



**DEPARTMENT  
of HEALTH  
and HUMAN  
SERVICES**

**Fiscal Year  
2024**

Centers for Disease Control  
and Prevention

*Justification of  
Estimates for  
Appropriation Committees*

## MESSAGE FROM THE DIRECTOR

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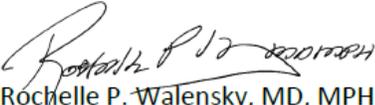
As the Centers for Disease Control and Prevention (CDC) looks forward to Fiscal Year (FY) 2024, I am proud of the many ways our agency continues its commitment to public health service. Last year brought new challenges as we continued to combat coronavirus disease 2019 and its impact on our population and health systems. Encouragingly, we saw that investments made to adapt to the pandemic better positioned us for taking rapid action against mpox—without averting attention from the hundreds of other public health priorities we address every year.

I am grateful for Congress’s support of CDC, public health, and these investments. We are already seeing impactful changes in the way health data are gathered, analyzed, and shared through the Public Health Data Modernization Initiative. State, tribal, local, and territorial public health departments have now received funding to recruit and train America’s next generation of public health workers who will protect our communities from health threats in the future. The nation’s public health laboratories are meeting new, higher standards for quality.

The FY 2024 budget will continue to support the strengthening of America’s public health system. In addition, it includes increases focused on the leading causes of death and underlying conditions that make people more vulnerable to hospitalization and death from infectious diseases.

As we continue to modernize our foundational capacities, we will continue our Moving Forward initiative and drive changes within CDC to share science and data more rapidly, translate science into practical, easy-to-understand policy, prioritize public health communications, develop a workforce ready to respond to future threats, and promote results-based partnerships.

Sincerely,



Rochelle P. Walensky, MD, MPH

Director, CDC

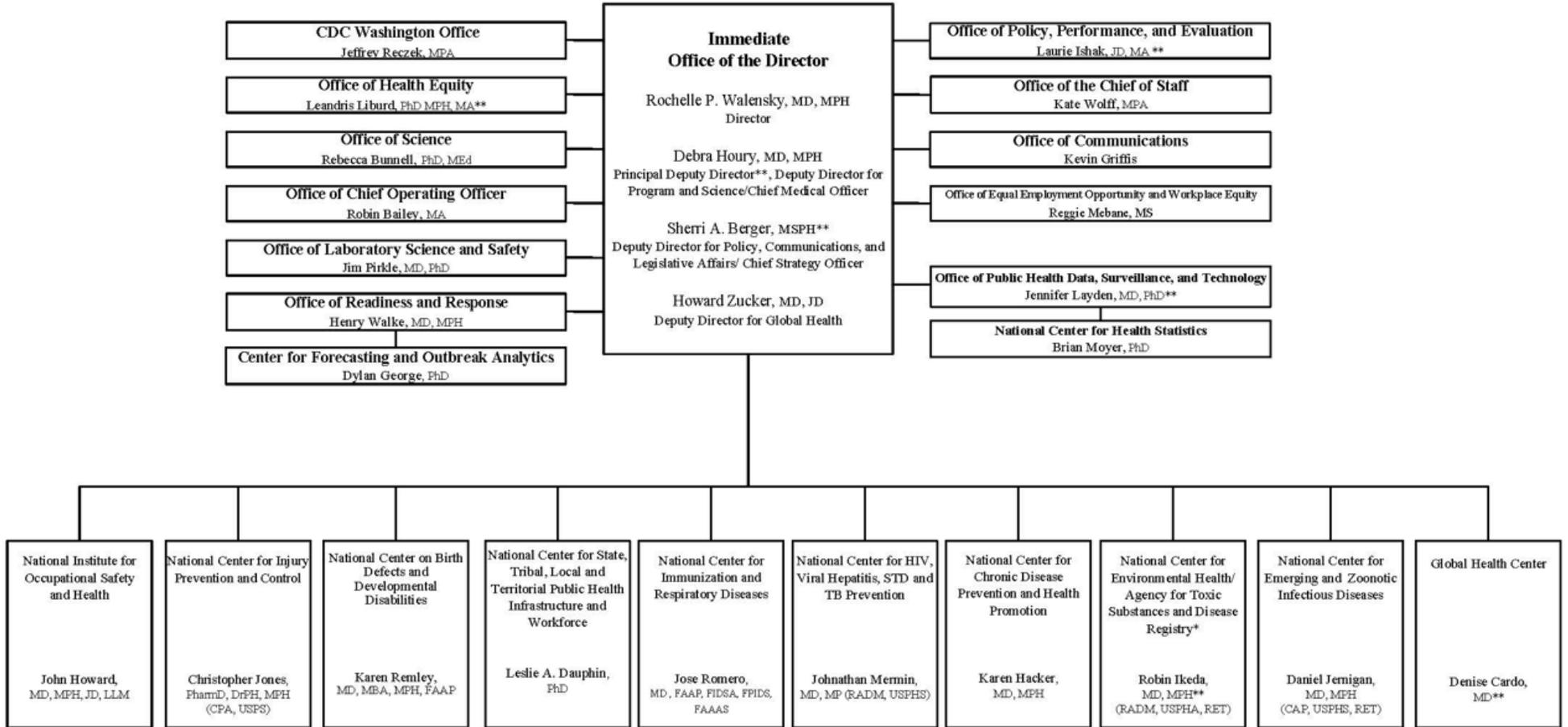
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# CDC ORGANIZATIONAL CHART



Listed personnel are Director of the entity unless otherwise noted.

\*ATSDR is an OPDIV within DHHS but is managed by a common director's office.

\*\* Serving as an acting official

Approved 1/24/2023; Effective 2/8/2023

Names Updated 2/24/2023

## **INTRODUCTION AND MISSION**

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The Centers for Disease Control and Prevention (CDC) is part of the Department of Health and Human Services and is the nation's public health protection agency.

CDC's mission is to protect America from health, safety, and security threats, both foreign and in the United States. To accomplish our mission, CDC conducts critical science and provides health information that protects our nation against dangerous health threats and responds when these threats arise. In doing so, CDC increases the health security of our nation.

CDC works on the cutting edge of health security while confronting global disease threats through advanced computing and lab analysis of huge amounts of data to quickly find solutions and respond to public health threats. CDC fights disease and supports communities and citizens to do the same, including in the COVID-19 emergency. The rapid development and deployment of safe, effective, and lifesaving COVID-19 vaccines has prevented millions of severe illnesses, hospitalizations, and deaths. As of February 2023, CDC has overseen the administration of over 670 million COVID-19 vaccine doses, including more than 51 million updated bivalent booster doses.

The COVID-19 crisis highlighted weaknesses and gaps in public health that threaten Americans' health and has proven the need for sustained improvements in our nation's public health infrastructure. CDC continues to build the capacities to ensure America is increasingly prepared to respond to future threats.

As the nation's health protection agency, CDC aims to build a sustainable and resilient public health system that can respond effectively to emerging threats and to ongoing public health needs to keep Americans safe and healthy.

# EXECUTIVE SUMMARY

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## OVERVIEW OF BUDGET REQUEST

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The Fiscal Year (FY) 2024 budget request for CDC to Congress includes total funding of \$11.581 billion in discretionary budget authority, Public Health Service (PHS) evaluation funds, and the Affordable Care Act Prevention and Public Health Fund (PPHF). The funding amounts and programmatic approaches described in this document are changes compared to the FY 2023 enacted level.

CDC's budget request responds to Executive Orders issued by the Biden Administration, including: 1) the National Security Memorandum; 2) Executive Order 13994, Ensuring a Data-Driven Response to COVID-19 and Future High-Consequence Public Health Threats; and 3) Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities through the Federal Government.

The COVID-19 crisis highlighted weaknesses and gaps that threaten the health of all Americans and has demonstrated the need for sustained improvements in our nation's public health infrastructure. In August 2022, CDC launched [Moving Forward](#)<sup>1</sup> to position the agency to better support the future of public health, strengthen systems and processes to deliver CDC's science and program activities to the American people equitably, determine how CDC should be structured to focus on the agency's core capabilities. As CDC moves to implement recommendations coming from this review, the agency is focused on bolstering these core capabilities: a diverse public health workforce, data modernization, laboratory capacity, rapid response to disease outbreaks, and preparedness within the US and around the world. To meet these goals, CDC's budget request reflects the need for ongoing recovery and revitalization of the public health system, to address the continuing consequences of the COVID-19 pandemic, and to build a better public health infrastructure for the future.

In addition to CDC's discretionary funding request for FY 2024, the budget includes the following new mandatory proposals:

**Vaccines for Adults:** The COVID-19 pandemic emphasized the critical need for a strong adult vaccination program. Establishment of a new mandatory program, capped at \$12.000 billion over 10 years, will provide uninsured adults access to vaccines recommended by the Advisory Committee on Immunization Practices at no cost.

**Pandemic Preparedness:** The FY 2024 Budget provides \$20 billion in mandatory funding across HHS, which is reflected in the Public Health and Social Services Emergency Fund, to prepare for pandemics and other biological threats. Of this total, \$6.100 billion is allocated to CDC. With these resources, CDC will modernize and build laboratory capacity and strengthen public health data systems; enhance domestic and global disease surveillance, biosafety, and biosecurity efforts; and support capabilities for monitoring and evaluating vaccine and medical countermeasure safety and effectiveness. For more information on the Department-wide pandemic preparedness proposal, please reference the detailed narrative in the Public Health Social Services and Emergency Fund FY 2024 Congressional Justification.

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<sup>1</sup> <https://www.cdc.gov/about/organization/cdc-moving-forward.html>

The FY 2024 budget request also continues existing mandatory programs, and proposes an expansion of the Vaccines for Children program:

**Vaccines for Children:** \$6.002 billion estimated in FY 2024 under proposed law, an increase \$1.568 billion above the FY 2023 Enacted (current law), which continues the FY 2023 President’s Budget proposal to expand the program to include all children under age 19 enrolled in the Children’s Health Insurance Program (CHIP) and make program improvements by eliminating cost-sharing for eligible children.

**World Trade Center Health Program:** \$782.145 million in FY 2024 under current law, an increase of \$72.297 million above the FY 2023 Enacted.

**The Energy Employees Occupational Illness Compensation Program Act (EEOICPA):** \$50.763 million (post-sequester), level with the FY 2023 Enacted.

### **Legislative Proposals**

CDC is submitting several A-19 legislative proposals, several of which will allow CDC to implement lessons learned from recent public health emergencies. Additional detail can be found in the section on legislative proposals, including budget details for two mandatory funding legislative proposals, Vaccines for Adults and Pandemic Preparedness.

### **Health Equity**

CDC’s Health Equity Science and Intervention Strategy, launched in 2021, continues to transform the approach to health equity at CDC, across the nation, and globally. CDC continues to integrate and incorporate health equity and a social and structural determinants of health approach into the Agency’s daily work while fostering a more diverse, equitable, inclusive, and accessible workplace.

## CDC’s CORE Commitment to Equity

*CDC launched an agency-wide strategy to integrate equity into the fabric of all we do*



**Cultivate** comprehensive health equity science

- CDC embeds health equity principles in the design, implementation, and evaluation of its research, data, surveillance, and intervention strategies



**Optimize** interventions

- CDC uses scientific, innovative, and data-driven strategies that address environmental, place-based, occupational, policy and systemic factors that impact health outcomes and address drivers of health disparities



**Reinforce** and expand robust partnerships

- CDC seeks out and strengthens sustainable multi-level, multi-sectoral and community partnerships to advance health equity



**Enhance** capacity and workplace diversity, inclusion, and engagement

- CDC builds internal capacity to cultivate a multi-disciplinary workforce and more inclusive climates, policies, and practices for broader public health impact

Leveraging lessons learned and the inequities exposed during COVID-19, CDC’s CORE strategy builds a robust and comprehensive approach to public health research, surveillance, and implementation science that enhances

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science and intervention approaches to identify and address the drivers of health inequities. Implementing the CORE strategy challenges all parts of the agency to examine their programmatic priorities and identify transformative goals and action plans for advancing health equity in science, intervention, partnerships, and the workforce. CDC is committed to bringing partners from different sectors together to gain collective expertise and perspectives, inform next steps, and create a shared commitment to reduce health inequities.

### **CDC Moving Forward**

In August 2022, the Director announced the Moving Forward initiative to better prepare the agency for future public health challenges to include the next pandemic. Through lessons learned from COVID-19 to improve how we deliver our science, guidance, and programs to the American people, the agency continues to modernize its operations and organizational structure to achieve key goals:

- Share Scientific Findings and Data Faster
- Translate Science into Practical, Easy to Understand Policy
- Prioritize Public Health Communications
- Develop a Workforce Prepared for Future Emergencies—CDC and Nationwide
- Promote Results-based Partnerships

## **Advancing Public Health’s Core Capabilities and Cross-cutting Support**

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The 2022-2027 CDC Strategic Plan advances science and health equity and affirms the agency’s commitment to one unified vision—equitably protecting health, safety, and security. The plan continues to leverage the core capabilities of the agency, reflecting our commitment to equity and diversity and capitalizing on COVID-19 investments.

### **Cross-cutting Support**

#### **Public Health Infrastructure and Capacity (+\$250.0 million)**

In FY 2024, CDC requests an increase of \$250.0 million above the FY 2023 enacted level to allow CDC to continue supporting jurisdictional health departments to build foundational public health capacity enabling them to effectively protect the health of their populations. Jurisdictions—along with funded partners who are providing technical assistance and support--will make critical investments in foundational capabilities, aligning with the Public Health National Center for Innovations framework, in the areas of assessment and surveillance, community partnership development, equity, organizational competencies, policy development and support, accountability and performance management, emergency and preparedness and response, and communications.

#### **Public Health Workforce (+\$35.0 million)**

Public health agencies at all levels understand that the workforce needs substantial changes to address the vulnerabilities highlighted by COVID-19. Local and state public health agencies and related organizations have lost thousands of jobs in the past decade. CDC’s pipeline and training programs, though comparatively small relative to the overall workforce, serve a pivotal role in training the public health leaders of today and tomorrow and in meeting the needs of a response. For example, from 2020 – 2022, CDC deployed 100% of its Epidemic Intelligence Service (EIS) and Laboratory Leadership Service (LLS) officers to support the pandemic response. In FY 2024, CDC requests an increase of \$35.0 million above the FY 2023 enacted level for Public Health Workforce. This increased funding will boost internship and fellowship recruitment and participation, enable more deployments, and help further establish student loan repayment as a recruitment and retention incentive.

#### **Public Health Leadership and Support (+\$15.0 million)**

In FY 2024, CDC requests an increase of \$15.0 million above the FY 2023 enacted level for Public Health Leadership and Support. CDC provides public health leadership, responsive and timely communication, and strong partnership support to non-governmental organizations working on public health issues. With increased funding, CDC will be able to facilitate the necessary partnerships that promote CDC’s guidance, communication, and strategy at all levels of government and industry. These investments will support communication with the public, Congress, academia, the business sector, employers, and other federal, state, and local partners through written communications, funding opportunities, briefings, and other engagements. Funds will also support the agency’s scientific leaders who advise and deploy for CDC’s urgent and emergent public health response activities, and CDC’s support for public health agency accreditation at the state and local levels.

#### **Buildings and Facilities (+\$15.0 million)**

The backlog of maintenance and repairs at CDC’s facilities is currently \$193.8 million. In FY 2024, CDC requests an increase of \$15.0 million over the FY 2023 enacted level to allow CDC to make progress in reducing the backlog and protecting assets through a rigorous preventive maintenance program. Several high priority fire and life safety projects as well as emergency repairs are planned for FY 2024.

### **Advancing Laboratory Science (+\$5.0 million)**

In FY 2024, CDC requests an increase of \$5.0 million above the FY 2023 enacted level to continue CDC's work in public health laboratory science and support key priorities including shortening the time to develop diagnostic tests, evaluating and implementing new detection technologies, increasing the number of test results available per day, ensuring the quality of test results, improving laboratory safety and efficiency, and developing uniform quality practice standards for CDC and other public health labs. These resources will also be used to implement a new Infectious Disease Test Review Board to provide responsive and in-depth oversight over new or modified testing and laboratory procedures.

### **Global and Domestic Immunization**

#### **Domestic Immunization Program (+\$316.6 million)**

In FY 2024, CDC requests an increase of \$316.6 million above the FY 2023 enacted level for the Immunization Program. CDC will use increased funding to build on COVID-19 investments including expanding existing immunization infrastructure, focusing on hard-to-reach communities; supporting state and local vaccine systems; and increasing national scientific, programmatic, and communications activities. Of this increase, \$25.0 million will be used to continue activities to address post-COVID conditions and \$15.0 million will be used to encourage the use of HPV vaccines as part of the Cancer Moonshot Initiative.

#### **Global Immunization (+\$10.0 million)**

Recent reductions in vaccine coverage and confidence across the world create vulnerabilities to health security at home and abroad. Missed routine vaccinations due to COVID-19, insufficient safety monitoring and reporting, weak confidence among certain concentrated populations, variable surveillance and response capacity, and supply chain management issues all contribute to the problem. In FY 2024, CDC requests an increase of \$10.0 million above the FY 2023 enacted level for Global Immunization to address these factors. Priority goals include shifting children out of zero-dose status, increasing childhood and adult vaccination, preventing and mitigating large outbreaks and exportations, and working toward essential service targets globally.

## **Streamlining Public Health Data**

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CDC's FY 2024 request makes significant investments in foundational public health data capacities. These investments will enable CDC to streamline the flow of information between providers and public health to predict and respond to outbreaks with speed, accuracy, and effectiveness.

### **Public Health Data Modernization Initiative (DMI) (+\$165.0 million)**

In FY 2024, CDC requests an increase of \$165.0 million over the FY 2023 enacted level in budget authority and Prevention and Public Health Fund resources for DMI. Weaknesses in the public health data system spotlighted by the COVID-19 pandemic need to be addressed with sustained resources. Early improvements, made with supplemental funding, began the process of allowing data to flow more seamlessly across healthcare and public health, as well as between state and local jurisdictions and CDC. Continued investment with annual resources will help CDC bring systems up to date with technological advancements, make major advances in data systems implementation and workforce, improve understanding of early warning signals through increased reporting of syndromic and disease surveillance data, decrease clinical and public health reporting lags, and improve the timeliness and accuracy of death reports.

### **Center for Forecasting and Outbreak Analytics (+\$50.0 million)**

Data collection, aggregation, and accessibility must be accompanied by the appropriate analytical and communications capacity to translate those data into actionable insights. Launched in April 2022, the Center for Forecasting and Outbreak Analytics (CFA) enables timely, effective decision-making through innovative data analytic and modeling approaches. In FY 2024, CDC requests an increase of \$50.0 million above the FY 2023 enacted level in Prevention and Public Health Fund resources to provide critical resources to maintain and grow the center's functionality for COVID-19 and other infectious disease threats as they arise.

### **Response Ready Enterprise Data Integration (RREDI, formerly HHS Protect) (+\$38.1 million)**

In FY 2024, CDC requests an increase of \$38.1 million to continue RREDI following the transfer of management of the platform from HHS to CDC. RREDI is a modernized, secure platform transferred to CDC from HHS in FY 2022. It harnesses the full power of public health data by bringing more than 200 disparate data sources together. This common operating picture integrates data across federal, state, and local governments and the healthcare industry. It serves as an important tool to support policy makers, provide critical data to the new Center for Forecasting and Outbreak Analytics, and communicate the latest timely information for COVID-19, mpox, and future threats and public health responses. This increase is needed to allow CDC to support data sharing license agreements; platform management including help desk, security monitoring, and maintenance functions; and systems and communications training for the agency's data workforce. The FY 2024 request builds upon \$21.9 million appropriated to PHSSEF in FY 2023 for HHS Protect, to support activities implemented by CDC.

### **National Healthcare Safety Network (+\$26.0 million)**

In FY 2024, CDC requests an increase of \$26.0 million above the FY 2023 enacted level for the National Healthcare Safety Network (NHSN). NHSN is the most comprehensive federally funded data collection and quality improvement system for healthcare. It is used by nearly 40,000 facilities across the country. With new data standards emerging and public health-facing electronic health records capacity increasing, CDC needs to expand NHSN to meet increasing demand. NHSN is a hub for U.S. government healthcare data, receiving inputs from and sending out timely patient safety and health-associated guidance to hospitals, ASPR, CMS, and state and local public health authorities. Increased funding to modernize and increase the platform's flexibility will accelerate this process.

**Surveillance for Emerging Threats to Moms and Babies (+\$17.0 million)**

Over the last decade, expectant and new parents have experienced the emergence and reemergence of pathogens and risk factors that uniquely affect them: newly-identified infectious diseases like Zika and COVID-19, and illnesses like syphilis and hepatitis C threaten the health of pregnant individuals and their babies. CDC’s Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET) is a surveillance network that gathers information on how health threats affect pregnancy and early childhood and helps inform prevention and treatment guidance for a uniquely susceptible population. In FY 2024, CDC requests an increase of \$17.0 million above the FY 2023 enacted level to support additional jurisdictions to build state SET-NET programs and provide increased support to the 31 currently funded jurisdictions.

**Health Statistics (+\$2.1 million)**

The National Center for Health Statistics (NCHS), the principal federal health statistics agency, is an operational component of CDC and makes foundational contributions to the nation’s understanding of health and wellness variables, including risk factors, emerging threats, and changes in disease burden over time. In FY 2024, CDC is requesting an increase of \$2.1 million above the FY 2023 enacted level for NCHS to speed the timeliness of its data releases and increase the number of analytical products produced each year. This investment will also be used to identify key socioeconomic and social determinants of health and health disparities. CDC will collect, analyze, integrate, link, and disseminate data related to these determinants, improving the understanding of health disparities in the United States.

## Defeat Diseases and Epidemics

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CDC works 24 hours a day, seven days a week, 365 days a year to address to protect America from health, safety and security threats, both foreign and in the United States. Whether diseases start at home or abroad, are chronic or acute, curable or preventable, human error or deliberate attack, CDC fights disease and supports communities and citizens to do the same.

### **Cancer Moonshot (+\$182.5 million)**

In FY 2024, CDC requests an increase of \$182.5 million above the FY 2023 enacted level to support the Cancer Moonshot initiative. These include a \$15.0 million increase for HPV prevention within the Domestic Immunization program, \$11.0 million increase for tobacco-related cancer control programs, \$35.0 million increase for Environmental Health, and \$121.5 million increase for Cancer Prevention and Control, distributed across programs. Increased funding will support a range of programs including but not limited to the Comprehensive Cancer and Ovarian Cancer programs to promote primary cancer prevention, early detection and treatment, and supporting survivors and caregivers. CDC will also provide state and local cancer programs with funds and guidance to implement proven practices that improve policy, system, and environmental variables to increase equity in cancer prevention, detection, and treatment. Funds will also support additional evaluation activities to ensure continuous improvement in practices and outcomes.

### **Ending the HIV Epidemic in the U.S. (EHE) (+\$90.0 million)**

In FY 2024, CDC requests an increase of \$90.0 million above the FY 2023 enacted level to continue to work to end the HIV epidemic in the United States. EHE is a once-in-a-generation opportunity to eliminate new HIV infections in the United States. EHE focuses on four strategies—diagnose, treat, prevent, and respond. Through EHE, CDC works in jurisdictions to reduce new HIV infections and advance health equity. EHE works with disproportionately affected populations, including gay and bisexual men of color, transgender and cisgender Black/African American women, and people who inject drugs (PWID). The EHE initiative builds on CDC's core investments in HIV prevention and provides affected communities with the expertise, technology, and resources to address the HIV epidemic locally.

### **Global Public Health Protection (+\$60.0 million)**

Recent and ongoing global health emergencies like COVID-19, Ebola, mpox, and outbreaks of vaccine preventable diseases like polio and measles highlight the persistent vulnerabilities in our public health systems globally. In FY 2024, CDC requests an increase of \$60.0 million above the FY 2023 enacted level to continue efforts to build workforce, laboratory, and response capacity, including maximizing resources through regional platforms. These platforms are invaluable in responding to emerging crises and response and recovery efforts when physical presence within a country is impossible. For example, the CDC Eastern Europe/Central Asia Regional office based in Tbilisi, Georgia, served as a landing pad for CDC staff from Ukraine who were displaced by the conflict, allowing them to continue supporting emergency response efforts and recovery planning. Other benefits of CDC's global public health protection efforts include training for field epidemiologists, laboratory leadership, and participation in internationally standardized evaluations of countries' health security capacity.

### **School Health - HIV (+\$52.0 million)**

In FY 2024, CDC requests an increase of \$52.0 million above the FY 2023 enacted level. Knowing that adverse experiences in childhood and adolescence can contribute to poorer physical and mental health later in life, CDC's *What Works in Schools* program works to strengthen schools' prevention activities. Using data from multiple large-scale surveys of school-aged children and adolescents, CDC developed guidance and curricula that have substantially reduced risk behaviors, experience of violence, substance use, and poor mental health among students. Increased funding will be used to expand support for up to 75 of the nation's largest local education

agencies to implement proven practices and focus specifically on school connectedness in the wake of COVID-19.

### **Emerging Infectious Diseases (+\$40.0 million)**

As the world sees an increase in newly emerging pathogens and responses become increasingly complex, in FY 2024 CDC requests an increase of \$40.0 million above the FY 2023 enacted level for Emerging Infectious Diseases in FY 2024. These funds will provide a safe backstop where there may be gaps between dedicated, pathogen- or disease-specific funding lines. CDC is a global leader in studying and responding to emerging pathogens, due to its groundbreaking research and state of the art laboratories, public health expertise, and collaborative networks with state, local, and tribal health departments to quickly identify and characterize emerging pathogens and coordinate multistate investigations and responses. Increased funding for Emerging Infectious Diseases will provide resources needed to harness these unique capabilities in the face of uncertainty.

### **Influenza Planning and Response (+\$20.0 million)**

In FY 2024, CDC requests an increase of \$20.0 million above the FY 2023 enacted level to enable the continued expansion of surveillance and preparedness efforts to detect, prepare for, and respond to emerging influenza threats. Increased testing at the human-animal interface and expanded next-generation sequencing will better characterize the landscape of emerging influenza viruses. CDC will also increase international support for seasonal influenza surveillance. Additional activities include expansion of vaccine effectiveness monitoring and evaluation, enhancing virus characterization and expanding vaccine virus development, increasing genomic testing of influenza viruses, and increasing influenza vaccine uptake rates.

### **Antimicrobial Resistance (AR) (+\$15.0 million)**

In FY 2024, CDC requests an increase of \$15.0 million above the FY 2023 enacted level to will expand state and local capacity to detect and prevent emerging and existing threats through strengthened antibiotic stewardship data collection and quality improvement efforts. Investments will provide support to implement and achieve the goals under the [National Action Plan for Combating Antibiotic-Resistant Bacteria \(CARB\), 2020-2025](#).<sup>2</sup> CDC will also improve data sets addressing health equity and disparity issues about AR threats and expand the Global AR Lab and Response Network.

### **Quarantine (+\$14.0 million)**

In FY 2024, CDC requests an increase of \$14.0 million above the FY 2023 enacted level, to modernize public health programs and scale-up migration systems to protect against future international outbreaks and pandemics. CDC will sustain investments made with COVID-19 supplemental funds to support innovative solutions that focus on a modernized and flexible traveler management program engage with travelers before, during, and after travel.

### **Viral Hepatitis (+\$11.5 million)**

CDC's FY 2024 budget request for Viral Hepatitis is \$11.5 million above the FY 2023 enacted level. This increase will support health departments conducting viral hepatitis outbreak response and surveillance, support viral hepatitis elimination planning and implementation in target jurisdictions, and work with health clinics and community organizations to promote awareness and uptake of updated national viral hepatitis testing and vaccination recommendations.

<sup>2</sup> [https://aspe.hhs.gov/sites/default/files/migrated\\_legacy\\_files/196436/CARB-National-Action-Plan-2020-2025.pdf](https://aspe.hhs.gov/sites/default/files/migrated_legacy_files/196436/CARB-National-Action-Plan-2020-2025.pdf)

**Parasitic Diseases and Malaria (+\$2.0 million)**

In FY 2024, CDC requests an increase of \$2.0 million over the FY 2023 enacted level to continue investing in new testing platforms and next generation sequencing to improve parasitic disease diagnosis and outbreak response. To address the emerging threat of invasive mosquitos, CDC will provide scientific leadership to enhance vector detection and rapid response and monitor malaria epidemiological trends.

## **Improving Community Health**

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Working at the community level promotes healthy living, helps prevent injury and chronic diseases and brings the greatest health benefits to the greatest number of people in need. It also helps to reduce health gaps caused by differences in race and ethnicity, location, social status, income, and other factors that can affect health.

### **Community Violence Intervention Initiative (+\$250.0 million)**

CDC's FY 2024 budget request includes an increase of \$250,000,000 for Community and Youth Violence Prevention to implement the Community Violence Intervention initiative, which will expand the reach of CDC programs to help stem the rise in violence in high risk urban and rural communities across the country. CDC will provide support to cities and communities demonstrating the greatest need for intervention and programming to stem the tide of community violence. Research, surveillance, and program evaluation efforts will be prioritized to emphasize those interventions and populations where evidence is strongest that public health approaches will reduce the burden of community violence.

### **Opioid Overdose Prevention and Surveillance (+207.8 million)**

In FY 2024, CDC's request for Opioid Overdose Prevention and Surveillance is \$207.8 million above the FY 2023 enacted level. Efforts will support integration of state and local prevention and response efforts, provide support for providers and health systems prevention (including use of prescription drug monitoring programs as a clinical decision support tool), enhance partnerships with public safety and first responders, establish and improve linkages to medications for opioid use disorder and other supportive services through harm reduction activities, and empower individuals to make informed choices. These activities support multiple initiatives included in ONDCP Policy Priorities and the National Drug Control Strategy.

### **Environmental Health (+\$135.0 million)**

In FY 2024, CDC requests an increase of \$135.0 million above the FY 2023 enacted level. The total request includes \$35.0 million to support expanded laboratory and health investigation activities under the Cancer Moonshot Initiative and an increase of \$100.0 million to expand support to health departments to build capacity to address environmental hazards and health. Within the total increase is also a \$10.0 million pilot program to provide portable High Efficiency Particulate Air (HEPA) filtration systems for homes in communities most affected by exposure to wildfire smoke, and to better understand the feasibility and health impact of installing such systems. CDC programs funded under Environmental Health Activities support core environmental health programs, workforce capacity, and research that protect Americans from emerging and everyday environmental health threats wherever they live. These programs are critical for ensuring environmental public health practitioners at state, local, tribal, and territorial health departments have the resources, tools, and evidence-based guidance to detect, prevent, and control environmental public health hazards.

### **Social Determinants of Health (+\$92.0 million)**

CDC's Social Determinants of Health (SDOH) program is designed to address the fact that conditions of our daily lives—the characteristics of places and resources where we live, learn, work, and play—can affect everyone's likelihood to seek or achieve healthy outcomes. Funds received so far have been awarded to jurisdictions to develop one-year accelerator plans addressing key aspects of CDC's priority SDOH: built environment, food security, clinical-community linkages, social connectedness, tobacco-free policies, and healthcare access and quality. In FY 2024, CDC requests an increase of \$92.0 million over the FY 2023 Enacted level to implement and evaluate action plans and to build the evidence base for SDOH-directed interventions through applied research, data collection, and surveillance.

**Nutrition, Physical Activity, and Obesity (+\$72.0 million)**

In support of the White House's [National Strategy on Hunger, Nutrition, and Health's](#)<sup>3</sup> proposed expansion of the State Physical Activity and Nutrition (SPAN) program, the FY 2024 budget request includes an increase of \$72.0million above the FY 2023 enacted level, which would expand the program to all 50 states, Washington, D.C., and eight territories; the expansion would also increase the average award amount. This expansion enables nationwide reach of SPAN's work to increase access to safe places for physical activity and healthier foods; implement interventions supportive of breastfeeding; and implement and integrate nutrition and physical activity standards into statewide early care and education (ECE) systems. CDC also plans to support Active People, Healthy Nation<sup>SM</sup>, an initiative to get 27 million people more physically active by 2027 by improving access to safe and convenient places to walk and roll, improving food systems to increase access to healthier foods, implementing interventions supportive of breastfeeding; and implementing and integrating nutrition and physical activity standards into statewide early care and education systems.

**Safe Motherhood and Infant Health (+\$56.0 million)**

In FY 2024, CDC's request is \$56.0 million above the FY 2023 enacted level. New investments will support developing the national infrastructure for maternal mortality prevention, including maternal mortality review committees, perinatal quality collaboratives, the CDC Levels of Care Assessment Tool (LOCATe<sup>SM</sup>), and the *Hear Her* campaign.

**Suicide Prevention (+\$50.0 million)**

In FY 2024, CDC requests an increase of \$50.0 million above the FY 2023 enacted level for Suicide Prevention. CDC will expand a multi-pronged strategy on suicide prevention, including a focus on early prevention and intervention in state, territorial, local, and tribal communities. In FY 2024, CDC anticipates releasing a new NOFO to expand the Comprehensive Suicide Prevention program to support recipients in up to 50 states, Washington, D.C., and 18 tribal and territorial communities.

**Rape Prevention and Education (+\$40.0 million)**

In FY 2024, CDC requests an increase of \$40.0 million above the FY 2023 Enacted level to release a one-year grant to build and enhance the primary prevention capacity of State, Territorial, and Tribal Sexual Assault Coalitions. This complements work funded through existing rape prevention funding opportunities.

**Childhood Lead Poisoning (+\$39.0 million)**

CDC's Childhood Lead Poisoning Prevention program focuses on primary prevention of lead exposure as well as detection, early intervention, and support for those children already demonstrating elevated blood lead levels. In FY 2024, CDC requests an increase of \$39.0 million over the FY 2023 enacted level in budget authority and Public Health Service evaluation funding to enable the program to expand support to existing jurisdictional partners as well as providing opportunities to reach a wider array of jurisdictions.

**School Health (+\$30.6 million)**

CDC's Healthy Schools Program plays a unique role in bringing together the education and public health sectors to support physical education, physical activity and healthy nutrition, management of chronic conditions, emotional wellbeing, and healthy and supportive school environments. In FY 2024, CDC requests an increase of \$30.6 million above the FY 2023 enacted level to implement the Healthy Schools program in all states including mental health, resilience, and emotional well-being.

<sup>3</sup> <https://www.whitehouse.gov/wp-content/uploads/2022/09/White-House-National-Strategy-on-Hunger-Nutrition-and-Health-FINAL.pdf>

**Firearm Injury and Mortality Research (+\$22.5 million)**

In FY 2024, CDC requests an increase of \$22.5 million above the FY 2023 enacted level. CDC will continue to fund research to identify the most effective ways to prevent firearm related injuries and deaths. This will include additional funding opportunities to support R01 research grants to improve understanding of firearm injury, inform the development of innovative and promising prevention strategies, and rigorously evaluate the effectiveness of strategies to keep individuals, families, schools, and communities safe from firearm-related injuries, deaths, and crime. CDC will fund additional research grants to support new investigators and will focus on improving collection and dissemination of timely data on firearm-related deaths, data on nonfatal firearm injuries, and data on behavioral issues related to firearms such as safe storage. This will include the expansion of the Firearm Injury Surveillance Through Emergency Rooms (FASTER) program to as many states as possible.

**National Violent Death Reporting System (+\$10.0 million)**

In FY 2024, CDC requests an increase of \$10.0 million over the FY 2023 enacted level for the National Violent Death Reporting System (NVDRS). CDC will enhance support to NVDRS recipients to implement and maintain the system, monitor and report data, and use these data to inform prevention efforts to save lives. CDC will continue to increase the use of NVDRS data by characterizing manner of death and identifying key populations for study (e.g., ethnic, racial, rural, sexual and gender minorities, military).

**Adverse Childhood Experiences (+\$6.0 million)**

To further support communities by expanding the number of states implementing proven prevention strategies to reduce adverse childhood experiences (ACEs) and promote positive childhood experiences through the Essentials for Childhood: Preventing Adversity through Data to Action (PACE:D2A) program in FY 2024, CDC requests \$6.0 million above the FY 2023 enacted level. CDC will also increase investments in surveillance and research activities for the prevention of ACEs.

**Domestic Violence Community Projects (+\$3.0 million)**

In FY 2024, CDC requests \$3.0 million above the FY 2023 enacted level for Domestic Violence Community Projects. CDC will expand the reach of the Domestic Violence Prevention Enhancement and Leadership Through Alliances (DELTA) program to 20 recipients to build capacity to implement and evaluate proven intimate partner violence prevention strategies in their states.

**Domestic Violence and Sexual Violence (+\$1.0 million)**

In FY 2024, CDC requests an increase of \$1.0 million above the FY 2023 enacted level for Domestic Violence and Sexual Violence prevention. With this increase, CDC will promote the forthcoming National Action Plan for Gender Based Violence, including developing a repository for gender-based violence prevention resources on the VetoViolence training portal.

## Budget Realignments and Other Requests

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CDC continues its proposal to modernize its budget structure to enhance preparedness capacity. As an agency with public health emergency response as a core part of its mission, CDC's budget structure with 13 separate Treasury accounts is not flexible enough to enable a "whole of agency" response to a national public health emergency. The proposed structure retains existing programs, projects and activities (PPAs) on CDC's operating plan, within one "CDC-Wide Activities and Program Support" Treasury account.

The request also includes the following proposed realignments that increase accountability, reduce administrative burden, and provide needed programmatic flexibility:

- Realignment of \$26.0 million for Lyme Disease to be included as a non-add under the Vector-borne Diseases program, project, or activity (PPA). CDC's Lyme Disease activities are encompassed in a larger program to address vector-borne diseases. This larger program supports activities (e.g., Vector Borne Centers of Excellence) that address multiple vector-borne diseases, including Lyme.
- Consolidation of the following Public Health Preparedness and Response PPAs—Public Health Emergency Preparedness Cooperative Agreement, Academic Centers for PH Preparedness, and All Other CDC Preparedness – to a single PPA labeled Domestic Preparedness. The activities funded in this budget account support program objectives for preparedness and response by creating greater flexibility in CDC's ability to respond to public health emergencies and execute resources.
- Consolidation of the following PPAs—All other Environmental Health, Climate and Health, and Safe Water into a single PPA labeled Environmental Health Capacity under the Environmental Health Activities budget activity. These activities funded under this budget account are focused on increasing environmental health capacity at the federal, state, local, territorial, and Tribal levels.

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## OVERVIEW OF PERFORMANCE

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As the nation's prevention agency and a leader in improving health around the world, CDC is committed to reducing the leading causes of death, disability, and injury. CDC staff work 24/7 around the world to save lives, protect people, and save money through prevention. To achieve maximum public health impact, CDC conducts research; implements strategic, evidence-based programs; and monitors results through ongoing data collection.

CDC's priorities form the core of its public health programs. These programs require the scientific excellence and leadership of our highly trained staff, who are dedicated to high standards of quality and ethical practice. The agency's priorities include:

- Rapid Response to Outbreaks at their Source
- Strong Global Capacity and Domestic Preparedness
- Diverse Public Health Workforce
- State-of-the Art Laboratories
- World Class Data and Analytics

Performance in each of these areas and in all of CDC's work is strengthened through the use of rigorous and ongoing performance metrics and program evaluation data to monitor program effectiveness and compare performance to established targets. The accomplishments described below highlight the importance of investing in high quality public health programs, preventing disease, and protecting health.

### **Rapid Response to Outbreaks at their Source and Strong Global Capacity and Domestic Preparedness**

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- CDC and its partners detected and assessed potential safety concerns for all vaccines available for public use including the COVID-19 vaccines and mpox vaccines.
  - Data from the CDC-FDA Vaccine Adverse Event Reporting System (VAERS) were used to detect potential COVID-19 vaccination adverse events like anaphylaxis and myocarditis. VAERS data informed national vaccine policy for COVID-19 vaccines, including risk-benefit analyses and a preferential recommendation for mRNA COVID-19 vaccines over Janssen's COVID-19 vaccine. The system is also monitoring for potential adverse events following vaccination for mpox.
  - Over 8.6 million fully vaccinated people are being followed for possible adverse events related to COVID-19 vaccination through the Vaccine Safety Datalink (VSD) collaborative.
  - More than 10.3 million users of v-safe, a smartphone-based tool providing health check-ins after individuals receive a COVID-19 vaccine, have completed over 150 million health surveys related to their COVID-19 vaccination. This system was created for the COVID-19 vaccines, but is expanding to be used for mpox vaccines.
- CDC led the rapid acceleration of implementation for COVID-19 electronic case reporting (eCR) in over 20,800 U.S. healthcare facilities nationwide. As of November 2022, over 24.5 million electronic patient case reports have been delivered to public health agencies in all 50 states, D.C., Puerto Rico, and 13 local jurisdictions. Healthcare organizations and public health agencies are expanding eCR to allow for reporting of all reportable conditions electronically.
- CDC provided guidance to healthcare facilities on how to optimize personal protective equipment (PPE) supplies during COVID-19, including the PPE Tracker app and Burn Rate Calculator to help track PPE inventory and use. The PPE Tracker app has been downloaded 35,907 times.
- In 2022, CDC led and coordinated the rapid public health response to an outbreak of mpox that has spread across several countries. As of October 2022, CDC, along with state and local public health partners, are tracking 28,442 cases of mpox in the U.S. CDC is also tracking multiple clusters of mpox that have been reported globally in 109 countries, 102 of which do not normally report mpox.

Additionally, CDC has administered over one million doses of mpox vaccine across the US. CDC is also supporting contact tracing, diagnostic testing, and conducting outreach to clinicians to help them identify potential infections.

- CDC contributed to the World Health Organization (WHO) recommending the RTS,S malaria vaccine for broader use among children in sub-Saharan Africa and in other regions with moderate to high malaria transmission. This is the first time that a vaccine has been recommended to combat malaria. CDC's collaboration on the RTS,S pilot in Kenya helped pave the way for wide scale implementation of this promising new intervention.
- CDC funds and places preparedness staff across the nation to support state, local, and territorial health departments by providing boots-on-the-ground support and connecting them with CDC's subject matter experts. As of November 2022, 73 Public Health Emergency Preparedness (PHEP) program-funded field staff (i.e., career epidemiology field officers (CEFOs), preparedness field assignees (PFAs)) serve as critical preparedness and response assets for 62 state, territorial, and large local health departments. Having trained and dedicated staff who provide direct technical assistance and other CDC support is critical to ensuring health departments are prepared to protect the health of their communities.
- CDC, in collaboration with state public health partners, investigated an outbreak of melioidosis cases which sickened four people, determined the cause of the cluster—an aromatherapy room spray sold at a national retailer—and took steps to prevent additional people from getting sick. Based on CDC's investigation and extensive laboratory work to confirm the source of the bacteria, 3,900 bottles of the aromatherapy spray were recalled. This success highlights the work of CDC's "disease detectives" who found the cause based on genomic analyses of hundreds of specimens at the homes of those affected.
- CDC researchers identified a new occupational disease, welder's anthrax, and released a journal article and blog post describing cases of the disease among metalworkers. Welder's anthrax is a pneumonia in metalworkers caused by bacteria that produces anthrax toxin.
- In 2022, CDC supported 30 jurisdictions to conduct maternal-infant surveillance through the Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET) to examine COVID-19, hepatitis C, syphilis, and Zika. In 2022, SET-NET supported five health departments in a pilot project to explore the feasibility of implementing surveillance for congenital cytomegalovirus (cCMV) a virus that affects infants and can cause neurodevelopmental disabilities and in some cases stillbirth and neonatal death. Further, establishing cCMV surveillance efforts will help heighten awareness and inform prevention strategies as new vaccines are developed. SET-NET data provides timely data for action and have been used to inform clinical and public health guidance for pregnant people and their infants.
- In 2022, CDC released interim guidance for the first short treatment regimen for drug-susceptible TB disease in almost 40 years. Shorter treatment regimens for TB disease can be more convenient and help patients finish treatment faster.

## **Diverse Public Health Workforce and State of the Art Laboratories**

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- CDC's training and fellowship programs have played a key role in developing and sustaining the public health workforce throughout the COVID-19 pandemic.
  - In FY 2021, the estimated learner impact for the top 10 CDC continuing education courses required to administer vaccines (including the COVID-19 vaccine trainings) was nearly two million.
  - On April 6, 2022, CDC in partnership with AmeriCorps, launched and awarded the first Public Health AmeriCorps grants which will allow Public Health AmeriCorps programs to recruit the first group of nearly 3,000 members. Members will help address public health needs in our Nation's inner cities, build tribal public health capacity, address health disparities in rural America, and bolster public health resources.

- In 2022, CDC expanded the Laboratory Leadership Service (LLS) to its largest class ever--25 fellows, with 40% in the field supporting jurisdictional health department laboratories. Additionally, in 2022 CDC's Epidemic Intelligence Service (EIS) had its largest class in over 15 years with 90 selected candidates.
- In FY 2022, CDC launched the Global Antimicrobial Resistance Laboratory and Response Network, a first-of-its-kind network that expands CDC's AR surveillance efforts globally. Through this network CDC supported the implementation of SARS-CoV-2 genomic surveillance among inpatients and healthcare workers in 12 hospitals across four countries in addition to the implementation of rapid detection, prevention and response of AR threats across 25 hospitals in nine countries.
- CDC supports laboratory response network (LRN)-B and LRN-C state and local laboratories through its Public Health Emergency Preparedness (PHEP) program. Investments in the LRN-B smallpox preparedness capabilities allowed the United States to identify the first case of mpox in May 2022 and quickly alert other LRN-B laboratories; from May-June 2022, the LRN-B tested more than 2,000 specimens and expanded testing capacity within public health laboratories to 8,000 tests per month in 78 public health laboratories. Additionally, in July 2022, five commercial laboratories began testing for mpox, resulting in a combined testing capacity of up to 80,000 specimens per week.
- CDC used state-of-the-art biomonitoring methods to produce the first nationally representative information on exposure to glyphosate, the most widely used herbicide in the United States. Measurements of glyphosate in specimens from CDC's NHANES suggest widespread exposure, potentially influenced by diet and lifestyle.
- CDC expanded pre-exposure prophylaxis (PrEP) access in 38 sexually transmitted infection (STI) clinics, tested more than 137,000 patients, diagnosed more than 1,000 new cases of HIV, and prescribed PrEP to more than 6,000 patients.
- In FY 2022, CDC invested significantly in states, supporting healthcare-associated infection (HAI)/AR Programs in all 50 states and several local health departments and territories for detection and prevention activities. Activities included nearly 50,000 responses or consultations to address confirmed or possible outbreaks involving AR threats, COVID-19, other HAI/AR infections, or serious infection control breaches in healthcare settings. Additionally, HAI/AR Programs engaged more than 2,000 clinical laboratories to improve testing of targeted organisms to detect antibiotic resistance rapidly.

## World Class Data and Analytics

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- CDC created cancer indicators that use its Environmental Public Health Tracking Network's new population-based geographies—the first federal release of cancer incidence data at this geographic level and building on CDC's vision to modernize its data systems and tools. This allows public health practitioners and others to identify areas with elevated cancer rates at geographies smaller than the county level, improving the targeting of public health interventions such as cancer screenings. Data are available on six cancer types (lung, female breast, prostate, colorectal, kidney, and melanoma) from 27 cancer registries.
- CDC updated the Blood Lead Reference Value (BLRV) to 3.5 µg/dL based on its most recent National Health and Nutrition Examination Survey (NHANES) data and the recommendation of the Lead Exposure and Prevention Advisory Committee. This allows CDC, federal partners, and health departments to focus resources on children with higher levels of lead in their blood compared to most children, and supports CDC's commitment to advancing health equity and environmental justice as disparities in lead exposure persist. For example, Georgia passed a law in April 2022 that lowered the blood lead levels that would require home interventive services and case management to 3.5 µg/dl. As a result, the Georgia Childhood Lead Poisoning Prevention Program can now provide services for a population of children who were previously outside of the legal parameters for services.

- CDC expanded the reach of its *Hear Her* campaign, which has received over 976,000 unique website visitors, with over 1.2 million page views, over 241 million impressions from digital ads, social media, and over 761 earned media mentions. Evaluation of the campaign shows it is having an impact by raising awareness of urgent maternal warning signs and encouraging people to seek more information and talk to their healthcare providers about concerns.
- Using data to inform violence prevention strategies is key to achieving health equity in communities as demonstrated in CDC’s Preventing Adverse Childhood Experiences: Data to Action (PACE:D2A) and Firearm Injury Surveillance Through Emergency Rooms (FASTER) programs.
  - The Massachusetts Department of Public Health PACE: D2A program recognized that positive childhood experiences (PCEs) profoundly affect health and development, potentially preventing or buffering against toxic stress created by adverse childhood experiences (ACEs). In 2021, the program included PCE questions in the Massachusetts Youth Health Survey which will provide insights into how ACEs and PCEs are impacting children, families and communities across Massachusetts and help direct ACE prevention resources to enhance safe, stable, nurturing relationships, and environments for children.
  - Timely state and local level data on emergency department visits for nonfatal firearm injuries is currently limited. CDC started a new pilot in 2020 to support 10 state health departments to provide surveillance data in near-real time on emergency visits for nonfatal firearm injuries. Data collected through this FASTER initiative allow communities to respond to surges in violence and better direct local efforts. These states have made promising progress in collecting and disseminating data and many are leveraging partnerships in their jurisdictions to connect these data to inform action. For example, Florida is conducting outreach to various statewide injury and suicide prevention coalitions, committees, and councils to promote opportunities to use FASTER data to inform state suicide prevention efforts.
- CDC expedited the release of youth commercial tobacco product use data focusing on health disparities and health equity in collaboration with national and federal partners, as follows:
  - Publication of three Morbidity and Mortality Weekly Reports (MMWRs), with FDA, including corresponding press releases, highlighting new data regarding commercial tobacco product use and use disparities among U.S. youth. These releases included data regarding 2022 youth e-cigarette use as well as 2021 and 2022 youth all tobacco product use.
  - Release of quarterly national e-cigarette sales data through July 2022 as part of additional efforts to monitor e-cigarette use among youth and young adults. CDC collaborated with the CDC Foundation and the Truth Initiative on the releases which covered time periods during the COVID-19 pandemic and the data were analyzed, synthesized, written and released on tight expedited timelines (two to three months, start to finish) in cooperation with national and federal partners. These data are used by federal, national, and state partners to monitor and inform tobacco control efforts.
- CDC’s Data Linkage Program completed the first ever linkage of national survey data to Centers for Medicare and Medicaid Services (CMS) Transformed Medicaid Statistical Information System (T-MSIS) data, which provides the opportunity to study changes in health status, health care utilization and expenditures in low-income families with children and the elderly.
- In July 2022, the Early Release Program of CDC’s National Health Interview Survey (NHIS) released preliminary health insurance estimates from data collected during January-March 2022. The 2022 preliminary data releases were the fastest in the 24-year history of the Early Release Program, each occurring less than four months after the close of data collection.
- In December 2021, CDC significantly expanded data access for analysis and near real-time surveillance with the first-ever release of provisional mortality data in the CDC WONDER online data query system. WONDER is updated monthly with the most recent data and allows for easy and flexible access to the timeliest death data available. Ongoing vitals modernizations investments will allow for even more timely provisional data in the future.

- Between December 2021 and September 2022, CDC released six dashboards that provided insights on health care utilization, including telemedicine usage, during the first years of the COVID-19 pandemic. The new data span across the ambulatory, hospital, and long-term care settings.
- In September 2022, CDC released new data from maternal mortality review committees (MMRCs) in 36 states which found that more than 80% of pregnancy-related deaths were preventable. These data reflect an updated, more robust set of data, with information from more MMRCs than ever before. The report was viewed almost 21,000 times and downloaded over 2,000 times in its first three months. These data can be used to inform activities to prevent future deaths and achieve equity in maternal health.
- In 2022, CDC’s Community Counts Data Visualization Tool allowed users to learn more about the burden of bleeding disorders and identify opportunities to prevent complications and death by displaying mortality information including demographics, characteristics, and causes of death among persons with bleeding disorders receiving care at U.S. hemophilia treatment centers.

## Other CDC Accomplishments

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- CDC supports states to implement policies, systems, and environmental changes to prevent the initiation of emerging tobacco products, including e-cigarettes among youth and young adults. State accomplishments include the following:
  - In 2021, the California Tobacco Control Program ran two media campaigns on multiple platforms. The “Flavors Hook Kids” and “We Are Not Profit” campaign targeted parents and focused on the dangers of flavored tobacco, including the damage menthol-flavored tobacco has had on African American communities. The campaign included targeted outreach to rural and African American/Black communities and had 205 million impressions. The second campaign, “Tell Your Story”, targeted youth and young adults who vape and promoted a text-based cessation program. The campaign had reached 169 million people and enrolled 678 youth and young adults in the cessation program.
  - The Florida Tobacco Control Program worked with 42 school districts to implement an alternative to suspension course for students who violate the tobacco-free campus policy. Since 2020, 8,172 students were enrolled in the course, and 68% successfully completed the course. School-based efforts to reduce and prevent tobacco product use include adopting tobacco-free policies (including e-cigarettes) with enforcement measures that include access to resources and treatment for students, rather than punishment.
  - Effective January 1, 2022, Oregon retailers selling cigarettes, tobacco, and/or inhalant delivery system products are required to obtain a license to sell these products. Oregon also prohibits the online sale of inhalant delivery systems. A seller may not ship cigarettes or smokeless tobacco products purchased by mail, telephone, or over the internet to consumers. Consumer purchase of cigarettes and smokeless tobacco products must be made in person at a retail store.
- In February 2022, the *Tips From Former Smokers*® (*Tips*®) campaign kicked off to celebrate its 10<sup>th</sup> anniversary of being on air. A total of 230,779 calls to 1-800-QUIT-NOW were received though the first 19 weeks of the 2022 campaign, which ran through September 25, 2022. The campaign included new and existing hard-hitting ads to raise awareness about the health effects caused by smoking, and to reach audiences widely including African American, American Indian/Alaska Native, Asian, Hispanic/Latino, and LGBTQ+ audiences. The *Tips* campaign is also promoting the new National Texting Portal (QUITNOW or DÉJÉLO YA to 333888) which connects people to text messaging-based smoking cessation services, an important complement to 1-800-QUIT-NOW that may reach people who may be less likely to call a quitline.
- As of July 2022, arthritis-appropriate, evidence-based interventions (AAEBIs) continued to be offered in all 50 states, the District of Columbia, and American Samoa as a result of the activities of 18 CDC-

supported state and national arthritis partners. Despite the impacts of COVID-19, states reached nearly 25,000 adults with AAEBIs during the last 2 years. These AAEBIs, are low-cost, community-based physical activity and self-management education programs, that have been proven to improve arthritis symptoms and management and quality of life without the use of opioids or other medicines commonly used among this population.

- CDC, alongside its partners in the U.S. government and the WHO, developed new evidence-based tools for strategies to improve the lives of those who suffer from the painful and debilitating effects of lymphatic filariasis (LF)—a parasitic disease. This updated guidance, published in 2021, gives countries with endemic LF a toolkit for carrying out morbidity management and disability prevention programs that will positively impact the lives of those who suffer long-term consequences of LF.
- CDC-supported recipients in 12 jurisdictions linked 66% of clients diagnosed with hepatitis C and 89% of clients diagnosed with hepatitis B to treatment and care during the first year of the Integrated Viral Hepatitis Surveillance and Prevention Funding for Health Departments (IVHSP): Special Projects for Persons Who Inject Drugs program.
- In 2022, the CDC-led Opioid Rapid Response Program (ORRP) expanded its reach and impact as an unprecedented federal interagency coordinated program. From October 2021-September 2022, CDC received 56 ORRP notifications from federal law enforcement partners across 26 states. These notifications allowed CDC to alert state health officials to the risk of increased overdose and other health risks among patients who abruptly lost access to their prescription opioid medications.
- In FY 2022, six-week Rapid Response Extension for Community Health Outcomes (ECHO) sessions, specifically focused on pain management and addiction medicine, were initiated to help physicians inheriting displaced patients taking long term opioid therapy after state ORRP coordinators experienced challenges identifying physicians. One ECHO session completed with a rural community health center in New York absorbed approximately 70 displaced patients receiving long-term opioid therapy.
- In September 2022, the White House National Strategy on Hunger, Nutrition, and Health was released which outlines concrete steps the Federal government can take to help states and communities reduce these disparities so that fewer Americans experience diet-related diseases such as diabetes, obesity, and hypertension. CDC played a significant role in its development and its State Physical Activity and Nutrition program, Active People, Healthy Nation, Food Service Guidelines and Family Healthy Weight Programs were all highlighted in the strategy.
- As of July 2022, nationally accredited health departments serve 91% of the U.S. population. The CDC-supported Public Health Accreditation Board (PHAB) has accredited 417 health departments—40 state, five tribal, and 372 local health departments. June 2021 evaluation data indicate that the program has stimulated quality improvement (95% of accredited health departments agree), improved accountability and transparency (89%), and improved the capacity of the department to provide high quality programs and services (85%).
- CDC’s Roybal Campus East Parking Deck was completed in 2022. It includes many sustainable features, such as a 440 kW solar array providing a net-zero parking deck, and will be ParkSmart Certified. The deck promotes commuter alternatives, reduces energy consumption through all LED lighting, and features rainwater capture cistern for use in parking deck cleaning.

## **Agency Performance Planning and Management**

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CDC conducts continuous program improvement through program strategic planning, monitoring and measurement, and evaluation. CDC collects information on program priorities, measurable outcomes, strategies, and progress through annual updates. Additionally, CDC has developed a performance improvement framework to advance a culture of performance improvement and build performance improvement capacity at all levels of the agency.

The CDC awards nearly 75% of its budget through grants, cooperative agreements, and contracts to help accomplish its mission to promote health and quality of life by preventing and controlling disease, injury, and disability. Contracts procure goods and services used directly by the agency, and grants and cooperative agreements assist other health-related and research organizations that contribute to CDC's mission through health information dissemination, preparedness, prevention, research, evaluation, and surveillance. CDC cooperative agreement funding announcements require applicants to specify how they are measuring, monitoring, and evaluating the activities they are implementing and progress toward achieving the intended outcomes.

## **Agency Use of Evaluation and Evidence**

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CDC is a data-driven agency and incorporates use of data for decision making and to continuously improve its programs. CDC continues to focus on the development and use of evidence to enhance all aspects of the Agency's mission. CDC is leveraging the Foundations for Evidence-Based Policymaking Act to strengthen program evaluation activities and data use for decision making across the agency. CDC uses a prospective evidence-building approach to innovate, test, evaluate and model strategies in order to identify those that are most impactful, cost-effective, and feasible for achieving our public health goals. As additional evidence is generated, some of these questions and approaches may shift. By continuously building and assessing the evidence, CDC is better positioned to optimize our impact and strategically drive informed decisions. This prospective generation of key evidence and ongoing data evaluation is critical for data-driven policymaking.

CDC is increasing its internal capacity to oversee and conduct program evaluation by expanding evaluation trainings available to employees through CDC University and webinars, enhancing the CDC Evaluation Fellowship Program to increase program evaluation expertise, and by ensuring CDC programs are implementing standard program evaluation guidelines and recommendations. Each notice of funding opportunity (NOFO) has clear performance measurement and evaluation measures to ensure funded recipients are collecting and using data for continuous program improvement.

## **Alignment to Administration Priorities and Initiatives**

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CDC is committed to supporting the national priorities set by the Administration. CDC leads key activities for 12 measures in the FY 2024 HHS performance plan. These include:

- strengthening public health surveillance, epidemiology, and laboratory capacity,
- protecting Americans in public health emergencies,
- preventing and controlling tobacco use,
- preventing and responding to trauma or violence,
- mitigating and preventing infectious and chronic diseases,
- mitigating the impacts of environmental factors,
- expanding access to high-quality services for older adults and people with disabilities, and
- improving data collection, use, and evaluation.

## LEGISLATIVE PROPOSALS

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### Data Authority

The current framework for collecting and sharing public health data has resulted in fragmented and inconsistent reporting to CDC, and to state and local public health partners. As part of the Preparedness legislative proposal to provide the HHS Secretary with new data authority, CDC will be able to allow for more complete and timely data sharing to support decisions at the federal, state, and local levels, while reducing burden on providers. For example, authority included in the CARES Act requiring COVID-19 laboratory test reporting during the PHE greatly improved the availability of laboratory data.

### Vaccines for Adults

The FY 2024 President's Budget includes a proposal for legislative authority and capped mandatory funding, \$12 billion over 10 years, to establish the Vaccines for Adults (VFA) program to begin to expand access to routine and outbreak vaccines for uninsured individuals at no cost. The VFA program would be modeled on the successful Vaccines for Children (VFC) program and tailored to adults. Ultimately, the program aims to reduce vaccination coverage disparities, improve outbreak control of vaccine-preventable diseases, and enhance and maintain the infrastructure needed for responding to future pandemics.

### Vaccines for Children

The FY 2024 President's Budget will also continue the FY 2023 policy proposal to expand Vaccines for Children (VFC) program to children under age 19 enrolled in a separate Children Health Insurance Program (CHIP), thereby transitioning CHIP vaccine purchase costs from the state to the VFC program. Under this proposal, CHIP children would have no copayment.

### Pandemic Preparedness

The FY 2024 President's Budget provides \$20 billion in mandatory funding across HHS, which is reflected in the Public Health and Social Services Emergency Fund, to prepare for pandemics and other biological threats. Of this total, \$6.1 billion is allocated to CDC. With these resources, CDC will modernize and build laboratory capacity and strengthen public health data systems; enhance domestic and global disease surveillance, biosafety, and biosecurity efforts; and support capabilities for monitoring and evaluating vaccine and medical countermeasure safety and effectiveness.<sup>4</sup>

### Student Loan Repayment Tax Waiver

CDC seeks approval for a tax code exclusion from gross income for payments made under the CDC Education Loan Repayment Program for Health Professionals (ELRPHP). CDC has the authority (section 317F of the PHS Act (42 U.S.C. 247b-7)) to pay up to \$50,000 on an annual basis on behalf of an individual for loan repayments which is beneficial in recruiting clinicians and other highly sought technical experts. However, CDC has had to pay taxes on behalf of the individual (39%), and the employer portion of Federal Insurance Contributions Act (FICA) social security/Medicare taxes (7.65%) which is a substantial drain on agency financial resources. The exception will relieve CDC of the tax burden on program funds that provide student loan repayment to new employees enabling CDC to use more of its program funds to provide this benefit to more individuals.

### Ready Response

The FY 2024 President's Budget will include a legislative proposal to allow CDC to dedicate a small percentage of funding across CDC appropriations account for the purpose of supporting a cadre of response-ready staff that would be available to respond to public health challenges. These staff would be trained and available for rapid deployment in the case of a Public Health Emergency (PHE), an event with significant potential to become a PHE,

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<sup>4</sup> For more information on the Department-wide pandemic preparedness proposal, please reference the detailed narrative in the Public Health Social Services and Emergency Fund FY 2024 Congressional Justification.

or other urgent threat to the nation's health security, and then return to their regular duties when the event is resolved. With this new cadre, CDC will be able to surge faster and stop the spread of disease before it becomes a widespread outbreak. This approach will allow for faster response, and significantly reduce the administrative burden that is in place today. This proposal would allow the use of funds from CDC's budget activities to support the cadre on an ongoing basis. It complements CDC's proposed one Treasury account policy, which will retain all budget activities and allow CDC to draw on all of its resources, with appropriate notification to Congress, to respond to large-scale threats.

### **Retired Annuitants**

CDC requests authority for one year to hire reemployed annuitants to fill full-time roles in emergency responses without hour limitations during a declared Public Health Emergency response. The identified positions are needed to meet the emergency response requirements and to provide substantive support, without limitation, in carrying out public health crises to support the CDC's mission criteria.

## MODERNIZING CDC'S BUDGET STRUCTURE

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The Administration is seeking to revitalize U.S. preparedness by investing in core capacities including public health infrastructure, data modernization, upskilling the public health workforce, and strengthening global health protection. As CDC lays the ground for these investments, it also needs greater operational flexibilities.

Over time, CDC's discretionary budget structure has grown increasingly complex. In FY 2023, CDC's discretionary budget had 13 Treasury accounts. When CDC launches a "whole of agency" response to an urgent public health threat, it cannot efficiently access or utilize agency resources, especially its most valuable resource—its people—to meet the urgent need. CDC is currently limited in its ability to rapidly engage its full workforce to support response because only staff whose regular positions are funded by appropriations consistent with prospective response duties can undertake those activities without formal personnel processing. Only when CDC's Emergency Operations Center (EOC) is formally activated can all CDC staff, including unique subject matter experts, support the activities of the EOC without reimbursement. Even then, the agency must track and report these activities, with limitations on the length of the detail assignments.

In an effort to more efficiently respond to future urgent threats, CDC is proposing to reduce the many Treasury accounts to a single "CDC-Wide Activities and Program Support" account, which will enable the agency to more easily access all of its resources to address a crisis. CDC will continue to maintain transparency and accountability through the programs, projects and activities described in Congressional reports. These details will also continue to be published on the CDC website.

This proposal would allow CDC to utilize staff to address urgent time limited problems without standing up an emergency response and detailing staff to it. Further, CDC could quickly redirect some contractual resources to address new priority problems. One key driver for this move is the need to create greater flexibility in CDC's ability to respond to public health emergencies and execute resources. CDC has great depth of expertise and technical capacity. But its ability to draw on those resources to address critical emerging threats is limited by the structure of the CDC appropriation. CDC must be able to draw on the best and most technically appropriate resources it has to address the most urgent threats. Realigning CDC's accounts can support more nimble response to emerging threats—allowing better access to, and leveraging of, program resources, such as staffing and procured services.

Specific improvements, such as a more streamlined budget accounting structure and the Ready Response legislative proposal, will facilitate a swifter and more effective public health response.

In addition to this effort and new authorities, CDC is proposing budget initiatives to support core, foundational capacities including data modernization, public health infrastructure, and global health protection, to build capacities supportive of current public health challenges, as well as those to come.

## ALL PURPOSE TABLE (CURRENT STRUCTURE)

(dollars in thousands)

	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget <sup>1</sup>	FY 2024 +/- FY 2023
<b>Immunization and Respiratory Diseases</b>	<b>\$868,155</b>	<b>\$919,291</b>	<b>\$1,255,930</b>	<b>\$336,639</b>
Budget Authority	\$448,805	\$499,941	\$750,930	\$250,989
ACA/PPHF	\$419,350	\$419,350	\$505,000	\$85,650
<b>HIV/AIDS, Viral Hepatitis, STI and TB Prevention</b>	<b>\$1,345,056</b>	<b>\$1,391,056</b>	<b>\$1,544,556</b>	<b>\$153,500</b>
<b>Emerging and Zoonotic Infectious Diseases</b>	<b>\$693,272</b>	<b>\$750,772</b>	<b>\$845,772</b>	<b>\$95,000</b>
Budget Authority	\$641,272	\$698,772	\$793,772	\$95,000
ACA/PPHF	\$52,000	\$52,000	\$52,000	\$0
<b>Chronic Disease Prevention and Health Promotion</b>	<b>\$1,338,664</b>	<b>\$1,430,414</b>	<b>\$1,813,539</b>	<b>\$383,125</b>
Budget Authority	\$1,083,714	\$1,175,464	\$1,551,339	\$375,875
ACA/PPHF	\$254,950	\$254,950	\$262,200	\$7,250
<b>Birth Defects, Developmental Disabilities, Disability and Health</b>	<b>\$177,060</b>	<b>\$205,560</b>	<b>\$222,560</b>	<b>\$17,000</b>
<b>Environmental Health</b>	<b>\$228,350</b>	<b>\$246,850</b>	<b>\$420,850</b>	<b>\$174,000</b>
Budget Authority	\$211,350	\$229,850	\$396,850	\$167,000
ACA/PPHF	\$17,000	\$17,000	\$17,000	\$0
PHS Evaluation Transfer	\$0	\$0	\$7,000	\$7,000
<b>Injury Prevention and Control</b>	<b>\$714,879</b>	<b>\$761,379</b>	<b>\$1,351,669</b>	<b>\$590,290</b>
<b>Public Health Scientific Services</b>	<b>\$651,997</b>	<b>\$754,497</b>	<b>\$961,564</b>	<b>\$207,067</b>
Budget Authority	\$651,997	\$754,497	\$651,222	(\$103,275)
ACA/PPHF	\$0	\$0	\$140,000	\$140,000
PHS Evaluation Transfer	\$0	\$0	\$170,342	\$170,342
<b>Occupational Safety and Health</b>	<b>\$351,800</b>	<b>\$362,800</b>	<b>\$362,800</b>	<b>\$0</b>
<b>Global Health</b>	<b>\$646,843</b>	<b>\$692,843</b>	<b>\$764,843</b>	<b>\$72,000</b>
<b>Domestic Preparedness<sup>2</sup></b>	<b>\$862,200</b>	<b>\$905,100</b>	<b>\$943,200</b>	<b>\$38,100</b>
<b>Cross-Cutting Activities and Program Support</b>	<b>\$493,570</b>	<b>\$723,570</b>	<b>\$1,038,570</b>	<b>\$315,000</b>
Budget Authority	\$333,570	\$563,570	\$828,570	\$265,000
ACA/PPHF	\$160,000	\$160,000	\$210,000	\$50,000
<b>Buildings and Facilities</b>	<b>\$30,000</b>	<b>\$40,000</b>	<b>\$55,000</b>	<b>\$15,000</b>
<b>Total CDC – Budget Authority</b>	<b>\$7,498,546</b>	<b>\$8,280,832</b>	<b>\$10,217,311</b>	<b>\$1,936,479</b>
<b>Total CDC – BA &amp; PHS Evaluation Transfer</b>	<b>\$7,498,546</b>	<b>\$8,280,832</b>	<b>\$10,394,653</b>	<b>\$2,113,821</b>
<b>CDC Program Level - BA, PPHF, &amp; PHS Eval<sup>3</sup></b>	<b>\$8,401,846</b>	<b>\$9,184,132</b>	<b>\$11,580,853</b>	<b>\$2,396,721</b>
Agency for Toxic Substances and Disease Registry (ATSDR)	\$80,500	\$85,020	\$86,020	\$1,000
Prevention and Public Health Fund (PPHF) Transfer	\$903,300	\$903,300	\$1,186,200	\$282,900
PHS Evaluation Transfer	\$0	\$0	\$177,342	\$177,342
Energy Employees Occupational Illness Compensation Program Act (EEOICPA) <sup>4</sup>	\$50,763	\$50,763	\$50,763	\$0
World Trade Center Health Program <sup>5</sup>	\$641,485	\$709,848	\$782,145	\$72,297
Vaccines for Children <sup>6</sup>	\$5,540,000	\$4,434,000	\$6,002,000	\$1,568,000
Vaccines for Adults (Proposed Law)	\$0	\$0	\$1,004,000	\$1,004,000
Other User Fees	\$2,226	\$2,226	\$2,226	\$0
<b>Total CDC/ATSDR</b>	<b>\$14,716,820</b>	<b>\$14,465,989</b>	<b>\$19,508,007</b>	<b>\$5,042,018</b>
Pandemic Preparedness, Proposed Law Mandatory via PHSSEF (non-add) <sup>7</sup>	\$0	\$0	\$6,100,000	\$6,100,000

<sup>1</sup> This table is for cross-walking purposes only; the Budget proposes to reduce the 13 accounts to one "CDC-Wide Activities and Program Support" account.

<sup>2</sup> FY 2023 enacted level is comparably adjusted to reflect \$21.9 million within CDC's total for HHS Protect. The FY 2023 Joint Explanatory Statement provides \$21.9 million from the Public Health and Social Services Emergency Fund (PHSSEF) for HHS Protect, to support activities implemented by CDC. The FY 2024 Budget level proposes directly appropriating funding to CDC for HHS Protect/Response Ready Enterprise Data Integration platform (RREDI). The 2024 Budget proposes the

realignment of Public Health Emergency Preparedness Cooperative Agreement; Academic Centers for PH Preparedness; and All Other CDC Preparedness into a new Domestic Preparedness PPA.

<sup>3</sup> FY 2023 enacted level excludes emergency and supplemental funding of \$86 million in the Disaster Relief Supplemental Appropriations Act (P.L. 117-328 Division N).

<sup>4</sup> EEOICPA reflects post-sequester amounts.

<sup>5</sup> World Trade Center Health Program reflects Federal share estimated obligations only; NYC share estimated obligations are not included. FY 2023 enacted level excludes supplemental funding of \$1 billion in the FY 2023 Appropriations Act (P.L. 117-328).

<sup>6</sup> FY 2022 and FY 2023 estimates reflect actual and estimated transfers from Medicaid under current law. FY 2024 total reflects estimate under proposed law which expands eligible population to include children enrolled in the Children's Health Insurance Program.

<sup>7</sup> The FY 2024 budget also provides \$20 billion in mandatory funding across HHS for pandemic preparedness, which is reflected in the Public Health and Social Services Emergency Fund chapter. Of this total, CDC will receive \$6.1 billion.

## ALL PURPOSE TABLE (PROPOSED STRUCTURE)

(dollars in thousands)

	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
<b>CDC-Wide Activities and Program Support<sup>1</sup></b>	<b>\$8,401,846</b>	<b>\$9,184,132</b>	<b>\$11,580,853</b>	<b>\$2,396,721</b>
Budget Authority	\$7,498,546	\$8,280,832	\$10,217,311	\$1,936,479
ACA/PPHF	\$903,300	\$903,300	\$1,186,200	\$282,900
PHS Evaluation Transfer	\$0	\$0	\$177,342	\$177,342
<b>Total CDC – Budget Authority</b>	<b>\$7,498,546</b>	<b>\$8,280,832</b>	<b>\$10,217,311</b>	<b>\$1,936,479</b>
<b>Total CDC – BA &amp; PHS Evaluation Transfer</b>	<b>\$7,498,546</b>	<b>\$8,280,832</b>	<b>\$10,394,653</b>	<b>\$2,113,821</b>
<b>CDC Program Level - BA, PPHF, &amp; PHS Eval<sup>2,3</sup></b>	<b>\$8,401,846</b>	<b>\$9,184,132</b>	<b>\$11,580,853</b>	<b>\$2,396,721</b>
Agency for Toxic Substances and Disease Registry (ATSDR)	\$80,500	\$85,020	\$86,020	\$1,000
Prevention and Public Health Fund (PPHF) Transfer	\$903,300	\$903,300	\$1,186,200	\$282,900
PHS Evaluation Transfer	\$0	\$0	\$177,342	\$177,342
Energy Employees Occupational Illness Compensation Program Act (EEOICPA) <sup>4</sup>	\$50,763	\$50,763	\$50,763	\$0
World Trade Center (Mandatory) <sup>5</sup>	\$641,485	\$709,848	\$782,145	\$72,297
Vaccines for Children <sup>6</sup>	\$5,540,000	\$4,434,000	\$6,002,000	\$1,568,000
Vaccines for Adults (Proposed Mandatory)	\$0	\$0	\$1,004,000	\$1,004,000
Other User Fees	\$2,226	\$2,226	\$2,226	\$0
<b>Total CDC/ATSDR</b>	<b>\$14,716,820</b>	<b>\$14,465,989</b>	<b>\$19,508,007</b>	<b>\$5,042,018</b>
Pandemic Preparedness, Proposed Mandatory via PHSSEF (non-add) <sup>7</sup>	N/A	N/A	\$6,100,000	\$6,100,000

<sup>1</sup> The following accounts are proposed for realignment to the “CDC-Wide Activities and Program Support” Account: Immunization and Respiratory Diseases; HIV/AIDS, Viral Hepatitis, STI and TB Prevention; Emerging and Zoonotic Infectious Diseases; Chronic Disease Prevention; Birth Defects, Developmental Disabilities, Disability and Health; Environmental Health; Injury Prevention; Public Health Scientific Services; Occupational Safety and Health; Public Health Preparedness; Global Health; and Buildings and Facilities.

<sup>2</sup> FY 2023 enacted level is comparably adjusted to reflect \$21.9 million within CDC’s total for HHS Protect. The FY 2023 Joint Explanatory Statement provides \$21.9 million from the Public Health and Social Services Emergency Fund (PHSSEF) for HHS Protect, to support activities implemented by CDC. The FY 2024 Budget level proposes directly appropriating funding to CDC for HHS Protect/Response Ready Enterprise Data Integration platform (RREDI).

<sup>3</sup> FY 2023 enacted level excludes emergency and supplemental funding of \$86 million in the Disaster Relief Supplemental Appropriations Act (P.L. 117-328 Division N).

<sup>4</sup> EEOICPA reflects post-sequester amounts.

<sup>5</sup> Reflects Federal share estimated obligations only; NYC share estimated obligations are not included. FY 2023 enacted level excludes supplemental funding of \$1 billion in the FY 2023 Appropriations Act (P.L. 117-328).

<sup>6</sup> FY 2022 and FY 2023 estimates reflect actual and estimated transfers from Medicaid under current law. FY 2024 total reflects estimate under proposed law which expands eligible population to include children enrolled in the Children’s Health Insurance Program.

<sup>7</sup> The FY 2024 budget also provides \$20 billion in mandatory funding across HHS for pandemic preparedness, which is reflected in the Public Health and Social Services Emergency Fund chapter. Of this total, CDC will receive \$6,100 million.

# BUDGET EXHIBITS

## **APPROPRIATIONS LANGUAGE**

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### **[IMMUNIZATION AND RESPIRATORY DISEASES**

For carrying out titles II, III, XVII, and XXI, and section 2821 of the PHS Act, titles II and IV of the Immigration and Nationality Act, and section 501 of the Refugee Education Assistance Act, with respect to immunization and respiratory diseases, \$499,941,000.

#### **HIV/AIDS, VIRAL HEPATITIS, SEXUALLY TRANSMITTED DISEASES, AND TUBERCULOSIS PREVENTION**

For carrying out titles II, III, XVII, and XXIII of the PHS Act with respect to HIV/AIDS, viral hepatitis, sexually transmitted diseases, and tuberculosis prevention, \$1,391,056,000.

#### **EMERGING AND ZOO NOTIC INFECTIOUS DISEASES**

For carrying out titles II, III, and XVII, and section 2821 of the PHS Act, titles II and IV of the Immigration and Nationality Act, and section 501 of the Refugee Education Assistance Act, with respect to emerging and zoonotic infectious diseases, \$698,772,000: Provided, That of the amounts made available under this heading, up to \$1,000,000 shall remain available until expended to pay for the transportation, medical care, treatment, and other related costs of persons quarantined or isolated under Federal or State quarantine law.

#### **CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION**

For carrying out titles II, III, XI, XV, XVII, and XIX of the PHS Act with respect to chronic disease prevention and health promotion, \$1,175,464,000: Provided, That funds made available under this heading may be available for making grants under section 1509 of the PHS Act for not less than 21 States, tribes, or tribal organizations: Provided further, That of the funds made available under this heading, \$16,500,000 shall be available to continue and expand community specific extension and outreach programs to combat obesity in counties with the highest levels of obesity: Provided further, That the proportional funding requirements under section 1503(a) of the PHS Act shall not apply to funds made available under this heading.

#### **BIRTH DEFECTS, DEVELOPMENTAL DISABILITIES, DISABILITIES AND HEALTH**

For carrying out titles II, III, XI, and XVII of the PHS Act with respect to birth defects, developmental disabilities, disabilities and health, \$205,560,000.

#### **PUBLIC HEALTH SCIENTIFIC SERVICES**

For carrying out titles II, III, and XVII of the PHS Act with respect to health statistics, surveillance, health informatics, and workforce development, \$754,497,000.

#### **ENVIRONMENTAL HEALTH**

For carrying out titles II, III, and XVII of the PHS Act with respect to environmental health, \$229,850,000: Provided, That of the amounts appropriated under this heading up to \$4,000,000 may remain available until expended for carrying out the Vessel Sanitation Program, in addition to user fee collections available for such purpose: Provided further, That the Committees on Appropriations of the House of Representatives and the Senate are notified at least 15 days in advance of any use of funds pursuant to the preceding proviso.

#### **INJURY PREVENTION AND CONTROL**

For carrying out titles II, III, and XVII of the PHS Act with respect to injury prevention and control, \$761,379,000.

## NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

For carrying out titles II, III, and XVII of the PHS Act, sections 101, 102, 103, 201, 202, 203, 301, and 501 of the Federal Mine Safety and Health Act, section 13 of the Mine Improvement and New Emergency Response Act, and sections 20, 21, and 22 of the Occupational Safety and Health Act, with respect to occupational safety and health, \$362,800,000.]

### ENERGY EMPLOYEES OCCUPATIONAL ILLNESS COMPENSATION PROGRAM

For necessary expenses to administer the Energy Employees Occupational Illness Compensation Program Act, \$55,358,000, to remain available until expended: Provided, That this amount shall be available consistent with the provision regarding administrative expenses in section 151(b) of division B, title I of Public Law 106-554.

### [GLOBAL HEALTH

For carrying out titles II, III, and XVII of the PHS Act with respect to global health, \$692,843,000, of which: (1) \$128,921,000 shall remain available through September 30, 2024 for international HIV/AIDS; and (2) \$293,200,000 shall remain available through September 30, 2025 for global public health protection: Provided, That funds may be used for purchase and insurance of official motor vehicles in foreign countries.

### PUBLIC HEALTH PREPAREDNESS AND RESPONSE

For carrying out titles II, III, and XVII of the PHS Act with respect to public health preparedness and response, and for expenses necessary to support activities related to countering potential biological, nuclear, radiological, and chemical threats to civilian populations, \$883,200,000: Provided, That the Director of the Centers for Disease Control and Prevention (referred to in this title as "CDC") or the Administrator of the Agency for Toxic Substances and Disease Registry may detail staff without reimbursement to support an activation of the CDC Emergency Operations Center, so long as the Director or Administrator, as applicable, provides a notice to the Committees on Appropriations of the House of Representatives and the Senate within 15 days of the use of this authority, a full report within 30 days after use of this authority which includes the number of staff and funding level broken down by the originating center and number of days detailed, and an update of such report every 180 days until staff are no longer on detail without reimbursement to the CDC Emergency Operations Center.

### BUILDINGS AND FACILITIES

For acquisition of real property, equipment, construction, installation, demolition, and renovation of facilities, \$40,000,000, which shall remain available until September 30, 2027: Provided, That funds made available to this account in this or any prior Act that are available for the acquisition of real property or for construction or improvement of facilities shall be available to make improvements on non-federally owned property, provided that any improvements that are not adjacent to federally owned property do not exceed \$2,500,000, and that the primary benefit of such improvements accrues to CDC: Provided further, That funds previously set-aside by CDC for repair and upgrade of the Lake Lynn Experimental Mine and Laboratory shall be used to acquire a replacement mine safety research facility: Provided further, That funds made available to this account in this or any prior Act that are available for the acquisition of real property or for construction or improvement of facilities in conjunction with the new replacement mine safety research facility shall be available to make improvements on non-federally owned property, provided that any improvements that are not adjacent to federally owned property do not exceed \$5,000,000: Provided further, That in addition, the prior year unobligated balance of any amounts assigned to former employees in accounts of CDC made available for Individual Learning Accounts shall be credited to and merged with the amounts made available under this heading to support the replacement of the mine safety research facility.

**CDC-WIDE ACTIVITIES AND PROGRAM SUPPORT**

(Including Transfer of Funds)

For carrying out titles II, III, XVII and XIX, and section 2821 of the PHS Act and for cross-cutting activities and program support for activities funded in other appropriations included in this Act for the Centers for Disease Control and Prevention, \$563,570,000, of which: (1) \$350,000,000 shall remain available through September 30, 2024, for public health infrastructure and capacity; and (2) \$50,000,000 shall remain available through September 30, 2024 for forecasting epidemics and outbreak analytics: Provided, That paragraphs (1) through (3) of subsection (b) of section 2821 of the PHS Act shall not apply to funds appropriated under this heading and in all other accounts of the CDC: Provided further, That of the amounts made available under this heading, \$35,000,000, to remain available until expended, shall be available to the Director of the CDC for deposit in the Infectious Diseases Rapid Response Reserve Fund established by section 231 of division B of Public Law 115-245: Provided further, That funds appropriated under this heading may be used to support a contract for the operation and maintenance of an aircraft in direct support of activities throughout CDC to ensure the agency is prepared to address public health preparedness emergencies: Provided further, That employees of CDC or the Public Health Service, both civilian and commissioned officers, detailed to States, municipalities, or other organizations under authority of section 214 of the PHS Act, or in overseas assignments, shall be treated as non-Federal employees for reporting purposes only and shall not be included within any personnel ceiling applicable to the Agency, Service, or HHS during the period of detail or assignment: Provided further, That CDC may use up to \$10,000 from amounts appropriated to CDC in this Act for official reception and representation expenses when specifically approved by the Director of CDC: Provided further, That in addition, such sums as may be derived from authorized user fees, which shall be credited to the appropriation charged with the cost thereof: Provided further, That with respect to the previous proviso, authorized user fees from the Vessel Sanitation Program and the Respirator Certification Program shall be available through September 30, 2024.

(Department of Health and Human Services Appropriations Act, 2023.)

**CDC-WIDE ACTIVITIES AND PROGRAM SUPPORT**

For an additional amount for "CDC-Wide Activities and Program Support", \$86,000,000, to remain available until September 30, 2024, for necessary expenses directly related to the consequences of Hurricanes Fiona and Ian: Provided, That funds appropriated under this heading in this Act may be made available to restore amounts, either directly or through reimbursement, for obligations incurred for such purposes, prior to the date of enactment of this Act.

(Disaster Relief Supplemental Appropriations Act, 2023.)]

## APPROPRIATIONS LANGUAGE

## CDC-WIDE ACTIVITIES AND PROGRAM SUPPORT

(Including Transfer of Funds)

*To carry out titles II, III, IV, VII, XI, XV, XVII, XIX, XXI, XXIII, XXVI, and XXVIII of the Public Health Service Act (PHS Act), sections 101, 102, 103, 201, 202, 203, 301, and 501 of the Federal Mine Safety and Health Act, section 13 of the Mine Improvement and New Emergency Response Act, sections 20, 21, and 22 of the Occupational Safety and Health Act, and titles II and IV of the Immigration and Nationality Act, and for expenses necessary to support activities related to countering potential biological, nuclear, radiological, and chemical threats to civilian populations, and for cross-cutting activities and program support for these activities, \$10,217,311,000; of which \$128,921,000 shall remain available through September 30, 2025, for international HIV/AIDS; of which \$353,200,000 shall remain available through September 30, 2026, for global public health protection; of which \$600,000,000 shall remain available through September 30, 2025, for public health infrastructure and capacity; and of which \$50,000,000 shall remain available through September 30, 2025, for forecasting epidemics and outbreak analytics: Provided, That funds made available under this heading may be used for purchase and insurance of official motor vehicles in foreign countries: Provided further, That of the amounts made available under this heading, up to \$1,000,000 shall remain available until expended to pay for the transportation, medical care, treatment, and other related costs of persons quarantined or isolated under Federal or State quarantine law: Provided further, That funds made available under this heading may be available for making grants under section 1509 of the PHS Act for not less than 21 States, tribes, or tribal organizations: Provided further, That the proportional funding requirements under section 1503(a) of the PHS Act shall not apply to funds made available under this heading: Provided further, That of the amounts appropriated under this heading, up to \$4,000,000 may remain available until expended for carrying out the Vessel Sanitation Program, in addition to user fee collections available for such purpose: Provided further, That of the amounts appropriated under this heading, \$55,000,000 shall remain available until September 30, 2028, for costs related to the acquisition of real property, equipment, construction, installation, demolition, and renovation of facilities: Provided further, That funds made available in this or any prior Act for the acquisition of real property or for construction or improvement of facilities shall be available to make improvements on non-federally owned property, provided that any improvements that are not adjacent to federally owned property do not exceed \$2,500,000, and that the primary benefit of such improvements accrues to CDC: Provided further, That funds previously set-aside by CDC for repair and upgrade of the Lake Lynn Experimental Mine and Laboratory shall be used to acquire a replacement mine safety research facility: Provided further, That in addition to the amounts made available under this heading, the prior year unobligated balances of any amounts assigned to former employees in accounts of CDC made available for Individual Learning Accounts shall be credited to and merged with the amounts made available for buildings and facilities to support the replacement of the mine safety research facility: Provided further, That paragraphs (1) through (3) of subsection (b) of section 2821 of the PHS Act shall not apply to funds appropriated under this heading: Provided further, That of the amounts made available under this heading, \$35,000,000, to remain available until expended, shall be available to the Director of the CDC for deposit in the Infectious Diseases Rapid Response Reserve Fund established by section 231 of division B of Public Law 115-245: Provided further, That funds appropriated under this heading may be used to support a contract for the operation and maintenance of an aircraft in direct support of activities throughout CDC to ensure the agency is prepared to address public health preparedness emergencies: Provided further, That any amounts made available by this Act to the Centers for Disease Control and Prevention may be used to support the salaries and expenses of any CDC employee or fellow responding to an emergency or other urgent public health crisis: Provided further, That employees of CDC or the Public Health Service, both civilian and commissioned officers, detailed to States, municipalities, or other organizations under the authority of section 214 of the PHS Act, or serving in overseas assignments previously notified to the Congress through the budgetary process, shall be treated as non-Federal employees for reporting purposes only and shall not be included within any personnel ceiling applicable to the Agency, Service, or HHS during the period of detail or assignment: Provided further, That CDC may use up to*

*\$10,000 from amounts appropriated to CDC in this Act for official reception and representation expenses when specifically approved by the Director of CDC: Provided further, That in addition to amounts provided under this heading, such sums as may be derived from authorized user fees, which shall be credited to the appropriation charged with the cost thereof: Provided further, That with respect to the previous proviso, authorized user fees from the Vessel Sanitation Program and the Respirator Certification Program shall be available through September 30, 2025: Provided further, That in addition to amounts provided under this heading, \$7,000,000 shall be available for lead poisoning prevention and \$170,342,000 shall be available for health statistics from amounts made available under section 241 of the PHS Act.*

## APPROPRIATIONS LANGUAGE ANALYSIS

Language Provision	Explanation
<b>DISEASE CONTROL AND PREVENTION</b>	
<p><i>To carry out titles II, III, IV, VII, XI, XV, XVII, XIX, XXI, XXIII, XXVI, and XXVIII of the PHS Act, sections 101, 102, 103, 201, 202, 203, 301, and 501 of the Federal Mine Safety and Health Act, section 13 of the Mine Improvement and New Emergency Response Act, sections 20, 21, and 22 of the Occupational Safety and Health Act, and titles II and IV of the Immigration and Nationality Act, and for expenses necessary to support activities related to countering potential biological, nuclear, radiological, and chemical threats to civilian populations, and for cross-cutting activities and program support for these activities, \$10,217,311,000</i></p>	<p>Appropriates funding for the Centers for Disease Control and Prevention into one CDC-Wide Activities and Program Support account.</p> <p>Removed “Section 501 of the Refugee Education Assistance Act” citation; Section 501 of the Refugee Education Assistance Act amended U.S.C. 1522 (included in Title IV of the Immigration National Act). Titles II and IV of the INA cover CDC’s programmatic activities, and continue to be cited in CDC’s appropriations language.</p>
<p><i>Provided, That funds made available under this heading may be available for making grants under section 1509 of the PHS Act for not less than 21 States, tribes, or tribal organizations: [Provided further, That of the funds made available under this heading, \$16,500,000 shall be available to continue and expand community specific extension and outreach programs to combat obesity in counties with the highest levels of obesity:] Provided further, That the proportional funding requirements under section 1503(a) of the PHS Act shall not apply to funds made available under this heading.</i></p>	<p>Deletes statutory requirement for the specific amount of funds for the high obesity counties program. CDC has budgeted for this specific program in the 2024 Budget request.</p>
<p><i>Provided further, That of the amounts appropriated under this heading, \$55,000,000 shall remain available until September 30, 2028, for costs related to the acquisition of real property, equipment, construction, installation, demolition, and renovation of facilities:</i></p>	<p>Appropriates funding to support repair and improvement of buildings and facilities, specifying availability through FY 2028 to account for unanticipated delays in these activities due to economic conditions.</p>
<p><i>Provided further, That funds made available in this or any prior Act for the acquisition of real property or for construction or improvement of facilities shall be available to make improvements on non-federally owned property, provided that any improvements that are not adjacent to federally owned property do not exceed</i></p>	<p>Provides funding, capped at \$2,500,000, for improvements on non-federally owned property when the primary benefit accrues to CDC.</p>

Language Provision	Explanation
<p><i>\$2,500,000 and that the primary benefit of such improvements accrues to CDC:</i></p>	
<p><i>Provided further, That funds previously set-aside by CDC for repair and upgrade of the Lake Lynn Experimental Mine and Laboratory shall be used to acquire a replacement mine safety research facility:</i></p> <p><i>Provided further, That in addition to the amounts made available under this heading, the prior year unobligated balances of any amounts assigned to former employees in accounts of CDC made available for Individual Learning Accounts shall be credited to and merged with the amounts made available for buildings and facilities to support the replacement of the mine safety research facility:</i></p>	<p>Provides funds previously set-aside for repair and upgrade of the Lake Lynn Experimental Mine and Laboratory to be merged with unobligated amounts from Individual Learning Accounts to purchase a replacement mine safety research facility.</p>
<p><i>Provided further, That any amounts made available by this Act to the Centers for Disease Control and Prevention may be used to support the salaries and expenses of any CDC employee or fellow responding to an emergency or other urgent public health crisis:</i></p>	<p>This language authorizes CDC to use funds appropriated to any CDC program to support staff who are engaged in a response to an emergency or other urgent public health crisis, including deployments to the field through the Emergency Operations Center. This authority would be used instead of authority to detail people to the Emergency Operations Center for a specific period of time. Authority to detail CDC staff to the emergency operations center was previously included in the Preparedness and Response account.</p>
<p><i>Provided further, That in addition to amounts provided under this heading, \$7,000,000 shall be available for lead poisoning prevention and \$170,342,000 shall be available for health statistics from amounts made available under section 241 of the PHS Act.</i></p>	<p>This language reflects additional amounts from PHS Evaluation resources for activities related to 1) environmental health and 2) public health scientific services.</p>

CDC-RELATED GENERAL PROVISIONS	
<p>Sec. [212]210. In order for HHS to carry out international health activities, including HIV/AIDS and other infectious disease, chronic and environmental disease, and other health activities abroad during fiscal year [2023] 2024:</p> <p>(1) The Secretary may exercise authority equivalent to that available to the Secretary of State in section 2(c) of the State Department Basic Authorities Act of 1956. The Secretary shall consult with the Secretary of State and relevant</p>	<p>The date change updates a FY 2021 provision so that it applies in FY 2024.</p> <p>CDC also proposes adding a new authority to acquire, lease, construct, alter, renovate, equip, furnish, or manage facilities outside of the United States to support its overseas programs.</p>

<p>Chief of Mission to ensure that the authority provided in this section is exercised in a manner consistent with section 207 of the Foreign Service Act of 1980 and other applicable statutes administered by the Department of State.</p> <p>(2) The Secretary is authorized to provide such funds by advance or reimbursement to the Secretary of State as may be necessary to pay the costs of acquisition, lease, alteration, renovation, and management of facilities outside of the United States for the use of HHS. The Department of State shall cooperate fully with the Secretary to ensure that HHS has secure, safe, functional facilities that comply with applicable regulation governing location, setback, and other facilities requirements and serve the purposes established by this Act. The Secretary is authorized, in consultation with the Secretary of State, through grant or cooperative agreement, to make available to public or nonprofit private institutions or agencies in participating foreign countries, funds to acquire, lease, alter, or renovate facilities in those countries as necessary to conduct programs of assistance for international health activities, including activities relating to HIV/AIDS and other infectious diseases, chronic and environmental diseases, and other health activities abroad.</p> <p>(3) The Secretary is authorized to provide to personnel appointed or assigned by the Secretary to serve abroad, allowances and benefits similar to those provided under chapter 9 of title I of the Foreign Service Act of 1980, and 22 U.S.C. 4081 through 4086 and subject to such regulations prescribed by the Secretary. The Secretary is further authorized to provide locality-based comparability payments (stated as a percentage) up to the amount of the locality-based comparability payment (stated as a percentage) that would be payable to such personnel under section 5304 of title 5, United States Code if such personnel's official duty station were in the District of Columbia. Leaves of absence for personnel under this subsection shall be on the same basis as that provided under subchapter I of chapter 63 of title 5, United States Code, or section 903 of the Foreign</p>	
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<p>Service Act of 1980, to individuals serving in the Foreign Service.</p> <p><i>(4) The Secretary may acquire, lease, construct, alter, renovate, equip, furnish, or manage facilities outside of the United States, as necessary to conduct such programs, in consultation with the Secretary of State, either directly for the use of the United States Government or for the use, pursuant to grants, direct assistance, or cooperative agreements, of public or nonprofit private institutions or agencies in participating foreign countries.</i></p>	
<p>Sec. [229] 220. Funds appropriated in this Act that are available for salaries and expenses of employees of the Department of Health and Human Services shall also be available to pay travel and related expenses of such an employee or of a member of his or her family, when such employee is assigned to duty, in the United States or in a U.S. territory, during a period and in a location that are the subject of a determination of a public health emergency under section 319 of the Public Health Service Act and such travel is necessary to obtain medical care for an illness, injury, or medical condition that cannot be adequately addressed in that location at that time. For the purposes of this section, the term “U.S. territory” means Guam, the Commonwealth of Puerto Rico, the Northern Mariana Islands, the Virgin Islands, American Samoa, or the Trust Territory of the Pacific Islands.</p>	<p>This provision allows CDC to Medivac its employees or their family members for medical care under certain circumstances, if needed.</p> <p>This provision may also be relevant to other HHS OpDivs.</p>
<p>SEC. [235] 225. Funds appropriated in this Act that are available for salaries and expenses of employees of the Centers for Disease Control and Prevention shall also be available for the primary and secondary schooling of eligible dependents of personnel stationed in a U.S. territory as defined in section 229 of this Act at costs not in excess of those paid for or reimbursed by the Department of Defense.</p>	<p>This language allows CDC to reimburse private schools for tuition costs for dependents of CDC employees.</p> <p>Historically, CDC’s Dengue Branch has had an Interagency Agreement with Department of Defense to send dependents to the base school. This is costly, and also does not provide bilingual instruction at the level needed for families that plan to stay in Puerto Rico long-term. This authority now allows CDC to provide that benefit to employees and saves money when compared to DOD schools.</p>
<p><i>Sec. 228. CONSTRUCTION AND RENNOVATION ON LEASED LAND</i></p>	<p>This new General Provision would allow CDC to make significant renovations on property it leases for its labs in</p>

<p><i>Funds made available to the Centers for Disease Control and Prevention in this or any other Act, or any prior Act, that are available for construction or renovation of facilities for the Centers for Disease Control and Prevention shall be available for such purposes on property leased by the United States Government in Fort Collins, Colorado.</i></p>	<p>Fort Collins, Colorado. This authority is specifically needed to implement the proposed renovation of Building 401 as described in the NEF chapter.</p>
<p><i>SEC. 232. (a) PREMIUM PAY AUTHORITY.— If services performed by a Department employee during a public health emergency declared under section 319 of the Public Health Service Act are determined by the Secretary of Health and Human Services to be primarily related to preparation for, prevention of, or response to such a public health emergency, any premium pay that is provided for such services shall be exempted from the aggregate of basic pay and premium pay calculated under section 5547(a) of title 5, United States Code, and any other provision of law limiting the aggregate amount of premium pay payable on a biweekly or calendar year basis.</i></p> <p><i>(b) OVERTIME AUTHORITY.—Any overtime that is provided for such services described in subsection (a) shall be exempted from any annual limit on the amount of overtime payable in a calendar or fiscal year.</i></p> <p><i>(c) APPLICABILITY OF AGGREGATE LIMITATION ON PAY.—In determining, for purposes of section 5307 of title 5, United States Code, whether an employee’s total pay exceeds the annual rate payable under such section, the Secretary of Health and Human Services shall not include pay exempted under this section.</i></p> <p><i>(d) LIMITATION OF PAY AUTHORITY.—Pay exempted from otherwise applicable limits under subsection (a) shall not cause the aggregate pay earned for the calendar year in which the exempted pay is earned to exceed the rate of basic pay payable for a position at level II of the Executive Schedule under section 5313 of title 5, United States Code.</i></p> <p><i>(e) DANGER PAY FOR SERVICE IN PUBLIC HEALTH EMERGENCIES — The Secretary of Health and Human Services may grant a danger pay</i></p>	<p>This new General Provision would provide certain administrative flexibilities, to be available during a public health emergency declared under section 319 of the PHS Act. Specifically:</p> <ul style="list-style-type: none"> <li>• Overtime Pay Cap Waiver: Authority to allow senior response leadership, including the incident management staff, and subject matter experts to accrue overtime during a public health response that will be disregarded in applying the statutory pay cap on aggregate of basic pay and premium pay.</li> <li>• Danger Pay for Service in Public Health Emergencies: Authority to allow HHS to provide danger pay to any employee who is serving in an area deemed to threaten physical harm or imminent danger to the health and well-being of the employee</li> </ul>

<p><i>allowance under section 5928 of title 5 of the United States Code, without regard to the limitations in the first sentence of such section, for work that is performed by a Department employee during a public health emergency declared under section 319 of the Public Health Service Act and that the Secretary determines is primarily related to preparation for, prevention of, or response to such a public health emergency and is performed under conditions that threaten physical harm or imminent danger to the health or well-being of the employee.</i></p> <p><i>(f) EFFECTIVE DATE.— Subsections (a), (b), (c), and (d) shall take effect as if enacted on September 30, 2021, and subsection (e) shall take effect as if enacted on September 30, 2022.</i></p>	
<p><b>SEC. 233. NONCOMPETITIVE CONVERSIONS OF CDC FELLOWSHIP AND TRAINING PARTICIPANTS.</b></p> <p><i>Section 317G of the Public Health Service Act (42 U.S.C. 247b-8) is amended by adding at the end the following: "The Secretary may, no later than 120 days after the end of an individual's participation in such a fellowship or training program, and without regard to those provisions of title 5, United State Code, governing appointments in the competitive service, appoint a participant in such a fellowship or training program to a term or permanent position in the Centers for Disease Control and Prevention."</i></p>	<p>This new General Provision provides for non-competitive conversions of CDC/ATSDR fellows and training recipients to sustain the skilled, essential public health workforce that can deploy to address and prevent crises.</p>

## AMOUNTS AVAILABLE FOR OBLIGATION<sup>1</sup>

	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget
<b>Discretionary Appropriation:</b>			
Enacted	\$7,498,546,000	\$8,258,932,000	\$10,394,653,000
Permissive Transfer	\$0	\$0	\$0
Reprogramming	\$0	\$0	\$0
ATB Rescission	N/A	N/A	N/A
<b>Subtotal, adjusted Appropriation</b>	<b>\$7,498,546,000</b>	<b>\$8,258,932,000</b>	<b>\$10,394,653,000</b>
<b>Mandatory and Other Appropriations:</b>			
Transfers from Other Accounts <sup>2</sup>	\$903,300,000	\$903,300,000	\$1,186,200,000
Receipts from User Fees	\$2,226,000	\$2,226,000	\$2,226,000
Receipts from CRADA <sup>3</sup>	\$65,661	\$65,661	\$65,661
Receipts from Royalties <sup>3</sup>	\$3,514,940	\$3,514,940	\$3,514,940
Appropriation (EEOICPA, post-sequester)	\$50,763,000	\$50,763,000	\$50,763,000
<b>Subtotal, adjusted Mandatory and Other Appropriations</b>	<b>\$959,869,601</b>	<b>\$959,869,601</b>	<b>\$1,242,769,601</b>
Recovery of prior year Obligations	\$404,693,907	\$0	\$0
Unobligated balance start of year	\$648,599,450	\$1,175,433,390	\$1,284,493,767
Unobligated balance expiring	\$9,837,499	\$0	\$0
Unobligated balance end of year	(\$1,175,433,390)	(\$1,284,493,767)	(\$1,596,858,359)
<b>Total Obligations</b>	<b>\$8,346,113,067</b>	<b>\$9,109,741,224</b>	<b>\$11,325,058,009</b>

<sup>1</sup> Excludes Vaccines for Children, World Trade Center Health Program, and Supplemental Funding.

<sup>2</sup> Reflects Prevention and Public Health Fund.

<sup>3</sup> FY 2022 amount represents actual receipts. FY 2023 and FY 2024 amounts are estimates assuming level receipts. Actual FY 2023 and FY 2024 amounts may vary.

## CDC SUMMARY OF CHANGES

	Dollars	FTEs
<b>FY 2023 Enacted (Discretionary Program Level)<sup>1</sup></b>	<b>\$9,184,132</b>	<b>12,620</b>
<b>FY 2024 President's Budget (Discretionary Program Level)</b>	<b>\$11,580,853</b>	<b>13,141</b>
<b>Net Change</b>	<b>\$2,396,721</b>	<b>521</b>

	FY 2023 FTE	FY 2023 Enacted	FTE Change	FY 2024 +/- FY 2023
<b>(dollars in thousands)</b>				
<b>Increases:</b>				
<b>Immunization and Respiratory Diseases</b>				
Immunization and Other Respiratory Diseases	---	\$681,933	---	\$316,639
Influenza/Influenza Planning and Response	---	\$231,358	---	\$20,000
<b>HIV/AIDS, Viral Hepatitis, STI and TB Prevention</b>				
Domestic HIV/AIDS Prevention and Research	---	\$1,013,712	---	\$142,000
Viral Hepatitis	---	\$43,000	---	\$11,500
<b>Emerging and Zoonotic Infectious Diseases</b>				
Antimicrobial Resistance Initiative	---	\$197,000	---	\$15,000
Emerging Infectious Diseases	---	\$202,997	---	\$40,000
National HealthCare Safety Network	---	\$24,000	---	\$26,000
Quarantine	---	\$58,772	---	\$14,000
<b>Chronic Disease Prevention and Health Promotion</b>				
Tobacco	---	\$246,500	---	\$11,000
Nutrition, Physical Activity and Obesity	---	\$58,420	---	\$72,000
School Health	---	\$19,400	---	\$30,600
Cancer Prevention and Control	---	\$409,549	---	\$121,525
Safe Motherhood/Infant Health	---	\$108,000	---	\$56,000
Social Determinants of Health	---	\$8,000	---	\$92,000
<b>Birth Defects, Developmental Disabilities, Disability and Health</b>				
Surveillance for Emerging Threats to Mothers and Babies	---	\$23,000	---	\$17,000
<b>Environmental Health</b>				
Environmental Health Activities	---	\$52,600	---	\$135,000
Childhood Lead Poisoning Prevention	---	\$51,000	---	\$39,000
<b>Injury Prevention and Control</b>				
Intentional Injury	---	\$164,550	---	\$350,000
National Violent Death Reporting System (NVDRS)	---	\$24,500	---	\$10,000
Opioid Overdose Prevention and Surveillance	---	\$505,579	---	\$207,790
Firearm Injury and Mortality Prevention Research	---	\$12,500	---	\$22,500
<b>Public Health Scientific Services</b>				
Health Statistics	--	\$187,397	--	\$2,067
Public Health Data Modernization Initiative	--	\$175,000	--	\$165,000
Advancing Laboratory Science	--	\$23,000	--	\$5,000
Public Health Workforce	--	\$71,000	--	\$35,000
<b>Global Health</b>				
Global Immunization Program	---	\$230,000	---	\$10,000
Parasitic Diseases and Malaria	---	\$29,000	---	\$2,000
Global Public Health Protection	---	\$293,200	---	\$60,000
<b>Public Health Preparedness and Response</b>				
Domestic Preparedness <sup>1</sup>	---	\$905,100	---	\$38,100
<b>Cross-Cutting Activities and Program Support</b>				
Public Health Leadership and Support	---	\$128,570	---	\$15,000
Public Health Infrastructure and Capacity	---	\$350,000	---	\$250,000
Center for Forecasting Epidemics and Outbreak Analytics	---	\$50,000	---	\$50,000
<b>Buildings and Facilities</b>				

Buildings and Facilities	---	\$40,000	---	\$15,000
<b>Total Increases</b>	<b>N/A</b>	<b>\$6,618,637</b>	<b>N/A</b>	<b>\$2,396,721</b>
<b>Decreases:</b>				
<b>All Other Decreases</b>		<b>\$0</b>		<b>\$0</b>
<b>Total Decreases</b>	<b>N/A</b>	<b>\$0</b>	<b>N/A</b>	<b>\$0</b>
<b>Transfers</b>				
	---	\$0	---	\$0
<b>Built-In:</b>				
1. Annualization of Jan - 2023 Pay Raise	---	---	---	\$0
2. FY 2024 Pay Increases	---	---	---	\$0
3. Changes in Day of Pay	---	---	---	\$0
4. Rental Payments to GSA and Others	---	---	---	\$0
<b>Total Built-In</b>		<b>\$0</b>		<b>\$0</b>
Absorption of Current Services				\$0
<b>Total</b>				<b>\$0</b>
<b>Total Increases (Program Level)</b>		<b>\$6,618,637</b>	<b>N/A</b>	<b>\$2,396,721</b>
<b>Total Decreases (Program Level)</b>		<b>\$0</b>	<b>N/A</b>	<b>\$0</b>
<b>NET CHANGE - L/HHS/ED Program Level</b>	<b>12,620</b>	<b>\$9,184,132</b>	<b>521</b>	<b>\$2,396,721</b>
<b>Other Program Level Changes</b>				
1. Vaccines for Children <sup>2</sup>	---	\$4,434,000	---	\$1,568,000
2. World Trade Center <sup>3</sup>	---	\$709,848	---	\$72,297
3. Energy Employees Occupational Illness Compensation Act (EEOICPA)	---	\$50,763	---	\$0
4. User Fees	---	\$2,226	---	\$0
5. Vaccines for Adults (Proposed)	---	N/A	---	\$1,004,000
<b>Total - Other Program Level Net Increase</b>	<b>N/A</b>	<b>\$5,196,837</b>	<b>N/A</b>	<b>\$2,644,297</b>
<b>NET CHANGE: CDC BUDGET AUTHORITY &amp; PROGRAM LEVEL</b>	<b>12,620</b>	<b>\$14,380,969</b>	<b>521</b>	<b>\$5,041,018</b>
<b>Pandemic Preparedness Mandatory via PHSSEF (non-add)<sup>4</sup></b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$6,100,000</b>

<sup>1</sup> FY 2023 Enacted level is comparably adjusted to reflect \$21.9 million within CDC's total for HHS Protect. The FY 2023 Joint Explanatory Statement provides \$21.9 million from the Public Health and Social Services Emergency Fund (PHSSEF) for HHS Protect, to support activities implemented by CDC. The 2024 Budget proposes the realignment of Public Health Emergency Preparedness Cooperative Agreement; Academic Centers for PH Preparedness; and All Other CDC Preparedness into a new Domestic Preparedness PPA.

<sup>2</sup> Estimates reflect actual and anticipated transfers from Medicaid under current law.

<sup>3</sup> Reflects Federal share estimated obligations only; NYC share estimated obligations are not included. Excludes supplemental funding of \$1 billion in the FY 2023 Appropriations Act (P.L. 117-328).

<sup>4</sup> The FY 2024 budget also provides \$20 billion in mandatory funding across HHS for pandemic preparedness, which is reflected in the Public Health and Social Services Emergency Fund chapter. Of this total, CDC will receive \$6.1 billion.

## BUDGET AUTHORITY BY ACTIVITY

(dollars in thousands)

Budget Activity/Description	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget
Immunization and Respiratory Diseases	\$448,805	\$499,941	\$750,930
HIV/AIDS, Viral Hepatitis, STI and TB Prevention	\$1,345,056	\$1,391,056	\$1,544,556
Emerging and Zoonotic Infectious Diseases	\$641,272	\$698,772	\$793,772
Chronic Disease Prevention and Health Promotion	\$1,083,714	\$1,175,464	\$1,551,339
Birth Defects, Developmental Disabilities, Disability and Health	\$177,060	\$205,560	\$222,560
Environmental Health	\$211,350	\$229,850	\$396,850
Injury Prevention and Control	\$714,879	\$761,379	\$1,351,669
Public Health Scientific Services	\$651,997	\$754,497	\$651,222
Occupational Safety and Health	\$351,800	\$362,800	\$362,800
Global Health	\$646,843	\$692,843	\$764,843
Public Health Preparedness and Response <sup>1</sup>	\$862,200	\$905,100	\$943,200
Cross-Cutting Activities and Program Support	\$333,570	\$563,570	\$828,570
Buildings and Facilities	\$30,000	\$40,000	\$55,000
<b>Total CDC, Budget Authority -</b>	<b>\$7,498,546</b>	<b>\$8,280,832</b>	<b>\$10,217,311</b>
<b>Total CDC, FTEs</b>	<b>12,360</b>	<b>12,620</b>	<b>13,141</b>

<sup>1</sup> FY 2023 Enacted level is comparably adjusted to reflect \$21.9 million within CDC's total for HHS Protect. The FY 2023 Joint Explanatory Statement provides \$21.9 million from the Public Health and Social Services Emergency Fund (PHSSEF) for HHS Protect, to support activities implemented by CDC. The FY 2024 Budget level proposes directly appropriating funding to CDC for HHS Protect/Response Ready Enterprise Data Integration platform (RREDI).

## AUTHORIZING LEGISLATION

(dollars in thousands)	<b>Enabling Legislation Status</b>	<b>Allocation Methods</b>	<b>FY 2021 Final</b>	<b>FY 2022 Enacted</b>	<b>FY 2023 Enacted</b>
<b>Enabling Legislation Citation<sup>1</sup></b>					
<b>Immunization and Respiratory Diseases</b>					
PHSA § 301	Permanent	Direct Federal/	\$821,005	\$868,155	\$919,291
PHSA § 307,	Indefinite	Intramural;			
PHSA § 310		Competitive			
PHSA § 311		Cooperative			
PHSA § 313		Agreements/			
PHSA § 317		Grants,			
PHSA § 317N		including			
PHSA § 317S		Formula			
PHSA § 319		Grants;			
PHSA § 319C-1		Contracts; and			
PHSA § 319E*		Other			
PHSA § 319F					
PHSA § 322					
PHSA § 325					
PHSA § 327					
PHSA § 340C					
PHSA § 352					
PHSA § 2102*					
PHSA § 2125					
PHSA § 2126					
PHSA § 2127					
PHSA § 2821					
Social Security Act § 1928 (42 U.S.C. 1396s)					
<b>HIV/AIDS, Viral Hepatitis, STD, and TB Prevention</b>					
PHSA § 301	Permanent	Direct Federal/	\$1,314,056	\$1,345,056	\$1,391,056
PHSA § 306*	Indefinite	Intramural,			
PHSA § 307		Competitive			
PHSA § 308		Grants/			
PHSA § 310		Cooperative			
PHSA § 311		Agreements,			
PHSA § 317*		Formula			
PHSA § 317E*		Grants/			
PHSA § 317N		Cooperative			
PHSA § 317P*		Agreements,			
PHSA § 318*		Contracts, and			
PHSA § 318A*		Other			
PHSA § 318B*					
PHSA § 322					
PHSA § 325					
PHSA § 327					
PHSA § 352,					
PHSA § 2315					
PHSA § 2320					
PHSA § 2341					
PHSA §§ 2521*2522*					
Departments of Labor, Health and Human Services, and Education, and					

(dollars in thousands)	<b>Enabling Legislation Status</b>	<b>Allocation Methods</b>	<b>FY 2021 Final</b>	<b>FY 2022 Enacted</b>	<b>FY 2023 Enacted</b>
<b>Enabling Legislation Citation<sup>1</sup></b>					
Related Agencies Appropriations Act, 1995 (P. L. 103-333, Title II)					
<b>Emerging and Zoonotic Infectious Diseases</b>					
PHSA § 264	Permanent	Direct Federal/	\$648,272	\$693,272	\$750,772
PHSA § 301	Indefinite	Intramural,			
PHSA § 304		Contracts, and			
PHSA § 307		Competitive			
PHSA § 308(d)		Grants/			
PHSA § 310		Cooperative			
PHSA § 311		Agreements			
PHSA § 317*					
PHSA § 317P*					
PHSA § 317R*					
PHSA § 317S					
PHSA § 317T*					
PHSA § 317U*					
PHSA § 319					
PHSA § 319D					
PHSA § 319E*					
PHSA § 319F					
PHSA § 319G*					
PHSA § 321					
PHSA § 322					
PHSA § 325					
PHSA § 327					
PHSA § 352					
PHSA § 353					
PHSA § 361-369					
PHSA § 399V-5					
PHSA § 1102					
PHSA § 2821					
PHSA § 2822					
Bayh-Dole Act of 1980 (P. L. 96-517)					
Immigration and Nationality Act, Titles II & IV (8 USC §§ 1182, 1222, 1252, 1522*)					
Prepare for and Respond to Existing Viruses, Emerging New Threats, and Pandemics (PREVENT) Act (P.L. 117-328, Title II)					
The American Rescue Plan Act § 2404					
<b>Chronic Disease Prevention and Health Promotion</b>					
PHSA § 301	Permanent	Direct Federal	\$1,276,664	\$1,338,664	\$1,430,414
PHSA § 307	Indefinite	Intramural;			
PHSA § 310		Competitive			
PHSA § 311,		Cooperative			
PHSA § 317*		Agreements/			
PHSA § 317D*		Grants,			
PHSA § 317H*		including			
PHSA § 317K		Formula			
PHSA § 317L		Grants; and			
PHSA § 317M*		Competitive			
PHSA § 317P*		Contracts			

(dollars in thousands)	<b>Enabling Legislation Status</b>	<b>Allocation Methods</b>	<b>FY 2021 Final</b>	<b>FY 2022 Enacted</b>	<b>FY 2023 Enacted</b>
<b>Enabling Legislation Citation<sup>1</sup></b>					
PHSA § 330E*					
PHSA § 398A					
PHSA § 3998B-EF*					
PHSA § 399Q*					
PHSA § 399R					
PHSA § 399V-3*					
PHSA § 399W-Z*					
PHSA § 399LL – LL-2					
PHSA § 399NN					
PHSA § 417E					
PHSA § 1501–1510*					
PHSA § 1706*					
Comprehensive Smoking Education Act of 1984					
Comprehensive Smokeless Tobacco Health Education Act of 1986					
Federal Cigarette Labeling and Advertising Act					
Fertility Clinic Success Rate and Certification Act of 1992 (P. L. 102-493)					
<b>Birth Defects, Developmental Disabilities, Disability and Health</b>					
PHSA § 301,	Permanent	Direct Federal/	\$167,810	\$177,060	\$205,560
PHSA § 304	Indefinite	Intramural,			
PHSA § 307		Competitive			
PHSA § 308(d)		Grants,			
PHSA § 310, PHSA § 311		Cooperative			
PHSA § 317*		Agreements			
PHSA § 317C*		and Contracts			
PHSA § 317J*					
PHSA § 317K					
PHSA § 317L					
PHSA § 317Q					
PHSA § 327					
PHSA § 352					
PHSA § 399M*					
PHSA § 399Q*					
PHSA § 399S					
PHSA § 399S-1*					
PHSA § 399T					
PHSA § 399V-2					
PHSA § 399AA					
PHSA § 399BB					
PHSA § 399CC					
PHSA § 1102					
PHSA § 1106					
PHSA § 1107					
PHSA § 1108*					
PHSA § 1110					
PHSA § 1113					
PHSA § 1114					
PHSA § 1115					
PHSA § 1132*					

(dollars in thousands)	<b>Enabling Legislation Status</b>	<b>Allocation Methods</b>	<b>FY 2021 Final</b>	<b>FY 2022 Enacted</b>	<b>FY 2023 Enacted</b>
<b>Enabling Legislation Citation<sup>1</sup></b>					
PHSA § 1706*					
The Prematurity Research Expansion And Education For Mothers Who Deliver Infants Early Act § 2* (42 U.S.C. 247b-4f*)					
<b>Environmental Health</b>					
PHSA § 301,	Permanent Indefinite	Direct Federal/ Intramural, Contracts, Competitive Grants/ Cooperative Agreements	\$224,350	\$226,850	\$246,850
PHSA § 307					
PHSA § 310					
PHSA § 311					
PHSA § 317*					
PHSA § 317A*					
PHSA § 317B					
PHSA § 317I*					
PHSA § 317O*					
PHSA § 327					
PHSA § 352					
PHSA § 361					
PHSA § 366					
PHSA § 399V-6					
PHSA § 1102					
PHSA § 1706*					
<b>Injury Prevention and Control</b>					
PHSA § 203*	Permanent Indefinite	Direct Federal/ Intramural; Competitive Cooperative Agreements/ Grants, including Formula Grants; and Competitive Contracts	\$682,879	\$714,879	\$761,379
PHSA § 214					
PHSA § 301					
PHSA § 304					
PHSA § 307					
PHSA § 308					
PHSA § 310					
PHSA § 311					
PHSA § 317*					
PHSA § 317N					
PHSA § 319					
PHSA § 319D					
PHSA § 327					
PHSA § 352					
PHSA § 391*					
PHSA § 392*					
PHSA § 392A					
PHSA § 393*					
PHSA § 393A*					
PHSA § 393B					
PHSA § 393C					
PHSA § 393D*					
PHSA § 393A					
PHSA § 393B					
PHSA § 393C					
PHSA § 393D					
PHSA § 394*					
PHSA § 399*					
PHSA § 3939					
PHSA § 3990					

(dollars in thousands)	<b>Enabling Legislation Status</b>	<b>Allocation Methods</b>	<b>FY 2021 Final</b>	<b>FY 2022 Enacted</b>	<b>FY 2023 Enacted</b>
<b>Enabling Legislation Citation<sup>1</sup></b>					
PHSA § 399P*					
PHSA § 1102					
PHSA § 1706*					
Bayh-Dole Act of 1980 (P. L. 96-517)					
Family Violence Prevention and Services Act §§ 314*					
Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities (SUPPORT) Act §§ 7011, 7131 (P. L. 115-271)					
Comprehensive Addiction and Recovery Act of 2016 § 102 (P. L. 115-271)					
Violence Against Women and Department of Justice Reauthorization Act of 2022 § 301 (P. L. 117-103)					
<b>Public Health Scientific Services</b>					
PHSA § 241	Permanent	Direct Federal/	\$591,997	\$651,997	\$754,497
PHSA § 301	Indefinite	Intramural,			
PHSA § 304		Competitive			
PHSA § 306*		Grants/			
PHSA § 307		Cooperative			
PHSA § 308		Agreements,			
PHSA § 310		Contracts			
PHSA § 317*					
PHSA § 317F					
PHSA § 317G					
PHSA § 318*					
PHSA § 319					
PHSA § 319A					
PHSA § 319D					
PHSA § 353					
PHSA § 391*					
PHSA § 399S-1*					
PHSA § 399V*					
PHSA § 768					
PHSA § 778*					
PHSA § 1102					
PHSA § 2315					
PHSA § 2341					
Coronavirus Aid, Relief, and Economic Security Act § 18115					
E-Government Act of 2002 (P. L. 107-347)					
Food, Conservation, and Energy Act of 2008 § 4403 (7 U.S.C. 5311a)					
Intelligence Reform and Terrorism Prevention Act of 2004 § 7211*					
National Nutrition Monitoring and Related Research Act of 1990 § 5341 (P. L. 101-445)					
Title V (44 U.S.C. 3501 note)					
<b>Occupational Safety and Health</b>					

(dollars in thousands)					
Enabling Legislation Citation <sup>1</sup>	Enabling Legislation Status	Allocation Methods	FY 2021 Final	FY 2022 Enacted	FY 2023 Enacted
PHSA § 301	Permanent	Direct Federal/	\$345,300	\$351,800	\$362,800
PHSA § 304	Indefinite	Intramural,			
PHSA § 306*		Competitive			
PHSA § 307		Grant/			
PHSA § 308(d)		Cooperative			
PHSA § 310		Agreements,			
PHSA § 311		Contracts,			
PHSA § 317		Other			
PHSA § 317A*					
PHSA § 317B					
PHSA § 319					
PHSA § 327					
PHSA § 352					
PHSA §§ 399MM – 399MM-3					
PHSA § 399V-6					
PHSA § 1102					
PHSA § 2695					
Bureau of Mine Act (as amended by P.L. 104-208)					
Energy Employees Occupational Illness Compensation Program Act of 2000					
Federal Mine Safety and Health Act of 1977 (P.L. 91-173, as amended by P.L. 95-164 and P.L. 109-236)					
Mine Improvement and New Emergency Response Act § 13					
Firefighter Cancer Registry Act of 2018 (P.L. 115-194)*					
Never Forget the Heroes: James Zadroga, Ray Pfeifer, and Luis Alvarez Permanent Authorization of the September 11th Victim Compensation Fund Act (P.L. 116-34)					
Occupational Safety and Health Act of 1970 §§ 20–22 (P.L. 91-596, as amended by P.L. 107-188 and P.L. 109-236, 29 U.S.C. 669–671)					
Radiation Exposure Compensation Act, §§ 6 and 12					
Toxic Substances Control Act (P.L. 94-469, as amended by P.L. 102-550)*					
<b>Global Health</b>					
PHSA § 214	Permanent	Direct Federal/	\$592,843	\$646,843	\$692,843
PHSA § 301	Indefinite	Intramural,			
PHSA § 304		Competitive			
PHSA § 307		Grants/			
PHSA § 310		Cooperative			
PHSA § 317T*		Agreements,			
PHSA § 319		Direct			
PHSA § 322		Contracts,			
PHSA § 327		Interagency			
PHSA § 340C		Agreements			

(dollars in thousands)	<b>Enabling Legislation Status</b>	<b>Allocation Methods</b>	<b>FY 2021 Final</b>	<b>FY 2022 Enacted</b>	<b>FY 2023 Enacted</b>
<b>Enabling Legislation Citation<sup>1</sup></b>					
PHSA § 361-369					
PHSA § 2315					
PHSA § 2341					
Foreign Assistance Act of 1961 §§ 104A* & 104C* and 627 & 629					
Federal Employees International Organization Service Act § 3					
Foreign Employees Compensation Program					
Tom Lantos and Henry J. Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria (P.L. 110-293, as amended by P.L. 115-305)					
PEPFAR Stewardship & Oversight Act of 2013 (Pub. L. 113-56)					
<b>Public Health Preparedness and Response</b>					
PHSA § 301	Permanent	Direct, Federal	\$842,200	\$862,200	\$883,200
PHSA § 307	Indefinite	Intramural,			
PHSA § 310		Cooperative			
PHSA § 311		Agreements,			
PHSA § 319		including			
PHSA § 319C-1		Formula			
PHSA § 319D		Grants/			
PHSA § 319F		Cooperative			
PHSA § 319F-2*		Agreements;			
PHSA § 319G*		and Contracts			
PHSA § 351A*					
PHSA § 361					
PHSA § 2801					
PHSA § 2812					
<b>CDC-Wide Activities and Program Support</b>					
PHSA § 241	Permanent	Direct Federal/	\$313,070	\$493,570	\$723,570
PHSA § 301	Indefinite	Intramural,			
PHSA § 304		Contracts,			
PHSA § 306*		Competitive			
PHSA § 307		Grants/			
PHSA § 308		Cooperative			
PHSA § 310		Agreements			
PHSA § 310A*					
PHSA § 311					
PHSA § 317					
PHSA § 317F					
PHSA § 317G					
PHSA § 318					
PHSA § 319					
PHSA § 319A					
PHSA § 319D					
PHSA § 322					
PHSA § 325					
PHSA § 327					
PHSA § 353					
PHSA § 361-369					

(dollars in thousands)	<b>Enabling Legislation Status</b>	<b>Allocation Methods</b>	<b>FY 2021 Final</b>	<b>FY 2022 Enacted</b>	<b>FY 2023 Enacted</b>
	<b>Enabling Legislation Citation<sup>1</sup></b>				
	PHSA § 391*				
	PHSA § 399S-1*				
	PHSA § 399G				
	PHSA § 399V*				
	PHSA § 399U				
	PHSA § 768				
	PHSA § 778				
	PHSA § 1102				
	PHSA § 1901 – 1909				
	PHSA § 2315				
	PHSA § 2341				
	PHSA Title XIX, part APHSA § 2821				
	PHSA § 2825				
	Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, 2019 (P.L. 115-245, Division B)				
	The American Rescue Plan Act § 2404				
	Prepare for and Respond to Existing Viruses, Emerging New Threats Pandemics (PREVENT) Act (P.L. 117-328, Title II)				
	Coronavirus Aid, Relief, and Economic Security Act § 18115				
	E-Government Act of 2002 (P. L. 107-347)				
	Food, Conservation, and Energy Act of 2008 § 4403 (7 U.S.C. 5311a)				
	Intelligence Reform and Terrorism Prevention Act of 2004 § 7211*				
	National Nutrition Monitoring and Related Research Act of 1990 § 5341 (P. L. 101-445), Title V (44 U.S.C. 3501 note)				

<sup>1</sup> Expired/Expiring noted with \*

## APPROPRIATIONS HISTORY TABLE<sup>1,2</sup>

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
2014 Budget Authority	5,216,509,000	--	5,757,052,000	5,792,542,000
2014 Public Health Prevention Fund	755,110,000	--	839,000,000	831,300,000
2015 Budget Authority	5,399,706,000	--	5,999,348,000	5,968,118,000
2015 Public Health Prevention Fund	809,510,000	--	887,300,000	886,300,000
2015 CR Ebola Funding (PL 113-164)	--	--	--	30,000,000
2015 Ebola Response and Preparedness <sup>3</sup>	--	--	--	1,771,000,000
2016 Budget Authority	6,095,803,000	6,095,803,000	5,747,306,000	6,270,745,000
2016 Public Health Prevention Fund	914,300,000	914,300,000	892,950,000	892,300,000
2017 Budget Authority <sup>4</sup>	5,967,376,000	6,875,144,000	6,153,448,000	6,293,503,000
2017 Public Health Prevention Fund	944,470,000	908,300,000	891,300,000	891,300,000
2018 Budget Authority	4,991,675,000	6,010,153,000	6,318,953,000	--
2018 Public Health Prevention Fund	840,600,000	840,600,000	800,900,000	--
2018 Disaster Relief Supplement (PL 115-123)	--	--	--	200,000,000
2019 Budget Authority	5,524,935,000	6,781,908,000	7,004,483,000	6,477,883,000
2019 Public Health Prevention Fund	--	848,000,000	808,300,000	804,500,000
2019 Disaster Relief Supplement (PL 116-20)	--	--	--	20,000,000
2020 Budget Authority	5,214,882,000	7,177,725,000	6,608,665,000	6,839,946,000
2020 Public Health Prevention Fund	891,100,000	854,250,000	854,250,000	854,250,000
2021 Budget Authority	5,565,318,000	7,100,396,000	6,908,446,000	6,963,296,000
2021 Public Health Prevention Fund	893,950,000	856,150,000	856,150,000	856,150,000
2022 Budget Authority	8,454,861,000	9,625,761,000	8,636,611,000	7,498,546,000
2022 Public Health Prevention Fund	903,300,000	903,300,000	903,300,000	903,300,000
2023 Budget Authority	9,620,961,000	9,540,696,000	9,542,171,000	8,258,932,000
2023 Public Health Prevention Fund	903,300,000	903,300,000	903,300,000	903,300,000
2023 Disaster Relief Supplement (PL 117-328)	--	--	--	86,000,000
2024 Budget Authority	\$10,217,311,000	--	--	--
2024 Public Health Prevention Fund	1,186,200,000	--	--	--

<sup>1</sup> Does not include funding for ATSDR.

<sup>2</sup> The Prevention and Public Health Fund (PPHF) amounts reflect CDC's request and final amount allotted from the PPHF to CDC from HHS.

<sup>3</sup> Ebola Response and Preparedness is one-time emergency funding appropriated in FY 2015 for the U.S. Government response to contain, treat, and prevent the spread of Ebola.

<sup>4</sup> FY 2017 Enacted includes funding for Flint, Michigan response, which includes \$15 million for Lead Poisoning Prevention and \$20 million for a Lead Exposure Registry and Advisory Council.

## APPROPRIATIONS NOT AUTHORIZED BY LAW

(dollars in millions)				
Program*	Last Year of Authorization	Authorization Level**	Appropriations in Last Year of Authorization	Appropriations in FY 2023
Sexually Transmitted Infections (STIs) (PHSA 318A)	FY 1998	Such Sums...	\$112.117	\$174.310
National Center for Health Statistics (PHSA 306)	FY 2003	Such Sums...	\$125.899	\$187.397
WISEWOMAN (PHSA 1509)	FY 2003	Such Sums...	\$12.419	\$34.620
National Cancer Registries (PHSA 399B-399F)	FY 2003	Such Sums...	N/A	\$53.440
Asthma Surveillance & Grants (PHSA 317I)	FY 2005	Such Sums...	\$32.422	\$33.500
Folic Acid (PHSA 317J)	FY 2005	Such Sums...	\$2.188	\$3.150
Injury Prevention and Control (PHSA 391-394A) <sup>1</sup>	FY 2005	Such Sums...	\$138.237	\$753.129 <sup>1</sup>
Oral Health Promotion (PHSA 317M)	FY 2005	Such Sums...	\$11.204	\$20.250
Childhood Lead Poisoning Prevention (PHSA 317A, 42 USC 247b-1; Pub. L. 106-310)	FY 2005	\$40.000	\$36.474	\$34.000
Birth Defects, Developmental Disability, Disability and Health (PHSA 317C)	FY 2007	Such Sums...	\$122.242	\$205.560
Breast and Cervical Cancer (PHSA 1501-10)	FY 2012	\$275.000	\$204.779	\$235.500
CDC Public Health Workforce and Career Development (PHSA 778)	FY 2013	\$39.500	\$41.500	\$71.000
National Diabetes Prevention Program (PHSA 399V-3)	FY 2014	Such Sums...	\$10.000	\$37.300
Johanna's Law (PHSA 317P(d))	FY 2014	\$18.000	\$5.131	\$11.500
Section 317 Immunization (PHSA 317(l))	FY 2014	Such sums...	\$610.847	\$681.933
Young Women's Breast Health Awareness and Support of Young Women Diagnosed with Breast Cancer (PHSA 399NN)	FY 2019	\$4.900	\$4.960	\$6.960
Center for Research and Demonstration of Health Promotion and Disease Prevention (PHSA 1706)	FY 2003	Such Sums...	\$26.830	\$28.961
Preventive Health Measures with regard to Prostate Cancer (PHSA 317D)	FY 2004	Such Sums...	\$14.091	\$15.205
Tourette Syndrome (PHSA 1108; 42 USC 300b-7; Pub. L. 106-310)	FY 2005	Such sums...	\$1.811	\$2.500
Epilepsy; seizure disorder (PHSA 330E; 42 USC 254c-5; Pub. L. 106-310)	FY 2005	Such sums...	\$7.560	\$11.500
Prevention of Falls Among Older Adults (PHSA 393D; 42 USC 280b-1f; Pub. L. 110-202)	FY 2005	Such sums...	N/A	\$3.050
Combating Antimicrobial Resistance (PHSA 319E)	FY 2006	Such Sums...	\$17.443	\$197.000

(dollars in millions)			<b>Appropriations in Last Year of Authorization</b>	<b>Appropriations in FY 2023</b>
Program*	<b>Last Year of Authorization</b>	<b>Authorization Level**</b>		
National Strategy for Combating and Eliminating Tuberculosis (PHSA 317E)	FY 2013	\$243.101	\$132.997	\$137.034
Rape Prevention Education	FY 2018	\$50,000	\$49.430	\$61.750
Newborn Screening Laboratory Quality and Surveillance (PHSA 1113)	FY 2019	\$8.000	\$17.250	\$22.250
Domestic Violence Prevention Enhancement and Leadership Through Alliances (DELTA) (Family Violence Prevention and Services Act Title II; 42 USC 10401 et seq; Pub. L. 117-2)	FY 2021	\$180.000	\$34.200	\$38.200
Surveillance for Neurological Diseases (PHSA 399S-1; 42 USC 280g et seq; Pub. L. 114-255)	FY 2022	\$5.000	\$5.000	\$5.000
Early Hearing Detection and Intervention (PHSA 399M)	FY 2022	\$11.852	\$10.760	\$10.760
Firefighter Cancer Registry (PHSA 399B; 42 USC 280e-5; Pub. L. 115-194)	FY 2022	\$2.500	\$2.500	\$5.500
Safe Motherhood (PHSA 317K; 42 USC 201 note and 42 USC 247b-12; Pub. L. 115-344)	FY 2023	\$58.000	\$83.000	\$108.000
Surveillance and education regarding infections associated with illicit drug use and other risk factors (PHSA 317N; 42 USC 247b-15; Pub. L. 115-271)	FY 2023	\$40.000	\$23.000	\$23.000
Improving State and Local Public Health Security (Grants for public health emergency preparedness) (PHSA 319C-1(e); 42 USC 247d-3a(e); Pub. L. 116-22)	FY 2023	\$685.000	\$735.000	\$735.000
Preventing overdoses of controlled substances (PHSA 392A; 42 USC 280b-1; Pub. L. 115-271)	FY 2023	\$496.000	\$505.579	\$505.579

\*Summarizes major authorities of CDC programs.

\*\* Authorization Level at last year of authorization.

<sup>1</sup>Excludes Traumatic Brain Injury, for which the authorization of appropriations does not expire until FY 2025.

# **NARRATIVE BY ACTIVITY**

## IMMUNIZATION AND RESPIRATORY DISEASES

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Budget Authority	\$448.805	\$499.941	\$750.930	+\$250.989
PPHF	\$419.350	\$419.350	\$505.000	+\$85.650
<b>Total Request</b>	<b>\$868.155</b>	<b>\$919,291</b>	<b>\$1,255.930</b>	<b>+\$336.639</b>
FTEs	912	974	1024	50
-- Immunization and Other Respiratory Diseases	\$650.797	\$681,933	\$998.572	+\$316.639
-- Immunization Program	\$231.447	\$262,583	\$493.572	+\$230.989
-- <i>Immunization Program (PPHF)</i>	<i>\$419.350</i>	<i>\$419.350</i>	<i>\$505.000</i>	<i>+\$85.650</i>
-- Acute Flaccid Myelitis	\$6.000	\$6.000	\$6.000	\$0
-- Influenza/Influenza Planning and Response	\$211.358	\$231.358	\$251.358	+\$20.000
<b>Mandatory Programs Total</b>	<b>\$5,540.000</b>	<b>\$4,434.000</b>	<b>\$7,006.000</b>	<b>+\$2,572.000</b>
-- Vaccines for Adults (VFA) – Proposed Law <sup>2</sup>	N/A	N/A	\$1,004.000	+\$1,004.000
-- Vaccines for Children (VFC) <sup>2</sup>	\$5,540.000	\$4,434.000	\$6,002.000	+\$1,568.000

<sup>1</sup>This table reflects totals by budget activity. The FY 2024 budget proposes a single "CDC-Wide Activities and Program Support" Treasury account structure

<sup>2</sup>FY 2022 and FY 2023 estimates reflect actual and estimated anticipated transfers from Medicaid under current law. FY 2024 total reflects estimate under proposed law which expands eligible population to include all children enrolled in the Children's Health Insurance Program.

**Enabling Legislation Citation:** PHSA § 301, PHSA § 307, PHSA § 310, PHSA § 311, PHSA § 313, PHSA § 317\*, PHSA § 317N, PHSA § 317S, PHSA § 319, PHSA § 319C-1\*, PHSA § 319E\*, PHSA § 319F, PHSA § 322, PHSA § 325, PHSA § 327, PHSA § 340C, PHSA § 352, PHSA § 2102\*, PHSA § 2125, PHSA § 2126, PHSA § 2127, PHSA § 2821, Social Security Act § 1928 (42 U.S.C. 1396s).

**Enabling Legislation Status:** Permanent Indefinite

**Authorization of Appropriations for FY 2022:** Indefinite; Expired/Expiring noted with \*

**Allocation Methods:** Direct Federal/Intramural; Competitive Cooperative Agreements/Grants, including Formula Grants; Contracts; and Other

CDC prevents disease, disability, and death through immunization and the control of respiratory and other related diseases. CDC improves access to immunization services for uninsured and underinsured populations and supports the development of the scientific evidence base for vaccine policy and practices through the discretionary Immunization Program and mandatory Vaccines for Children (VFC) Program. CDC also provides critical epidemiology and laboratory capacity to detect, prevent, and respond to vaccine-preventable respiratory diseases and related infectious disease threats, including influenza.

CDC's FY 2024 budget request of **\$1,255,930,000** for Immunization and Respiratory Diseases is **\$336,639,000** above the FY 2023 enacted level. Funding will support ongoing needs of the program, including building a sustainable COVID-19 program, support for vaccine confidence and equity activities, as well as continued immunization information system modernization. The request includes an increase of **\$25,000,000** for CDC to continue activities to address post-COVID conditions or Long COVID. The budget includes a **\$15,000,000** increase for HPV prevention within the Immunization Program to support the Cancer Moonshot Initiative. Additionally, the request includes an increase of **\$20,000,000** for Influenza Planning and Response.

These funds support the prevention of vaccine-preventable diseases (VPDs) across the lifespan by sustaining high vaccination coverage rates for routine immunizations, including polio, measles, and influenza, while responding to the COVID-19 pandemic. CDC will continue to enhance Acute Flaccid Myelitis (AFM) surveillance capacity in states and initiate follow up of cases to better understand long-term effects and risk factors.

The FY 2024 budget request establishes a Vaccines for Adults program to provide routine and outbreak vaccines for uninsured adults by funding the program at \$12 billion over ten years as a capped mandatory program.. The proposed Vaccines for Adults (VFA) program will be modeled on the successful Vaccines for Children (VFC) program and will be tailored to meet the unique needs of adults.

The FY 2024 budget will also continue the FY 2023 policy proposal to expand Vaccines for Children (VFC) program to children under age 19 enrolled in a separate Children Health Insurance Program (CHIP), thereby transitioning CHIP vaccine purchase costs from the state to the VFC program. Under this proposal, CHIP children would have no copayment.

### Health Equity

CDC is committed to vaccine equity, which is when everyone has fair and just access to vaccination. There are many social, geographic, political, economic, and environmental factors that create challenges to vaccination access and acceptance, often disproportionately affecting racial and ethnic minority groups. Because of these challenges, some Black or African American people and Hispanic or Latino people are less likely to be vaccinated than people in other racial and ethnic minority groups or non-Hispanic White people. This disparity in immunization rates also held true for the initial rollout of the COVID-19 vaccines. While it has narrowed over time and reversed for Hispanic people, it persists for Black people. Despite this narrowing, Black and Hispanic people have had higher rates of infection and death than non-Hispanic White people throughout the pandemic. Additionally, other racial and ethnic minority groups, including American Indian or Alaska Native people, have also been more severely affected by COVID-19 and influenza than non-Hispanic White people, due to systemic inequities and other underlying health conditions.

To help combat these disparities, CDC is working to increase vaccination rates among racial and ethnic minority groups, which have historically had lower flu vaccination rates. One way CDC is accomplishing this is through a [special communication campaign](#)<sup>5</sup> to inform the general population about the importance of flu vaccination, with a focus on Black and Latino audiences. After the first two years of the campaign, concerns about flu vaccine risks or side effects decreased from 43 percent to 33 percent among Black adults surveyed and from 41 percent to 32 percent among Hispanic adults surveyed.

CDC is working to build trust, increase collaboration, and create tools and resources for all communities, especially those disproportionately impacted by COVID-19. CDC developed the [Vaccinate with Confidence](#)<sup>6</sup> strategy, which advances three key priorities to strengthen public trust in vaccines: protect communities, empower families, and stop myths. This strategy combines CDC’s existing work with new investments, partnerships, and activities to protect communities at risk by increasing vaccine acceptance.

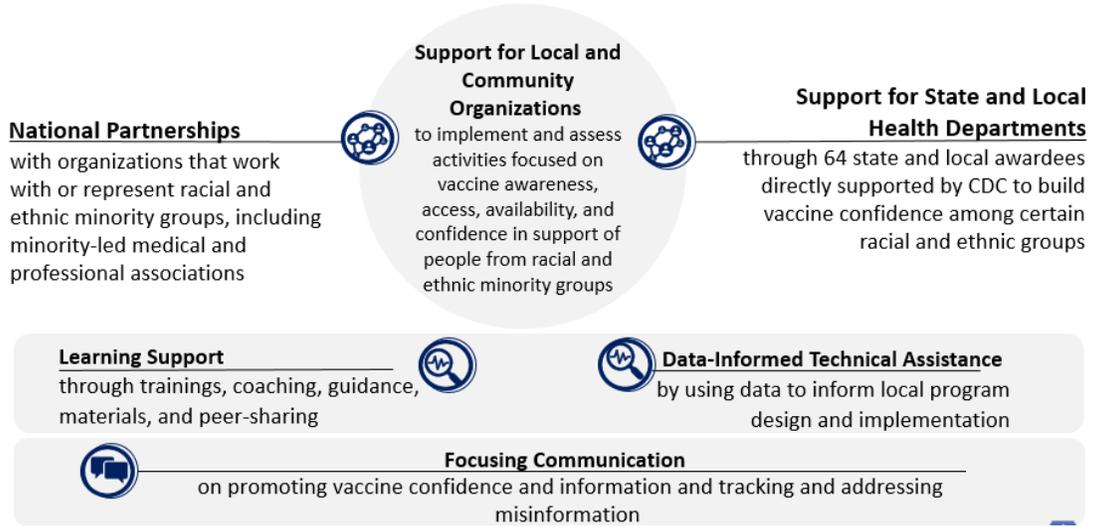
CDC has made significant investments in vaccine confidence strategy implementation, providing funding and technical assistance to traditional and non-traditional partners, including partnerships with approximately 20 national organizations to improve both COVID-19 and flu vaccination coverage. To date, CDC has helped 100 organizations to educate and empower trusted messengers, build community partnerships, and identify and address barriers to vaccine uptake. CDC has also supported capacity development through trainings and talks with health departments and partners on vaccine confidence basics, demand generation and community engagement strategies and social listening and misinformation management.

<sup>5</sup> <https://www.cdc.gov/flu/resource-center/toolkit/index.htm>

<sup>6</sup> <https://www.cdc.gov/vaccines/partners/vaccinate-with-confidence.html>

## Reducing Racial Disparities through Community-Level Action

*To reduce the racial/ethnic disparities that have long existed, CDC is focusing on funding, support, and communications for racial and ethnic minority communities.*



## IMMUNIZATION AND RESPIRATORY DISEASES

### BY THE NUMBERS

- **14**—Diseases prevented by vaccination during the first 24 months of life. **99%** of children had received some vaccinations by age 24 months.
- **921 million**—The number of COVID-19 vaccine doses delivered in the United States through December 2022, equivalent to eight years of vaccine distribution for the Vaccines for Children (VFC) program.
- **228 million**—The number of people who completed the primary vaccine series against COVID-19 in the United States as of December 2022.
- **9.2 million**—The number of children 5-11 years who completed the primary vaccine series against COVID-19 disease as of December 2022.
- **39 million**—The number of COVID-19 updated (bivalent) booster doses administered in the United States as of December 2022
- **10.3 million**—The estimated number of hospitalizations prevented by COVID-19 vaccination, as well as an estimated 1.1 million deaths averted from COVID-19 vaccination through November 2021.
- **175.6 million**—Doses of public and private sector influenza vaccine distributed in the United States at the end of the 2021-2022 influenza season.
- **500**—Local and community-based organizations funded through CDC’s new Partnering for Vaccine Equity (P4VE) grant program working to improve COVID-19 and flu vaccination coverage among racial and ethnic minority groups: nearly **199,000** community spokespersons trained and nearly **500,000** clinicians and over 860 healthcare organizations reached by **181** nationwide educational campaigns in 43 languages.

References:

<sup>1</sup> CDC assessed vaccination coverage by age 24 months among children born in 2017 and 2018, with comparisons to children born in 2015 and 2016. [Vaccination Coverage by Age 24 Months Among Children Born in 2017 and 2018 — National Immunization Survey-Child, United States, 2018–2020 | MMWR \(cdc.gov\)](https://www.cdc.gov/mmwr/mmwr4411a1.htm)

\*Unless otherwise noted, all information and calculations are from CDC program data.

<b>Immunization and Respiratory Diseases Funding History</b>	
<b>Fiscal Year</b>	<b>Dollars (in millions)</b>
FY 2020 (BA)	\$419.705
FY 2020 (PPHF)	\$370.300
FY 2021 (BA)	\$447.428
FY 2021 (PPHF)	\$372.200
FY 2022 Final (BA)	\$448.805
FY 2022 Final (PPHF)	\$419.350
FY 2023 Enacted (BA)	\$499.941
FY 2023 Enacted (PPHF)	\$419.350
FY 2024 President's Budget (BA)	\$750.930
FY 2024 President's Budget (PPHF)	\$505.000

<b>Immunization Program Ten-Year Funding History</b>	
<b>Fiscal Year</b>	<b>Dollars (in millions)</b>
FY 2014 (BA)	\$450.547
FY 2014 (PPHF)	\$160.300
FY 2015 (BA)	\$400.547
FY 2015 (PPHF)	\$210.300
FY 2016 (BA)	\$285.247
FY 2016 (PPHF)	\$324.350
FY 2017 (BA)	\$281.771
FY 2017 (PPHF)	\$324.350
FY 2018 (BA)	\$285.529
FY 2018 (PPHF)	\$324.350
FY 2019 (BA)	\$287.106
FY 2019 (PPHF)	\$320.550
FY 2020 (BA)	\$419.705
FY 2020 (PPHF)	\$370.300
FY 2021 (BA)	\$240.706
FY 2021 (PPHF)	\$372.200
FY 2022 Final (BA)	\$231.447
FY 2022 Final (PPHF)	\$419.350
FY 2023 Enacted (BA)	\$262.583
FY 2023 Enacted (PPHF)	\$419.350
FY 2024 President's Budget (BA)	\$493.572
FY 2024 President's Budget (PPHF)	\$505.000

## Program Accomplishments

### **Immunization and Vaccines**

CDC is working closely with government partners to respond to the COVID-19 pandemic and to build a sustainable COVID-19 program to support ongoing surveillance, epidemiology, laboratory and vaccination needs beyond the end of the public health emergency. CDC's long-standing immunization infrastructure supported the nation's COVID-19 vaccination program. Annually, CDC distributes over 80 million doses of routinely recommended vaccines directly to health departments and private health providers across the country. This centralized distribution mechanism has been scaled to manage the distribution of COVID-19 vaccine doses. Since December 2020, CDC has distributed over 960 million doses of COVID-19 vaccine across the United States. This vaccine distribution system was enhanced to reach the entire nation to support the needs of a pandemic and is regularly used by state and local health jurisdictions across the country. CDC also continues to support national, state, and local immunization programs to address gaps in routine immunization coverage and encourage vaccine uptake.

### **Health Equity and Vaccines**

In addition to the *Vaccinate with Confidence* strategy, in 2022 CDC continued to support the [Partnering for Vaccine Equity \(P4VE\) program](#),<sup>7</sup> which provides funding, technical assistance, and educational resources to over 500 national, state, local, and community-level partners promoting equity in vaccination access and uptake for racial and ethnic minority groups. Partner activities as of September 2022 include training over 200,000 community-level spokespersons to promote vaccination in populations of focus, launching nationwide educational campaigns in 43 languages and dialects, and outreach to over 500,000 clinicians and nearly 900 healthcare organizations on ways to improve vaccine equity. To date, P4VE program helped vaccinate over 1.87 million people for COVID-19 or flu. Despite initially focusing on COVID-19 and flu, the program now aims to build a national network of partners working to improve equity among disproportionately affected populations across all adult-recommended vaccines.

### **Influenza World-class Data and Analytics**

In order to more comprehensively track which influenza viruses are circulating and where, CDC made several enhancements to its influenza surveillance systems including adding more than 1,000 emergency departments and 287 other providers to CDC's Outpatient Flu-like Illness Surveillance Network (ILINet) to capture approximately 2 million patient visits each week.

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<sup>7</sup> <https://www.cdc.gov/vaccines/health-equity/index.html>

## Immunization and Other Respiratory Diseases

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### Program Overview

CDC's Immunization Program plays a fundamental role in sustaining high vaccination coverage rates to prevent the spread of disease, disability, and death from VPDs. Immunization funding supports the public health capacity for effective immunization programs and scientifically sound immunization policy. A strong immunization infrastructure at the national, state, and local levels is vital to sustain high vaccination coverage levels and low incidence of VPDs. This funding supports public health preparedness and response to a vaccine-preventable national emergency, such as a pandemic or bioterrorism. This program aligns with CDC's core capabilities to build strong domestic preparedness and to quickly respond to outbreaks at their source

CDC purchases routinely recommended vaccines to protect populations at higher risk and not eligible for immunizations through the mandatory Vaccines for Children (VFC) Program and to meet urgent public health needs such as controlling VPD outbreaks. CDC provides flexibility to states to use their purchased vaccines to meet their unique needs and priorities in responding to VPD outbreaks. The public health functions supported by the discretionary program include:

- providing a safety net for those who cannot otherwise access immunization services
- managing vaccine shortages, conducting continual quality improvement efforts with immunization providers
- monitoring the safety and effectiveness of vaccines and vaccine programs
- preventing disease outbreaks and responding early and rapidly should they occur
- responding quickly to other emergencies, such as a pandemic

### Budget Request

CDC's FY 2024 budget request of **\$998,572,000** for the Immunization and Other Respiratory Diseases program is **\$316,639,000** above the FY 2023 enacted level. The request includes **\$505,000,000** from the Prevention and Public Health Fund (PPHF), which is **\$85,650,000** above the FY 2023 enacted level.

Within the total request, an increase of **\$230,989,000** will support ongoing needs of the immunization program, including support needed for COVID-19 vaccination. To date, the planning and preparation for COVID-19 vaccine administration has been supported by COVID-19 supplemental funding. The proposed increase continues CDC's work to support implementation of the COVID-19 vaccine program and expand the existing immunization infrastructure, including implementing and evaluating new strategies for hard-to-reach populations, such as those who may be vaccine hesitant, those who are members of racial and ethnic or other minority groups, and those who are underserved due to socioeconomic or other reasons. CDC continues to expand the evidence base to further understand the emerging science of SARS-COV-2 through enhanced epidemiology, surveillance, and laboratory efforts, as well as other respiratory pathogens capable of causing a public health emergency, such as RSV, MERS and SARS-COV-1.

Finally, CDC's budget request continues to support the prevention of VPDs across the lifespan by increasing vaccination coverage rates and helping to control respiratory diseases, including influenza. CDC builds on recent investments in the COVID-19 vaccine program by supporting essential activities aimed at strengthening the immunization infrastructure for adults, addressing disparities in adult vaccine coverage, and supporting vaccine efforts across the lifespan.

## Immunization

In FY 2024, CDC's Immunization Program will focus on three critical areas: national, state, and local immunization program operations; vaccine purchase; and a multicomponent vaccine confidence strategy to prevent outbreaks of vaccine-preventable diseases in the United States. CDC supports state and local health departments to use data to identify communities at risk for significant increases in VPDs; provide them with support before outbreaks occur; and promote the importance of vaccination and science-based information through social and digital platforms, partnerships, and healthcare providers. These investments will help ensure all Americans are protected by a strong immunization system that provides coverage and access to life-saving vaccines that are safe and effective. CDC will continue to provide technical assistance and laboratory support to states and local communities responding to vaccine-preventable disease investigations, including outbreaks.

The COVID-19 pandemic disrupted access to routine medical services, including routine immunization, leaving communities at higher risk for VPD outbreaks. CDC responded to the COVID-19 pandemic by leveraging the nation's immunization infrastructure to implement a historic vaccination program, distributing over 800 million COVID-19 vaccines in just under 20 months. Vaccination remains our most powerful tool for preventing severe disease and death from COVID-19. CDC supports states, cities, and counties by using immunization information system data to pinpoint areas of low vaccination coverage and take steps to protect people who live/work in communities that put them at higher risk of becoming infected.

CDC is working with key partners to strengthen parent-provider conversations about vaccines. Trust in vaccines is not built through a top-down approach, but through millions of conversations between parents, doctors, nurses, pharmacists, and community members. To stop misinformation from eroding public trust in vaccines, CDC will continue its work with local partners and trusted messengers to improve [confidence in vaccines](#)<sup>8</sup> among groups placed at higher risk, including racial and ethnic minorities and with parents of very young infants and expectant parents. CDC will also work with social media companies and partners to contain the spread of misinformation and to provide clear information about vaccination and the critical role it plays in protecting the public.

To address the COVID-19 pandemic, CDC leveraged critical investments to increase adult influenza vaccination, strengthen jurisdictional planning and preparedness, and enhance information technology infrastructure to monitor and track COVID-19 distribution, administration, and uptake. CDC will build off these investments, which support its core capability to develop and deploy world-class data and analytics, to continue modernizing its Immunization Information Systems (IIS).

### Preserving Public Health Immunization Infrastructure

In FY 2024, CDC will continue to support, expand, and improve the public health workforce and core systems at the national, state, and local levels that protect all Americans from disability and death from VPDs. CDC conducts scientific studies about the burden of disease, vaccine effectiveness and safety, economic considerations, and program feasibility, which provide the basis for national immunization recommendations and programs.

The Advisory Committee on Immunization Practices (ACIP) evaluates the safety and immunogenicity data for new vaccine candidates and develops vaccine policy options that ACIP may consider for recommendation to the CDC Director. In addition, CDC collects, analyzes, and reports scientific data about vaccines to ensure the effectiveness and safety of national vaccine recommendations and programs and informs changes to the recommendations and programs as needed.

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<sup>8</sup> <https://www.cdc.gov/vaccines/partners/vaccinate-with-confidence.html>.

CDC supports science-based communication efforts to aid Americans in making informed vaccine decisions to protect themselves and their loved ones. CDC conducts outreach to healthcare providers about current immunization recommendations and clinical best practices to help them protect their patients and communities from VPDs.

**Supporting State and Territorial Immunization Programs**

In FY 2024, CDC will continue to provide infrastructure funding to 64 awardees—including all 50 states, Washington, D.C., five large cities, five territories, and three freely-associated states—through a non-competitive, formula-based, cooperative agreement program that provides financial assistance for state and local immunization operations. CDC monitors the spending plans developed by awardees and adjusts them as needed throughout the year to prevent vaccine wastage. Through population-based awards, collaboration, and a strong public-private partnership, the discretionary Immunization Program establishes a comprehensive immunization system providing the following elements:

- Public sector vaccine ordering and distribution,
- Continual quality assurance,
- Provider recruitment and enrollment in the VFC Program,
- Provider education and public awareness focused on new and expanded vaccine recommendations, and
- Management of vaccine shortages.

**Immunization Cooperative Agreements<sup>1</sup>**

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President’s Budget
Number of Awards	64	64	64
- New Awards	0	0	0
- Continuing Awards	64	64	64
Average Award	\$5.172	\$5.083	\$5.379
Range of Awards	\$0.654–\$36.458	\$0.643–\$35.833	\$0.681–\$37.924
<b>Total Awards</b>	<b>\$435.978</b>	<b>\$428.502</b>	<b>\$453.502</b>

<sup>1</sup>These funds are awarded by formula.

Vaccination coverage has dropped a total of two percentage points since the start of the pandemic – from 95% reported in the 2019-20 school year to 93% in the 2021-22 school year. This decline is significant because it means there are more than 275,000 kindergartners who may not be completely protected against common, and sometimes very serious, vaccine-preventable diseases. To help address pandemic-related declines in routine immunizations, CDC launched [Let's RISE](#),<sup>9</sup> an effort to equip partners and healthcare providers with actionable strategies, resources, and data to support getting all Americans back on schedule with their routine immunizations.<sup>10</sup>

CDC also responds to disease outbreaks by rapidly finding and investigating cases, conducting surveillance and laboratory testing, and implementing focused vaccination efforts and other measures to control the spread of disease and prevent future outbreaks. For example, CDC worked with New York State's Department of Health and Mental Hygiene (DOH) in response to a case of paralytic polio, which was confirmed in Rockland County, New York after an unvaccinated person contracted the disease. In the United States, the risk to the public of paralytic polio is low because most people are vaccinated against polio during childhood. CDC's robust routine immunization program and case-based surveillance, combined with good sanitation and other measures, helps risk of paralytic polio remain low in the general public.

Respiratory syncytial virus (RSV) is a common respiratory virus that causes annual epidemics that usually peak in winter. RSV is the leading cause of hospitalization in infants. Hospitalization risk decreases with increasing age in young children. For children younger than 5 years old, each year in the United States, RSV leads to approximately 2.1 million outpatient visits, 58,000–80,000 hospitalizations, and 100–300 deaths. During the 2022-2023 season, CDC responded to a surge in RSV cases that overwhelmed many pediatric hospitals and emergency departments around the country. Among adults ≥65 years of age in the United States, RSV is associated with about 6000-10,000 deaths, 60,000-160,000 hospitalizations, and 0.9-1.4 million medical encounters per year. In FY 2024, CDC is working to prepare for the potential introduction of multiple new immunizing products that are currently under FDA review. If approved, these products could reduce incidence and severity of RSV infections in infants and older adults, broad access and uptake could result in significant public health impact.

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<sup>9</sup> <https://www.cdc.gov/vaccines/partners/routine-immunizations-lets-rise.html>

<sup>10</sup> [www.cdc.gov/vaccines/hcp/clinical-resources/downloads/safe-return-school.pdf](http://www.cdc.gov/vaccines/hcp/clinical-resources/downloads/safe-return-school.pdf)

**Immunization’s Role in Public Health**

Funding Category	Impact
State Infrastructure	Cooperative agreements support immunization workforce and core infrastructure at the state and local levels to do the following: <ul style="list-style-type: none"> <li>• recruit and educate networks of immunization providers</li> <li>• provide continual vaccine management quality assurance</li> <li>• promote public awareness of new and expanded vaccine recommendations</li> <li>• manage vaccine shortages</li> <li>• respond to vaccine preventable disease outbreaks</li> </ul>
Vaccine Purchase	Allocated through direct assistance to provide federally purchased vaccines to vaccinate populations that are uninsured and non-VFC-eligible and to meet urgent public health needs such as controlling vaccine preventable disease outbreaks.
Extramural Program Operations	Supports national immunization policies and programs including <ul style="list-style-type: none"> <li>• disease surveillance</li> <li>• vaccine coverage assessment</li> <li>• post-marketing evaluation of vaccine effectiveness and safety</li> <li>• immunization information technologies</li> <li>• centralized vaccine ordering and distribution systems</li> <li>• payer of last resort</li> <li>• public awareness campaigns and resources</li> <li>• provider education and tools</li> </ul>
Intramural Program Operations	Provides national public health expertise in immunization and vaccine preventable diseases to national, state, and local vaccination program efforts, including expertise in epidemiology and surveillance, laboratory methods and science, immunology, immunization policy, health communications science, vaccine management, and program implementation.

**Preventing HPV-Related Cancers through the Cancer Moonshot Initiative**

HPV vaccination can prevent more than 90 percent of cancers caused by HPV and prevent cancer precursors. The Healthy People 2030 Objectives set a target that 80 percent of adolescents aged 13 through 15 years receive recommended doses of the HPV vaccine. CDC supports the National HPV Vaccination Roundtable, a coalition of public, private, and voluntary organizations with expertise relevant to increasing HPV vaccination rates in the United States to reduce illness and death from HPV cancers through coordinated leadership and strategic planning.

The FY 2024 budget request provides an increase of **\$15,000,000** as part of the Cancer Moonshot Initiative to encourage the use of HPV vaccine. CDC will use funding to increase vaccine uptake, with most of the funding to support working with professional and other organizations to increase awareness, education, and training on HPV vaccination for cancer prevention. CDC will also enhance collaborations with health systems, health plans, and payors to increase vaccine uptake.

This effort builds upon ongoing efforts to improve HPV vaccination coverage. For example, CDC funded 22 immunization programs to use Immunization Information Systems (IIS) for reminder or recall notifications for adolescents 11 to 18 years of age and conducted a comprehensive communication and education campaign. Alongside this effort, CDC supported a national network of immunization and cancer-prevention organizations to engage clinical and immunization partners at national, regional, state, tribal, territorial, jurisdictional, and local levels. CDC also works with professional medical organizations to educate their members about HPV vaccine and the importance of a strong clinician recommendation for the vaccine. CDC's 2020 National Immunization Survey-Teen (NIS-Teen) estimates show vaccination coverage among adolescents aged 13–17 years coverage with ≥1

dose of HPV vaccine increased from 68.1 percent in 2018 to 75.1 percent in 2020, and the percentage of adolescents who were up to date with the HPV vaccination series increased from 51.1 percent in 2018 to 58.6 percent in 2020.<sup>11</sup>

## Post COVID Conditions

Post-COVID conditions are a wide range of new, returning, or ongoing health problems people can experience four or more weeks after first being infected with the virus that causes COVID-19. Even people who did not have COVID-19 symptoms in the days or weeks after they were infected can have post-COVID conditions. These conditions can present as different types and combinations of health problems for different lengths of time. These post-COVID conditions may also be known as long COVID, long-haul COVID, post-acute COVID-19, long-term effects of COVID, or chronic COVID. CDC and experts around the world are working to learn more about short- and long-term health effects associated with COVID-19, who gets them, and why.

The budget request includes an increase of **\$25,000,000** for CDC to continue activities for studying long COVID conditions to identify symptoms, risk factors, demographic groups disproportionately impacted, prevalence, and treatments. Rapid and multi-year studies are underway to further investigate post-COVID conditions in more detail and will help establish a more complete understanding of the natural history of SARS-CoV-2 infection, which can inform healthcare strategies, clinical decision-making, and public health interventions.

To characterize and assess long COVID, CDC has a multi-layered surveillance approach including working with several data sources, systems, and partners. Funds will be used to implement a multi-pronged approach: (1) prospective cohort studies; (2) health surveys; (3) studies based on electronic healthcare data and large patient databases; and (4) medical chart abstraction. Additionally, sentinel surveillance began in September through a cooperative agreement funding five grantees for five years.

Examples of CDC’s ongoing work include:

[Support for Patients With SARS-CoV-2 Infections \(INSPIRE\)](#)<sup>12</sup> is a prospective cohort study following nearly 6,000 individuals at sites across the country for up to 18 months. Enrollment began in December 2020 and is ongoing; follow up will end in March 2023. Participants in this study complete detailed surveys every 3 months. The surveys include information on social determinants of health and data are collected from linked electronic health record information. The study’s goal is to understand the long-term effects of COVID-19 infection. The interactive page on [CDC’s COVID Data Tracker](#),<sup>13</sup> added in July 2022, includes enrollment data, descriptive statistics on study participants and symptoms of participants at different times periods. These data will be updated quarterly.

- **COVID-19 within American Indian Communities at High Risk in the Southwest U.S.** focuses on the Navajo and White Mountain Apache communities. The study follows people who are infected with SARS-CoV-2 for up to 12 months to assess the development and duration of symptoms, complications from infection, and the immune response to infection.
- **Longitudinal Study of COVID-19 Antibody Response in Children in Seattle, WA** is a longitudinal study of COVID-19 antibody response in children in Seattle, WA. Children and adolescents (up to 18 years old) who test positive for COVID-19. These children are followed to assess the development and duration of the immune response, symptoms, and complications over time. The cases are assessed for up to two years.
- **Characterizing Post-COVID Conditions in the United States** is a current study that describes the health and medical care using medical records of adult patients receiving care in post-COVID clinics at three participating medical centers through September 30, 2021. It collects health data to describe the health and

<sup>11</sup> Elam-Evans LD, Yankey D, Singleton JA, et al. National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13–17 Years — United States, 2019. *MMWR Morb Mortal Wkly Rep* 2020;69:1109–1116. DOI: <http://dx.doi.org/10.15585/mmwr.mm6933a1>.

<sup>12</sup> <https://www.covidinspire.org/>

<sup>13</sup> <https://covid.cdc.gov/covid-data-tracker/#inspire>

medical care of patients at clinics designed for post-COVID care to help classify types of post-COVID health problems and care needed and highlight unmet needs for care in other medical settings.

### **Working in Partnership**

CDC works with complementary healthcare organizations such as pharmacies and retail-based clinics to improve adult vaccination coverage rates, and along with HHS, provides leadership to the National Adult and Influenza Immunization Summit, a network of provider organizations, health systems, public health, and others working on innovative strategies to increase adult immunization. Additionally, CDC strategically directs immunization resources to manage changes in the healthcare environment. For example, CDC will continue to implement health information technologies to ensure healthcare providers are notified when their patients need vaccines and will manage vaccine supply disruptions and shortages to ensure the best public health outcomes.

### **Addressing Emerging Respiratory Pathogens**

CDC will address emerging respiratory pathogens by continuing activities as follows:

- Funding 10 Emerging Infections Program (EIP) sites to monitor respiratory bacterial pathogens, antibiotic resistance, and vaccine-preventable diseases—including *Legionella* and Group A and Group B *Streptococcus*.
- Maintaining epidemiologic and laboratory activities for non-influenza respiratory viruses allowing CDC to maintain expertise to conduct surveillance, perform diagnostics, and respond to outbreaks of known viruses such as adenoviruses and enterovirus D68 (EV-D68), as well as those due to emerging respiratory viruses such as coronaviruses.
- Supporting state and local health department planning, laboratory testing, domestic and global surveillance, and technical assistance for Middle East Respiratory Syndrome (MERS).
- Building capacity to prevent cases of Legionnaire’s disease by distributing building water management toolkits, monitoring and evaluating causes and prevention strategies of *Legionella* outbreaks in communities and healthcare facilities, collaborating with the Centers for Medicare & Medicaid Services (CMS) to support implementation of water management programs in healthcare facilities, partnering with states and non-governmental organizations to monitor the impact of prevention measures, and developing laboratory techniques to more quickly identify the most dangerous strains.

## **Vaccines for Adults Budget Request**

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The COVID-19 pandemic highlighted the importance of a strong adult vaccination program, including support for adult vaccine purchase and operational infrastructure within the broader immunization program. Furthermore, the pandemic continues to affect the healthcare delivery system, and in particular, the ability of providers to continue routine immunizations.

The Vaccines for Adults (VFA) program will begin to provide uninsured adults access to recommended routine and outbreak vaccines at no cost. The VFA program would be modeled on the successful Vaccines for Children program and tailored to adults. CDC is responsible for providing federally purchased vaccines to protect uninsured Americans from preventable diseases—and thus protect communities from the dangers of low vaccination rates. To date, discretionary activities have focused on rapid vaccination of uninsured adults in outbreak settings and there has been no dedicated program to ensure routine vaccination of uninsured adults.

A comprehensive VFA program would facilitate a more agile and effective response to pandemics caused by vaccine-preventable disease; sustain long-term investment in public health infrastructure in response to the COVID-19 pandemic; and improve preparedness to respond to future threats from existing or emerging vaccine-preventable diseases, including pandemic influenza.

### **Budget Request**

CDC's FY 2024 budget requests **\$12 billion** in capped mandatory funding over ten years to establish a Vaccine for Adults program to begin to expand access to routine and outbreak vaccines for uninsured individuals at no cost. The goal is to reduce the spread of preventable disease by building an adult immunization program to support high vaccination coverage among adults. Ultimately, the program aims to reduce vaccination coverage disparities, improve outbreak control of vaccine-preventable diseases, and enhance and maintain the infrastructure needed for responding to future pandemics.

Activities in the proposed budget include:

- **Vaccine Purchase:** Includes purchase of routine and outbreak vaccines recommended for adults by the Advisory Committee on Immunization Practices.
- **Provider Fees:** Covers costs associated with supplies, patient education, storage and handling, and staffing.
- **Provider Fee Reimbursement Mechanism:** One or more contracts to administer the provider reimbursement process. Oversight of these contracts and the overall program will be provided by CDC.
- **Program Operations:** As a complement to discretionary immunization funding, VFA includes funding to support operational activities.

CDC will also work with jurisdictions to leverage base immunization funding and other resources to support associated program operations costs, vaccine confidence and vaccine equity activities, including communications, partnerships, education, and technical assistance.

## Acute Flaccid Myelitis Budget Request

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### Program Description

CDC's Acute Flaccid Myelitis (AFM) program thoroughly investigates every suspected AFM case reported by health departments and examines possible risk factors and causes of AFM, including why some people develop this condition, monitors AFM activity nationwide, and updates possible treatment options.

### Budget Request

CDC's FY 2024 budget request of **\$6,000,000** for Acute Flaccid Myelitis is level with the FY 2023 enacted level. CDC will continue working on AFM to help determine its cause and improve tailored prevention efforts. CDC continues to work closely with national experts and the AFM Task Force, healthcare providers, state and local health departments, and parents to:

- Promote awareness of AFM among front-line clinicians.
- Monitor AFM activity nationwide--via enhanced surveillance capacity in states and initiate follow up of cases to understand long-term effects and causes.
- Update possible treatment options.
- Track outcomes of those affected by AFM.
- Improve surveillance for viruses that cause AFM.

### Program Accomplishments

CDC provides guidance and tools for health departments for reporting AFM cases. For states confirming cases independently, CDC provides standard operating procedures, a medical chart abstraction tool, and training on how to interpret the information. CDC collaborates with health departments and partners to educate clinicians on the symptoms of AFM, how to report suspected cases of AFM, and the specimens and information to collect for suspected cases. Educational activities and materials include health alerts, job aids, toolkits, webinars, and scientific publications and presentations. CDC collaborates with several AFM parent groups who offer support to children with AFM and their families. This collaborative effort raises awareness about AFM and shares information and resources. Lastly, CDC and experts in a range of disciplines continue to update clinical guidance for the acute medical treatment of patients with AFM as more information is discovered about AFM.

CDC's AFM Task Force, a group of national experts in AFM, continues to meet quarterly to provide input on the AFM research agenda to better understand the causes of AFM, and review and update clinical guidance on the management of patients with AFM. Funding is used to support laboratory activities to maintain diagnostic testing for AFM cases, including specimen typing, developing new antibody tools, and designing serologic assays for AFM testing. The program uses existing cooperative agreements and contracts to fund these activities.

## **Influenza Planning and Response Budget Request**

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### Program Description

CDC's influenza (flu) program detects, controls, and prevents influenza disease, which causes substantial illness and death each year. Influenza vaccination continues to be important for reducing additional illnesses and burden on the healthcare system while the U.S. responds to emerging and persistent health threats. CDC continues to invest in improving influenza vaccines through expanding vaccine effectiveness, monitoring, and evaluation; understanding the effects of the virus and immune response on vaccine effectiveness; and the benefits of vaccination. CDC will build on work enhancing virus characterization and expanding vaccine development. This work is critical in advancements towards identifying influenza variants before they happen and increasing the speed of the detection and analysis of variants of concern. CDC continuously enhances its surveillance infrastructure and capacity to identify when and where influenza is circulating, including by expanding the National Influenza Reference Center (NIRC) program, emergency department syndromic surveillance, and electronic health record (EHR) based hospitalization surveillance and conducting long-term care facility surveillance.

Influenza places a substantial burden on the health of people each year. Some populations, such as older adults, young children, pregnant individuals, and people with certain long-term health conditions, are at higher risk for serious influenza complications. The seasonal burden of influenza disease in the United States is determined by several factors, including the characteristics of the circulating viruses, the timing of the season, vaccine effectiveness, and how many people are vaccinated. Influenza-related hospitalizations of children younger than five years of age in the United States are estimated to have ranged from 7,000 to nearly 30,000 since 2010. Any flu infection can carry a risk of serious complications, hospitalization, or death, even among otherwise healthy children and adults. Accordingly, CDC recommends an annual influenza vaccine for everyone six months and older. While vaccines are powerful tools, reaching every individual who would benefit from immunization is not easy.

Influenza viruses continually change, influenza seasons are unpredictable, and an influenza pandemic is a constant threat, requiring vigilance from CDC and its domestic and international public health partners. CDC provides leadership and a cutting-edge scientific and programmatic foundation for the diagnosis, prevention, and control of influenza domestically and internationally.

Prevention of seasonal influenza requires an annual reassessment of viruses included in the vaccine, based on CDC surveillance data of influenza viruses in circulation. The vaccine must be produced and administered annually to account for seasonal variations.

Since 2010, the Advisory Committee on Immunization Practices (ACIP) has recommended influenza vaccine for all people ages six months and older. For the 2022-2023 flu season, ACIP voted to preferentially recommend the use of higher dose or adjuvanted flu vaccines for adults 65 and older to account for the expected increased intensity of this season compared to recent years. To implement these recommendations, CDC works to educate providers and raise public awareness. CDC makes special efforts to reach populations of focus, such as pregnant people, and provides further outreach to subspecialty medical providers to increase vaccination of those persons. CDC also promotes vaccination at non-traditional venues, such as retail pharmacies, to increase access to vaccine services outside of clinic settings and hours.

## Budget Request

CDC's FY 2024 budget request of **\$251,358,000** for Influenza/Influenza Planning and Response is **\$20,000,000** above the FY 2023 enacted level.

CDC will continue expanding influenza surveillance and preparedness efforts to help the U.S. detect, prepare for, and respond to emerging influenza threats whenever and wherever they emerge. These activities include increased activities at the human-animal interface, expanded next-generation sequencing domestically and globally to better characterize the landscape of emerging influenza viruses, and increased international support for seasonal influenza surveillance.

CDC works closely with other Federal agencies such as USDA, BARDA and ASPR to monitor and prepare for human infections (spillover viruses) detected at the human-animal interface, including for the monitoring and response to the recent outbreak of influenza A(H5) in wild birds and poultry in the U.S. CDC will assure needed planning and response to influenza pandemics and/or viruses with the potential to become pandemics. CDC will evaluate existing, and develop new, candidate vaccine viruses to provide optimal protection against any potential pandemic threats. CDC will expand genetic sequencing efforts in order to enhance capacity, flexibility, and increased speed for developing vaccine candidates.

CDC will expand essential influenza surveillance systems, including hospitalization and syndromic surveillance systems to provide more representative and complete data on seasonal influenza and to better understand the effect of other respiratory pathogens.

CDC will support improvements in influenza vaccines as well as domestic and global influenza laboratory capacity.

The request will also continue to support funding for implementation of the activities outlined in the [2020–2030 National Influenza Vaccination Modernization Strategy](#).<sup>14</sup> These activities include expanding vaccine effectiveness monitoring and evaluation, enhancing virus characterization and expanding vaccine virus development for use by industry, increasing genomic testing of influenza viruses, and increasing influenza vaccine use.

## Program Accomplishments

### **Influenza Prevention**

CDC will continue to support efforts to prevent influenza through vaccination. Each season, CDC serves as a leader in the development and improvement of influenza vaccines. In FY 2024, CDC will continue to support U.S. Government efforts to modernize the domestic influenza vaccine enterprise to be highly responsive, flexible, scalable, and effective at preventing the spread of influenza viruses. This will be achieved through better characterization of influenza viruses, better selection of viruses for use in vaccines, and enhanced monitoring of vaccine effectiveness in the community. Influenza is a public health and national security priority. In addition to the annual burden caused by seasonal influenza epidemics, an influenza pandemic can cause devastating disease and economic burden. Faster methods of producing influenza vaccines will help keep Americans safer from seasonal influenza and the threat of pandemic influenza.

Another priority is increasing the demand for influenza vaccine through health communication and outreach to providers and the public, prioritizing outreach to populations at higher risk of morbidity and mortality about the importance of vaccination, and partnerships with pharmacists to extend access to influenza vaccination. Annual vaccination campaigns support reaching influenza vaccination goals, including those for racial and ethnic

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<sup>14</sup> <https://www.phe.gov/Preparedness/planning/nivms/Pages/default.aspx>.

minority groups and populations disproportionately affected by influenza, and help build capacity for vaccination efforts in the event of an influenza pandemic.

Increasing flu vaccine uptake in people at higher risk of serious outcomes is key in preventing severe disease and death from influenza. The FY 2022 target percentage of adults aged 18 years and older vaccinated annually against seasonal influenza is 70 percent. CDC will continue to work with public health and clinical partners to eliminate barriers to vaccination. CDC is also examining operational considerations such as access to vaccine and prolonging vaccine uptake throughout the flu season. CDC is making additional influenza vaccine available to state health departments for uninsured adults and those at higher risk for morbidity and mortality. To support this effort, CDC is enhancing communications to engage with special audiences, including older Americans, persons with disabilities, people with underlying health conditions, workers in long-term care facilities, other essential workers, and African American and Hispanic persons.

To complement national efforts, resources are available to all 64 immunization awardees to increase demand for seasonal influenza vaccine—including school-located vaccination clinics—and to improve influenza vaccine coverage rates among priority populations (school-aged children, adults at higher risk of morbidity, and racial and ethnic minority groups). CDC will measure vaccination coverage, with particular attention to racial and ethnic minority populations with historically low coverage rates. These surveys guide outreach efforts that have resulted in improvements in influenza vaccination rates, particularly among children.

### **Influenza Detection and Monitoring**

Detecting and monitoring influenza involves a network of surveillance systems at state and international levels that routinely:

- Determine severity of the [influenza season](#).<sup>15</sup>
- Identify viruses that are causing disease and may pose a pandemic threat.
- Determine the effectiveness of the influenza vaccine and other interventions.

Ongoing work to improve laboratory and surveillance methods ensures that CDC can adequately respond to both epidemic and novel influenza outbreaks. As noted above, CDC also implemented several surveillance enhancements to prepare for the possibility of a more severe influenza season, as well as the potential co-circulation of influenza and other respiratory viruses. Examples of these enhancements include adding a surveillance component that will track laboratory-confirmed influenza in approximately 15,400 long-term care facilities and adding 200 additional providers to one of its influenza-like illness surveillance systems (ILINET). The surveillance component captured approximately 2 million patient visits each week during the 2021-2022 flu season.

CDC's influenza laboratory capabilities and epidemiologic networks have strengthened national security by improving influenza surveillance and vaccine strain selection and have provided the underpinning for other respiratory disease surveillance. CDC's training and support of epidemiologists serving as influenza surveillance coordinators in every state and multiple local jurisdictions have allowed for continuous improvement of surveillance systems that provide data to inform a timely response to annual influenza epidemics and the emergence of novel viruses. This training and support to jurisdictions also provides surveillance systems and a trained workforce that can be immediately repurposed to respond to emerging health threats.

CDC continues to work with domestic and international partners at the interface of human and animal health to improve surveillance, conduct swift outbreak responses, and complete threat assessments for emerging influenza viruses with pandemic potential. Pandemics may occur when a virus that is predominantly transmitted

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<sup>15</sup> <http://www.cdc.gov/flu/weekly/fluactivitysurv.htm>.

among animals develops the ability to infect and transmit among humans. Each human infection with an animal influenza virus has the potential to cause a pandemic. CDC will continue to conduct and expand surveillance and research to better understand the complex factors that impact how and when these animal influenza viruses develop the ability to infect people and transmit from person to person. CDC collaborates with domestic and international health partners, including USDA, to monitor the occurrence of avian and swine influenza viruses, which have historically resulted in pandemics more often than other animal influenza viruses. The recent detections of avian influenza in wild birds and poultry in the U.S. underscores the importance of routine monitoring and collaboration to protect human health. It is important to maintain and expand domestic and international surveillance and sequencing capabilities to identify outbreaks where they start. Strong surveillance systems can rapidly provide the information needed to understand the risk and to prepare effective countermeasures.

Novel influenza viruses can emerge anywhere in the world. To combat this threat, CDC supports the international monitoring of influenza and evaluates its partners' capacity to conduct surveillance, perform laboratory testing, and prepare for influenza pandemics. Pandemic influenza preparedness is interconnected and complementary with seasonal influenza preparedness and response.

The same data systems used by countries to monitor seasonal epidemics contribute to vaccine composition decision-making and are the foundation for pandemic preparedness. CDC's influenza program funds partner nations through cooperative agreements. Since 2005 CDC has provided financial and technical assistance to more than 50 partner countries in developing surveillance systems, resulting in a significant increase in countries reporting to WHO FluNet. These CDC-led cooperative agreement expand virus sample sharing among countries which ensures that vaccines and diagnostic tests for viruses with pandemic potential can be produced equitably internationally. CDC will continue this support to partner countries to build capacity for the detection of viruses with the ability to cause pandemics and to reduce the global burden of seasonal influenza. These funds build international public health capacity, and CDC-funded partner countries leverage influenza surveillance staff and infrastructure for other national public health response activities.

The CDC funded network of seasonal influenza surveillance systems forms the foundation for pandemic influenza surveillance. Through the Epidemiology and Laboratory Capacity cooperative agreement program CDC funds 50 states, three municipalities, and four territories to conduct influenza surveillance and diagnostic activities. In FY 2024, CDC will continue to fund public health departments to support seasonal influenza surveillance and improve detection of infections with novel influenza viruses. Collaboration between state and local health authorities and CDC is essential for risk assessment and response in novel influenza virus cases.

## Planning for and Responding to Influenza Pandemics

Influenza viruses change constantly. The possibility of a novel influenza pandemic is a persistent threat. CDC's domestic and global seasonal influenza work is the foundation of its influenza pandemic preparedness activities. In FY 2024, CDC will work to improve the ability to identify novel influenza viruses when transmitted from animals to humans. CDC will rapidly characterize viruses to ensure the effectiveness of medical countermeasures and develop new ones when necessary, including candidate vaccine viruses against novel influenza threats. In the past year alone, CDC has characterized thousands of influenza viruses to track epidemic and novel viruses and developed more than a dozen new vaccine viruses to protect against novel influenza viruses that have the potential to cause a pandemic.

CDC remains at the forefront of developing recommendations to reduce the risk of transmission of this and other influenza threats. Each flu season CDC works to assess and refine its surveillance and laboratory infrastructure, to respond to any flu season, as well as potential pandemics. As part of CDC's Data Modernization Initiative, the agency is working to improve the integration of its lab and epidemiological data and is developing new and innovative ways to visualize and share both seasonal and novel influenza data.

For example, in 2022 CDC leveraged its surveillance and data infrastructure to monitor and respond to the recent circulation of avian influenza A(H5) in wild birds and poultry both domestically and internationally. When USDA identified avian influenza A(H5) in birds in the U.S. in early 2022, CDC rapidly characterized the circulating viruses to determine that, should human cases occur, laboratory assays in state and local public health labs would be capable of detecting potential human infections. USDA confirmed that the currently available candidate vaccine virus, which had been developed by CDC a year prior, and antivirals would be effective in protecting against and treating human infection. CDC's domestic surveillance system and partnerships with state and local health departments allowed for the rapid scale-up of surveillance, monitoring, and follow-up of thousands of people who were exposed to infected birds, including poultry workers. CDC developed an internal electronic dashboard to synthesize and display all relevant available data related to the outbreak, a model which can be replicated for future responses. CDC leveraged its seasonal influenza communication capacity and relationships with state, local, and federal partners to rapidly develop and disseminate guidance to those with a higher chance of exposure to infected birds about steps they could take to prevent the spread of avian influenza.

Disease outbreaks and pandemics transcend borders, making global health security crucial to domestic preparedness. Because of this need for global preparedness, CDC partners with WHO and partner countries around the world to build pandemic preparedness infrastructure and expertise by helping to assess preparedness and response gaps and integrate activities into national action plans as well as providing technical assistance to develop needed capacities and systems. This support may include updating pandemic plans and conducting exercises and trainings with local staff, building in-country capacity to identify and control outbreaks before they become pandemic.

CDC continues to support influenza pandemic planning efforts among health departments, hospitals, and emergency responders, including for hospital surge and equitable vaccine prioritization and distribution planning. Coordination among these groups will result in better-integrated emergency response plans prior to a public health disaster to ensure a rapid, efficient, and effective response at the community level. To ensure response readiness, CDC will test response capabilities with federal, state, and local partners in FY 2024 using techniques such as virtual tabletop and functional exercises to evaluate and improve response plans based on lessons from the COVID-19 response.

CDC has created response tools to enhance pandemic preparedness that could be applied to different emerging threats. The Text Illness Monitoring (TIM) is a secure mobile texting tool that facilitates symptom monitoring during an infectious disease outbreak or pandemic response. Originally developed to monitor responders to an avian influenza outbreak, it has been used by federal, state, and tribal organizations to monitor COVID-19

symptoms and most recently by 10 states for influenza monitoring. CDC also developed VaccineFinder, a web-based service to help people find nearby pharmacies and locations that offer influenza vaccines, which can also be used to identify COVID-19 vaccine locations. VaccineFinder is also a mechanism for providers and jurisdictions to report vaccine inventory to CDC and share information on vaccine stock availability for consumers. CDC collaborates with the National Association of County and City Health Officials (NACCHO), the Association of State and Territorial Health Officials (ASTHO), and national associations that represent pharmacies, pharmacists, and pharmaceutical distributors on efforts to improve antiviral distribution and dispensing at the local level during a pandemic.

**State Table: Discretionary (Section 317)<sup>1,2</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$4,037,361	\$3,968,130	\$4,199,642	\$231,512
Alaska	\$1,273,179	\$1,251,347	\$1,324,354	\$73,007
Arizona	\$7,089,980	\$6,968,404	\$7,374,960	\$406,556
Arkansas	\$3,019,949	\$2,968,164	\$3,141,335	\$173,171
California	\$36,458,485	\$35,833,308	\$37,923,923	\$2,090,615
Colorado	\$5,322,498	\$5,231,230	\$5,536,434	\$305,205
Connecticut	\$3,988,724	\$3,920,327	\$4,149,050	\$228,723
Delaware	\$1,448,752	\$1,423,909	\$1,506,984	\$83,075
District of Columbia	\$1,914,112	\$1,881,289	\$1,991,049	\$109,760
Florida	\$18,356,551	\$18,041,779	\$19,094,387	\$1,052,608
Georgia	\$9,898,549	\$9,728,812	\$10,296,418	\$567,606
Hawaii	\$2,056,634	\$2,021,368	\$2,139,300	\$117,932
Idaho	\$1,901,593	\$1,868,986	\$1,978,027	\$109,042
Illinois	\$7,673,835	\$7,542,246	\$7,982,282	\$440,036
Indiana	\$5,428,451	\$5,335,365	\$5,646,646	\$311,280
Iowa	\$3,784,028	\$3,719,141	\$3,936,126	\$216,985
Kansas	\$2,827,983	\$2,779,490	\$2,941,653	\$162,163
Kentucky	\$4,428,534	\$4,352,595	\$4,606,538	\$253,943
Louisiana	\$3,848,607	\$3,782,612	\$4,003,300	\$220,688
Maine	\$2,831,231	\$2,782,682	\$2,945,032	\$162,349
Maryland	\$5,378,925	\$5,286,689	\$5,595,129	\$308,440
Massachusetts	\$6,667,645	\$6,553,310	\$6,935,649	\$382,338
Michigan	\$9,270,779	\$9,111,807	\$9,643,415	\$531,608
Minnesota	\$5,477,073	\$5,383,154	\$5,697,222	\$314,068
Mississippi	\$3,060,928	\$3,008,441	\$3,183,961	\$175,521
Missouri	\$5,978,940	\$5,876,415	\$6,219,262	\$342,846
Montana	\$1,558,974	\$1,532,241	\$1,621,637	\$89,395
Nebraska	\$2,708,204	\$2,661,765	\$2,817,060	\$155,295
Nevada	\$3,291,408	\$3,234,968	\$3,423,705	\$188,737
New Hampshire	\$1,854,962	\$1,823,154	\$1,929,522	\$106,368
New Jersey	\$7,935,276	\$7,799,205	\$8,254,232	\$455,027
New Mexico	\$2,215,002	\$2,177,020	\$2,304,033	\$127,013
New York	\$9,162,569	\$9,005,453	\$9,530,856	\$525,403
North Carolina	\$9,808,593	\$9,640,399	\$10,202,847	\$562,448
North Dakota	\$1,336,763	\$1,313,841	\$1,390,494	\$76,653
Ohio	\$10,919,200	\$10,731,962	\$11,358,094	\$626,133
Oklahoma	\$4,011,560	\$3,942,772	\$4,172,804	\$230,032
Oregon	\$3,783,603	\$3,718,723	\$3,935,684	\$216,961
Pennsylvania	\$9,848,992	\$9,680,105	\$10,244,869	\$564,764
Rhode Island	\$1,639,934	\$1,611,813	\$1,705,851	\$94,038
South Carolina	\$3,834,875	\$3,769,116	\$3,989,017	\$219,901
South Dakota	\$1,624,372	\$1,596,518	\$1,689,663	\$93,145
Tennessee	\$5,921,937	\$5,820,389	\$6,159,967	\$339,578
Texas	\$24,534,968	\$24,114,251	\$25,521,143	\$1,406,893
Utah	\$3,161,196	\$3,106,989	\$3,288,260	\$181,270
Vermont	\$1,412,649	\$1,388,425	\$1,469,430	\$81,005
Virginia	\$7,782,510	\$7,649,058	\$8,095,326	\$446,267
Washington	\$6,671,438	\$6,557,039	\$6,939,595	\$382,556
West Virginia	\$2,495,957	\$2,453,157	\$2,596,281	\$143,124
Wisconsin	\$4,606,934	\$4,527,936	\$4,792,108	\$264,172

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Wyoming	\$1,006,525	\$989,265	\$1,046,982	\$57,717
<b>Subtotal States</b>	<b>\$296,551,729</b>	<b>\$291,466,562</b>	<b>\$308,471,533</b>	<b>\$17,004,971</b>
<b>Cities</b>				
Chicago	\$3,487,987	\$3,428,176	\$3,628,185	\$200,009
Houston <sup>2</sup>	\$2,823,133	\$2,774,723	\$2,936,608	\$161,885
New York City	\$8,723,209	\$8,573,626	\$9,073,836	\$500,209
Philadelphia	\$2,433,589	\$2,391,858	\$2,531,406	\$139,548
San Antonio <sup>2</sup>	\$1,600,155	\$1,572,716	\$1,664,473	\$91,757
<b>Subtotal Cities</b>	<b>\$19,068,072</b>	<b>\$18,741,100</b>	<b>\$19,834,508</b>	<b>\$1,093,408</b>
<b>Territories</b>				
American Samoa	\$654,440	\$643,218	\$680,745	\$37,527
Guam	\$1,393,451	\$1,369,557	\$1,449,460	\$79,904
Marshall Islands	\$2,974,623	\$2,923,616	\$3,094,188	\$170,572
Micronesia	\$4,377,766	\$4,302,698	\$4,553,729	\$251,031
Northern Mariana Islands	\$949,356	\$933,077	\$987,515	\$54,438
Puerto Rico	\$3,365,307	\$3,307,600	\$3,500,575	\$192,975
Republic of Palau	\$722,787	\$710,393	\$751,840	\$41,446
Virgin Islands	\$940,741	\$924,609	\$978,553	\$53,944
<b>Subtotal Territories</b>	<b>\$15,378,472</b>	<b>\$15,114,767</b>	<b>\$15,996,605</b>	<b>\$881,838</b>
<b>Total States/Cities/Territories</b>	<b>\$330,998,273</b>	<b>\$325,322,429</b>	<b>\$344,302,646</b>	<b>\$18,980,216</b>
<b>Other Adjustments<sup>3</sup></b>	<b>\$104,979,727</b>	<b>\$103,179,571</b>	<b>\$109,199,354</b>	<b>\$6,019,784</b>
<b>Total Resources</b>	<b>\$435,978,000</b>	<b>\$428,502,000</b>	<b>\$453,502,000</b>	<b>\$25,000,000</b>

<sup>1</sup> This State Table is a snapshot of selected programs that fund all 50 states (and in some cases local, tribal, and territorial grantees). Includes vaccine direct assistance and immunization infrastructure/operations grant funding. For a more comprehensive view of grant and cooperative agreement funding to grantees by jurisdiction, visit <http://www.cdc.gov/FundingProfiles/FundingProfilesRIA/>

<sup>2</sup> Vaccine direct assistance for Houston and San Antonio is included with the state of Texas.

<sup>3</sup> Other adjustments include vaccine that is in inventory at the centralized distribution center but has not been ordered by immunization providers, funds for centralized vaccine distribution activities, a centralized vaccine ordering system, pediatric stockpile, influenza stockpile, stockpile storage and rotation, and program support services.

**State Table: Vaccines for Children<sup>1,2,3</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$88,977,845	\$69,662,188	\$94,720,953	\$25,058,765
Alaska	\$11,110,867	\$7,923,097	\$10,773,181	\$2,850,083
Arizona	\$126,517,298	\$99,123,663	\$134,780,260	\$35,656,597
Arkansas	\$56,566,548	\$44,144,839	\$60,024,546	\$15,879,707
California	\$614,379,651	\$478,175,362	\$650,183,798	\$172,008,436
Colorado	\$69,610,390	\$54,021,416	\$73,453,908	\$19,432,493
Connecticut	\$46,653,202	\$35,185,079	\$47,841,796	\$12,656,717
Delaware	\$15,087,690	\$11,362,122	\$15,449,286	\$4,087,164
District of Columbia	\$14,384,760	\$10,722,883	\$14,580,100	\$3,857,217
Florida	\$371,691,682	\$291,426,184	\$396,257,521	\$104,831,336
Georgia	\$193,786,412	\$151,454,247	\$205,935,114	\$54,480,867
Hawaii	\$20,543,183	\$15,260,256	\$20,749,649	\$5,489,393
Idaho	\$29,610,433	\$23,199,582	\$31,544,896	\$8,345,314
Illinois	\$110,203,544	\$84,893,068	\$115,430,659	\$30,537,591
Indiana	\$110,489,765	\$86,514,264	\$117,635,029	\$31,120,765
Iowa	\$47,308,498	\$36,309,809	\$49,371,113	\$13,061,304
Kansas	\$37,335,794	\$28,956,460	\$39,372,629	\$10,416,169
Kentucky	\$69,956,918	\$54,695,367	\$74,370,292	\$19,674,925
Louisiana	\$102,112,965	\$80,079,943	\$108,886,165	\$28,806,222
Maine	\$18,319,241	\$13,456,852	\$18,297,527	\$4,840,676
Maryland	\$103,447,292	\$80,734,457	\$109,776,120	\$29,041,663
Massachusetts	\$92,277,350	\$70,910,750	\$96,418,645	\$25,507,895
Michigan	\$117,211,919	\$90,541,582	\$123,111,047	\$32,569,465
Minnesota	\$59,894,608	\$46,085,134	\$62,662,801	\$16,577,667
Mississippi	\$54,018,482	\$42,040,904	\$57,163,787	\$15,122,883
Missouri	\$85,227,938	\$66,208,867	\$90,025,409	\$23,816,542
Montana	\$12,805,061	\$9,621,543	\$13,082,589	\$3,461,045
Nebraska	\$29,576,376	\$22,725,813	\$30,900,704	\$8,174,891
Nevada	\$49,865,309	\$38,489,343	\$52,334,664	\$13,845,322
New Hampshire	\$14,224,903	\$10,712,733	\$14,566,300	\$3,853,566
New Jersey	\$113,985,701	\$88,554,235	\$120,408,815	\$31,854,580
New Mexico	\$40,488,459	\$31,284,121	\$42,537,592	\$11,253,471
New York	\$156,126,299	\$120,650,237	\$164,050,337	\$43,400,100
North Carolina	\$180,556,050	\$140,687,549	\$191,295,438	\$50,607,888
North Dakota	\$10,130,289	\$7,543,343	\$10,256,822	\$2,713,479
Ohio	\$169,666,157	\$132,760,860	\$180,517,373	\$47,756,513
Oklahoma	\$82,688,546	\$64,140,341	\$87,212,797	\$23,072,456
Oregon	\$48,202,274	\$36,773,747	\$50,001,938	\$13,228,190
Pennsylvania	\$131,214,007	\$101,459,072	\$137,955,759	\$36,496,687
Rhode Island	\$18,102,729	\$13,516,297	\$18,378,357	\$4,862,060
South Carolina	\$89,004,926	\$69,503,289	\$94,504,895	\$25,001,606
South Dakota	\$12,469,165	\$9,618,305	\$13,078,186	\$3,459,881
Tennessee	\$123,077,156	\$96,324,403	\$130,974,055	\$34,649,652

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Texas <sup>2</sup>	\$711,561,936	\$559,427,168	\$760,663,367	\$201,236,199
Utah	\$34,810,744	\$26,591,522	\$36,156,980	\$9,565,458
Vermont	\$8,660,748	\$6,361,725	\$8,650,154	\$2,288,429
Virginia	\$107,995,452	\$84,729,711	\$115,208,540	\$30,478,829
Washington	\$109,823,520	\$84,399,772	\$114,759,916	\$30,360,144
West Virginia	\$28,422,119	\$21,941,259	\$29,833,932	\$7,892,673
Wisconsin	\$59,382,956	\$45,803,533	\$62,279,903	\$16,476,370
Wyoming	\$6,271,890	\$4,536,513	\$6,168,380	\$1,631,867
<b>Subtotal States</b>	<b>\$5,015,837,047</b>	<b>\$3,901,244,810</b>	<b>\$5,304,594,024</b>	<b>\$1,403,349,214</b>
<b>Cities</b>				
Chicago	\$48,584,301	\$37,330,591	\$50,759,088	\$13,428,497
Houston <sup>2</sup>	\$0	\$0	\$0	\$0
New York City	\$178,018,852	\$137,846,440	\$187,432,329	\$49,585,889
Philadelphia	\$38,078,699	\$28,873,910	\$39,260,384	\$10,386,474
San Antonio <sup>2</sup>	\$0	\$0	\$0	\$0
<b>Subtotal Cities</b>	<b>\$264,681,852</b>	<b>\$204,050,941</b>	<b>\$277,451,801</b>	<b>\$73,400,861</b>
<b>Territories</b>				
American Samoa	\$3,392,575	\$2,594,318	\$3,527,541	\$933,224
Guam	\$2,955,452	\$1,871,972	\$2,545,355	\$673,383
Marshall Islands <sup>3</sup>	\$0	\$0	\$0	\$0
Micronesia <sup>3</sup>	\$0	\$0	\$0	\$0
Northern Mariana Islands	\$2,196,324	\$1,567,844	\$2,131,827	\$563,982
Palau <sup>3</sup>	\$50,481,298	\$38,740,527	\$52,676,204	\$13,935,677
Puerto Rico	\$0	\$0	\$0	\$0
Virgin Islands	\$2,878,702	\$1,533,588	\$2,085,248	\$551,660
<b>Subtotal Territories</b>	<b>\$61,904,350</b>	<b>\$46,308,249</b>	<b>\$62,966,174</b>	<b>\$16,657,925</b>
<b>Total States/Cities/Territories</b>	<b>\$5,342,423,249</b>	<b>\$4,151,604,000</b>	<b>\$5,645,012,000</b>	<b>\$1,493,408,000</b>
<b>Other Adjustments<sup>4</sup></b>	<b>\$197,576,751</b>	<b>\$282,396,000</b>	<b>\$356,988,000</b>	<b>\$74,592,000</b>
<b>Total Resources<sup>5</sup></b>	<b>\$5,540,000,000</b>	<b>\$4,434,000,000</b>	<b>\$6,002,000,000</b>	<b>\$1,568,000,000</b>

CFDA Number: 93.268

<sup>1</sup> This State Table is a snapshot of selected programs that fund all 50 states (and in some cases local, tribal, and territorial grantees). Includes vaccine direct assistance and immunization infrastructure/operations grant funding. For a more comprehensive view of grant and cooperative agreement funding to grantees by jurisdiction, visit <http://wwwn.cdc.gov/FundingProfiles/FundingProfilesRIA/>.

<sup>2</sup> Vaccine direct assistance for Houston and San Antonio is included with the state of Texas.

<sup>3</sup> Awardee does not receive VFC funding.

<sup>4</sup> Other adjustments include vaccine that is in inventory at the centralized distribution center but has not been ordered by immunization providers, funds for centralized vaccine distribution activities, a centralized vaccine ordering system, pediatric stockpile, influenza stockpile, stockpile storage and rotation, and program support services.

<sup>5</sup> Total resources are based on the OMB-approved FY 2024 VFC PB 10 Year Table. FY 2024 column reflects estimates under proposed law to expand the VFC program to include CHIP beneficiaries.

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## HIV/AIDS, VIRAL HEPATITIS, SEXUALLY TRANSMITTED INFECTIONS, AND TUBERCULOSIS

(Dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Budget Authority	\$1,345.056	\$1,391.056	\$1,544.556	+\$153.500
<b>Total Request<sup>1</sup></b>	<b>\$1,345.056</b>	<b>\$1,391.056</b>	<b>\$1,544.556</b>	<b>+\$153.500</b>
FTEs	1,126	1,115	1,167	52
-- Domestic HIV Prevention and Research	\$986.712	\$1,013.712	\$1,155.712	+\$142.000
-- <i>Ending HIV Initiative (non-add)</i>	\$195.000	\$220.000	\$310.000	+\$90.000
-- <i>School Health—HIV (non-add)</i>	\$36.081	\$38.081	\$90.081	+\$52.000
-- Viral Hepatitis	\$41.000	\$43.000	\$54.500	+\$11.500
-- Sexually Transmitted Infections (STIs)	\$164.310	\$174.310	\$174.310	\$0
-- Tuberculosis	\$135.034	\$137.034	\$137.034	\$0
-- Infectious Diseases and the Opioid Epidemic	\$18.000	\$23.000	\$23.000	\$0

<sup>1</sup>This table reflects totals by budget activity. The FY 2024 budget proposes a single “CDC-Wide Activities and Program Support” Treasury account structure.

**Enabling Legislation Citation:** PHS A § 301, PHS A § 306\*, PHS A § 307, PHS A § 308, PHS A § 310, PHS A § 311, PHS A § 317, PHS A § 317E\*, PHS A § 317N, PHS A § 317P\*, PHS A § 318\*, PHS A § 318A\*, PHS A § 318B\*, PHS A § 322, PHS A § 325, PHS A § 327, PHS A § 352, PHS A § 2315, PHS A § 2320, PHS A § 2341, PHS A §§ 2521, 2522, Departments of Labor, Health and Human Services, Education, and Related Agencies Appropriations Act of 1995 ( Pub. L. 103-333, Title II).

**Enabling Legislation Status:** Permanent Indefinite

**Authorization of Appropriations for FY 2022:** Indefinite; Expired/Expiring noted with \*

**Allocation Methods:** Direct Federal/Intramural, Competitive Grants/Cooperative Agreements, Formula Grants/Cooperative Agreements, Contracts, and Other

CDC envisions a future free of Human Immunodeficiency Virus (HIV), viral hepatitis, sexually transmitted infections (STIs), and tuberculosis (TB). In working toward that future, CDC prioritizes cost-effective, scalable programs, policies, and research to achieve the greatest reduction in the incidence and disparities of these conditions—all of which have substantial individual, societal, and economic costs for all Americans, and an even greater cost for certain populations.

CDC’s FY 2024 budget request of **\$1,544,556,000** for HIV, Viral Hepatitis, Sexually Transmitted Infections, and Tuberculosis is **\$153,500,000** above the FY 2023 enacted level. The request includes an increase of **\$142,000,000** above the FY 2023 enacted level for Domestic HIV/AIDS Prevention and Research, which includes an increase of **\$90,000,000** for the Ending the HIV Epidemic (EHE) Initiative and **\$52,000,000** for School Health to scale up the What Works in Schools program. CDC’s FY 2024 budget request also includes an increase of **\$11,500,000** above the FY 2023 enacted level for Viral Hepatitis.

Eliminating the severe and disproportionate impact of these diseases would move the nation toward achieving health equity. Additionally, the nation has seen an increase in drug use-related hospitalizations, overdoses, and fatalities, as well as the transmission of infectious diseases such as viral hepatitis and HIV. CDC remains committed to strengthening the collaborative work across HIV, viral hepatitis, STIs, TB and improving the health of people who use drugs to facilitate efficiency and integration of services to the public.

### Health Equity

Certain populations in the United States experience a greater health burden of HIV, viral hepatitis, STDs, TB, and youth risk behaviors. Gay, bisexual, and other men who report male-to-male sexual contact are

disproportionately affected by HIV and the 2022 United States mpox outbreak. In relation to their population size, transgender women are among the groups most affected by HIV. In the U.S. lesbian, gay, and bisexual high school students are two to four times more likely to experience violence, use drugs, or attempt suicide.<sup>16</sup> HIV incidence rates are 8 times higher among Black/African American individuals and 3 times higher among Hispanic/Latino/a individuals than White individuals<sup>17</sup> due to social and structural barriers that exacerbate these disparities.

CDC's HIV, viral hepatitis, STI, TB, and school health programs have worked for decades to reduce infectious diseases and health disparities throughout the United States. These programs fund health departments and community-based organizations to address infectious diseases among racial/ethnic minority groups. Partnering with community-based and national organizations will foster collaborations with providers and clients to provide effective prevention programs and services and inform guidelines and policies. Facilitating strong collaborations between communities and clinical services will reduce disparities, enhance the effectiveness of partnerships, and improve prevention activities. Supporting public health strategies in local school districts have proven to build safe and supportive school environments with predominately Black and Latino youths while also reducing sexual risk behavior, sexual violence, substance use, suicide ideation, and school violence.

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<sup>16</sup> <https://www.cdc.gov/healthyyouth/data/yrbs/pdf/YRBSDataSummaryTrendsReport2019-508.pdf>

<sup>17</sup> Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2015–2019. HIV Surveillance Supplemental Report 2021;26(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published May 2021

## HIV/AIDS, VIRAL HEPATITIS, SEXUALLY TRANSMITTED INFECTIONS AND TUBERCULOSIS

### BY THE NUMBERS

- ~ **1.3 million**—HIV tests conducted in 2020 by 60 CDC-funded state and local health departments and 100 community-based organizations (CBOs); 6,458 persons were newly diagnosed as HIV-positive. This represents about one in three new HIV diagnoses in the United States.
- **287,581**—Lab tests CDC conducted from 2015 to 2021 for outbreak investigations and surveillance.<sup>2</sup>
- **3,578**—Potential cases of congenital syphilis prevented by CDC-funded STD prevention programs in 2020.
- **27**—States that have declared an end to their hepatitis A outbreaks among people who used drugs or are experiencing homelessness. CDC continues to support the 10 states with active hepatitis A outbreaks and assist all states in surveillance, preparedness, and vaccination programs as needed.<sup>3</sup>
- **800**—Responses to requests through the National Harm Reduction Technical Assistance Center for technical assistance related to implementation of harm reduction services, increasing linkages to care, and evaluating program impact.
- **9000+**—M. tuberculosis samples tested since 2009 by CDC’s Molecular Detection of Drug Resistance (MDDR) service to rapidly identify multidrug-resistant TB and help clinicians prescribe the most effective treatment.
- ~ **2 million**—U.S. middle and high school students reached by CDC’s school health funding. CDC’s “What Works in Schools” program reduces sexual risk behavior, experience of violence, substance use, and poor mental health among students in schools that implement the approach at a cost of less than \$10 per student.
- **227**—Clusters of HIV infections reported to CDC and addressed by 41 health departments from 2020-2021. Fifty-two jurisdictions use a bioinformatics tool developed and managed by CDC that allows these health departments to identify molecular clusters of HIV –transmission within their jurisdiction in near-real time.
- **454**—U.S. tuberculosis genotype clusters for which CDC has performed whole-genome sequencing in 2021. Health departments use CDC’s whole-genome sequencing service to identify similarities or differences in the bacterial genomes of people who are diagnosed with TB disease. Whole genome sequencing data can show whether the cases are related or not, guiding health departments’ decisions on how to conduct outreach or contact investigations.
- **33,000**—Registered learners of the CDC-supported STD Curriculum Center. Learners have been awarded over 138,000 continuing nursing education hours, continuing medical education credits, or continuing education hours between 2021-2022.
- **76%**—Persons newly diagnosed with HIV at a CDC-funded testing site linked to HIV medical care within 30 days.
- **108**—Syringe services programs (SSPs) operating in Ending the HIV Epidemic (EHE) jurisdictions and supported with EHE funding. Approximately 50% of these SSPs are mobile/outreach locations.
- **1.2 million**—People initiated curative hepatitis C treatment from 2014 to 2020, an average of 171,000 people each year — far below the 260,000 people who need to be treated annually to eliminate hepatitis C.

\*References:

<sup>1</sup> Internal CDC Data.

<sup>2</sup> Data point is not exclusive to outbreak activities, but inclusive of these activities.

<sup>3</sup> As of December 13, 2021

\*Unless otherwise noted, all information and calculations are from CDC program data.

<b>HIV, Viral Hepatitis, Sexually Transmitted Infections, and TB Funding History</b>	
<b>Fiscal Year</b>	<b>Dollars (In millions)</b>
FY 2020	\$1,273.556
FY 2021	\$1,310.019
FY 2022 Final	\$1,345.056
FY 2023 Enacted	\$1,391.056
FY 2024 President's Budget	\$1,544.556

<b>CDC-Wide HIV/AIDS Funding</b>			
<b>Fiscal Year</b>	<b>Domestic HIV/AIDS Prevention and Research (Infectious Disease) (Dollars in millions)</b>	<b>Global HIV/AIDS Program (Dollars in millions)</b>	<b>CDC-Wide HIV Total (Dollars in millions)</b>
FY 2014	\$786.712	\$128.420	\$915.132
FY 2015	\$786.712	\$128.421	\$915.133
FY 2016	\$788.712	\$128.421	\$917.133
FY 2017	\$786.868	\$128.120	\$914.988
FY 2018	\$786.101	\$127.985	\$914.086
FY 2019	\$788.712	\$128.421	\$917.133
FY 2020	\$928.712	\$128.421	\$1,057.133
FY 2021	\$964.712	\$128.421	\$1,093.133
FY 2022	\$986.712	\$128.921	\$1,115.133
FY 2023	\$1,099.712	\$128.921	\$1,228.133
FY 2024 President's Budget	\$1,155.712	\$128.921	\$1,284.633

### Program Accomplishments

CDC partners with health departments and CBOs to test, link to care and treatment, prevent, monitor, and respond to viral hepatitis in the United States. In FY 2021, CDC launched the integrated viral hepatitis surveillance and prevention program for health departments, which funds core viral hepatitis outbreak response, surveillance, and prevention activities in 59 jurisdictions (49 states, eight cities/counties, Washington D.C., and Puerto Rico). Priorities include increasing health department surveillance capacity, access to hepatitis B and C testing, prevention and treatment services, state and large city viral hepatitis elimination planning, outbreak detection, and investigation and control.

CDC continued to power the National Harm Reduction Technical Assistance Center, a nationwide program for health departments, community-based organizations, and others developing or implementing syringe services programs (SSPs). The National Harm Reduction Technical Assistance Center greatly expanded its reach through a partnership with SAMHSA to provide additional support to substance use disorder treatment and recovery organizations. CDC funded eight SSPs to implement patient navigation programs, successfully linking clients to care and treatment for infectious disease and substance use disorders, housing and food assistance, wound care, and providing a model for the nation on how to provide services more effectively for people who use drugs.

U.S. TB rates are among the lowest in the world. In 2021, the United States reported an incidence rate of 2.4 new TB disease cases per 100,000 persons, or a total of 7,882 cases. This low rate is due to CDC's aggressive strategy of finding each new case of TB disease, and ensuring patients receive treatment until cured. Not only has this strategy improved and saved American lives, but it also had a positive economic effect. Over a 20-year period, U.S. TB control efforts averted as many as 319,000 cases of TB up to \$14.5 billion in medical and societal costs from TB deaths. In addition, the percentage of eligible patients completing treatment in one year has risen from 63.4% in 1993 to 89.9% in 2019.

## Domestic HIV Prevention and Research Budget Request

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CDC's FY 2024 budget request of **\$1,155,712,000** for Domestic HIV/AIDS Prevention and Research is **\$142,000,000** above the FY 2023 enacted level. An estimated 1.2 million people with HIV live in the United States, and there are approximately 35,000 new HIV infections annually. HIV prevention and treatment efforts have yielded major successes—saving lives and money. CDC's high-impact HIV prevention approach uses public health data to inform decision-making and prioritizes the implementation of scientifically proven, cost-effective, and scalable HIV prevention interventions. This approach includes:

1. Decreasing the annual number of new diagnoses of HIV infection by 21% from 2009 to 2019.
2. Increasing the percentage of persons with diagnosed HIV who are virally suppressed from 61.5% in 2016 to 64.6% in 2020.
3. Meeting the goal of eliminating perinatal transmission in 2018.

CDC is committed to achieving health equity for all people living in the United States affected by HIV. CDC's HIV prevention and care efforts are driven by the 2022-2025 National HIV/AIDS Strategy (NHAS) which established bold targets for ending the HIV epidemic in the U.S. by 2030. CDC's investment in nationwide surveillance enables CDC to describe the status of the HIV epidemic and where disparities exist. Our progress on the six NHAS indicators are critical for advancing HIV prevention in the United States. Key surveillance<sup>18</sup> information gathered through our programs informs our high-impact prevention approach includes:

**Funding health departments, and national and community-based organizations:** CDC funds health departments and CBOs for activities as follows:

- Conducting HIV testing,
- Providing critical prevention interventions like PrEP and PEP, and
- Improving linkages to care to reach and maintain greater rates of viral suppression.

CDC partners with national and community level organizations to develop and maintain a well-trained HIV prevention workforce to best implement critical interventions across the nation. In FY 2022, CDC awarded approximately \$61 million via [PS21-2102: Comprehensive High-Impact HIV Prevention Programs for Community Based Organizations](#).<sup>19</sup> CDC invests in the HIV prevention workforce by funding [Capacity Building Assistance programs](#),<sup>20</sup> which help implement and sustain science-based and culturally appropriate HIV prevention interventions in communities. <https://www.cdc.gov/hiv/funding/announcements/ps18-1802/index.html> CDC requires health departments to partner directly with CBOs that have a long history of meeting the HIV prevention needs of disproportionately affected groups. HIV, STIs, and viral hepatitis can co-occur at disproportionate rates in certain populations and are considered syndemic diseases. CDC supports syndemic prevention approaches to HIV prevention and care including integrating screening for HIV, STIs, and viral hepatitis, developing and disseminating community awareness campaigns, and increasing use of HIV self-tests and STI self-sample collection kits. CDC supports HIV-related services to deliver high-quality, culturally affirming health care and services at every engagement. Integrating these approaches with strategies that address social determinants of health can help reduce barriers to accessing and remaining engaged in care and improve health equity.

**Conducting public health surveillance activities:**<sup>21</sup> CDC's surveillance activities are essential for identifying and prioritizing prevention efforts. CDC monitors how effectively states, cities, and local communities are providing

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<sup>18</sup> Since 2020 HIV surveillance data should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing and care-related services, 2019 data is presented here.

<sup>19</sup> <https://www.cdc.gov/hiv/funding/announcements/PS21-2102/index.html>

<sup>20</sup> <https://www.cdc.gov/hiv/funding/announcements/ps18-1802/index.html>

<sup>21</sup> <https://www.cdc.gov/hiv/library/reports/index.html>

HIV prevention and care services. CDC also analyzes data to guide prevention, treatment, and testing programs, as well as housing and health education for affected populations.

**Investing in adolescent and school health:** CDC strengthens schools’ capacity to promote adolescent health and well-being and prevent HIV, STDs, and unintended pregnancies. Experiences and behaviors during the adolescent years can present immediate risk for HIV and STDs, which can cause serious health consequences into adulthood. CDC collects data to monitor adolescent health risk behaviors and experiences, conducts school-based prevention activities such as health education, health services, and providing safe environments, which have been proven to improve health behaviors and experiences and support students’ mental health. Data from the Adolescent Behaviors and Experiences Survey (ABES)<sup>22</sup> show that most Asian, Black, and multiracial students experienced racism during their life. Experiencing racism was associated with poor mental health among students. Additionally, [data from the 2021 Youth Risk Behavior Survey](#)<sup>23</sup> show that six out of 10 girls felt persistently sad or hopeless and nearly one-third had seriously contemplated suicide. This data informs the Administration’s national mental health strategy.<sup>24</sup>



CDC implements the *What Works in Schools (WWIS)* program to ensure young people have the skills, information, and support they need to thrive. This evidence-based approach for education agencies reaches nearly 2 million students and reduces sexual risk behavior, experience of violence, substance use, and poor mental health among students in schools. Schools served by CDC-funded local education agencies have seen significant declines in the percentage of students engaged in sexual risk behavior, used substances, like marijuana, and experienced violence, like sexual assault. Schools in funded districts that implemented policies and practices to support LGBTQ youth saw improved mental health and decreased suicidal ideation in both LGBTQ and heterosexual students.

**Supporting effective HIV prevention programs:** CDC continually improves domestic HIV prevention through world class scientific expertise, cutting edge technology, communication science, and translating prevention research into practice through investments in:

- **Laboratory Science:** CDC’s cutting-edge HIV laboratory works in collaboration with the National Institutes of Health, industry, and academia to identify new biomedical approaches to HIV prevention and innovative diagnostic techniques. The laboratory also serves as a world-renowned HIV reference laboratory, which works directly with the WHO and monitors HIV resistance patterns. The laboratory provides support to states for cluster detection and response activities, which are necessary to interrupt active networks of HIV transmission.
- **Translation Research:** CDC uses prevention research to identify promising HIV prevention strategies and program, evaluate their effectiveness, and inform implementation.
- **Clinical Guidelines:** CDC’s clinical practice guidelines for PrEP gives health care providers the latest information on prescribing PrEP for HIV prevention to their patients and increasing PrEP use by people who could benefit from it.
- **Education Campaigns:** CDC uses communication science to reduce stigma, raise awareness about HIV in the U.S., and promote HIV prevention and testing focused on populations most affected by HIV through the [Let’s Stop HIV Together](#)<sup>25</sup> campaign.

<sup>22</sup>[https://www.cdc.gov/mmwr/volumes/71/su/su7103a4.htm?s\\_cid=su7103a4\\_w#suggestedcitation](https://www.cdc.gov/mmwr/volumes/71/su/su7103a4.htm?s_cid=su7103a4_w#suggestedcitation)

<sup>23</sup> [https://www.cdc.gov/healthyyouth/data/yrbs/yrbs\\_data\\_summary\\_and\\_trends.htm](https://www.cdc.gov/healthyyouth/data/yrbs/yrbs_data_summary_and_trends.htm)

<sup>24</sup> <https://www.whitehouse.gov/briefing-room/statements-releases/2022/03/01/fact-sheet-president-biden-to-announce-strategy-to-address-our-national-mental-health-crisis-as-part-of-unity-agenda-in-his-first-state-of-the-union/>

<sup>25</sup> <https://www.cdc.gov/stophivtogether/index.html>

- **Workforce Development**: CDC builds workforce capacity by providing national training programs, regional technical assistance, marketing support, field assignees, and quality improvement. CDC provides sustainability support for health departments and community-based organizations.

### **Ending the HIV Epidemic in the U.S. (EHE) Initiative**

CDC’s FY 2024 budget request of **\$310,000,000** for Domestic HIV/AIDS Prevention and Research is **\$90,000,000** above the FY 2023 enacted level. In FY 2024, CDC will continue to employ cross-cutting approaches to maximize the impact of our resources like ensuring health equity is central to the entire HIV prevention portfolio, including expanding innovations in HIV prevention delivery to improve access to HIV prevention and care services; engaging community partners meaningfully in planning and implementation of HIV prevention programs; and using syndemic and status neutral collaborations to broaden reach of services to key populations, create efficiencies, and reduce stigma.

With the FY 2024 increase in EHE funding, CDC will:

- Increase access to and use of HIV self-tests and conduct testing in non-healthcare settings (e.g., community organizations, correctional facilities, and mobile units).
- Rapidly linking people with HIV to care, and starting treatment within 7 days of diagnosis. Expanding telemedicine services to increase patient access, especially in rural areas.
- Expand programs to connect people to PrEP and PEP services including telePrEP and injective PrEP. This can also be done through establishment and expansion of syringe services programs where permissible, by using innovative delivery options such as mobile testing.
- Establish a dedicated workforce to support HIV outbreak response efforts, as well as improve the use of real-time information to direct resources to the communities that most need them.

EHE is a once-in-a-generation opportunity to eliminate new HIV infections in the United States. EHE focuses on four strategies—diagnose, treat, prevent, and respond. Through EHE, CDC works in jurisdictions to reduce new HIV infections and advance health equity. EHE works with disproportionately affected populations, including gay and bisexual men of color, transgender and cisgender Black/African American women, and people who inject drugs (PWID). The EHE initiative builds on CDC’s core investments in HIV prevention and provides affected communities with the expertise, technology, and resources to address the HIV epidemic locally. Since the launch of EHE:

- CDC has distributed 100,000 free consumer HIV self-test kits to populations disproportionately affected by HIV, including transgender women and racial/ethnic minority communities.
- Health Departments in EHE jurisdictions have conducted almost 250,000 HIV tests in the first year and 1,000 people were able to receive a new diagnosis of HIV.
- More than 140,000 HIV-negative people were identified through testing efforts in EHE areas—64% were screened for PrEP, 76% of those screened were eligible for PrEP and 27% were prescribed PrEP.
- 108 SSP’s were supported in EHE jurisdictions, including 57 fixed locations and 51 mobile or outreach locations.
- CDC grantees have been able to use real-time data to quickly direct resources to communities that need them most by identifying and addressing gaps in services.

**Diagnosing** all individuals with HIV as early as possible can lead to improved health outcomes, rapid treatment, and prevention of transmission to others. Approximately one in seven of the estimated 1.2 million people with HIV in America still don’t know they have HIV. By partnering with state and local organizations, CDC can focus testing where it is needed and increase access to self-testing options. Collaborations to increase testing for related diseases, including STIs and viral hepatitis, are ongoing. CDC’s HIV laboratory is improving diagnostic testing methods and technologies that make testing easier, quicker, and better able to detect HIV early after infection. CDC is working with funded recipients to expand innovations in testing spurred by COVID-19, including

the use of telemedicine and rapid HIV tests. For example, CDC recently awarded [funding](#)<sup>26</sup> to provide at least 875,000 HIV self-testing kits to populations disproportionately affected by HIV, including men who have sex with men, transgender women, and Black cis-gender women. These activities will increase awareness of HIV infection, prevent new infections, decrease HIV transmission, and improve overall health and well-being of participants.

**Treating** people with HIV rapidly and effectively using preventive medicine that reduces viral load to the point where an infected individual cannot transmit HIV to their sex partner. CDC estimates that people with HIV who are unaware they have HIV or are not receiving HIV care and treatment transmit 80% of new infections. CDC supports the use of public health data and cutting-edge analytical methods like “Data-to-Care” to identify and follow up with people who are out of care to re-engage them in medical care. CDC produces guidelines and educational materials for healthcare providers to build competency in HIV testing, care, treatment, and prevention. CDC also requires funded jurisdictions to identify and expand innovative and technological options to improve adherence and promote ongoing medical care, such as mobile text reminders, provision of telehealth services, and using pharmacy data to re-engage people who have not picked up their prescriptions.

**Preventing** new HIV transmissions by using effective interventions, including PrEP and SSPs. When taken as directed, PrEP can reduce the risk of HIV infection by about 99%. Of the estimated 1.2 million Americans at risk for HIV and who could benefit from PrEP, only 30% were using this medication in 2021. And while Black and Hispanic/Latino people account for the majority of people for whom PrEP is recommended, they face greater barriers to PrEP use and adherence. CDC funding supports the following activities:

- **Improved uptake of PrEP:** CDC develops content for and funds partners to address barriers to PrEP success and increased knowledge of demand for, access to, and persistence on PrEP. To do this, CDC provides consumer PrEP education, referrals, and navigation to increase access. Recipients can use EHE funds to cover laboratory and other costs associated with PrEP provision in uninsured or underinsured people. CDC also provides online continuing medical education, Prescribe HIV Prevention, which encourages health care providers to prescribe PrEP and PEP to prevent new HIV infections after exposure to the virus. “The Start Talking. Stop HIV.” communication campaign provides materials and resources to educate people who are at risk of HIV about PrEP as a prevention tool. The [#ShesWell](#) communication campaign<sup>27</sup> is focused on promoting PrEP uptake, sexual health, and wellness in women, especially women of color.
- **Implementation of SSPs:** CDC supports SSPs, which play a critical role in preventing HIV among persons who inject drugs, facilitate entry into substance use disorder treatment and medical services, and do not increase illegal drug use. CDC funding supported over 100 SSPs in EHE jurisdictions, with almost half of the SSPs being mobile or outreach locations. CDC funds technical assistance providers that work to ensure that recipients implement high quality and comprehensive SSPs.

**Responding** quickly to HIV clusters or outbreaks ensures that prevention and treatment services are delivered to people who need them most. These services may include linking people to HIV testing, medical care, PrEP, and SSPs. HIV outbreaks are costly; the cost of one outbreak in Indiana in 2015 associated with injection drug use was estimated at over \$100 million. HIV cluster detection and response work is a public health response to a system failure. It employs laboratory data and traditional epidemiological techniques that help identify clusters where HIV transmission is rapid, allowing CDC, health departments, and other partners to develop and implement strategies to stop transmission and focus HIV prevention efforts where they are needed in near real-time. From December 2015 through November 2022, more than 400 clusters were detected. These clusters

<sup>26</sup> <https://www.cdc.gov/hiv/funding/announcements/ps22-2210/index.html>

<sup>27</sup> <https://www.cdc.gov/stophivtogether/sheiswell/index.html>

were varied in their location, populations affected, and duration. Directing prevention efforts to networks with active transmission can improve success, prevent new infections, and save time and money.

### **School Health Budget Request**

CDC’s FY 2024 budget request of **\$90,081,000** for School Health is **\$52,000,000** above the FY 2023 enacted level. As part of the HHS Roadmap for Behavioral Health, CDC will build upon the success of the *What Works in Schools* program to reach adolescents nationwide by increasing the investment from 28 to up to 75 of the largest local education agencies (LEAs) and 50 state education agencies. This investment will leverage an established evidence-based approach that, when implemented in schools, positively impacts adolescent health and well-being of youth. In addition, this support will amplify existing adolescent health prevention and promotion activities within HHS.

CDC’s *What Works in Schools* program will strengthen the integrated delivery of mental health promotion and treatment interventions to students and families by allowing school administrators to create programs for their schools and students that are tailored to respond to the specific needs of different communities. The outcomes of the *What Works in Schools* program are protective for all youth, but particularly for Black and Hispanic youth, female students, and LGBTQ+ youth who experience disproportionately adverse mental health outcomes.

**Evaluation of CDC HIV/AIDS School Health Activities:** CDC’s School Health program is building new evidence and strengthening capacity for rigorous evaluation and data analytics through:

- Developing and maintaining internet-based data collection systems to gather information about funding recipients’ program activities
- Linking existing data collection systems such as Youth Risk Behavior Surveillance System (YRBSS) and School Health Profiles (Profiles) with program performance monitoring systems to enable assessment of population level behavior change correlated with program implementation activities.
- Implementing and evaluating demonstration projects in local education agencies to fill gaps in existing evidence about school health and inform future program direction.

Linking YRBSS with Profiles and other school-based federal data sets enables large scale evaluation of the impact of school policies and practices on youth health behaviors and experiences. These activities have helped support the strongest and most rigorous evaluation of the CDC funded programs to date. Findings from this evaluation were published across multiple peer-reviewed manuscripts in 2021 and 2022. The evaluation has shown that students participating in CDC’s *What Works in Schools* program reported lower prevalence of several risk behaviors across sexual risk, substance use, and violence domains. In addition, analyses have documented that specific aspects of the program approach that address safe and supportive school environments were linked to reduced sexual risk behaviors, violence victimization, substance use, and suicide attempts among students.

## Viral Hepatitis Budget Request

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CDC's FY 2024 budget request of **\$54,500,000** for Viral Hepatitis is **\$11,500,000** above the FY 2023 enacted level. CDC will continue to support 59 health departments to conduct viral hepatitis outbreak response and surveillance, support jurisdictional viral hepatitis elimination planning and implementation, and work with health clinics and community organizations to promote awareness and uptake of updated national viral hepatitis testing and vaccination recommendations. CDC will achieve this through the following activities:

- Raising awareness around barriers to hepatitis C treatment.
- Supporting comprehensive programming through the [Integrated Viral Hepatitis Surveillance and Prevention Funding for Health Departments](#)<sup>28</sup> cooperative agreement to address the health needs of people who inject drugs (PWID) and their communities to reduce new viral hepatitis infections and increase access to testing and treatment.
- Building capacity among communities, healthcare organizations, and healthcare professionals to increase knowledge of viral hepatitis management and to provide culturally responsive services to priority populations.

Millions of people are living with viral hepatitis, yet only about 40% of people with hepatitis C and about one-third of people with hepatitis B are aware of their infection. Viral hepatitis is a serious public health threat that kills thousands of Americans every year and is a leading cause of liver cancer. Viral hepatitis is costly and puts significant burden on the U.S. healthcare system. The estimated cost of providing health care services for people living with chronic hepatitis C virus infection is \$15 billion annually.<sup>29</sup> Caring for individuals affected by the recent hepatitis A outbreaks has cost the nation more than \$442 million between July 1, 2016, and November 4, 2022.<sup>30,31</sup>

### Testing and Linking to Care and Treatment

Testing for hepatitis B and hepatitis C is cost-saving and improves health outcomes. Despite the availability of highly effective medications capable of curing hepatitis C, a recent CDC analysis found that the number of people being treated declined from 2015 to 2020; an average of 171,000 people were treated each year, falling far short of national public health goals. Another CDC analysis found that less than one in three insured people with a hepatitis C diagnosis were being treated within one year of diagnosis. To improve access to life saving treatment, CDC continues to promote uptake of the screening and testing recommendations through collaborations with health departments, CBOs, national policy and provider organizations, health systems, and public health and commercial laboratories.

CDC supports state and local health departments and syringe services programs with training and technical assistance through the National Harm Reduction Technical Assistance Center (NHRTAC) to better implement syringe services programs and increase cultural competence when working with people who use drugs. In 2022, NHRTAC received 803 requests for technical assistance related to implementation of harm reduction services, increasing linkage to care, and evaluating program impact.

<sup>28</sup> [https://www.cdc.gov/hepatitis/policy/2103\\_CoAg-comp-3-PWID.htm](https://www.cdc.gov/hepatitis/policy/2103_CoAg-comp-3-PWID.htm)

<sup>29</sup> Chahal, H. S., et al. (2016, January). Cost-effectiveness of early treatment of hepatitis C virus genotype 1 by stage of liver fibrosis in a U.S. treatment-naive population. *The Journal of the American Medical Association*, 176(1), 65–73. Retrieved October 25, 2017, from <http://archinte.jamanetwork.com/article.aspx?articleid2471608>.

<sup>30</sup> Hofmeister MG, et. al. Hepatitis A Hospitalization Costs, United States, 2017. *Emerg Infect Dis*. 2020;26(5):1040-1041. <https://dx.doi.org/10.3201/eid2605.191224>.

<sup>31</sup>This does not include costs of the public health response for state health departments, making the estimated burden even greater.

## **Preventing Viral Hepatitis**

CDC leverages its expertise and resources to prevent new infections by providing technical assistance to jurisdictions to implement SSPs, which play a critical role in preventing viral hepatitis among people who inject drugs. Additionally, CDC trains state and local health department staff to actively identify networks of viral hepatitis transmission among persons who inject drugs and other disproportionately affected populations to precisely target prevention interventions and prevent outbreaks. To ensure the provision of vaccines to populations most at risk for infection, CDC provides data and analyses to medical providers and public health experts to improve existing vaccination or developing new vaccination recommendations.

## **Monitoring and Supporting Data-to-Action**

Public health surveillance provides data needed to monitor and control the spread of viral hepatitis. Surveillance also ensures that resources target areas and populations most at risk. Surveillance for viral hepatitis is labor intensive and health departments have limited capacity for collecting, verifying, and reporting the many cases of viral hepatitis in the United States.<sup>32</sup> In FY 2020, 93% of funded-recipients successfully developed and maintained a registry of hepatitis C and hepatitis B cases to improve surveillance case classification and reporting.

## **Responding to Outbreaks**

CDC continues to provide technical assistance for outbreaks of hepatitis A, other hepatitides, and SARS-CoV-2. In FY 2021, CDC's viral hepatitis laboratory processed more than 15,000 hepatitis C sequences to support state responses to hepatitis C outbreaks. CDC provided outbreak assistance for the continued hepatitis A outbreak, testing samples from 22 affected states. In addition, CDC's viral hepatitis laboratory also supported the COVID-19 response by testing over 10,000 SARS-CoV-2 samples from October 2020 to September 2021.

Thirty-seven states reported outbreaks of hepatitis A involving person-to-person transmission since 2016. CDC has provided technical assistance to all states on preventing and responding to viral hepatitis outbreaks, and has deployed epidemiologists, laboratorians, public health advisors, and disease intervention specialists, to provide on-the-ground support for outbreak response in nine states. CDC continues to support vaccine supply and vaccine policy development. States administered over 4.4 million hepatitis A vaccine doses in response to these outbreaks.

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<sup>32</sup> Not all states report data to CDC or permit CDC to publish their data in national surveillance reports.

## Sexually Transmitted Infections Budget Request

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CDC's FY 2024 budget request of **\$174,310,000** for Sexually Transmitted Infections is level with the FY 2023 enacted level. To address the substantial increases in the rates of STIs observed in 2020, CDC will continue to conduct STI surveillance and support states to conduct STI prevention and control activities. This funding level will support training and educational materials for healthcare professionals, and studies to translate STI research to practice and to improve program delivery. CDC will continue to work with state, territorial, and local recipients to address rising numbers of CS cases. CDC continues to support efforts in alignment with the HHS STI National Strategic Plan. CDC is the only federal agency that directly supports and funds sexually transmitted infection (STI) prevention and control activities of state, territorial, and local health departments. STIs compromise Americans' health and cost billions.<sup>33</sup> Adverse outcomes include pelvic inflammatory disease, infertility, neurological conditions, birth defects, infant death, and increased risk of HIV infection. Data from 2020 show that there were more cases of gonorrhea, syphilis, and congenital syphilis (CS) in babies than ever reported before, while chlamydia declined – likely due to its asymptomatic nature coupled with reduced screening – not a reduction in infections. A strong public health infrastructure is essential to sustain STI prevention programs and respond to increases in disease. Beyond individual and community health impacts, STIs are an economic drain on the U.S. healthcare system. There are more than 26 million new STI cases annually, costing the healthcare system \$15.9 billion in lifetime direct medical care costs, including 2,500 new STI-attributable HIV cases annually at a cost of more than \$1 billion. Having an STI more than doubles the risk of acquiring or transmitting HIV during sex.<sup>34</sup>

STIs disproportionately occur in young people, and disparities persist in rates of STIs among racial and ethnic minority groups.<sup>35,36</sup> CDC estimates that youth between ages 15–24 make up just over one quarter of the sexually active population, but account for almost half of the new STIs in the United States each year.<sup>37</sup> In 2020, the overall rate of reported gonorrhea cases among Black or African American people in the U.S. was 8.9 times the rate among white people.<sup>38</sup> Access to, and routine use of, quality health care including STI prevention and treatment is key to reducing STI disparities in the United States.<sup>39</sup>

Despite being preventable, cases of CS are rapidly increasing, with 47 states, the District of Columbia, and one U.S. territory reporting cases in 2020. CS results in infant death in up to 40 percent of cases. Among infants who survive, CS can cause developmental delays, permanent deafness, neurological impairment, and bone deformities. CDC supports training for healthcare providers, as well as support for state and local health departments to address CS through academic detailing to providers, records matching, and maternal review boards.

CDC provides national leadership, research, policy assessment, and scientific information about STIs to the medical community and the public. CDC coordinates and publishes national *STI Treatment Guidelines and Recommendations*, which translate research into clinical practice and serve as the gold standard for STI care in the United States. CDC's STI program also works collaboratively on the U.S. National Action Plan for Combating Antibiotic-Resistant Bacteria (CARB) initiative, monitoring and mitigating the spread of antibiotic resistance gonorrhea and increasing surge capacity in health departments.

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<sup>33</sup> Chesson et al. The Estimated Direct Lifetime Medical Costs of Sexually Transmitted Infections Acquired in the United States in 2018. *Sex Transm Dis.* 2021;48(4):215-221. DOI: <https://doi.org/10.1097/olq.0000000000001380>.

<sup>34</sup> Kreisel et al. 2021. Sexually Transmitted Infections Among US Women and Men: Prevalence and Incidence Estimates, 2018. *Sex Transm Dis* 2021;48(4):208-214. doi: 10.1097/OLQ.0000000000001355.

<sup>35</sup> Newman LM, Berman SM. Epidemiology of STD Disparities in African American Communities. *Sex Transm Dis.* 2008;35(12):S4–S12. DOI: 10.1097/OLQ.0b013e31818eb90e.

<sup>36</sup> Hogben M, Leichter JS. Social determinants and sexually transmitted disease disparities. *Sex Transm Dis.* 2008;35(Suppl 12):S13–18. doi: 10.1097/OLQ.0b013e31818d3cad.

<sup>37</sup> <https://www.cdc.gov/std/life-stages-populations/adolescents-youngadults.htm>.

<sup>38</sup> Sexually Transmitted Disease Surveillance 2020. Atlanta: U.S. Department of Health and Human Services; 2022.

<sup>39</sup> Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2018. Atlanta: U.S. Department of Health and Human Services; 2019. DOI: 10.15620/cdc.79370.

CDC's cost-saving STI program prevents and tracks disease and contains outbreaks. CDC's support and funding over a fifteen-year period from 2006–2020 for syphilis, gonorrhea, and chlamydia prevention activities averted an estimated \$2.4 billion in lifetime medical costs.<sup>40</sup>

CDC continues to prioritize investing in state and local health departments, and jurisdictions have received funding increases over the last five years. CDC supports health departments in all 50 states, Washington, D.C., and select cities and territories to:

- Collect and analyze information on notifiable STIs (i.e., syphilis, gonorrhea, chlamydia, and chancroid). In 2020, health departments reported a record number of syphilis cases (133,945) and gonorrhea cases (677,769). There were 1.6 million chlamydia cases, a reduction from 2019 likely due to lower screening rates related to COVID-19.
- There were 1.6 million chlamydia cases, a reduction from 2019 likely due to lower screening rates related to COVID-19.
- Conduct disease investigations, contact tracing, and linkage to treatment for patients diagnosed with STIs, including HIV, to reduce adverse health outcomes and prevent spread of disease.
- Respond and contain outbreaks.
- Ensure appropriate screening to rapidly detect STIs and timely treatment by clinical providers.
- Conduct scientific investigations to better understand how diseases spread throughout the community.
- Support training and education of health and medical professionals to expand access to quality STI clinical services, screening, diagnostic testing, and treatment.

To support the *Ending the HIV Epidemic Initiative*, CDC awarded supplemental funding to strengthen the infrastructure of STI clinics serving a high volume of racial/ethnic and sexual minorities. In 2021, the funded STI clinics tested more than 137,000 patients, diagnosed more than 1,000 new cases of HIV, and prescribed PrEP to more than 6,000 patients.

STI program staff at state, territorial, and local health departments have made extraordinary efforts to respond to COVID-19 and mpox in their jurisdictions. In FY 2021 and FY 2022, CDC assisted public health programs in hiring, training, and supporting Disease Intervention Specialists (DIS) to mitigate the spread of COVID-19 and other infections via funding from the American Rescue Plan Act. This five-year investment complements and expands the existing work of CDC's STI program to protect the health of communities across the Nation.

In FY 2022, CDC supported the Navajo Nation's response to a syphilis outbreak in collaboration with the Navajo Department of Health (NDOH)/Navajo Epidemiology Center, Indian Health Service (IHS), Tribal Health Organizations, and state health departments in New Mexico and Arizona. The Epi-Aid involved conducting a program assessment, providing provider training, epidemiologic and clinical support and developing training to address the disease intervention capacity building needs of the program.

CDC's STI program is playing an integral role in elevating the Nation's response the urgent and ongoing mpox response. This includes working with the Council of State and Territorial Epidemiologist (CSTE) to make mpox cases reportable to the Notifiable Disease Surveillance System (NNDSS) to inform the U.S. response. CDC also supports health departments to identify and report mpox. Patients with mpox symptoms often go to STI clinics as the virus's symptoms mimic symptoms of common STIs and can be transmitted during close and intimate contact. Early data revealed that 61% of patients presenting with mpox symptoms tested positive for another STI.

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<sup>40</sup> Chesson HW, Ludovic JA, Berruti AA, Gift TL. Methods for sexually transmitted disease prevention programs to estimate the health and medical cost impact of changes in their budget. *Sex Transm Dis* 2018; 45(1):1-7. DOI: 10.1097/OLQ.0000000000000747.

## Tuberculosis Budget Request

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CDC's FY 2024 budget request of **\$137,034,000** for Tuberculosis is level with the FY 2023 enacted level. At this funding level, CDC will support 50 states, eight large cities, Washington, D.C., and two territories to conduct tuberculosis (TB) surveillance and oversee the medical and public health management of persons with TB disease and their contacts. CDC will fund four TB Centers of Excellence (COEs) to provide training and technical assistance for contact tracing, outreach, and case management, TB educational materials, and medical consultation for healthcare professionals treating TB patients. CDC continues to offer state-of-the-art TB laboratory services to health departments, free of charge.

CDC's TB elimination program leads domestically and impacts globally with innovation and research. CDC is the lead agency for eliminating TB in the United States and a global expert in programmatic TB research, laboratory science, TB surveillance, epidemiology, education, and training. Through CDC's support, state health departments across the nation, some large cities, Washington D.C., Puerto Rico, the Virgin Islands, and U.S. territories and Affiliated Pacific Islands:

- Investigate and report every case of TB disease.
- Ensure provision of medical care, laboratory testing, and other services to achieve complete cure of TB patients, which halts further transmission and prevents drug resistance.
- Identify contacts and provide treatment to prevent future TB cases.
- Examine genetic fingerprints of TB isolates (purified TB samples) to find out whether cases are related, and to test for drug resistance.

### Investing in health departments to control and avert TB

CDC funds 61 state, local, and territorial health departments to find and treat cases of TB disease, and to identify, evaluate, and treat close contacts who may be infected to avert them from developing TB disease. CDC provides on-site epidemiologic and programmatic assistance, called epi-aids, at the request of state health departments to assist with large or complex outbreaks. In 2021, CDC worked rapidly with FDA and state health departments to investigate a rare outbreak of TB disease among surgical patients who had received a bone allograft product contaminated with *Mycobacterium tuberculosis*. This allograft had been distributed to 37 facilities in 20 states, affecting more than 100 patients. CDC and its partners worked with hospitals to locate and remove unused units of the allograft and ensure that the patients who had received product were treated for TB disease.

### Providing world-class training in workforce and laboratory services

Delayed diagnosis and treatment of TB disease remain challenges in TB prevention and elimination. CDC funds TB COEs, which have increased human resource development through education and training activities and increased the capacity for appropriate medical evaluation and management of persons with TB disease and LTBI through medical consultation. Between 2018-2021, the COEs provided over 3,482 hours of training to 43,594 participants and provided 9,994 medical consultations to providers with TB patients.

CDC serves as the National Tuberculosis Reference Laboratory and as a source of innovation, including development and deployment of advanced molecular detection methods. CDC continues to offer health departments molecular detection of drug resistance for isolates upon request, allowing the rapid identification of cases of drug-resistant TB. Molecular tests produce results within days, instead of the weeks required for culture-based testing, providing health departments and clinicians with timely information on how to best treat patients and protect their communities.

**Leading domestic TB clinical and field research with global impact**

CDC's TB Trials Consortium conducts clinical and epidemiologic trials that drive domestic and global treatment guidelines and programmatic practice for diagnosing, preventing, and treating TB. In 2022, CDC released new interim guidance for a 4-month treatment regimen to treat drug-susceptible TB disease that is as effective as the standard 6-month regimen for TB treatment. Shortening treatment for TB disease can benefit patients, families, healthcare providers, and health systems.

**Addressing TB program preparedness at the national level**

Approximately one percent of U.S. TB cases are multidrug-resistant, and 10 percent are resistant to one of the four front-line TB drugs. Drug-resistant TB cases are expensive to treat, and the regimens are difficult for patients to tolerate. CDC works to prevent drug-resistant TB from developing in the first place. One of the most effective ways to prevent drug-resistant TB is to ensure treatment is completed without interruption.

## Infectious Diseases and the Opioid Epidemic Budget Request

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CDC's FY 2024 budget request of **\$23,000,000** for the Infectious Diseases and the Opioid Epidemic initiative is level with the FY 2023 enacted level. CDC will invest in the implementation of support for syringe services programs (SSPs), bringing life-saving services and linkages to care to improve the health of people who use drugs.

The United States is experiencing a public health crisis involving drug use of opioids<sup>41</sup> and other drugs such as methamphetamines and cocaine. For over a decade, our nation has seen a rise in drug use-related hospitalizations, overdoses, and fatalities and in the transmission of infectious diseases such as viral hepatitis, HIV, and other drug use-related bacterial and fungal infections. Rates of hepatitis C have quadrupled since 2010, and HIV transmission associated with injection drug use began to rise after years of declines. In 2020, an analysis of electronic health record data showed that among persons with substance use disorders the rates of hospitalization for serious bacterial infections, including infective endocarditis, increased from 2012 to 2017.<sup>42</sup> The COVID-19 pandemic has exacerbated this danger and creates an uncertain post-pandemic landscape for the health of people who use drugs.<sup>43,44</sup> Since 2019, CDC's program to address the infectious diseases associated with substance use focuses on four key strategies:

### 1. Ensuring implementation of and access to high quality SSPs nationwide

SSPs are a core component of the U.S. public health system, serving not only people who use drugs, but greater communities in which they are located by preventing infectious diseases, reducing needlestick injuries experienced by law enforcement officers, and linking people to substance use disorder treatment and other health care and social services. SSPs are safe, effective, and cost-saving interventions vital to reducing the transmission of viral hepatitis, HIV, and other infections. One study showed that efforts in two SSPs (in Philadelphia and Baltimore) averted almost 12,000 new HIV infections over ten years, saving more than \$290 million in medical costs in one year alone.<sup>45</sup> As of August 2022, 44 states and Washington D.C., Cherokee Nation (Oklahoma), and Puerto Rico have conducted CDC-guided data collection confirming the need to support SSPs. CDC awarded \$7.7 million in FY 2022 (and up to \$42.3 million in subsequent years) through the Strengthening Syringe Services Programs cooperative agreement to increase access to harm reduction services for people who use drugs and reduce incidence of infectious diseases and other complications of injection drug use. This program increases support and resources to SSPs for implementation of syringe distribution and disposal; testing, treatment, and prevention of infectious diseases and infectious complications from injection drug use; and mitigation of other harms due to drug use.

### 2. Increasing testing and linkage to care in local communities

In September 2022, CDC awarded \$7.7 million to bolster the nation's syringe services programs – a vital component to the nation's public health infrastructure. In the first year, at least 40 SSPs will receive \$6 million in direct funding to support implementation of services. The program will increase access to harm reduction services for people who currently inject or have a history of injecting drugs and reduce incidence of infectious diseases and complications of injection drug use. These efforts build on investments from supplemental funding from FY 2018-2021, in which 9 jurisdictions tested almost 50,000 people in high-risk settings for hep B or C infections and linked 90 percent (almost 5,000) of people with infections to care and treatment. Finally, CDC

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<sup>41</sup> Including heroin, fentanyl, and prescription opioids

<sup>42</sup> Bacterial Infections Associated with Substance Use Disorders, Large Cohort of United States Hospitals, 2012–2017 | Clinical Infectious Diseases | Oxford Academic (oup.com)

<sup>43</sup> <https://emergency.cdc.gov/han/2020/han00438.asp>

<sup>44</sup> Glick SN, Prohaska SM, LaKosky PA, Juarez AM, Corcorran MA, Des Jarlais DC. The Impact of COVID-19 on Syringe Services Programs in the United States. *AIDS Behav.* 2020;24(9):2466-2468. doi:10.1007/s10461-020-02886-2

<sup>45</sup> Ruiz MS, et al. Using interrupted time series analysis to measure the impact of legalized syringe exchange on HIV diagnoses in Baltimore and Philadelphia. *J Acquir Immune Defic Syndr.* 2019;82(suppl 2):S148–S154.

supports 17 jurisdictions with \$4.47 million to complete special projects addressing infectious diseases transmitted through injection drug use, thus expanding access to sterile injection equipment; assessment and medication to treat opioid use disorder; testing for hepatitis C, hepatitis B, and HIV; vaccination for hepatitis A and hepatitis B; linkage to care and treatment for infectious diseases; and access to PrEP for people who test negative for HIV.

### **3. Increasing state and local capacity to detect and respond to infectious disease clusters and prevent further transmission**

In FY 2023, CDC funded viral hepatitis surveillance and prevention projects in 59 jurisdictions. CDC provides epidemiological, laboratory, and other technical assistance to state and local jurisdictions experiencing concerning increases, clusters, and outbreaks of infectious diseases associated with drug use. CDC partners with health departments and CBOs to test, link to care and treatment, prevent, monitor, and respond to viral hepatitis in the United States. CDC worked with national partners to identify cross-jurisdictional outbreak preparedness measures that enable a more streamlined, agile, and effective response to clusters in neighboring jurisdictions. This was designed to highlight the experiences of three neighboring jurisdictions—Kentucky, Ohio, and West Virginia, which experienced HIV outbreaks and conducted cluster response efforts near their state borders. In 2022, CDC also updated hepatitis B vaccination recommendations, recommending universal hepatitis B vaccination in all adults aged 19–59 years and adults over 60 years with risk factors for hepatitis B.

### **4. Increasing linkage to substance use disorder treatment at healthcare encounters for drug-use-related infections**

CDC continues to monitor bacterial infectious diseases associated with injection drug use and link persons to substance use disorder treatment at healthcare encounters. Efforts include tracking infective endocarditis at the national and sub-national levels in CDC's National Healthcare Safety Network (NHSN) and identifying opportunities for linking people who inject drugs to substance use disorder treatment and prevention services, including:

- Collaborating with three state health departments and their academic partners through CDC's Emerging Infections Program (EIP) to describe healthcare encounters among persons who inject drugs who seek care for skin and soft tissue infections and identify interventions for improving referrals to medication-assisted treatment programs. Data collection has been completed, and data analysis is underway.
- Developing a toolkit for healthcare providers based on data from a project that uses a comprehensive care bundle, including linkage to medication-assisted treatment, for patients with bacterial infections from injection drug use presenting to hospitals and emergency departments.

**State Table: Integrated HIV Prevention and Surveillance Funding<sup>1,2,3,4</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$8,300,812	\$8,305,800	\$8,305,800	\$0
Alaska	\$1,033,859	\$1,033,859	\$1,033,859	\$0
Arizona	\$8,304,250	\$8,180,643	\$8,180,643	\$0
Arkansas	\$3,973,178	\$3,972,483	\$3,972,483	\$0
California	\$30,397,683	\$30,392,562	\$30,392,562	\$0
Colorado	\$5,217,100	\$5,217,100	\$5,217,100	\$0
Connecticut	\$4,472,957	\$4,469,420	\$4,469,420	\$0
Delaware	\$1,353,327	\$1,353,327	\$1,353,327	\$0
Florida	\$49,371,623	\$49,366,864	\$49,366,864	\$0
Georgia	\$23,340,465	\$23,336,661	\$23,336,661	\$0
Hawaii	\$1,676,489	\$1,676,489	\$1,676,489	\$0
Idaho	\$1,054,018	\$1,054,018	\$1,054,018	\$0
Illinois	\$4,962,660	\$4,955,966	\$4,955,966	\$0
Indiana	\$6,055,623	\$6,055,623	\$6,055,623	\$0
Iowa	\$1,621,114	\$1,617,925	\$1,617,925	\$0
Kansas	\$1,233,569	\$1,233,569	\$1,233,569	\$0
Kentucky	\$4,352,612	\$4,352,612	\$4,352,612	\$0
Louisiana	\$10,477,213	\$10,477,213	\$10,477,213	\$0
Maine	\$1,070,549	\$1,075,537	\$1,075,537	\$0
Maryland	\$11,627,380	\$11,659,220	\$11,659,220	\$0
Massachusetts	\$9,448,037	\$9,448,037	\$9,448,037	\$0
Michigan	\$8,327,694	\$8,327,694	\$8,327,694	\$0
Minnesota	\$2,985,919	\$2,984,325	\$2,984,325	\$0
Mississippi	\$5,365,071	\$5,365,071	\$5,365,071	\$0
Missouri	\$7,220,560	\$7,220,560	\$7,220,560	\$0
Montana	\$1,029,059	\$1,029,059	\$1,029,059	\$0
Nebraska	\$1,103,683	\$1,103,683	\$1,103,683	\$0
Nevada	\$5,408,291	\$5,410,161	\$5,410,161	\$0
New Hampshire	\$1,063,128	\$1,062,781	\$1,062,781	\$0
New Jersey	\$17,799,326	\$17,798,631	\$17,798,631	\$0
New Mexico	\$1,306,349	\$1,306,349	\$1,306,349	\$0
New York	\$14,874,693	\$14,874,693	\$14,874,693	\$0
North Carolina	\$13,543,064	\$13,543,064	\$13,543,064	\$0
North Dakota	\$1,000,000	\$1,000,000	\$1,000,000	\$0
Ohio	\$11,994,794	\$11,994,794	\$11,994,794	\$0
Oklahoma	\$4,173,748	\$4,173,748	\$4,173,748	\$0
Oregon	\$2,500,170	\$2,500,170	\$2,500,170	\$0
Pennsylvania	\$6,929,484	\$6,929,484	\$6,929,484	\$0
Rhode Island	\$1,419,305	\$1,419,305	\$1,419,305	\$0
South Carolina	\$8,675,541	\$8,675,541	\$8,675,541	\$0
South Dakota	\$1,026,481	\$1,026,481	\$1,026,481	\$0
Tennessee	\$8,805,169	\$8,805,169	\$8,805,169	\$0
Texas	\$26,685,198	\$26,680,896	\$26,680,896	\$0

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Utah	\$1,151,670	\$1,151,670	\$1,151,670	\$0
Vermont	\$1,000,000	\$1,000,000	\$1,000,000	\$0
Virginia	\$8,275,532	\$8,273,795	\$8,273,795	\$0
Washington	\$7,424,923	\$7,424,923	\$7,424,923	\$0
West Virginia	\$1,096,121	\$1,095,774	\$1,095,774	\$0
Wisconsin	\$2,884,088	\$2,884,088	\$2,884,088	\$0
Wyoming	\$1,015,468	\$1,015,468	\$1,015,468	\$0
<b>Cities</b>				
Baltimore	\$6,938,438	\$6,938,438	\$6,938,438	\$0
Chicago	\$11,887,395	\$11,887,396	\$11,887,396	\$0
Houston	11,313,963	\$11,313,963	\$11,313,963	\$0
Los Angeles	\$22,146,754	\$22,146,754	\$22,146,754	\$0
New York City	\$44,171,783	\$44,173,235	\$44,173,235	\$0
Philadelphia	\$9,936,954	\$9,936,954	\$9,936,954	\$0
San Francisco	\$9,747,418	\$9,747,071	\$9,747,071	\$0
Washington, D.C.	\$9,076,686	\$9,084,168	\$9,084,168	\$0
<b>Territories</b>				
Puerto Rico	\$8,412,408	\$8,536,319	\$8,536,319	\$0
Virgin Islands	\$1,029,968	\$1,029,968	\$1,029,968	\$0
<b>Subtotal States</b>	<b>\$365,429,047</b>	<b>\$365,312,305</b>	<b>\$365,312,305</b>	<b>\$0</b>
<b>Subtotal Cities</b>	<b>\$125,219,391</b>	<b>\$125,227,979</b>	<b>\$125,227,979</b>	<b>\$0</b>
<b>Subtotal Territories</b>	<b>\$9,442,376</b>	<b>\$9,566,287</b>	<b>\$9,566,287</b>	<b>\$0</b>
<b>Total Resources</b>	<b>\$500,090,814</b>	<b>\$500,106,571</b>	<b>\$500,106,571</b>	<b>\$0</b>

<sup>1</sup> CFDA NUMBER: 93-940 [Discretionary]

<sup>2</sup> This State Table is a snapshot of selected programs that fund all 50 states (and in some cases local and territorial awardees). For a more comprehensive view of grant and cooperative agreement funding to awardees by jurisdiction, visit <http://www.cdc.gov/FundingProfiles/>

**State Table: Sexually Transmitted Disease Prevention** <sup>1,2,3</sup>

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$1,551,532	\$1,539,755	\$1,541,978	\$2,223
Alaska	\$362,385	\$364,031	\$365,469	\$1,438
Arizona	\$1,812,950	\$1,822,784	\$1,949,345	\$126,561
Arkansas	\$984,677	\$983,588	\$986,333	\$2,745
California	\$7,856,912	\$7,917,948	\$7,954,410	\$36,462
Colorado	\$1,357,540	\$1,365,525	\$1,371,290	\$5,765
Connecticut	\$830,372	\$833,935	\$837,185	\$3,250
Delaware	\$404,357	\$407,251	\$409,076	\$1,825
Florida	\$5,406,277	\$5,438,983	\$5,462,130	\$23,147
Georgia	\$3,435,711	\$3,451,699	\$3,465,407	\$13,708
Hawaii	\$454,977	\$457,744	\$459,695	\$1,951
Idaho	\$374,021	\$376,195	\$377,777	\$1,582
Illinois	\$2,321,235	\$2,332,023	\$2,341,283	\$9,260
Indiana	\$1,728,377	\$1,737,166	\$1,744,218	\$7,052
Iowa	\$741,561	\$745,656	\$748,750	\$3,094
Kansas	\$743,380	\$747,181	\$750,218	\$3,037
Kentucky	\$1,139,949	\$1,148,010	\$1,153,134	\$5,124
Louisiana	\$1,855,032	\$1,853,254	\$1,858,482	\$5,228
Maine	\$300,000	\$300,000	\$300,000	\$0
Maryland	\$1,350,504	\$1,357,121	\$1,362,579	\$5,458
Massachusetts	\$1,611,405	\$1,634,653	\$1,641,439	\$6,786
Michigan	\$2,508,612	\$2,517,504	\$2,526,933	\$9,429
Minnesota	\$1,314,170	\$1,322,301	\$1,327,966	\$5,665
Mississippi	\$1,144,760	\$1,142,167	\$1,145,080	\$2,913
Missouri	\$1,712,670	\$1,723,762	\$1,731,248	\$7,486
Montana	\$300,000	\$300,000	\$300,000	\$0
Nebraska	\$514,136	\$517,145	\$519,326	\$2,181
Nevada	\$974,400	\$981,318	\$985,704	\$4,386
New Hampshire	\$300,000	\$300,000	\$300,000	\$0
New Jersey	\$2,080,155	\$2,063,002	\$2,065,698	\$2,696
New Mexico	\$717,249	\$721,592	\$724,664	\$3,072
New York	\$2,477,009	\$2,490,358	\$2,500,622	\$10,264
North Carolina	\$3,067,964	\$3,084,731	\$3,097,493	\$12,762
North Dakota	\$300,000	\$300,000	\$300,000	\$0
Ohio	\$3,134,577	\$3,148,633	\$3,161,030	\$12,397
Oklahoma	\$1,183,879	\$1,190,914	\$1,195,956	\$5,042
Oregon	\$1,071,872	\$1,079,912	\$1,084,826	\$4,914
Pennsylvania	\$2,274,984	\$2,287,121	\$2,296,522	\$9,401
Rhode Island	\$365,959	\$368,049	\$369,590	\$1,541
South Carolina	\$1,532,667	\$1,539,340	\$1,545,360	\$6,020
South Dakota	\$343,130	\$348,654	\$350,125	\$1,471
Tennessee	\$1,809,512	\$1,813,111	\$1,819,324	\$6,213

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Texas	\$7,630,153	\$7,675,465	\$7,707,958	\$32,493
Utah	\$680,935	\$685,343	\$688,318	\$2,975
Vermont	\$300,000	\$300,000	\$300,000	\$0
Virginia	\$2,127,347	\$2,137,862	\$2,146,478	\$8,616
Washington	\$1,812,734	\$1,818,655	\$1,825,363	\$6,708
West Virginia	\$469,885	\$446,391	\$424,071	(\$22,320)
Wisconsin	\$1,333,903	\$1,340,193	\$1,345,532	\$5,339
Wyoming	\$300,000	\$300,000	\$300,000	\$0
<b>Cities</b>				
Baltimore	\$944,874	\$907,895	\$903,024	(\$4,871)
Chicago	\$1,804,793	\$1,808,445	\$1,814,655	\$6,210
Los Angeles	\$3,356,049	\$3,375,241	\$3,389,378	\$14,137
New York City	\$4,132,052	\$3,925,450	\$3,729,177	(\$196,273)
Philadelphia	\$1,633,796	\$1,552,106	\$1,474,501	(\$77,605)
San Francisco	\$1,119,045	\$1,123,479	\$1,127,783	\$4,304
Washington, D.C.	\$806,370	\$766,051	\$727,749	(\$38,302)
<b>Territories</b>				
Puerto Rico	\$968,263	\$969,221	\$972,344	\$3,123
Virgin Islands	\$300,000	\$300,000	\$300,000	\$0
<b>Subtotal States</b>	<b>\$80,423,551</b>	<b>\$80,758,025</b>	<b>\$81,165,389</b>	<b>\$407,364</b>
<b>Subtotal Cities</b>	<b>\$13,796,979</b>	<b>\$13,458,667</b>	<b>\$13,166,267</b>	<b>(\$292,400)</b>
<b>Subtotal Territories</b>	<b>\$1,268,263</b>	<b>\$1,269,221</b>	<b>\$1,272,344</b>	<b>\$3,123</b>
<b>Total Resources</b>	<b>\$95,488,793</b>	<b>\$95,485,913</b>	<b>\$95,604,000</b>	<b>\$118,087</b>

<sup>1</sup> CFDA NUMBER: 93-977 [Discretionary]

<sup>2</sup> Amounts reflect new assistance and include HIV/STD co-infection funds

<sup>3</sup> This State Table is a snapshot of selected programs that fund all 50 states (and in some cases local, tribal, and territorial awardees). For a more comprehensive view of grant and cooperative agreement funding to awardees by jurisdiction, visit [www.cdc.gov/FundingProfiles/](http://www.cdc.gov/FundingProfiles/).

**State Table: TB Prevention and Control<sup>1,2,3</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$1,096,200	\$1,096,200	\$1,096,200	\$0
Alaska	\$571,779	\$571,779	\$571,779	\$0
Arizona	\$1,613,779	\$1,613,779	\$1,613,779	\$0
Arkansas	\$652,746	\$652,746	\$652,746	\$0
California	\$8,807,703	\$8,807,703	\$8,807,703	\$0
Colorado	\$535,492	\$535,492	\$535,492	\$0
Connecticut	\$555,766	\$555,766	\$555,766	\$0
Delaware	\$181,503	\$181,503	\$181,503	\$0
Florida	\$4,960,858	\$4,960,858	\$4,960,858	\$0
Georgia	\$2,504,121	\$2,504,121	\$2,504,121	\$0
Hawaii	\$1,003,699	\$1,003,699	\$1,003,699	\$0
Idaho	\$187,520	\$187,520	\$187,520	\$0
Illinois	\$1,481,231	\$1,481,231	\$1,481,231	\$0
Indiana	\$839,058	\$839,058	\$839,058	\$0
Iowa	\$415,248	\$415,248	\$415,248	\$0
Kansas	\$405,046	\$405,046	\$405,046	\$0
Kentucky	\$628,065	\$628,065	\$628,065	\$0
Louisiana	\$945,655	\$945,655	\$945,655	\$0
Maine	\$250,332	\$250,332	\$250,332	\$0
Maryland	\$1,406,578	\$1,406,578	\$1,406,578	\$0
Massachusetts	\$1,709,981	\$1,709,981	\$1,709,981	\$0
Michigan	\$1,061,690	\$1,061,690	\$1,061,690	\$0
Minnesota	\$1,365,142	\$1,365,142	\$1,365,142	\$0
Mississippi	\$646,182	\$646,182	\$646,182	\$0
Missouri	\$702,194	\$702,194	\$702,194	\$0
Montana	\$181,940	\$181,940	\$181,940	\$0
Nebraska	\$259,365	\$259,365	\$259,365	\$0
Nevada	\$664,919	\$664,919	\$664,919	\$0
New Hampshire	\$171,423	\$171,423	\$171,423	\$0
New Jersey	\$2,192,732	\$2,192,732	\$2,192,732	\$0
New Mexico	\$357,686	\$357,686	\$357,686	\$0
New York	\$1,522,455	\$1,522,455	\$1,522,455	\$0
North Carolina	\$1,679,562	\$1,679,562	\$1,679,562	\$0
North Dakota	\$186,048	\$186,048	\$186,048	\$0
Ohio	\$1,080,561	\$1,080,561	\$1,080,561	\$0
Oklahoma	\$611,649	\$611,649	\$611,649	\$0
Oregon	\$619,132	\$619,132	\$619,132	\$0
Pennsylvania	\$900,925	\$900,925	\$900,925	\$0
Rhode Island	\$190,622	\$190,622	\$190,622	\$0
South Carolina	\$859,457	\$859,457	\$859,457	\$0
South Dakota	\$197,868	\$197,868	\$197,868	\$0
Tennessee	\$1,035,673	\$1,035,673	\$1,035,673	\$0
Texas	\$7,883,899	\$7,883,899	\$7,883,899	\$0
Utah	\$279,266	\$279,266	\$279,266	\$0
Vermont	\$161,543	\$161,543	\$161,543	\$0
Virginia	\$1,540,577	\$1,540,577	\$1,540,577	\$0
Washington	\$1,566,912	\$1,566,912	\$1,566,912	\$0
West Virginia	\$174,253	\$174,253	\$174,253	\$0
Wisconsin	\$570,307	\$570,307	\$570,307	\$0
Wyoming	\$155,691	\$155,691	\$155,691	\$0
<b>Cities</b>				

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Baltimore	\$196,706	\$196,706	\$196,706	\$0
Chicago	\$1,027,052	\$1,027,052	\$1,027,052	\$0
Houston	\$1,677,097	\$1,677,097	\$1,677,097	\$0
Los Angeles	\$4,559,479	\$4,559,479	\$4,559,479	\$0
New York City	\$4,479,967	\$4,479,967	\$4,479,967	\$0
Philadelphia	\$591,378	\$591,378	\$591,378	\$0
San Diego	\$1,968,551	\$1,968,551	\$1,968,551	\$0
San Francisco	\$846,917	\$846,917	\$846,917	\$0
Washington, D.C.	\$323,411	\$323,411	\$323,411	\$0
<b>Territories</b>				
Puerto Rico	\$537,026	\$537,026	\$537,026	\$0
Virgin Islands	\$118,000	\$118,000	\$118,000	\$0
<b>Subtotal States</b>	<b>\$59,572,033</b>	<b>\$59,572,033</b>	<b>\$59,572,033</b>	<b>\$0</b>
<b>Subtotal Cities</b>	<b>\$15,670,558</b>	<b>\$15,670,558</b>	<b>\$15,670,558</b>	<b>\$0</b>
<b>Subtotal Territories</b>	<b>\$655,026</b>	<b>\$655,026</b>	<b>\$655,026</b>	<b>\$0</b>
<b>Total Resources</b>	<b>\$75,897,617</b>	<b>\$75,897,617</b>	<b>\$75,897,617</b>	<b>\$0</b>

<sup>1</sup> CFDA NUMBER: 93-116 [Discretionary]

<sup>2</sup> Amounts reflect new assistance and include HIV/TB coinfection funds. Amounts do not include funding under Direct Assistance.

<sup>3</sup> This State Table is a snapshot of selected programs that fund all 50 states (and in some cases local, tribal, and territorial awardees). For a more comprehensive view of grant and cooperative agreement funding to awardees by jurisdiction, visit <http://www.cdc.gov/FundingProfiles/FundingProfilesRIA/>.

**State Table: Viral Hepatitis Surveillance and Prevention<sup>1,2,3</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$315,000	TBD	TBD	
Alaska	\$315,000	TBD	TBD	
Arizona	\$315,000	TBD	TBD	
Arkansas	\$315,000	TBD	TBD	
California	\$315,000	TBD	TBD	
Colorado	\$591,393	TBD	TBD	
Connecticut	\$315,000	TBD	TBD	
Delaware	\$315,000	TBD	TBD	
Florida	\$617,983	TBD	TBD	
Georgia	\$338,873	TBD	TBD	
Hawaii	\$238,500	TBD	TBD	
Idaho	\$315,000	TBD	TBD	
Illinois	\$315,000	TBD	TBD	
Indiana	\$627,010	TBD	TBD	
Iowa	\$591,031	TBD	TBD	
Kansas	\$315,000	TBD	TBD	
Kentucky	\$605,648	TBD	TBD	
Louisiana	\$339,926	TBD	TBD	
Maine	\$601,228	TBD	TBD	
Maryland	\$315,000	TBD	TBD	
Massachusetts	625,696	TBD	TBD	
Michigan	\$315,000	TBD	TBD	
Minnesota	\$315,000	TBD	TBD	
Mississippi	\$315,000			
Missouri	\$257,824	TBD	TBD	
Montana	\$315,000	TBD	TBD	
Nebraska	\$255,392	TBD	TBD	
Nevada	\$314,366	TBD	TBD	
New Hampshire	\$315,000	TBD	TBD	
New Jersey	\$339,831	TBD	TBD	
New Mexico	\$601,228	TBD	TBD	
New York	\$315,000	TBD	TBD	
North Carolina	\$339,284	TBD	TBD	
North Dakota	\$315,000	TBD	TBD	
Ohio	\$323,484	TBD	TBD	
Oklahoma	\$334,738	TBD	TBD	
Oregon	\$601,228	TBD	TBD	
Pennsylvania	\$315,000	TBD	TBD	
Rhode Island	\$601,228	TBD	TBD	
South Carolina	\$315,000	TBD	TBD	
South Dakota	\$0	TBD	TBD	
Tennessee	\$340,000	TBD	TBD	
Texas	\$315,000	TBD	TBD	
Utah	\$445,437	TBD	TBD	
Vermont	\$315,000	TBD	TBD	
Virginia	\$315,000	TBD	TBD	
Washington	\$638,761	TBD	TBD	
West Virginia	\$393,182	TBD	TBD	
Wisconsin	\$315,000	TBD	TBD	
Wyoming	\$310,910	TBD	TBD	

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<b>Cities</b>			
Baltimore	\$601,228	TBD	TBD
Chicago	\$315,000	TBD	TBD
Dallas	\$315,000	TBD	TBD
Houston	\$315,000	TBD	TBD
Los Angeles	\$601,228	TBD	TBD
New York City	\$601,228	TBD	TBD
Philadelphia	\$601,228	TBD	TBD
San Francisco	\$315,000	TBD	TBD
Washington, D.C.	\$315,000	TBD	TBD
<b>Territories</b>			
Puerto Rico	\$315,000	TBD	TBD
<b>Subtotal States</b>	<b>\$18,834,180</b>	TBD	TBD
<b>Subtotal Cities</b>	<b>\$3,979,912</b>	TBD	TBD
<b>Subtotal Territories</b>	<b>\$315,000</b>	TBD	TBD
<b>Total Resources</b>	<b>\$23,129,92</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup> CFDA NUMBER: 93-270

<sup>2</sup> This State Table is a snapshot of selected programs that fund all 50 states (and in some cases local, tribal, and territorial awardees). For a more comprehensive view of grant and cooperative agreement funding to awardees by jurisdiction, visit <http://www.cdc.gov/FundingProfiles/FundingProfilesRIA/>.

<sup>3</sup> Table reflects viral hepatitis resources and additional resources provided to states from the Infectious Disease Consequences of the Opioid Epidemic.

<sup>4</sup> FY 2023 and FY 2024 amounts are subject to funding availability and other determinations based on annual program application requirements.

## EMERGING AND ZONOTIC INFECTIOUS DISEASES

(dollars in millions)		FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
	Budget Authority	\$641.272	\$698.772	\$793.772	+\$95.000
	PPHF	\$52.000	\$52.000	\$52.000	\$0
	<b>Total Request<sup>1</sup></b>	<b>\$693.272</b>	<b>\$750.772</b>	<b>\$845.772</b>	<b>+\$95.000</b>
	FTEs	1,577	1,620	1,620	0
--	Antimicrobial Resistance Initiative	\$182.000	\$197.000	\$212.000	+\$15.000
--	Vector-Borne Diseases	\$75.103	\$88.603	\$88.603	\$0
	-- <i>Lyme Disease and other Tick-Borne Diseases (non-add)<sup>2</sup></i>	\$20.500	\$26.000	\$26.000	\$0
--	Prion Disease	\$6.500	\$7.500	\$7.500	\$0
--	Chronic Fatigue Syndrome	\$5.400	\$5.400	\$5.400	\$0
--	Emerging Infectious Diseases	\$194.997	\$202.997	\$242.997	+\$40.000
--	Food Safety	\$68.000	\$71.000	\$71.000	\$0
--	National Healthcare Safety Network	\$21.000	\$24.000	\$50.000	+\$26.000
--	Quarantine	\$50.772	\$58.772	\$72.772	+\$14.000
--	Advanced Molecular Detection (AMD)	\$35.000	\$40.000	\$40.000	\$0
--	Harmful Algal Blooms	\$2.500	\$3.500	\$3.500	\$0
--	<i>Epi and Lab Capacity Program (PPHF)</i>	\$40.000	\$40.000	\$40.000	\$0
--	<i>Healthcare-Associated Infections (PPHF)</i>	\$12.000	\$12.000	\$12.000	\$0

<sup>1</sup> This table reflects totals by budget activity. The FY 2024 budget proposes a single "CDC-Wide Activities and Program Support" Treasury account structure.

<sup>2</sup> FY 2022 and FY 2023 Enacted levels are comparably adjusted to reflect proposed budget structure realignment of Lyme Disease.

**Enabling Legislation Citation:** PHS A § 264, PHS A § 301, PHS A § 304, PHS A § 307, PHS A § 308(d), PHS A § 310, PHS A § 311, PHS A § 317\*, PHS A § 317P\*, PHS A § 317R\*, PHS A § 317S, PHS A § 317T\*, PHS A § 317U, PHS A § 319, PHS A § 319D, PHS A § 319E\*, PHS A § 319F, PHS A § 319G\*, PHS A § 321, PHS A § 322, PHS A § 325, PHS A § 327, PHS A § 352, PHS A § 353, PHS A § 361-369, PHS A § 399V-5, PHS A § 1102, PHS A § 2821, PHS A § 2822, Bayh-Dole Act of 1980 (Pub. L. 96-517), Immigration and Nationality Act, Titles II & IV (8 U.S.C. §§ 1182, 1222, 1252, 1522\*)

**Enabling Legislation Status:** Permanent Indefinite

**Authorization of Appropriations for FY 2022:** Indefinite; Expired/Expiring noted with \*

**Allocation Methods:** Direct Federal/Intramural, Contracts, and Competitive Grants/Cooperative Agreements

CDC defends the country against public health threats by preventing and controlling a wide range of infectious diseases, including threats caused by bacteria (like anthrax or Salmonella), viruses (like mpox [formerly known as monkeypox], Zika, or Ebola), or by fungi (like Valley fever). CDC prevents and controls zoonotic disease outbreaks using a One Health approach that brings together human, animal, and environmental health sectors. Factors like climate change, travel, migration, and disruption to the natural environment contribute to our increasing contact with animals and the potential spread of zoonotic diseases. CDC's world-class scientists, researchers, laboratorians, and outbreak responders reduce illness and death associated with these infectious diseases through several core functions:

- **Outbreak preparedness and response:** Providing rapid scientific and technical support during outbreaks of infectious disease, including unique scientific expertise for more than 800 pathogens and technical expertise supporting critical elements for outbreak containment.
- **Surveillance:** CDC's disease surveillance systems serve as early warning systems, enabling rapid response of CDC's experts to identify emerging threats, control outbreaks, and protect the public. Surveillance is critical for identifying pathogens and monitoring prevention efforts.
- **Laboratory expertise:** CDC labs advance disease detection and identification and serve as reference laboratories for the United States and abroad. These labs develop state-of-the-art diagnostic tools,

research new targets for drug and vaccine development, and house pathogens for research that does not exist elsewhere in the United States.

- **Improving healthcare quality, health systems resilience, and patient safety:** CDC uses science, data, and expertise to protect patients, keep healthcare workers safe, and strengthen healthcare delivery systems both internationally and domestically through surveillance and tracking, infection prevention and control capacity, and health systems and workforce training.
- **Promoting health equity and addressing disparities in emerging infectious diseases:** CDC works to understand and reduce disparities as they relate to emerging and zoonotic infectious diseases. For example, CDC conducts prevention and response activities for diseases that disproportionately affect American Indian populations, such as Rocky Mountain spotted fever and Hantavirus, and the Arctic Investigations Program collaborates with Tribal and state partners to reduce and prevent infectious diseases that affect Alaska Native people.
- **Support to state and local health departments:** The Epidemiology and Laboratory Capacity for Prevention and Control of Emerging Infectious Diseases (ELC) program works to reduce illness and deaths caused by a wide range of infectious diseases. The ELC Cooperative Agreement is one of CDC's key mechanisms providing direct financial support to 64 jurisdictions, including all 50 states, 6 localities, and U.S. territories and affiliates for surveillance, detection, response, and prevention of infectious diseases while offering recipients strategic direction and technical assistance.
- **Protecting our borders:** CDC works to prevent the introduction, transmission and spread of infectious diseases into the United States. CDC rapidly responds to reports of sick travelers who arrive in the United States at U.S. ports of entry, as well as alerting travelers to health threats and restricting the importation of animals and products that may carry disease.

CDC's FY 2024 request of **\$845,772,000** for Emerging and Zoonotic Infectious Diseases, including **\$52,000,000** from the Prevention and Public Health Fund, is **\$95,000,000** above the FY 2023 enacted level.

## Health Equity

CDC is committed to identifying, preventing, and eliminating the health inequities associated with emerging and zoonotic infectious diseases. CDC has made ambitious plans for advancing health equity that is intentional, inclusive, and integrates health equity principles within disease-specific programs that focus on six areas:

1. To promote **capacity building in health equity science and practice**, which includes an organizational capacity assessment, capacity building and training, and revision of strategic plans, science agendas, funding opportunities, and organizational practices.
2. To prioritize **prevention strategies, including those with an emphasis on social, economic, and environmental conditions**, by disseminating best practices in equity-focused infectious disease prevention strategies and other resources.
3. To provide **actionable data to advance health equity**, which will first assess and enhance data collection, analysis, and reporting of demographic and social variables.
4. To **assess factors that influence health and translate information to inform public health action** by developing and implementing a health equity science and program evaluation agenda.
5. To ensure **timely, accessible communications and outreach tailored for diverse populations**, that review and enhance current prevention materials and develop policies, tools, and resources for the development of tailored prevention materials.
6. To build **partnerships to implement and evaluate programs and policies in diverse settings** by completing center- and program-level partnership assessments and then developing and implementing equity-focused partnership strategies.

This initiative will enhance the assessment and understanding of health inequities and expand our robust partnerships to develop and implement public health solutions. Informed by monitoring, evaluation, and current science, to make iterative improvements and innovations to the strategy.

**NATIONAL CENTER FOR EMERGING AND ZOOONOTIC INFECTIOUS DISEASES**

**BY THE NUMBERS**

- **>800**—Pathogens the CDC protects against, including ones transmitted via food, water, or vector; bioterror threats like anthrax; infections spread in healthcare settings; and drug-resistant threats.
- **>\$197 million**—Non-COVID funds awarded to state, local, and territorial health departments through the ELC cooperative agreement in FY 2022 to strengthen jurisdictions’ core and cross-cutting epidemiology, laboratory, and health information systems capacity to address infectious diseases.
- **>32,000**—Number of mpox tests performed by Laboratory Response Network laboratories, to quickly detect and treat cases.
- **>30,000**—Alerts detected to date by the Antimicrobial Resistance Laboratory Network, resulting in faster detection of emerging threats, rapid containment, and reduced number of resistant infections.<sup>1</sup>
- **>38,300**—U.S. healthcare facilities are using the National Healthcare Safety Network to track and identify emerging and enduring threats across healthcare, including reporting healthcare-associated infections; antimicrobial resistance and antibiotic use data; and COVID-19 case, death, vaccination, and supply data for the federal government and health departments.
- **\$90 million**—Funds awarded over five years to establish a network of five Pathogen Genomic Centers of Excellence in collaboration with over 20 academic partners, to foster and improve innovation and technical capacity in pathogen genomics, molecular epidemiology, and bioinformatics.
- **154**—Multi-state clusters of enteric infections investigated by CDC from Jan 1, 2022–Nov 30, 2022 (97 salmonellosis, 36 *E. coli*, 15 listeriosis, 2 campylobacteriosis, 1 cronobacteriosis, and 3 unknown etiology), resulting in public health officials better understanding causes and learning how to prevent similar outbreaks and illnesses from happening in the future.
- **>10 million participants** —V-safe, a text message-based vaccine safety monitoring system, users have completed more than 150 million health surveys related to the COVID-19 vaccination campaign. V-safe data, as part of the most intense safety monitoring in U.S. history, provide crucial information to monitor the safety of vaccines in near-real time and help communicate this information extensively to providers and the public.
- **165**—Life-saving drugs distributed from CDC quarantine stations to treat people with rare and potentially deadly diseases in 2022.

All statistics are from CDC program data unless otherwise stated:

<sup>1</sup> <https://www.cdc.gov/drugresistance/laboratories.html>

<b>Emerging and Zoonotic Infectious Diseases Funding History</b>	
<b>Fiscal Year</b>	<b>Dollars (in millions)</b>
FY 2020 (BA)	\$583.772
FY 2020 (PPHF)	\$52.000
FY 2021 (BA)	\$594.442
FY 2021 (PPHF)	\$52.000
FY 2022 Final (BA)	\$641.272
FY 2022 Final (PPHF)	\$52.000
FY 2023 Enacted (BA)	\$698.772
FY 2023 Enacted (PPHF)	\$52.000
FY 2024 President’s Budget (BA)	\$793.772
FY 2024 President’s Budget (PPHF)	\$52.000

## Antimicrobial Resistance Initiative Budget Request

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Antimicrobial resistance (AR)—when bacteria or fungi do not respond to the drugs designed to kill them, is a threat to lives, modern medicine, and the healthcare, veterinary, and agriculture industries. AR infections are difficult to treat and add considerable burden to patients and the U.S. healthcare system.

During the first year of the COVID-19 pandemic, CDC found significant surges, upwards of 15%, in AR infections and antibiotic use in hospitals with resistant hospital-onset infections and deaths. This analysis, [COVID-19: U.S. Impact on Antimicrobial Resistance, Special Report 2022](#),<sup>46</sup> reflects a reversal of progress noted in the *2019 AR Threats Report*, which showed an 18% overall reduction in AR deaths from 2012 to 2017. The United States must redouble its efforts to support the strongest public health response against AR to date to ensure these setbacks are temporary.

Through CDC's *AR Initiative*, CDC is leading the U.S. public health response to combat AR, while working to achieve the pivotal goals in the U.S. National Action Plan, for Combating Antibiotic-Resistant Bacteria (CARB), 2020-2025 (2020 Plan). CDC is expanding successful activities to improve the foundational public health infrastructure needed to address AR, thus altering how the nation combats these threats.

### Budget Request

CDC's FY 2024 budget request of **\$212,000,000** for the Antimicrobial Resistance Initiative is **\$15,000,000** above the FY 2023 enacted level.

CDC's FY 2024 request will further investments in the state, local, and international capacities to address AR to develop and implement improved and innovative approaches for combating AR and preventing infections. CDC will increase investments in state, territorial, and local capacity to detect and prevent emerging and existing threats that have been magnified throughout the COVID-19 pandemic through strengthened infection prevention and control, antibiotic stewardship data collection, and healthcare quality improvement efforts. CDC will increase investments in critical AR testing capacity through the AR Laboratory Network, which supports labs nationwide to rapidly detect AR in healthcare, food, the environment, and communities. CDC will build upon existing work with key partners to ensure antibiotic stewardship is a core principle and consideration in the development of treatment guidelines for AR infections.

CDC's AR investments will provide support to implement and achieve the goals under the 2020 Plan, including efforts to address AR globally and in the environment.

CDC will also improve the types and quality of available data sets addressing health equity and disparity issues about AR threats. CDC will continue to support the Global AR Lab and Response Network to increase capacity for surveillance, prevention, detection, and response around the world. Through these investments, CDC will expand the framework needed for global action to combat AR infections wherever they emerge and spread.

### Program Accomplishments

CDC continues to protect patients and communities in the United States and around the world from AR threats as follows:

- Investing more than \$70 million to sustain core laboratory and epidemiological capacity in all 50 states, as well as several large cities and territories to address AR infections related to healthcare, foodborne, and community infections.
- Strengthening laboratory capacity to detect AR threats in all states. The Antimicrobial Resistance Laboratory Network (AR Lab Network) as well as seven AR Regional Laboratories work together to: assist

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<sup>46</sup> <https://www.cdc.gov/drugresistance/covid19.html>

state outbreak response; detect existing and emerging resistance rapidly; and support innovations in preventatives, antibiotic, and antifungal resistance and diagnostic development. CDC continues to scale up core testing and characterization of highly resistant bacteria, colonization screening, *Neisseria gonorrhoeae* antimicrobial susceptibility testing (AST), and whole genome sequencing.

- Improving antibiotic use by collaborating with a broad range of healthcare facilities to implement Antibiotic Stewardship Programs. This has resulted in more than 90% of acute care hospitals meeting all of CDC’s Core Elements of Hospital Antibiotic Stewardship Programs; and the implementation of the *Be Antibiotics Aware: Smart Use, Best Care*, a national educational effort for healthcare professionals, patients, and their families to help improve antibiotic prescribing and use.
- Supporting alternative treatment and prevention options that may be as or more effective as antibiotics in fighting AR (e.g., vaccines, diagnostics, and other therapeutics). CDC has invested more than \$200 million in more than 135 institutions to research innovative approaches to addressing antibiotic-resistant infections.
- Expanding AR surveillance efforts globally by launching the Global Antimicrobial Resistance Laboratory and Response Network. This is a first-of-its-kind network, that spans nearly 50 countries and works with nearly 20 organizations worldwide. The goal is to build laboratory capacity to detect AR organisms; prevent infections in health care and the community through proven infection control practices; and apply new and innovative ways to respond to AR threats. This network is tasked to identify risk factors driving the emergence and spread of AR across the One Health spectrum.
- Investing, more than \$2.1 billion from the American Rescue Plan Act, in U.S. public health departments and other partner organizations to bolster public health, healthcare infection prevention and control, and the healthcare system.

## **Quarantine and Migration Budget Request**

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Modern air and maritime travel have enabled extraordinary global interconnectivity, providing economic, cultural, and social benefits. However, these connections also allow an infected person to fly or sail to any location in the world, often in less time than it takes to develop symptoms. CDC's global migration and quarantine activities work to create a multi-layered system of public health defenses to mitigate the risk of communicable diseases spreading into and within the United States.

### **Budget Request**

CDC's FY 2024 budget request of **\$72,772,000** for Quarantine and Migration is **\$14,000,000** above the FY 2023 enacted level.

CDC will use these funds to modernize public health programs and scale-up migration systems that will protect the U.S. during future international outbreaks and pandemics. In 2022, the National Academies of Sciences, Engineering, and Medicine produced formal recommendations related to modernizing the CDC quarantine and migration system. These funds will allow CDC to begin to implement the most urgent recommendations, which are vital for our routine disease outbreak work and global health security.

CDC will sustain investments made with COVID-19 supplemental funds to support innovative solutions that focus on building and then enhancing a modernized and flexible traveler management program. This will enable CDC to communicate directly with travelers and gather travel data faster; partner with state, local, and territorial health departments; and link travelers into the traveler management system, enabling the CDC to engage with travelers before, during, and after travel.

### **Program Accomplishments**

***Preparedness and Response:*** CDC maintains 20 quarantine stations, positioned at key ports of entry, to detect and respond to reports of illness, strengthening public health security at the border. CDC partners with the Department of Homeland Security to administer the Public Health Do Not Board list to prevent individuals with certain infectious diseases from boarding commercial aircraft and potentially infecting other travelers.

***Travelers' Health:*** CDC leverages its expertise, surveillance systems, and global partnerships to develop public health alerts, recommendations, and education for travelers and healthcare providers. These efforts help prevent U.S. travelers from falling ill and spreading disease after they return to the United States. Strengthened public health efforts include expanding traveler disease surveillance systems to better inform travel recommendations and the collection of key contact information from travelers during air travel to enable the CDC to respond more quickly to ill and exposed persons arriving in the United States.

***Animal Importation:*** CDC prevents the introduction and spread of zoonotic diseases from animals and animal products by regulating their importation. As one of the deadliest zoonotic diseases, dog rabies accounts for an estimated 59,000 human deaths globally each year. Dog rabies was eliminated from the United States in 2007.

## Emerging Infectious Diseases Budget Request

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The Emerging Infectious Diseases (EI) activities provide a critical foundation for many of the CDC's world-renowned programs, research, laboratories, outbreak functions, and public health capacities, particularly for diseases that do not have a dedicated funding line.

CDC builds domestic and global response capacity by providing fundamental support to state and local public health agencies and international partners who rely on CDC to confirm unusual pathogens, diagnose mystery illnesses, and rapidly coordinate multi-jurisdictional investigations and responses. The type of pathogens that are supported by EI funding range from the rare but deadly (Ebola, anthrax, rabies) to more common and complex pathogens like fungal and waterborne diseases. The flexibility of the EI line is essential for CDC's ability to quickly address these pathogens as they emerge and to maintain expertise for preventing the next outbreak. Core examples are as follows:

- Laboratory Capacity
- Controlling High-Consequence Pathogens and Zoonotic Disease
- Emerging Infectious Disease Preparedness and Response
- Water/Sanitation/Hygiene, Mycotics, and Harmful Algal Blooms
- Monitoring the safety of vaccines

### Budget Request

CDC's FY 2024 budget request of **\$242,997,000** for Emerging Infectious Diseases is **\$40,000,000** above the FY 2023 enacted level. CDC will continue its core emerging infectious disease work and laboratory capacity to respond to outbreaks for a range of emerging and critical pathogens; improve laboratory data science proficiency and cutting-edge analytics, including the incorporation of epidemiologic and genomics data; keep pace with innovation and quality initiatives; and provide training to CDC laboratory scientists. In addition, the budget will support CDC's pandemic preparedness efforts.

CDC will expand and strengthen the nation's health and support pandemic preparedness efforts through key enhancements:

- Increased ability to support domestic and international investigations and responses to rare and deadly pathogens like mpox.
- Increased laboratory and epidemiological capacity, as well as the research needed to prepare for emerging threats.
- Improved efficiency of general and preparedness operations of CDC laboratories and assay readiness.
- Development of tests, treatments, and vaccines that are vital to support outbreak prevention and response.
- Ability to keep CDC's unique and specialized state-of-the-art pathology laboratories working with the most cutting-edge tools and expertise to investigate all emerging and mystery infectious illnesses.
- Enhanced support for state, local, and territorial emerging infectious disease capabilities, including increasing investments in the ELC to support cross-cutting infectious disease outbreak domestic preparedness capabilities, including work to coordinate epidemiology, laboratory, and health information systems.

### Program Accomplishments

**Laboratory Response Network:** Rapid detection and response to infectious disease outbreaks are critical for effectively protecting public health. Outbreaks of high-consequence pathogens rely on subject matter expertise, including years of direct public health knowledge and experience. When a cluster of melioidosis cases that sickened four patients in 2021 – one each in Georgia, Kansas, Texas, and Minnesota – was discovered

through the Laboratory Response Network (LRN), CDC staff and local and state health officials were quick to investigate, discover the source of the cluster, and take steps to protect the health of the nation. CDC investigators were able to determine the cause of the cluster, an aromatherapy room spray sold at a national retailer, leading to the recall of 3,900 bottles of the product before more people were sickened.

**Rabies:** CDC conducts over 1,000 rabies exposure consultations each year, typically leading the investigation of human rabies deaths and multi-state rabies outbreaks. Advanced molecular detection methods have become more commonplace, and advancements have led to the detection of novel rabies virus variants and led to the realization that there are cryptic rabies virus transmission cycles among animal hosts in the United States that have unexplored consequences for human and animal health.

***National Wastewater Surveillance System:***

In 2022, CDC continued to coordinate and support the nation’s capacity to monitor SARS-CoV-2 in wastewater through the National Wastewater Surveillance System (NWSS). Through NWSS, health departments and public health laboratories develop their capacity to conduct wastewater surveillance, including epidemiology, data analytics, and laboratory support. This information can be a critical early warning for authorities of new outbreaks and inform local decision-making, such as where to have mobile testing and vaccination sites. It has expanded to include 47 jurisdictions and more than 1,400 sampled wastewater treatment plants, which represents over 134 million persons. In addition to COVID-19, NWSS has supported CDC’s mpox and polio response efforts.

**Mycotic Diseases:** In FY 2022, CDC detected an increase in *C. auris* resistant to all antifungal medications. Related to Valley Fever, CDC worked in collaboration with the Valley Fever Institutes and the Cocci Study Group to host a series of meetings focused on improved diagnostic tests and vaccine development for Cocci. To address the need for rapid outbreak detection, CDC launched FungiNet, a network for genomic surveillance for fungal diseases focused on building whole genome sequencing capacity in state and local health departments through the Antimicrobial Resistance Laboratory Network (ARLN).

**Harmful Algal Blooms:** Harmful algal blooms (HABs) can harm local ecology and cause illness in people, companion animals, livestock, and wildlife. CDC supports state efforts to understand and mitigate impacts, especially in states such as Florida and Oregon, which have declared emergencies to address this growing problem, and in the Great Lakes region, which has experienced HABs events during recent summers. As of August 2022, CDC has funded 12 jurisdictions to build their public health capacity and coordinated a public health network of 28 states and six federal agencies.

**Monitoring the safety of vaccines:** For every vaccine that CDC promotes, CDC’s immunization safety office works with partners and Federal agencies (including FDA) to conduct vaccine safety monitoring, clinical research, and to communicate timely, transparent information about the safety of vaccines. CDC uses multiple complementary systems to rapidly detect and assess possible safety concerns including:

- Vaccine Adverse Event Reporting System (VAERS), the nation’s early warning system for vaccine safety jointly run by CDC and FDA that can rapidly detect rare events and potential safety problems and generate hypotheses for further safety studies.
- Vaccine Safety Datalink (VSD), a collaboration between CDC and nine integrated healthcare systems that use electronic health records and administrative data to conduct near real-time active vaccine safety surveillance and epidemiologic research.
- The Clinical Immunization Safety Assessment (CISA) Project, a collaboration between CDC and seven medical research centers with experts in vaccine safety that assesses complex vaccine safety issues, conducts clinical research and evaluates complex adverse events in individual patients after vaccination.
- V-safe, a smartphone-based tool that uses text messaging and web surveys to provide personalized health check-ins after individuals receive a vaccine.

Vaccine safety is a vital part of the nation's response to the COVID-19 pandemic and other public health emergencies. CDC continues to work with FDA and other partners to monitor and evaluate adverse event reports and take necessary action to assure the safety of vaccines and provide transparency to assure the public's trust.

## **Vector-Borne Diseases Budget Request**

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The United States is increasingly vulnerable to diseases transmitted by ticks, mosquitoes, fleas, and other insects. CDC leverages state-of-the-art advanced molecular detection techniques and collaborations with federal, state, and local agencies to identify new threats as they emerge so those multi-sectoral responses can be implemented. CDC is also using climate and other vector-borne disease risk factors to build and evaluate forecasting and modeling tools to predict future outbreaks.

### **Budget Request**

CDC's FY 2024 request of **\$88,603,000** for Vector-Borne Diseases, including **\$26,000,000** for the Lyme Disease non-add, is level with the FY 2023 enacted level.

In FY 2024, CDC will continue to:

- Support vector-borne disease prevention and control through both the Centers of Excellence in Vector-Borne Diseases and the ELC cooperative agreements. CDC will also continue supporting states by responding to outbreaks and emerging vector-borne disease threats.
- Expand the capacity for vector-borne disease prevention and control training and evaluation in regions not currently supported by the Centers of Excellence.
- Prioritize prevention by developing better vector control tools, vaccines, and other prevention tools; working with state, local, and university partners to evaluate and implement prevention strategies; and providing education to the public and healthcare providers.
- Improve and developing diagnostic tests, including diagnosing Lyme and other tick-borne diseases at multiple stages of illness.
- Advance health equity by focusing on tailored strategies to address outbreaks in areas of disproportionate risk and bringing increased diversity to the field of Public Health Entomology.

### **Program Accomplishments**

**Centers of Excellence in Vector-Borne Diseases:** With an increase in FY 2022 funds, CDC re-established the Centers of Excellence in Vector-Borne Diseases (COE) program. In July 2022, CDC made four awards to four regional university-based research centers.<sup>47</sup> These centers will conduct applied prevention research; train a new generation of public health entomologists to serve as experts in vector-borne diseases at state and local levels; and strengthen collaboration between the academic community and state, territorial, and local public health organizations, vector management programs, and other partners to develop, evaluate, and implement prevention strategies. In November 2022 CDC announced a new non-research funding opportunity to support training and evaluation of vector-borne disease prevention and control programs, strategies, and technologies. This non-research program will complement the COE research program and provide greater regional capacity for vector-borne disease prevention and control across the United States.

**Vector-borne disease control and prevention:** In FY 2022, CDC focused efforts on the most promising vaccine program activities, including program planning and implementation for existing and candidate vaccines for dengue, Lyme disease, West Nile virus, chikungunya, and Zika. In FY 2022, CDC worked closely with the health departments of dengue-endemic Puerto Rico and the U.S. Virgin Islands to prepare for vaccine implementation through serosurveys, development of local policies, training, education, coordination with laboratories and insurance providers, and modifications to surveillance systems. Vaccination of eligible children in Puerto Rico began in 2022. In July 2022, CDC staff were deployed to assist in reactive vaccine campaigns being conducted in Kenya, where yellow fever cases have not been detected for more than 25 years. CDC's continued engagement

<sup>47</sup> <https://www.cdc.gov/nceid/dvbd/about/prepare-nation/coe.html>

has led to over 200 million persons in Africa receiving a dose of the yellow fever vaccine, which offers lifetime protection and limits further transmission.

**Lyme Disease:** In FY 2022, CDC published a prospective study quantifying all medical costs, out-of-pocket expenses, and lost earnings for patients with various stages of Lyme disease in four high-incidence states (CT, MD, MN, NY).<sup>48</sup> The average patient cost was \$1,200, with societal costs totaling \$345-\$968 million, underscoring the need for early diagnosis and improved prevention methods to reduce the morbidity and associated costs of vector-borne diseases, and Lyme disease in particular.

CDC maintains, operates, and improves two vector or vector-borne disease surveillance systems: ArboNET—the national surveillance system for arboviruses<sup>49</sup>; and TickNET—a collaborative public health effort that includes laboratory surveys, high-quality prevention trials, and pathogen discovery.<sup>50</sup> To make these data more accessible to the public, CDC launched an interactive Lyme disease data dashboard in 2022.

A new Lyme vaccine entered phase 3 clinical trials in August 2022, including children aged 5–17. In preparation, CDC is researching key topics associated with disease burden, vaccine acceptability, and public health and economic impact:

- Assessing public and clinician acceptability of a potential vaccine;
- Evaluating factors influencing vaccine decisions and conducting a cost-benefit analysis of a potential vaccination program;
- Developing communication materials that inform the public and healthcare providers about vaccine development and address questions and concerns; and
- Developing enhanced Lyme disease surveillance programs in key high-incidence states as a foundation for future vaccine effectiveness studies.

**Mosquito Abatement:** CDC provides annual funding and technical support to states to ensure they have the staff, training, expertise, and equipment needed to monitor and respond to mosquito-borne disease outbreaks. In FY 2021, CDC collaborated with local partners to implement and evaluate Wolbachia suppression, a novel vector control technique to reduce mosquito populations and possibly the risk of dengue and other mosquito-borne viruses. Implementation of the technology is the first project involving sterile or incompatible insect techniques in Puerto Rico. The project suppressed the local mosquito population by up to 50% while maintaining high community acceptance (88%). This program may be used as a model for community education, mobilization, and evaluation of other novel vector control programs.

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<sup>48</sup> Hook, Sarah A.;Jeon, et.al. Economic Burden of Reported Lyme Disease in High-Incidence Areas, United States, 2014–2016. Published Date : 6 2022  
Source : Emerg Infect Dis. 2022; <https://stacks.cdc.gov/view/cdc/118164>

<sup>49</sup> <https://www.cdc.gov/mosquitoes/mosquito-control/professionals/ArboNET.html>

<sup>50</sup> <https://www.cdc.gov/ticknet/index.html>

## National Healthcare Safety Network (NHSN) Budget Request

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CDC's National Healthcare Safety Network (NHSN) is the nation's most comprehensive and widely used system to identify emerging and enduring threats across healthcare, such as COVID-19, healthcare-associated infections (HAIs), and antibiotic-resistant (AR) infections. More than 38,300 U.S. healthcare facilities, including nearly every hospital (~7,100), ambulatory surgery center (~5,400), dialysis facility (~7,900), and CMS-certified nursing home (~15,400), participate in NHSN. NHSN drives quality improvement and patient safety by enabling healthcare facilities to track, report, assess gaps, and take actions related to a range of urgent health threats. NHSN data and analytics are available to the facilities and their state health departments immediately upon data submission.

### Budget Request

CDC's FY 2024 budget request of **\$50,000,000** for the National Healthcare Safety Network is **\$26,000,000** above the FY 2023 enacted level.

In FY 2024, CDC will accelerate work with health departments, hospitals, nursing homes, and other partners to increase the use of reporting pathways such as the NHSN Antimicrobial Use and Resistance (AUR) module to assess antibiotic prescribing and antibiotic-resistant infections in hospitals in support of national HAI/AR prevention goals. Currently, more than 2,500 hospitals from all 50 states, Washington, D.C., and Puerto Rico, as well as Pacific and European military hospitals, use NHSN to track antibiotic use, and more than 1,200 hospitals report AR infections to NHSN. This reporting is completely automated, with no manual data entry. The Centers for Medicare & Medicaid Services recently released a final rule that adds a new AUR Surveillance measure and requires its reporting to NHSN under the Medicare Promoting Interoperability Program's Public Health and Clinical Data Exchange Objective, beginning in the calendar year 2024.<sup>51</sup> CDC will onboard facilities and partner with other state, local, and federal government agencies to help them meet this new mandatory reporting requirement in NHSN. CDC will also begin a pilot project to receive an automated feed of pathogen-agnostic hospital occupancy and capacity data from one jurisdiction, with the goal of rolling this pilot out to additional jurisdictions in the future to increase the timeliness of data and reduce reporting burden.

Technical assistance based on NHSN data and reporting capabilities is a key component of the comprehensive NHSN quality improvement program. CDC continues to promote the use of the Targeted Assessment for Prevention (TAP) Strategy by facilities, health systems, health departments, and federal quality improvement organizations to target and tailor prevention efforts. NHSN's TAP reports use data to alert providers and public health professionals about healthcare facilities and units with more infections so they can immediately target prevention efforts in these areas. CDC intends to continue analytic work to identify hotspots of infections within the healthcare system and disproportionately affected populations, respond to future emergencies, and aid other U.S. government agencies, state and local health departments, and individual healthcare facilities.

CDC will more rapidly modernize NHSN and make system enhancements to further support the management and analysis of additional data reported from both hospitals and nursing homes under recent CMS regulations for COVID-19 hospital and nursing home data, antibiotic use and resistance data from hospitals, and the CMS-led nursing home initiative. Over the past eight years, the number of facilities reporting both voluntary and mandatory data to NHSN has tripled, and the number of conditions reported has expanded. CDC will transform NHSN's ability to provide actionable and timely data that is shared across HHS and USG. With this funding, CDC will:

- Increase the automation of data reporting to NHSN
- Modernize user interface and support to:

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<sup>51</sup> Federal Register :: Public Inspection: Medicare Program: Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2023 Rates; etc.

- Continue the integration of electronic healthcare records and other emerging data standards to NHSN
- Begin to build the modern, flexible platform that can serve as the hub of USG healthcare data for CDC, CMS, ASPR, and HHS to identify and respond to emerging and enduring health threats in healthcare facilities
- Build additional capabilities to address future health emergencies
- Meet the needs of CMS' recently finalized rules which extends nursing home and hospital COVID-19 reporting for several years beyond the end of the current Public Health Emergency
- Accelerate the adoption and improvement of measurements of patient safety, including sepsis, healthcare-associated conditions, and antimicrobial use and resistance to improve healthcare quality and safety
- Continue to improve the provision of analytic reports and electronic data provided from NHSN to state and local health departments, other federal government agencies—such as CMS and ASPR—and public health partners to support their decisions

### Program Accomplishments

Throughout the COVID-19 pandemic, CDC has leveraged NHSN to collect and analyze urgently needed information to drive key emergency response actions. CDC has received COVID-19 vaccination data from all ~15,400 CMS-certified nursing homes in the country, covering more than 1.2 million residents and 1.8 million staff. These data are used to pinpoint outreach to increase staff vaccination rates; analyze breakthrough infections and vaccine effectiveness; and help inform decision-making about the need for additional vaccination and booster doses for residents and staff.

## Healthcare-Associated Infections Budget Request

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CDC plays a critical role in preventing infections people get while receiving medical care, including those caused by antibiotic-resistant (AR) pathogens, emerging pathogens, and infections leading to sepsis. While CDC has made great progress preventing healthcare-associated infections (HAIs) in the United States, recent gains may have been reversed due to the strain on the healthcare system from COVID-19.<sup>52</sup>

HAIs can also lead to sepsis. Annually, over 1.7 million U.S. adults develop, and nearly 270,000 deaths, from sepsis.<sup>53</sup> To address sepsis, CDC focuses on four key areas: tracking sepsis; preventing infections that can lead to sepsis; early detection and diagnosis; and appropriate treatment. CDC defines the magnitude of the burden and the impact of our interventions, prevents HAIs and infections caused by AR pathogens that might lead to sepsis, educates clinicians and the public about the importance of early recognition and detection of sepsis through the *Get Ahead of Sepsis* national education campaign; and preserves antibiotics as life-saving tools through antibiotic stewardship. CDC acknowledges the large human and financial toll sepsis and sepsis-related conditions impose on the millions of patients and our nation's health care system annually, and will continue to work on solutions to help mitigate these impacts.

### Budget Request

CDC's FY 2024 budget request of **\$12,000,000** from the Prevention and Public Health Fund (PPHF) for Healthcare-Associated Infections is level with the FY 2023 enacted level.

CDC continues to provide national leadership in HAI-AR prevention, emerging threat identification, and patient protection, including working with health departments and healthcare facilities when problems arise, engaging other health partners to prevent HAIs, and supporting other federal agencies through the provision of data and technical expertise. This funding will support the CDC's delivery of tools and expertise provided during COVID-19, including Tele-ICAR. Project Firstline, CDC's national healthcare IPC training collaborative, will continue to equip frontline healthcare workers with the knowledge they need to prevent the spread of HAIs.<sup>54</sup>

### Program Accomplishments

CDC is working to keep COVID-19 infections out of nursing homes, identify infections early, and limit transmission. CDC has developed and implemented infection prevention and control (IPC) guidance, tailored to specific healthcare settings, deployed staff to assist nursing homes and other healthcare facilities, provided remote technical assistance to complement in-person deployments, and supported extensive vaccination surveillance across all CMS-certified nursing homes. In FY 2021, CDC responded to over 44,500 reports of possible COVID-19 outbreaks in healthcare settings, and 337 reports involving other types of HAI/AR outbreaks or infection control breaches across the United States.

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<sup>52</sup> <https://www.cdc.gov/hai/data/portal/covid-impact-hai.html>

<sup>53</sup> <https://www.cdc.gov/sepsis/datareports/index.html>

<sup>54</sup> <https://www.cdc.gov/infectioncontrol/projectfirstline/index.html>

## **Advanced Molecular Detection (AMD) Budget Request**

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The Advanced Molecular Detection (AMD) program is a cross-cutting, collaborative program that fosters biotechnology-focused laboratory and bioinformatic innovation across the U.S. public health system. The AMD program works with disease-specific programs across CDC, expanding the use of technologies in diseases as diverse as influenza, COVID-19, tuberculosis, salmonellosis, valley fever, anthrax, malaria, and mpox.

### Budget Request

CDC's FY 2024 budget request for **\$40,000,000** for Advanced Molecular Detection is level with the FY 2023 enacted level. In FY 2024, the AMD program will continue to focus on five key areas:

- **Innovating through research and development:** The AMD program serves as a model for how CDC can rapidly take advanced, complex technologies (i.e., next-generation sequencing and bioinformatics), bring them into the U.S. public health system, and rapidly implement them to protect the health of Americans.
- **Deploying AMD technologies across a wider range of diseases:** The program has supported the adoption of AMD technologies at state and local health departments in many disease areas including COVID-19, foodborne illness, hepatitis C, influenza, meningitis, and Legionnaires' disease. However, there remains many more areas where AMD technologies are applicable and provide positive impacts on public health.
- **Enhancing technological infrastructure:** The application of sequencing and related technologies requires access to infrastructure such as high-performance computing and expertise in specialized areas, including bioinformatics. The rapid increase in sequencing currently underway in state health departments will require the expansion of existing services to maintain system reliability and rapid turnaround time.
- **Modernizing the workforce:** Although AMD technologies carry great potential; sufficient laboratory and bioinformatics capacity and a highly skilled workforce are essential to extract and interpret relevant information from the massive amount of sequencing data available. To this end, CDC's AMD program is offering molecular epidemiology training to state epidemiologists.
- **Promoting collaboration:** During the COVID-19 pandemic, the AMD program implemented a collaborative initiative between universities/research institutions and state and local public health departments to improve public health capacity and improve U.S. public health. With continued funding, AMD can continue to establish national and regional baselines for sequence-based surveillance and assessment of risk profiles of circulating virus variants.

### Program Accomplishments

CDC's AMD program has supported the U.S. government's COVID-19 emergency response from the beginning of the pandemic.

**Pathogen Genomics Centers of Excellence:** The investment of \$1.7 billion from the American Rescue Plan (ARP) supporting the AMD program has improved the detection, monitoring, and mitigation of COVID-19 variants and helped states and other jurisdictions strengthen their response capability. In 2022, with support from ARP, the CDC launched the Pathogen Genomics Centers of Excellence (PGCoE) to build on AMD's foundational work translating genomic data into action. The PGCoE network expands and deepens the collaboration between U.S. public health agencies and universities and will serve as an important model to foster innovation and technical capacity in pathogen genomics.

**Sequencing for Public Health Emergency Response, Epidemiology and Surveillance:** CDC continues to lead the Sequencing for Public Health Emergency Response, Epidemiology and Surveillance (SPHERES) consortium, which joins more than 250 different institutions (public, private, academic, and non-governmental organizations). The consortium has expanded to share important information on topics such as wastewater surveillance and mpox sequencing. The SPHERES consortium builds on the AMD program’s previous collaborations with academic laboratories as well as with the private sector. During the COVID-19 response, the program has overseen the award of 39 contracts for organizations – primarily university laboratories – to work with public health agencies around the United States. Awardees have used the funding for a wide variety of public health activities such as supporting COVID-19 control in schools, investigating transmission in rural communities, and improving wastewater surveillance.

## Food Safety Budget Request

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CDC has a unique role in detecting and investigating foodborne illnesses and outbreaks and attributing them to specific foods and settings. CDC provides the vital link between illness in people and the food safety systems of government agencies and food producers. CDC collaborates closely with FDA, USDA, state and local health departments, and food industries to protect Americans from food contaminated with dangerous pathogens.

### Budget Request

CDC's FY 2024 budget request of **\$71,000,000** for Food Safety is level with the FY 2023 enacted level. CDC will continue supporting the nation's food safety system, focusing on food safety priority areas at CDC and state and local health departments. CDC will achieve these priorities in part through programs that enhance state and local public health capacity to support vital national surveillance, improve foodborne outbreak detection and investigations, enhance food safety prevention efforts, and maintain vigilance for emerging threats to our nation's food supply.

In FY 2024, CDC will undertake key activities in the Food Safety portfolio:

- Support efforts to standardize and improve the collection of information for invasive *Cronobacter* infections and other bacterial contaminants in infants. CDC will work with public health partners to enhance all aspects of *Cronobacter* surveillance, including creating an electronic surveillance platform, and improving mechanisms for case reporting, notification timelines, laboratory testing methods, outbreak response processes, and disease prevention.
- Improve disease detection and outbreak response by further integrating new whole genome sequencing (WGS) technology into routine public health practice.
- Support state and local capacity for monitoring foodborne illness and response to outbreaks.
- Train state public health personnel in best practices for foodborne disease detection, surveillance, pathogen identification, outbreak investigation, and control.
- Implement state and local program metrics more widely to identify strengths, weaknesses, and progress in upgrading illness tracking and outbreak response.
- Continue Integrated Food Safety Centers of Excellence regional support for state and local food safety programs.
- Monitor foodborne diseases through population surveys to determine the burden of foodborne illness and frequency of consuming specific foods, collect and analyze foodborne outbreak data, and evaluate WGS technologies to monitor emerging antibiotic resistance.
- Assess trends in foodborne illness and associated disparities, identify high-risk foods, and evaluate the effectiveness of prevention strategies, through the Interagency Food Safety Analytics Collaboration (IFSAC).
- Further explore the use of WGS to better define the reservoirs of the germs that make foods unsafe, to help focus prevention efforts.
- Improve data integration, analysis, usability, and sharing with food safety partners and the public.
- Reduce data gaps and improve linkage across surveillance systems by working with FDA and USDA's Food Safety Inspection Service (FSIS) to improve the targeting of prevention efforts.
- Track the adoption of new culture-independent diagnostic tests (CIDTs) in clinical laboratories and analyze their impact on foodborne disease surveillance.
- Develop and pilot metagenomic technologies to improve the detection of outbreaks and help preserve the ability to detect and control outbreaks in the absence of bacterial cultures.

## Program Accomplishments

**PulseNet:** Every year, PulseNet prevents approximately 270,000 illnesses and saves at least \$500 million in medical costs and lost productivity. For every \$1 invested into PulseNet, \$70 is saved.<sup>55</sup> The use of whole genome sequencing (WGS) has already greatly improved CDC's ability to detect and investigate widespread problems in the food supply. During May and June 2022, CDC, FDA, and states investigated a multistate outbreak of *Salmonella* Senftenberg infections linked to peanut butter. Through swift federal coordination, the investigation linked illnesses to this peanut butter, resulting in a recall of 49 peanut butter products within 8 days, with an additional 21 companies recalling products made with that peanut butter.

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<sup>55</sup> Scharff RL, Besser J, Sharp J, Jones TF, Gerner-Smidt P, Hedberg CW. 2016. An Economic Evaluation of PulseNet: A Network for Foodborne Disease Surveillance, *American Journal of Preventive Medicine*, 50(5) Supp 1; pp. S66-S73. <https://doi.org/10.1016/j.amepre.2015.09.018>.

## **Chronic Fatigue Syndrome Budget Request**

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CDC's Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS) program conducts and supports innovative research to integrate the clinical presentation and management of patients. CDC leverages its expertise in health statistics to track the prevalence of ME/CFS through large national systems such as the Behavioral Risk Factor Surveillance System and the National Health Interview Survey. CDC also capitalizes on its collaborations on syndromic surveillance to gather data on risk factors, description of patients with new onset of ME/CFS, and management strategies that favor improvement through the CDC Emerging Infections Program.

### **Budget Request**

CDC's FY 2024 budget request of **\$5,400,000** for ME/CFS is level with the FY 2023 enacted level. CDC will continue to conduct surveillance and clinical studies to better understand the prevalence, onset, and course of ME/CFS and associated disparities. CDC will also continue to work with public health and medical organizations to improve clinical care of persons living with ME/CFS and to address the critical shortage of healthcare providers familiar with the diagnosis and management of the disease. In coordination with federal partners, CDC will work toward cross-agency alignment of initiatives to improve access to care and conduct research to advance knowledge of ME/CFS.

## **Prion Diseases Budget Request**

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Prion diseases are a group of rare brain diseases affecting humans and animals that are uniformly fatal. CDC provides funds and expertise to support medical personnel and health authorities with state-of-the-art laboratory diagnostics to confirm human prion diseases through the National Prion Disease Pathology Surveillance Center (NPDPS). To date, CDC has found no definite chronic wasting disease infections in humans. However, chronic wasting disease strains evolve, and some animal studies suggest that some strains of the disease pose a risk to certain types of non-human primates, which raises concerns that there may also be a risk to humans.

### **Budget Request**

CDC's FY 2024 budget request of **\$7,500,000** for Prion Diseases is level with the FY 2023 enacted level. In FY 2024, CDC will continue to conduct U.S. mortality surveillance and fund laboratory-based surveillance for prion diseases. CDC will investigate possible prion diseases by supporting medical personnel and state and local health officials with expert consultation and state-of-the-art diagnostics. CDC will continue to enhance surveillance among groups placed at the highest risk of exposure to chronic wasting disease.

## Epidemiological and Laboratory Capacity Program Budget Request

The [Epidemiology and Laboratory Capacity for Prevention and Control of Emerging Infectious Diseases<sup>56</sup>](#) (ELC) cooperative agreement provides support to all 50 states, six large localities, and eight U.S. territories to prevent, detect, respond to, and control the growing threats posed by infectious diseases. The ELC affords recipients the flexibility to meet program goals and milestones while allowing them to find approaches that incorporate unique jurisdictional needs.

The ELC awards more than \$200 million each year and serves as the primary mechanism to support emerging infectious disease epidemiology and laboratory capacity in the United States. These funds support more than 8,000 infectious disease staff across the United States, providing state and local jurisdictions with a critical workforce and leadership.

### Budget Request

CDC’s FY 2024 budget request of **\$40,000,000** from the Prevention and Public Health Fund (PPHF) for the Epidemiological and Laboratory Capacity Program is level with the FY 2023 enacted level. CDC will continue its support and technical assistance to all jurisdictions specifically to help strengthen cross-cutting surveillance and health information systems. This includes support for a skilled public health workforce and systems that can maintain critical flexibility to address emergent infectious disease threats and outbreaks.

### Program Accomplishments

The ELC has awarded more than \$42 billion in COVID-19 supplemental funding appropriated to HHS and CDC to state, local, and territorial health departments. COVID-19 supplemental funding significantly augmented the workforce, supporting more than 51,000 positions, including epidemiologists, laboratorians, infection prevention and control experts, health information system staff, and health educators. As of September 30, 2022, ELC investments have substantially supported the conduct and reporting of more than 11.4 billion community and facility-specific tests in the United States. COVID-19 funds are also allowing seven jurisdictions to expand and upgrade existing laboratory space to improve testing and whole genome sequencing capacities.

Additionally, the ELC provides support for the Laboratory Response Network (LRN) which started with small investments in 2019 and scaled up with COVID-19 supplemental funding to expand public health laboratory capabilities to respond to emerging infectious diseases. These funds enabled quick expansion by LRN to support rapid detection by LRN of testing for mpox in 2022. Since September 30, 2022, the LRN network has tested more than 10,000 specimens.

**ELC Cooperative Agreements<sup>1</sup>** (dollars in millions)

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President’s Budget</b>
Number of Awards	64	64	TBD
Average Award	\$3.079	TBD	TBD
Range of Awards	\$0.156–\$10.362	TBD	TBD
<b>Total Awards</b>	<b>\$197.040</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup>ELC is not a formula-based award; funding is awarded based on need as documented in the application, strength of application, and availability of funds.

<sup>56</sup> <https://www.cdc.gov/ncezid/dpei/epidemiology-laboratory-capacity.html>

**State Table: Epidemiology and Laboratory Capacity<sup>1</sup>**

	<b>FY 2022 Final<sup>2</sup></b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$1,895,343	TBD	TBD	TBD
Alaska	\$2,216,487	TBD	TBD	TBD
Arizona	\$2,868,459	TBD	TBD	TBD
Arkansas	\$2,126,337	TBD	TBD	TBD
California	\$10,362,274	TBD	TBD	TBD
Colorado	\$5,999,774	TBD	TBD	TBD
Connecticut	\$2,559,951	TBD	TBD	TBD
Delaware	\$2,603,053	TBD	TBD	TBD
Florida	\$4,123,281	TBD	TBD	TBD
Georgia	\$3,521,597	TBD	TBD	TBD
Hawaii	\$1,943,945	TBD	TBD	TBD
Idaho	\$1,570,357	TBD	TBD	TBD
Illinois	\$1,887,316	TBD	TBD	TBD
Indiana	\$2,804,594	TBD	TBD	TBD
Iowa	\$3,197,687	TBD	TBD	TBD
Kansas	\$2,339,429	TBD	TBD	TBD
Kentucky	\$2,596,633	TBD	TBD	TBD
Louisiana	\$2,142,594	TBD	TBD	TBD
Maine	\$2,293,626	TBD	TBD	TBD
Maryland	\$5,144,569	TBD	TBD	TBD
Massachusetts	\$6,800,136	TBD	TBD	TBD
Michigan	\$6,694,072	TBD	TBD	TBD
Minnesota	\$8,553,088	TBD	TBD	TBD
Mississippi	\$1,301,827	TBD	TBD	TBD
Missouri	\$1,558,132	TBD	TBD	TBD
Montana	\$1,648,729	TBD	TBD	TBD
Nebraska	\$3,220,876	TBD	TBD	TBD
Nevada	\$2,084,665	TBD	TBD	TBD
New Hampshire	\$1,978,069	TBD	TBD	TBD
New Jersey	\$3,554,807	TBD	TBD	TBD
New Mexico	\$2,637,756	TBD	TBD	TBD
New York	\$8,645,809	TBD	TBD	TBD
North Carolina	\$3,041,076	TBD	TBD	TBD
North Dakota	\$1,396,048	TBD	TBD	TBD
Ohio	\$3,584,552	TBD	TBD	TBD
Oklahoma	\$2,346,818	TBD	TBD	TBD
Oregon	\$2,894,936	TBD	TBD	TBD
Pennsylvania	\$3,351,687	TBD	TBD	TBD
Rhode Island	\$2,082,650	TBD	TBD	TBD
South Carolina	\$2,589,107	TBD	TBD	TBD
South Dakota	\$1,353,475	TBD	TBD	TBD
Tennessee	\$7,507,419	TBD	TBD	TBD
Texas	\$3,995,395	TBD	TBD	TBD
Utah	\$5,471,840	TBD	TBD	TBD
Vermont	\$1,824,340	TBD	TBD	TBD
Virginia	\$5,104,364	TBD	TBD	TBD
Washington	\$8,856,117	TBD	TBD	TBD
West Virginia	\$954,235	TBD	TBD	TBD
Wisconsin	\$5,703,549	TBD	TBD	TBD
Wyoming	\$1,369,717	TBD	TBD	TBD

CDC FY 2024 Congressional Justification

<b>Subtotal States</b>	\$176,302,597	TBD	TBD	TBD
<b>Localities</b>				
Chicago	\$1,982,590	TBD	TBD	TBD
Houston	\$1,649,214	TBD	TBD	TBD
LA County	\$3,808,296	TBD	TBD	TBD
New York City	\$4,783,905	TBD	TBD	TBD
Philadelphia	\$1,688,458	TBD	TBD	TBD
Washington, D.C.	\$2,136,994	TBD	TBD	TBD
<b>Subtotal Localities</b>	\$16,049,457	TBD	TBD	TBD
<b>Territories</b>				
American Samoa	\$382,200	TBD	TBD	TBD
Federated States of Micronesia	\$155,509	TBD	TBD	TBD
Guam	\$231,456	TBD	TBD	TBD
Marianna Islands	\$699,287	TBD	TBD	TBD
Marshall Islands	\$397,349	TBD	TBD	TBD
Republic of Palau	\$260,750	TBD	TBD	TBD
U.S. Virgin Islands	\$1,210,804	TBD	TBD	TBD
Puerto Rico	\$1,350,680	TBD	TBD	TBD
<b>Subtotal Territories</b>	\$4,688,035	TBD	TBD	TBD
<b>Total Resources</b>	<b>\$197,040,089</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup> CFDA number 93.323 (Discretionary)

<sup>2</sup> Includes funding from multiple infectious disease programs, awarded through the ELC Cooperative Agreement, excluding COVID-19 resources.

## CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Budget Authority	\$1,083.714	\$1,175.464	\$1,551.339	+\$375.875
PPHF	\$254.950	\$254.950	\$262.200	+\$7.250
<b>Total Request</b>	<b>\$1,338.664</b>	<b>\$1,430.414</b>	<b>\$1,813.539</b>	<b>+\$383.125</b>
FTEs	853	865	905	40
-- Tobacco	\$113.650	\$120.650	\$124.400	+\$3.750
-- Tobacco (PPHF)	\$127.850	\$125.850	\$133.100	+\$7.250
-- Nutrition Physical Activity and Obesity	\$58.420	\$58.420	\$130.420	+\$72.000
-- School Health	\$17.400	\$19.400	\$50.000	+\$30.600
-- Health Promotion	\$49.600	\$62.600	\$62.600	\$0
-- Glaucoma	\$4.000	\$4.000	\$4.000	\$0
-- Vision and Eye Health	\$1.500	\$2.500	\$2.500	\$0
-- Alzheimer's Disease	\$30.500	\$38.500	\$38.500	\$0
-- Inflammatory Bowel Disease	\$1.000	\$1.500	\$1.500	\$0
-- Interstitial Cystitis	\$1.100	\$1.100	\$1.100	\$0
-- Excessive Alcohol Use	\$5.000	\$6.000	\$6.000	\$0
-- Chronic Kidney Disease	\$3.500	\$4.500	\$4.500	\$0
-- Chronic Disease Education and Awareness	\$3.000	\$4.500	\$4.500	\$0
-- Prevention Research Centers	\$26.961	\$28.961	\$28.961	\$0
-- Heart Disease and Stroke	\$88.030	\$98.030	\$98.030	\$0
-- <i>Heart Disease and Stroke (PPHF)</i>	\$57.075	\$57.075	\$57.075	\$0
-- Diabetes	\$98.854	\$102.854	\$102.854	\$0
-- <i>Diabetes (PPHF)</i>	\$52.275	\$52.275	\$52.275	\$0
-- National Diabetes Prevention Program	\$33.300	\$37.300	\$37.300	\$0
-- Cancer Prevention and Control	\$389.799	\$409.549	\$531.074	+\$121.525
-- Oral Health	\$19.750	\$20.250	\$20.250	\$0
-- Safe Motherhood/ Infant Health	\$83.000	\$108.000	\$164.000	+\$56.000
-- Arthritis	\$11.000	\$11.000	\$11.000	\$0
-- Epilepsy	\$10.500	\$11.500	\$11.500	\$0
-- National Lupus Patient Registry	\$9.500	\$10.000	\$10.000	\$0
-- Racial and Ethnic Approach to Community Health	\$65.950	\$68.950	\$68.950	\$0
-- <i>Good Health and Wellness in Indian Country (non-add)</i>	\$22.500	\$24.000	\$24.000	\$0
-- Social Determinants of Health	\$8.000	\$8.000	\$100.000	+\$92.000
-- Million Hearts (PPHF)	\$4.000	\$5.000	\$5.000	\$0
-- National Early Child Care Collaboratives (PPHF)	\$4.000	\$5.000	\$5.000	\$0
-- Hospitals Promoting Breastfeeding (PPHF)	\$9.750	\$9.750	\$9.750	\$0

<sup>1</sup> This table reflects totals by budget activity. The FY 2024 budget proposes a single "CDC-Wide Activities and Program Support" Treasury account structure.

**Enabling Legislation Citation:** PHS A § 301, PHS A § 307, PHS A § 310, PHS A § 311, PHS A § 317, PHS A § 317D\*, PHS A § 317H\*, PHS A § 317K, PHS A § 317L, PHS A § 317M\*, PHS A § 317P\*, PHS A § 330E\*, PHS A § 398B, PHS A § 399B-F\*, PHS A § 399Q\*, PHS A § 399R, PHS A § 399V-3\*, PHS A § 399V-6, PHS A §§ 399W-Z\*, PHS A §§ 399LL-399LL-2\*, PHS A § 399NN, PHS A § 417E, PHS A § 1501-1510\*, PHS A § 1706\*, Comprehensive Smoking Education

Act of 1984, Comprehensive Smokeless Tobacco Health Education Act of 1986, Federal Cigarette Labeling and Advertising Act, Fertility Clinic Success Rate And Certification Act of 1992 (P. L. 102-493), Firefighter Cancer Registry Act of 2018 (Pub. L. 115-194)\*

**Enabling Legislation Status:** Permanent Indefinite

**Authorization of Appropriations for FY 2022:** Indefinite; Expired/expiring noted with \*

**Allocation Methods:** Direct Federal Intramural; Competitive Cooperative Agreements/Grants, including Formula Grants; and Competitive Contracts

### Program Description

Preventing disease before it starts – whether infectious or non-infectious – is the key to protecting all Americans’ health. Chronic diseases—such as heart disease, cancer, chronic lung diseases, stroke, and diabetes—account for most deaths in the United States and globally and are the major drivers of sickness, disability, and health care costs in the nation. They are responsible for seven of 10 deaths among Americans each year, and they are leading drivers of the nation’s \$4.1 trillion in annual health care costs.<sup>57</sup> During public health emergencies people with chronic diseases are often most at-risk for negative health outcomes. CDC’s mission of protecting the public’s health is only achievable when reducing chronic disease is a key focus. CDC’s chronic disease prevention framework<sup>58</sup> guides its efforts to help Americans take charge of their health. Each domain contributes to CDC’s goals of preventing and reducing chronic diseases, conditions, and associated risk factors; promoting health; and eliminating health disparities.

### Budget Request

CDC’s FY 2024 budget request of **\$1,813,539,000** for the Chronic Disease Prevention and Health Promotion program, including **\$262,200,000** from the Prevention and Public Health Fund (PPHF), is **\$383,125,000** above the FY 2023 enacted level.

In FY 2024, CDC will continue to provide national leadership and technical assistance to prevent and control chronic diseases and associated risk factors through evidence-based strategies by:

- Supporting a robust public health response to implement focused chronic disease prevention interventions through state, tribal, local, and territorial health departments; community-based organizations; and nongovernmental partners.
- Monitoring chronic diseases, conditions, and risk factors to track national trends and evaluate effective interventions.
- Conducting and translating public health research and evaluation to build the evidence and improve uptake of strategies.
- Informing sound public health policies that reduce rates of chronic diseases and associated risk factors.

### Health Equity

While chronic diseases affect all populations, they are not evenly distributed. Disease rates vary by race, ethnicity, education, and income level, with the most disadvantaged Americans often suffering the highest burden of disease. For example, African American women had a 43 percent higher rate of breast cancer deaths (26.8 per 100,000) than White women (18.8 per 100,000) in 2019. Diagnosed diabetes in adults is 63 percent higher among Hispanic and Latino persons, and nearly twice as high among American Indians and Alaska Native

<sup>57</sup> National Health Care Spending In 2019: Steady Growth for the Fourth Consecutive Year. Anne B. Martin, Micah Hartman, David Lassman, Aaron Catlin, and The National Health Expenditure Accounts Team. Health Affairs 2021 40:1, 14-24. <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.02022>

<sup>58</sup> <https://www.cdc.gov/chronicdisease/center/nccdphp/how.htm>

persons than non-Hispanic White persons. In 2020, 32 percent of adults with a general education development diploma (GED) smoked cigarettes, compared to 5.6% of adults with a bachelor's degree.<sup>59</sup>

The COVID-19 pandemic has underscored the importance of addressing chronic diseases and underlying factors. As the nation's preeminent public health agency, CDC acts as the single point of contact for state, tribal, local, and territorial (STLT) coordination across all public health areas – infectious and non-infectious – building effective partnerships and reducing duplicative efforts. CDC's chronic disease program recipients are using funding flexibilities to address COVID-19 within the scope of their activities. Because of its established community relationships, the Racial and Ethnic Approaches to Community Health (REACH) program is well-positioned to share messages around the increased risk of severe COVID-19 in racial and ethnic minority groups. Additionally, CDC's Healthy Schools is currently working with all 16 funded states and six nongovernmental organizations to quickly adapt and promote evidence-based strategies and tools that can promote healthy learning and habits for students, as schools are negatively impacted by COVID-19.

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<sup>59</sup> Cornelius ME, Wang TW, Jamal A, Loretta C, Neff L. Tobacco Product Use Among Adults - United States, 2019. Morbidity and Mortality Weekly Report (MMWR). November 2020.

## CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION

### BY THE NUMBERS

Chronic diseases are the leading causes of death and disability, and a major driver of health care costs in the United States. Over half of adults have a chronic disease and 33.8% of adults have two or more chronic diseases.<sup>1\*</sup> CDC programs produce lasting change to address these costly conditions. Based on the most recent data:

- **14.7 million**—Estimated U.S. children & adolescents ages 2–19 years with obesity, nearly 20%.<sup>2</sup>
- **599,500**—Deaths occurring due to cancer each year in the United States—over 1,630 deaths per day. Cancer is the second leading cause of death in the United States, after heart disease.<sup>4</sup>
- **1.1 million**—the number of women who received breast and cervical cancer services through the National Breast and Cervical Cancer Early Detection Program from 2017-2021
- **7%**—Increase, from 2018 - 2021, in blood pressure control rates among adults receiving care in health systems participating in CDC-funded state programs.
- **Over 660,000**—People reducing or reversing their risk of type 2 diabetes by participating in CDC’s National Diabetes Prevention Program from 2012-2022.
- **1 million**—Annual number of people with diabetes receiving diabetes self-management education and support services supported by CDC-funded state programs, reducing risk for diabetes complications.
- **207 million**—Number of individuals in the U.S., approximately 73% of the population, served by community water systems that provide water with enough fluoride to prevent cavities.<sup>5</sup>
- **37**—Number of states, territories, and Washington, D.C. that adopted state Complete Streets policies that make it easier to cross the street, walk to schools and parks, and bicycle to work.<sup>6</sup>
- **1 million**—Number of U.S. adults that quit smoking because of CDC’s *Tips from Former Smokers*<sup>®</sup> Campaign (2012-2018)<sup>7</sup>
- **50**—Number of states plus Washington, D.C. that use the Whole School, Whole Child, Whole Community model to improve the health and wellbeing of students and staff.
- **1.1 million** – Number of stroke patients who have received enhanced stroke care through CDC-funded Paul Coverdell National Acute Stroke Program from 2012-2021
- **15%**- Increase in the average percentage of pregnancy-associated deaths identified within 12 months of the date of death by ERASE Maternal Mortality recipients.

\*References:

<sup>1</sup> Centers for Disease Control and Prevention. REACH Program Impact. 2020. Accessed August 11, 2021, from [https://www.cdc.gov/nccdphp/dnpao/state-local-programs/reach/program\\_impact/index.htm](https://www.cdc.gov/nccdphp/dnpao/state-local-programs/reach/program_impact/index.htm).

<sup>2</sup> Children and adolescents: Fryar CD, Carroll MD, Afful J. Prevalence of overweight, obesity, and severe obesity among children and adolescents aged 2–19 years: United States, 1963–1965 through 2017–2018. NCHS Health E-Stats. 2020. <https://www.cdc.gov/nchs/data/hestat/obesity-child-17-18/overweight-obesity-child-H.pdf>

<sup>3</sup> Adults: Hales CM, Carroll MD, Fryar CD, Ogden CL. Prevalence of obesity and severe obesity among adults: United States, 2017–2018. NCHS Data Brief, no 360. Hyattsville, MD: National Center for Health Statistics. 2020. <https://www.cdc.gov/nchs/data/databriefs/db360-h.pdf>

<sup>4</sup> Centers for Disease Control and Prevention. *An Update on Cancer Deaths in the United States*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, Division of Cancer Prevention and Control; 2021.

<sup>5</sup> Centers for Disease Control and Prevention. National Water Fluoridation Statistics. <https://www.cdc.gov/fluoridation/statistics/2018stats.htm>

<sup>6</sup> Smart Growth America. Complete Streets Policy Atlas. Accessed 8/11/2021 at <https://smartgrowthamerica.org/program/national-complete-streets-coalition/publications/policy-development/policy-atlas/>

<sup>7</sup> Murphy-Hoefer R, Davis KC, King BA, Beistle D, Rodes R, Graffunder C. Association between the Tips From Former Smokers Campaign and Smoking Cessation Among Adults, United States, 2012–2018. *Preventing Chronic Disease* 2020;17:200052

\*Unless otherwise noted, all information and calculations are from CDC program data

Chronic Disease Prevention and Health Promotion Funding History	
Fiscal Year	Dollars (in millions)
FY 2020 (BA)	\$984.964
FY 2020 (PPHF)	\$254.950
FY 2021 (BA)	\$1,018.578
FY 2021 (PPHF)	\$254.950
FY 2022 Final (BA)	\$1,083.174
FY 2022 Final (PPHF)	\$254.950
FY 2023 Enacted (BA)	\$1,175.464
FY 2023 Enacted (PPHF)	\$254.950
FY 2024 President’s Budget (BA)	\$1,551.339
FY 2024 President’s Budget (PPHF)	\$262.200

**Program Accomplishments**

In 2022, CDC’s Tips From Former Smokers® (Tips®) campaign celebrated its 10th anniversary; it continues to run new compelling ads to raise awareness about the health effects caused by smoking. For the 2022 campaign, call volume to 1-800-QUIT-NOW was over 64% above the baseline measurement three weeks prior to launch of the campaign. Call volume to the Spanish quitline, Dejelo-Ya, was 127% higher compared to the baseline; Asian Smokers’ Quitline call volume was 9% higher than baseline. Year after year, the Tips® campaign has had a significant and sustained impact, helping more than 1 million U.S. adults to quit smoking and inspiring millions more to try.

With additional funding in FY 2023, CDC will fund 36 state-based Perinatal Quality Collaboratives (PQCs) to disseminate best practices and implement initiatives to improve outcomes for pregnant persons and newborns. PQCs have contributed to measurable improvements in postpartum outcomes. For example, the Illinois PQC made progress in eliminating racial disparities in care for mothers with opioid use disorder (OUD). At baseline, Black women with OUD were less likely to be on Medication-Assisted Treatment (MAT) than White women with OUD (24% vs 45%), however across the initiative, improvements in MAT rates were seen for all patients with the greatest improvements for Black patients (60% Black patients vs 58% for White patients).

The National Breast and Cervical Cancer Early Detection Program (NBCCEDP) helps those with low incomes who do not have adequate insurance gain access to timely breast and cervical cancer screening, diagnostic, and treatment services. More than 1.1 million people received breast and cervical cancer services through the NBCCEDP from 2017-2021. Screening can detect cancer early when treatment is more effective and for cervical cancer, screening can also prevent cancer by removing precancerous lesions. During this time, the NBCCEDP found 9,562 high-grade premalignant cervical lesions, potentially preventing progression to invasive cervical cancer. An additional 12,858 breast cancers were diagnosed.

Nearly 700,000 – The total number of people participating in CDC’s National Diabetes Prevention Program; 53% of evaluated participants reduced their risk of developing type 2 diabetes by achieving: at least 5% weight loss (49%); at least 4% weight loss combined with an average of 150 minutes/week of physical activity (35%); or a minimum of 0.2% reduction in A1C (0.3%). By covering the program, payers can avoid the high cost of type 2 diabetes—an average of \$16,752 per year in medical expenses—by delaying or preventing the onset of type 2 diabetes among covered individuals.

## Social Determinants of Health Budget Request

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Social determinants of health (SDOH) are factors in the places where people live, learn, work, and play can affect a wide range of health risks and outcomes. Differences in SDOH contribute to the stark and persistent chronic disease and other health disparities in the United States among racial, ethnic, and socioeconomic groups, systematically affecting health and limiting opportunities for members of some groups to be healthy.

Interventions addressing factors related to improving health outcomes have tremendous potential to narrow disparities across many chronic diseases and health risk behaviors. CDC's unique ability to affect meaningful change in this space centers around several key roles: convener, integrator, influencer, and change-maker. Our approach considers both the social and structural conditions that impact health and contribute to disparities and inequities. Our framework targets action in several key areas: data and surveillance, evaluation and evidence building, partnerships and collaborations, community engagement, infrastructure and capacity, and policy.

CDC has always worked to address and improve structural and environmental factors that relate to health outcomes. Starting in FY 2020, the agency supported a two-year project to expand the evidence base for improving health outcomes. In partnership with the Association of State and Territorial Health Officials (ASTHO) and the National Association of City and County Health Officials (NACCHO), CDC completed a retrospective evaluation<sup>60</sup> of multi-sector initiatives in 42 communities. Initial findings from year one demonstrated improved health behaviors, clinical outcomes, overall health and wellness, and decreased health care utilization and cost. In year two, a community of practice was established and facilitated information sharing of evidence-based and evidence-informed strategies. Results from an in-depth evaluation of a subset of the initial communities will be available in early FY 2024. In FY 2021, CDC awarded funds to 20 recipients and awarded funds to an additional 36 recipients to continue to develop accelerator action plans to improve health and resilience among vulnerable populations through addressing challenges related to the built environment (16 recipients), food security (20 recipients), clinical-community linkages (20 recipients), social connectedness (21 recipients), and tobacco free policies (2 recipients). Community leadership teams informed the action planning process. Recipients were geographically diverse with no more than two in an HHS region and focused on a variety of populations, including African American, Asian American and Pacific Islander, Native Americans, rural, lower income, and youth. For example, the Arkansas Department of Health, among the first group of recipients, used their award to establish partnerships across multiple sectors to improve access to health care and address food insecurities and transportation barriers in Crittenden County, where more than 40% of adults and 60% of children live below 200% of the federal poverty line.

### Budget Request

CDC's FY 2024 budget request of **\$100,000,000** for Social Determinants of Health, is **\$92,000,000** above the FY 2023 enacted level. In addition to continuing the support for communities to develop SDOH accelerator action plans, activities will focus on funding community demonstration projects to test the implementation and evaluation of action plans, including but not limited to, previously funded accelerator plans recipients, and building the evidence base through applied research, data collection, and surveillance.

CDC has developed tools that will support community efforts to address factors related to improving health outcomes including a public web-based portal to share the lessons learned from accelerator recipients' planning efforts including success stories, example accelerator plans, and technical assistance tools.

Additionally, CDC will continue to leverage and coordinate efforts currently underway across the agency to ensure that drivers of health inequity are addressed in our scientific and intervention planning, implementation, and evaluation activities. COVID-19 highlighted the importance of clinical-community linkages, particularly

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<sup>60</sup> <https://www.cdc.gov/chronicdisease/programs-impact/sdoh/community-pilots.htm>

among groups historically underrepresented in medical professions, racial and ethnic minority populations, and people in economically disadvantaged circumstances. The FY 2021 Community Health Workers for COVID Response and Resilient Communities (CCR) cooperative agreement is working to improve community health workers' knowledge, skills, and long-term integration into organizations and care teams that improve health outcomes among groups affected by systemic inequities. Additional resources will leverage these efforts and other CDC programs addressing health equity to implement sustainable activities. This program aligns with Executive Order 13985<sup>61</sup> by supporting increased investment in health equity principles, policies, and approaches to better serve members of historically underrepresented and underserved communities.

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<sup>61</sup> <https://www.govinfo.gov/content/pkg/FR-2021-01-25/pdf/2021-01753.pdf>

## Safe Motherhood and Infant Health Budget Request

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For over 50 years, CDC has been dedicated to promoting optimal and equitable safe maternal and infant health, and improving the lives of women, children, and families through surveillance, science, and partnerships.

### Budget Request

CDC's FY 2024 budget request of **\$164,000,000** for Safe Motherhood and Infant Health is **\$56,000,000** above the FY 2023 enacted level. Funding will support CDC activities related to building the national infrastructure for maternal mortality prevention, including Maternal Mortality Review Committees (MMRCs), Perinatal Quality Collaboratives (PQCs), CDC Levels of Care Assessment Tool (LOCATE), and the Hear Her Campaign.

Overall, CDC is working to strengthen and expand key public health prevention infrastructure to improve maternal and infant health. CDC has made rapid progress with MMRCs to standardize definitions and data collection processes to ensure there is robust data on pregnancy-related mortality that can drive action and will be expanding to fund additional states in FY 2024. CDC will expand our financial and technical support of PQCs in FY 2024 to assist additional states in implementing quality improvement and increasing equity in care and outcomes. Finally, CDC will expand support for surveillance of SUID and SDY to facilitate data timeliness, completeness, and analysis and implement support for data-informed prevention efforts. These investments provide the opportunity to optimize the public health infrastructure to support the advancement of maternal and infant health in the United States. It also enables work toward eliminating persistent racial/ethnic and geographic disparities in care and outcomes by using data to drive implementation and evaluation of policies and programs to improve maternal and infant health.

**Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE Maternal Mortality)**<sup>62</sup>: CDC supports 39 awards in 40 states and jurisdictions to coordinate and manage Maternal Mortality Review Committees (MMRCs) to identify, review, and characterize pregnancy-related deaths and identify prevention opportunities. CDC has worked to strengthen and standardize processes to ensure that the data and recommendations from MMRCs are robust, actionable, and communicated. In September 2022, CDC released a data brief highlighting findings from MMRCs in 36 states. The most frequent causes of pregnancy-related deaths varied by race and ethnicity, over 50% occurred between 7 days and 1 year after the end of pregnancy, and over 80% of the pregnancy-related deaths were determined to be preventable.

Additionally, ERASE Maternal Mortality has supported states in improving their MMRC processes. For example, a notable increase in timeliness of identification of pregnancy-associated deaths occurred across all funded jurisdictions participating in ERASE Maternal Mortality - 15% increase in the average percentage of pregnancy-associated deaths identified within 12 months of the date of death – the critical first step in committee review processes. CDC has provided focused technical assistance to ensure that MMRCs have both clinical and non-clinical members to strengthen an MMRC's ability to fully understand the circumstances of a woman's life and death. CDC also partners with the HHS Office of Minority Health and others to build a health equity framework for maternal mortality review and prevention. This includes a web portal for MMRCs to display "Community Vital Signs" dashboards with contextual population and community-level indicators (e.g., obstetricians or nurse midwives per capita, unmet need for substance use, and poverty rate) to help identify community and systems-level contributing factors and assets.

**Perinatal Quality Collaboratives (PQC)**<sup>63</sup>: In 2022, CDC published a new five-year NOFO providing support to 27 state PQCs and to the National Network of PQCs to improve quality of care and health outcomes around pregnancy and childbirth. State-based PQCs are networks of hospitals, patients, public health, and other stakeholders providing opportunities for collaborative learning and quality improvement science to achieve

<sup>62</sup><https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/index.html>

<sup>63</sup><https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pqc.htm>

systems-level change. As state MMRCs identify recommendations to improve maternal outcomes, PQC are a key partner in implementing these recommendations more broadly across health facility networks and creating strong clinical-community linkages. With CDC support, PQC have contributed to measurable improvements in postpartum outcomes.<sup>64</sup>

**Hear Her:**<sup>65</sup> CDC's Hear Her campaign is a national effort to raise awareness on the urgent maternal warning signs during and after pregnancy and to improve communication between patients and their providers. Since its launch in August 2020, CDC's Hear Her campaign has received over 1.3 million unique visitors to the Hear Her website, with over 1.8 million page views. In addition, the campaign has garnered over 257 million impressions from digital ads and social media, and over 975 earned media mentions. In FY 2022, Hear Her released a new suite of materials for health care professionals.<sup>66</sup> In FY 2023, CDC, in partnership with HHS Office of Minority Health, released a new segment of the campaign to amplify the voices of American Indian and Alaska Native people and to work to improve maternal health outcomes. Evaluation of the campaign overall demonstrates it is raising awareness of urgent maternal warning signs and encouraging people to seek more information and talk to their healthcare providers about concerns.<sup>67</sup>

**SUID and SDY Case Registry:**<sup>68</sup> About 3,400 babies in the United States die suddenly and unexpectedly each year. As part of the Sudden Unexpected Infant Death (SUID) and Sudden Death in the Young (SDY) Case Registry, CDC supports SUID monitoring programs in 22 states and jurisdictions, covering about 1 in 3 SUID cases in the United States. Participating states and jurisdictions use data about SUID trends and circumstances to develop strategies to reduce future deaths. With the increase in FY 2022, CDC provided support to the National Network of Public Health Institute to support local and state jurisdictions not currently participating in the SUID and SDY Case Registry to address barriers and build capacity for surveillance so they can be better positioned to participate in the Case Registry in the future.

**Monitor Assisted Reproductive Technology (ART):**<sup>69</sup> While ART relieves the burden of infertility for many couples, it presents a significant public health challenge due to the substantial risk for multiple birth delivery, which is associated with poor maternal and infant health outcomes. To monitor the safety and effectiveness of procedures in the United States, through the National ART Surveillance System, CDC collects data from every fertility clinic in the United States that performs ART and calculates standardized pregnancy success rates for each clinic.

**Pregnancy Risk Assessment Monitoring System (PRAMS):**<sup>70</sup> CDC supports 46 states, the Washington, D.C., New York City, Northern Mariana Islands, and Puerto Rico participating in PRAMS, representing approximately 81% of all U.S. live births. PRAMS provides data not available from other sources and is used to measure progress towards goals in improving the health of mothers and infants. Researchers use PRAMS data to investigate emerging issues in the field of reproductive health. State, territory, and local governments use PRAMS data to plan and review programs and policies aimed at reducing health problems among mothers and babies. PRAMS identifies behavioral and health status trends and risk factors for adverse outcomes, monitors access to care and services, and measures progress in reducing pregnancy- and childbirth-associated health problems.

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<sup>49</sup> <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pqc/working-together-improve-maternal-outcomes/index.html>

<sup>50</sup> [www.cdc.gov/hearher](http://www.cdc.gov/hearher)

<sup>51</sup> [www.cdc.gov/hearher](http://www.cdc.gov/hearher)

<sup>67</sup> [www.cdc.gov/hearher](http://www.cdc.gov/hearher)

<sup>68</sup> <https://www.cdc.gov/sids/case-registry.htm>

<sup>69</sup> <https://www.cdc.gov/reproductivehealth/drh/activities/art.htm>

<sup>70</sup> <https://www.cdc.gov/prams/index.htm>

**Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM) Grant Awards**

(dollars in millions)	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
	<b>Final</b>	<b>Enacted</b>	<b>President's Budget</b>
Number of Awards	40	54	62
- New Awards	10	14	8
- Continuing Awards	30	40	54
Average Award	\$0.355	\$0.465	\$0.494
Range of Awards	\$0.15–\$553	\$0.225–\$0.860	\$0.225–\$0.935
<b>Total Awards</b>	<b>\$14.2</b>	<b>\$25.1</b>	<b>\$30.7</b>

## Cancer Prevention and Control Budget Request

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Cancer affects every age group and is responsible for more years of life lost than all other causes of death combined. Cancer detection and advances in treatment help reduce deaths, but disparities in prevention, screening, early detection, and quality of care persist. As the U.S. population ages, more people will be at risk for cancer. CDC works with state, tribal, and territorial health departments, and nongovernmental organizations to improve prevention and early detection, including access to screenings and other services.

### Budget Request

CDC's FY 2024 budget request of **\$531,074,000** for Cancer Prevention and Control is **\$121,525,000** above the FY 2023 enacted level. Increased resources will support CDC activities that are part of the Administration's Cancer Moonshot Initiative. In FY 2024, the budget request includes dedicated funding to support the following programs.

#### **National Breast and Cervical Cancer Early Detection Program (NBCCEDP)**

CDC's National Breast and Cervical Cancer Early Detection Program (NBCCEDP) provides screening and diagnostic services to uninsured and underinsured women in 50 States, Washington, D.C., 13 tribes/tribal organizations, Puerto Rico, and five U.S. Affiliated Pacific Islands. Since 1991, NBCCEDP has served over 6.1 million women and diagnosed 75,961 cases of invasive breast cancer, 15.7 cases of invasive cervical cancer, and 235,396 premalignant cervical lesions. Funded programs implement strategies to improve services that increase the number of individuals completing screening processes, particularly among people never or rarely screened or who are in a higher-risk age bracket. In FY 2024, in support of the Cancer Moonshot Initiative, the additional funding requested will support increased funding to all 70 awardees by an average of approximately \$740,000 per awardee. With this investment CDC estimates awardees can serve an additional 142,000 women and detect an additional 2,550 invasive breast and cervical cancers, including precancerous cervical lesions.

#### **Colorectal Cancer Control Program (CRCCP)**

CDC's Colorectal Cancer Control Program (CRCCP)<sup>71</sup> funds 35 recipients: 20 states, eight universities, two tribal organizations, and five other organizations to implement evidence-based interventions in primary care clinics to increase CRC screening rates. In 2020, the median screening rate fell to 50 percent due to COVID-19 related challenges, but some CRCCP recipients continued showing improvements in screening rates. For example, during the pandemic, one partner FQHC serving a large Hispanic and uninsured population increased its screening rate from 13% to 21% over 6 months. The FQHC modified its electronic medical record system to quickly order fecal immunochemical tests that can be completed through the mail. In FY 2024, in support of the Cancer Moonshot Initiative, the additional funding requested will support increased funding to all 35 awardees by an average of approximately \$300,000 per awardee. With this investment, CDC estimates the program could screen up to an additional 250,000 people for colorectal cancer over 5 years. CDC will also support the goals of the Cancer Moonshot Initiative through its *Screen for Life: National Colorectal Cancer Action Campaign*<sup>72</sup>, which informs men and women who are 45 and older about the importance of getting screened for colorectal cancer regularly.

#### **National Program of Cancer Registries**

CDC's National Program of Cancer Registries (NPCR)<sup>73</sup> funds 46 states, Washington, D.C., Puerto Rico, the U.S. Pacific Island jurisdictions, and the U.S. Virgin Islands to collect data about cancer cases and deaths for 97 percent of the population. NPCR coordinates with the National Cancer Institute (NCI) to produce the U.S. Cancer

<sup>71</sup> <https://www.cdc.gov/cancer/crccp/index.htm>

<sup>72</sup> <https://www.cdc.gov/cancer/colorectal/sfl/>

<sup>73</sup> <https://www.cdc.gov/cancer/npcr/index.htm>

Statistics (USCS), which provides cancer data on 100 percent of the U.S. population. CDC provides USCS data through a public use database and a data visualization tool allowing users to customize cancer statistics at national, state, county, and smaller geographic levels. NPCR, a priority participant in CDC's accelerated data modernization initiative, is developing a single cloud-based computing platform shared by all central cancer registries to improve efficiency, reduce costs, and deliver more accurate, comprehensive cancer statistics in real time. Data will improve the ability to define and monitor burden; identify incidence trends, investigate cancer treatment patterns, and evaluate cancer prevention effectiveness. Currently, 90 percent of the cancer registries are receiving pathology data in real time from Quest Laboratories. Another 5 national labs are in the process of submitting data using the Association of Public Health Laboratories cloud platform. In FY 2024, in support of the Cancer Moonshot Initiative, the additional funding requested will support increased funding to all 50 awardees by an average of approximately \$270,000 per awardee. With this investment CDC will fully implement the Cancer Surveillance Cloud-Based Computing Platform and increase real-time reporting of cancer cases in up to 25 central cancer registries.

### **National Comprehensive Cancer Control Program**

CDC's National Comprehensive Cancer Control Program (NCCCP)<sup>74</sup> funds 50 states, Washington, D.C., seven tribal organizations, and eight U.S. territories and Pacific Island Jurisdictions. NCCCP supports policy and system improvements advancing cancer prevention, early detection and treatment, survivor support, and health equity. Recipients convene coalitions to create jurisdiction-specific plans supporting cancer prevention and reduction strategies. Each year, NCCCP recipients collaborate with over 2000 partners (with a median of 27 partners per awardee) to promote healthy behaviors, increase cancer screening, enhance cancer survivor support, and more. Recipients work with government, health care, and nonprofit organizations. In FY 2024, in support of the Cancer Moonshot Initiative, CDC will support: 1. Supplemental funding for awardees to support patient navigation activities and support groups for cancer survivors; 2. Support up to 10 Centers of Excellence to use electronic medical records for surveillance and clinical management of cancer survivors; 3. Support 10-15 awardees to address barriers to screening and follow-up among populations that were disproportionately impacted by COVID-19; and 4. Increase support and resources for pediatric cancer survivors and their caregivers, to include: interventions to reduce disparities in pediatric cancer care; increase awareness of the cognitive, physical, and emotional impact of childhood cancer; and ensure appropriate community-clinical linkages to support services are available.

### **Breast Cancer Awareness for Young Women**

While breast cancer mainly affects older women, nine percent of all breast cancers in the United States are reported in women younger than age 45. CDC's *Bring Your Brave* campaign<sup>75</sup> is a digital advertising and social media campaign that shares the stories of women affected by breast cancer, prevention information, women's own history and family history of cancer, and health care professionals' guidance on understanding and managing their risk. The *Bring Your Brave* campaign has resulted in 180 million impressions across social media, blogs, search engines, digital display, and earned media; nearly 6.8 million video views, nearly 1.7 million social media engagements and over 1.9 million visits to *Bring Your Brave* web pages. CDC also provides free continuing medical education (CME) courses educating health care providers on breast cancer diagnosis frequency in women under age 45. In FY 2024, in support of the Cancer Moonshot Initiative, CDC will develop additional campaign resources for survivors and their health care providers regarding topics such as mental health, fertility, and psychosocial issues; expand the reach of the *Bring Your Brave* campaign messages using entertainment programs and platforms; and increase paid media outreach on various social and digital media platforms.

<sup>74</sup> <https://www.cdc.gov/cancer/ncccp/index.htm>

<sup>75</sup> [https://www.cdc.gov/cancer/breast/young\\_women/bringyourbrave/about.htm](https://www.cdc.gov/cancer/breast/young_women/bringyourbrave/about.htm)

## Johanna’s Law (Gynecologic Cancer Education and Awareness Act of 2005)

CDC’s *Inside Knowledge: About Gynecologic Cancer*<sup>76</sup> campaign educates health care providers and women of all ages, races, and ethnic groups—especially individuals 35 and older – on the five main types of gynecologic cancer: cervical, ovarian, uterine, vaginal, and vulvar, through free videos, graphics, and printed materials for public use. *Inside Knowledge (IK)* has generated more than 9 billion impressions across search engines, social media, digital display, paid digital advertising, and earned media. These ads have amassed over 32 million clicks to CDC resources. In FY 2024, in support of the Cancer Moonshot Initiative, CDC will increase awareness and education about HPV and HPV-associated cancers using paid media; and develop new IK campaign materials that address gaps in knowledge by women and providers.

### Ovarian Cancer

Ovarian cancer is the second most common gynecologic cancer and the leading cause of death among cancers of the female reproductive system in the United States; each year, about 19,700 new cases of ovarian cancer and over 13,700 deaths are reported. CDC conducts research to better understand geographic patterns of care and disparities among women with ovarian cancer by age, race, and urbanicity/rurality. In FY 2024, in support of the Cancer Moonshot Initiative, CDC will support NPCR awardees to conduct feasibility assessments exploring prognostic factors specific to ovarian cancer, genetic testing, or treatment-related data; and conduct a pilot study on data capture for genetic testing of Hereditary Breast and Ovarian Cancer Syndrome.

### Prostate Cancer

CDC works to improve prostate cancer data quality in cancer registries, especially information about the grade and stage at the time of diagnosis, patterns of care, and race and ethnicity of affected men. CDC also sponsors measures of prostate cancer testing on national surveys, and research on patient and provider knowledge and awareness of prostate and monitors prostate cancer activities in local cancer control plans. CDC developed interactive decision aids featuring virtual human simulation (*Talk to Nathan*<sup>77</sup>) to help patients navigate cancer screening and treatment options, and to help health care providers aid patients with these decisions.<sup>78,79</sup> In FY 2024, in support of the Cancer Moonshot Initiative, CDC will disseminate education materials and tools to men eligible for prostate cancer screening, prostate cancer patients, survivors, and their caregivers; fund support groups for men with prostate cancer and prostate cancer survivors; and support studies to better understand shared decision-making and disparities related to prostate cancer risk, screening and treatment.

### Skin Cancer

Skin cancer is the most common cancer in the United States. CDC uses data, science, and public health programs—including a new visualization tool, the *Melanoma Dashboard*<sup>80</sup>—to empower individuals and communities to adopt best practices to reduce cancer risk. In FY 2024, in support of the Cancer Moonshot Initiative, CDC will enhance communication materials on how different community sectors can support sun safety in outdoor community spaces; and enhance data collection on sunburn, sunscreen use, and indoor and outdoor tanning to inform skin cancer prevention efforts at the state and local level.

<sup>76</sup> <https://www.cdc.gov/cancer/gynecologic/knowledge/index.htm>

<sup>77</sup> <https://www.cdc.gov/cancer/prostate/talk-to-nathan/>

<sup>78</sup> <https://simulations.kognito.com/PROS/PatientScreening/>

<sup>79</sup> <https://simulations.kognito.com/PROS/PatientTreatment/>

<sup>80</sup> <https://ephtracking.cdc.gov/Applications/melanomadashboard/>

## Cancer Survivorship Resource Center

As of January 2022, there were an estimated 18.1 million cancer survivors in the United States. The number of cancer survivors is projected to increase to 24.4 million by 2032. CDC prioritizes health issues and needs of cancer survivors by conducting epidemiologic and applied research and surveillance and supporting programs for survivors. An evaluation of the Resource Center led to the development of *Healthy Living Guides and Survivor Stories*<sup>81</sup> by connecting survivors to informative and inspirational resources. It also showed the need for specific and tailored resources on patient physical and mental health, navigating cancer care, and care coordination. Over 80% of National Comprehensive Cancer Control Program (NCCCP) survey respondents indicated the importance of providing their partners and constituents with these resources. In FY 2024, in support of the Cancer Moonshot Initiative, CDC will increase funding for Resource Center awardees to expand strategies focused on improving the quality of life for cancer survivors and their caregivers.

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<sup>81</sup> <https://www.cdc.gov/cancer/survivors/healthy-living-guides/index.htm>

## School Health Budget Request

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CDC's Healthy Schools Program<sup>82</sup> plays a unique role in bringing together the education and public health sectors to support physical education, physical activity and healthy nutrition, management of chronic conditions, emotional wellbeing, and healthy and supportive school environments. CDC's Healthy Schools program funds State Education Agencies (SEAs) who work with local communities to implement evidence-based, comprehensive school health policies, practices, and programs designed to improve student and staff health and advance equity using the comprehensive Whole School Whole Community Whole Child (WSCC) model.<sup>83</sup> Healthy Schools also funds six national non-governmental organizations to support state education agencies, local school districts, schools, parents, and community partners. Each of these national organizations have specialized knowledge and skills and provide professional development and technical assistance to improve the health and wellbeing of students and staff. CDC tools and programs help 132,000 schools in the United States, reaching 78 million students. In addition, CDC tools and training currently reach approximately 40,000 school staff annually providing education and resources that promote and support the health and wellbeing of both staff and students.

### Budget Request

CDC's FY 2024 budget request of **\$50,000,000** for School Health is **\$30,600,000** above the FY 2023 enacted level. Currently, CDC funds 16 state education agencies and in FY 2024, CDC plans to implement the Healthy Schools program in all states including mental health, resilience, and emotional well-being.

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<sup>82</sup> <https://www.cdc.gov/healthyschools/index.htm>

<sup>83</sup> <https://www.cdc.gov/healthyschools/wsc/index.htm>

## Tobacco Prevention and Control Budget Request

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Commercial tobacco<sup>84</sup> use is the leading cause of preventable disease, disability, and death in the United States.<sup>85</sup> Each year, nearly half a million U.S. adults die prematurely due to smoking-related disease, including exposure to secondhand smoke.<sup>30</sup> In addition, over 16 million U.S. adults live with a serious illness caused by smoking.<sup>30</sup> Smoking harms nearly every organ of the body and compromises the immune system.<sup>86</sup> Further, cigarette smoking cost the United States more than \$600 billion in 2018.<sup>87</sup>

In 2020, an estimated 47.1 million U.S. adults (one in five adults) reported currently using any tobacco products.<sup>88</sup> Though progress has been made in reducing cigarette smoking prevalence over time, disparities in tobacco use persist with tobacco products disproportionately marketed to certain population groups.<sup>89</sup> Progress in prevention and control efforts is also challenged by the continued diversification of the tobacco product landscape, including e-cigarettes, and other emerging flavored tobacco products. In 2022, an estimated 3.08 million U.S. youth reported currently using any tobacco product; 2.55 million of these youth reported currently using e-cigarettes.<sup>90</sup> In FY 2023, CDC focused increased resources on preventing youth tobacco use and eliminating health disparities.

### Budget Request

CDC's FY 2024 budget request of **\$257,500,000** for Tobacco Prevention and Control, including **\$133,100,000** from the Prevention and Public Health Fund (PPHF), is **\$11,000,000** above the FY 2023 enacted level. Increased resources will support CDC activities that are part of the Administration's Cancer Moonshot Initiative. In FY 2024, CDC will increase tobacco prevention, control, and surveillance efforts, including addressing tobacco use among youth and; will accelerate smoking cessation efforts by airing the Tips campaign for more weeks with heaviest rotation in communities with the highest smoking prevalence, by increasing support to the National Tobacco Control Programs to expand Tobacco Quitline services, and by expanding community-based cessation programs in areas with the highest tobacco product use rates.

### **National Tobacco Control Program**

CDC provides funding and technical support to 50 states, Washington, D.C., eight U.S. territories, eight national networks, and 26 tribal organizations through the National Tobacco Control Program<sup>91</sup> to implement efforts that reduce tobacco-related diseases, disabilities, and deaths. As part of the National Tobacco Control Program, CDC works with grantees to address youth e-cigarette use and tobacco-related disparities. This includes supporting and implementing policies to reduce tobacco use initiation and collaborating with organizations, health care systems, and networks reinforcing tobacco-free norms among youth and young adults. Recipients also emphasize strategies to advance health equity by identifying and reducing statewide and community-based disparities, implementing commercial tobacco control policies, and evaluating their impact on reducing disparities.

<sup>84</sup> References to tobacco refer to commercial tobacco and not the sacred and traditional use of tobacco by some American Indian communities.

<sup>85</sup> U.S. Department of Health and Human Services. *The Health Consequences of Smoking - 50 Years of Progress: A Report of the Surgeon General*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention. 2014.

<sup>86</sup> CDC. COVID-19. People with Certain Medical Conditions. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>.

<sup>87</sup> Centers for Disease Control and Prevention. Economic Cost Estimates Associated with Cigarette Smoking. 2022.

<sup>88</sup> Cornelius ME, Wang TW, Jamal A, Loretta C, Neff L. Tobacco Product Use Among Adults - United States, 2019. *Morbidity and Mortality Weekly Report (MMWR)*. November 2020.

<sup>89</sup> Cornelius ME, Loretan CG, Wang TW, Jamal A, Homa DM. Tobacco Product Use Among Adults — United States, 2020. *MMWR Morb Mortal Wkly Rep* 2022;71:397–405.

<sup>90</sup> Park-Lee, E; Ren, C; Cooper, M; Cornelius, M; Jamal, A; Cullen, K. Tobacco Product Use Among Middle and High School Students — United States, 2022. *MMWR Morb Mortal Wkly Rep* 2022;71: 1429-1435.

<sup>91</sup> [https://www.cdc.gov/tobacco/stateandcommunity/tobacco\\_control\\_programs/index.htm](https://www.cdc.gov/tobacco/stateandcommunity/tobacco_control_programs/index.htm)

## National Tobacco Education Campaign

Seven out of 10 U.S. adults who smoke cigarettes want to quit smoking.<sup>92</sup> CDC's *Tips From Former Smokers*® (*Tips*®) campaign, the first federally funded national tobacco education campaign, celebrated its 10<sup>th</sup> year on air in 2022. The *Tips* campaign profiles real people living with serious long-term health effects due to smoking and secondhand smoke exposure. Between 2012-2018, approximately one million adults who smoked cigarettes quit because of CDC's *Tips* campaign; *Tips* also helped prevent an estimated 129,000 early deaths and save \$7.3 billion in health care sector costs.<sup>93</sup> The *Tips* campaign was also associated with health care cost savings of \$11,400 per lifetime quit, and \$5,300 per quality-adjusted life year gained. For every \$3,800 spent on the *Tips* campaign between 2012-2018, CDC prevented an early death.<sup>94</sup> In 2022, the *Tips* campaign also placed additional media on a variety of focused channels, including TV, print, and digital to reach African American, Hispanic, Asian, American Indian/Alaska Native, and LGBTQ+ audiences. CDC also periodically ran promotions for free nicotine replacement therapy (NRT) on TV ads as part of the campaign.

## Youth Tobacco Product Use

CDC conducts and coordinates surveillance, laboratory, and evaluation activities related to tobacco product use, including e-cigarette use, among youth. For example, CDC implements the National Youth Tobacco Survey (NYTS), in collaboration with FDA, to provide national data on youth tobacco product use. These data are key to designing, implementing, and evaluating youth tobacco prevention and control programs.

In 2022, CDC released new social media ads directed to educators, highlighting the risks of youth e-cigarette use. The media placements ran for 26 weeks and achieved more than 40 million impressions, and over 265,000 visits to CDC's e-cigarette web pages. The goal of the campaign was to encourage middle and high school educators, including teachers, coaches, and on-site school administrators, to speak with their students about the risks of youth e-cigarette use, including negative impacts on youth mental health. The national media placements consist of paid search ads and social media platforms. In addition, CDC in partnership with the American Academy of Pediatrics is working to support the development of youth cessation resources and the creation of digital tools geared toward pediatric health care clinicians. In 2022, a new training resource was released to support clinicians in adopting the "Ask – Counsel – Treat" (A.C.T.) cessation counseling model<sup>95</sup> into clinical practice.

<sup>92</sup> Babb S, Malarcher A, Schauer G, et al. Quitting Smoking Among Adults — United States, 2000–2015. *MMWR Morb Mortal Wkly Rep* 2017;65:1457–1464.

<sup>93</sup> Murphy-Hoefer R, Davis KC, King BA, et al. Association between the Tips From Former Smokers Campaign and Smoking Cessation Among Adults, United States, 2012–2018. *Preventing Chronic Disease* 2020;17:200052.

<sup>94</sup> Shrestha SS, Davis K, Mann N, et al. Cost Effectiveness of the Tips from Former Smokers Campaign—United States, 2012–2018. *American Journal of Preventive Medicine*; 2021.

<sup>95</sup> <https://www.aap.org/en/patient-care/tobacco-control-and-prevention/youth-tobacco-cessation/tobacco-use-considerations-for-clinicians/>

## Diabetes Budget Request

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Diabetes affects about 37.3 million Americans, including 283,000 children and adolescents. Each year 1.4 million Americans aged 18 or older are newly diagnosed. CDC estimates that 96 million American adults—more than one in three—have prediabetes, a serious health condition that increases the risk of developing type 2 diabetes, heart disease, and stroke. In addition, medical costs are twice as high and productivity costs are 13% higher in people with diabetes compared to those without.<sup>96</sup> Each year the cost of diabetes is approximately \$327 billion due to medical costs and reduced productivity. The ongoing COVID-19 pandemic has further underscored the importance of type 2 diabetes prevention and diabetes management. For example, hospitalizations and severe COVID-19 outcomes were more common among people with the highest hemoglobin A1c (HbA1c) levels (>9%).<sup>97</sup> Communities are more resilient when they are healthier and when chronic diseases, such as diabetes, are well-managed.

### Budget Request

CDC's FY 2024 budget request of **\$155,129,000**, including **\$52,275,000** from the Prevention and Public Health Fund (PPHF), for Diabetes is level with the FY 2023 enacted level. In addition, the FY 2024 request includes **\$37,300,000** for the National Diabetes Prevention Program, which is level with the FY 2023 enacted level.

### **National Diabetes Prevention Program (National DPP)**

CDC implements the National Diabetes Prevention Program (National DPP),<sup>98</sup> a scientifically proven lifestyle change program to prevent or delay the onset of type 2 diabetes in adults at high risk. National DPP is a partnership of public and private organizations working to build a nationwide delivery system focused on healthy eating, physical activity, and stress management. According to CDC estimates, administering the National DPP lifestyle change program to a participant who completes all 22 sessions of the year-long program costs \$500. By covering the program, payers can avoid the high cost of type 2 diabetes through delaying or preventing the onset of type 2 diabetes among covered individuals.<sup>99</sup> CDC continues to expand the reach and coverage of the program to include all payers. Medicare started covering the program in 2018, a growing number of state Medicaid agencies offer coverage, and so do an increasing number of commercial and employer payers. CDC works with the Centers for Medicare & Medicaid Services (CMS) to support Medicare coverage for the National DPP lifestyle change program, and data show that adults aged 65 years or older participating in the National DPP lifestyle change program achieve the 5% weight loss goal at a higher rate than the population under age 65.

In FY 2024, CDC will expand technical assistance and training for over 2,200 CDC-recognized program delivery organizations, employers, and other stakeholders through the National DPP Customer Service Center. CDC will also monitor National DPP delivery organizations through the CDC Diabetes Prevention Recognition Program and support continued CMS expansion of the Medicare Diabetes Prevention Program as a covered service for Medicare beneficiaries with prediabetes. Finally, CDC will complete the launch of the National DPP Operations Center to enable partners to use data from multiple sources to improve the program.

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<sup>96</sup> Park J, Bigman E, and Zhang P. [Productivity Loss and Medical Costs Associated With Type 2 Diabetes Among Employees Aged 18–64 Years With Large Employer-Sponsored Insurance](#). *Diabetes Care*. November 2022; 45 (11): 2553–2560.

<sup>97</sup> Jackson SL, Block JP, Rolka, DB, et al. COVID-19 Outcomes Stratified by Control Status of Hypertension and Diabetes: Preliminary Findings From PCORnet, U.S. *AJPM Focus*. September 2022. DOI: 10.1016/j.focus.2022.100012

<sup>98</sup> <https://www.cdc.gov/diabetes/prevention/index.html>

<sup>99</sup> <https://coveragetoolkit.org/cost-value-elements/>

## **Cross-Cutting Cooperative Agreements to Prevent Diabetes and Reduce Diabetes-Related Complications**

In FY 2022, CDC funded five cooperative agreements to support type 2 diabetes prevention and diabetes management and reduce diabetes-related complications.<sup>100,101</sup> These programs develop, implement, and evaluate evidence-based strategies to manage diabetes: prevent or delay type 2 diabetes in populations with high rates of diabetes; and build the National DPP infrastructure in communities needing it most.

Since 2017, CDC has awarded over \$84 million to 10 national organizations to expand access to the National DPP lifestyle change program.<sup>102</sup> As of August 2022, these organizations were working with over 164 affiliate program delivery sites to implement the National DPP lifestyle change program in 34 states, Washington D.C., and four U.S.-Affiliated Pacific Islands. The national organizations worked with employers and payers to cover the National DPP lifestyle change program for over 6 million people and helped 42 CDC-recognized National DPP delivery organizations in underserved areas become Medicare DPP suppliers. Participants who attended eight or more sessions in the first six months and stayed in the program for at least nine full months had an average weight loss of 6.1% – greater than the desired program goal.

In FY 2024, CDC anticipates funding a diverse group of national, state, and local organizations and tribes to prevent or delay onset of type 2 diabetes among adults at high risk and to improve self-care practices, quality of care, and early detection of complications among people with diabetes.

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<sup>100</sup> <https://www.cdc.gov/diabetes/programs/stateandlocal/funded-programs/dp18-1815.html>

<sup>101</sup> <https://www.cdc.gov/diabetes/programs/stateandlocal/funded-programs/dp18-1817.html>

<sup>102</sup> <https://www.cdc.gov/diabetes/programs/stateandlocal/funded-programs/dp17-1705.html>

## Oral Health Budget Request

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Oral health is essential to overall health and well-being<sup>103</sup>. Oral health affects the ability to eat, speak, smile, and show emotions, as well as impacts self-esteem, school performance, and attendance at work or school. Oral diseases can lead to pain, inflammation, and infections that can spread in the body.

### Budget Request

CDC's FY 2024 budget request of **\$20,250,000** for Oral Health is level with the FY 2023 enacted level. In FY 2024, CDC will continue to support states and territories to implement proven interventions to reduce cavity and oral disease rates and to integrate oral health into chronic disease prevention programs and medical care services.

Cavities are one of the greatest unmet health treatment needs among all age groups. Among children aged six to eight years, over half (52 percent) have had a cavity in their primary (baby) teeth. Children from low-income households are twice as likely to have untreated cavities as children from higher-income households.<sup>104</sup> In adults aged 20 to 64, 1 in 4 currently has at least one untreated cavity, and for those aged 65 or older it is 1 in 6.<sup>45</sup> CDC encourages the use of community water fluoridation to benefit all community members, regardless of age, education, or income by reducing the rates of cavities and improving oral health. CDC also promotes greater use of school dental sealant programs targeted toward schools with children less likely to receive private dental care, an intervention shown to decrease disparity in access to care among children from low-income households.<sup>105</sup>

Nearly 4 in 10 adults had a past-year medical visit and no dental visit, medical visits may be the only opportunity to provide oral health education and referrals to adults. CDC continued its partnership with the American Academy of Pediatrics to test and promote *Protect Tiny Teeth*, an oral health toolkit for medical providers to raise awareness about the importance of oral health as part of prenatal care. AAP has developed implementation guides for using these resources in maternity and pediatric care settings.

CDC serves as the national leader in infection prevention and control for the dental community, developing and promoting guidelines, tools and resources, trainings, and a mobile application to increase adherence to guidelines. CDC also conducts surveillance activities that include research and translation of national and state data on oral disease burden, access to dental care, preventive services, and cost-effectiveness of preventive interventions. CDC hosts a dental public health specialty residency program, which produces skilled dental public health specialists who can work in various health settings.

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<sup>103</sup> National Institutes of Health. Oral Health in America: Advances and Challenges. Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Institute of Dental and Craniofacial Research, 2021.

<sup>104</sup> Centers for Disease Control and Prevention. Oral Health Surveillance Report: Trends in Dental Caries and Sealants, Tooth Retention, and Edentulism, United States, 1999–2004 to 2011–2016. US Dept of Health and Human Services; 2019.

<sup>105</sup> Centers for Disease Control and Prevention. Vital signs: dental sealant use and untreated tooth decay among US school-aged children. MMWR. 2016;65(41):1141-1145.

## Heart Disease and Stroke Budget Request

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In 2020, over 931,000 people died of cardiovascular diseases (CVD), which include heart disease and stroke. CVD deaths account for one-third of all U.S. deaths—more than COVID-19, cancer and unintentional injuries combined. Hypertension, or high blood pressure, is a major cause of CVD, putting 116 million or 1 in 2 adults in the United States at risk for largely preventable heart attacks, strokes, heart failure, kidney disease, and pregnancy complications.

The United States loses around \$377 billion annually in health care costs, productivity, and premature death due to CVD; \$1 of each \$7 in health care costs is spent on CVD. The cost could reach \$1.1 trillion per year by 2035. Pre-existing CVD has also been shown to increase risk for severe COVID-19 illness or death and having COVID-19 also substantially increases a person's risk of CVD. The pandemic resulted in a "health debt" of delayed or missed CVD care the impact will become clear in the years ahead.

### Budget Request

CDC's FY 2024 budget request of **\$155,105,000**, including **\$57,075,000** from the Prevention and Public Health Fund (PPHF), for Heart Disease and Stroke is level with the FY 2023 enacted level. In FY 2024, CDC will support states, localities, tribes, and territories to use interventions to control risk factors and prevent and manage heart disease and stroke. CDC will also conduct surveillance and applied research to understand how best to reduce the burden and risk factors for heart disease and stroke. In addition, CDC will continue leading Million Hearts® to prevent cardiovascular events in five-year intervals.

### **State and Local Heart Disease and Stroke Cooperative Agreements**

CDC funds 50 states, Washington, D.C., and some large cities to prevent and control hypertension, also known as high blood pressure (HBP), high cholesterol, and other heart disease and stroke risk factors in these ways: increase the number of people with HBP who monitor their blood pressure regularly and share readings with their health care team; expand the use of team-based care to control a patient's HBP; increase use of electronic health records (EHR) to ensure that people with and at risk for CVD get the proper treatment; and facilitate patient referral to lifestyle programs helping them manage and monitor their medical conditions.

CDC is improving blood pressure control in health systems by partnering with funded states. Since 2013, these health systems have reached tens of millions of people. The number of adults with improved blood pressure control increased by 7 percentage points from 2018-2021. In FY 2024, CDC will continue to support efforts that identify populations with a high prevalence of CVD and its risk factors and to address the drivers of health inequities. Specific emphasis will be placed on the prevention and control of hypertension and high cholesterol. For example, Virginia uses Community Health Workers (CHWs) to improve chronic disease management and increase referrals to lifestyle change programs, especially in rural areas. These efforts include recruiting interested pharmacy techs to expand their responsibilities to include hypertension. In FY2024, CDC awardees will have the option to focus on identifying and addressing the disparities that rural residents face.

Every year, over 795,000 Americans have a stroke; over 185,000 of them will die. Strokes are the leading cause of long-term disability, generating over \$45 billion in costs annually. CDC's *Paul Coverdell National Acute Stroke Program* funds states to implement comprehensive stroke systems for individuals at highest risk. Awardees use data to improve elements across the continuum of care, from stroke symptom onset through emergency transport, hospitalization, and discharge. Rapid administration of the drug tissue plasminogen activator (tPA) improves the likelihood of recovery for patients with the most common kind of stroke. Among Coverdell Program awardees, the percentage of patients receiving tPA within the national standard of 60 minutes rose from 43% in 2012 to 69% in 2020. From 2012 to June 2021, the program reached 12 states and 797 hospitals, with approximately 1,079,500 stroke patients benefiting from quality care improvement efforts.

CDC is funding a pilot project to use de-identified and aggregated electronic health record data to create near real-time data on chronic disease, including heart disease and stroke. This will support CDC’s accelerated data modernization initiative and provide near real time data on blood pressure control and cholesterol management, providing public health organizations timely information for targeting program activities and policy development. Continued effort will focus on efficiency, portability, and sustainability of these data management approaches.

**Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN)**

Heart disease is the number one killer of women; over 385,000 women die from it annually, incurring losses to families and communities and costs in the tens of billions of dollars. CDC’s WISEWOMAN program assesses risk for CVD among low-income, uninsured, and underinsured adults aged 35 to 64 who are participants of the CDC-funded National Breast and Cervical Cancer Early Detection Program (NBCCEDP). WISEWOMAN program connects those identified to healthy behavior support services (HBSS) such as evidence-based lifestyle programs, health coaching, and resources that support improved diet, physical activity, tobacco cessation, and medication adherence. From 2008 to 2022, WISEWOMAN provided 365,440 screenings to 256,442 participants and provided nearly 502,000 HBSS to reduce CVD risk; recently, 82% of WISEWOMAN participants received at least one HBSS. In FY 2024, CDC will continue funding states and tribal-serving entities for screenings and referrals to HBSS to reduce CVD risk factors in participants.

**Million Hearts®<sup>106</sup>**

Million Hearts 2027 is a national initiative co-led by CDC and the Center for Medicare & Medicaid Services to prevent one million heart attacks and strokes in five years.

**Budget Request**

CDC’s FY 2024 budget request for Million Hearts includes **\$5,000,000** from the Prevention and Public Health Fund, which is level with the FY 2023 enacted level. In FY 2024, Million Hearts will be in its third five-year cycle and will continue to support access to healthy communities, improve access to optimal care and improve cardiovascular health for all, with a deliberate emphasis on populations experiencing inequities. In its first five-year cycle from 2012-2016, Million Hearts prevented an estimated 135,000 heart attacks, strokes, and related cardiovascular events, and saved \$5.6 billion in direct medical costs – a substantial portion of which was saved by public insurance programs like Medicare and Medicaid. Evaluations of the second five-year cycle are underway. Through a partnership with the National Association of Community Health Centers (NACHC), Million Hearts® has directly improved the quality of care for more than 700,000 at-risk patients in community health centers across the nation for an extremely low cost of about \$17 per person helped. In FY 2024, CDC will continue leveraging partner relationships to prevent heart attacks and strokes and control risk factors like hypertension. In addition, as part of a public-private partnership, CDC continues to lead the “Live to the Beat,” campaign to support African American adults ages 35 to 54 to adopt heart-healthy habits, as well as a second public campaign directed at all adults ages 55 to 64 who have at least one risk factor for a heart attack or stroke.

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<sup>106</sup> <https://millionhearts.hhs.gov/index.html>

## Nutrition, Physical Activity, and Obesity Budget Request

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In the United States, poor diet and inactivity contribute to the leading causes of disease and death. Good nutrition, starting with breastfeeding, and regular physical activity improve health and well-being. Twenty six percent of adults are inactive; over 42 percent of adults (age 20 years and older) and 19.7 percent of children (ages two to 19) have obesity, increasing their risk for type 2 diabetes, heart disease, stroke, certain cancers, depression, and early death. The poor diet, inactivity, and obesity epidemic affect overall health, increase health care costs, and harm worker productivity. U.S. military readiness is affected: just over one in three (37%) young adults aged 17–24 exceed the military’s weight and body fat limits. CDC’s science, programs and policies promote good nutrition, regular physical activity, and healthy weight to improve health across the lifespan and reduce health disparities.

CDC funds and provides technical assistance to recipients and partners to implement, evaluate, and translate, program activities at state and local levels. CDC works with partners to develop evidence-based interventions, and conducts surveillance and research to inform health policies, programs, and guidelines.

### Budget Request

CDC’s FY 2024 budget request of **\$130,420,000** for Nutrition, Physical Activity, and Obesity is **\$72,000,000** above the FY 2023 enacted level.

### **Cross-Cutting Cooperative Agreements to Enhance Nutrition and Physical Activity and Prevent Obesity**

In FY 2023, CDC funded 17 states through the State Physical Activity and Nutrition Program (SPAN)<sup>107</sup> to support state, local, and tribal grantees to use proven interventions promoting physical activity and nutrition to prevent obesity and other chronic diseases. In support of the White House’s [National Strategy on Hunger, Nutrition, and Health’s](#) proposed expansion of SPAN, the FY 2024 budget request includes an increase of \$72,000,000 which would expand the program to all 50 states, DC, and 8 territories and increase the average award amount. This expansion will enable nationwide reach of SPAN’s work to increase access to safe places for physical activity and healthier foods; implement interventions supportive of breastfeeding; and implement and integrate nutrition and physical activity standards into statewide early care and education (ECE) systems with a focus on health equity across all strategies. This will also allow for the expansion of Active People, Healthy Nation<sup>SM</sup> strategies. Active People, Healthy Nation<sup>SM</sup> is an initiative to get 27 million people more physically active by 2027 by improving access to safe and convenient places to walk and roll.

In FY 2024, CDC will also continue to fund 15 universities through the High Obesity Program to work with community extension services to increase access to healthier foods and safe and convenient places for physical activity in counties where over 40 percent of adults have obesity.

SPAN and HOP recipients are making significant progress. Since 2018, SPAN recipients helped about 528,500 people in 624 areas through breastfeeding support and achieved 6,112 potential linear miles of activity-friendly routes in new or improved policies or plans providing access to places for people to be physically active. Over that period HOP recipients’ increased access to healthier foods for about 271,042 people. Building on the evidence base of the Childhood Obesity Research Demonstration, (CORD)<sup>108</sup> project, funding in FY 2022 allowed 10 HOP recipients to support Family Healthy Weight Programs, which are evidence-based, family centered childhood obesity interventions.

In FY 2024, CDC plans to provide similar support through multiple efforts including: Active People, Healthy Nation<sup>SM</sup>; improving food systems to increase access to healthier foods; implementing interventions supportive

<sup>107</sup> <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/span-1807/index.html>

<sup>108</sup> <https://www.cdc.gov/obesity/initiatives/cord/cord3.html>

of breastfeeding; and implementing and integrating nutrition and physical activity standards into statewide early care and education (ECE) systems.

### **Nutrition, Physical Activity, and Obesity Prevention**

CDC focuses on several nutrition and obesity prevention efforts. CDC works with partners to fund state farm-to-ECE policies and practices which are designed to increase access to healthy, local foods in ECE settings through local food purchasing. CDC works with partners to fund and support these efforts in 10 states and Washington, D.C., reaching 220,000 children in 1,219 ECE sites and reaching 243 U.S. counties. In FY 2024, CDC will continue to fund Farm to ECE to assist state and community-level nutrition experts in expanding and continuing their work focusing on health equity. CDC also supports strategies to increase access to healthy food and beverages such as Federal Food Service Guidelines (FSGs). FSGs are voluntary standards for sustainable, healthier food and beverage service operations developed by CDC and federal partners for food service settings like worksites, hospitals, recreation centers, and food banks. CDC funds states and communities to adopt FSGs. From 2018-2022, this work helped up to 4 million people choose healthier foods. In addition, CDC monitors state policies to support healthy food service and procurement. Since 2007, 11 states and Washington, D.C. have adopted 20 state-level FSG policies. In FY 2024, CDC will continue promoting FSGs to provide healthier food options.

[In FY 2024, CDC's Active People, Healthy Nation<sup>SM</sup> 109](#) initiative will continue expanding its network and advancing physical activity strategies already covering almost 10 million people. CDC will continue its investment to create Safe and Accessible Opportunities for Physical Activity.<sup>110</sup> CDC trained over 2,100 community leaders to develop action plans expanding opportunities for physical activity through community design. CDC has also worked with national partners to implement Complete Streets Policies in over 1,600 jurisdictions and implement safe routes to schools and parks programs nationwide.

Since 2000, CDC's International Micronutrient Malnutrition Prevention and Control (IMMPaCt) program has contributed to global nutrition guidance development and provided technical assistance, training, and/or funding to about 60 countries to monitor vitamin and mineral status and deliver and evaluate interventions. In FY 2024, CDC will continue strengthening these efforts domestically and work with global partners.

### **Hospitals Promoting Breastfeeding**

#### **Budget Request**

CDC's FY 2024 request for Hospitals Promoting Breastfeeding includes **\$9,750,000** from the Prevention and Public Health Fund and is level with the FY 2023 enacted level. CDC will continue to support birthing hospitals, worksites, and communities in addressing related racial disparities.

Infants who are breastfed have reduced risks of asthma, obesity, type 1 diabetes, sudden infant death syndrome, and certain infections. Breastfeeding also helps lower postpartum risk of high blood pressure, type 2 diabetes, and breast and ovarian cancer. A CDC study of U.S. births found that breastfeeding initiation reduced the risk of post-perinatal (between 7-364 days) infant deaths by 26 percent.<sup>111</sup> CDC reports annual breastfeeding rates, among infants born in 2018, over half were breastfed at 6 months (56.7%). Among non-Hispanic black infants, breastfeeding rates at 6 months have improved from 47.8% in 2017 to 49.3% in 2018. With continued CDC investments in breastfeeding support, over one million babies per year (28 percent) are born in hospitals with supportive breastfeeding practices.

<sup>109</sup> <https://www.cdc.gov/physicalactivity/activepeoplehealthynation/index.html>

<sup>110</sup> <https://www.cdc.gov/physicalactivity/activepeoplehealthynation/strategies-to-increase-physical-activity/access-to-places-for-physical-activity.html>

<sup>111</sup> <https://www.thelancet.com/action/showPdf?pii=S2667-193X%2821%2900090-9>

## National Early Child Care Collaboratives

### **Budget Request**

CDC's FY 2024 request for National Child Care Collaboratives includes **\$5,000,000** from the Prevention and Public Health Fund and is level with the FY 2023 enacted level.

CDC funding helps children up to five years old develop healthy eating and physical activity behaviors for healthy growth, and brain development, while decreasing later in life risk for obesity. Children with obesity face an increased risk of high blood pressure, high cholesterol, type 2 diabetes, asthma, joint problems, and fatty liver disease. They also may have higher rates of depression, low self-esteem, and bullying. CDC funds, trains, and assists in obesity prevention efforts in ECE settings based on CDC's ECE framework<sup>112</sup> which outlines how states can embed obesity prevention standards to ensure healthy eating, breastfeeding support, and physical activity while monitoring state ECE system progress. As of May 31, 2022, CDC funded and assisted 33 states and DC in implementing these standards, helping over 7,100 facilities ensure more than 260,000 children receive healthy food and physical activity. CDC funding has contributed to 40 states updating ECE state licensing to incorporate obesity prevention standards.

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<sup>112</sup> [Spectrum of Opportunities for Obesity Prevention in the Early Care and Education Setting \(ECE\). \(cdc.gov\)](https://www.cdc.gov/ece/obesity-prevention)

## **Racial and Ethnic Approaches to Community Health (REACH) Budget Request**

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Health disparities continue to affect people with lower income and less education, rural populations, and racial and ethnic minority populations. The Racial and Ethnic Approaches to Community Health (REACH) budget line funds two initiatives, the REACH Program, and the Healthy Tribes program. Since 1999, REACH<sup>113</sup> has been at the forefront of CDC’s efforts to reduce health disparities, and has increased opportunities for physical activity, healthier food options, and living smoke-free/tobacco-free for millions of Americans.

### **Budget Request**

CDC’s FY 2024 budget request of **\$68,950,000** for the REACH program is level with the FY 2023 enacted level. At this funding level, the CDC will continue to support up to 40 recipients to implement culturally tailored interventions to address preventable risk behaviors, including poor nutrition, physical inactivity, and tobacco use, and increase referral and access to community health programs for chronic disease prevention and treatment. This request also includes **\$24,000,000**, which is level with the FY 2023 enacted level, to support current investment in the health of American Indians and Alaska Natives (AI/AN) through the Good Health and Wellness in Indian Country program.

### **Racial and Ethnic Approaches to Community Health (REACH)**

CDC’s REACH program works to end disparities by partnering with racial and ethnic communities with the highest risk or rates of chronic disease to make healthy choices easier. Through REACH, funded organizations plan and carry out local, evidence-based, and culturally appropriate programs to address a wide range of health issues among Black or African American, Hispanic, or Latino, Asian, American Indian, Native Hawaiian, Pacific Islander, and Alaska Native persons. For example, REACH recipient Partners in Health worked in rural communities on the Navajo Nation to increase access to healthier foods in small stores and community venues for about 18,500 residents. They also trained community health workers, which increased access to health services for about 90,000 community members. Another recipient, the Presbyterian Healthcare Services in New Mexico, addressed food insecurity among patients through its Food Farmacy which, despite impacts from COVID-19, distributed over 12,500 bags of high-quality, New Mexico grown produce and food. In FY 2024, CDC’s REACH program will continue to support rural, urban, and tribal communities to improve health among racial and ethnic minority populations.

### **Good Health and Wellness in Indian Country Program**

Tribal populations have higher rates of disease, disability, injury, and early death compared to other racial and ethnic groups in the United States. CDC supports AI/AN communities to promote health, prevent disease, address social determinants of health, strengthen resiliency, support self-empowerment, and build public health capacity and infrastructure to improve health and well-being in Indian Country.

The Good Health and Wellness in Indian Country (GHWIC) line supports CDC’s Healthy Tribes program,<sup>114</sup> which includes GHWIC activity as well as Tribal Practices for Wellness in Indian Country (TPWIC) and Tribal Epidemiology Centers Public Health Infrastructure (TECPHI). GHWIC supports a coordinated, holistic approach to chronic disease prevention through community-chosen, culturally adapted policies, systems, and environmental improvements to achieve long-term goals of reducing rates of death and disability from commercial tobacco use, diabetes, heart disease and stroke, and reducing the prevalence of obesity. In the first two years of the FY2019-2024 GHWIC cooperative agreement, almost 200,000 AI/AN community members were reached through GHWIC supported nutrition, physical activity, breastfeeding support, and related obesity

<sup>113</sup> <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/reach/>

<sup>114</sup> <https://www.cdc.gov/healthytribes/index.htm>

prevention and control programs. In FY 2024, CDC will re compete GHWIC<sup>115</sup> focusing on cross-cutting activities with support from other NCCDPHP programs.

Tribal Epidemiology Centers Public Health Infrastructure<sup>116</sup> (TECPHI) supports Tribal Epidemiology Centers (TECs) and one Network Coordinating Center to improve delivery of public health functions to and with Tribes, villages, and Urban Indian Organizations (UIOs). From 2020 to 2021, all 12 TECs enhanced their health data monitoring and most enhanced evaluation capacity with online portals to provide AI/AN communities and partners with accessible, up-to-date health data to inform decision-making and responses to public health challenges ranging from homelessness to COVID-19. In FY 2024, CDC will continue to fund 12 TECs to strengthen public health capacity and infrastructure among Tribes and UIOs served.

**Tribal Epidemiology Centers for Public Health Infrastructure (TECPHI)**

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President’s Budget
Number of Awards	13	13	13
- New Awards	0	0	0
- Continuing Awards	13	13	13
Average Award	\$0.523	\$0.523	\$0.523
Range of Awards	\$0.300–\$0.600	\$0.300–\$0.600	\$0.300–\$0.600
<b>Total Awards</b>	<b>\$6.799</b>	<b>\$6.799</b>	<b>\$6.799</b>

The Tribal Practices for Wellness in Indian Country<sup>117</sup> (TPWIC) is an innovative program that funds Tribes, Tribal organizations, and UIOs to strengthen cultural practices that build resilience and connections to community, family, and culture, which can reduce risk factors for chronic disease and promote health and wellness. During the first iteration of TPWIC (FY 2018-2021), more than 775,000 individuals engaged in cultural activities to increase health and wellness. Over 160,600 community members participated in community, social, and cultural activities to support resiliency and overall health, and almost 45,000 community members participated in activities to increase traditional foods in diets. In FY 2024, CDC will continue to fund 36 recipients to support culture as a path to prevention and wellness promotion in AI/AN communities.

**Tribal Practices for Wellness in Indian Country (TPWIC)**

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President’s Budget
Number of Awards	36	36	36
- New Awards	0	0	0
- Continuing Awards	36	36	36
Average Award	\$0.149	\$0.149	\$0.149
Range of Awards	\$0.117–\$0.150	\$0.117–\$0.150	\$0.117–\$0.150
<b>Total Awards</b>	<b>\$5.353</b>	<b>\$5.352</b>	<b>\$5.352</b>

<sup>115</sup> <https://www.cdc.gov/healthytribes/ghwic.htm>

<sup>116</sup> <https://www.cdc.gov/healthytribes/tecphi.htm>

<sup>117</sup> <https://www.cdc.gov/healthytribes/tribalpractices.htm>

## Health Promotion Budget Request

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CDC collects health data and conducts epidemiologic research to define the public health impact of chronic disease risk factors and identify how public health agencies can reduce them. These activities complement existing chronic disease programs and support federal, state, tribal, and local public health efforts.

### Budget Request

CDC's FY 2024 budget request of **\$62,600,000** for Health Promotion is level with the FY 2023 enacted level. CDC will use FY 2024 funding to strengthen the science base for preventing leading causes of disease, disability, and death. CDC will also assess disease and risk factor trends and identify their relationship to aging and other population trends, enabling the public health community to anticipate future chronic disease burden. In FY 2024, CDC will focus on the following health promotion activities:

#### **Alzheimer's Disease**

Alzheimer's disease seriously impairs a person's ability to carry out activities of daily living and to live independently. In 2021, nearly 6.2 million Americans were living with Alzheimer's and this number is expected to increase to 14 million by 2060. More than 15 million Americans provide 18 billion hours of unpaid care for loved ones with Alzheimer's and other dementias.

In FY 2023, CDC awarded public health departments Alzheimer's Disease (BOLD) funding through a new cooperative agreement for Alzheimer's disease and related dementias. BOLD Public Health Programs bolster the public health infrastructure by improving early detection, risk reduction, hospitalization prevention, and caregiving support. In FY 2024, CDC will continue to fund the National Healthy Brain Initiative awards and three BOLD Public Health Centers of Excellence. CDC will continue to support a network of Prevention Research Centers (PRCs) for Dementia Risk Reduction Research—the first dementia risk reduction research network—to support awardees and deliver innovative science. The Dementia Risk Reduction Network supports the 6th goal in the National Plan to Address Alzheimer's Disease: 2021 Update, *Accelerate Action to Promote Healthy Aging and Reduce Risk Factors for Alzheimer's Disease and Related Dementias*. In FY 2024, CDC will continue support for the *Road Map Series*<sup>118</sup> with continued implementation of its 2023-2028 updated Road Map Series to build public health infrastructure at national, state, tribal,<sup>119</sup> and local levels. CDC will continue to update its Alzheimer's Disease and Healthy Aging Data Portal<sup>120</sup> and infographic series<sup>121</sup> annually to share up-to-date data for public health action.

#### **Excessive Alcohol Use Prevention**

Excessive alcohol use,<sup>122</sup> including binge and underage drinking,<sup>123</sup> is responsible for more than 140,000 deaths in the U.S. each year, or more than 380 deaths per day. One in five deaths among people aged 20 to 49 years is from excessive alcohol use. In FY 2023, CDC expanded its support for alcohol epidemiology and prevention from 9 to 12 states. This support has improved state surveillance on excessive drinking and alcohol related harms, and the integration of excessive alcohol use prevention into a range of other topic areas to leverage resources and coordinate prevention efforts. CDC also helped states and communities implement effective excessive alcohol use reduction strategies through The Center for Advancing Alcohol Science to Practice, which delivers evidence-based technical assistance and training.<sup>124</sup> In FY 2024, CDC will continue to strengthen state capacity to prevent

<sup>118</sup> <https://www.cdc.gov/aging/healthybrain/roadmap.htm>

<sup>119</sup> <https://www.cdc.gov/aging/healthybrain/Indian-country-roadmap.html>

<sup>120</sup> <https://www.cdc.gov/aging/agingdata/index.html>

<sup>121</sup> <https://www.cdc.gov/aging/data/index.htm>

<sup>122</sup> <http://www.cdc.gov/alcohol/>

<sup>123</sup> <http://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm>

<sup>124</sup> <https://www.health.state.mn.us/communities/alcohol/documents/2020prelimfullyalcoholdeaths.pdf>

excessive drinking and its impacts, including tools to measure the concentration of alcohol outlets to improve the alcohol environment and address alcohol-related health disparities.

### **Chronic Kidney Disease, Inflammatory Bowel Disease (IBD), and Interstitial Cystitis (IC)**

Kidney diseases are a leading cause of death in the United States.<sup>125</sup> About 37 million Americans have chronic kidney disease (CKD), with most unaware of their condition. In 2020, treating Medicare beneficiaries with CKD cost over \$75 billion, and treating people with end-stage kidney disease or kidney failure cost \$37.1 billion.<sup>126</sup> Diabetes and high blood pressure account for three in four new cases of kidney failure.<sup>127</sup> CDC’s CKD Initiative<sup>128</sup> provides strategies for kidney health promotion. In FY 2024, CDC will continue working with partners to strengthen the CKD Surveillance System; public awareness; early diagnosis and treatment; and additional research.

CDC supports an epidemiologic research study on inflammatory bowel disease (IBD),<sup>129</sup> a disease that CDC estimates to affect over 3 million U.S. adults and is associated with poor quality of life, substantial illness, and complications requiring hospitalizations and surgical procedures. In FY 2024, CDC will continue to support epidemiologic research to examine the etiology of IBD, address gaps in social and psychological factors that contribute to IBD, assess health disparities among IBD-affected persons, and identify effective IBD management strategies.

CDC also supports an epidemiologic study on interstitial cystitis (IC),<sup>130</sup> a chronic condition that results in recurring discomfort or pain in the bladder or surrounding pelvic region. In FY 2024, CDC will support an IC epidemiologic cohort study to examine the incidence of comorbidities; demographic, treatment, and clinical patterns; health disparities, and impact on health over time. Findings support health provider awareness and education, patient quality of life improvement strategies, and medical and self-management.

### **Vision Health and Glaucoma**

Vision impairment is one of the top 10 leading causes of disability among U.S. adults. An estimated 7.7 million Americans have vision impairment, including 1 million who are blind. Vision impairment is also a disabling condition among children, with approximately 7% of the children in the United States having diagnosed eye and vision conditions. CDC’s Vision Health Initiative (VHI)<sup>131</sup> invests in national, state, and community public health infrastructure and developed the Vision and Eye Health Surveillance System<sup>132</sup> to assess related population trends and health disparities. In FY 2024, CDC’s VHI will continue developing state capacity to integrate vision and eye health into public health infrastructure, enhance surveillance system, and support research to improve glaucoma detection, management, referral, and treatment for high-risk populations.

### **Chronic Disease Education and Awareness**

Advancing CDC’s work with stakeholders on education for chronic diseases demonstrating clear disparities in public and professional awareness is critical to advancing public health efforts. In FY 2024, CDC will re compete the competitive grant program to fund national partners to develop and implement education and awareness activities for chronic diseases that do not otherwise receive dedicated CDC appropriated resources. The previous grantees focused on Lymphedema, Obstructive Sleep Apnea, Psoriasis, Hearing Loss, Cystic Fibrosis, and Chronic Obstructive Pulmonary Disease.

<sup>125</sup> Heron M. Deaths: Leading causes for 2017. National Vital Statistics Reports; vol 68 no 6. 2019.

<sup>126</sup> <https://adr.usrds.org/2020>

<sup>127</sup> <https://www.cdc.gov/kidneydisease/prevention-risk/CKD-common-serious-costly.html>.

<sup>128</sup> <https://www.cdc.gov/kidneydisease/index.html>

<sup>129</sup> <https://www.cdc.gov/ibd/index.htm>

<sup>130</sup> <http://www.cdc.gov/ic/>

<sup>131</sup> <https://www.cdc.gov/visionhealth/vehss/index.html>

<sup>132</sup> <https://www.cdc.gov/visionhealth/vehss/index.html>

## Prevention Research Centers Budget Request

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CDC provides leadership, technical assistance, and oversight to a network of 26 academic Prevention Research Centers<sup>133</sup> (PRCs) to conduct innovative public health research at the community level to address chronic diseases and leading causes of death and disability in the United States.<sup>134</sup> In addition, the PRC network is a valuable tool for addressing emerging public health issues. In FY 2023, the network continued to support the implementation of CDC's COVID-19 vaccine confidence strategy through the PRC Vaccine Confidence Network, which identified key behavioral insights to inform effective solutions to increase confidence and uptake in COVID-19 vaccines.

In the 2019-2024 PRC cycle, PRC research is significantly impacting knowledge, research, and practice nationally. For example, during the first three years of the cycle, PRCs trained over 13,250 persons through almost 300 PRC-hosted trainings, producing qualified public health specialists and prevention researchers, and developed 230+ research and practice tools to help public health practitioners adopt and implement evidence-based practices.

Through the PRC network, CDC also funds Special Interest Projects (SIPs) which enable CDC programs and other federal agencies to leverage PRC expertise and established relationships with community partners. In the 2019-2024 funding cycle, CDC has so far awarded 62 SIPs, with plans to fund additional SIPs in FY 2023. Thematic Research Networks are a type of SIP that funds several PRCs to work together to advance a specific health issue. There are currently five thematic research networks that focus on: cancer; epilepsy; nutrition and obesity; physical activity, and dementia risk reduction.

### Budget Request

CDC's FY 2024 budget request of **\$28,961,000** for Prevention Research Centers is level with the FY 2023 enacted level. FY 2024 marks the beginning of a new five-year cycle for the PRC Program. With the FY 2024 funding opportunity, CDC will continue to leverage the PRC network to increase availability and use of evidence-based interventions by public health practitioners and increase translation of evidence-based research to practice that improves population health and advances health equity.

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<sup>133</sup> <http://www.cdc.gov/prc/>

<sup>134</sup> Authorized under Public Health Service Act, Section 170.

## Arthritis, Lupus, and Epilepsy Budget Request

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Arthritis is a leading cause of disability; with over 58.5 million adults reporting an arthritis diagnosis<sup>135</sup> and nearly 24 million of these individuals reporting being less active because of their arthritis. Lupus is a rheumatic autoimmune disease that can cause inflammation and tissue damage, resulting in disability, pain, and premature death. Epilepsy, a chronic neurological condition, affects about 3.4 million people in the United States, including 3 million adults and 470,000 children from birth to 17 years old. People with epilepsy often have higher health care costs than those without the disorder. From 2010-2018, \$24.5 billion direct U.S. healthcare spending was attributed to seizures or epilepsy.<sup>136</sup>

### Budget Request

CDC's FY 2024 budget request of **\$32,500,000** for Arthritis, Lupus, and Epilepsy is level with the FY 2023 enacted level.

CDC's arthritis program promotes efforts to decrease pain and disability and improve functioning in people with arthritis. In FY 2023, CDC awarded new funding to support state health departments and national organizations to promote cost-effective, drug-free arthritis pain management strategies and expand access to interventions that facilitate physical activity and chronic disease self-management behaviors such as the [Toolkit for Active Living with Chronic Disease](#)<sup>137</sup> and the [Better Choices, Better Health online Chronic Disease Self-Management Program](#), and the Walk With Ease Self-Directed Program.<sup>138</sup> Funded partners also continued data collection informing priorities and decisions and access to evidence-based health communications campaigns promoting physical activity for arthritis management. Evidence-based arthritis interventions are now available in all 50 states, Washington, D.C., and American Samoa. In FY 2024, CDC will continue its support of these funded partners to increase access to arthritis information.

Guided by the [National Public Health Agenda for Lupus](#),<sup>139</sup> CDC funds population registries and cohort studies to increase public health knowledge about lupus. In FY 2023, CDC funded five registry studies, including one focused on pediatric lupus, which improved the understanding of lupus diagnoses, disease burden, natural history, and where to target intervention efforts. In FY 2024, CDC will continue to support research on treatment patterns and impacts, health care access, and disparities to fill knowledge gaps on long-term lupus in adult and pediatric populations. CDC also funds The Lupus Foundation and the American College of Rheumatology to develop and disseminate strategies for sustainable lupus awareness, knowledge, skills, and partnerships.

CDC's Epilepsy Program supports prevention, surveillance, and research. CDC works with the Epilepsy Foundation, the American Epilepsy Society, and others to increase awareness, reduce stigma, and enhance care and safety for people with epilepsy. In FY 2023, CDC funded five awardees to improve education, systems of care and health outcomes, and continued support for the Managing Epilepsy Well (MEW) Network through CDC-funded Prevention Research Centers (PRCs). The MEW Network researched advancements for the availability of community telehealth epilepsy self-management programs.<sup>140</sup> CDC supported PRC studies on community health worker integration in epilepsy care, and on epilepsy burden, results indicated an annual economic burden of \$5.4 billion for epilepsy, \$19 billion for seizure, and \$24.5 billion for epilepsy or seizure in direct healthcare spending. In FY 2024, CDC will expand the use of epilepsy self-management programs in more communities to improve epilepsy care and enhance provider training opportunities to improve epilepsy diagnosis and management.

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<sup>135</sup> [Arthritis Basics | CDC](#)

<sup>136</sup> <https://onlinelibrary.wiley.com/doi/epdf/10.1111/epi.17305>

<sup>137</sup> [https://www.cdc.gov/arthritis/interventions/self\\_manage.htm#toolkitCDSMP](https://www.cdc.gov/arthritis/interventions/self_manage.htm#toolkitCDSMP)

<sup>138</sup> <https://www.cdc.gov/arthritis/interventions/physical-activity.html#WWESelf>

<sup>139</sup> <https://stacks.cdc.gov/view/cdc/78565>

<sup>140</sup> <https://managingepilepsywell.org/>

**State Table of Grant Funding<sup>1</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$8,739,276	\$8,739,276	TBD	TBD
Alaska	\$6,333,543	\$6,333,543	TBD	TBD
Arizona	\$7,817,463	\$7,817,463	TBD	TBD
Arkansas	\$5,891,313	\$5,891,313	TBD	TBD
California	\$15,641,713	\$15,641,713	TBD	TBD
Colorado	\$7,691,925	\$7,691,925	TBD	TBD
Connecticut	\$2,894,715	\$2,894,715	TBD	TBD
Delaware	\$4,915,787	\$4,915,787	TBD	TBD
District of Columbia	\$4,833,316	\$4,833,316	TBD	TBD
Florida	\$13,933,351	\$13,933,351	TBD	TBD
Georgia	\$9,926,459	\$9,926,459	TBD	TBD
Hawaii	\$4,040,491	\$4,040,491	TBD	TBD
Idaho	\$5,206,247	\$5,206,247	TBD	TBD
Illinois	\$13,131,495	\$13,131,495	TBD	TBD
Indiana	\$6,650,590	\$6,650,590	TBD	TBD
Iowa	\$5,495,689	\$5,495,689	TBD	TBD
Kansas	\$8,035,853	\$8,035,853	TBD	TBD
Kentucky	\$6,568,728	\$6,568,728	TBD	TBD
Louisiana	\$3,957,818	\$3,957,818	TBD	TBD
Maine	\$4,554,950	\$4,554,950	TBD	TBD
Maryland	\$6,330,980	\$6,330,980	TBD	TBD
Massachusetts	\$6,447,453	\$6,447,453	TBD	TBD
Michigan	\$10,813,915	\$10,813,915	TBD	TBD
Minnesota	\$8,987,862	\$8,987,862	TBD	TBD
Mississippi	\$7,160,827	\$7,160,827	TBD	TBD
Missouri	\$6,370,551	\$6,370,551	TBD	TBD
Montana	\$6,043,960	\$6,043,960	TBD	TBD
Nebraska	\$5,877,118	\$5,877,118	TBD	TBD
Nevada	\$7,430,530	\$7,430,530	TBD	TBD
New Hampshire	\$4,692,892	\$4,692,892	TBD	TBD
New Jersey	\$7,425,687	\$7,425,687	TBD	TBD
New Mexico	\$6,125,713	\$6,125,713	TBD	TBD
New York	\$15,819,532	\$15,819,532	TBD	TBD
North Carolina	\$4,262,254	\$4,262,254	TBD	TBD
North Dakota	\$5,942,862	\$5,942,862	TBD	TBD
Ohio	\$9,211,914	\$9,211,914	TBD	TBD
Oklahoma	\$5,072,156	\$5,072,156	TBD	TBD
Oregon	\$7,253,517	\$7,253,517	TBD	TBD
Pennsylvania	\$9,245,868	\$9,245,868	TBD	TBD
Rhode Island	\$5,860,297	\$5,860,297	TBD	TBD
South Carolina	\$9,729,146	\$9,729,146	TBD	TBD
South Dakota	\$4,850,263	\$4,850,263	TBD	TBD
Tennessee	\$7,115,601	\$7,115,601	TBD	TBD
Texas	\$6,045,565	\$6,045,565	TBD	TBD
Utah	\$6,078,218	\$6,078,218	TBD	TBD
Vermont	\$4,709,503	\$4,709,503	TBD	TBD

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Virginia	\$7,725,723	\$7,725,723	TBD	TBD
Washington	\$10,908,418	\$10,908,418	TBD	TBD
West Virginia	\$5,645,162	\$5,645,162	TBD	TBD
Wisconsin	\$7,105,780	\$7,105,780	TBD	TBD
Wyoming	\$3,693,702	\$3,693,702	TBD	TBD
<b>Other Awardees</b>				
Indian Tribes	\$52,569,369	\$52,569,369	TBD	TBD
Migrant Program	N/A	N/A	TBD	TBD
American Samoa	\$796,002	\$796,002	TBD	TBD
Guam	\$1,276,773	\$1,276,773	TBD	TBD
Marshall Islands	\$504,760	\$504,760	TBD	TBD
Micronesia	\$450,725	\$450,725	TBD	TBD
Northern Mariana Islands	\$570,767	\$570,767	TBD	TBD
Palau	\$989,937	\$989,937	TBD	TBD
Puerto Rico	\$503,170	\$503,170	TBD	TBD
Virgin Islands	\$313,664	\$313,664	TBD	TBD
<b>Subtotal, States</b>	<b>\$361,410,375</b>	<b>\$361,410,375</b>	<b>TBD</b>	<b>TBD</b>
<b>Subtotal, Other Awardees</b>	<b>\$57,975,167</b>	<b>\$57,975,167</b>	<b>TBD</b>	<b>TBD</b>
<b>Total Resources</b>	<b>\$419,385,542</b>	<b>\$419,385,542</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup>This State table is a summary of NCCDPHP programs that fund states and Washington, D.C., tribal, and territorial awardees. For a more comprehensive view of grant and cooperative agreement funding to grantees by jurisdiction, visit <http://www.cdc.gov/FundingProfiles/FundingProfilesRIA/>. Relevant CFDA numbers are 93.334 (DP-2004 BOLD Public Health Programs to Address Alzheimer’s; DP20-2003 The National Healthy Brain Initiative), 93.336 (DP20-2007 Behavioral Risk Factor Surveillance System), 93.898 (DP17-1701 Cancer Prevention and Control Programs), 93.387 (DP20-2001 National and State Tobacco Control Program), 93.426 (DP18-1815.NU58 Diabetes and Heart Disease & Stroke Prevention Programs), 93.431 (DP18-1808.NU58 Consortium of National Networks to Impact Populations), 93.436 (DP18-1816.NU58 Well-Integrated Screening and Evaluation for Women Across the Nation), 93.479 (DP19-1903.NU58 Good Health and Wellness in Indian Country), 93.738 (DP18-1813.NU58 Racial and Ethnic Approaches to Community Health), 93.800 (DP20-2002 Public Health and Health Systems Partnerships to Increase CRC Screening), 93.762 (DP17-1704 PPHF17.NU58 Building Public Health Infrastructure in Tribal Communities), and 93.762 (DP18-1812 PPHF18.NU58 Tribal Practices for Wellness in Indian Country). The “to be determined” status of FY 2024 President’s Budget totals depends on funding amounts associated with FY 2024 initiatives.

## BIRTH DEFECTS, DEVELOPMENTAL DISABILITIES, DISABILITIES AND HEALTH

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
<b>Total Request</b>	<b>\$177.060</b>	<b>\$205.560</b>	<b>\$222.560</b>	<b>+\$17.000</b>
FTEs	210	208	213	5
-- Child Health and Development				
	\$65.800	\$71.300	\$71.300	\$0
-- Birth Defects	\$19.000	\$19.000	\$19.000	\$0
-- Fetal Death	\$0.900	\$0.900	\$0.900	\$0
-- Fetal Alcohol Syndrome	\$11.000	\$11.500	\$11.500	\$0
-- Folic Acid	\$3.150	\$3.150	\$3.150	\$0
-- Infant Health	\$8.650	\$8.650	\$8.650	\$0
-- Autism	\$23.100	\$28.100	\$28.100	\$0
-- Health and Development for People with Disabilities	\$76.910	\$85.910	\$85.910	\$0
-- Disability and Health	\$39.000	\$45.500	\$45.500	\$0
-- Tourette Syndrome	\$2.000	\$2.500	\$2.500	\$0
-- Early Hearing Detection and Intervention	\$10.760	\$10.760	\$10.760	\$0
-- Muscular Dystrophy	\$6.500	\$7.500	\$7.500	\$0
-- Attention Deficit Hyperactivity Disorder	\$1.900	\$1.900	\$1.900	\$0
-- Fragile X	\$2.000	\$2.000	\$2.000	\$0
-- Spina Bifida	\$7.500	\$7.500	\$7.500	\$0
-- Congenital Heart Failure	\$7.250	\$8.250	\$8.250	\$0
-- Public Health Approach to Blood Disorders	\$7.400	\$10.400	\$10.400	\$0
<i>-- Sickle Cell Research (non-add)</i>	<i>\$3.000</i>	<i>\$6.000</i>	<i>\$6.000</i>	<i>\$0</i>
-- Hemophilia CDC Activities	\$3.500	\$3.500	\$3.500	\$0
-- Hemophilia Treatment Centers				\$0
	\$5.100	\$5.100	\$5.100	
-- Thalassemia	\$2.100	\$2.100	\$2.100	\$0
-- Neonatal Abstinence Syndrome	\$3.250	\$4.250	\$4.250	\$0
-- Surveillance for Emerging Threats to Mothers and Babies	\$13.000	\$23.000	\$40.000	+\$17.000

<sup>1</sup>This table reflects totals by budget activity. The FY 2024 budget proposes a single "CDC-Wide Activities and Program Support" Treasury account structure.

**Enabling Legislation Citation:** PHS § 301, PHS § 304, PHS § 307, PHS § 308(d), PHS § 310, PHS § 311, PHS § 317, PHS § 317C\*, PHS § 317J\*, PHS § 317K, PHS § 317L, PHS § 317Q, PHS § 327, PHS § 352, PHS § 399M\*, PHS § 399Q\*, PHS § 399S, PHS § 399S-1\*, PHS § 399T, PHS § 399V-2, PHS § 399AA, PHS § 399BB, PHS § 399CC, PHS § 1102, PHS § 1106, PHS § 1107, PHS § 1108\*, PHS § 1110, PHS § 1113, PHS § 1114, PHS § 1115, PHS § 1132\*, PHS § 1706\*, The Prematurity Research Expansion And Education For Mothers Who Deliver Infants Early Act § 2\* (42 U.S.C. 247b-4f\*)

**Enabling Legislation Status:** Permanent Indefinite

**Authorization of Appropriations for FY 2022:** Indefinite; Expired/Expiring noted with \*

**Allocation Methods:** Direct Federal/Intramural, Competitive Grants, Cooperative Agreements and Contracts

## Program Description

CDC's birth defects, developmental disabilities, blood disorders, and disability and health programs promote optimal health across the lifespan among populations by advancing science, leadership, research, tools, and surveillance. They aim to improve the well-being of populations that have been disproportionately impacted in the United States. and advance the science to support those that have been historically marginalized. CDC identifies and addresses health inequities by:

- Linking birth defects and other data such as critical congenital heart defect newborn screening data to determine the method and timing of detection and disparities in timing of diagnosis
- Improving access to timely screenings and quality health care for children with developmental disabilities including those with hearing loss
- Expanding surveillance and strengthening reporting of disability status and gender identity for persons with bleeding disorders
- Building the evidence base to understand the needs of people with, or at risk of, disabilities, to improve health and development outcomes

## Budget Request

CDC's FY 2024 budget request of **\$222,560,000** for Birth Defects, Developmental Disabilities, Disabilities and Health is **\$17,000,000** above the FY 2023 enacted level. CDC continues to modernize and expand its surveillance efforts. Recruiting, retaining, and increasing the number of people with epidemiology and laboratory expertise will provide a more detailed and nuanced picture of the impact public health emergencies have on Americans, and can lead to better public health responses for infants, pregnant people, people with disabilities, and people with blood disorders.

## Health Equity

The COVID-19 pandemic highlighted critical and systemic factors contributing to health disparities, especially for pregnant people, children at risk for or with developmental disabilities, and people with disabilities. For example, COVID-19 has a disproportionate impact on people with disabilities, who experience barriers to accessing COVID-19 testing and vaccines. To reduce health inequities, CDC worked with partners including the Association of University Centers on Disability to promote equitable access to COVID-19 preventative measures for people with disabilities; CDC also worked with the National Academies of Science, Engineering, and Medicine (NASEM) to design free online tools to support coping skills and resilience among those disproportionately affected. CDC also issued specific and relevant guidance for people with disabilities using a variety of communication formats, including [American Sign Language](#) and extreme low literacy tools, to ensure accessible messaging about how to stay well during the COVID-19 pandemic. CDC partnered with the Administration on Community Living on the Disability Information and Access Line (DIAL) to help people with disabilities get vaccinated and has begun to monitor COVID-19 vaccination by disability status. These efforts helped improve inclusion for people with disabilities, but gaps remain.

## BIRTH DEFECTS, DEVELOPMENTAL DISABILITIES, DISABILITIES AND HEALTH

### BY THE NUMBERS<sup>1</sup>

- **One in 33 babies** are born with a major birth defect.<sup>2</sup>
- **One in 6 children** have developmental disabilities.<sup>3</sup>
- **One in 76 Americans** have a blood disorder.<sup>4</sup>
- **One in 4 Americans adults** have at least one disability—approximately equivalent to the combined populations of New York and California.<sup>5</sup>

CDC’s birth defects, developmental disabilities, and blood disorders programs support states, territories, and communities:

- **30 jurisdictions**—funded to address COVID-19, hepatitis C, syphilis, and Zika as part of the Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET).
- **10 sites**—improving the health and quality of life among people with disabilities through the adaptation and implementation of evidence-based strategies in their communities.
- **11 sites**—conduct population-based surveillance to increase our understanding of the prevalence and characteristics of children with autism spectrum disorder (ASD) and inform strategies to improve identification and services for children with ASD and other developmental disabilities.
- **5 sites**—monitoring transition planning and outcomes among 16-year-olds with ASD
- **41 states**—include an Act Early COVID response team led by an Act Early Ambassador to develop and implement strategies to increase parent-engaged developmental monitoring and early action on concerns, bolstering early childhood systems and delivery of essential health services.
- **39 jurisdictions**—funded to optimize surveillance systems that help jurisdictions ensure all infants in the United States are screened for hearing loss and receive the essential follow-up diagnostic and intervention services in a timely manner.
- **10 states**—funded to reduce health disparities experienced by adults with intellectual and developmental disabilities and adults with mobility limitations in the United States.
- **2 national programs**—focus on adapting evidence-based health promotion programs to the unique needs of individuals with intellectual and developmental disabilities and mobility limitations in community settings.
- **11 states**—funded to collect health data about people with sickle cell disease through the Sickle Cell Data Collection (SCDC) program.
- **7 sites**—carrying out **Congenital Heart Defects Surveillance across Time And Regions (CHD STAR)** to look at the health of children, adolescents, and adults with heart defects over a 10-year period.

<sup>1</sup>Unless otherwise noted, all information and calculations are from CDC program data.

<sup>2</sup>Rynn L, Cragan J, Correa, et al. “Update on Overall Prevalence of Major Birth Defects—Atlanta, Georgia, 1978–2005.” <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5701a2.htm>.

<sup>3</sup>Zablotsky B, Black LI, Maenner MJ, Schieve LA, Danielson ML, et al. “Prevalence and Trends of Developmental Disabilities among Children in the United States: 2009-2017.” <https://pubmed.ncbi.nlm.nih.gov/31558576/>

<sup>4</sup>CDC, National Center on Birth Defects and Developmental Disabilities (NCBDDD) (2017, September 19). Protecting People. Available at <https://www.cdc.gov/ncbddd/aboutus/protecting-people/index.html>

<sup>5</sup><https://dhds.cdc.gov>

<b>Birth Defects, Developmental Disabilities, Disabilities and Health Funding History</b>	
<b>Fiscal Year</b>	<b>Dollars (in millions)</b>
FY 2020	\$160.810
FY 2021	\$167.294
FY 2022 Final	\$177.060
FY 2023 Enacted	\$205.560
FY 2024 President’s Budget	\$222.560

**Program Accomplishments**

***Saving Babies through surveillance, research, and prevention of birth defects and infant disorders:*** In 2022, CDC funded 30 jurisdictions to conduct maternal-infant surveillance through the Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET) to examine COVID-19, hepatitis C, syphilis, and Zika. In 2022, SET-NET funded 5 health departments in a pilot project to explore the feasibility of implementing surveillance for congenital cytomegalovirus (cCMV). SET-NET data have been used to inform clinical and public health guidance for pregnant people and their infants and will continue to provide timely data for action. Further, establishing cCMV surveillance efforts will be helpful to heighten awareness and inform prevention strategies as new vaccines are developed.

***Helping Children live to the fullest by understanding developmental disabilities:*** In 2019, CDC changed the Autism and Developmental Disabilities Monitoring Network (ADDM) methods enabling Autism Spectrum Disorder (ASD) prevalence data results to be published one year faster compared to the previous methods. Across all 11 participating sites, 1 in 44 children aged 8 years were identified as having autism. The ADDM Network also began looking at ASD characteristics among 16-year-old children who had been previously identified by ADDM Network sites at age 8 in 2010.

***Protecting People by preventing the complications of blood disorders:*** CDC’s Sickle Cell Data Collection (SCDC) program supports 11 states to better understand the health and health care needs of people with sickle cell disease (SCD). In 2019, SCDC California used findings to support new legislation and resources to fund SCD clinics in geographic areas with the greatest burden. In c2021, SCDC Michigan identified the number of adult SCD patients in their state to support the expansion of specialty services, thereby smoothing the transition from pediatric to adult care. In calendar year 2022, SCDC Georgia used data to plot new locations for mobile clinic services in rural areas, and for supporting proposals for new mental health services. Additionally, this growing data program is attracting a new cohort of public health and medical professionals and researchers to better understand SCD and the collaboration that’s needed to achieve progress for a historically marginalized population.

***Improving Health of people with disabilities:*** CDC led efforts to increase inclusion of people with disabilities in public health data to learn more about health disparities, focus disease prevention and health promotion activities, and evaluate outcomes. Efforts focus on increasing the use of standard disability questions in data collection systems. Collaborations also help enhance the use of administrative and survey data in identifying people with disabilities.

## Saving Babies

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Every 4½ minutes, a baby is born with a major birth defect in the United States. That is approximately one in every 33 babies—or 120,000 babies every year. In the United States, more than \$23.000 billion per year is spent on hospital costs for the treatment of birth defects. Babies born with a birth defect are more likely to die before their first birthday, while those who survive may face lifelong challenges, such as problems with physical movement, learning, and social interaction. Birth defects may be the first sign that infectious diseases, environmental, occupational, or nutritional factors, maternal conditions, or substance use can cause serious harm to pregnant individuals, infants, and children. CDC works to identify causes of birth defects and infant disorders, along with opportunities to prevent them, and to improve the health of people living with these conditions.

### Birth Defects

#### Budget Request

CDC's FY 2024 budget request of **\$19,000,000** for Birth Defects is level with the FY 2023 enacted level.

CDC funds states for birth defects surveillance and supports the Centers for Birth Defects Research and Prevention, which collaborate on the Birth Defects Study To Evaluate Pregnancy exposures ([BD-STEPS](#)). CDC's prevention programs translate research into actions that pregnant individuals, families, health care providers, and decision makers can use to help ensure babies are born healthy and continue to thrive.

CDC's investment in addressing birth defects has produced the following results:

- **Modernizing population-based surveillance of birth defects:** CDC, in collaboration with the Public Health Informatics Institute (PHII), developed the Birth Defects Readiness Assessment to help state birth defects programs understand their current surveillance system and readiness for automated electronic data exchange using health information standards. CDC and PHII provided technical assistance and hosted a series of webinars for state birth defects programs on components of the Assessment to help inform interoperable surveillance-based birth defects registries.<sup>141</sup>
- **Reporting on major birth defects data from population-based birth defects surveillance programs in the United States:** CDC supported the National Birth Defects Prevention Network in developing a report on the number and prevalence of more than 40 major birth defects by maternal race/ethnicity from state-based birth defects surveillance programs. This report documents data on birth defects by state to help plan assistance for families.<sup>142</sup>
- **Making key research contributions to understand risk factors for birth defects:** A new analysis from CDC's National Birth Defects Prevention Study found that mothers with pregestational type 1 or type 2 diabetes are at high risk for having a pregnancy affected by a birth defect. More studies evaluating both types of pregestational diabetes and the role of their respective monitoring and glycemic control methods could help inform birth defects interventions.<sup>143</sup> Another analysis examined maternal smoking and congenital heart defects, finding that multiple types of heart defects were modestly linked with any amount of cigarette smoking around the time of conception<sup>144</sup> CDC and collaborators also examined the use of hydroxychloroquine in mothers of babies with and without birth defects, finding that the use of this medicine does not appear to increase risk for birth defects.<sup>145</sup>
- **Assessing the role of genetic variation and gene-environment interaction effects associated with the risk of birth defects:** Using population-based data and DNA specimens collected for CDC's National Birth Defects

<sup>141</sup> <https://phii.org/birth-defects-surveillance/>

<sup>142</sup> [https://www.nbdpn.org/docs/Birth\\_Defects\\_Data\\_and\\_Directory\\_2022.pdf](https://www.nbdpn.org/docs/Birth_Defects_Data_and_Directory_2022.pdf)

<sup>143</sup> <https://onlinelibrary.wiley.com/doi/full/10.1002/bdr2.2050>

<sup>144</sup> <https://onlinelibrary.wiley.com/doi/full/10.1002/bdr2.2050>

<sup>145</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8426694/>

Prevention Study, CDC and collaborators in the Centers for Birth Defects Research and Prevention have begun sequencing exomes of child-parent trios to better understand how variation in genes or the combination of genes and the environment play a role in the risk for birth defects. CDC recently published findings on exome sequencing with the following birth defects: colonic atresia,<sup>146</sup> bladder exstrophy,<sup>147</sup> sacral agenesis,<sup>148</sup> and anophthalmia and microphthalmia,<sup>149</sup> and findings from a genome-wide association study of obstructive heart defects.<sup>150</sup> These analyses are providing critical data to help answer questions about the causes of specific birth defects.

In FY 2024, CDC will continue to collect and analyze data and build the science base to develop and strengthen birth defects prevention and treatment strategies

## Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET)

### Budget Request

CDC's FY 2024 budget request of **\$40,000,000** for Surveillance for Emerging Threats to Mothers and Babies is **\$17,000,000** above the FY 2023 enacted level.

Pregnant people and their babies may be uniquely susceptible and disproportionately affected by certain infectious diseases, experience higher rates of morbidity and mortality than non-pregnant infected people and suffer higher rates of pregnancy complications when infected. Infections such as influenza and COVID-19 are associated with severe disease during pregnancy and can lead to adverse maternal, pregnancy and infant outcomes. Other infections, such as hepatitis, can be transmitted during pregnancy with potential lifelong consequences for the infant. Also, specific infections such as Zika and syphilis during pregnancy can cause birth defects resulting from congenital infection.

Prior investments, such as the development of the [U.S. Zika Pregnancy and Infant Registry \(USZPIR\)](#),<sup>151</sup> have started to address the serious gap in the nation's ability to detect and respond to threats to pregnant people and their children. Since FY 2019, CDC has implemented and expanded mother-infant linked surveillance through the Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET). Mother-infant linked longitudinal surveillance has resulted in improved preparedness to detect and prevent serious threats to pregnant people and their infants.

**Scaling up SET-NET to include COVID-19:** CDC currently supports 30 state, local, and territorial health departments to determine how health threats, such as COVID-19, hepatitis C, syphilis, and Zika, affect pregnant people and their infants. SET-NET data has helped identify risk factors for severe illness and adverse birth outcomes in pregnant people with COVID-19, demonstrating the need for COVID-19 vaccination recommendations for pregnant populations.

**Helping state, local, and territorial health agencies address emerging issues in their communities:** Health departments funded for SET-NET are using the data and the approach to increase surveillance capacity, take public health action, bridge data silos, and create new data linkages within their jurisdictions. Additional success stories are available on the [CDC website](#)<sup>152</sup>.

<sup>146</sup> <https://pubmed.ncbi.nlm.nih.gov/31328417/>

<sup>147</sup> <https://pubmed.ncbi.nlm.nih.gov/34355505/>

<sup>148</sup> <https://pubmed.ncbi.nlm.nih.gov/35274497/>

<sup>149</sup> <https://pubmed.ncbi.nlm.nih.gov/35716026/>

<sup>150</sup> <https://pubmed.ncbi.nlm.nih.gov/35451555/>

<sup>151</sup> <https://www.cdc.gov/pregnancy/zika/research/registry.html>

<sup>152</sup> SET-NET's Impact | CDC: <https://www.cdc.gov/ncbddd/set-net/success-stories.html#:~:text=%20SET-NET%20Success%20Stories%20%20%20Increasing%20Surveillance,used%20SET-NET%20to%20help%20understand%20how...%20More%20>

- In Pennsylvania, SET-NET monitoring has helped link pregnant people to care and treatment for hepatitis C after delivery and helped ensure that pregnant people and infants are part of the strategy for hepatitis C elimination efforts.
- In Tennessee, SET-NET data on COVID-19 showed that Hispanic pregnant people were more likely to become infected. As a result, health officials partnered with the state’s Health Disparity Task Force and developed a public service announcement in Spanish to reach Hispanic women.

**Understanding the impact of Zika:** CDC continues to track the impact of the previous Zika epidemic, with a focus on collecting longitudinal data on a large cohort of babies affected by Zika in Puerto Rico up until the children are 5-years of age. CDC published the first report to describe Zika-associated birth defects, identifying 5 percent of infants as having a Zika-associated brain or eye defect, and one third of infants having more than one defect reported. The Zika Birth Defects Surveillance System found that nine specific birth defects had significantly higher prevalence in areas with widespread Zika virus transmission, highlighting the importance of population-based birth defects surveillance for understanding the full impact of new and re-emerging teratogens.

**Establishing surveillance for congenital cytomegalovirus (cCMV):** CMV is one of the most common causes of congenital infection, which can lead to microcephaly, hearing loss, and developmental delays in children. CDC is funding 5 health departments within SET-NET in a pilot project to explore the feasibility of leveraging the network to conduct surveillance for cCMV. Surveillance data for cCMV would allow us to understand how pregnant people and babies are affected and their health outcomes. This information will improve clinical decision-making and public health action, including to support potential prevention strategies as vaccines for CMV are under development.

**Modernizing data collection:** Under the agency-wide Data Modernization Initiative (DMI), CDC is enhancing SET-NET’s data collection and approach to improve data sharing by standardizing data collection, reducing redundancy, and supporting multi-directional data flows among state, local, and territorial partners and CDC.

In FY 2024, with an increased investment for SET-NET, CDC will:

- Expand support for health departments and clinical sites to conduct and improve mother-infant linked longitudinal surveillance,
- Expand public health and health care professional organizations’ use of SET-NET to inform clinical and public health recommendations to improve maternal and infant health.
- Pilot innovative approaches to mother-infant linked longitudinal surveillance such as active stillbirth surveillance to better understand the connection between this adverse pregnancy outcome and emerging threats.

## **Neonatal Abstinence Syndrome (NAS)**

### Budget Request

CDC’s FY 2024 budget request of **\$4,250,000** for Neonatal Abstinence Syndrome (NAS) is level with the FY 2023 enacted level.

NAS is a withdrawal syndrome that can occur in newborns after exposure to opioids during pregnancy. To better understand the effects of multiple substances and their links to NAS, CDC is focused on surveillance and communication with providers to increase NAS reporting. For example, CDC worked with the Council of State and Territorial Epidemiologists to conduct standardized surveillance using a NAS case definition and provided funding for jurisdictions to pilot this surveillance. CDC will share findings from this project with public health scientists and healthcare providers and use lessons learned to inform continued reporting of NAS.

CDC also helps support MATernal and Infant Network (MAT-LINK), a surveillance system to monitor maternal, infant, and child health outcomes associated with medication for opioid use disorder during pregnancy. Results from MAT-LINK will be used to inform clinical practice recommendations and clinical decision-making around medication for opioid use disorder among pregnant people. In addition, this project will develop and pilot a data platform to collect and link maternal, infant, and child data across clinical sites, which can serve as a model for collecting data on other exposures during pregnancy.

In FY 2024, CDC will work with partners to strengthen surveillance for and advance the understanding of NAS as well as maternal, infant, and child health outcomes associated with opioid and other substance use during pregnancy and identify best practices for care, evaluation, and management of NAS.

## Infant Health

### Budget Request

CDC's FY 2024 budget request of **\$8,650,000** for Fetal Infant Health is level with the FY 2023 enacted level.

Early life experiences lay a foundation for a person's health and wellbeing throughout their lifetime. CDC will support infant health activities by identifying and addressing preventable causes of birth defects, infant disorders, and related conditions; promoting and improving the health of people living with birth defects, infant disorders, and related conditions; and rapidly responding to emerging health threats to understand and reduce their effects on pregnant people and their infants. In FY 2024, CDC will use these funds to support internal maternal child health subject matter experts on fetal death, birth defects and emerging threats along with supporting the infrastructure to rapidly translate emerging data from surveillance to action.

## Fetal Alcohol Syndrome

### Budget Request

CDC's FY 2024 budget request of **\$11,500,000** for Fetal Alcohol Syndrome is level with the FY 2023 enacted level.

Fetal alcohol spectrum disorders (FASDs) are a group of conditions that can occur in a person who was exposed to alcohol before birth. While population-based estimates are not yet available, a recent study indicates that one in twenty U.S. children may have FASDs.<sup>153</sup> Despite these known adverse effects, alcohol use during pregnancy remains a critical public health issue, and polysubstance use is increasingly common. Recent CDC data indicate that from 2018-2020, approximately one in seven pregnant adults in the United States reported drinking alcohol in the past thirty days and, among those, approximately forty percent reported binge drinking. Data also showed that those with no usual health care provider and those reporting frequent mental distress were more likely to consume alcohol.<sup>154</sup>

As part of its work on FASDs, CDC funds the *National Partnerships to Address Prenatal Alcohol and Other Substance Use and FASDs*, a framework of national partner organizations that work to reduce prenatal alcohol and other substance use, improve services and access to care, and improve identification of children and families experiencing FASDs.

In FY 2024, CDC will continue working to strengthen partnerships in preventing alcohol use during pregnancy, improve support services and access to care, and improve identification and health of children with FASD and their families.

<sup>153</sup> Prevalence of Fetal Alcohol Spectrum Disorders in 4 US Communities - PubMed (nih.gov)

<sup>154</sup> <https://www.cdc.gov/mmwr/volumes/71/wr/mm7101a2.htm>

## Folic Acid

### Budget Request

CDC's FY 2024 budget request of **\$3,150,000** for Folic Acid is level with the FY 2023 enacted level.

Neural tube defects (NTDs) are severe birth defects of the brain or spine and a major cause of infant death and lifelong disability worldwide. CDC recommends all persons capable of becoming pregnant take 400 micrograms (mcg) of folic acid each day, in addition to consuming food with folate from a varied diet. As a result of folic acid fortification, every year approximately 1,300 American babies who would have been born with a NTD are born healthy, saving an estimated \$603.000 million per year in health care costs.

Despite the success of folic acid fortification in the United States, about 23 percent of women remain at elevated risk for NTDs. Although strides have been made in preventing neural tube defects, ethnic disparities remain. Hispanic women in the U.S. have the highest risk of having a child affected by a NTD, with birth prevalence of approximately 7 NTDs per 10,000 live births.<sup>155</sup> Voluntary folic acid fortification of corn masa flour, a major food staple for many Hispanic women, was permitted in 2016. CDC assessed the effects of voluntary folic acid fortification of corn masa flour and published data,<sup>156</sup> which showed little change in optimal blood folate concentration among Hispanic women of reproductive age after voluntary fortification.

In FY 2024, CDC will continue efforts to address health equity to reduce morbidity and mortality related to folic acid preventable NTDs, monitor folate levels, examine risk factors for NTDs, and provide education on NTD prevention.

## Fetal Death (Stillbirth)

### Budget Request

CDC's FY 2024 budget request of **\$900,000** for Fetal Death is level with the FY 2023 enacted level.

Stillbirth, the loss of a baby at or after 20 weeks of pregnancy, is one of the most common adverse pregnancy outcomes. Understanding the potential causes of stillbirths can lead to recommendations and policies to help prevent them and provide services for parents experiencing a stillbirth in their family. CDC supports two research centers in Arkansas and Massachusetts for BD-STEPS to better understand factors that might impact the risk for stillbirth. A recent CDC analysis identified disparities in stillbirth showing that Black people were more than twice as likely to experience a stillbirth compared to White and Hispanic people. In response to the COVID-19 pandemic and concerns about its impact on stillbirths, CDC is collaborating with research partners to better understand the impact of COVID-19 on the risk of stillbirth.

In FY 2024, CDC will continue to collect and analyze data and publish findings to build the science base to develop stillbirth prevention strategies.

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<sup>155</sup> <https://pubmed.ncbi.nlm.nih.gov/31504109/>

<sup>156</sup> <https://pubmed.ncbi.nlm.nih.gov/33923768/>

## Helping Children

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Developmental disabilities are among the most significant child health issues facing American families. They include conditions like autism spectrum disorder (ASD), congenital hearing loss, Attention-Deficit/Hyperactivity Disorder (ADHD), Tourette syndrome and tic disorders, and fragile X syndrome. These conditions typically appear by early childhood, may impact day-to-day functioning, and usually last throughout a person's lifetime.

Children with developmental disabilities are at significantly greater risk for other co-occurring mental, emotional, and behavioral disorders that often cause additional challenges for these children and their families. CDC helps children with developmental disabilities reach their full potential by providing families, educators, health care providers, and community leaders with a comprehensive understanding of these conditions. CDC collects and analyzes disability data to inform policies and health promotion programs, so children with developmental disabilities and their families get the support they need.

### Autism Spectrum Disorder

#### Budget Request

CDC's FY 2024 budget request of **\$28,100,000** for Autism Spectrum Disorder is level with the FY 2023 enacted level.

#### ***Autism and Developmental Disability Monitoring Network (ADDM)***

Through ADDM, CDC tracks and monitors the prevalence of autism spectrum disorder (ASD) among children 4 and 8 years old across 11 ADDM Network sites. CDC is also undertaking a new effort to follow-up on children at aged 16 years at 5 ADDM Network sites.<sup>157</sup> ADDM incorporates a Social Vulnerability Index (SVI) data into its data collection and reporting to provide greater insight into community demographics, allowing more timely provision of intervention services for children with ASD.

The ADDM Network is also part of CDC's data modernization initiative, informing data system enhancements that could be applied more broadly across CDC programs. For example, through improvements in methodology, CDC has reduced ADDM data reporting time by one year.

#### ***Study to Explore Early Development (SEED)***

CDC's SEED study<sup>158</sup> is the largest U.S. study to identify factors that may put children at risk for ASD and other developmental disabilities.<sup>159</sup> CDC leveraged SEED to study the [impact of COVID-19](#) on children (aged 5–9 years) with ASD and their families. In FY 2021, CDC completed the first-ever study on 16-year-old children with ASD to understand health needs and diagnostic practices in this transition period. The study revealed that adolescents in SEED Teen with autism were 90 percent more likely to have mental health or other conditions, and three times more likely to have unmet health care service needs compared with children in the general population.<sup>160</sup>

CDC applied the results of the SEED Teen study and lessons learned to develop a new study called SEED Follow-up, which will provide an opportunity for CDC to learn more about early adult outcomes of individuals with ASD (e.g., health, functioning, and service use and needs) and factors associated with developmental trajectories. Young adults with ASD often experience a precipitous loss of access to well-integrated school-based health and mental healthcare and have limited employment and educational opportunities. Surveying young adults will provide critical information from their perspective on topics such as anxiety and depression symptoms, romantic

<sup>157</sup> <https://www.cdc.gov/ncbddd/autism/notice-of-funding-opportunity-cdc-RFA-DD23-2301.html>

<sup>158</sup> <https://www.cdc.gov/ncbddd/autism/seed.html>

<sup>159</sup> <https://www.cdc.gov/ncbddd/autism/seed-phase3.html>

<sup>160</sup> <https://www.cdc.gov/mmwr/volumes/70/wr/mm7017a1.htm>

relationships, gender identity, substance abuse, suicidality, social camouflaging, and quality of life. Data collection for SEED Follow-Up will launch in Spring 2023.

### ***Learn the Signs. Act Early (LTSAE)***

CDC's LTSAE program encourages tracking of developmental milestones and acting early on concerns. Fifty-eight [Act Early Ambassadors](#) are working in nearly all states and territories to improve early identification of developmental delays and disabilities. Recently, CDC's LTSAE program team provided technical assistance to the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) clinics in 22 states and 1 territory, which resulted in the successful integration of LTSAE resources into the WIC Shopper App in twenty-one states.

CDC continues to improve its [Milestone Tracker app](#) to help parents and other caregivers track their children's early development and take action on possible developmental concerns. The app has been downloaded over 1.5 million times. In the coming year, CDC will launch a survey of app users to evaluate the impact of the app on knowledge and behaviors related to early identification of developmental delay and disability.

In FY 2024, along with programs to promote early identification of developmental delays and disabilities, CDC will continue to support the tracking and research that help us better understand ASD, how children and families are affected, and how we can best address health inequities and support this population during and after public health emergencies.

During the pandemic, 41 CDC-funded Act Early Response teams worked to mitigate the impact of the pandemic and ensure children were connected to needed screening and intervention services. Because of their efforts, more than 401,000 children were supported, and 6,700 children received early intervention services.<sup>161</sup>

## **Early Hearing Detection and Intervention**

### **Budget Request**

CDC's FY 2024 budget request of **\$10,760,000** for Early Hearing Detection and Intervention is level with the FY 2023 enacted level.

Nearly one out of every 500 infants in the United States are born deaf or hard of hearing. Undiagnosed hearing loss can result in serious and long-term consequences by affecting a child's ability to develop speech, language, and social skills. Early identification and intervention of hearing loss can significantly improve developmental outcomes for children. CDC supports 38 states and Puerto Rico to optimize their Early Hearing Detection and Intervention Information Systems (EHDI-IS).

These essential health data are used by CDC to assist health departments, service providers, and early intervention programs in providing and planning services, identifying areas for improvement, and guiding resource allocation to meet the needs of infants with hearing loss and their families. Such data advances CDC's CORE Health Equity goal by highlighting potential differences in services among often underrepresented populations and inform approaches to address gaps in services.

In FY 2024, CDC will continue to support 38 states and Puerto Rico in analyzing EHDI data for improved tracking and informed decision making. CDC will support increasing the number of infants who receive a diagnosis before three months of age and who are enrolled in intervention services before six months of age. In partnership with the Health Resources Services Administration (HRSA), CDC will leverage EHDI-IS data to further develop infrastructure for assessing and supporting optimal outcomes for infants born deaf or hard of hearing.

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<sup>161</sup> <https://www.aucd.org/template/page.cfm?id=1225>

## Attention-Deficit/Hyperactivity Disorder

### Budget Request

CDC's FY 2024 budget request of **\$1,900,000** for Attention-Deficit/Hyperactivity Disorder is level with the FY 2023 enacted level.

Attention-Deficit/Hyperactivity Disorder (ADHD) is one of the most common neurodevelopmental disorders of childhood affecting an estimated one in 11 children aged 2 through 17 years. Children with ADHD are at significantly greater risk for other co-occurring mental, developmental, and behavioral disorders. Early and effective treatment of ADHD is the key to children's success at home, in school, in the community, and as they transition into adulthood. Excess expenses related to childhood ADHD cost Americans up to \$124.5 billion per year. CDC conducts studies to understand risk factors and the health and education outcomes of children with ADHD and provides resources for enhancing awareness about this disorder.

In FY 2024, CDC will continue to work with partners to promote optimal health and development among children and adolescents with ADHD and describe the public health impact of ADHD.

## Tourette Syndrome (TS)

### Budget Request

CDC's FY 2024 budget request of **\$2,500,000** for Tourette Syndrome (TS) is level with the FY 2023 enacted level.

CDC works with partners to conduct research on the nearly 1 in 50 children aged 5 to 14 years with persistent tic disorders, including Tourette syndrome, to better understand prevalence, risk and protective factors, and health risk behaviors.<sup>162</sup> TS data is used to improve identification of tic disorders in community and clinical settings, treatment of TS, and to address racial and ethnic disparities in identification and diagnosis.

In FY 2024, CDC will lead research efforts to better understand the prevalence and impact of Tourette Syndrome and co-occurring conditions. CDC is funding a study to develop and evaluate diagnostic screening tools for tic disorders. Using data from the [National Survey of Children's Health](#) and working with the Tourette Association of America, CDC will support outreach to children, families, and adults with Tourette syndrome and tic disorders and linkages to professionals who support them.

## Fragile X Syndrome

### Budget Request

CDC's FY 2024 budget request of **\$2,000,000** for Fragile X Syndrome is level with the FY 2023 enacted level.

Fragile X syndrome (FXS) is the most common inherited cause of intellectual disability. CDC supports the National Fragile X Foundation's Fragile X Online Registry with Accessible Research Database (FORWARD) to which help researchers and health care providers learn more about co-occurring conditions, the impact of FXS on daily living, short-term and long-term outcomes, and effective interventions and supports. CDC collaborated with the American Academy of Pediatrics (AAP) to create educational materials for healthcare professionals and families. These materials helped to encourage early diagnosis of FXS so that those affected can receive appropriate care and services in a timely manner. CDC also funded AAP to develop training modules that helped pediatric healthcare professionals learn best practices for FXS diagnosis and treatment.

<sup>162</sup> <https://www.cdc.gov/ncbddd/tourette/data.html>

In FY 2024, CDC will lead research efforts to learn more about individuals with FXS, including their co-occurring conditions, short-term, and long-term outcomes so better approaches to intervention, clinical care, and family support can be developed.

## Protecting People

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About one in 76 Americans are affected by a blood disorder. CDC continues to address the needs of Americans with blood disorders by gathering data on patient outcomes over time, targeting education campaigns to improve understanding of how to be healthy while living with blood disorders, and working with partners to ensure doctors and patients know how to prevent complications from both heritable and acquired blood disorders.

Working with partners in academia, national professional organizations, state and local health departments, and other federal agencies, CDC identifies:

- How often and in what settings blood disorders occur to better understand who is at higher risk.
- Effective clotting or bleeding episode prevention strategies.
- Ways to reduce complications from blood disorders.

### **Public Health Approach to Blood Disorders**

#### **Budget Request**

CDC's FY 2024 budget request of **\$10,400,000** for Public Health Approach to Blood Disorders is level with the FY 2023 enacted level. In addition to supporting sickle cell disease capacity building, CDC works to address other blood disorders like blood clots.

#### ***Venous Thromboembolism (VTE)***

CDC works to prevent medical complications, such as venous thromboembolism, or blood clots in the veins. VTE affects as many as 900,000 American patients each year; one in 10 of whom die from VTE, (many without ever being diagnosed), and costs the health care system an estimated \$10 billion annually. CDC's VTE activities include:

[Stop the Clot, Spread the Word®](#), a national campaign to promote the awareness of the signs, symptoms, and risk factors for VTE, which achieved over 800 million media impressions and an advertising value-added return on investment of up to 178 percent.

In FY 2024, CDC will continue to build the inventory for best practices in VTE prevention, work closely with partner institutions to improve and tailor pilot VTE surveillance mechanisms at healthcare institutions, and address knowledge gaps about the incidence of coagulopathies among patients affected by COVID-19.

### **Sickle Cell Disease**

#### **Budget Request**

Of the CDC's FY 2024 budget request of **\$10,400,000** for Public Health Approach to Blood Disorders, \$6,000,000 supports Sickle Cell Disease, and is level with the FY 2023 enacted level.

Sickle cell disease (SCD) is the most common inherited blood disorder in the United States, and the third most common disorder identified by newborn screening. Complications of SCD include multi-organ damage and failure, debilitating pain, infection, and stroke. People with SCD experience 20-to-30-year shorter life expectancy compared to people without SCD, and the rate of stroke among people with SCD is three-fold higher than rates in African Americans of similar age (35 to 64 years) without SCD. Risks for poor health outcomes in people with

SCD are compounded by racial, socioeconomic, and healthcare disparities. Most people with SCD in the United States are Black or African American, and Hispanics comprise a notable proportion.

The SCD program studies long-term trends in diagnosis, treatment, and healthcare access to help inform policy and healthcare standards that improve and extend the lives of people with SCD.

Data indicates that historical prevalence estimates are an underestimate, among other key data findings. CDC has a three-year cooperative agreement (FY 2020 – FY 2022) with 11 states to collect and link data from multiple sources to paint a comprehensive picture of where people with SCD live, how they access healthcare, and other important health information.

In FY 2024, CDC will:

- Continue to collect data and conduct surveillance activities in states with significant numbers of people with SCD;
- Develop a data coordinating center that will support the growing network of state-based multidisciplinary teams and the increasing needs of the nation's research and healthcare communities;
- Provide guidance for important analyses such as SCD and COVID-19, causes and measures of mortality, reproductive health, access to specialty care, the Hispanic population, and social vulnerability; and
- Educate patients, families, providers and other stakeholders through topic-focused data briefs, fact sheets, and reports.

## Hemophilia

### Budget Request

CDC's FY 2024 budget request of **\$3,500,000** for Hemophilia CDC Activities is level with the FY 2023 enacted level. In addition, the FY 2024 request for Hemophilia Treatment Centers of **\$5,100,000** is level with the FY 2023 enacted level.

CDC works closely with Hemophilia Treatment Centers (HTC) across the country to monitor the health of people with hemophilia, an inherited bleeding disorder that can cause damage to internal organs, chronic joint disease, and pain. CDC's bleeding disorders surveillance programs seek to increase the lifespan of individuals with hemophilia and to understand and promote best options for treatment. About 1 in 5 people with hemophilia develop an inhibitor<sup>163</sup> a condition that makes treatments less effective and more expensive,<sup>164</sup> increasing hospitalizations and risk of death.<sup>165</sup> CDC's surveillance programs work to discover and treat inhibitors early, understand and promote options for treatment, improve outcomes and reduce healthcare costs, and ultimately increase the lifespan of individuals with hemophilia.

Community Counts<sup>166</sup> is CDC's surveillance system that gathers individual and population-level data to help physicians and scientists improve the lives of people with hemophilia. CDC's data visualization tool<sup>167</sup> for Community Counts represents the largest US publicly accessible database with over 88,000 individuals with bleeding disorders receiving care at hemophilia treatment centers (HTCs). CDC continues to add new features making more data available to the patients, providers, and public.

<sup>163</sup> <http://www.cdc.gov/ncbddd/hemophilia/inhibitors.html>.

<sup>164</sup> <https://www.ncbi.nlm.nih.gov/pubmed/25616111>.

<sup>165</sup> <https://www.ncbi.nlm.nih.gov/pubmed/22151000>.

<sup>166</sup> <https://www.cdc.gov/ncbddd/hemophilia/communitycounts/about.html>.

<sup>167</sup> <https://www.cdc.gov/ncbddd/hemophilia/communitycounts/data-viz.html>.

In FY 2024, CDC will:

- Continue to enhance laboratory safety, quality, and excellence in science while improving early detection of inhibitors in people with bleeding disorders:
- Continue developing an internal data tracking system accessible to regional coordinators:
- Continue the public health education campaign to increase awareness about the signs, symptoms, and diagnosis of bleeding disorders:
- Work to exceed the 2021-2022 goal of 6,000 people enrolled in the Community Counts surveillance system through federally funded Hemophilia Treatment Centers; and
- Work toward reporting disability status and gender identity of people with bleeding disorders to inform their health care needs and reduce stigmatization.

## **Thalassemia**

### **Budget Request**

CDC's FY 2024 budget request of **\$2,100,000** for Thalassemia is level with the FY 2023 enacted level.

Thalassemia is a group of genetic red blood cell disorders that cause anemia beginning at birth and lasting throughout life. People with thalassemia require blood transfusions to live, which places them at higher risk for transfusion-related infections and complications that can result in organ failure and early death. As a population with underlying health conditions, such as heart disease, diabetes, and severe iron overload, people with thalassemia face heightened risk of severe illness from COVID-19. CDC is working to share information about the safety and stability of the nation's blood supply during the SARS-CoV-2 pandemic, as well as the importance of transfusion treatments for people with hemoglobinopathies like thalassemia.

CDC funds the Transfusions Complications Monitoring project to learn more about treatment complications associated with blood transfusions for thalassemia and SCD. The goal of the project is to improve access to, coordination of, and continuity of health care for people with thalassemia or SCD, leading to fewer transfusion-related complications and improved quality and increased lifespan.

In FY 2024, CDC will continue efforts to learn more about treatment complications associated with blood transfusions for thalassemia. Funding also will support development of communication strategies and educational tools that improve consumer and provider awareness and knowledge about thalassemia complication prevention and treatment practices.

## Improving Health

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Up to 26 percent of American adults have at least one disability. These disabilities may be developmental disabilities from childhood or those that are later onset, possibly temporary, and occur with other health conditions. Annual health care costs associated with disabilities are nearly \$868 billion, which is over 36 percent of all health care expenditures for adults residing in the United States.<sup>168</sup>

People with disabilities are often disproportionately negatively impacted by disasters, yet disability is frequently underrepresented in data used to guide decision-making and resource allocation during public health emergencies. Creating diagnostic code-based definitions can help identify emergency department visits from people with disabilities. CDC is working with ASTHO and the National Syndromic Surveillance Program (NSSP) on developing, testing, and disseminating syndromic surveillance definitions to identify people with disabilities and monitor emerging public health threats. This work is in alignment with CDC's CORE Health Equity goals and will improve response capacity to detect and monitor the health and well-being of people with disabilities before, during, and after public health emergencies.

### Disability and Health

#### Budget Request

CDC's FY 2024 budget request of **\$45,500,000** for Disability and Health is level with the FY 2023 enacted level. CDC works to support state disability and health programs and the disability and health data system. CDC also maintains a partnership with the National Center on Health, Physical Activity and Disability (NCHPAD), and Special Olympics to reduce health disparities and support healthy athletes.

#### ***Health Promotion for People with Disabilities***

CDC funds two national organizations to raise knowledge about health needs, disseminate health promotion models, provide training and education for health professionals, and promote the adoption of healthy behaviors aimed at reducing health disparities for people with mobility limitations (ML) and intellectual disabilities (ID).

#### ***Improving the Health of People with Mobility Limitations***

CDC funds the National Center on Health, Physical Activity and Disability (NCHPAD) to reduce health disparities and improve the health of people with ML by delivering health promotion programs and expanding healthcare and community-based providers' capacity for serving the health needs of people with ML.

NCHPAD developed a comprehensive, evidence-based set of wellness modules that help tailor health promotion programs to the unique needs of people with a range of disability and mobility issues. MENTOR (Mindfulness, Exercise and Nutrition To Optimize Resilience) was created to bridge the gap between healthcare and post-healthcare public health practice for individuals who have recently accessed the healthcare system for treatment related to a new or existing disability, new secondary health condition, or a condition likely to result in a disability.

In FY 2024, CDC will continue to support work to improve the mental and physical health of Americans with mobility limitations across the lifespan through evidence-based health promotion programs.

#### ***Improving the Health of People with Intellectual Disabilities***

Special Olympics provides year-round sports training and athletic competition in a variety of Olympic-type sports for children and adults with intellectual disabilities (ID). CDC funds the Special Olympics Healthy Athletes® and

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<sup>168</sup> Khavjou OA, Anderson WL, Honeycutt AA, Bates LG, Razzaghi H, Hollis ND, Grosse SD. National Health Care Expenditures Associated With Disability. *Med Care.* 2020 Sep;58(9):826-832. doi: 10.1097/MLR.0000000000001371. PMID: 32826747; PMCID: PMC7505687.

Healthy Communities Programs to provide Special Olympics athletes with increased access to free health screenings, education, services, supports, and referrals for follow-up health care as well as year-round health promotion and disease prevention programs.

CDC’s partnership with Special Olympics focuses on reducing barriers to inclusive health services and programs, challenging misperceptions, eliminating stigma, and improving the health of people with ID by

- Training health care professionals to conduct and support Healthy Athletes® screening events throughout the United States.
- Increasing the availability of data during and after screening events using digital health technology to evaluate effectiveness and provide critical health information on this population.
- Providing disability awareness training to health care professionals, community wellness partners, schools, and other collaborators who have limited or no experience working with people with intellectual disabilities.

In FY 2024, CDC will continue to work with Special Olympics to screen and connect athletes with health care resources in their communities and to promote best practices for health promotion and follow-up care.

### ***State Disability and Health Programs***

CDC invests in 10 State Disability and Health Programs to improve engagement with high-quality routine preventive healthcare, adoption of healthy lifestyle behaviors, and early identification, management, and control of chronic disease and mental health conditions among people with intellectual and developmental disabilities and people with mobility limitations. These programs have reached over 3.2 million people nationwide through the implementation of 39 evidence-based strategies<sup>169</sup> and interventions on physical activity, nutrition, diabetes, and other topics significant to this population. CDC’s [Disability and Health Data System \(DHDS\)](#), an online interactive source of state, regional, and national data on the health and demographics of adults with disabilities, provides states with information on the health status of their population with disabilities and tailor health protection programs for them. DHDS includes approximately 30 measures of health (e.g., smoking, physical activity, obesity, hypertension, heart disease, and diabetes) and can inform policies for health disparities and support people with disabilities. For example, CDC used this dataset to drive programmatic decisions and inform strategies for a Medicaid analysis project to examine the impact of COVID-19 on people with intellectual and developmental disabilities.

In FY 2024, CDC will continue to fund State Disability and Health Programs and provide subject matter expertise to assist federal, tribal, local governments and nonprofit organizations to identify unmet preventive health care needs of people with disabilities—and to adapt and improve public health programs and services to be more inclusive of people with disabilities.

## **Muscular Dystrophy**

### **Budget Request**

CDC’s FY 2024 budget request of **\$7,500,000** for Muscular Dystrophy is level with the FY 2023 enacted level.

[Muscular dystrophies \(MDs\)](#) are a group of genetic muscle diseases, that, over time, cause muscle weakness and wasting, leading to decreased mobility, making the tasks of daily living difficult. There are many muscular dystrophies that vary in age of onset, severity, and patterns of inheritance. Through public health research and collaboration with partners, CDC aims to improve the health and quality of life for people with MDs by

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<sup>169</sup> <https://www.cdc.gov/ncbddd/disabilityandhealth/programs.html>.

understanding the impact of living with these complex conditions, promoting early diagnosis, and improving care and services.

CDC funds and manages the only population-based surveillance system for muscular dystrophy in the United States, the [Muscular Dystrophy Surveillance Tracking and Research Network \(MD STARnet\)](#). CDC collects critical information about muscular dystrophies from medical clinics, hospitals, and birth and death certificates to understand and improve care for those living with the disease. CDC also maintains a webpage with tools and resources for clinicians and people with Duchenne muscular dystrophy (DMD) and their families. CDC supported AAP through a cooperative agreement to implement a 5-part webinar series focused on primary and specialty care for patients with DMD.

In FY 2024, CDC will continue to utilize MD STARnet data to estimate prevalence, describe care and services, and assess health disparities and mental health needs. CDC will continue to promote early identification and earlier access to care and services of MDs.

## **Spina Bifida**

### Budget Request

CDC's FY 2024 budget request of **\$7,500,000** for Spina Bifida is level with the FY 2023 enacted level.

Approximately 1,400 babies born in the United States each year are affected by spina bifida (SB), a complex, disabling condition that affects the spine and is usually apparent at birth. Spina bifida, a neural tube defect, has a tremendous impact on individuals and families, including high health care costs associated with frequent surgeries and hospitalizations. The lifetime direct costs to treat just one child with SB are estimated at \$790,000.

In 2008, CDC established the [National Spina Bifida Patient Registry \(NSBPR\)](#) which is now the largest SB patient registry in the United States. NSBPR collects longitudinal data to assess risk factors, treatment options, and health outcomes across the lifespan. CDC is currently analyzing data from NSBPR and Urologic Management to Preserve Initial Renal Function Protocol for Young Children with Spina Bifida (UMPIRE) to better understand health disparities for infants living with spina bifida by race/ethnicity. CDC is funding AAP to implement a Spina Bifida Project ECHO (Extension for Community Healthcare Outcomes) focused on improving the transition from pediatric to adult care for people living with SB. The first Spina Bifida Project ECHO was completed in FY 2022, reaching over 30 providers that care for individuals with SB. A second cohort will aim to reach a broad range of providers and will be implemented this year. CDC also began working in partnership with the Association of University Centers on Disabilities (AUCD), to utilize large nationally representative databases to estimate the number of people living with SB in the U.S.

In FY 2024, CDC will continue to analyze NSBPR data, UMPIRE data, and additional data sources to describe the SB population in the United States, the care and services received, and health outcomes achieved. These studies can inform improved care and services for individuals of all ages living with SB and efforts to improve quality of life across the lifespan.

## **Congenital Heart Defects**

### Budget Request

CDC's FY 2024 budget request of **\$8,250,000** for Congenital Heart Defects is level with the FY 2023 enacted level.

[Congenital heart defects \(CHDs\)](#) affect the structure of the heart and the way it functions. Collectively, CHDs are the most common type of birth defect. Thanks to advancements in medical care and treatment, infants with CHDs are living longer and healthier lives. However, children with CHDs face new challenges as they transition into adulthood, including increased risk of pregnancy complications and longer-term comorbidities. CDC funds

the Congenital Heart Defects Surveillance across Time And Regions (CHD STAR) project to examine the health of children and adults with heart defects over a 10-year period. To modernize CHD surveillance, CDC funds a site to examine whether machine learning can improve the quality of CHD surveillance data. Additionally, 8 states are working to better understand when and how critical CHDs are detected, racial and ethnic groups most at risk for late detection, and other barriers to timely detection and intervention.

In FY 2024, CDC will further the understanding of timing of diagnosis, longer term health and social outcomes, and health disparities among people with heart defects. CDC will continue to support surveillance of healthcare utilization and health outcomes among children, adolescents, and adults with CHD, and initiate a survey to understand health, educational, and social outcomes among children and adolescents with heart defects.

**State Table: Early Hearing Detection and Intervention<sup>1, 2</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$160,000	\$160,000	\$160,000	0
Alaska	\$160,000	\$160,000	\$160,000	0
Arizona	-	-	-	-
Arkansas	\$160,000	\$160,000	\$160,000	0
California	-	-	-	-
Colorado	-	-	-	-
Connecticut	-	-	-	-
Delaware	-	-	-	-
Florida	\$160,000	\$160,000	\$160,000	0
Georgia	\$160,000	\$160,000	\$160,000	0
Hawaii	\$160,000	\$160,000	\$160,000	0
Idaho	\$160,000	\$160,000	\$160,000	0
Illinois	\$160,000	\$160,000	\$160,000	0
Indiana	\$160,000	\$160,000	\$160,000	0
Iowa	\$160,000	\$160,000	\$160,000	0
Kansas	\$95,000	\$160,000	\$160,000	0
Kentucky	\$160,000	\$160,000	\$160,000	0
Louisiana	\$159,998	\$160,000	\$160,000	0
Maine	\$160,000	\$160,000	\$160,000	0
Maryland	\$160,000	\$160,000	\$160,000	0
Massachusetts	\$160,000	\$160,000	\$160,000	0
Michigan	\$160,000	\$160,000	\$160,000	0
Minnesota	\$160,000	\$160,000	\$160,000	0
Mississippi	-	-	-	-
Missouri	\$160,000	\$160,000	\$160,000	0
Montana	-	-	-	-
Nebraska	\$160,000	\$160,000	\$160,000	0
Nevada	\$160,000	\$160,000	\$160,000	0
New Hampshire	\$160,000	\$160,000	\$160,000	0
New Jersey	\$160,000	\$160,000	\$160,000	0
New Mexico	\$160,000	\$160,000	\$160,000	0
New York	\$160,000	\$160,000	\$160,000	0
North Carolina	\$150,000	\$150,000	\$150,000	0
North Dakota	\$160,000	\$160,000	\$160,000	0
Ohio	-	-	-	-
Oklahoma	\$160,000	\$160,000	\$160,000	0
Oregon	\$160,000	\$160,000	\$160,000	0
Pennsylvania	-	-	-	-
Rhode Island	\$160,000	\$160,000	\$160,000	0
South Carolina	\$160,000	\$160,000	\$160,000	0
South Dakota	-	-	-	-
Tennessee	\$160,000	\$160,000	\$160,000	0
Texas	\$160,000	\$160,000	\$160,000	0
Utah	\$160,000	\$160,000	\$160,000	0
Vermont	\$160,000	\$160,000	\$160,000	0
Virginia	\$160,000	\$160,000	\$160,000	0
Washington	\$160,000	\$160,000	\$160,000	0
Washington, D.C.	-	-	-	-
West Virginia	-	-	-	-
Wisconsin	-	-	-	-
Wyoming	\$160,000	\$160,000	\$160,000	0

CDC FY 2024 Congressional Justification

<b>Territories</b>	-	-	-	-
America Samoa	-	-	-	-
Guam	-	-	-	-
Marshall Islands	-	-	-	-
Micronesia	-	-	-	-
Northern Marianas	-	-	-	-
Puerto Rico	\$160,000	\$160,000	\$160,000	0
Palau	-	-	-	-
Virgin Islands	-	-	-	-
<b>Subtotal, States</b>	<b>\$6,004,998</b>	<b>\$6,070,000</b>	<b>\$6,070,000</b>	<b>0</b>
<b>Subtotal, Territories</b>	<b>\$160,000</b>	<b>\$160,000</b>	<b>\$160,000</b>	<b>0</b>
<b>Total Resources</b>	<b>\$6,164,998</b>	<b>\$6,230,000</b>	<b>\$6,230,000</b>	<b>0</b>

<sup>1</sup> This State Table is a snapshot of selected programs that fund states (and in some cases local, tribal, and territorial grantees). For a more comprehensive view of grant and cooperative agreement funding to grantees by jurisdiction, visit <http://wwwn.cdc.gov/FundingProfiles/FundingProfilesRIA/>.

<sup>2</sup> CFDA number 93.314

**State Table: Disability and Health Grants<sup>1,2,3</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	-	-	-	-
Alaska	-	-	-	-
Arizona	-	-	-	-
Arkansas	-	-	-	-
California	-	-	-	-
Colorado	-	-	-	-
Connecticut	-	-	-	-
Delaware	-	-	-	-
Florida	-	-	-	-
Georgia	\$575,176	\$584,412	\$585,000	-
Hawaii	-	-	-	-
Idaho	-	-	-	-
Illinois	-	-	-	-
Indiana	-	-	-	-
Iowa	-	-	-	-
Kansas	-	-	-	-
Kentucky	-	-	-	-
Louisiana	-	-	-	-
Maine	-	-	-	-
Maryland	-	-	-	-
Massachusetts	\$585,000	\$585,000	\$585,000	0
Michigan	\$585,000	\$585,000	\$585,000	0
Minnesota	-	-	-	-
Mississippi	-	-	-	-
Missouri	\$585,000	\$585,000	\$585,000	0
Montana	\$572,500	\$572,500	\$585,000	0
Nebraska	-	-	-	-
Nevada	-	-	-	-
New Hampshire	\$572,500	\$572,500	\$585,000	0
New Jersey	-	-	-	-
New Mexico	-	-	-	-
New York	\$585,000	\$585,000	\$585,000	0
North Carolina	-	-	-	-
North Dakota	-	-	-	-
Ohio	\$572,500	\$584,999	\$585,000	0
Oklahoma	-	-	-	-
Oregon	\$585,000	\$572,500	\$585,000	0
Pennsylvania	-	-	-	-
Rhode Island	-	-	-	-
South Carolina	-	-	-	-
South Dakota	-	-	-	-
Tennessee	-	-	-	-
Texas	-	-	-	-
Utah	\$585,000	\$585,000	\$585,000	0
Vermont	-	-	-	-
Virginia	-	-	-	-
Washington	-	-	-	-
West Virginia	-	-	-	-
Wisconsin	-	-	-	-
Wyoming	-	-	-	-

CDC FY 2024 Congressional Justification

<b>Territories</b>	-	-	-	-
America Samoa	-	-	-	-
Guam	-	-	-	-
Marshall Islands	-	-	-	-
Micronesia	-	-	-	-
Northern Marianas	-	-	-	-
Puerto Rico	-	-	-	-
Palau	-	-	-	-
Virgin Islands	-	-	-	-
<b>Subtotal, States</b>	<b>\$5,802,676</b>	<b>\$5,811,911</b>	<b>\$5,850,000</b>	<b>0</b>
<b>Subtotal, Territories</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>0</b>
<b>Total Resources</b>	<b>\$5,802,676</b>	<b>\$5,811,911</b>	<b>\$5,850,000</b>	<b>0</b>

<sup>1</sup>This State Table is a snapshot of selected programs that fund states (and in some cases local, tribal, and territorial grantees). For a more comprehensive view of grant and cooperative agreement funding to grantees by jurisdiction, visit <http://www.cdc.gov/FundingProfiles/FundingProfilesRIA/>.

<sup>2</sup> <http://www.cdc.gov/ncbddd/disabilityandhealth/programs.html>

<sup>3</sup> CFDA number 93.184

## PUBLIC HEALTH SCIENTIFIC SERVICES

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Budget Authority	\$651.997	\$754.497	\$651.222	(\$103.275)
Prevention and Public Health Fund	\$0	\$0	\$140.000	+\$140.000
PHS Evaluation Transfer	\$0	\$0	\$170.342	+\$170.342
<b>Total Request<sup>1</sup></b>	<b>\$651.997</b>	<b>\$754.497</b>	<b>\$961.564</b>	<b>+\$207.067</b>
FTEs	1,574	1,636	1,695	59
-- Health Statistics	\$180.397	\$187.397	\$189.464	+\$2.067
-- Health Statistics – BA	\$180.397	\$187.397	\$19.122	(\$168.275)
-- <i>Health Statistics – PHS Evaluation Transfer</i>	<i>\$0</i>	<i>\$0</i>	<i>\$170.342</i>	<i>+\$170.342</i>
--Public Health Data Modernization <sup>2</sup>	\$100.000	\$175.000	\$340.000	+\$165.000
--Public Health Data Modernization - BA	\$100.000	\$175.000	\$200.000	+\$25.000
-- <i>Public Health Data Modernization - PPHF</i>	<i>N/A</i>	<i>N/A</i>	<i>\$140.000</i>	<i>+\$140.000</i>
-- Surveillance, Epidemiology, and Informatics <sup>2,3</sup>	\$297.600	\$298.100	\$298.100	\$0
-- Advancing Laboratory Science <sup>3</sup>	\$13.000	\$23.000	\$28.000	+\$5.000
-- Public Health Workforce	\$61.000	\$71.000	\$106.000	+\$35.000

<sup>1</sup>This table reflects totals by budget activity. The FY 2024 budget proposes a single “CDC-Wide Activities and Program Support” Treasury account structure.

<sup>2</sup>FY 2022 Enacted Level is comparably adjusted to reflect Congressionally accepted realignment of Public Health Data Modernization Initiative as a stand-alone line.

<sup>3</sup>FY 2022 Enacted Level is comparably adjusted to reflect Congressionally accepted realignment of Advancing Laboratory Science as a stand-alone line.

**Enabling Legislation Citation:** PHS § 241, PHS § 301, PHS § 304, PHS § 306,\* PHS § 307, PHS § 308, PHS § 310, PHS § 317, PHS § 317F,\* PHS § 317G, PHS § 318,\* PHS § 319, PHS § 319A, PHS § 319D, PHS § 353, PHS § 391\*, PHS § 399S-1,\* PHS § 768, PHS § 778,\* PHS § 1102, PHS § 2315, PHS § 2341, 44 U.S.C. §3581, E-Government Act of 2002 (P. L. 107-347), Food, Conservation, and Energy Act of 2008 § 4403 (7 U.S.C. 5311a), Intelligence Reform and Terrorism Prevention Act of 2004 § 7211,\* National Nutrition Monitoring and Related Research Act of 1990 (P. L. 101-445 § 5341), Title V (44 U.S.C. 3501 note)

**Enabling Legislation Status:** Permanent Indefinite

**Authorization of Appropriations for FY 2022:** Indefinite; Expired/Expiring noted with \*

**Allocation Methods:** Direct Federal/Intramural, Competitive Grants/Cooperative Agreements, Contracts

### Program Description

CDC’s Public Health Scientific Services (PHSS) budget supports the agency’s activities to lead, promote, and facilitate scientific standards and policies to protect the health of Americans here and abroad:

- Providing leadership and training for a diverse, competent, sustainable, and empowered public health workforce;
- Modernizing public health surveillance systems and infrastructure; and
- Improving access to information needed by public health professionals who monitor and respond to disease outbreaks and other threats.

**Budget Request**

CDC’s FY 2024 budget request of **\$961,564,000** for Public Health Scientific Services, including **\$140,000,000** from the Prevention and Public Health Fund (PPHF) and **\$170,342,000** in PHS Evaluation Transfer resources, is **\$207,067,000** above the FY 2023 enacted level.

<b>Public Health Scientific Services Funding History</b>	
<b>Fiscal Year</b>	<b>Dollars (in millions)</b>
FY 2020	\$578.497
FY 2021	\$590.181
FY 2022 Final	\$651.997
FY 2023 Enacted (BA)	\$754.497
FY 2024 President’s Budget (BA)	\$651.222
FY 2024 President’s Budget (PPHF)	\$140.000
FY 2024 President’s Budget (PHS Eval)	\$170.342

**Program Accomplishments**

CDC collects, analyzes, and reports scientific data to inform policies and practices to protect the health of all Americans through its Public Health Scientific Services activities. In addition to characterizing the disparate impact of diseases and conditions among different communities, this data informs policies, practices, and guidance that promote equity among groups that have historically been economically and socially marginalized. Modernized public health data infrastructure enables more complete data on race, ethnicity, gender, sexual orientation, disability, and urban versus rural status.

CDC has made substantial progress on its Data Modernization Initiative and other efforts to enhance public health infrastructure and statistical capacity across the country. For example, modernization of vital records has also yielded faster overdose death data, new data on excess deaths, and expanded life expectancy reporting by and Hispanic origin. CDC has reduced lag time on provisional death data from months to just weeks. Nearly 70% of deaths are now reported electronically within 10 days, and preliminary estimates are accessible on CDC WONDER.

Key activities have been undertaken within the PHSS portfolio:

- Enhancing and modernizing CDC and state, territorial, local, and tribal data, surveillance, and analytics capabilities to provide more complete, higher quality data that better illuminate health disparities.
- Releasing additional estimates on drivers of health disparities, including occupation, gender identity, environmental exposures, geographic location, and nonfinancial barriers to care.
- Facilitating more effective action to address health disparities by generating more complete, representative, and specific information via new and non-traditional data sources and methods.
- Expanding data linkages between CDC health data and datasets from other federal agencies to identify and analyze health disparities driven by social determinants of health.
- Increasing laboratory data exchange with an emphasis on facilities that serve medically underserved individuals to ensure access to quality diagnostics and care.
- Strengthening the diversity of the public health workforce and public health career paths.
- Reducing the incidence of diagnostic errors for conditions frequently misdiagnosed among ethnic, racial, or other disproportionately affected groups.
- Increasing the proportion of fellows and interns from under-represented groups and communities.

## PUBLIC HEALTH SCIENTIFIC SERVICES

### BY THE NUMBERS

- **Over 700,000**—Number of records linked between medical or survey data and the National Death Index, expanding researchers' understanding of outcomes with a longitudinal view of population health.
- **555**—Morbidity and Mortality Weekly Reports (MMWR) published on COVID-19 as of December 2022.
- **6,288**—Number of healthcare facilities across the 50 states, Washington, D.C., and Guam that contribute data to the National Syndromic Surveillance Program's BioSense Platform.
- **2,202**—CDC campus laboratory spaces receiving onsite, in-person safety inspections in a typical year from CDC laboratory safety officials.
- **124,000**—Number of vials of material regulated by the Federal Select Agent Program reconciled with laboratory inventories.
- **Over 107,000**—Laboratory systems, safety, quality, and regulatory affairs training course registrations by CDC and non-CDC learners in FY 2022. CDC designed, delivered, and maintained over 250 laboratory education and training materials in FY 2022, including 75 eLearning courses, six in-person courses, two virtual reality courses, and 54 live webinars.
- **542**—Number of CDC fellows and trainees, in FY 2022, assigned to positions in a state, local, Tribal, or territorial public health agency.<sup>1</sup>
- **\$14.64 million**—Estimated value of continuing education credits, contact hours, and units awarded to federal, state, local, tribal, and territorial public health professionals through the CDC TRAIN Learning Network in FY 2022.
- **463**—Number of executed CDC technology transfer agreements in FY 2022, fostering dissemination and application of CDC science and technology innovations, enabling rapid prevention, detection, and treatment of public health threats.

\*Unless otherwise noted, all information and calculations are from CDC program data.

<sup>1</sup> In FY 2022, this includes ALL (new and continuing) full-time trainees at least partially funded by CDC PHSS, in the CDC Epidemic Intelligence Service, Laboratory Leadership Service, Preventive Medicine Residency and Fellowship, Public Health Informatics Fellowship Program, and the Public Health Associate Program. It also includes full-time trainees in the CDC/CSTE Applied Epidemiology Fellowship and the CDC/CSTE Applied Public Health Informatics Fellowship.

## Health Statistics Budget Request

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### Program Description

CDC's National Center for Health Statistics (NCHS) is the nation's principal health statistics agency, designated by the Office of Management and Budget (OMB) to produce official health statistics for the nation. These statistics provide critical evidence to inform policies, monitor programs, track progress, and measure change. Through foundational health statistics systems that gather data from vital statistics and a suite of surveys, NCHS tracks detailed and diverse demographic information about the U.S. population, providing policymakers with the information needed to support evidence-based decision-making. For example, CDC uses suicide, homicide, and drug overdose mortality statistics from NCHS to develop guidance and programs and monitor progress in prevention and treatment. By making reliable and complete demographic data available to the public, NCHS also improves the understanding of health disparities in the United States.

Innovations in health statistics at CDC help modernize the entire public health data system, harness new data, expand the scope and capacity for statistical analysis, and link data across the statistical system. CDC is leading innovations in methods development, data integration, and emerging approaches in data science to embrace new technology and approaches for managing data. NCHS drives these efforts through its longstanding relationships with other federal entities, experience in data access and data use agreements, and expertise in record matching, data linkage, and analytic methods.

### Budget Request

CDC's FY 2024 budget request of **\$189,464,000** for the National Center for Health Statistics, including **\$170,342,000** in PHS Evaluation Transfers, is **\$2,067,000** above the FY 2023 enacted level.

FY 2024 resources will be used to invest in ongoing and updated statistical agency activities:

- Continuing to provide high-quality health statistics to inform decisions and policies by maintaining existing health data systems at current functionality and implementing new requirements to acquire data assets for evidence-building purposes.
- Maintaining core data systems used by HHS and CDC that monitor changes in the healthcare system and address the most critical data needs of public health.
- Informing efforts to expand access to data, including public and restricted data, while protecting confidential information.
- Maintaining baseline sample sizes for surveys to produce estimates on key health indicators.
- Ensuring maximum efficiency of efforts through statistical agency coordination and alignment of data collection activities across agencies and programs.
- Advancing work on equity analysis through data collection, such as further disaggregated data for Asian Americans, Native Hawaiians, and Pacific Islanders.
- Evaluating the use of EHRs in equity analysis to better understand how the data capture health equity variables.
- Evaluating misclassification of race and ethnicity in vital records, develop and implement methodologies to adjust for misclassification in published statistics, and develop training materials and targeted outreach to data providers on proper classification.

With additional funding received in FY 2023, NCHS will maintain its existing data collection and dissemination activities while absorbing increased survey deployment and personnel costs. Remaining resources will be prioritized towards increasing sample size of the National Health Interview Survey to expand disaggregation of health statistics for smaller subgroups of the American population. CDC will continue to prioritize its major data

collection activities, described below, that allow policymakers and the public to understand the health of the U.S. population.

### **National Vital Statistics System (NVSS)**

The NVSS provides key information on approximately 3.8 million births and 2.8 million deaths annually in the United States. This system produces information on birth rates, infant and maternal mortality, life expectancy, mortality, and the leading causes of death. The quality, timeliness, and utility of the vital statistics data have significantly improved in the last decade due to the successful long-standing collaboration with vital registration jurisdictions, consisting of U.S. states, territories, New York City, and Washington, D.C.

CDC staff have also worked with medical examiners and coroners to improve the quality of mortality data, including the creation of a new office within NCHS in 2022 dedicated to this effort: the Collaborating Office for Medical Examiners and Coroners (COMEC). NVSS's monthly release of [Provisional Drug Overdose Death Counts](#),<sup>170</sup> launched in 2017, provides access to the timeliest information on drug overdose deaths. Over the past four years, the number of jurisdictions reporting overdose death counts with drug specificity has more than doubled to 42. These data guide overdose prevention programs and have been crucial in identifying the rapid rise of fentanyl-related overdose deaths in the United States. Through these improvements, CDC has accelerated the reporting of mortality data. Since 2011, there has been a 52-percentage-point improvement in mortality records received within 10 days of the event, allowing for the analysis of detailed death data and more rapid publishing. For example, beginning in February of 2022, CDC began reporting provisional overdose mortality four months after the date of death, a substantial improvement over the previous norm of a six-month lag.

Since the beginning of the COVID-19 pandemic, CDC has provided timely and relevant data and tools to support decision making and response efforts. CDC continues to provide weekly updates on [COVID-19 mortality counts](#),<sup>171</sup> stratified by geographic region, age, sex, race and ethnicity, and educational status, to inform policymakers on the differential effects of COVID-19 on various sub-populations. In 2022, NCHS also published a [report](#)<sup>172</sup> stratifying COVID-19 mortality by occupation and industry. NVSS mortality data are over 99% complete for race and ethnicity fields.

CDC also publishes estimates of [excess deaths](#),<sup>173</sup> including deaths directly or indirectly attributed to COVID-19, to provide information about the total burden of mortality due to the pandemic. Published data on excess deaths, updated weekly, are available by age group, race and Hispanic origin, and for select causes of death. Information on excess deaths allows public health experts and policymakers to identify where and when mortality increases. These data exposed elevated mortality due to heart disease, hypertension, dementia, and other ailments during the pandemic within weeks of the deaths occurring. To ensure accurate and standardized death certificates nationwide and minimize the risk of over- or under-reporting COVID-19 deaths, CDC also published [Guidance for Certifying Deaths Due to Coronavirus Disease 2019 \(COVID-19\)](#).<sup>174</sup>

### **National Health Interview Survey (NHIS)**

For more than 60 years, the NHIS has served as the nation's principal health survey and has provided invaluable information on the state of health in the U.S. population. The NHIS collects data through personal household interviews focusing on critical public health topics, including prescription opioid use, long-COVID symptoms, and vaccination status. Data collected also cover health status, risk factors, health conditions, health insurance coverage, and access to care. NHIS data reveal how respondents' health impacts their daily lives, something that

<sup>170</sup> <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>

<sup>171</sup> <https://www.cdc.gov/nchs/nvss/covid-19.htm/>

<sup>172</sup> <https://www.cdc.gov/nchs/data/nvsr/nvsr71/nvsr71-06.pdf>

<sup>173</sup> [https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess\\_deaths.htm](https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm)

<sup>174</sup> <https://www.cdc.gov/nchs/data/nvss/vsrg/vsrg03-508.pdf>

cannot be done via medical and case records or insurance claim reviews. NHIS data are crucial for crafting policies that support the health and well-being of all Americans.

Many states, like California, benchmark health surveys to the NHIS, allowing CDC and HHS to use the NHIS to compare the effectiveness of programs. Private sector health surveys also rely on the NHIS for national population health estimates. NHIS data have become the linchpin for modeling access to care and estimating the impact of changes in national policy on various segments of the U.S. population.

### **National Health and Nutrition Examination Survey (NHANES)**

The NHANES is the only federal survey that combines household interviews with physical examinations and laboratory tests. These unique methods allow NHANES to collect objective, nationally representative data on the prevalence of diagnosed and undiagnosed conditions in the population, including diabetes, hypertension, environmental exposures, high cholesterol, and obesity. NHANES also provides information that sets the national standards for height, weight, and blood pressure measurements.

CDC and other federal agencies, including the National Institutes of Health (NIH) and the U.S. Department of Agriculture (USDA), rely on NHANES to provide measurements that are used to target resources and plan or evaluate programs. NHANES is the primary source of data for many reports and guidance, including CDC's growth charts for children, the Dietary Guidelines for Americans, the National Report on Human Exposure to Environmental Chemicals, and the Healthy People 2030 objectives.



### **National Health Care Surveys**

The National Health Care Surveys are provider-based surveys that cover a broad spectrum of healthcare settings, including ambulatory, inpatient, and long-term care providers. Inpatient hospital units, emergency departments, physician offices, and long-term care facilities provide information on their practices, the delivery of services and care, and individual patient encounters. CDC recently developed methods to identify co-occurring disorders among opioid users using linked hospital-care and mortality data, leading to a report published in July 2022 which found 7.8% of opioid-involved ED visits and 15% of opioid-involved hospitalizations were among patients diagnosed with both a substance use disorder and a selected mental health issue<sup>175</sup>. Additional updates are underway, which include adding variables on disparities in healthcare settings. Beginning in 2020, CDC added questions about COVID-19 to the National Ambulatory Medical Care Survey and the National Post-Acute and Long-Term Care Survey, and data released in September 2021 informed policymakers on the status of health care facilities during the pandemic.

### **Health Equity Analysis**

NCHS's data reveal racial and ethnic disparities on a wide range of health indicators, including life expectancy; infant mortality; risk factors such as smoking, physical activity, and alcohol use; and access to care. In FY 2023, CDC will support efforts to accelerate equity analysis by evaluating electronic health records (EHRs) to ensure that race, ethnicity, and language variables are updated and standardized.

At the FY 2024 requested level, CDC will evaluate EHRs from hospitals and federally qualified health centers for use in equity analyses. CDC will also improve the reporting of race and ethnicity with evaluations linking death records to data from the Census Bureau. CDC will measure race and ethnicity misclassification and develop more

<sup>175</sup> <https://www.cdc.gov/nchs/data/nhsr/nhsr173.pdf>

accurate statistics for small group populations. CDC also will work with state vital records offices to improve the quality of race and ethnicity information in vital statistics.

### **Data Access**

CDC provides access to health statistics from its suite of data collection systems to policymakers, researchers, and the public. The Research Data Center (RDC) grants researchers access to restricted public health data in an ethical manner to inform evidence-based policymaking while protecting the confidentiality of survey respondents, study subjects, and institutions. CDC is also developing a Virtual Data Enclave (VDE) to increase access and lower costs for researchers using restricted data. The VDE will provide a more efficient means to digitally access information and conduct research.

The NCHS Data Linkage Program connects health-related data sources to help answer complex health questions. Linked data resources reduce costs associated with recontacting survey participants for follow-up information and connect historical and social context to survey data on major diseases, risk factors, and health services utilization. Data linkage maximizes the value of CDC's health surveys by integrating data from the National Death Index, Centers for Medicare and Medicaid enrollment and claims, and the U.S. Department of Housing and Urban Development. Linked data have aided in answering key health equity policy questions, such as the effectiveness of policies to lower lead exposure in children living in public housing. In 2022, CDC established a new linkage with data from the Department of Veterans Affairs to compare the impacts of COVID-19 on veteran and non-veteran populations.

### **Strengthening the Use of Evidence and Evaluation**

As part of the Foundations for Evidence-Based Policymaking Act of 2018, federal statistical agencies are responsible for acquiring data for evidence-building purposes (44 U.S.C. §3581). As the statistical agency for health, NCHS serves HHS in implementing the agency's Evidence-Building Plan. The Director of NCHS is the designated HHS Statistical Official and works with the HHS Evaluation Officer and Chief Data Officer to promote interagency coordination. The Director of NCHS also serves on the Interagency Council on Statistical Policy, supporting coordination across all agencies and implementing new statutory requirements focused on improving the management and use of data across the federal government.

## Surveillance, Epidemiology, and Informatics Budget Request

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### Program Description

Surveillance, Epidemiology, and Informatics serve as the foundation for the nation's ability to identify and respond to health threats. The public health surveillance systems, laboratory exchange between public health and clinical laboratories, and high-quality scientific publications supported by this line provide vital insights into the nation's health, health disparities, and useful public health recommendations. The COVID-19 pandemic demonstrated how essential a comprehensive picture of public health data—from case reporting to emergency department visits to laboratory result data—is to our ability to understand and respond to health threats. Continued investment is needed to support and maintain platforms for syndromic data and case reporting. Simultaneously, CDC needs to modernize those systems at the federal, state, and local level to ensure that data can move faster than the spread of disease.

### Budget Request

CDC's FY 2024 budget request of **\$298,100,000** for Surveillance, Epidemiology, and Informatics is level with the FY 2023 enacted level. CDC will continue to work toward a robust, modern, and secure public health information ecosystem capable of delivering real-time, accurate, and useful data to public health and policymakers at the local, state, and federal levels.

In FY 2024, CDC will continue to support the National Syndromic Surveillance Program as the nation's early warning system to detect and monitor health threats; the National Notifiable Disease Surveillance System will continue to provide comprehensive national surveillance for diseases and conditions that present a potential threat to the health of a community; the Behavioral Risk Factor Surveillance System will continue to collect data on health-related behaviors across the nation.

In FY 2024, CDC will continue to build the **agency's scientific integrity** and quality infrastructure to support public health:

- Ensuring scientific integrity and quality by modernizing policies, practices, and training to safeguard scientific integrity in alignment with federal regulations and ensure that its activities meet the highest standards of scientific integrity, quality, ethics, and transparency.
- Building capacity through scientific integrity experts and a trained, diverse scientific workforce.
- Advancing health equity science and interventions by expanding the evidence-base for effective approaches that reduce health disparities, improve health outcomes, and advance health equity.
- Modernizing data and innovation using scientific methods, systems, and research processes, emphasizing innovative scientific tools to advance analytics capabilities across the agency.
- Developing systems, infrastructure, and knowledge management to increase public access to CDC science, data, and surveillance and ensure that systems evaluate impact, relevance, credibility, and transparency.

FY 2024 priorities for clinical and **public health laboratory activities** include activities in the following areas:

- Improving the quality and safety of clinical and public health testing and practice.
- Providing technical expertise to the federally mandated CLIA program in partnership with CMS and FDA.
- Developing resources, tools, and guidelines for next-generation sequencing and other emerging technologies.
- Advancing laboratory-focused activities to reduce the incidence of diagnostic errors, focusing on health conditions that disproportionately affect medically underserved populations.

- Enhancing laboratory preparedness and laboratory result reporting of clinical and public health laboratories during emergency response.
- Expanding access to the CDC Biorepository by leading and promoting continuous improvements in quality, collection, and data standards, and enhancing other services and tools that address the critical needs of sample management across CDC and beyond.
- Improving public health laboratories' ability to receive electronic test orders and report results to healthcare.

CDC supports a national network of strong health departments, which work to provide accessible, timely, quality, and sustainable public health services, underpinned by strong surveillance and epidemiology, that protect Americans' health and safety. These essential components of the nation's front line of public health defense require tools, resources, and a sustainable, well-trained workforce to work better, faster, and smarter. CDC works with executive-level partners in health departments throughout the public health system and provides services tailored to state, tribal, local, and territorial health officials—including targeted communications, consultations, and site visits—that will improve community health outcomes.

### **National Syndromic Surveillance Program (NSSP)**

CDC's NSSP provides local, state, and federal health officials with a near-real time system for detecting, understanding, and monitoring health events. Tracking symptoms and diagnoses of patients in emergency departments enables public health officials to detect changes in reported illnesses so they can determine how to respond. These syndromic methods complement traditional case reporting by rapidly providing information from multiple sources as new threats emerge.

For example, the NSSP BioSense platform captures near real-time information from more than 6,000 emergency departments and outpatient facilities in all 50 states, usually within 24 hours from the time a patient walks through the emergency department doors. CDC, state and local health departments, and collaborators in academia, nongovernmental agencies, and the private sector examine data from these multiple sources, where they can identify patterns or trends that may not be apparent in data from individual providers.

Innovative applications of NSSP have provided: earlier detection of emerging infections, including pediatric hepatitis and mpox; more comprehensive information for vaccine safety monitoring; and better data on health disparities.

### **National Notifiable Diseases Surveillance System (NNDSS)**

CDC's NNDSS supports state, local, and territorial public health departments' ability to receive disease data, track cases, identify outbreaks, and prevent disease spread. More than 3,000 local health departments nationwide contribute data on more than 120 diseases and conditions to NNDSS through state and territorial public health departments. CDC funding supports programs in collecting and analyzing these data and builds capacity for implementing new technological innovations, such as electronic case reporting (eCR), which makes richer data available sooner.

### **Behavioral Risk Factor Surveillance System (BRFSS)**

CDC collaborates with state and territorial health departments to administer the BRFSS, the world's largest continuously conducted telephone health survey. This is also the primary data source for states and localities to understand health-related behaviors of adults.

### **National Neurological Conditions Surveillance System (NNCSS)**

The NNCSS harnesses the power of multiple data sources to produce robust national surveillance estimates, identify populations that are at higher risk or underserved, monitor trends, and catalyze further research into causes, diagnostics, prevention, and treatments. CDC has explored more than 30 data sources and tools to determine their current and future usefulness for surveillance of multiple sclerosis (MS), Parkinson's disease (PD), and other neurological conditions. In FY 2022, CDC produced estimates of national prevalence for MS and PD including overall prevalence; prevalence by age, sex, and geographic region; and, where data were available, prevalence by race/ethnicity. CDC also synthesized its methods and lessons learned to propose a consolidated set of replicable approaches for maintaining and expanding MS and PD surveillance and initiating surveillance for additional neurological conditions.

## Epidemiology

CDC supports scientifically sound decision making by providing epidemiological resources, evidence-based recommendations, scientific literature, tools, and other resources for preventing and solving public health threats. Health departments, hospitals, clinicians, and others engaged in protecting the health of their communities use these resources to inform and enhance their work at state and local levels. The principal programs and tools include [CDC WONDER](https://wonder.cdc.gov/)<sup>176</sup> and [Epi Info](https://www.cdc.gov/epiinfo/index.html)<sup>177</sup>. In addition to the agency's public-facing tools, the CDC Data Hub provides services for the identification, acquisition, access, and support of data from healthcare and public health partners for CDC programs ranging from emerging infectious diseases to birth defects.

## Standards and Services in Public Health and Clinical Laboratories

The nation's health depends on a robust network of laboratories that perform routine clinical testing, detect biothreats, share information, and respond to public health emergencies. Responses to the COVID-19 pandemic and other public health emergencies, such as the mpox outbreak, highlight the ongoing need for safe and reliable testing, timely and effective public health messaging, training resources, and standardized reporting of laboratory test results. During the COVID-19 pandemic, approximately 55,000 new laboratories and testing facilities aligned with Clinical Laboratory Improvement Amendments of 1988 (CLIA) certification requirements were added in places such as doctor's offices, pharmacies, schools, and nursing homes. In total, these more than 322,000 CLIA-certified laboratories and testing facilities conducted approximately 16 billion laboratory tests in 2021. CDC provides critical support and resources to these laboratories, including data-driven guidance documents and information to the public health and clinical laboratory community.

Since the start of the COVID-19 pandemic, CDC has convened routine national public health response calls with more than 4,520 unique organizations to share laboratory and testing updates from CDC and other federal partners. CDC has also supported the nation's clinical laboratories to increase nationwide testing capacity by providing technical assistance and guidance and leveraging partner networks to achieve public-private consensus on diagnostic testing strategies. In the spring of 2022, CDC utilized its existing partner network to transfer mpox tests to five large commercial laboratories to quickly increase mpox testing capacity and access. CDC's Laboratory Outreach Communication System, which serves as a direct line of communication and source of technical support to clinical laboratories, issued 272 messages to nearly 100,000 clinical laboratory staff and individuals, including 225 messages specific to COVID-19 or mpox.

CDC is strengthening the nation's infrastructure for surge testing during future public health emergencies (PHEs) through enhanced public and private partnerships in the clinical laboratory community. In FY 2022, CDC added additional partners to its Memorandum of Understanding between public and private laboratory stakeholders, including with the Food and Drug Administration (FDA), to address surge testing during PHEs. Through its OneLab Initiative, CDC is developing a sustainable capacity-building community among clinical and public health

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<sup>176</sup> <https://wonder.cdc.gov/>

<sup>177</sup> <https://www.cdc.gov/epiinfo/index.html>

laboratories to come together as "one lab" to prepare for and swiftly respond to public health emergencies. Formed in February 2021, the OneLab Network has quickly grown to include 2,600+ members who represent 1,300+ laboratories and laboratory professional organizations. CDC provides OneLab Network members with monthly live webinars and on-demand web-based training resources.

### **Morbidity and Mortality Weekly Report (MMWR) and CDC Vital Signs**

CDC's mission is not only to conduct high-quality science, but to share that information with the public in an actionable way. Publications such as the MMWR, often referred to as "the Voice of CDC," and CDC Vital Signs are the agency's primary vehicles for scientific publication of timely, reliable, authoritative, accurate, and objective scientific findings. Major news media outlets, medical societies, and scholarly medical journals extensively redistribute MMWR and CDC Vital Signs content, amplifying CDC's ability to get public health information into the hands of people who need it.

The MMWR's relentless focus on scientific quality, timeliness, and impact has resulted in a steady stream of scientific reports that have shaped the national understanding of COVID-19. COVID-19-related MMWR reports have resulted in more than 935,000 social media impressions and more than 30,000 total citations. These reports have become touchpoints in the public understanding of the pandemic: the effectiveness of face masks and respirators for preventing infections, the initial detection of the Omicron variant in the United States, ventilation improvement strategies in K-12 schools, post-COVID conditions among adults, and racial and ethnic disparities in outpatient treatment of COVID-19. MMWR reports have also shone a light on the collateral effects of the pandemic, such as the mental health impact on public health workers and caregivers. MMWR has also played a crucial role in disseminating information about the 2022 mpox outbreak, publishing reports about the epidemiologic and clinical features of mpox and mpox vaccine effectiveness.

### **Scientific Integrity and Quality**

CDC works to ensure the highest standards of scientific integrity, relevance, credibility, and transparency for any data, publications, research, and communication materials. CDC scientific services include training, guidance, consultations, library resources, and technology transfer facilitation for over 11,000 scientists across the agency. In FY 2021, CDC's scientific leadership began incorporating its [CORE Health Equity Science and Intervention Strategy](#)<sup>178</sup> throughout the agency's scientific and research programs to ensure that health equity principles and criteria are routinely considered in the early stages of CDC's work and drive progress in ensuring all people have an opportunity to live as healthy as possible.

CDC's investments in data science and modernization also promote data sharing, public access, and alignment with federal data initiatives and privacy, ethics, and confidentiality principles. CDC executed 463 technology transfer agreements in FY 2022, fostering dissemination and application of CDC science and technology innovations, enabling rapid prevention, detection, and treatment of public health threats. In FY 2021, CDC also executed 510 technology transfer agreements, of which 66 were COVID-related, and reduced scientific regulatory approval time by 90 percent for nearly 100 key COVID-19 scientific studies.

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<sup>178</sup> <https://www.cdc.gov/healthequity/core/index.html>

**NSSP Awards<sup>1,2</sup>**

(Dollars in millions)	FY 2024 President's		
	FY 2022 Final	FY 2023 Enacted	Budget
Number of Awards	51	51	51
- New Awards	0	0	0
- Continuing Awards	51	51	51
<b>Total Awards</b>	<b>\$6.564</b>	<b>\$6.564</b>	<b>\$6.564</b>

<sup>1</sup> Table includes core funding from the Surveillance, Epidemiology, and Public Health Informatics budget activity and other CDC programs.

<sup>2</sup> These funds are not awarded by formula.

**NNDSS Awards<sup>1</sup>**

(Dollars in millions)	FY 2022	FY 2023 Enacted	FY 2024 President's
	Final		Budget
Number of Awards	64	64	64
- New Awards	0	0	0
- Continuing Awards	64	64	64
Average Award	\$0.138	\$0.172	\$0.172
Range of Awards	\$0.007-\$0.860	\$0.003-\$0.342	\$0.003-\$0.172
<b>Total Awards</b>	<b>\$8.846</b>	<b>\$11.035</b>	<b>\$11.035</b>

<sup>1</sup> These funds are not awarded by formula.

**BRFSS Awards<sup>1,2</sup>**

(dollars in millions)	FY 2022	FY 2023 Enacted	FY 2024 President's
	Final		Budget
Number of Awards	56	56	56
- New Awards	56	0	0
- Continuing Awards	0	56	56
Average Award	\$0.401	\$0.400	\$0.400
Range of Awards	\$0.070-\$0.470	\$0.125-\$0.405	\$0.125-\$0.405
<b>Total Awards</b>	<b>\$22.485</b>	<b>\$22.485</b>	<b>\$22.485</b>

<sup>1</sup> Table includes core funding from the Surveillance, Epidemiology, and Public Health Informatics budget activity and other CDC programs.

<sup>2</sup> These funds are not awarded by formula.

## Advancing Laboratory Science Budget Request

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### Program Description

High-quality, timely, and affordable laboratory test results are essential for the effective detection, diagnosis, treatment, and prevention of infectious disease, chronic disease, and harmful exposures.

For CDC laboratories to provide these critical functions, they must address five priorities: 1) provide high-quality and timely test results, including emergency results that identify new and dangerous pathogens and surveillance results that detect the incidence and prevalence of disease in affected populations; 2) be at the cutting edge of advances in laboratory science to develop unique, new, faster, less expensive, and better diagnostic tests; 3) operate in a manner that ensures the safety of laboratory personnel and appropriate treatment of laboratory animals; 4) provide training and technology transfer to other laboratories; and 5) effectively integrate and collaborate with other public health and private laboratories. Review of CDC's infectious disease (ID) laboratory response to the COVID pandemic identified multiple areas needing improvement, especially to ensure the rapid development of high-quality laboratory tests. Recognizing that emergency conditions pose special problems for rapid development of high-quality tests, CDC laboratories need to be better prepared to develop such tests under emergency conditions.

### Budget Request

CDC's FY 2024 budget request of **\$28,000,000** for Advancing Laboratory Science is **\$5,000,000** above the FY 2023 enacted level.

### **Laboratory Safety, Quality, and Training at CDC**

CDC has pledged to the American people to base public health decisions on the highest quality scientific data derived openly and objectively. CDC fulfills this pledge through its commitment to continually improving laboratory quality and safety across more than 200 laboratories that employ over 1,700 laboratory scientists to safeguard the country against health threats. CDC laboratory scientists use the latest technologies to detect and diagnose infectious diseases, respond to foodborne outbreaks, evaluate effectiveness of treatments and vaccines against high-consequence infectious diseases, investigate disease and death of unknown cause, evaluate biosecurity threats, protect America's blood supply, screen for genetic and other health risk factors, monitor the health of communities, identify harmful exposures, and address other public health issues to carry out CDC's mission to save lives and protect the American public.

CDC's laboratories continue to run unique tests, provide exceptional products and services that advance laboratory science and quality, and offer methodologically well-characterized and validated clinical diagnostic test results. CDC will provide scientifically excellent, timely, and efficient laboratory support for an emergency response that is integrated well with the overall CDC response and the response efforts of private and public health partners. Additionally, a comprehensive training curriculum, including laboratory safety and quality courses, ensures that CDC's laboratory scientists are equipped to meet public health challenges.

In FY 2023, CDC made considerable progress implementing the Laboratory Quality Plan (LQP) to strengthen laboratory quality throughout the agency and address gaps highlighted by the COVID-19 pandemic. The LQP provides the infrastructure to ensure the development of high-quality test methods and reporting of high-quality test results. Progress during FY 2023 on the LQP is briefly described below:

- Three quality management systems: tailor-made quality specifications to address the unique challenges of different laboratories focused on infectious disease, non-infectious disease laboratories and NIOSH.
- A Quality Manual for Microbiological Laboratories (QMML) that describes quality standards for clinical, surveillance and research infectious disease laboratories has been drafted and is under review.

- Formalized processes and procedures for the Infectious Disease Test Review Board (IDTRB) review of laboratory tests developed within CDC before they are shared externally to ensure the tests meet excellent quality standards and are suitable for their intended purpose. The IDTRB was formed in FY 2022 and participated in reviewing protocols for laboratory detection of MPox virus to support the 2022 MPox Outbreak Response.
- Convened a method expert group on real-time polymerase chain reaction (rt-PCR) that developed excellent quality control standards for this method that are being incorporated into CDC's QMML. Additional method expert groups for other diagnostic methods are planned, including next generation sequencing.
- Procurement and tailoring of an electronic quality management system (eQMS) that is flexible, easy to use, and facilitates laboratory quality activities such as documenting and managing non-conforming events, corrective and preventive actions, training, equipment maintenance, standard operating procedures and more.
- Prepared for biannual external review of all laboratories (clinical, surveillance, and research); clinical laboratories will be audited to meet CLIA requirements by Centers for Medicaid and Medicare Services approved auditors.

In FY 2023, CDC continued to spotlight agency-wide awareness of the laboratory quality policy and the importance of quality management systems as foundational elements for protecting and enhancing CDC's scientific excellence. CDC laboratories continue to implement and adhere to these standards for scientific activities, facilities, and operations, ensuring that CDC's laboratory science is of the highest quality and that CDC maintains state-of-the-art laboratory capacity, test accuracy and precision, and scientific innovation. CDC also continues to advance laboratory safety and efficiency by replacing outdated laboratory instruments and equipment and expanding automated sample-processing workflows.

CDC must continue to strengthen laboratory science and safety by implementing quality management systems that review protocols for the inactivation of life-threatening pathogens, conducting on-the-ground safety inspections of CDC laboratories, and ensuring that CDC laboratory staff have state-of-the-art training needed to meet 21<sup>st</sup>-century health threats. CDC will also continue investing in key efforts to strengthen laboratory safety and excellence across the agency, as follows:

- Advancing laboratory science: CDC will promote cutting edge laboratory science to develop unique, new, faster, more inexpensive, and better diagnostic tests. These tests will be instrumental for pandemic preparedness. CDC will also strive to be on the forefront of advances in laboratory science that improve laboratory safety and quality by supporting a highly skilled laboratory workforce and enhancing special, high-containment safety training facilities.
- Providing comprehensive safety oversight: CDC will continue to implement and provide thorough, centralized internal oversight of biological, chemical and radiation safety across the agency, a vital investment to ensure optimal safety and security of CDC laboratories and the public.
- Setting high standards of laboratory quality: CDC will continue to implement the LQP with quality process improvements designed to ensure development of excellent quality diagnostic tests and excellent quality, timely laboratory results. This includes augmenting support for the Boards, Committees, and Councils responsible for oversight of laboratory quality, safety, and regulatory compliance of laboratories.
- Enhancing laboratory training: CDC will develop more instructor-led training courses and roll out a standardized core BSL-3 training curriculum and provide tools, training, and expertise to enhance quality laboratory science and aid CDC laboratories in implementing quality management systems.
- Ensuring ethical and humane treatment of laboratory animals: CDC will continue to be responsible for ensuring compliance with federal laws and principles in the care and use of laboratory animals at CDC while ensuring the highest standards of animal welfare.

- Securing select agents: CDC will continue to support this program to ensure internal laboratories that work with the most high-consequence pathogens and toxins in the world continue to comply with the Federal Select Agent Program's rules to secure these agents and protect the public's health.

## Public Health Data Modernization Initiative Budget Request

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### Program Description

The COVID-19 pandemic has underscored the need for high-speed, modernized public health data infrastructure. Connected and integrated data help CDC put the pieces together faster and take action to protect health. With initial investments beginning in FY 2020 through the Public Health Data Modernization Initiative, CDC has taken the first steps to strengthen the U.S. public health data and surveillance infrastructure. CDC is improving core surveillance systems that benefit all of CDC and public health, bolstering CDC program capabilities to protect health, and supporting State, Tribal, local, and territorial public health departments to strengthen their capabilities for COVID-19 and beyond.

### Budget Request

CDC's FY 2024 budget request of **\$340,000,000** for the Public Health Data Modernization Initiative, including **\$140,000,000** from the Prevention and Public Health Fund (PPHF), is **\$165,000,000** above the FY 2023 enacted level.

In FY 2024, CDC will make advances to allow data to flow more seamlessly across healthcare and public health, as well as between state and local jurisdictions and the agency. CDC will continue to partner with state, tribal, local, and territorial public health departments and public and private sector partners to create modern, interoperable, and real-time public health data and surveillance systems that protect Americans.

### **Improving Systems that Benefit All of CDC and Public Health**

Because of modernization efforts, CDC has more data for decision-making, particularly across the core surveillance systems used by many CDC programs and public health partners to track all diseases and conditions across the United States. For example:

- Electronic case reporting (eCR) expansion is decreasing reporting burden on healthcare providers and increasing the completeness and speed of data flowing into public health. With CDC support, the Oregon Community Health Information Network implemented eCR submissions and, by reducing the time to submit required COVID data, saved approximately 145,000 staff hours or \$4.3 million in 11 months.
- CDC built a new electronic pathway for COVID laboratory-based diagnostic tests that has handled over 934 million diagnostic test reports, at times averaging over 1.5 million per day. This data flow is now supporting automated reporting for mpox.
- Advancements in interoperability of immunization information systems have supported new work to improve national situational awareness. These pipelines have allowed for aggregate reporting of over 670 million COVID vaccine doses and are now being used to support mpox situational awareness.
- Modernization of vital records has also yielded faster access to overdose death data, new data on excess deaths, and expanded life expectancy reporting by race and Hispanic origin. CDC has reduced lag time to publishing provisional death data from months to just weeks. Nearly 70% of deaths are now reported electronically within 10 days, and preliminary estimates are accessible to the public on CDC WONDER. Additional support is now making it possible for 10 states to successfully implement bi-directional interoperability of their electronic death registration systems with CDC's NCHS to further improve information exchange.
- CDC and the U.S. Digital Service worked with the Virginia Department of Health to pilot a new data ingestion and integration pipeline for lab, case, and vaccine data. This cloud-based pipeline runs 24/7 and has increased message processing from 5,800 to 20,000 messages per hour - saving time and manual effort, increasing data processing speed, creating a single source of truth for incoming data, and removing the need for duplicative processes.

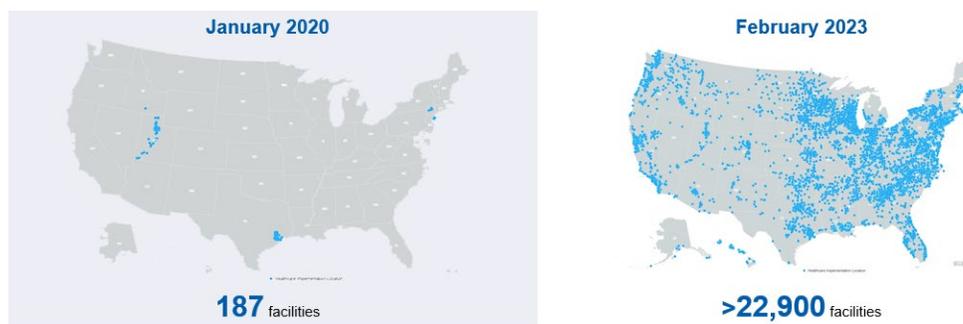
## Bolstering CDC’s Capabilities to Protect Health

Modernization efforts have allowed CDC programs to bolster their capabilities to protect health through the migration to cloud-based storage and services, including increased use of enterprise-wide tools and services. As an example, the Enterprise Data, Analytics, and Visualization (EDAV) platform, a collection of cloud-based tools and services that enable in-depth data analysis and data visualization, is allowing CDC’s scientists to catalogue, analyze, and communicate findings faster than previously possible. Programs addressing infectious and noninfectious disease threats have benefited from these investments, improving the public health system’s preparedness and response for conditions as varied as pertussis, tuberculosis, drug overdose, suicide, cancer, and hazardous environmental exposures.

### Data Modernization Spotlight: Electronic Case Reporting

Because modernization in public health surveillance systems generally lag behind the adoption of technology in healthcare systems, the vast amount of electronic healthcare data can be difficult for public health agencies to process, integrate, and analyze. Additionally, many jurisdictions still rely on outdated data collection and reporting processes, such as faxes and phone calls. The inability of public health agencies to efficiently process and use this valuable healthcare data created a gap that represents a missed opportunity to improve people’s health.

Data modernization investments have helped CDC fill this gap through electronic case reporting (eCR). eCR is the automated generation and real-time exchange of case report information between electronic health records and public health agencies. Its automated process could potentially revolutionize public health case surveillance by reducing the burden on both healthcare providers and health departments involved in manual data transmission and producing timelier, richer, and more complete data than traditional case reporting. Expanding eCR also has the potential to support health equity by helping agencies make data-driven decisions in under-resourced and socially marginalized communities, allowing resources to be allocated more equitably.



As of February 3, 2023, more than 22,900 health care facilities in all 50 states were using eCR—up from 187 before the pandemic and a 111-fold increase. These connections hold substantial promise to promote health equity. While relatively small fractions of all federally qualified health centers (FQHCs) and critical access hospitals (CAHs) currently use eCR to serve their patient populations of historically underserved individuals, including rural residents, continued investment will support increasing capacity while also reducing the reporting burden for healthcare providers in these environments. As of February 2023, eCR is used in 25% of CMS hospitals and 21% of CAHs. Twenty-two Tribal healthcare facilities and three Tribal organizations—Cherokee Nation, with 430,000 citizens; Alaska Native Tribal Healthcare Consortium, the largest U.S. Tribal health organization; and Yukon-Kuskokwim Health Corporation, serving 58 rural communities in southwestern Alaska—have also begun submitting eCR data.

In FY 2024, CDC will continue efforts as follows:

- Develop and adopt cloud-native, efficient, and enterprise-wide applications. The level of investment for these efforts will determine how quickly CDC can shift from existing siloed systems into enterprise-wide applications to reduce burden on health departments and data providers.
- Modernize core public health data sources that allow data to flow more seamlessly across healthcare and public health. Again, the level of investment in these efforts will determine the speed by which this can be fully implemented.
- Progress toward complete modernization of the state case management/surveillance platform (NBS) that helps public health departments manage and send notifiable disease data to CDC.

CDC will direct funding to State, local, Tribal and territorial jurisdictions, supporting their ability to make critical transformations that will enable health departments to receive and share data from health care and other sources and use it for situational awareness to inform public health actions. CDC will provide technical assistance and deploy CDC-developed tools and solutions, such as application-based 'building blocks', to state and local health departments for their own use, to enhance their ability to make these necessary foundational transformations and avoid unnecessary modernization costs.

CDC's commitment to data modernization is how public health will get the information needed to ensure that all people have an equal opportunity to attain the best health possible. To better serve Americans, CDC is working to make demographic data, such as race and ethnicity data, higher quality and more complete, specific, and representative. CDC is also addressing social and structural determinants of health by making existing geographic-linked data on root causes of poor health outcomes routinely available, better directing resources to address barriers to achieving the highest level of health possible. As CDC continues to transform public health data, advancements in rapid data analysis will allow public health agencies and policymakers to gain real-time insights, enhancing their ability to detect public health threats before they become emergencies. Through its modernization effort, CDC envisions a future in which public health is not only "response-ready" but also more equitable and better at promoting meaningful wellness for all Americans.

## **Public Health Workforce Budget Request**

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### **Program Description**

The COVID-19 response laid bare the gaps resulting from a decades-long erosion of public health workforce support. Public health agencies did not have the people or resources to surge to meet the demands of a pandemic. Actions taken now to invest in developing the next generation of essential public health workers will better position our communities and the nation to safeguard Americans' health.

CDC strengthens the U.S. public health workforce with a multi-pronged approach focused on: support for world-class public health fellowship and training programs like the Epidemic Intelligence Service (EIS), Laboratory Leadership Service (LLS), and the Public Health Informatics Fellowship Program (PHIFP); ensuring broad access to training and educational resources; identifying and systematically addressing workforce and recruitment gaps; and building foundational workforce capacity to ensure public health is prepared for future threats at every level of government.

### **Support for State, Tribal, Local, and Territorial Health Departments**

CDC supports a national network of strong health departments, which work to provide accessible, timely, quality, and sustainable public health services that protect Americans' health and safety. These essential components of the nation's front line of public health defense require tools, resources, and a sustainable, well-trained workforce to work better, faster, and smarter. CDC works with executive-level partners in health departments throughout the public health system and provides services tailored to state, tribal, local, and territorial health officials—including targeted communications, consultations, and site visits—that will improve community health outcomes.

CDC also supports cross-cutting cooperative agreements and grants. This work includes supporting health departments to improve their performance and accountability by using quality improvement tools, undertaking community health assessments, implementing community health improvement plans, meeting national standards, and attaining public health accreditation. These activities help identify gaps and opportunities and inform programmatic and resource decisions across the nation. These tools are also reinforcing health equity efforts. For example, national accreditation standards are advancing attention to health equity. Annual evaluation findings show that 73% of accredited health departments report that accreditation has helped the health department use health equity as a lens for identifying and addressing health priorities.

### **Maintaining CDC's Leadership Pipeline**

FY 2024 initiatives will continue to focus on strategic leadership and enhancing coordination among CDC's Centers, Institutes, and Offices to improve the identification and implementation of evidence-based public health policies and interventions and increase engagement with internal and external partners in health equity, infectious and non-infectious disease, public health science and surveillance, and services and implementation science. CDC will continue its national and global leadership and expertise in preventing and controlling infectious diseases. In addition, CDC will continue strategic investments providing public health management and leadership to the U.S. Government's COVID-19 and Response function, direct support to health departments, tribal and underserved communities, and data modernization. By providing senior leadership and expertise to response efforts in health departments across the nation, CDC will ensure that training, data for decision-making, and surge capacity will be available during this and future emergencies.

Building on investments from the American Rescue Plan Act (ARP) of 2021, CDC will also expand its focus on training and developing the public health leadership pipeline through the Public Health Associate Program (PHAP), Public Health Americorps, National Leadership Academy for the Public's Health, Public Health Improvement Training, and Public Health Law Program. It will also continue to promote upskilling in its

workforce and drive innovation, such as by training leaders to use applied modeling and analytics to translate data into evidence and support public health decision-making at the national, state, tribal, and local levels. CDC's leadership will continue to integrate non-infectious diseases, injuries, birth defects and disabilities, and environmental health issues into science, policies, and programs across CDC and within the broader public health community to build community health security, reduce health disparities, and create better health for all.

### Budget Request

CDC's FY 2024 budget request of **\$106,000,000** for Public Health Workforce is **\$35,000,000** above the FY 2023 enacted level. In FY 2024, CDC will support State, Tribal, local, and territorial (STLT) health departments through CDC fellowship and training programs to assist in hiring and recruitment, identify and address barriers to hiring at the STLT levels, address workforce gaps, and build capacity to respond to current and future public health threats. The increase would allow CDC to continue to build a pathway for epidemiologists, laboratorians, and other public health professionals, increasing the diversity of both graduate and undergraduate fellows.

CDC bolsters the STLT public health workforce by providing continuing education and accredited learning opportunities at no cost. CDC continues to expand accreditation to meet the needs of CDC programs and federally funded partners. In FY 2022, CDC began offering Physician Assistant accredited training. In FY 2022, more than 265,700 unique health professionals earned free continuing education credits, valued at \$14.6 million. In addition, CDC developed and provides Introduction to Public Health Practice, a training plan made available at no cost to jurisdictions in CDC TRAIN. This in-demand resource covers topics including health equity, communication skills, and data analytics to build the proficiencies of new public health professionals using quality training standards. This training plan will also provide additional support to public health jurisdictions to train new staff.

### **Short-term Fellowship Expansion**

With an expansion supported by the American Rescue Plan Act of 2021, in addition to FY 2022 Public Health Workforce budget, CDC increased the number of fellows across seven<sup>179</sup> full-time fellowship programs working in state, tribal, local, and territorial (STLT) health agencies to approximately 542, an increase from 295 fellows in FY 2019, before the COVID pandemic. Fellows fulfill roles at CDC headquarters, quarantine stations, STLT health departments, and other field assignments. The CDC Laboratory Leadership Service welcomed its largest class ever, 25 fellows, with 40 percent in the field supporting jurisdictional health department laboratories. Additionally, in 2022, the CDC Epidemic Intelligence Service had its largest class in over 15 years with 90 selected candidates. CDC fellowships are a pathway for recruiting and training the next generation of public health leaders.

As STLT health departments hire and onboard staff and achieve more complete staffing levels, the nation's public health system faces the critical task of training those staff so they are most effective. Through the Public Health Workforce line, CDC provides training and resources broadly to public health professionals at no cost to state and local public health departments.

CDC is developing additional strategies to build and maintain multi-disciplinary pathways into public health careers, including providing student loan repayment as a recruitment incentive to increase and sustain the demographic diversity of CDC fellowship program participants, publishing training materials and STEM resources highlighting pathways to careers in public health, modernizing public health workforce development data and analytics capacity and information technology systems, and working with partners to access and facilitate rotation opportunities for university students at STLT public health agencies.

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<sup>179</sup> In FY 2022, this includes full-time trainees across seven CDC fellowship programs supported by Public Health Workforce and the American Rescue Plan Act.

To ensure that adequate support is available to reach, train, and sustain clinical and public health laboratory professionals and the laboratory community, CDC is also implementing focused collaborations:

- Leveraging the OneLab Network to increase engagement between the clinical and public health laboratory communities and build essential bridges between healthcare and public health.
- Providing the clinical and public health laboratory communities with training resources that are accessible and responsive to their evolving needs and busy schedules.
- Reaching, training, and sustaining clinical and public health laboratory professionals and the testing community through training resources, including eLearning courses, job aids, virtual reality, and webinars on core laboratory science, quality, safety, informatics, and preparedness.
- Continuing to build public health laboratory workforce pathways by collaborating with a partner organization to scale up a national laboratory fellowship and internship program. This program provides undergraduate students and recent graduates with meaningful field experiences at state, local, and territorial public health laboratories.

**National Notifiable Diseases Surveillance System (NNDSS) Grants<sup>1,2</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$232,174	TBD	TBD	TBD
Alaska	\$184,279	TBD	TBD	TBD
Arizona	\$80,883	TBD	TBD	TBD
Arkansas	\$174,404	TBD	TBD	TBD
California	\$500,815	TBD	TBD	TBD
Colorado	\$229,533	TBD	TBD	TBD
Connecticut	\$52,163	TBD	TBD	TBD
Delaware	\$248,280	TBD	TBD	TBD
Florida	\$115,710	TBD	TBD	TBD
Georgia	\$42,655	TBD	TBD	TBD
Hawaii	\$155,195	TBD	TBD	TBD
Idaho	\$128,572	TBD	TBD	TBD
Illinois	\$89,545	TBD	TBD	TBD
Indiana	\$194,353	TBD	TBD	TBD
Iowa	\$114,081	TBD	TBD	TBD
Kansas	\$225,805	TBD	TBD	TBD
Kentucky	\$194,757	TBD	TBD	TBD
Louisiana	\$154,432	TBD	TBD	TBD
Maine	\$182,188	TBD	TBD	TBD
Maryland	\$173,464	TBD	TBD	TBD
Massachusetts	\$597,417	TBD	TBD	TBD
Michigan	\$218,939	TBD	TBD	TBD
Minnesota	\$306,933	TBD	TBD	TBD
Mississippi	\$58,491	TBD	TBD	TBD
Missouri	\$70,409	TBD	TBD	TBD
Montana	\$149,105	TBD	TBD	TBD
Nebraska	\$209,172	TBD	TBD	TBD
Nevada	\$155,873	TBD	TBD	TBD
New Hampshire	\$118,564	TBD	TBD	TBD
New Jersey	\$258,279	TBD	TBD	TBD
New Mexico	\$242,993	TBD	TBD	TBD
New York	\$130,225	TBD	TBD	TBD
North Carolina	\$139,828	TBD	TBD	TBD
North Dakota	\$119,118	TBD	TBD	TBD
Ohio	\$216,832	TBD	TBD	TBD
Oklahoma	\$427,044	TBD	TBD	TBD
Oregon	\$152,726	TBD	TBD	TBD
Pennsylvania	\$154,451	TBD	TBD	TBD
Rhode Island	\$133,621	TBD	TBD	TBD
South Carolina	\$190,856	TBD	TBD	TBD
South Dakota	\$115,538	TBD	TBD	TBD
Tennessee	\$188,282	TBD	TBD	TBD
Texas	\$95,619	TBD	TBD	TBD
Utah	\$267,454	TBD	TBD	TBD
Vermont	\$192,505	TBD	TBD	TBD
Virginia	\$518,728	TBD	TBD	TBD

Washington	\$310,602	TBD	TBD	TBD
West Virginia	\$75,846	TBD	TBD	TBD
Wisconsin	\$173,141	TBD	TBD	TBD
Wyoming	\$111,381	TBD	TBD	TBD
<b>Territories</b>				
Guam	\$32,283	TBD	TBD	TBD
Marshall Islands	\$77,641	TBD	TBD	TBD
Micronesia	\$7,101	TBD	TBD	TBD
Northern Mariana Islands	\$32,283	TBD	TBD	TBD
Palau	\$33,656	TBD	TBD	TBD
Puerto Rico	\$26,640	TBD	TBD	TBD
Virgin Islands	\$108,919	TBD	TBD	TBD
American Samoa	\$207,000	TBD	TBD	TBD
<b>Cities</b>				
Chicago	\$64,286	TBD	TBD	TBD
District of Columbia	\$107,749	TBD	TBD	TBD
Houston	\$217,891	TBD	TBD	TBD
Los Angeles	\$194,128	TBD	TBD	TBD
New York City	\$164,557	TBD	TBD	TBD
Philadelphia	\$133,775	TBD	TBD	TBD
<b>Subtotal States</b>	<b>\$9,573,260</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Subtotal Territories</b>	<b>\$525,523</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Subtotal Cities</b>	<b>\$882,386</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Total Resources</b>	<b>\$10,981,169</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup> This State Table is a snapshot of selected programs that fund all 50 states (and in some cases local, tribal, and territorial grantees). For a more comprehensive view of grant and cooperative agreement funding to grantees by jurisdiction, visit <https://www.cdc.gov/funding/funding-profiles/>.

<sup>2</sup> CFDA Number: 93-521 [Discretionary]

**Behavioral Risk Factor Surveillance System (BRFSS) Grants<sup>1,2,3</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$316,380	\$370,000	\$370,000	\$0
Alaska	\$435,000	\$385,000	\$385,000	\$0
Arizona	\$430,000	\$386,000	\$386,000	\$0
Arkansas	\$355,500	\$335,000	\$335,000	\$0
California	\$425,000	\$390,000	\$390,000	\$0
Colorado	\$430,000	\$395,000	\$395,000	\$0
Connecticut	\$450,087	\$392,000	\$392,000	\$0
Delaware	\$425,496	\$370,000	\$370,000	\$0
District of Columbia	\$440,000	\$385,000	\$385,000	\$0
Florida	\$425,000	\$395,000	\$395,000	\$0
Georgia	\$455,610	\$350,000	\$350,000	\$0
Hawaii	\$425,468	\$370,000	\$370,000	\$0
Idaho	\$423,994	\$390,000	\$390,000	\$0
Illinois	\$435,760	\$350,000	\$350,000	\$0
Indiana	\$425,000	\$390,000	\$390,000	\$0
Iowa	\$402,997	\$380,000	\$380,000	\$0
Kansas	\$430,811	\$390,000	\$390,000	\$0
Kentucky	\$403,757	\$390,000	\$390,000	\$0
Louisiana	\$430,731	\$390,000	\$390,000	\$0
Maine	\$405,568	\$335,000	\$335,000	\$0
Maryland	\$429,946	\$390,000	\$390,000	\$0
Massachusetts	\$429,901	\$390,000	\$390,000	\$0
Michigan	\$421,836	\$375,272	\$375,272	\$0
Minnesota	\$445,439	\$385,000	\$385,000	\$0
Mississippi	\$431,000	\$390,000	\$390,000	\$0
Missouri	\$431,000	\$390,000	\$390,000	\$0
Montana	\$431,000	\$390,000	\$390,000	\$0
Nebraska	\$430,982	\$390,000	\$390,000	\$0
Nevada	\$400,000	\$405,000	\$405,000	\$0
New Hampshire	\$450,382	\$392,001	\$392,001	\$0
New Jersey	\$430,000	\$390,000	\$390,000	\$0
New Mexico	\$430,962	\$390,000	\$390,000	\$0
New York	\$430,000	\$405,000	\$405,000	\$0
North Carolina	\$431,566	\$390,000	\$390,000	\$0
North Dakota	\$430,000	\$390,000	\$390,000	\$0
Ohio	\$425,990	\$390,000	\$390,000	\$0
Oklahoma	\$410,451	\$380,629	\$380,629	\$0
Oregon	\$470,339	\$392,000	\$392,000	\$0
Pennsylvania	\$415,000	\$390,000	\$390,000	\$0
Rhode Island	\$377,054	\$340,000	\$340,000	\$0
South Carolina	\$430,000	\$390,000	\$390,000	\$0
South Dakota	\$325,738	\$296,346	\$296,346	\$0
Tennessee	\$421,063	\$299,419	\$299,419	\$0
Texas	\$430,000	\$390,000	\$390,000	\$0
Utah	\$425,000	\$335,000	\$335,000	\$0
Vermont	\$462,954	\$385,000	\$385,000	\$0

CDC FY 2024 Congressional Justification

Virginia	\$370,000	\$370,000	\$370,000	\$0
Washington	\$420,000	\$390,000	\$390,000	\$0
West Virginia	\$415,000	\$390,000	\$390,000	\$0
Wisconsin	\$440,100	\$390,000	\$390,000	\$0
Wyoming	\$349,382	\$290,330	\$290,330	\$0
<b>Territories</b>				
America Samoa	\$80,000	\$125,000	\$125,000	\$0
Guam	\$345,243	\$270,000	\$270,000	\$0
Micronesia	\$70,000	\$125,000	\$125,000	\$0
Puerto Rico	\$425,068	\$360,000	\$360,000	\$0
Virgin Islands	\$150,080	\$125,000	\$125,000	\$0
<b>Subtotal States</b>	<b>\$21,414,244</b>	<b>\$19,218,997</b>	<b>\$19,218,997</b>	<b>\$0</b>
<b>Subtotal Territories</b>	<b>\$1,070,391</b>	<b>\$1,005,000</b>	<b>\$1,005,000</b>	<b>\$0</b>
<b>Total Resources</b>	<b>\$22,484,635</b>	<b>\$20,223,997</b>	<b>\$20,223,997</b>	<b>\$0</b>

<sup>1</sup>This State Table is a snapshot of selected programs that fund all 50 states (and in some cases local, tribal, and territorial grantees). For a more comprehensive view of grant and cooperative agreement funding to grantees by jurisdiction, visit <http://wwwn.cdc.gov/FundingProfiles/FundingProfilesRIA/>.

<sup>2</sup>Table includes core funding from the Surveillance, Epidemiology, and Public Health Informatics budget activity and other CDC programs. These funds are not awarded by formula.

<sup>3</sup>CFDA Number: 93-336 [Discretionary]

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## ENVIRONMENTAL HEALTH

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Budget Authority <sup>1</sup>	\$211.350	\$229.850	\$396.850	+\$167.000
Prevention and Public Health Fund	\$17.000	\$17.000	\$17.000	\$0
PHS Evaluation Transfer	\$0	\$0	\$7.000	+\$7.000
<b>Total Request</b>	<b>\$228.350</b>	<b>\$246.850</b>	<b>\$420.850</b>	<b>+\$174.000</b>
FTEs	483	478	543	65
-- Environmental Health Laboratory, Total	\$68.750	\$70.750	\$70.750	\$0
-- <i>Newborn Screening Quality Assurance Program (non-add)</i>	\$19.000	\$21.000	\$21.000	\$0
-- <i>Newborn Screening for Severe Combined Immuno- Diseases (non-add)</i>	\$1.250	\$1.250	\$1.250	\$0
-- Environmental Health Activities, Total	\$49.100	\$52.600	\$187.600	+\$135.000
-- Environmental Health Capacity <sup>2</sup>	\$37.100	\$39.600	\$174.600	+\$135.000
-- Amyotrophic Lateral Sclerosis Registry (ALS)	\$10.000	\$10.000	\$10.000	\$0
-- Trevor's Law	\$2.000	\$3.000	\$3.000	\$0
-- Environmental and Health Outcome Tracking Network	\$34.000	\$34.000	\$34.000	\$0
-- Asthma	\$30.500	\$33.500	\$33.500	\$0
-- Lead Exposure Registry	\$5.000	\$5.000	\$5.000	\$0
-- Childhood Lead Poisoning Prevention, Total	\$41.000	\$51.000	\$90.000	+\$39.000
-- Childhood Lead Poisoning Prevention - BA	\$24.000	\$34.000	\$66.000	+\$32.000
-- <i>Childhood Lead Poisoning Prevention (PPHF)</i>	\$17.000	\$17.000	\$17.000	\$0
-- <i>Childhood Lead Poisoning Prevention - PHS Evaluation Transfer</i>	\$0.000	\$0.000	\$7.000	+\$7.000

<sup>1</sup> This table reflects totals by budget activity. The FY 2024 budget proposes a single "CDC-Wide Activities and Program Support" Treasury account structure.

<sup>2</sup> FY 2022 and FY 2023 Levels are comparably adjusted to reflect proposed realignment of All Other Environmental Health, Safe Water, and Climate and Health, into Environmental Health Capacity. FY 2022 Level reflects the CR anomaly of \$1.5 million for the Vessel Sanitation Program.

**Enabling Legislation Citation:** PHS A § 301, PHS A § 307, PHS A § 310, PHS A § 311, PHS A § 317, PHS A § 317A\*, PHS A § 317B, PHS A § 317I\*, PHS A § 317O\*, PHS A § 327, PHS A § 352, PHS A § 361, PHS A § 366, PHS A § 1102, PHS A § 1706\*.

**Enabling Legislation Status:** Permanent Indefinite

**Authorization of Appropriations for FY 2022:** Indefinite; Expired/Expiring noted with \*

**Allocation Methods:** Direct Federal/Intramural, Contracts, Competitive Grants/Cooperative Agreements

CDC helps protect Americans from health effects resulting from environmental hazards in air, water, food, and soil. The World Health Organization (WHO) estimates that, overall, 13 percent of the disease burden in the United States is due to environmental factors. The WHO also estimates that 5.6 million disability-adjusted life years and 398,000 deaths annually can be attributed to environmental factors in the United States.<sup>180</sup>

<sup>180</sup> Pugh, KH and Zarus, GM. (2012). The Burden of Environmental Disease in the United States. Journal of Env. Health. Volume 74, Number 9.

The COVID-19 pandemic has highlighted the importance understanding, mitigating, and preventing the introduction, transmission, and spread of an infectious disease through the environment. Mitigation measures, such as ventilation in buildings, can help prevent transmission of airborne pathogens.

CDC prevents health effects from exposure to environmental hazards through four core strategies:

7. Partnering with state/local/territorial health departments, tribal nations, and national and local organizations to provide expertise, guidance, and support aimed at increasing environmental public health capacity to reduce harmful environmental exposures and implement effective environmental public health prevention programs and interventions.
8. Monitoring and investigating environmental public health threats and their health effects through public health data surveillance and analytics; conducting laboratory analyses and environmental exposure and health studies; and championing informatics for data-driven decisions to improve health outcomes.
9. Monitoring and responding to extreme weather events—from hurricanes and floods to wildfires and extreme heat—and building appropriate public health response capacity within state, local, territorial, and tribal communities.
10. Improving guidance, education, and implementation of best practices to prevent and reduce the effects of the environment on health through research, evaluation, and translation of the highest quality scientific findings into an expanded environmental health evidence base.

CDC’s FY 2024 budget request of **\$420,850,000** for Environmental Health, including **\$17,000,000** from the Prevention and Public Health Fund (PPHF) and **\$7,000,000** in PHS Evaluation transfers, is **\$174,000,000** above the FY 2023 enacted level. This request includes resources to strengthen workforce and environmental programs and support CDC’s efforts around Climate and Health, the Childhood Lead Poisoning Prevention Program, and CDC’s work to support the Administration’s Cancer Moonshot Initiative.

### **Health Equity**

Health equity is at the center of CDC’s environmental health work. By listening to community concerns and providing the resources, tools, and science to empower communities, CDC strives to ensure that all people have an equal opportunity to thrive in a healthy environment.

Many of CDC’s programs build capacity at state and local levels to address health disparities. For example, the Childhood Lead Poisoning Prevention (CLPP) program funds 62 state and local health departments to provide critical interventions in communities at high risk for lead exposure, such as communities of color where lack of access to affordable housing and discrimination may prevent families from finding safe, lead-free places to live. CDC is also exploring strategies to pilot additional community-level efforts to implement targeted, population-based interventions to prevent lead exposure before it occurs. Because lead exposure risk varies greatly by location and other risk factors, these activities will prioritize tribal governments or local communities with the greatest demonstrated need.

CDC also supports a consortium of local partners to administer the Flint Registry, which connects people affected by the Flint Water Crisis with resources and programs to aid in the recovery process and shares best practices with similarly impacted communities.

CDC’s Climate and Health Program supports jurisdictions in adopting resilience plans for protecting people disproportionately at risk for climate-related health impacts. This includes partnering with the National Indian Health Board on the Climate-Ready Tribes Initiative to build capacity within American Indian and Alaska Native Tribes to identify, assess, and take action to mitigate climate-related health threats.

Residents in rural communities are more likely to use private wells, which can be affected by harmful bacteria and other pathogens and elevated concentrations of nitrate, arsenic, radon, lead, and organic compounds. CDC's Safe Water program supports improved access to safe drinking water in wells and private systems.

CDC's Environmental Health Tracking Program provides data to identify demographic factors, environmental burdens, socioeconomic conditions, and public health concerns that are useful for addressing health equity issues in communities. The tracking program addressed health disparities during the COVID-19 pandemic by linking COVID-19 data with data from other sources, such as hospitals and shelters and systems tracking chronic conditions. In 2021, the program developed a tool to identify communities vulnerable to environmental exposures, identify and address environmental and health inequities, and allocate resources and inform policy decisions to reduce health disparities.

## ENVIRONMENTAL HEALTH

### BY THE NUMBERS

#### Childhood Lead Poisoning Prevention

- 3.5 ug/dL—Revised, lower blood lead reference value (BLRV) from 2022. The updated BLRV reflects a downward trend in population blood lead levels and means that 2.5% of children, which is about 500,000 children across the U.S., have blood levels at or above 3.5 ug/dL.
- 3.1 million—Average number of children with blood lead levels tested in CDC-supported states and localities each year between 2018 and 2020.

#### Vessel Sanitation

- 2.8 million—Cumulative page views from March 2020 to July 2022 for COVID-19 resources for travelers and technical instructions for cruise ships.
- 54—Field deployments in 2022 to review cruise ship compliance with CDC’s COVID-19 and VSP operations manuals.

#### Environmental Health Laboratory

- 410—Chemicals, nutrition indicators, and clinical biomarkers measured by CDC’s Environmental Health Laboratory among participants in the National Health and Nutrition Examination Survey (NHANES) and other national studies.
- 680—Laboratories in 50 states and 88 countries that are directly benefiting from CDC’s newborn screening quality assurance activities.

#### Asthma

- 25—States funded through CDC’s National Asthma Control Program, helping decrease emergency department visits and asthma-related hospitalizations.
- 46 percent—Reduction in emergency department visits since 2015 for children with asthma in the southeast region of New Mexico, where the CDC-funded New Mexico Asthma Control Program (NMACP) has partnered with a hospital to provide an Asthma Self-Management Education referral program.

#### Safe Water

- 24—Funding recipients working on well water initiatives such as identifying at-risk wells and other private water systems with elevated levels of chemical, radiological, and biological contaminants.
- 37—Funding recipients developing water management plans and environmental health strategies to prevent and control Legionnaires’ disease.

#### Climate and Health

- 48—Contiguous U.S. states with county-level data represented in the CDC’s Heat & Health Tracker, including heat vulnerability data and real-time forecasts to help communities better prepare for and respond to extreme heat events.
- 42—Total number of states, cities, tribes, and territories funded by CDC for climate and health adaptation since 2010.

#### \*References

<sup>1</sup> Gould E (2009). Childhood Lead Poisoning: Conservative Estimates of the Social and Economic Benefits of Lead Hazard Control. *Environmental Health Perspectives*, 117(7), 1162-1167.

<sup>2</sup> Centers for Disease Control and Prevention. National Center for Environmental Health (2014). Prevention Tips: How are children exposed to lead? <https://www.cdc.gov/nceh/lead/tips.htm> (accessible as of 3/23/2022)

<sup>3</sup> Centers for Disease Control and Prevention. Blood Lead Levels in Children Aged 1-5 Years—United States, 1999-2010. *MMWR* 2013; 62: 245-248. [https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6213a3.htm?s\\_cid=mm6213a3\\_w](https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6213a3.htm?s_cid=mm6213a3_w) (accessible as of 3/23/2022).

<sup>4</sup> National Center for Health Statistics. Centers for Disease Control and Prevention. Asthma. <https://www.cdc.gov/nchs/fastats/asthma.htm>(accessible as of 3/23/2022)  
<sup>5</sup> Nurmagambetov T, Kuwahara R, Garbe P (2018). The economic burden of asthma in the United States, 2008-2013. *Annals of the American Thoracic Society*, 15(3), 348-356. <https://www.atsjournals.org/doi/abs/10.1513/AnnalsATS.201703-259OC> (accessible as of 3/23/2022).  
<sup>6</sup> United States Census Bureau. U.S. Population Clock. <https://www.census.gov/popclock/> (accessible as of 3/23/2022)  
<sup>7</sup> Centers for Disease Control and Prevention. Heat-Related Deaths – United States, 2004-2018. *MMWR* 2020; 69: 729-734. <https://www.cdc.gov/mmwr/volumes/69/wr/mm6924a1.htm> (accessible as of 3/23/2022).

<b>Environmental Health Funding History</b>	
<b>Fiscal Year</b>	<b>Dollars (in millions)</b>
FY 2020 (BA)	\$196.850
FY 2020 (PPHF)	\$17.000
FY 2021 (BA)	\$205.218
FY 2021 (PPHF)	\$17.000
FY 2022 Final (BA)	\$211.350
FY 2022 Final (PPHF)	\$17.000
FY 2023 Final (BA)	\$229.850
FY 2023 Final (PPHF)	\$17.000
FY 2024 President’s Budget (BA)	\$396.850
FY 2024 President’s Budget (PPHF)	\$17.000
FY 2024 President’s Budget (PHS Eval Transfer)	\$7.000

## Childhood Lead Poisoning Prevention Budget Request

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### Budget Request

CDC's FY 2024 budget request of **\$90,000,000** for Childhood Lead Poisoning Prevention is **\$39,000,000** above the FY 2023 enacted level. This request includes **\$66,000,000** in budget authority, **\$17,000,000** from the Prevention and Public Health Fund (PPHF), and **\$7,000,000** in PHS Evaluation transfers.

In FY 2024, CDC will continue to support childhood lead poisoning prevention activities in state, local, tribal, and affiliated territorial jurisdictions. The updated blood lead reference value (BLRV) has been successful in increasing the number of children being prioritized for follow-up by public health agencies. This has resulted in increased workloads on these agencies. Increased funding will be used to expand and enhance existing activities to assist jurisdictions in implementing a comprehensive childhood lead poisoning prevention program; to improve health equity by building capacity in jurisdictions; and to expand the data and evaluation capabilities of the program, in alignment with CDC's Data Modernization Initiative.

In FY 2024, CDC will continue to expand its Lead-Free Communities initiative, new community-based effort to further support communities with the highest need. Consistent with the Justice40 Initiative, Lead-Free Communities provide funds directly to underserved communities with a higher proportion of older housing and other risk factors for lead exposure to effectively conduct lead poisoning prevention education and outreach.

All funded recipients will focus their efforts on four core program strategies:

- **Testing and Reporting:** testing and reporting Blood Lead Levels (BLL) in children put at higher risk of exposure, particularly before age six; emphasizing universal testing of Medicaid-enrolled children.
- **Surveillance:** systematically collecting, analyzing, and disseminating BLLs and follow-up data to track trends and identify risk hot spots.
- **Linking Lead-Exposed Children to Services:** implementing processes to ensure children at higher risk of lead exposure and children who have been exposed to lead are referred to and receive critical follow-up care.
- **Tailored, Community-Based Interventions:** maintaining collaborative relationships with community, local, and state partners to develop activities that prioritize and address childhood lead poisoning prevention challenges and opportunities in communities with the highest risk of lead exposure.

Lead exposure can cause adverse effects in nearly every system in the body and seriously harm a child's health. Even at low levels, lead exposure has the potential to affect growth and development, hearing and speech, IQ, academic achievement, and behavior. Public health initiatives to reduce environmental exposures to lead have caused steady BLL decreases among the U.S. population, including children. Overall mean BLLs in children less than six years of age declined from 15 micrograms lead per deciliter blood ( $\mu\text{g}/\text{dL}$ ) in the late 1970's to  $<1 \mu\text{g}/\text{dL}$  in the most recent four years of National Health and Nutrition Examination Survey (NHANES) data, representing a 94 percent decrease over time. This trend is continuing and in children ages 1-5 years; the BLL corresponding to the highest 5<sup>th</sup> percentile declined from 2.91  $\mu\text{g}/\text{dL}$  in the 2011-12 NHANES to 2.02 in 2017-18.



Millions of locations throughout the United States still have lead hazards and large numbers of children are at risk for lead exposure. Risk varies greatly due to the distribution of lead hazards in the environment and other risk factors in the population, with children from lower income and racial and ethnic minority households experiencing higher risk. Lead is found in paint in older housing, in soil from past gasoline emissions, and in drinking water.<sup>181</sup> Nearly 29 million U.S. homes contain at least one lead hazard, and over 10 million U.S. homes rely on lead-containing service lines to carry water from municipal sources into family dwellings. An analysis from the Health Impact Project estimates that eliminating lead hazards from the places where children live, learn, and play could generate approximately \$84 billion in long-term benefits per birth cohort. Additionally, permanently removing lead hazards from the environment would benefit future birth cohorts, compounding savings over time. To support communities that have been historically underserved and under-resourced, CDC piloted the Lead-Free Communities (LFC) Initiative in 2021 in three jurisdictions. LFC is focused on intervention planning to eliminate lead exposure hazards and negative health outcomes. The LFC Initiative offers a comprehensive approach to support communities in developing and implementing customized local plans to become lead-free.

CDC’s Childhood Lead Poisoning Prevention Program (CLPPP) reduces the number of children exposed to lead and eliminates BLL disparities. Currently, CDC funds 62 states and localities to address critical gaps in services. (See map, with funded states and territory in blue and funded localities listed by name). CDC will continue expanding opportunities for funding to additional states, tribes, territories, and localities. CDC estimates funding approximately 48 additional entities with CLPPP funding in FY23. CDC funding and guidance have enabled substantial local interventions, ultimately improving the physical and socioeconomic health of communities:

- After CDC updated the BLRV to 3.5 µg/dL, Georgia aligned their state-wide standard for provision of home services and case management when children at or above that BLRV are identified. With the relevant law’s passage in April 2022, the Georgia CLPPP can support interventions based on the most up-to-date evidence. In addition to Georgia, 23 other states have implemented the updated BLRV and another 14 are preparing to do so.
- Lead surveillance: The State of New Jersey used CLPPP data to develop a policy requiring removal of lead hazards from environments in which children may be exposed. As of July 2022, any rental property built before 1978 must be inspected for lead within two years; before this policy was enacted, single-family and two-family rental units did not have a uniform lead inspection requirement.
- After considering data from the Philadelphia Lead and Healthy Homes Program, the city of Philadelphia developed a policy requiring that—by the end of 2022—all rental properties must be certified lead-free or

2. Gould, E. (2009). Childhood Lead Poisoning: Conservative Estimates of the Social and Economic Benefits of Lead Hazard Control. *Environmental Health Perspectives*, 117(7), 1162-1167. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2717145/> (accessible as of 3/23/2022).

lead-safe before leases could be issued or renewed. Before this requirement was in place, only units with residents under the age of seven needed to be covered by such certifications.

- CDC is partnering with ATSDR’s geospatial program to create the Lead Exposure Risk Index (LERI), a new tool to help public health officials, healthcare providers, and the public identify and map community risk for lead exposure. LERI enables community health workers, leaders, public health professionals, and clinicians to quickly measure risk of lead exposure in the communities, and act to reduce those risks.

CDC’s CLPPP also conducts research to identify and evaluate best practices in lead poisoning prevention; develops case management guidelines and other documents to assist health departments and health care providers; provides technical assistance to states to develop, implement, and evaluate local lead poisoning prevention activities; and maintains the Childhood Blood Lead Surveillance System used by state and local health departments for blood lead surveillance, case management activities, and reporting data to CDC. These activities are essential for an evidence-based and coordinated approach for eliminating childhood lead poisoning within the United States. In 2022, CDC released a supplement in the *American Journal for Public Health* titled Ubiquitous Lead: Risks, Prevention–Mitigation Programs, and Emerging Sources of Exposure. CDC has also released new training and educational materials on childhood lead poisoning for public health professionals, health care providers, and others.

CDC supports the Flint Lead Exposure Registry, a model for the nation’s first lead-free city and support for the Flint community. In FY 2022, CDC awarded Michigan State University a second five-year grant to continue community, tribal, and stakeholder outreach and training; registrant enrollment via targeted outreach; data collection; referral of registrants to services to reduce or control lead exposure effects; measurement of registrants’ exposure, health, developmental milestones with their interventions, services, and enrichment activities; cohort maintenance of enrolled participants; and evaluation and dissemination of findings to share best practices. As of July 2022, over 20,276 people had been fully enrolled in the Flint Registry.

**Childhood Lead Poisoning Prevention Grants<sup>1</sup>**

(dollars in millions)	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President’s Budget</b>
Number of Awards	62	72	110
- New Awards	0	10	38
- Continuing Awards	62	62	72
Average Award	\$0.387	\$0.500	\$0.500
Range of Awards	\$0.225-0.500	\$0.225-0.750	\$0.225-0.750
<b>Total Awards</b>	<b>\$23.980</b>	<b>\$36.000</b>	<b>\$55.000</b>

<sup>1</sup> These funds are not awarded by formula.

## **Environmental and Health Outcome Tracking Network Budget Request**

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CDC's National Environmental and Health Outcome Tracking Network, provides innovative programs and solutions that empower people to make information-driven decisions to protect and improve health.

### **Budget Request**

CDC's FY 2024 budget request of **\$34,000,000** for CDC's Environmental and Health Outcome Tracking Network is level with the FY 2023 enacted level. CDC's Tracking Program will continue to focus on capacity building for current state/local Tracking recipients to ensure that data science, tools, and expertise are used across the United States to drive public health action. The Tracking Program will also continue to advance CDC's health equity priorities by partnering with other agency programs to enhance disease surveillance with the incorporation of environmental health data; make practical advancements in data science to provide better and more efficient methods that use data to improve public health; collaborate with non-traditional partners to uncover new insights and drive environmental health decision-making in new sectors; and use cutting edge data visualization tools and products to address respond to existing and emerging public health crises.

### **Better Information for Better Health: The Tracking Network**

To make information-driven decisions, the Tracking Program provides timely, accurate, standardized, and accessible data. This data is accessible to the public through the Tracking Network, a Web-based system that delivers data in a variety of ways that serve the different needs of users and inform decision making at local, state, and national levels.

The flagship product of the Tracking Network, the interactive Data Explorer has over 725 environmental and health measures with which users can create maps, charts, and tables. For example, data are available on air quality, radon, asthma, and birth defects. The Tracking Network also has a data visualization embedding (DVE) feature, which allows anyone to embed a fully interactive map, chart, or table into their own website.

### **Leaders in Data Science**

CDC collaborates with other federal agencies and state and local health departments to increase the quality and availability of data sources; improve the utilization of Tracking Network data to protect the health of Americans; and address data gaps in the areas of environmental health. By allowing users to seamlessly pair disparate data sources to identify communities that are disproportionately affected by environmental factors, the Tracking Program enables public health professionals to discover environmental health trends that may otherwise go unnoticed.

The Tracking Program's network of data science experts has prepared the public health workforce of the future by expanding health departments' capacity in data collection, analytics, reporting, and dissemination. The Tracking Program experts have developed innovative analytic methods that facilitate broad visibility into public health insights and trends at the census tract level that were previously only accessible to a few data scientists and researchers. For example, the Tracking Program collaborated with the National Program of Cancer Registries to create cancer indicators that use the Tracking Program's new population-based geographies—the first federal release of cancer incidence data at this geographic level.

### **Responding to Public Health Crises**

The Tracking Program worked with CDC's Climate and Health Program to develop CDC's Heat and Health Tracker which delivers user-friendly local-level heat and health data that can be used to inform decisions and public health actions related to heat. For example, public health professionals can use this information to evaluate the effectiveness of local climate adaptation strategies and to target resources to populations at greater risk of health impacts from extreme heat.

The Tracking Program developed the Environmental Justice Dashboard (Dashboard), to help fill a critical gap in existing tools. In particular, the Dashboard makes information more accessible by presenting data in ways that consider health literacy and increasing context by incorporating environmental data and health outcome data. Users can input their zip code and view information for their community in infographics and interactive maps along with explanatory text to help them understand the data and its relevance. Data are presented at multiple geographic levels, including national, state, county, and census tract, based on the data source. At least three Tracking state/local grant recipients (Colorado, Washington, and Massachusetts) have reported using these data to develop their own local tools such as maps and data viewers to address the needs of disproportionately impacted communities.

**Capacity Building: Improving State/Local Public Health Infrastructure**

CDC funds 33 state or local tracking programs through competitive cooperative agreements to create, maintain, and add to their own local tracking networks, as well as to contribute to and receive data from the national Tracking Network. According to the Council for State and Territorial Epidemiologists, less than half of all states report having adequate environmental epidemiology capacity. CDC helps to maintain vital environmental health surveillance and epidemiology capacity—saving time, money, and resources—by supporting over 200 state personnel and facilitating a mentoring program with current and potential recipients. For example, Minnesota’s Tracking Program estimates that its public health data website saves the state \$3.6 million per year in staff time by making data publicly available and reducing the number of public data inquiries the state must process. Additionally, the infrastructure and expertise developed by the Tracking Program has enabled CDC’s Tracking Network to serve as the primary surveillance data platform in 17 state health departments.

Recently, many state and local Tracking Program recipients have used their expertise in data science and geographic information systems to develop data visualizations and dashboards to support emergency response efforts. In Iowa, the COVID-19 data dashboard was built using the Tracking Program data portal platform and maintained by the state Tracking Program staff. In the first week following its release, the dashboard was viewed more than 3.4 million times.

**Tracking Network Grants<sup>1</sup>**

(dollars in millions)	<b>FY 2022</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President’s Budget</b>
	<b>Final</b>		
Number of Awards	26	33	33
- New Awards	0	33	0
- Continuing Awards	26	0	33
Average Award	\$0.625	\$0.606	\$0.606
Range of Awards	\$0.300-0.820	\$0.300-0.710	\$0.300-0.710
<b>Total Awards</b>	<b>\$16.250</b>	<b>\$20.000</b>	<b>\$20.000</b>

<sup>1</sup>These funds are not awarded by formula.

## **Environmental Health Laboratory Budget Request**

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CDC's Environmental Health Laboratory improves the detection, diagnosis, treatment, and prevention of diseases resulting from exposure to harmful environmental chemicals and diseases needing advanced laboratory measurement for accurate diagnosis. The lab is recognized worldwide for its expertise in measurement science. It develops and applies innovative techniques to assess disease risk, determines exposure levels among the U.S. population, and responds rapidly to public health emergencies. It also supports state public health laboratories in assessing harmful exposures in their communities and works directly with state newborn screening programs to implement and ensure accurate tests for early detection of diseases that cause severe disability or death when untreated. In addition, the lab harmonizes tests for chronic diseases to ensure results are accurate and precise for diagnosing disease, guiding treatment and prevention, and supporting high-quality health research.

### **Budget Request**

CDC's FY 2024 budget request of **\$70,750,000** for the Environmental Health Laboratory is level with the FY 2023 enacted level. The total request includes **\$21,000,000** for the Newborn Screening Quality Assurance Program which is level with FY 2023 Enacted and **\$1,250,000** for the Newborn Screening for Severe Combined Immunodeficiency Diseases which is level with the FY 2023 enacted level. In FY 2024, CDC will continue to maintain its state-of-the-art public health laboratory—delivering the unique diagnostic methods, profiles of measurements, and measurement quality needed for public health decisions.

### **Using Biomonitoring to Assess Americans' Exposure to Harmful Chemicals and Their Nutrition Status**

CDC uses biomonitoring—measurements in human blood and urine—to help identify harmful environmental exposures or nutrition deficiencies among the U.S. population. The Environmental Health Laboratory measures more than 400 biomarkers of chemicals, including a subset of PFAS compounds, and nutrition indicators in samples from participants in the National Health and Nutrition Examination Survey (NHANES) and other national studies. CDC regularly publishes findings in the *National Report on Human Exposure to Environmental Chemicals* and *National Report on Biochemical Indicators of Diet and Nutrition in the U.S. Population*. These reports are the most comprehensive assessments of Americans' exposure to environmental chemicals and Americans' nutrition status—providing national reference data that helps physicians, scientists, and public health officials identify harmful exposures and adequate nutrition levels.

In FY 2024, CDC will leverage its newly modernized web interface to release timely biomonitoring results in an easier to use format. CDC also intends to collaborate on more than 70 studies that assess environmental exposures in high-risk population groups or investigate the relationship between environmental exposures and adverse health effects.

CDC's current five-year biomonitoring cooperative agreements with New Hampshire, New Jersey, New York, Michigan, Iowa, and Minnesota will end in FY 2023. In FY 2024, CDC will award new cooperative agreement funding to at least six states, expanding nationwide capacity to measure priority environmental chemicals in human samples. Funding supports population-based studies at the state level and targeted investigations of groups at higher risk for exposure or consequences of exposure—including individuals who are pregnant, children, and firefighters.

**State Biomonitoring Cooperative Agreements**

(dollars in millions)	FY 2022	FY 2023 Enacted	FY 2024 President's
	Final		Budget
Number of Awards	6	6	6
- New Awards	0	0	6
- Continuing Awards	6	6	0
Average Award	\$0.833	\$0.833	\$0.833
Range of Awards	\$0.728-0.900	\$0.728-0.900	\$0.728-0.900
Total Awards	\$5.00	\$5.00	\$5.00

**Providing Critical Laboratory Expertise in Public Health Emergencies**

CDC’s Environmental Health Laboratory uses its expertise in measurement science to support emergency investigations of potentially harmful exposures and disease. For example, CDC created and continues to enhance a free online resource that helps clinical laboratories identify more than 250 synthetic opioid-related compounds using any high-resolution mass spectrometer. In FY 2022, CDC measurements supported emergency investigations of human exposures to marine toxins in Florida, pesticides in Oklahoma, and nerve agents in Utah.

In response to the COVID-19 pandemic, CDC completed structural analysis of the spike protein from the original SARS-CoV-2 strain and significant viral variants. Results showed that more infectious variants have structural differences that may affect transmission, virulence, and vaccine efficacy.

CDC’s Environmental Health Laboratory also coordinates and provides technical expertise to the Laboratory Response Network for Chemical Threats (LRN-C) and a pilot Laboratory Response Network for Radiologic Threats (LRN-R) programs. In FY 2024, CDC’s Environmental Health Laboratory will continue in-house response readiness and support for LRN-C member laboratories by providing surge capacity, sample logistics support, coordination with local, state, and federal partners, and sentinel surveillance support.

**Harmonizing Laboratory Tests for Better Disease Diagnosis and Treatment**

Accurate and precise laboratory measurements are essential for correct diagnosis and treatment of disease. CDC uses expert measurement science to improve the accuracy, precision, and cost effectiveness of laboratory tests for environmental chemicals, nutrition indicators, heart disease, chronic diseases, and newborn screening. The lab develops reference methods and materials and provides quality assurance programs and trainings to assure the quality of tests in state, clinical, research, and academic laboratories. CDC's efforts reach thousands of domestic and international laboratories, helping reduce diagnosis and treatment errors, unnecessary medical procedures, and repeat laboratory tests. CDC uses its unique, reference-quality methods to assist other federal agencies as they address emerging issues, such as ensuring the quality of blood lead measurements.

CDC continues to expand its Clinical Standardization Programs to reach more manufacturers, hospital laboratories, and commercial laboratories—and harmonize measurements for new biomarkers. CDC reported the most comprehensive assessment of hormone levels in the U.S. population in NHANES 2019-2020. In FY 2022, CDC provided standardization programs for 34 chronic disease biomarkers, adding new priority biomarkers of thyroid disorders and heart disease.

In FY 2024, CDC will add two chronic disease biomarkers to the Clinical Standardization Programs. CDC will develop or improve reference methods by assigning target levels to reference materials for cholesterol or other priority hormones. CDC will further expand harmonization and standardization programs to reach additional laboratories and manufacturers for harmonization of high priority clinical laboratory test results. These activities will improve the diagnosis, treatment, and prevention of chronic kidney diseases, diabetes, certain cancers, osteoporosis, developmental diseases (such as polycystic ovary syndrome) and thyroid diseases.

In FY 2022, CDC investigated laboratory data for seven chronic disease biomarkers used in pediatric care and identified concerning inconsistencies in how these data are used to make healthcare decisions. Without additional funding in FY 2024, CDC will make only incremental progress in addressing critical need for accurate pediatric reference intervals that are representative of the diverse U.S. patient population.

**Earlier Identification of Diseases in Newborns by Supporting State Screening**

CDC helps assure comprehensive and accurate newborn screening test results in the United States by providing training, technical assistance, quality assurance materials, and funding to state newborn screening programs. CDC supports states as they implement testing for all conditions on the HHS Recommended Uniform Screening Panel (RUSP). CDC develops and evaluates test methods for conditions on the RUSP, transfers technology to state laboratories, implements advanced technology for data analytics, supports expert workforce in state newborn screening programs, and works directly with states to overcome testing issues to accelerate nationwide adoption of screening for priority conditions. CDC is working to improve newborn screening test performance and streamline interpretation of complex data for better detection of newborn disorders.

In FY 2022, CDC received additional funding for its newborn screening quality assurance program. CDC developed innovative processes that ensure a sustainable supply of source material for producing reference materials for spinal muscular atrophy (SMA), severe combined immunodeficiency (SCID), and cystic fibrosis. In FY 2022 and FY 2023, CDC will award cooperative agreement funds to five state newborn screening programs to implement testing for conditions on the RUSP and work with CDC on newborn screening quality improvement activities. In FY 2024, CDC will continue to fund 5 states to test for newborn screening conditions.

**Newborn Screening Cooperative Agreements**

(dollars in millions)	FY 2022	FY 2023 Enacted	FY 2024 President’s
	Final		Budget
Number of Awards	5	5	5
- New Awards	5	0	5
- Continuing Awards	0	5	0
Average Award	\$0.397	\$0.397	\$0.397
Range of Awards	\$0.348-0.445	\$0.348-0.445	\$0.3-0.500
Total Awards	\$1.987	\$1.987	\$1.987

**Asthma Budget Request**

Budget Request

CDC’s FY 2024 budget request of **\$33,500,000** for the National Asthma Control Program is level with the FY 2023 enacted level. In FY 2024, CDC will offer education and expertise, quantify risks and vulnerabilities to asthma control, and fund state and territorial health departments to implement comprehensive asthma control programs. CDC will prioritize proven prevention and control efforts that reduce the number of asthma hospitalizations and emergency department visits.

Over 25 million Americans suffer from asthma today, including over four million children. Asthma takes almost 4,000 lives and causes 1.6 million emergency department visits per year. The disease also costs the nation \$81.9 billion annually.<sup>4</sup> Asthma disproportionately affects Black or African American children, who are twice as likely to be hospitalized and more than four times more likely to die from asthma than White children. National Asthma Control Program (NACP) recipients conduct significant work in communities with lower incomes, among populations without access to services, and in areas disproportionately impacted by negative environmental

effects (e.g., communities affected by transportation or industrial air pollution) and other outdoor air quality concerns. This helps address health disparities at the local level.

### **Comprehensive Asthma Control Programs**

In FY 2020, NACP launched CCARE, Controlling Childhood Asthma and Reducing Emergencies, a program with the goal of preventing 500,000 emergency department visits and hospitalizations due to asthma by August 31, 2024. CCARE is supported by the EXHALE technical package, a set of six strategies that CDC and partners are using to reduce the burden of asthma in children:

- Education on asthma self-management
- eXtinguishing smoking and exposure to second-hand smoke
- Home visits for trigger reduction and asthma self-management education
- Achievement of guidelines-based medical management
- Linkages and coordination of care across settings
- Environmental policies or best practices to reduce asthma triggers from indoor, outdoor, and occupational sources.

CDC currently funds 25 state, city, and territorial health departments to implement the EXHALE technical package. These programs focus their efforts on geographic areas or communities with a high or disproportionate burden of asthma. CDC funds have helped many asthma funding recipients achieve success in improving asthma control and decreasing emergency department visits and asthma-related hospitalizations.

For example, the New York State Asthma Control Program (NYSACP) supports Urban Health Plan (UHP), a federally qualified health center (FQHC), as a NYS regional asthma contractor (RAC) for the Bronx, caring for more than 12,000 patients with asthma. UHP utilizes a community health worker (CHW) model for delivery of home-based asthma services targeted to patients whose asthma is not well controlled. In response to the COVID-19 pandemic, UHP worked to seamlessly adapt their CHW asthma home visit program from an in-home model to one that offered primarily telephonic and virtual service delivery, with in-home services offered when feasible.

In 2021, the Illinois Asthma Program, in collaboration with the Respiratory Health Association (RHA), developed a survey for school nurses and school administrators that identified multiple barriers to improving asthma response during the school day. RHA and the Illinois State Board of Education developed an online training to increase availability and use of undesignated asthma rescue medication and have made the training available online.

NACP also funds four non-governmental organizations (NGOs) to develop communication, education, or policy strategies to enhance the management of asthma and indoor and outdoor air quality, aimed at individuals with asthma, their caretakers, clinicians, and other stakeholders. This partnership allows CDC's NACP to reach a national audience in a coordinated manner. CDC awarded a new, five-year cooperative agreement to the four NGO recipients in FY 2020.

### **Asthma Surveillance**

State and local health departments rely on asthma surveillance to accurately direct their efforts to reduce the burden of asthma. CDC provides state-specific asthma prevalence data and important measures of asthma control through existing data systems. The Behavioral Risk Factor Surveillance System (BRFSS) administers an in-depth Asthma Call-Back Survey (ACBS), and the National Health Interview Survey (NHIS) publishes national estimates of asthma burden. In FY 2024, CDC will continue to support the use of ACBS and publish national estimates of asthma burden. CDC is also focused on data modernization initiatives with the goal of improving asthma surveillance data, technology, and workforce capacity.

NACP recipients use surveillance data to focus their efforts on populations with a disproportionate burden of asthma within their jurisdictions and address health disparities locally. In addition, NACP funds jurisdictions to improve the reach, quality, effectiveness, and sustainability of asthma control services and to reduce asthma morbidity, mortality, and disparities by implementing evidence-based strategies across multiple sectors.

**Asthma Grants to Health Departments<sup>1</sup>**

(dollars in millions)	<b>FY 2022</b>		<b>FY 2024</b>
	<b>Final</b>	<b>FY 2023 Enacted</b>	<b>President's Budget</b>
Number of Awards	25	25	27
- New Awards	0	0	27
- Continuing Awards	25	25	0
Average Award	\$0.604	\$0.604	\$0.604
Range of Awards	\$0.450-\$0.800	\$0.450-\$0.800	\$0.450-\$0.800
<b>Total Awards</b>	<b>\$15.704</b>	<b>\$15.704</b>	<b>\$16.308</b>

<sup>1</sup>These funds are not awarded by formula.

## Environmental Health Activities Budget Request

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### Budget Request

CDC's FY 2024 budget request of **\$187,600,000** for Environmental Health Activities is **\$135,000,000** above the FY 2023 enacted level. The total request includes an increase of **\$35,000,000** to support expanded laboratory and health investigation activities under the Cancer Moonshot Initiative and an increase of **\$100,000,000** to expand support to health departments to build capacity to address environmental hazards and health and pilot the provision of portable High Efficiency Particulate Air (HEPA) filtration systems.

Our constant interactions with our environment affect our health, quality of life, and exacerbate health disparities. Children, the elderly, people from racial and ethnic minority groups, people with lower incomes, and people with disabilities or chronic health conditions such as asthma are especially vulnerable to environmental hazards.

CDC programs funded under Environmental Health Activities support core environmental health programs, workforce capacity, and research that protect Americans from emerging and everyday environmental health threats wherever they live. These programs are critical for ensuring environmental public health practitioners at state, local, tribal, and territorial health departments have the resources, tools, and evidence-based guidance to detect, prevent, and control environmental public health hazards.

Environmental public health is a foundational area in state, tribal, local, and territorial public health departments with a rapidly expanding set of responsibilities for responding to emerging issues and emergencies to protect the public. These environmental health threats include diverse issues like drinking water contamination; unsafe retail food practices; extreme weather-related events, including hurricanes, heat, wildfires, and flooding; radiation and chemical emergencies and environmental and medical exposures to radiation; and health investigations around cancer and the environment. CDC, in conjunction with partners within HHS and across the federal government, protect and safeguard the American people from these threats by identifying the environmental exposures that make people sick, investigating how those exposures are transmitted in the environment, and finding ways to eliminate the threat to people's health—thereby saving money and lives.

### Environmental Health Capacity

#### *Cancer Activities*

CDC/ATSDR have released Guidelines for Examining Unusual Patterns of Cancer and Environmental Concerns. The new guidelines, as well as accompanying tools and templates, can be found at <https://www.cdc.gov/nceh/cancer-environment/index.html>. These guidelines update and replace CDC's previous guidelines, "Investigating Suspected Cancer Clusters and Responding to Community Concerns: Guidelines from CDC and the Council of State and Territorial Epidemiologists."

The new guidance contains the following changes:

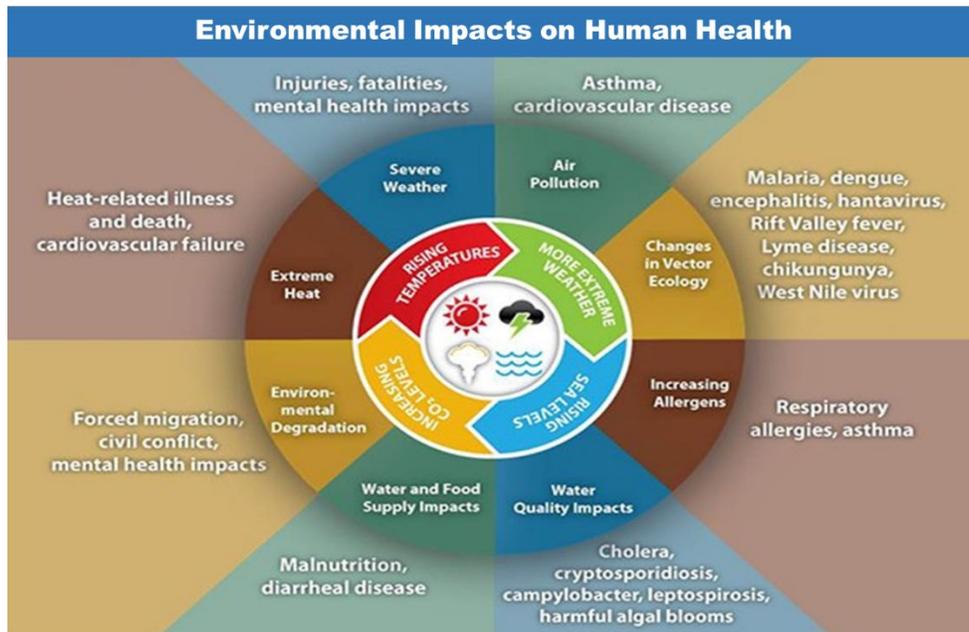
- Places a greater emphasis on engaging and communicating with community members,
- Recommends health departments consider proactive evaluation of cancer registry data at regular intervals to look for unusual patterns of cancer,
- Revises the definition of a cancer cluster to encompass broader unusual patterns of cancer and recommends the term "unusual patterns of cancer" to describe situations that may warrant further assessment, and
- Replaces the steps in the 2013 Guidelines with new detailed criteria to:
  - address environmental concerns more broadly, and
  - de-emphasize statistical significance as the primary criterion for moving forward with evaluating potential exposures and cancer rates.

Additional support in FY 2024 will address the goals of the Cancer Moonshot and enable CDC and health departments to conduct cancer studies in communities utilizing CDC’s Guidelines for Examining Unusual Patterns of Cancer and Environmental Concerns. Additional resources will also support the expansion of laboratory studies and method development around human health and exposure to hazardous substances, improving the scientific understanding of the direct and indirect pathways by which such exposures may cause or contribute to the development of different cancers.

*Climate and Health Program*

In 2022, the Association for State and Territorial Health Officials released a report<sup>182</sup> analyzing information collected from state and territorial health departments regarding their efforts to address extreme weather and changes in weather patterns. Sixty-four percent of jurisdictions named extreme heat events as a high concern, with a third of jurisdictions ranking winter storms similarly. Despite this, there is low health department capacity to address these health risks: only 23.1% of jurisdictions reported a high capacity to respond to heat-related illnesses and 25.6% reported a high capacity to respond to cold-related illness. When asked about resources to address weather-related health risks overall, 69.2% of jurisdictions reported staff availability and 79.5% reported financial capital as reasons for limited capacity.

As the only federal program that directly funds health departments to address the health impacts of changing weather patterns, CDC’s Climate and Health Program is building capacity throughout the nation to prepare for and respond to weather-related health risks. Currently, CDC funds 11 health departments and three tribes to prepare for and respond to extreme weather health impacts by following CDC’s Building Resilience Against Climate Effects (BRACE) Framework. The BRACE framework helps communities anticipate weather impacts, assess vulnerabilities, project disease burden, assess public health interventions, develop adaptation plans, and evaluate the impact and quality of health interventions.



<sup>182</sup> <https://www.astho.org/globalassets/report/astho-climate-survey.pdf>

CDC funding allows states to form partnerships across jurisdictions to increase their impact. CDC-supported state health departments in Rhode Island, Maine, New Hampshire, and Vermont formed the Northeast Regional Heat Collaborative, which studied the relationship between heat index values and adverse health outcomes in the region. At the time, the National Weather Service issued a heat advisory if forecasts predicted 100 degrees Fahrenheit weather for more than two hours. However, the collaborative study<sup>183</sup> found that the number of emergency department visits and heat-related deaths increased significantly on days when the heat index was 95 degrees Fahrenheit. This prompted the National Weather Service to lower the Heat Advisory Criteria to 95 degrees Fahrenheit,<sup>184</sup> allowing for earlier warnings to the public and lower thresholds for public health officials to implement actions to protect public health, such as opening cooling centers.

CDC support also allows health departments to form collaborations across different sectors to protect health. The North Carolina Department of Health and Human Services (NCDHHS) partnered with the North Carolina Forest Service, North Carolina Climate Office, and U.S. Environmental Protection Agency to develop a smoke vulnerability map for counties most at-risk for wildfire smoke exposures, based on the likelihood of exposure and number of people with underlying conditions. NCDHHS partnered with local organizations to develop, implement, and evaluate pilot interventions aimed at making people aware of the health risks associated with wildfire smoke and actions they could take to protect themselves from smoke exposure.

Through the BRACE program, CDC funding supports the development of tools that inform decisions about how to best protect people's health. For example, the San Francisco Department of Public Health developed a Heat Vulnerability Index to identify factors that make neighborhoods more vulnerable to extreme heat, such as the amount of heat-absorbing concrete and tree density. This index is used in a variety of city efforts, including guiding where to establish cooling centers and where to conduct outreach efforts to ensure those most at-risk for heat-related illness, such as older adults, have access to these life-saving resources.

CDC also develops tools that all jurisdictions can use to inform decisions about how to protect people from weather-related health impacts, such as CDC's [Heat & Health Tracker](#).<sup>185</sup> Through a collaboration with CDC's National Environmental Public Health Tracking Program, the tracker provides the heat wave forecast at the county-level and tracks weekly cases of heat-related illness and emergency department visits. In 2022, the tracker made data on daily heat-related illness and emergency department visits available. This first-of-its kind online tool can help emergency and public health planners prepare for and respond to extreme heat events to protect people's health and reduce the number of heat-related illnesses and mortalities.

Although most Americans are at-risk for weather-related health risks, some tribal populations are among those most at-risk for the worst weather-related health effects because of higher exposure, higher sensitivity, and lower adaptive capacity due to historical, socioeconomic, and ecological factors. CDC partners with the National Indian Health Board on the Climate-Ready Tribes Initiative to build capacity within American Indian and Alaska Native Tribes to identify, assess, and take action to mitigate these health threats.

In FY 2024, CDC will use additional resources to continue to build capacity and expand the Climate and Health Program to support all states and provide additional assistance to local health departments, tribes and territories to identify weather-related health effects and implement health adaptation plans. An expansion of existing strategies and the development and implementation of new strategies such as the following would further expand public health professionals' ability to protect people from climate-related health effects:

- Funding and supporting adaptive health department actions in all states that are tailored to communities based on their unique weather exposures and vulnerabilities, and ensuring that communities at highest risk receive support

<sup>183</sup> <https://www.sciencedirect.com/science/article/pii/S0013935116312609?via%3Dihub>

<sup>184</sup> <https://www.weather.gov/media/car/DSS/NEWHeatThresholds.pdf>

<sup>185</sup> <https://ephracking.cdc.gov/Applications/heatTracker/>

- Developing a workforce ready to address weather-related health impacts
- Developing additional and enhanced data systems to help predict and respond to weather hazards
- Evaluating strategies and interventions to determine the most effective means of protecting health from weather impacts and sharing these best practices with communities across the nation
- Studying how severe weather impacts health, expanding the science base for public health practitioners to use when addressing these health risks
- Enhancing communications activities that help Americans understand the health risks of severe weather – and steps they can take to protect themselves

In FY 2024, CDC will use \$10,000,000 of the increase for Environmental Health Capacity to support states to pilot the provision of portable High Efficiency Particulate Air (HEPA) filtration systems in homes and communities most affected by wildfire smoke, and to better understand the feasibility and health impact of installing such systems. Program outcomes (e.g., health impact of providing HEPA filters) could inform federal policies aimed at implementing the intervention in the future and help federal programs make decisions about wider implementation. CDC plans to leverage existing mechanisms through state cooperative agreements to provide funds.

**Building Resilience Against Climate Effects (BRACE) Cooperative Agreement**

(dollars in millions)			FY 2024
	FY 2022 Final	FY 2023 Enacted	President's Budget
Number of Awards	11	11	52
- New Awards	0	0	41
- Continuing Awards	11	11	11
Average Award	\$0.400	\$0.400	\$0.400
Range of Awards	\$0.300 - \$0.500	\$0.300 - \$0.500	\$0.300 - \$0.500
Total Awards	\$4.300	\$4.300	\$20.800

**Safe Water**

Clean and safe water is core to our nation's health, security, and way of life. The 331 million adults and children in the United States rely on our nation’s water supply for drinking, recreation, sanitation, and hygiene. Environmental contamination and waterborne illness occur naturally, as well as through industrial processes and accidents, water system failure, and changing environmental conditions, including storms and floods. Overall, water-related illness, such as Legionnaires’ disease, results in an estimated 40,000 hospitalizations and \$970 million in healthcare costs each year.<sup>186</sup>

More than 2 million Americans lack access to safe drinking water and sanitation.

- Race is the strongest predictor of water access. Other predictors of water access are community size, income, and education level.<sup>187</sup>
- A strong cumulative effect seems to exist related to water access. For example, a person who lives in a rural area and has lower income is much more likely to live in a home without adequate water and sanitation services than a person who is either living in a rural area or has lower income. An escalating effect also seems to exist, where living in a more rural area or having lower income increases the chances of living in a home without adequate services.
- Many residents of some tribal nations have limited access to running water.

<sup>186</sup> Adam, EA et al. 2017. “Prevalence and direct costs of emergency department visits and hospitalizations for selected diseases that can be transmitted by water, United States,” J. Water Health. 15(5):673-83.

<sup>187</sup> Dig Deep and U.S. Water Alliance. 2019. Closing the water access gap in the United States: a national action plan.

- Many additional U.S. populations also have significant water access challenges. These populations include residents of certain geographic locations, migrant farm workers, people experiencing homelessness, and people experiencing poverty in major metropolis areas.

The CDC Safe Water program funds 29 health departments to strengthen programs and services for drinking water and recreational water through the Environmental Health Capacity (EHC) cooperative agreement. In FY 2021, CDC awarded approximately \$8.7 million to 50 recipients to strengthen capacity of health department environmental health programs and improve overall environmental health practice. As part of CDC's efforts around data modernization, the 50 EHC recipients have 94 projects to detect, prevent, and control environmental health hazards and to build core capacity around data. Twenty-four recipients use EHC funding for well water initiatives such as identifying at-risk wells and other private water systems with elevated levels of chemical, radiological, and biological contaminants such as arsenic, uranium, nitrates, and *E. coli*. For example, one recipient identified 580 well water samples that exceeded allowable levels for arsenic, increasing awareness of the issue and potentially informing future efforts to address the risk.

CDC protects the American people during their 300 million pool visits every year through the national Model Aquatic Health Code, a set of voluntary guidelines for local and state agencies on the design, construction, operation, and maintenance of pools, spas, and hot tubs. Several state and local health departments use EHC funding to conduct recreational water activities such as establishing new datasets on pool risk measures or violation risk scores and determining whether current systems adequately identify and characterize recreational water hazards and harmful exposures.

Harmful algal blooms (HABs), the rapid growth of algae in fresh, marine, or brackish waters, that produce toxins and can cause a variety of illnesses in people and animals, are increasing in frequency, geographic extent, and severity. This may be due to climate change, farming practices, storm and wastewater runoff, and other environmental factors, making this a very critical emerging environmental public health issue. CDC provides emergency response and scientific services to support state and local officials dealing with HABs. The CDC Safe Water program supports several state and local health departments to conduct HABs activities.

CDC's HABs activities include developing a vulnerability index for HABs, updating the interagency HAB event surveillance system, and creating an internship program for HABs surveillance and investigation. CDC is currently conducting a study in and around Lake Okeechobee, Florida, to assess human exposures and health effects associated with exposure to cyanobacterial HABs (CyanoHABs). The study will provide information about the effects CyanoHABs may have on the population and will provide insights on local public health actions that can be taken to reduce exposures to CyanoHABs.

Much of CDC's Safe Water work is in rural America and in racial and ethnic minority communities and communities with people of lower incomes. In FY 2024, CDC will continue this work by:

- Addressing environmental causes of waterborne illness outbreaks
- Supporting state, territorial, local, and tribal governments to protect residents from waterborne contamination and illness, including prevention and response to legionellosis outbreaks and other contaminants found in building plumbing systems
- Prioritizing efforts to keep small drinking water systems free from contamination
- Supporting HABs activities in state and local health departments

**Safe Water Grants (EHC)<sup>1</sup>**

(dollars in millions)	FY 2024 President's		
	FY 2022 Final	FY 2023 Enacted	Budget
Number of Awards	29	29	29
- New Awards	0	0	0
- Continuing Awards	29	29	29
Average Award	\$0.085	\$0.085	\$0.085
Range of Awards	\$0.049–\$0.249	\$0.049–\$0.249	\$0.049–\$0.249
Total Awards	\$2.458	\$2.458	\$2.458

<sup>1</sup>These funds are not awarded by formula.

**Environmental Health Security, Emergency Preparedness, and Response**

CDC provides critical assistance and expertise to help federal, state, and local entities respond to disease outbreaks and emerging health threats; advance on-the-ground science to address emerging environmental health issues, such as toxic health threats; build capacity in disaster epidemiology to better prepare for and respond to public health emergencies; provide unique expertise and training regarding radiation exposure and radiological and nuclear events; and work to ensure that the nation has a strong and knowledgeable environmental health workforce now and in the future. CDC's environmental health workforce supports all non-infectious disease emergency response scenarios (chemical, radiological, and natural disasters).

CDC's multidisciplinary team of epidemiologists and medical toxicologists use innovative data to detect emerging environmental hazards and reduce harmful environmental exposures and protect public health. During the COVID-19 pandemic, they identified and assisted states in responding to emerging environmental concerns related to ingesting alcohol-based hand sanitizers containing methanol, and elevated chemical exposures related to misuse of cleaning and disinfectant products. In 2021, CDC collaborated with Nevada Department of Health and Human Services and FDA to investigate cases of acute liver failure among children that was linked to a bottled water product.<sup>188</sup> CDC also developed a Toxicological Outbreak Investigation course to help build capacity for international, state, and local public health agencies to respond to similar outbreaks.

CDC's Environmental Health Training in Emergency Response courses teach state and local officials how to restore clean drinking water, dispose of sewage properly, ensure food is protected from unsafe environmental conditions, and prevent the spread of diseases after disasters. CDC disaster epidemiologists also help build state and local capacity in collecting and reporting morbidity and mortality data during public health emergencies.

Radiological and nuclear preparedness and radiation exposure hazards

The public health response to radiological and nuclear incidents is uniquely challenging and requires specific skill sets not readily available within state and local public health communities. CDC's radiation protection experts develop evidence-based environmental public health strategies and interventions to protect the public from radiation-related hazards, and disseminate best practices guidance, training, tools, and information to professional and lay audiences.

CDC also participates in responses to major nuclear incidents. In the past decade, CDC has provided more than 21,000 emergency radiation preparedness toolkits to clinicians and state and local public health professionals and other national and international partners. CDC provides expertise and assistance to federal, state, and local partners in exercising preparedness plans to enhance effective public health response to a radiation emergency

<sup>188</sup> [Ruff, J.C., Zhang, Y., Bui, D.P., et al. 2021. Notes from the Field: Acute Nonviral Hepatitis Linked to a Brand of Alkaline Bottled Water – Clark County, Nevada and California, 2020. Accessible as of 2/22/2022 at https://www.cdc.gov/mmwr/volumes/70/wr/mm7046a6.htm?s\\_cid=mm7046a6\\_x](https://www.cdc.gov/mmwr/volumes/70/wr/mm7046a6.htm?s_cid=mm7046a6_x)

and helped inform the planning for and response to a national-level exercise that simulated detonation of an improvised nuclear device in an urban area.

### Chemical Threats and Preparedness

Sea disposal was common for excess, obsolete, or unserviceable chemical munitions prior to 1970. Significant storms, commercial fishing, and dredging operations can bring these munitions to the surface, creating a public health hazard to workers and the food supply. CDC, along with other partners, developed tools for commercial fishing personnel encountering chemical munitions to help reduce risks of exposure. CDC provides support for safe chemical warfare agent disposal to protect public and worker health. Some chemical warfare items that are not stockpiled will require management for years to come. Many of the locations with stored chemical weapons and recoveries are in or near populations that have historically been economically and socially marginalized. The safe destruction of these stockpiled and non-stockpiled weapons has reduced risk to these populations by over 90 percent and will be completed in 2023.

In FY 2024, CDC will continue emergency preparedness and response work by responding to environmental health emergencies, providing training and guidance for the nation's environmental health workforce, providing expertise on disaster epidemiology, and providing expertise on radiation and health.

### **Food Safety**

Environmental factors are responsible for many foodborne diseases, from which 1 in 6 Americans get sick and 3,000 die every year. More than half of foodborne outbreaks begin in restaurants, and the United States spends approximately \$78 billion per year on healthcare, workplace, and other related costs.<sup>189</sup> CDC supports state and local environmental health programs in the identification and prevention of environmental factors that contribute to foodborne illness outbreaks.

CDC's Environmental Health Specialists Network (EHS-Net) is unique in its ability to collect real-time data on food safety policies and practices in retail food establishments because it relies on staff from environmental health programs with food safety skills and experience. EHS-Net findings document links between food safety policies, training, and monitoring practices and have been used to inform significant, national food safety policy and practice guidelines. Most recently, EHS-Net's work informed recommendations in the FDA's New Era of Smarter Food Safety provision on the need for food establishments to develop and implement food safety management systems. EHS-Net's work also laid the foundation for the New Era's focus on conducting root cause analysis as part of a foodborne illness investigation.

CDC collects and translates high-quality surveillance data on the environmental causes of foodborne outbreaks through the National Environmental Assessment Reporting System (NEARS). NEARS is the only national effort to systematically collect, analyze, interpret, and disseminate environmental data that help identify the causes of outbreaks and prevent them. Data from NEARS support a growing body of research showing that food safety training and certification is important to retail food safety. In FY 2024, CDC will continue supporting food safety program priorities by addressing environmental causes of foodborne illness outbreaks; translating research findings into recommended food safety prevention practices, policies, and training; and capturing environmental assessment data from foodborne illness outbreak investigations.

### **Vessel Sanitation Program**

CDC's Vessel Sanitation Program (VSP) has a long history of working with the cruise ship industry to prevent and control the introduction, transmission, and spread of gastrointestinal illnesses (GI) on cruise ships. VSP staff have extensive knowledge of cruise ship operational structures, facilities, management, and construction. Because of

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<sup>189</sup> Scharff, R. (2012). Economic burden from health losses due to foodborne illness in the United States. *Journal of Food Protection*, 75(1), 123–131.

this knowledge, the program played a critical role in detecting, mitigating, and preventing the spread of COVID-19 on cruise ships from mid-FY 2020 through FY 2022. VSP also began using geospatial analysis to better understand the distribution of GI and other infectious diseases on cruise ships and to identify contributing environmental factors. CDC applied these techniques during the COVID-19 response.

Like other close contact environments, cruise ships demonstrate high risk for transmission of infectious diseases through exposure to respiratory droplets or contact with contaminated surfaces. During the COVID-19 outbreak, CDC monitored 60 cruise ships traveling within U.S. jurisdiction during the CDC-imposed No Sail Order (July 2020 to September 2021), 90 cruise ships during the Conditional Sailing Order (September 2021 to February 2022), and 100 cruise ships during the subsequent voluntary COVID-19 Program for Cruise Ships (February to July 2022) that set requirements for all cruise ship programs.

CDC now provides guidance for cruise ships on the mitigation and management of COVID-19.

The Vessel Sanitation Program will continue its public health mission to ensure sanitary and safe conditions on cruise ships and support public health personnel to conduct ship inspections. Prior to COVID-19, the program operated on user fees from voluntary inspections. However, user fee collections have not yet resumed to levels sufficient to support program operations. With sustained support, VSP personnel can continue to provide guidance on cruise ship sanitation, food safety, water safety, ventilation, and vector control activities during routine biannual ship inspections; conduct surveillance for gastrointestinal illness; and provide reliable and current public health information and communication. This work allows VSP to better understand how environmental systems and practices on cruise ships contribute to the spread of viruses and other pathogens among passengers and crew. As CDC works to bring back all components of its program to full capacity, including construction inspections of new cruise ships and training for cruise ship managers on public health best practices to prevent and control transmission of GI illness, continued budget authority is needed to support the program during the transition and to support the continuation of efforts initiated during the COVID-19 pandemic to address infectious respiratory diseases.

### **National Amyotrophic Lateral Sclerosis (ALS) Registry**

Launched in 2010, the National Amyotrophic Lateral Sclerosis Registry—a joint effort between CDC and the Agency for Toxic Substances and Disease Registry (ATSDR)—is an important resource for scientists to understand, prevent, and potentially cure the disease. Also known as Lou Gehrig’s disease, amyotrophic lateral sclerosis (ALS) is a progressive, fatal, neurodegenerative disorder that has no cure and the cause of which is not fully understood. The main goals of the Registry are to determine the epidemiology of ALS in the United States, characterize the demographics of those living with ALS, and identify the potential risk factors for the disease.

Because ALS is not a notifiable disease in the United States, CDC/ATSDR had to develop novel approaches to identify ALS cases. The first approach identifies prevalence cases from existing national administrative databases—Medicare, Medicaid, Veterans Health Administration, and Veterans Benefits Administration. The second method uses a secure web portal to identify cases not included in the national administrative databases and offers persons with ALS the opportunity to take brief, online surveys to help researchers learn more about potential risk factors for the disease.

Based on a new methodology and the most current data available, the registry estimates there are approximately 32,000 patients diagnosed with ALS as of 2017.<sup>190</sup> This is a revised prevalence of 9.9 cases of ALS per 100,000 persons in the U.S. population. To date, patients in all 50 states have enrolled in the registry and the number of enrollees increases each day.

<sup>190</sup> Mehta P, Raymond J, Punjani R, Han M, Larson T, Kaye W, Nelson LM, Topol B, Muravov O, Genson C & Horton DK. (2022) Prevalence of amyotrophic lateral sclerosis in the United States using established and novel methodologies, 2017, *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration*, DOI: 10.1080/21678421.2022.2059380

CDC and ATSDR continue to enhance the registry. For example,

- Samples are collected nationally to ensure diversity in areas such as demographics, sex, age, and population density.
- The Biorepository has two components, an in-home one where phlebotomists travel to donors’ residences to collect blood, urine, and saliva, and a post-mortem component that includes 10 collections a year of bone, brain, spinal cord, cerebral spinal fluid, and muscle. To date, nearly 1,500 patients have participated in the in-home component and over 50 patients in the post-mortem component. Since 2013, the National ALS Registry has been a unique resource for recruiting thousands of Registry-enrolled persons with ALS (PALS) into clinical trials and epidemiological studies.<sup>191</sup> The *Research Notification Mechanism*, established by the Registry, benefits PALS and ALS researchers by providing a tool to expand recruitment and connecting PALS to opportunities for participation in appropriate research studies

Another critical function of the ALS program is advancing the science through studies. The National ALS Registry has undertaken multiple activities to improve and maintain transparency and continue to address the needs of the ALS community:

- Meeting regularly with non-governmental organizations interested in ALS
- Creating a public dashboard on the Registry homepage to display current information about national ALS data (e.g., epidemiology, grants, and biospecimens available) <https://www.cdc.gov/als/dashboard/index.html>
- Conducting listening sessions to gain better insight into stakeholder and partner ideas to enhance the Registry
- Restructuring the Registry’s Annual Meeting to communicate latest accomplishments, share new data releases, present findings from funded academic researcher projects, and increase transparency to improve public trust and better address concerns of the ALS community
- Publishing a 12-year retrospective analysis of the National ALS Registry’s findings and accomplishments to date: <https://onlinelibrary.wiley.com/doi/10.1002/acn3.51660>

**ALS Research Grants<sup>1</sup>**

(dollars in millions)			FY 2024
	FY 2022 Final	FY 2023 Enacted	President’s Budget
Number of Awards	7	8	8
- New Awards	3	3	3
- Continuing Awards	4	5	5
Average Award	\$0.440	\$0.400	\$0.400
Range of Awards	\$0.300-0.500	\$0.300-0.500	\$0.300-0.500
<b>Total Awards</b>	<b>\$3.100</b>	<b>\$3.200</b>	<b>\$3.200</b>

<sup>1</sup> These funds are not awarded by formula.

<sup>191</sup> Mehta P, Raymond J, Han MK, Larson T, Berry JD, Paganoni S, Mitsumoto H, Bedlack RS, Horton DK (2022) Recruitment of Patients With Amyotrophic Lateral Sclerosis for Clinical Trials and Epidemiological Studies: Descriptive Study of the National ALS Registry’s Research Notification Mechanism J Med Internet Res, DOI: 10.2196/28021

**State Table: Environmental Health Funding<sup>1</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$175,000	\$175,000	TBD	TBD
Alaska	\$299,963	\$299,963	TBD	TBD
Arizona	\$1,461,544	\$1,461,544	TBD	TBD
Arkansas	\$0	\$0	TBD	TBD
California	\$3,669,499	\$3,669,499	TBD	TBD
Colorado	\$747,072	\$747,072	TBD	TBD
Connecticut	\$1,527,500	\$1,527,500	TBD	TBD
Delaware	\$757,500	\$757,500	TBD	TBD
District of Columbia	\$350,000	\$350,000	TBD	TBD
Florida	\$2,104,959	\$2,104,959	TBD	TBD
Georgia	\$939,545	\$939,545	TBD	TBD
Hawaii	\$0	\$0	TBD	TBD
Idaho	\$190,000	\$190,000	TBD	TBD
Illinois	\$1,450,000	\$1,450,000	TBD	TBD
Indiana	\$1,393,431	\$1,393,431	TBD	TBD
Iowa	\$1,593,000	\$1,593,000	TBD	TBD
Kansas	\$1,039,885	\$1,039,885	TBD	TBD
Kentucky	\$1,555,000	\$1,555,000	TBD	TBD
Louisiana	\$969,704	\$969,704	TBD	TBD
Maine	\$1,665,000	\$1,665,000	TBD	TBD
Maryland	\$1,415,937	\$1,415,937	TBD	TBD
Massachusetts	\$1,530,000	\$1,530,000	TBD	TBD
Michigan	\$2,427,053	\$2,427,053	TBD	TBD
Minnesota	\$2,888,498	\$2,888,498	TBD	TBD
Mississippi	\$150,000	\$150,000	TBD	TBD
Missouri	\$1,505,000	\$1,505,000	TBD	TBD
Montana	\$650,000	\$650,000	TBD	TBD
Nebraska	\$745,000	\$745,000	TBD	TBD
Nevada	\$290,000	\$290,000	TBD	TBD
New Hampshire	\$2,153,230	\$2,153,230	TBD	TBD
New Jersey	\$2,105,527	\$2,105,527	TBD	TBD
New Mexico	\$2,042,242	\$2,042,242	TBD	TBD
New York	\$4,269,163	\$4,269,163	TBD	TBD
North Carolina	\$1,723,985	\$1,723,985	TBD	TBD
North Dakota	\$0	\$0	TBD	TBD
Ohio	\$1,031,950	\$1,031,950	TBD	TBD
Oklahoma	\$175,000	\$175,000	TBD	TBD
Oregon	\$1,365,037	\$1,365,037	TBD	TBD
Pennsylvania	\$1,996,900	\$1,996,900	TBD	TBD
Rhode Island	\$1,882,587	\$1,882,587	TBD	TBD
South Carolina	\$0	\$0	TBD	TBD
South Dakota	\$667,910	\$667,910	TBD	TBD
Tennessee	\$1,010,297	\$1,010,297	TBD	TBD
Texas	\$2,457,587	\$2,457,587	TBD	TBD
Utah	\$1,879,633	\$1,879,633	TBD	TBD
Vermont	\$2,020,037	\$2,020,037	TBD	TBD

CDC FY 2024 Congressional Justification

Virginia	\$2,633,057	\$2,633,057	TBD	TBD
Washington	\$1,292,698	\$1,292,698	TBD	TBD
West Virginia	\$266,724	\$266,724	TBD	TBD
Wisconsin	\$2,045,000	\$2,045,000	TBD	TBD
Wyoming	\$150,000	\$150,000	TBD	TBD
<b>Total Resources</b>	<b>\$66,655,654</b>	<b>\$66,655,654</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup>This table is a compilation of NCEH grant programs Building Resilience Against Climate Effects, EH16-1602, 93.070; Radiation Health Protection and Measurements Involving Radiation or Radioactive Materials, EH16-1604, 93.070; Childhood Lead Poisoning Prevention, EH17-1701/EH18-1806, 93.197; Enhancing Innovation and Capabilities of the Environmental Public Health Tracking Network, EH17-1702, 93.070; Lead Exposure Registry of Flint Residents – Michigan, EH17-1704, 93.197; Identifying Common and Unique Barriers to the Exchange of Hospital Inpatient and Emergency Department Data, EH18-1801, 93.070; Developing Standards and Principles to Effectively Administer and Integrate Public Health Statistics and Information Systems into the National Environmental Public Health Tracking Network, EH18-1802, 93.070; Radiation Protection of the Public as Practiced by the State and Local Radiation Programs, EH18-1803, 93.070; State-Based Public Health Laboratory Biomonitoring Programs, EH19-1901, 93.070; A Comprehensive Public Health Approach to Asthma Control Through Evidence-Based Interventions, EH19-1902, 93.070; Promoting Asthma Friendly Environments Through Partnerships and Collaborations, EH20-2002, 93.070; National Public Health Surveillance for Chemical and Radiologic Exposures and Emerging Drug Threats, EH20-2003, 93.070; Enhancing Disease Detection in Newborns: Building Capacity in Public Health Laboratories, EH20-2004, 93.065; Strengthening Environmental Health Capacity (EHC) to detect, prevent, and control environmental health hazards through data-driven, evidence-based approaches, EH20-2005, 93.070; and represents all funding within a jurisdiction (including funding to local, tribal, and other grantees). For a more comprehensive view of grant and cooperative agreement funding to grantees by jurisdiction, visit <http://www.cdc.gov/FundingProfiles/FundingProfilesRIA/>.

## INJURY PREVENTION AND CONTROL

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Budget Authority	\$714.879	\$761.379	\$1,351.669	+\$590.290
<b>Total Request</b>	<b>\$714.879</b>	<b>\$761.379</b>	<b>\$1,351.669</b>	<b>+\$590.290</b>
FTEs	505	543	584	41
-- Intentional Injury	\$139.050	\$164.550	\$514.550	+\$350.000
-- Domestic Violence and Sexual Violence	\$34.700	\$38.200	\$39.200	+\$1.000
-- <i>Child Maltreatment (non-add)</i>	\$7.250	\$7.250	\$7.250	\$0
-- <i>Child Sexual Abuse Prevention (non-add)</i>	\$2.000	\$3.000	\$3.000	\$0
-- Youth and Community Violence Prevention	\$15.100	\$18.100	\$268.100	+\$250.000
-- Domestic Violence Community Projects	\$5.500	\$7.500	\$10.500	+\$3.000
-- Rape Prevention	\$56.750	\$61.750	\$101.750	+\$40.000
-- Suicide Prevention	\$20.000	\$30.000	\$80.000	+\$50.000
-- Adverse Childhood Experiences (ACEs)	\$7.000	\$9.000	\$15.000	+\$6.000
-- NVDRS	\$24.500	\$24.500	\$34.500	+\$10.000
-- Unintentional Injury	\$10.300	\$13.300	\$13.300	\$0
-- <i>Traumatic Brain Injury (TBI) (non-add)</i>	\$7.250	\$8.250	\$8.250	\$0
-- <i>Elderly Falls (non-add)</i>	\$2.050	\$3.050	\$3.050	\$0
-- <i>Drowning Prevention</i>	\$1.000	\$2.000	\$2.000	\$0
-- Injury Prevention Activities	\$28.950	\$29.950	\$29.950	\$0
-- Opioid Abuse and Overdose Prevention and Surveillance	\$490.579	\$505.579	\$713.369	+\$207.790
-- Injury Control Research Centers	\$9.000	\$11.000	\$11.000	\$0
-- Firearm Injury and Mortality Prevention Research	\$12.500	\$12.500	\$35.000	+\$22.500

<sup>1</sup>This table reflects totals by budget activity. The FY 2024 budget proposes a single "CDC-Wide Activities and Program Support" Treasury account structure.

**Enabling Legislation Citation:** PHSA § 203\*, PHSA § 214, PHSA § 301, PHSA § 304, PHSA § 307, PHSA § 308, PHSA § 310, PHSA § 311, PHSA § 317, PHSA § 317N, PHSA § 319, PHSA § 319D, PHSA § 327, PHSA § 352, PHSA § 391\*, PHSA § 392\*, PHSA § 392A, PHSA § 393\*, PHSA § 393A, PHSA § 393B, PHSA § 393C, PHSA § 393D\*, PHSA § 394\*, PHSA § 399\*, PHSA § 399O, PHSA § 399P\*, PHSA § 1102, PHSA § 1706\*, Bayh-Dole Act of 1980 (P. L. 96-517), Family Violence Prevention and Services Act §§ 314\*, Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities (SUPPORT) Act §§ 7011 and 7131 (P. L. 115-271), Comprehensive Addiction and Recovery Act of 2016 § 102 (P. L. 115-271), Violence Against Women Act Reauthorization Act of 2022 § 301 (P.L. 117-103).

**Enabling Legislation Status:** Permanent Indefinite

**Authorization of Appropriations for FY 2022:** Indefinite; Expired/Expiring noted with \*

**Allocation Methods:** Direct Federal/Intramural; Competitive Cooperative Agreements/Grants, including Formula Grants; and Competitive Contracts

## Program Description

CDC is the nation's leading authority on violence and injury prevention. Preventing violence and injuries uses the same public health methods used to prevent diseases: carefully defining the problem through data, studying factors that increase or decrease risk, designing and evaluating interventions that target these risk factors, and taking steps to ensure that proven strategies are implemented in communities nationwide. This includes helping adapt the strategies to challenging circumstances, like those facing communities during the COVID-19 pandemic.

In the United States, injury is the leading cause of death of children and adults ages 1-45. Many causes of injury are urgent and interrelated. CDC is focused on preventing adverse childhood experiences, overdose, and suicide. Prevention of any one of these issues, decreases the risk of the others now and for the next generation.

## Budget Request

CDC's FY 2024 budget request of **\$1,351,669,000** for Injury Prevention and Control is **\$590,290,000** above the FY 2023 enacted level. The request includes **\$250,000,000** to fund the Community Violence Intervention (CVI) initiative, which will expand the reach of CDC programs to help stem the rise in violence in high risk urban and rural communities across the country. The Budget includes a total of \$80 million for the Suicide Prevention program to allow CDC to expand the program to fund all 50 states, Washington, D.C., and 18 tribal and territorial communities.

With the proposed funds for youth and community violence prevention, CDC will devote additional resources to build the capacity of the violence prevention workforce by dedicating funds for staffing support and workforce development activities.

With the proposed funds for rape prevention and education, CDC will enhance support to state and territorial health departments to initiate, expand, or enhance approved prevention activities. CDC will support state, territorial, and tribal sexual assault coalitions to coordinate and provide prevention activities and to collaborate with entities engaged in sexual violence prevention.

With the proposed funds for intimate partner violence, CDC will continue its surveillance activities to better understand IPV among older adults and adaptation of successful initiatives to prevent dating violence among youth with disabilities. At this level, CDC will expand a multi-pronged strategy on suicide prevention that includes a focus on prevention and early intervention in state, local, territorial, local, and tribal communities.

## Health Equity

CDC is committed to reducing health disparities, achieving health equity, and fostering a diverse injury and violence prevention workforce to ensure all people can achieve lifelong health and wellbeing. CDC is advancing health equity as it relates to injury and violence by 1) integrating health equity into all aspects of CDC's work, including developing and growing a workforce that is trained, and represents the diversity of the populations we serve, and engaging in programmatic work that aims to move prevention upstream by addressing the root causes of existing health disparities and inequities within injury and violence; 2) using surveillance, research, and innovative data science to drive prevention action; 3) addressing shared risk and protective factors across injury and violence topics; 4) ensuring evaluation, including economic cost and benefit analyses, and principles of implementation research and science are integrated into CDC's programmatic activities; and 5) translating, disseminating, and communicating the data and science to support broad adoption of evidence-based policies, programs, and practices.

## INJURY PREVENTION AND CONTROL

### BY THE NUMBERS<sup>1</sup>

- 84%—Portion of survey respondents exposed to the Rx Awareness campaign who agreed that there is hope for people struggling with an addiction to prescription opioids.
- 66%—Portion of survey respondents exposed to the Rx Awareness campaign pilot who reported the campaign was effective or very effective at improving knowledge.
- 6—States funded to build surveillance infrastructures that will inform adverse childhood experience (ACE) prevention activities.
- 61%—Adults who report having experienced at least one ACE in their lifetime.
- 44%—Estimated reduction of cases of depression in adults if ACEs were prevented.
- 17—The number of Comprehensive Suicide Prevention program recipients funded in FY 2022.
- 9—Injury Control Research Centers (ICRCs) studying how to prevent injuries and violence and working with community partners to put research findings into action.
- 23—States funded through the Core State Injury Prevention Program to focus on preventing ACEs, TBI, and transportation-related injury.
- 5—Youth Violence Prevention Centers researching how to prevent and reduce community rates of youth violence within communities with high rates of violence among youth.
- 404,812—Copies of CDC’s technical packages for violence prevention that have been disseminated to states, territories, and partners.
- 52—States and territories collecting data through CDC’s National Violent Death Reporting System (NVDRS). These data help define public health priorities, develop and evaluate programs and policies, and conduct research regarding violent deaths at the state level.

<sup>1</sup>Unless otherwise noted, all information and calculations are from CDC program data.

<b>Injury Prevention and Control Funding History</b>	
Fiscal Year	Dollars (in millions)
FY 2020	\$677.379
FY 2021	\$680.783
FY 2022	\$714.879
FY 2023 Enacted	\$761.379
FY 2024 President’s Budget	\$1,351.699

## National Violent Death Reporting System Budget Request

The [National Violent Death Reporting System \(NVDRS\)](#)<sup>192</sup> pools information from multiple data sources into a usable, anonymous database describing the circumstances of homicides and suicides (including opioid-related suicides). CDC supports NVDRS programs in all 50 states, Washington, D.C., and Puerto Rico.

NVDRS benefits from improvements made to information systems through CDC’s accelerated Data Modernization Initiative. As CDC continues to transform its approach to public health data, advancements in rapid data analysis give public health professionals and policymakers greater visibility into public health threats, allowing them to make decisions faster.

### Budget Request

CDC’s FY 2024 budget request of **\$34,500,000** for the National Violent Death Reporting System is **\$10,000,000** above the FY 2023 enacted level. In FY 2024, CDC will continue supporting the 52 NVDRS recipients to implement and maintain the system, monitor and report data, and use these data to inform prevention efforts to save lives. CDC will continue to increase the use of NVDRS data by characterizing deaths collected (e.g., homicide, suicide, deaths of undetermined intent) among various populations (e.g., ethnic, racial, rural, sexual and gender minorities, military). CDC also will work with data providers to identify ways to improve data completeness, timeliness, and quality and continue to enhance system infrastructure with NVDRS web-based system refinements. With the proposed increases to NVDRS, CDC will increase awards to states and continue efforts to improve timeliness of data collection.

<b>National Violent Death Reporting System (NVDRS) Grants<sup>1</sup></b>			
(dollars in millions)	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President’s Budget</b>
Number of Awards	52	52	TBD
- New Awards	0	0	TBD
- Continuing Awards	52	52	TBD
Average Award	\$0.323	\$0.323	TBD
Range of Awards	\$0.178–\$0.962	\$0.178–\$0.962	TBD
<b>Total Awards</b>	<b>\$16.833</b>	<b>\$16.833</b>	<b>TBD</b>

<sup>1</sup> These funds are awarded by formula.

<sup>192</sup> <https://www.cdc.gov/violenceprevention/datasources/nvdrs/index.html>

## **Unintentional Injury Prevention Budget Request**

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Unintentional injuries, including falls and traumatic brain injuries (TBI), are the leading cause of death for people one to 44 years old in the United States, and are responsible for more than \$130 billion in medical costs annually.

### **Budget Request**

CDC's FY 2024 budget request of **\$13,300,000** for the Unintentional Injury Prevention is level with the FY 2023 enacted level. At this level, CDC will continue efforts in preventing and minimizing the impacts of unintentional injury.

### **Falls**

Falls are the leading cause of injuries among older Americans. More than one in four adults ages 65 and older fall each year, resulting in about 36 million falls and an estimated \$50 billion spent on related medical costs. Fall-related death rates have risen about 3% every year from 2008-2020 and may surge as Baby Boomers age. CDC informs older adults and caregivers about fall prevention, provides state-level data on falls burden, and partners with doctors and other healthcare providers to develop fall prevention tools and resources and implement and evaluate effective fall prevention strategies. CDC's Stopping Elderly Accidents, Deaths, and Injuries (STEADI) initiative teaches clinicians to screen, assess, and intervene to reduce fall risks. CDC's [Still Going Strong](#) campaign empowers older adults to reduce their risk of common injuries like falls, motor vehicle crashes, and traumatic brain injury. This campaign launched in 2021 and has garnered tens of millions of impressions. A 2022 evaluation survey found 93% of respondents strongly agreed the campaign made them feel they can prevent common injuries and 92% strongly agreed that the campaign made them feel positive about staying independent. With these funds, CDC will create new campaign assets, expand the campaign's reach, and broaden campaign focus to include mental health. Additionally, CDC provided technical assistance to the CDC Foundation to develop an online, interactive falls screening tool which was released on the National Council on Aging website in August 2022. Since the release there have been over 180,000 visits and over 30,000 completions of the screener.

### **Traumatic Brain Injury (TBI)**

TBI is a serious public health concern resulting in death and disability for thousands of people each year. A TBI can lead to short- or long-term problems with memory, sleep, movement, vision, hearing, and mental health. An average of 176 TBI-related deaths and 611 TBI-related hospitalizations occur each day based on the most recent national data. Americans ages 75 years and older have the highest numbers and rates of TBI-related hospitalizations and deaths, accounting for around one third of both hospitalizations and deaths related to TBI.

CDC is focused on preventing TBI, improving care for TBI patients in rural settings, helping students return to school following a TBI, and improving the diagnosis and management of mild TBI, also called a concussion. CDC's Heads Up tools and resources were created to help protect youth from TBI and their potentially devastating effects. CDC has partnered with more than 85 organizations across the fields of athletics, healthcare, public health, education, and scientific research to advance brain injury awareness and prevention efforts through the Heads Up program. Since its inception 20 years ago, over 10 million participants have completed online trainings courses, and more than 200 million people have been reached through ad campaigns and educational materials.

## **Drowning**

Drowning is one of the three leading causes of unintentional injury death among persons aged 29 years and younger. In 2020, 4,589 lives were lost to unintentional drowning and drowning was the leading cause of death among children 1-4 years of age. Alarming, a 2022 CDC publication<sup>11</sup> revealed that although drowning death rates for people  $\leq 29$  years in the U.S. decreased 2% per year from 2010 to 2019, they increased 17% from 2019 to 2020. The largest increases from 2019 to 2020 occurred among young adults aged 20 to 24 years (44%), Black or African American persons (24%), and males (20%). Rates are disproportionately high among certain racial and ethnic groups. In 2021, CDC released a study that found non-Hispanic American Indian or Alaska Native persons had two times higher drowning rates and non-Hispanic African American or Black persons had 1.5 times higher rates than non-Hispanic White persons. To begin addressing these disparities, CDC is funding partners to improve the quality of drowning data and surveillance, understand barriers that populations at higher risk of drowning may have in accessing effective interventions, and pilot basic swimming and water safety skills programs in communities at increased risk of drowning.

## **Injury Prevention Activities Budget Request**

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More than 245,000 people die from an injury every year. There are 11 hospitalizations and 109 emergency department visits for every 1 injury-related death. People who survive major injuries can have lifelong mental, physical, and financial problems. CDC developed the Core State Injury Prevention Program (Core SIPP) to support health department infrastructure and partnerships that identify and respond to existing and emerging injury threats with data-driven public health actions. This support increases protective factors and reduces risk factors using the best available evidence to prevent injuries and death.

All Core SIPP recipients focus on preventing Adverse Childhood Experiences (ACEs), traumatic brain injury (TBI), and transportation-related injury. Recipients can also use up to 25% of their award to address identified priority injury topics of local concern, such as drowning, older adult falls, or suicide. An enhanced funding component is available for a smaller number of recipients to implement and evaluate prevention strategies or conduct novel surveillance activities.

### **Budget Request**

CDC's FY 2024 budget request of **\$29,950,000** for the Injury Prevention Activities is level with the FY 2023 enacted level. At this level, CDC will continue conducting prevention activities in areas of greatest need, including crosscutting programs such as Core SIPP and other critical activities such as providing public health leadership in motor vehicle crash injury prevention.

### **Transportation Safety**

In 2020, the United States had the highest number of motor vehicle traffic deaths in over a decade—nearly 41,000 people died. In the same year, crash deaths resulted in over \$430 billion in total costs (including medical costs and estimates for lives lost) in addition to the immeasurable burden on victims' families and friends. In 2022, CDC [released a study](#) revealing that the U.S. had the highest population-based crash death rate (11.1 per 100,000 population) out of 29 high-income countries in 2019. Also, the U.S. population-based death rate increased by 0.1% from 2015 to 2019, while the average percent change among 27 other high-income countries was a decrease of 10.4%.

CDC provides public health leadership to enhance implementation of proven prevention strategies. CDC's experts work with partners to gather data and provide guidance on effective transportation safety interventions that identify and reduce motor vehicle crash deaths and injuries among disproportionately affected populations.

Motor vehicle crashes are a leading cause of death for children. In 2022, CDC reported that combined child passenger death rates (from 2015–2019) were highest for non-Hispanic American Indian/Alaska Native children (2.67 per 100,000 population) and non-Hispanic Black children (1.96 per 100,000 population). Also, death rates among Hispanic children increased over 7-fold from the most urban counties to the most rural counties, while those for non-Hispanic White and Black children increased over 5-fold. To address these disparities, CDC released the Booster Seat Planning Guide to assist states, tribes, localities, and territories with assessing, planning, and implementing improved booster seat laws to reduce crash injuries and deaths among children.

**Core State Injury Prevention Program Grants<sup>1,2</sup>**

(dollars in millions)	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>
Number of Awards	23	TBD	TBD
- New Awards	23	TBD	TBD
- Continuing Awards	0	TBD	TBD
Average Award	\$0.292	TBD	TBD
Range of Awards	\$0.248-\$0.475	TBD	TBD
<b>Total Awards</b>	<b>\$6.723</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup> All Core SIPP states receive approximately \$250,000 in base funding. Select states are funded for enhanced components above their base funding.

<sup>2</sup> These funds are not awarded by formula.

## **Opioid Overdose Prevention and Surveillance Budget Request**

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The drug overdose epidemic continues to evolve and is becoming more complex due to an increasing array of potential substances and exposures, such as synthetic opioids (e.g., illicitly manufactured fentanyl) and stimulants, and an increase in polysubstance use (i.e., use of more than one substance). In 2021, 106,699 drug overdose deaths occurred in the United States, up from 91,799 in 2020 and exacerbated by the COVID-19 pandemic. In both 2020 and 2021, adults aged 35-44 had the highest rate of drug overdose deaths (62.0 per 100,000). Opioids, mainly synthetic opioids (other than methadone), are currently the main driver of drug overdose deaths with the age-adjusted rate of synthetic drug overdose deaths having increased from 1.0 per 100,000 in 2013 to 21.8 in 2021. From 2012 through 2021, the rate of drug overdose deaths involving cocaine increased more than 420% (from 1.4 to 7.3), while those involving psychostimulants with abuse potential increased 1150% (from 0.8 to 10.0). Beyond the human toll, the cost of fatal opioid and opioid use disorder in the United States in 2017 was \$1.02 trillion.<sup>193</sup> This cost represents a dramatic increase from the estimated cost of \$78.5 billion just four years earlier in 2013.

CDC's drug overdose prevention work encompasses the below foundational pillars, all of which align with the Office of National Drug Control Policy (ONDCP) drug control strategy and are implemented within a framework centering on health equity, reducing stigma, and improving linkage to care and treatment.

### **Budget Request**

CDC's FY 2024 budget request of **\$713,369,000** for Opioid Overdose Prevention and Surveillance is **\$207,790,000** above the FY 2023 enacted level. CDC will advance local investments and innovation to reach communities heavily impacted by the overdose crisis, while continuing to support all states, territories, and local jurisdictions to track and prevent overdose deaths. CDC will support collection and reporting of real-time, robust overdose data, building upon the work of the Overdose Data to Action (OD2A) program. CDC will partner with funded jurisdictions to implement surveillance strategies that include contextual and toxicological information that can inform identify emerging substance threats, such as xylazine and fentanyl analogs, and prevent overdose and related harms in communities.

Recognizing the associations between ACEs, suicides, and substance use disorders, CDC will continue supporting upstream prevention programs, such as expanding ACEs data collection in communities experiencing high rates of drug overdoses and leveraging ongoing comprehensive suicide prevention approaches to test a comprehensive community approach for the primary and secondary prevention of ACEs.

### **Surveillance and Research**

Timely, high-quality data are necessary for public health officials and other decision makers to understand the extent of the problem, prioritize resources, and evaluate the effectiveness of prevention and response efforts. CDC surveillance efforts have helped states adapt to the rapidly changing overdose epidemic and implement more tailored strategies. Data have also equipped communities to help save lives in cases of nonfatal overdose. For example, Colorado has improved real-time reporting of emergency department visits involving overdose from 60% coverage to 90% coverage statewide, which helps direct resources to localities where they are immediately needed. Additionally, strong cross-sector partnerships within states and localities can enhance data collection efforts. Connecticut collaborates with the New England High Intensity Drug Trafficking Area (HIDTA) and local syringe service programs to conduct drug toxicology surveillance. The results of these tests track changes in the illicit drug supply, detect overdose spikes or clusters, and inform public health response.

CDC's State Unintentional Drug Overdose Reporting System (SUDORS) allows states to collect data on all

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<sup>193</sup> Florence C, Luo F, Rice K. The economic burden of opioid use disorder and fatal opioid overdose in the United States, 2017. *Drug Alcohol Depend.* 2021 Jan 1;218:108350. doi: 10.1016/j.drugalcdep.2020.108350. Epub 2020 Oct 27. PMID: 33121867; PMCID: PMC8091480.

unintentional or undetermined intent drug overdose deaths in one place. As a result, states can spot trends and understand factors leading up to overdose deaths. Data collected by SUDORS includes valuable information from death scene investigations, detailed information on toxicology and drugs contributing to death, the route of administration, and other risk factors associated with fatal overdose. An example of SUDORS' utility is in identifying and tracking changes in the landscape of illicitly manufactured fentanyl analogs, which have similar chemical structures to fentanyl but with varying potency. Eight states had identified one such analog, *para*-fluorofentanyl, as of June 2021. By 2022, however, SUDORS data indicated a drastic increase in deaths associated with this analog. As published in a *Notes from the Field*,<sup>194</sup> *para*-fluorofentanyl was found in 35 jurisdictions. Furthermore, while this analog accounted for a small proportion of total overdose deaths from July 2020-June 2021 (2.6%), such deaths increased by 455.3% during the study period.

SUDORS benefits from improvements made to information systems through CDC's public health data modernization initiative, which aims to improve core surveillance systems that benefit all of CDC and public health, bolster CDC program capabilities to protect health, and support state, tribal, local, and territorial public health jurisdictions to strengthen their capabilities for COVID-19 and beyond.

Between 2011-2020, all fifty states and DC collected ACEs data in their annual Behavioral Risk Factor Surveillance System (BRFSS) survey at least once. CDC included ACEs and opioid misuse surveillance questions on an internet panel survey to provide better insight into trends in ACEs and their connection to opioid misuse over time—a key function of public health surveillance not supported by existing retrospective data systems. Once CDC experts identify important trends or successful strategies, they work to understand how the insights and interventions can inform action in other jurisdictions and continuously evaluate and refine them. For example, CDC led an evaluation of medication for opioid use disorder (MOUD) to improve the evidence base and how it can be scaled up to achieve population-level impact. This research assessed the type of MOUD and the contextual, provider, and individual factors that influence implementation and improve patient wellbeing.

### **Build State, Local, and Tribal Capacity**

CDC's [Overdose Data to Action \(OD2A\) program](#) supports states, localities, and territories to advance the understanding of the drug overdose epidemic and to scale up surveillance and prevention strategies. This overarching support is made up of two distinct cooperative agreements: Overdose Data to Action in States (OD2A-S), which supports state health departments, and Overdose Data to Action: LOCAL, which supports local and territorial health departments.

OD2A-S supports state health departments in preventing non-fatal and fatal overdoses by expanding and strengthening overdose surveillance efforts and tailoring and scaling evidence-based prevention and response efforts to reduce overdose deaths. OD2A-S supports tracking of non-fatal and fatal overdoses, emerging drug threats, and associated risk factors, and assists to implement, enhance, and/or evaluate effective prevention strategies and policies. OD2A-S focuses on groups disproportionately affected by the overdose epidemic; closing gaps related to access to care and services represents a key approach to reducing health inequities.

Similarly, LOCAL supports city and county health departments and territories to conduct overdose-related surveillance and prevention activities and decrease overdose morbidity and mortality at the local level. Funded recipients emphasize reducing disparities and implementing evidence-based strategies including, harm reduction and linkage to and retention in care.

Through the OD2A Initiative, CDC supports a robust menu of strategies at state, local, and territorial levels including linkage to evidence-based treatment and innovative surveillance activities that can assist in evaluating linkage to care efforts. For example, Ohio partnered with public safety to develop systems and policies for

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<sup>194</sup> Bitting J, O'Donnell J, Mattson CL. *Notes from the Field: Overdose Deaths Involving Para-fluorofentanyl* — United States, July 2020–June 2021. MMWR Morb Mortal Wkly Rep 2022;71:1239–1240. DOI: <http://dx.doi.org/10.15585/mmwr.mm7139a3>

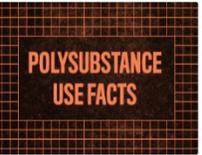
linking individuals with a substance use disorder to clinical and community supports to reduce overdose and increase access to treatment.

In addition, CDC-funded tribal partner projects improve overdose surveillance and data infrastructure, as well as culturally appropriate prevention strategies. In partnership across the agency, CDC provides approximately \$13 million to 11 Tribal Epidemiology Centers and 15 tribes or tribal-serving organizations to support data collection improvements and regional overdose prevention strategic planning. CDC also works with public safety and harm reduction organizations that serve people from racial and ethnic minority groups to develop, disseminate, and evaluate educational and communications materials to reduce negative health outcomes related to opioid use disorder. These tools use a trauma-informed, recovery-oriented approach to address the social determinants of health and incorporate real-world “how to” steps to implement the recommendations.

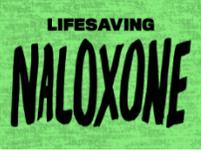
### Empower Consumers to Make Safe Choices



Fentanyl is up to 50x more potent than heroin and 100x more potent than morphine. [Learn more about the dangers of fentanyl and how it has taken over the drug supply.](#)



Polysubstance use occurs when two or more drugs are taken together, either intentionally or unintentionally. [Learn more about the risks and consequences of mixing different types of drugs.](#)



Naloxone is a safe medication that can reverse an overdose from opioids, including heroin and fentanyl. [Learn more about where to get naloxone and how to use it.](#)



Addiction is a disease, not a character flaw. There are many ways to treat substance use disorders. [Learn more about what options are available and how to support loved ones on their recovery journey.](#)

One of CDC’s priorities is raising awareness about the risks of overdose and providing individuals, as well as their employers, the resources and information they need to make informed choices. CDC’s four evidence-based campaigns, known together as *Stop Overdose*,<sup>195</sup> are meant to prevent and reduce drug overdose in young adults ages 18 to

34 years. The campaigns address the risks of polysubstance use, the dangers of fentanyl, the life-saving power of naloxone, and stigma around treatment and recovery for substance use disorder.

### Support Providers, Health Systems, and Payers

CDC supports providers and healthcare systems with resources to support and increase safe and effective pain care, maximize the use of prescription drug monitoring programs (PDMP), and advance insurer and health systems interventions at the federal, state, and local level. Pain, particularly chronic pain, can lead to impaired physical functioning, poor mental health, and a reduced quality of life. It contributes to substantial morbidity and mortality in the United States each year. Chronic pain is the leading cause of disability in the United States and the economic costs are staggering—\$560 to \$635 billion dollars annually.<sup>196</sup>

To improve our understanding of patterns of chronic pain as well as the use of various treatments for pain in the U.S., CDC continues to conduct research on these topics using nationally representative population-based survey data (such as the Medical Expenditure Panel Survey (MEPS) and the National Ambulatory Medical Care Survey (NAMCS)). Additional work is being conducted using administrative claims data from commercially insured patients and the Medicare and Medicaid population. For example, recent studies published by CDC scientists examined the prevalence of chronic pain and the prevalence of opioid prescriptions, nonopioid prescriptions, and nonpharmacological therapies among patients with chronic pain.<sup>197,198</sup>

<sup>195</sup> <https://www.cdc.gov/stopoverdose/index.html>

<sup>196</sup> Gaskin DJ, Richard P. The Economic Costs of Pain in the United States. In: Institute of Medicine (US) Committee on Advancing Pain Research, Care, and Education. *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*. Washington (DC): National Academies Press (US); 2011. Appendix C. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK92521/>

<sup>197</sup> <https://academic.oup.com/painmedicine/article/20/10/1948/5211340?login=true>

<sup>198</sup> [https://www.ajpmonline.org/article/S0749-3797\(20\)30227-0/fulltext](https://www.ajpmonline.org/article/S0749-3797(20)30227-0/fulltext)

In addition, CDC conducted outreach to people living with pain, their caregivers, and the clinicians who help manage their pain in support of developing the *2022 CDC Clinical Practice Guideline for Prescribing Opioids for Pain* (2022 Clinical Practice Guideline), which provides recommendations for clinicians to provide evidence-based treatment for pain care for patients. CDC posted two notices in the Federal Register to learn more about values and preferences related to pain and pain management options (including but not limited to the benefits and harms of opioid use) to complement ongoing guideline update efforts.

The 2022 Clinical Practice Guideline, released in November 2022, provides recommendations to promote a multimodal and multidisciplinary approach to pain management and implementation strategies to reduce disparities in pain care.<sup>199</sup> In addition, policies and programs that address primary injury prevention, improved access to affordable, culturally responsive health care, and more effective pain management therapies can mitigate the burden of chronic pain. CDC released a suite of translation and communication materials to support implementation of the 2022 Clinical Practice Guideline.<sup>8,200</sup> The agency remains committed to working with clinical partners and patient organizations to improve pain care by giving patients and clinicians the data, tools, and guidance they need to make informed, individualized, and patient-centered treatment decisions based on the latest science and the human story of pain.

### Overdose Data to Action: State and OD2A: Local Grants<sup>1,2</sup>

(dollars in millions)	FY 22 Final	FY 2023 Enacted	FY 2024 President's Budget
Number of Awards		91	TBD
- New Awards	0	91	TBD
- OD2A: State	0	51	
- OD2A: Local	0	40	
- Continuing Awards	66	--	TBD
- Overdose Data to Action	66	--	
Average Award		-	
- Overdose Data to Action	\$4.572	TBD	TBD
- OD2A: State			
- OD2A: Local	--	TBD	TBD
Range of Awards			
- Overdose Data to Action	\$1.015-8.699	\$1.400-6.000	TBD
- OD2A: State			
- OD2A: Local		\$1.000-2.000	
<b>Total Awards</b>	<b>\$290.000</b>	<b>\$290.000</b>	<b>TBD</b>

<sup>1</sup> These funds are not awarded by formula

<sup>2</sup> Estimated funding may shift if jurisdictions adjust budgets.

### **Firearm Injury and Mortality Prevention Research Budget**

Firearm-related injuries are among the five leading causes of death for people ages one to 44 in the United States. In 2021, there were 48,830 firearm-related deaths in the United States. From 2019 to 2020, the firearm homicide rate increased nearly 35%, resulting in the highest firearm homicide rate seen in more than 25 years. The burden and impact of firearm injury and violence are not equally shared across populations. Long-standing

<sup>199</sup> <https://www.cdc.gov/mmwr/volumes/71/rr/rr7103a1.htm>

<sup>200</sup> <https://www.cdc.gov/opioids/healthcare-professionals/index.html>

systemic inequities and structural racism contribute to avoidable firearm-related health disparities among some racial and ethnic groups. For example, in 2020, firearm homicide for Black boys and young black men ages 10-24 was more than 21 times as high as the rate for White boys and young white men in the same age group. Addressing the gaps in knowledge around firearm violence and identifying effective prevention strategies are critical in keeping people, families, schools, and communities safe from firearm injury and death.

To do this, CDC supports surveillance activities and data analysis to record the public health burden of firearm injuries and strengthen firearm-related data. Since 2020, CDC has invested over \$2 million annually to build on existing CDC activities, including surveillance support activities, and syndromic surveillance. The Firearm Injury Surveillance Through Emergency Rooms (FASTER) program also funds 10 state health departments to collect data on nonfatal firearm injuries to provide near real-time, local data. Data collected through FASTER allows communities to identify patterns, respond to surges in violence, and know where to direct efforts. These states have made progress in collecting and disseminating data and many are leveraging partnerships in their jurisdictions to connect these data to inform action. For example, Florida is conducting outreach to statewide injury and suicide prevention coalitions, committees, and councils to promote the use of FASTER data to inform suicide prevention efforts.

### Budget Request

CDC's FY 2024 budget request of **\$35,000,000** for Firearm Injury and Mortality Prevention Research is **\$22,500,000** above the FY 2023 enacted level. At this level, CDC will continue to fund research to identify the most effective ways to prevent firearm related injuries and deaths. This will include additional funding opportunities to support R01 research grants to improve understanding of firearm injury, inform the development of innovative and promising prevention strategies, and rigorously evaluate the effectiveness of strategies to keep individuals, families, schools, and communities safe from firearm-related injuries, deaths, and crime. CDC will fund additional research grants to support new investigators and will focus on improving collection and dissemination of timely data on firearm-related deaths, data on nonfatal firearm injuries, and data on behavioral issues related to firearms such as safe storage. This includes expanding the FASTER program to as many states as possible.

### Program Accomplishments

CDC supports 22 research grants to prevent firearm-related injuries, deaths, and crime; findings can be used to inform the development and evaluation of promising prevention strategies to keep individuals, families, schools and communities safe. Research teams funded in FY 2020 continue to complete their proposed projects. Several researchers are studying interventions that involve collaborations across multiple sectors. Researchers at the University of Michigan and Virginia Commonwealth University study emergency department and hospital-based prevention programs. Preliminary analysis shows that many 18- to 24-year-old patients in urban emergency departments reported recently carrying a firearm, with nearly half of these young adults reporting using alcohol or drugs while carrying a firearm. These early findings suggest that many young adults who carry firearms could benefit from firearm safety interventions such as gun safety training and education to promote safe storage.

The research team at the University of Washington analyzed data from the Community Youth Development Study and found six specific patterns of handgun carrying behavior over time. Their research article "Trajectories of Handgun Carrying in Rural Communities from Early Adolescence to Young Adulthood" was published in April 2022 and suggests that many rural students begin carrying a handgun as early as 12 years old, and suggests that firearm injury prevention programs may need to reach elementary school-aged youth.

### Injury Control Research Centers Budget Request

[Injury Control Research Centers](#) (ICRCs) study ways to prevent injuries, violence and work with community partners to put research findings into action. The ICRC program includes nine academic research centers that

focus on three areas: research, outreach, and training. ICRCs are on the scientific front line conducting research on the causes, outcomes, and prevention of injuries and violence. ICRC research includes motor vehicle injuries, interpersonal violence, suicides, overdoses, older adult falls, and traumatic brain injuries (TBIs). They also play a critical role in training and developing the current and next generations of researchers and public health professionals.

### Budget Request

CDC's FY 2024 budget request of **\$11,000,000** for the Injury Control Research Centers is level with the FY 2023 enacted level. In FY 2024, CDC anticipates funding up to eleven ICRCs to continue high quality research, training, and outreach activities, as well as effective translation of scientific discoveries into practice for the prevention and control of injuries and violence. These activities will focus on CDC research priorities in injury and violence prevention and control, including overdose, suicide, and ACEs.

### Program Accomplishments

As an ICRC, Johns Hopkins Center for Injury Research and Policy (JHCIRP) found in recent studies that state laws mandating ignition interlock use for all drunk driving offenders reduced fatal alcohol-involved crashes by at least 7%. All states use some type of ignition interlock law to help prevent injuries and deaths from alcohol-impaired driving. The JHCIRP study evaluates the effects of different types of ignition interlock laws on fatal motor vehicle crashes. This national study was conducted to evaluate the association between state laws mandating alcohol ignition interlocks for drivers under the influence of alcohol and fatal crashes involving alcohol.

Injuries are the leading cause of death and hospitalizations for children in the United States aged one to 18 years. Every day, more than 25 children die from preventable injuries, resulting in more deaths than all other causes combined. The Injury Free Coalition for Kids® coordinated the annual National Injury Prevention Day on November 18<sup>th</sup> to raise awareness of this important public health issue, with over 70 cities, 65 hospitals, and 9 CDC-funded ICRCs participating. The coalition operates as an outreach arm of the Columbia Center for Injury Science and at Columbia University, a CDC-funded ICRC. The Injury Free Coalition for Kids® brought together child injury prevention advocates, healthcare professionals, public health professionals, elected officials, and families to shed light on the need to address the burden of child injury in the United States. The coalition used traditional media, social media, educational opportunities, government proclamations, and green lights to highlight this issue. Media coverage was obtained in 66 venues across the country. There were 15,534 engagements of the Twitter chat, which reached almost 6 million projected viewers. Twitter users saw posts more than 30 million times containing the hashtag #BeInjuryFree. And the National Injury Prevention Day webpage had over 32,000 views.

The United States has a shortage of trained injury researchers and clinicians in public health. The University of Washington Harborview Injury Prevention and Research Center leveraged resources from the ICRC program to develop the Injury Prevention Student Internship Training (INSIGHT) summer research program in response to this need. The goals are to create a pipeline for the next generation of injury prevention and treatment researchers and clinicians and to foster interest and growth in different types of public health expertise. The INSIGHT Program was a small face-to-face program in the past with participants mainly from Washington. The COVID-19 pandemic challenged program managers to pivot to online educational experiences. This approach proved highly successful and allowed for significant expansion of the quality and quantity of participants. In 2020, the INSIGHT Program included 458 applicants and 18 were selected. In 2021, the program included 758 applicants from over 100 schools. Twenty-four participants were selected. The 24 participants represented 10 states and 14 different academic institutions.

With support from CDC's ICRC program, Nationwide Children's Center for Injury Research and Policy developed Trainees for Child Injury Prevention (T4CIP) to promote interest and engagement in child injury prevention. Medical students, residents, and fellows with an interest in pediatrics, child injury prevention, health behavior

change, and communication can apply to become pediatric trainees in T4CIP. The program exposes them to public health approaches and community engagement to prevent child and teen injuries and violence. T4CIP has reached 118 participants from 62 institutions and 27 states since 2021. The participants include 52 medical students and 66 medical residents and fellows. These trainees are using their new skills to engage around child injury prevention and build strong relationships with peers, mentors, and patient families.

## Intentional Injury Prevention Budget Request

Violence is a serious and growing problem in the United States, affecting not only immediate victims but people close to them, and often communities more broadly. Survivors of violence suffer from physical, mental, and emotional health problems throughout their lives. Communities affected by violence experience damage to local economies, increasing demand on law enforcement, and strained social services. In 2020 24,576 people were victims of homicide. Over half of women and almost one in three men experience sexual violence (SV) involving physical contact during their lifetimes. At least one in seven children have experienced child abuse and/or neglect in the past year and about one in 12 U.S. high school students experiences physical dating violence. Suicide was the second leading cause of death for people aged 10-14 and 25-34.

CDC collects critical data and works with state and local public health agencies, universities, and non-governmental organizations to implement and evaluate prevention programs. Strategies representing the best available evidence to prevent or reduce public health problems like violence are shared through a suite of resources called [technical packages](#).<sup>201</sup> States, territories, and other partners have downloaded these resources over 250,000 times and obtained over 153,000 copies, and these technical packages serve as the scientific basis for CDC's programmatic work with communities.

CDC produces training modules for professionals to learn about preventing adverse childhood experiences (ACEs). In 2022, CDC released Preventing ACEs Training Module for Educators to help teachers, administrators, school counselors, and other school staff create positive relationships and environments, which can help prevent ACEs and lessen their harmful effects. Preventing ACEs can prevent a significant portion of later life adversities and health challenges. CDC [Vital Signs](#)<sup>202</sup> reported that ACEs are associated with at least 5 of the top 10 leading causes of death in the United States.

CDC is responding to risk factors for injury and violence made worse by the COVID-19 pandemic, such as mental health challenges, suicide risk, and ACEs. By working with the Association of State and Territorial Health Officers (ASTHO), National Association of City and County Health Officials (NACCHO), the Prevention Institute, and Indian Health Boards, CDC supported development of community assessment tools and training for use in emergency situations to prevent injury and violence associated with suicide, ACEs, and intimate partner violence.

In 2024 CDC will continue to work with partners to reduce intentional injuries through cooperative agreements with these and state partners.

## Budget Request

CDC's FY 2024 budget request of **\$514,550,000** for Intentional Injury Prevention is **\$350,000,000** above the FY 2023 enacted level.

With the additional \$250,000,000 for Youth and Community Violence Prevention, CDC will expand the reach of its work by funding up to 75 cities and communities to reduce rising homicide rates through community driven, data-to-action implementation of proven public health violence prevention interventions.

With the additional \$40,000,000 for Rape Prevention and Education, CDC will have the necessary funding levels to successfully implement the Violence Against Women Act Reauthorization Act of 2022 by enhancing support to state and territorial health departments and state, territorial, and tribal sexual assault coalitions to initiate, expand, or enhance proven prevention activities and to implement changes to ensure meaningful coordination between state health departments and sexual assault coalitions. With the additional \$1,000,000 for domestic and sexual violence, CDC will promote the forthcoming National Action Plan for Gender Based Violence,

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<sup>201</sup> <https://www.cdc.gov/violenceprevention/communicationresources/pub/technical-packages.html>

<sup>202</sup> <https://www.cdc.gov/vitalsigns/aces/index.html>

including developing a repository for gender-based violence prevention resources on the VetoViolence training portal.

With the additional \$3,000,000 for Domestic Violence Community projects, CDC will expand the reach of the Domestic Violence Prevention Enhancement and Leadership Through Alliances (DELTA) program to 20 recipients to build capacity to implement and evaluate proven intimate partner violence (IPV) prevention strategies in their states.

With the additional \$6,000,000 for Adverse Childhood Experiences (ACEs), CDC will further support communities by expanding the number of states implementing proven prevention strategies to reduce ACEs and promote positive childhood experiences through the Essentials for Childhood (EfC): Preventing Adverse Childhood Experiences through Data to Action program. CDC will also increase investments in surveillance and research activities for the prevention of ACEs.

With the additional \$50,000,000 for Suicide Prevention, CDC will expand its multi-pronged strategy on suicide prevention nation-wide, including a focus on early prevention and intervention in state, territorial, local, and tribal communities. In FY 2024, CDC anticipates releasing two new NOFO to expand the Comprehensive Suicide Prevention program to support recipients in up to 50 states, the District of Columbia, and one to expand funding to tribes and territories. Funded jurisdictions will convene multi-sectoral partners; use data to the most impacted populations and better understand suicide risk and protective factors to inform interventions; use syndromic surveillance and other data sources to track and monitor nonfatal suicide-related outcomes in near real-time; select, implement, and evaluate complementary prevention policies, programs, and practices with the best available evidence; and evaluate outcomes for continuous quality improvement and sustainability. CDC will continue to work with funded jurisdictions and partners to build our knowledge around strategies that work with specific population groups, enhance the quality and timeliness of data, and leverage emerging data science methods that support suicide prevention strategies tailored to communities.

With the additional \$1,000,000 for Domestic and Sexual Violence, CDC will promote the forthcoming National Action Plan for Gender Based Violence, including developing a repository for gender-based violence prevention resources on the VetoViolence training portal.

## Rape Prevention and Education (RPE)

FY 2023 is the last year of CDC’s current five-year RPE cooperative agreement dedicated to preventing rape and other forms of sexual violence (SV), supporting health departments in all 50 states, Washington, D.C., and territories. RPE recipients’ efforts are informed by programs, practices, and policies identified within *STOP SV: A Technical Package to Prevent Sexual Violence*.<sup>203</sup> This technical package promotes positive social norms, provides opportunities to empower and support girls and women, teaches healthy relationship skills, and creates protective environments. CDC supports six research awards to rigorously evaluate the effectiveness of primary prevention efforts implemented by RPE programs.

For example, to reduce the prevalence of SV among students, Illinois’s program reviewed data from the 2019 Youth Risk Behavior Survey and found that 12.0% of girls and 7.5 % of boys reported they have been physically forced to have sexual intercourse in grades 9-12. In response, Illinois’ RPE program provided comprehensive sex education focusing on consent, which can prevent SV among youth.

Since 2016, CDC has supported [multiple research](#) awards aimed at building the evidence base for sexual violence prevention approaches that have substantial uptake in practice and to rigorously evaluate the effectiveness of primary prevention efforts implemented by RPE programs. CDC continues to fund collaborative research projects between academic researchers and RPE-funded organizations to build the evidence for sexual violence prevention approaches that are feasible for communities to implement.

In FY 2024, CDC will release two new NOFOs to award the next five-year cycle of RPE funding to state and territorial health departments in all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands and state, territorial, and tribal sexual assault coalitions. . These NOFOs build upon and complement work funded through the previous NOFO, Rape Prevention and Education: Using the Best Available Evidence for Sexual Violence Prevention (CE19-1902).

### Rape Prevention and Education Grants<sup>1</sup>

(dollars in millions)	FY 2024 President’s		
	FY 2022 Final	FY 2023 Enacted	Budget
Number of Awards	53	TBD	TBD
- New Awards	0	TBD	TBD
- Continuing Awards	53	TBD	TBD
Average Award	\$0.771	TBD	TBD
Range of Awards	\$0.040–\$3.667	TBD	TBD
<b>Total Awards</b>	<b>\$42.866</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup> Funding is awarded by formula.

<sup>203</sup> <https://www.cdc.gov/violenceprevention/pdf/SV-Prevention-Technical-Package.pdf>

## Intimate Partner Violence (IPV)

Data from CDC's National Intimate Partner and Sexual Violence Survey (NISVS), an ongoing, nationally representative survey that assesses SV, stalking, and IPV victimization among adults in the United States, estimates that the lifetime cost of IPV is \$103,767 per female victim and \$23,414 per male victim.

### Success Story: Delaware Coalition Against Domestic Violence

-Collaborates with other Delaware organizations to implement Sparrow Run Supporting Families community center program, serving 400 low-income clients each year  
-Connection to services including on-site application and FAQ with representatives from financial and food support programs like Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

In FY 2023, CDC will issue new awards to state domestic violence coalitions (SDVCs) under a new cooperative agreement called Domestic Violence Prevention Enhancement and Leadership Through Alliances (DELTA): Achieving Health Equity through Addressing Disparities (AHEAD). The cooperative agreements with the SDVCs are established for the purposes of establishing, operating, and maintaining local community projects to prevent family violence, domestic violence, and dating violence, including violence committed by and against youth, using a Coordinated Community Response (CCR) model and through prevention and education programs.

## Child Abuse and Neglect

Child sexual abuse and neglect is a significant and preventable ACE that has long-term repercussions for both the child and for society. About one in four girls and one in 13 boys experience childhood sexual abuse. In 2019, 1,840 children died of abuse and neglect in the United States. CDC published research in 2018 showing that, for each person in the United States who experiences nonfatal child abuse and neglect, the lifetime cost to society is more than \$830,000. The lifetime economic burden of child abuse and neglect in 2015 alone was estimated at \$428 billion,<sup>204</sup> rivaling the cost of stroke and type 2 diabetes.

In 2023, CDC launched Essentials for Childhood (EfC): Preventing Adverse Childhood Experiences through Data to Action (EfC: PACE D2A), a cooperative agreement designed to support states in the prevention of adverse childhood experiences (ACEs), including child abuse and neglect, and promotion of positive childhood experiences (PCEs). EfC: PACE D2A combines two former child abuse and adverse childhood experience programs into one to reduce administrative costs, avoid duplication, and expand the number of recipients. Recipients are expected to leverage multi-sector partnerships and resources to improve ACE and PCE surveillance infrastructures and the coordination and implementation of ACE prevention strategies. As a result, there will be increased state capacity to develop and sustain a surveillance system that collects, uses, and disseminates data on ACEs and PCEs, including data used to identify health inequities; and increased implementation and reach of ACE prevention strategies that help to promote safe, stable, nurturing relationships and environments where children live, learn and play.

EfC: PACE D2A builds upon the past success of the CDC's former EfC and PACE: D2A programs EfC.<sup>205</sup> For example, the California Essentials for Childhood Initiative educated community members, city staff, and elected officials about strategies in CDC's technical packages and provided guidance on implementing them locally. As a result, 17 separate evidence-based policies, programs, and practices are being implemented in communities across the state. These include expanding the use of Earned Income Tax Credits and supporting implementation of paid family and medical leave policies.

The Massachusetts Department of Public Health PACE: D2A program recognized that positive childhood experiences (PCEs) profoundly affect health and development, potentially preventing or buffering against toxic

<sup>204</sup> <https://www.cdc.gov/violenceprevention/childabuseandneglect/fastfact.html>

<sup>205</sup> <https://www.cdc.gov/violenceprevention/pdf/essentials-for-childhood-framework508.pdf>

stress created by ACEs. In 2021, the program included PCE questions in the Massachusetts Youth Health Survey to better understand childhood experiences across the state and thus to direct ACE prevention resources where they are most needed.

In FY 2024, CDC will continue to evaluate approaches (programs, policies, or practices) for their impact on primary prevention of CSA perpetrated by youth or adults.

## **Suicide Prevention**

Suicide prevention has historically focused on crisis intervention and referring people to mental health treatment. However, CDC data have shown that about half of individuals who die by suicide do not have a known mental health condition. Multiple factors contribute to suicide at the individual, relationship, community, and societal levels. These can include issues related to substance misuse, physical health, jobs, money, interpersonal violence, stigma, and access to lethal means among people at risk.

CDC's public health approach begins with using data to track and monitor suicide, suicide attempts, and suicide ideation to understand the problem and to identify populations at increased risk for these outcomes. CDC funded a pilot to identify suicide warning signs through the Emergency Department Surveillance of Nonfatal Suicide Related Outcomes (ED SNSRO) program because attempts and suicidal ideation are opportunities for intervention. Ten states recently completed their third and final year of funding. They demonstrated the feasibility of using near-real time syndromic surveillance to monitor these outcomes and keep prevention partners abreast of changes in rates and patterns for improved prevention programming. For example, the Washington State Department of Health (WSDH) monitored trends in nonfatal suicide-related outcomes and shared de-identified data with partners to raise awareness and inform suicide prevention. Syndromic data for behavioral health-related conditions are now an essential part of the WSDH's strategic planning and intervention approach. CDC incorporated syndromic surveillance into its Comprehensive Suicide Prevention program beginning in 2022 after the pilot program showed success.

CDC initiated the five-year Comprehensive Suicide Prevention (CSP) program in 2020, supporting 8 states and 1 university. With increases in appropriations in FY 2021, 2 additional states were added, and in FY 2022, 5 additional states and 1 university became the latest funded partners. There are now a total of 15 states and 2 universities participating. In FY 2023, CDC will fund up to 7 additional CSP recipients. This program implements and evaluates a comprehensive public health approach to suicide prevention, with focused attention on disproportionately affected groups including youth, veterans, rural communities, LGBTQ+ individuals, and middle-aged adults, among others. Funded entities use data to drive decision-making and apply the best available evidence to prevent suicide. For example, the California Department of Public Health (CDPH) used data to identify 13 counties with disproportionately high rates of suicides. The data revealed poisoning and firearms as main contributors to suicide and suicide attempts. In response CDPH is training pharmacists, healthcare, and behavioral health professionals to promote safe storage practices for both firearms and medications among people at risk. CDPH also identified the need to improve access and delivery of suicide care in underserved areas. They used these data to increase telehealth access among Medicaid recipients seeking mental health services and train people to identify and respond to suicide risk. As a result of this work through their CSP grant, CDPH recently received almost \$2.8 million in state funding to initiate an Office of Suicide Prevention. Other CSP recipients are focusing on school-based programs to increase connectedness to teachers and other adults, increase coping and problem-solving skills among youth and parents, and reduce stigma around seeking help.

Non-Hispanic American Indians and Alaska Natives (AI/AN) have a suicide rate 50% greater than the general U.S. population. Given this disproportionate risk, CDC funds two tribal organizations to build capacity for comprehensive suicide prevention tailored to tribal communities. The Southern Plains Tribal Board Foundation are adapting a culturally based prevention program, American Indian Life Skills for their local communities. Wabanaki Health and Wellness are implementing gatekeeper training to help people recognize and respond to suicide risk in youth and veterans. A recent CDC report examining people who died by suicide found that

compared to non-AI/AN people, AI/AN people had higher odds of relationship, alcohol or other substance use problems, and reduced odds of known mental health conditions. This information can be used to tailor culturally relevant approaches to comprehensive suicide prevention.

CDC, in cooperation with the CDC Foundation, continues to fund 5 veteran serving organizations (VSOs) through its Veteran Suicide Prevention Evaluation program. This program increases VSOs' capacity to evaluate their suicide prevention programs that are focused on community connectedness and community integration among veterans. VSOs reported increased evaluation skills and numerous program and strategy improvements after just one year in the program. Input from these VSOs will be combined with those of future cohorts to develop an evaluation toolkit and increase implementation of best practices.

### **Youth and Community Violence Prevention**

In the United States in 2020, 24,576 lives were lost to homicide. Youth and young adults (ages 10-34), particularly those in communities of color, are disproportionately impacted. Homicide is the third leading cause of death among youth and young adults aged 10–34. Homicide is the leading cause of death among Black individuals in this age group. Youth who experience violence as victims, perpetrators, or witnesses have experienced an ACE, and so are more likely to have short-term and chronic physical and mental health conditions and behavioral difficulties, including future experiences with violence, smoking, substance use, obesity, high-risk sexual behavior, depression, academic difficulties, school dropout, and suicidal behavior. Youth violence prevention efforts are proven to reduce a myriad of future negative physical and mental health outcomes and also to reduce healthcare costs.

With the \$250.00 million investment in the Community Violence Intervention initiative, CDC will maintain current youth violence prevention activities and invest the proposed funding increases to expand the reach of its community violence prevention work, with a focus on youth perpetration and victimization, to help stem the rise of the most lethal forms of violence in cities across the country. As CDC develops the Community Violence Intervention program, it will draw from its more than 20 years of science-based youth violence prevention efforts. This program will fund up to 75 cities and communities with high numbers of homicides and communities with high numbers of homicides per capita to establish a community-driven approaches to reducing violence. Communities will implement strategies best suited to their demographics and risk factors, including programs that complement law-enforcement activities, such as hospital-community partnerships, and a data-to-action approach that will use death data and near real-time syndromic surveillance data on emergency department visits for nonfatal firearm and assault injuries to understand local risks so that cities and communities may more effectively select interventions to prevent violence and deaths. This data will allow communities to understand local risks so that they may more effectively select interventions to prevent violence and deaths. Based on what they learn from these data, award recipients will implement evidence-based strategies such as built environment approaches like adding green spaces and safe parks, or school-based programs, and provision of trauma-informed screening and mental health and trauma recovery services.

In addition to funding communities, CDC will support partnerships with community-based organizations to support civilian community violence workers who see trauma, violence, and death up close and are sometimes shot at themselves. Studies show these workers, key elements of community-based violence prevention efforts, experience symptoms of secondary traumatic stress and need support to reduce the negative health impacts of workplace exposure to violence that is common in the profession.

CDC's [Comprehensive Technical Package for the Prevention of Youth Violence and Associated Risk Behaviors](https://www.cdc.gov/violenceprevention/pdf/yv-technicalpackage.pdf)<sup>206</sup> shows communities and states how to sharpen their focus on prevention activities and prioritize strategies with the greatest potential local benefit. Preventing Violence Affecting Young Lives (PREVAYL) focuses on sustaining the widespread impact and reach of proven violence prevention strategies and decreasing high rates of violence

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<sup>206</sup> <https://www.cdc.gov/violenceprevention/pdf/yv-technicalpackage.pdf>

in communities of color. CDC funds eight PREVAYL recipients to address social determinants of health (e.g., concentrated poverty, limited educational or employment opportunities, and racial inequity) which are associated with increased risk for violence. For example, the County of Monterey Department of Health is working with student groups to identify and map unsafe areas in Salinas, California, and makes recommendations to modify the physical environment to make their schools and communities safer.

CDC funds five Youth Violence Prevention Centers (YVPCs), which are academic-community collaborations that advance the science and practice of youth violence prevention research. For example, Michigan's YVPC adopted Crime Prevention Through Environmental Design (CPTED), promoting safety through “greening” efforts. Evaluation results showed that by beautifying and reinvigorating local neighborhoods, neighbors reported increased communication with one another, lower amounts of victimization, lower levels of fear and crime, and increased neighborhood satisfaction. Areas where this intervention was implemented witnessed a 38% decrease in youth seeking treatment for assault related injuries and youth in the intervention area were 25% less likely to be victims of a violent assault than youth in a comparison area without the interventions.

## State Table: Rape Prevention and Education<sup>1,2</sup>

	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Alabama	\$656,741	TBD	TBD	TBD
Alaska	\$252,772	TBD	TBD	TBD
Arizona	\$859,442	TBD	TBD	TBD
Arkansas	\$445,487	TBD	TBD	TBD
California	\$3,667,132	TBD	TBD	TBD
Colorado	\$973,130	TBD	TBD	TBD
Connecticut	\$747,744	TBD	TBD	TBD
Delaware	\$273,329	TBD	TBD	TBD
District of Columbia	\$246,774	TBD	TBD	TBD
Florida	\$2,200,604	TBD	TBD	TBD
Georgia	\$1,190,710	TBD	TBD	TBD
Hawaii	\$306,919	TBD	TBD	TBD
Idaho	\$344,994	TBD	TBD	TBD
Illinois	\$1,317,341	TBD	TBD	TBD
Indiana	\$827,859	TBD	TBD	TBD
Iowa	\$737,096	TBD	TBD	TBD
Kansas	\$464,996	TBD	TBD	TBD
Kentucky	\$614,949	TBD	TBD	TBD
Louisiana	\$638,936	TBD	TBD	TBD
Maine	\$298,204	TBD	TBD	TBD
Maryland	\$769,783	TBD	TBD	TBD
Massachusetts	\$847,747	TBD	TBD	TBD
Michigan	\$1,153,254	TBD	TBD	TBD
Minnesota	\$971,113	TBD	TBD	TBD
Mississippi	\$472,979	TBD	TBD	TBD
Missouri	\$1,027,286	TBD	TBD	TBD
Montana	\$522,622	TBD	TBD	TBD
Nebraska	\$366,951	TBD	TBD	TBD
Nevada	\$441,205	TBD	TBD	TBD
New Hampshire	\$298,588	TBD	TBD	TBD
New Jersey	\$1,306,811	TBD	TBD	TBD
New Mexico	\$382,034	TBD	TBD	TBD
New York	\$2,115,598	TBD	TBD	TBD
North Carolina	\$1,174,673	TBD	TBD	TBD
North Dakota	\$247,339	TBD	TBD	TBD
Ohio	\$1,318,538	TBD	TBD	TBD
Oklahoma	\$564,620	TBD	TBD	TBD
Oregon	\$831,276	TBD	TBD	TBD
Pennsylvania	\$1,433,217	TBD	TBD	TBD
Rhode Island	\$533,560	TBD	TBD	TBD
South Carolina	\$666,330	TBD	TBD	TBD
South Dakota	\$264,839	TBD	TBD	TBD
Tennessee	\$832,005	TBD	TBD	TBD
Texas	\$2,911,325	TBD	TBD	TBD
Utah	\$701,084	TBD	TBD	TBD
Vermont	\$235,491	TBD	TBD	TBD
Virginia	\$1,004,595	TBD	TBD	TBD
Washington	\$894,431	TBD	TBD	TBD
West Virginia	\$359,499	TBD	TBD	TBD
Wisconsin	\$746,476	TBD	TBD	TBD

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Wyoming	\$237,394	TBD	TBD	TBD
Territories				
American Samoa	\$0	TBD	TBD	TBD
Guam	\$0	TBD	TBD	TBD
Marshall Islands	\$0	TBD	TBD	TBD
Micronesia	\$0	TBD	TBD	TBD
Northern Mariana Islands	\$0	TBD	TBD	TBD
Puerto Rico	\$514,405	TBD	TBD	TBD
Republic of Palau	\$0	TBD	TBD	TBD
Virgin Islands	\$40,717	TBD	TBD	TBD
<b>Subtotal States</b>	<b>\$42,603,399</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Subtotal Territories</b>	<b>\$555,122</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Total Resources</b>	<b>\$43,158,521</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup> CFDA NUMBER: 93.136 Discretionary

<sup>2</sup> This State Table is a snapshot of selected programs that fund all 50 states (and in some cases local, tribal, and territorial grantees). For a more comprehensive view of grant and cooperative agreement funding to grantees by jurisdiction, visit <https://www.cdc.gov/fundingprofiles/>

## State Table: National Violent Death Reporting System<sup>1,2</sup>

	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Alabama	\$330,224	\$330,224	TBD	TBD
Alaska	\$204,513	\$204,513	TBD	TBD
Arizona	\$370,210	\$370,210	TBD	TBD
Arkansas	\$273,123	\$273,123	TBD	TBD
California	\$962,085	\$962,085	TBD	TBD
Colorado	\$333,405	\$333,405	TBD	TBD
Connecticut	\$234,676	\$234,676	TBD	TBD
District of Columbia	\$184,398	\$184,398	TBD	TBD
Delaware	\$183,314	\$183,314	TBD	TBD
Florida	\$709,468	\$709,468	TBD	TBD
Georgia	\$432,712	\$432,712	TBD	TBD
Hawaii	\$195,908	\$195,908	TBD	TBD
Idaho	\$212,021	\$212,021	TBD	TBD
Illinois	\$469,526	\$469,526	TBD	TBD
Indiana	\$352,671	\$352,671	TBD	TBD
Iowa	\$240,432	\$240,432	TBD	TBD
Kansas	\$254,240	\$254,240	TBD	TBD
Kentucky	\$288,180	\$288,180	TBD	TBD
Louisiana	\$330,086	\$330,086	TBD	TBD
Maine <sup>3</sup>	\$195,056	\$195,056	TBD	TBD
Maryland	\$459,044	\$459,044	TBD	TBD
Massachusetts	\$266,816	\$266,816	TBD	TBD
Michigan	\$434,523	\$434,523	TBD	TBD
Minnesota	\$279,049	\$279,049	TBD	TBD
Mississippi	\$265,229	\$265,229	TBD	TBD
Missouri	\$369,064	\$369,064	TBD	TBD
Montana	\$203,175	\$203,175	TBD	TBD
Nebraska	\$202,245	\$202,245	TBD	TBD
Nevada	\$277,984	\$277,984	TBD	TBD
New Hampshire	\$196,896	\$196,896	TBD	TBD
New Jersey	\$288,454	\$288,454	TBD	TBD
New Mexico	\$255,091	\$255,091	TBD	TBD
New York	\$469,614	\$469,614	TBD	TBD
North Carolina	\$423,840	\$423,840	TBD	TBD
North Dakota	\$182,151	\$182,151	TBD	TBD
Ohio	\$450,824	\$450,824	TBD	TBD
Oklahoma	\$312,737	\$312,737	TBD	TBD
Oregon	\$280,256	\$280,256	TBD	TBD
Pennsylvania	\$477,710	\$477,710	TBD	TBD
Puerto Rico	\$282,935	\$282,935	TBD	TBD
Rhode Island	\$180,387	\$180,387	TBD	TBD
South Carolina	\$319,523	\$319,523	TBD	TBD
South Dakota	\$192,173	\$192,173	TBD	TBD
Tennessee	\$363,681	\$363,681	TBD	TBD
Texas	\$780,508	\$780,508	TBD	TBD
Utah	\$265,822	\$265,822	TBD	TBD
Vermont <sup>3</sup>	\$178,505	\$178,505	TBD	TBD
Virginia	\$354,585	\$354,585	TBD	TBD
Washington	\$331,969	\$331,969	TBD	TBD
West Virginia	\$238,720	\$238,720	TBD	TBD

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Wisconsin	\$311,848	\$311,848	TBD	TBD
Wyoming	\$181,687	\$181,687	TBD	TBD
<b>Total Resources</b>	<b>\$16,833,293</b>	<b>\$16,833,293</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup> CFDA NUMBER: 93.136 Discretionary.

<sup>2</sup> This State Table is a snapshot of selected programs that fund states (and in some cases local, tribal, and territorial grantees). For a more comprehensive view of grant and cooperative agreement funding to grantees by jurisdiction, visit <https://www.cdc.gov/fundingprofiles/>

<sup>3</sup> Maine and Vermont are funded together, with Maine as the lead state under the award.

**State Table: Opioid Overdose Prevention and Surveillance Programs<sup>1,2, 3, 4</sup>**

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$3,683,433	TBD	TBD	TBD
Alaska	\$3,433,274	TBD	TBD	TBD
Arizona	\$5,723,310	TBD	TBD	TBD
Maricopa County	\$2,688,960	TBD	TBD	TBD
Arkansas	\$3,017,401	TBD	TBD	TBD
California	\$5,362,538	TBD	TBD	TBD
Riverside County	\$2,353,139	TBD	TBD	TBD
San Diego County	\$2,185,228	TBD	TBD	TBD
Colorado	\$4,085,898	TBD	TBD	TBD
Connecticut	\$5,748,985	TBD	TBD	TBD
Delaware	\$5,377,830	TBD	TBD	TBD
District of Columbia	\$5,696,694	TBD	TBD	TBD
Florida	\$7,360,184	TBD	TBD	TBD
Broward County	\$3,111,844	TBD	TBD	TBD
Duval County	\$4,212,591	TBD	TBD	TBD
Palm Beach County	\$3,795,923	TBD	TBD	TBD
Georgia	\$4,918,298	TBD	TBD	TBD
Hawaii	\$2,988,741	TBD	TBD	TBD
Idaho	\$2,591,377	TBD	TBD	TBD
Illinois	\$5,615,555	TBD	TBD	TBD
Chicago	\$3,086,970	TBD	TBD	TBD
Indiana	\$6,953,983	TBD	TBD	TBD
Iowa	\$2,686,911	TBD	TBD	TBD
Kansas	\$2,936,761	TBD	TBD	TBD
Kentucky	\$7,457,148	TBD	TBD	TBD
Louisiana	\$4,861,204	TBD	TBD	TBD
Maine	\$4,425,213	TBD	TBD	TBD
Maryland	\$7,189,413	TBD	TBD	TBD
Baltimore County	\$2,616,028	TBD	TBD	TBD
Massachusetts	\$6,938,651	TBD	TBD	TBD
Michigan	\$6,788,333	TBD	TBD	TBD
Minnesota	\$3,270,647	TBD	TBD	TBD
Mississippi	\$2,307,356	TBD	TBD	TBD
Missouri	\$4,844,172	TBD	TBD	TBD
Montana	\$2,410,752	TBD	TBD	TBD
Nebraska	\$2,528,404	TBD	TBD	TBD
Nevada	\$4,028,727	TBD	TBD	TBD
Clark County	\$2,502,392	TBD	TBD	TBD
New Hampshire	\$3,672,978	TBD	TBD	TBD
New Jersey	\$6,983,765	TBD	TBD	TBD
New Mexico	\$4,514,005	TBD	TBD	TBD
New York	\$5,880,119	TBD	TBD	TBD
New York City	\$2,359,358	TBD	TBD	TBD
North Carolina	\$6,803,731	TBD	TBD	TBD
North Dakota	N/A	TBD	TBD	TBD
Ohio	\$8,498,506	TBD	TBD	TBD
Cuyahoga County	\$4,411,596	TBD	TBD	TBD
Franklin County	\$3,509,855	TBD	TBD	TBD
Hamilton County	\$5,096,920	TBD	TBD	TBD
Oklahoma	\$3,991,979	TBD	TBD	TBD

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Oregon	\$2,834,987	TBD	TBD	TBD
Pennsylvania	\$8,290,588	TBD	TBD	TBD
Allegheny County	\$5,157,865	TBD	TBD	TBD
Philadelphia	\$5,650,402	TBD	TBD	TBD
Rhode Island	\$4,264,125	TBD	TBD	TBD
South Carolina	\$3,825,371	TBD	TBD	TBD
South Dakota	\$2,422,603	TBD	TBD	TBD
Tennessee	\$6,471,197	TBD	TBD	TBD
Texas	N/A	TBD	TBD	TBD
Harris County	\$2,079,506	TBD	TBD	TBD
Utah	\$3,831,181	TBD	TBD	TBD
Vermont	\$3,173,012	TBD	TBD	TBD
Virginia	\$4,626,878	TBD	TBD	TBD
Washington	\$3,975,240	TBD	TBD	TBD
West Virginia	\$7,332,338	TBD	TBD	TBD
Wisconsin	\$5,195,302	TBD	TBD	TBD
Wyoming	N/A	TBD	TBD	TBD
<b>Territories</b>		TBD		
Marshall Islands	N/A	TBD	TBD	TBD
Micronesia	N/A	TBD	TBD	TBD
Northern Mariana Islands	\$765,000	TBD	TBD	TBD
Puerto Rico	\$1,414,084	TBD	TBD	TBD
<b>Subtotal States</b>	<b>\$286,187,676</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Subtotal Territories</b>	<b>\$2,179,084</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Total Resources</b>	<b>\$288,366,760</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup> CFDA NUMBER: 93.136 Discretionary

<sup>2</sup> Estimated funding may shift if jurisdictions adjust budgets

<sup>3</sup> New funding forecast for FY 2023: Overdose Data to Action in States: [CDC-RFA-CE-23-0002](#)

<sup>4</sup> New Funding forecast for FY 2023: Overdose Data to Action: Limiting Overdose through Collaborative Actions in Localities (OD2A: LOCAL): [CDC-RFA-CE-23-0003](#)

## NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Budget Authority	\$351.800	\$362.800	\$362.800	\$0
<b>Total Request</b>	<b>\$351.800</b>	<b>\$362.800</b>	<b>\$362.800</b>	<b>\$0</b>
FTEs	1,068	1,049	1,049	0
-- National Occupational Research Agenda (NORA)	\$118.000	\$119.500	\$119.500	\$0
-- <i>Agriculture, Forestry, Fishing (AgFF) (non-add)</i>	\$27.500	\$29.000	\$29.000	\$0
-- Education and Research Centers	\$31.000	\$32.000	\$32.000	\$0
-- Personal Protective Technology	\$22.000	\$23.000	\$23.000	\$0
-- Mining Research	\$62.500	\$66.500	\$66.500	\$0
-- Other Occupational Safety and Health Research	\$114.100	\$115.100	\$115.100	\$0
-- National Mesothelioma Registry and Tissue Bank	\$1.200	\$1.200	\$1.200	\$0
-- Firefighter Cancer Registry	\$3.000	\$5.500	\$5.500	\$0
<b>Mandatory Programs Total</b>	<b>\$692.248</b>	<b>\$760.611</b>	<b>\$832.908</b>	<b>+\$72.297</b>
World Trade Center <sup>2</sup>	\$641.485	\$709.848	\$782.145	+\$72.297
Energy Employees Occupational Illness Compensation Program Act (EEOICPA) <sup>3</sup>	\$50.763	\$50.763	\$50.763	\$0

<sup>1</sup> This table reflects totals by budget activity. The FY 2024 budget proposes a single "CDC-Wide Activities and Program Support" Treasury account structure.

<sup>2</sup> Reflects the federal share of WTCHP only. These amounts are based on trend analysis and are the best estimates at the time but are subject to change. This does not reflect changes resulting from additional WTCHP appropriations contained in the FY 2023 enacted.

<sup>3</sup> EEOICPA funds are subject to Defense sequestration amount of 8.6 percent. Levels reflect post-sequester amount.

**Enabling Legislation Citation:** PHS A § 301, PHS A § 304, PHS A § 306\*, PHS A § 307, PHS A § 308(d), PHS A § 310, PHS A § 311, PHS A § 317, PHS A § 317A\*, PHS A § 317B, PHS A § 319, PHS A § 327, PHS A § 352, PHS A §§ 399MM-399MM-3, PHS A § 399V-6, PHS A § 1102, PHS A § 2695, Bureau of Mine Act, as amended by Pub. L. 104-208; Energy Employees Occupational Illness Compensation Program Act of 2000; Federal Mine Safety and Health Act of 1977, Pub. L. 91-173 as amended by Pub. L. 95-164 and Pub. L. 109-236; Mine Improvement and New Emergency Response Act § 13, Firefighter Cancer Registry Act of 2018 (Pub. L. 115-194)\*; Never Forget the Heroes: James Zadroga, Ray Pfeifer, and Luis Alvarez Permanent Authorization of the September 11th Victim Compensation Fund Act (Pub. L. 116-34); Occupational Safety and Health Act of 1970 §§20–22, Pub. L. 91-596 as amended by Pub. L. 107-188 and 109-236 (29 U.S.C. 669–671); Radiation Exposure Compensation Act, §§ 6 and 12; Toxic Substances Control Act, Pub. L. 94-469 as amended by 102-550\*

**Enabling Legislation Status:** Permanent Indefinite, Expired/Expiring noted with \*

**Authorization of Appropriations for FY 2022:** Indefinite

**Allocation Methods:** Direct Federal/Intramural, Competitive Grant/Cooperative Agreements, Contracts, Other

CDC's National Institute for Occupational Safety and Health (NIOSH) was established by the Occupational Safety and Health Act of 1970 as distinct from the regulatory function of the Occupational Safety and Health Administration to work cooperatively with employers and employees to adapt new knowledge from occupational health and safety research into workable solutions. The economic impact of work-related injuries and illnesses in the United States is now \$250 billion annually.<sup>207</sup> NIOSH is the only dedicated federal investment for the research needed to prevent work-related injuries and illnesses among the nation's 164 million workers. NIOSH's research efforts are aligned under the National Occupational Research Agenda (NORA), a public-private partnership that identifies critical needs and shares scientific findings to keep people safe and healthy at work. NIOSH prepares for, responds to, and studies chemical, biological, radiological, and natural disasters. The core functions of NIOSH are critical to the COVID-19 response, including certifying respirators to meet healthcare

<sup>207</sup> <https://www.bls.gov/news.release/pdf/empsit.pdf>

needs and working to provide updated safety guidelines for key industries. NIOSH also administers the Energy Employees Occupational Illness Compensation Program and the World Trade Center Health Program, both supported by mandatory funding allocated to CDC.

### **Health Equity**

CDC's CORE commitment to health equity focuses on science, interventions, and other solutions as the drivers of change and aims to ensure that a health equity lens is embedded into work originating from all divisions within the Agency.

The goals comprising CDC's CORE strategy sharpen the agency's focus on 1) developing a more comprehensive evidence base for occupational safety and health disparities and inequities affecting sociodemographic populations that have historically been marginalized, 2) understanding the drivers of disparities and inequities, and 3) generating and disseminating scientific findings, interventions, and other solutions to help reduce or eliminate them.

CDC provided over 70 trainings and other presentations to build foundational skills among intramural and extramural occupational safety and health professionals and trainees to enable them to competently advance equity work. Further, CDC established 21 new occupational safety and health equity research and intervention priorities across its diverse scientific agendas, implemented 14 new policies and procedures to better facilitate the conduct of occupational safety and health equity science and the development of interventions, and identified 97 occupational safety and health equity-related measures and methodologies to better capture data on the occupational safety and health status of historically marginalized and underserved sociodemographic populations.

Since 2021, CDC increased its occupational safety and health outreach and/or communication efforts to reach populations that historically have been marginalized and underserved through new partnerships and communication materials. For example, CDC launched an [initiative](#) in collaboration with the National Aeronautics and Space Administration (NASA) and a crowdsourcing challenge hosting company to develop innovative solutions to problems (e.g., use, availability, accessibility, acceptability, and knowledge) related to offering equitable personal protective technologies to all workers, including those belonging to sociodemographic groups that have been historically marginalized and underserved. CDC also generated more than 68 presentations, reports, publications, and other occupational safety and health equity-focused products.

**NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH**

**BY THE NUMBERS**

- **37,408**—Downloads of the Personal Protective Equipment (PPE) Burn Rate Calculator app, which allows healthcare facilities to calculate their average PPE consumption rate or “burn rate” and how many days a PPE supply will last.
- **534**—Respirator approval decisions and 272 quality assurance audits completed in 2022 (as of 12/1/22) making more types of respirators available to essential workers.
- **7900+**—Responses to PPE stakeholder and media inquiries since the start of the pandemic, an increase from an average of 510 annually.
- **142**—Health Hazard Evaluations (HHE) conducted in 36 states (including Washington DC) since January 2022 addressing work-related health concerns of thousands of workers and managers.
- **8,920**—Downloads of Health Hazard Evaluation reports since January 2022, and thousands more workers, managers, and other stakeholders benefit from the recommendations issued in HHE reports.
- **2,200,000**—Downloads of the OSHA-NIOSH Heat Safety app. The app serves as a useful resource for planning outdoor work activities based on how hot it feels throughout the day. It features real-time heat index and hourly forecasts as well as occupational safety and health recommendations from OSHA and NIOSH.
- **564,369**—Downloads of the NIOSH Ladder Safety Smartphone app. The app provides graphical guidance on safe ladder use and includes a patented innovation that allows users to set safe ladder angles more accurately and quickly than other methods.
- **100,000,000+**—Number of records coded by the [NIOSH Industry and Occupation Computerized Coding System \(NIOCCS\)](#), a free web application used to translate industry and occupation text found in surveys, death certificates, and medical records into standardized codes so that researchers can analyze their data. More than 50 million of these records were coded in fiscal year 2022 alone, when NIOSH moved NIOCCS to a new and improved learning-based system.

<b>National Institute for Occupational Safety and Health Discretionary Funding History</b>	
<b>Fiscal Year</b>	<b>Dollars (in millions)</b>
FY 2020	\$342.800
FY 2021	\$344.240
FY 2022 Final	\$351.800
FY 2023 Enacted	\$362.800
FY 2024 President’s Budget	\$362.800

## Occupational Health and Safety Budget Request

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CDC's occupational health and safety research reflects the economic and infrastructure needs of the American workforce as identified by employers and employees, data on occupational illness and injury, and the opportunities for making an impact. CDC conducts research to reduce worker illness and injury and advance worker well-being, recommends interventions and capacity building to keep workers safe, and enhances worker safety and health through global collaborations. This work addresses every segment of the American workforce.

### Budget Request

CDC's FY 2024 budget request of **\$362,800,000** for Occupational Safety and Health is level with the FY 2023 enacted level. At the FY 2024 level, CDC will continue its collaboration with the Indian Health Service by focusing on addressing occupational hazards with high public health burden, including disproportionately affected populations. For example, CDC would establish a tribal steering committee comprised of tribal members, tribal serving organizations, state and federal agencies, and other partners to prioritize and implement the activities contained in the NIOSH American Indian and Alaska Native Worker Safety and Health Strategic Plan, which will be finalized by FY 2024. CDC will also support worker safety and health projects in tribal communities. At the FY 2024 level, CDC would also continue supporting its Education and Research Centers (ERCs). CDC currently funds 18 ERCs to address the burden of occupational safety and health in the United States by providing state-of-the-art interdisciplinary training for the next generation of occupational safety and health practitioners and researchers.

In FY 2024, CDC will continue to support the [National Occupational Research Agenda](#) (NORA). NORA is a partnership program that stimulates innovative research and improved workplace practices, while also addressing emerging issues. For example, the [Future of Work Initiative](#) evaluates worker safety and health risks by developing evidence-based research solutions for the future workforce. Priority topics for intramural and extramural research in this area include work arrangements, Artificial Intelligence, innovative technologies such as additive and smart manufacturing, demographics, and worker skills.

- Increase coordination and research activities that support the Agriculture, Forestry and Fishing (AgFF) program. Workers within the AgFF sector experience the highest fatal occupational injury rate at 21.5 deaths per 100,000 full-time workers.
- Continue to conduct research to improve safety and health in maritime industries, which are found in every U.S. state and across multiple industry sectors and experience a higher risk of fatality, injury, and illness than other American industries.
- Continuing research on PFAS exposure in firefighters and other industry sectors with high to moderate PFAS use, such as manufacturing, services, and public safety.
- Focusing on the use of robotics, exoskeletons, and other emerging technologies in construction to determine the impact on health and safety.
- Developing and making available new technologies and recommended practices in mining that will reduce injuries and fatalities from machinery and rock falls, as well as exposures to harmful mine dusts, airborne pollutants, heat, and noise.
- Addressing emerging occupational safety and health issues that may require new approaches to prevention, such as occupational use of robots and advanced manufacturing.
- Continuing the Total Worker Health<sup>®</sup> Program and Centers of Excellence, including the Center of Excellence for Workplace Mental Health.
- Implementing an initiative supported by funding from the American Rescue Plan Act of 2021 to address the mental health and well-being of the nation's health workers by spotlighting the burden of poor mental health outcomes; assimilating the best scientific evidence in a repository; fostering and enhancing partnerships; identifying and adapting tools and training; improving data and surveillance; and generating awareness by conducting a national multi-dimensional social marketing campaign.

## Response to COVID-19 Pandemic

CDC plays a critical role in the COVID-19 response by supporting states, tribes, localities, and territories, as well as industries and employers, in addressing the ongoing needs of the nation's workers. CDC conducted site visits and virtual consultations for employers in critical industries, such as meatpacking and manufacturing, and developed more than 40 factsheets for essential occupations such as transportation, food services, and first responders. CDC also developed information about COVID-19 vaccines for essential workers, including the [workplace COVID-19 vaccine toolkit](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/toolkits.html)<sup>208</sup> and information about workplace vaccination programs.

### Personal Protective Technology (PPT)

CDC's efforts are critical for the use and supply of personal protective equipment (PPE) in the COVID-19 pandemic. The [Respirator Approval Program \(RAP\)](https://www.cdc.gov/niosh/npptl/respmanuf.html)<sup>209</sup> evaluates and approves all respirators used in American workplaces and is a critical asset within the U.S. public health infrastructure. The RAP more than doubled respirator investigations and approval decisions in 2020. It achieved 730 respirator approval decisions and 412 quality assurance audits in 2021, and 534 respirator approval decisions and 272 quality assurance audits in 2022 (as of December 1, 2022). A tremendous influx of imported respirators led CDC's NIOSH to develop an abbreviated filtration efficiency test that facilitated investigations for imported non-NIOSH-approved respirators. The efficiency testing revealed that approximately 60 percent of more than 780 international respirators tested demonstrated less than expected filtration efficiency and should not be used as respirators in U.S. workplace settings. These reports have been instrumental in providing federal, state, and user communities with data to help identify substandard and counterfeit products. The RAP also provided the scientific basis for the National Strategic Stockpile's release of respirators and surgical gowns that were beyond manufacturer-designed shelf life. NIOSH shortened the timeline for its approval of new N95 respirators to support the national effort to increase supplies of PPE, addressing more than 1,300 new approval applicant requests and responses from non-domestic requestors (up from approximately 10 annually) and 460 new approval applicant requests from domestic requestors (up from 3-5 annually) in the first year of the pandemic.

In response to the continued shortage of filtering facepiece respirators, CDC published documents and strategies to inform PPE use and distribution:

- [“Strategies for Optimizing the Supply of N95 Respirators.”](#)
- [“Release of Stockpiled N95 Filtering Facepiece Respirators Beyond the Manufacturer-Designated Shelf Life: Considerations for the COVID-19 Response.”](#)
- [“Decontamination and Reuse of Filtering Facepiece Respirators using Contingency and Crisis Capacity Strategies.”](#)
- [“Respiratory Protection in a Time of Crisis: NIOSH Testing of International Respiratory Protective Devices for Emergency Use.”](#)
- [15 Conformity Assessment Notices and Letters to Manufacturers and Interested Parties](#)

These guidance documents and strategies provide optimization strategies for N95 respirator use when PPE supplies are stressed, running low, or exhausted. The website has more than 1.8 million views. CDC also responded to more than 7,900 PPE stakeholder and media inquiries since the start of the pandemic (grown from 500 annually), developed guidance documents, factsheets, science blogs, and informational videos on other PPE-related issues including respirator decontamination and PPE optimization, as well as infection prevention and control recommendations for critical workers.

<sup>208</sup> <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/toolkits.html>

<sup>209</sup> <https://www.cdc.gov/niosh/npptl/respmanuf.html>

## Improving the Safety and Health of Emergency Response Employees

Emergency response employees (EREs) are essential workers and include firefighters, law enforcement officers, paramedics, emergency medical technicians, and funeral service practitioners. EREs are at risk of exposure to potentially life-threatening infectious diseases through contact with victims during emergencies. In June 2022, CDC received a new delegation of authority under Part G of the Ryan White HIV/AIDS Treatment Extension Act of 2009, which requires that medical facilities notify EREs when they may have been exposed to potentially life-threatening infectious diseases while transporting or serving victims of an emergency. Such notification allows EREs to receive timely diagnosis and post-exposure medical treatment to prevent life-threatening diseases. Under the new delegation of authority from the HHS Secretary, CDC will establish a comprehensive system for the receipt and investigation of reported violation of these notification requirements. CDC intends to develop various communication materials to educate state and local health departments, medical facilities, and employers, about their responsibilities under Part G and anticipates that the result will be the establishment of reliable Part G infectious disease notification networks where they may not exist now. CDC expects that those networks will be responsive to the current COVID-19 pandemic and future public health emergencies.

## Total Worker Health®

CDC is looking ahead at the changing nature of work, the demands of an economy under rapid transition, and its impact on worker safety and health. The CDC/NIOSH Total Worker Health® Program supports and conducts ground-breaking research in workplace safety, health, and well-being within the context of a changing economy and shifting workplace and population demographics. As part of the program, ten funded Centers of Excellence with their regional presence and expertise play an important role in conducting novel research on the important connections between work arrangements, working conditions, and health. In Fall 2021, CDC launched a new Total Worker Health® Center of Excellence dedicated to workplace mental health as part of an expanded occupational safety and health mental health portfolio at CDC, including its research agenda, partners, and research to intervention strategies. Safeguarding and improving the mental health of workers, preventing work-related stress and burn-out are critical issues for employers and organizations as poor mental health outcomes and associated disability increase. CDC's [Healthy Work Design](#)<sup>210</sup> and [Work Stress](#)<sup>211</sup> prevention programs have examined the mental health impacts of work conditions such as non-standard work arrangements, work hours and fatigue, and occupational stress and shown that mental health issues permeate all industries. In addition, work-related factors increase critical risks for substance use disorders and suicide, two increasingly challenging causes of death among working age populations. Active Total Worker Health research and interventions are offering timely solutions for these critical issues.

CDC evaluates emerging worker safety and health risks and develops evidence-based research solutions around new industries, organizational design, job arrangements, and ways to control risks that affect the future workforce. For example, CDC partners with the National Science Foundation to fund studies on innovations in integration of robotics to improve worker safety through the [National Robotics Initiative 3.0](#).<sup>212</sup> In addition, CDC [launched the Center for Work and Fatigue Research \(CWFR\)](#),<sup>213</sup> to raise awareness of the various sources of worker fatigue, identify effective methods of assessing fatigue-risk in workplaces, and reduce health and safety risks associated with workplace fatigue. The Center published guidance for workers and employers to manage workplace fatigue and work safely during COVID-19.

CDC also examines opioid use in workers, from identifying workplace conditions and determining work-related risk factors, to protecting workers and developing methods for detection and decontamination. CDC identified elements of [Workplace Supported Recovery \(WSR\) Programs](#),<sup>214</sup> in which employers use evidence-based policies

<sup>210</sup> <https://www.cdc.gov/niosh/programs/hwd/default.html>

<sup>211</sup> <https://www.cdc.gov/niosh/topics/healthcare/workstress.html>

<sup>212</sup> [https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=503641](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503641)

<sup>213</sup> <https://www.cdc.gov/niosh/programs/ppops/cwfr.html>

<sup>214</sup> <https://www.cdc.gov/niosh/topics/opioids/wsrp/default.html>

and programs to reduce multiple risk factors. These include helping prevent initial substance use to decrease the risk for substance misuse and its progression to a substance use disorder. WSR programs also take steps to help workers seek the care they need and assist with recovery, including staying at or returning to work.

### Occupational Climate Exposure

Climate-related hazards are an emerging worker safety health risk that can lead to adverse health effects and decreased worker productivity. Climate disproportionately affects workers, and they are likely to have more and greater exposure to climate-related hazards than the public. Examples of climate-related occupational hazards include increasing temperatures, air pollution, UV radiation, extreme weather, vector-borne diseases and expanding habitats, industrial transitions, and emerging industries. CDC takes a multi-disciplinary approach to address these critical and pressing public health problems. As part of the CDC Climate and Health Task Force, participating staff are updating the climate and occupational safety and health conceptual framework; communicating with partners, including other federal agencies, about climate and work-related topics and activities; and establishing and implementing priorities for research and surveillance of climate-related hazards for workers in many industries across the country.



[NIOSH Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments](https://www.cdc.gov/niosh/docs/2016-106/default.html)<sup>215</sup> is a well-recognized, often referenced source of information that includes scientific data on heat stress and hot environments. Another popular tool is the [OSHA-NIOSH Heat Safety app](https://www.osha-slc.gov/heat-safety-app/),<sup>216</sup> which helps users plan outdoor work activities based on how hot it feels throughout the day. It has been downloaded more than 1.4 million times and is routinely featured in news articles and trade magazines in the summer months. CDC is funding work on climate and occupational health through its Centers for Agriculture Safety and Health, including projects on heat stress in agriculture workers, measuring thermal load of personal floatation devices in fishermen, potential for respiratory problems in wildfire response workers, and preparedness and recovery for extreme weather events.

### Mining Research

CDC's [Mining Research Program](https://www.cdc.gov/niosh/mining/researchprogram/index.html)<sup>217</sup> addresses safety and health issues in both surface and underground mining within the coal, metal/nonmetal, and stone, sand, and gravel mining sectors. The Mining Research Program focuses on critical issues such as automation and emerging technologies, respirable mine dust, ground control ventilation, and the [Miner Health Program](https://www.cdc.gov/niosh/mining/researchprogram/strategicplan/MHProgram_StrategicAgenda2020-2030.html),<sup>218</sup> which was established to understand and improve the health and well-being of miners in all sectors through a focused integration of research, transfer of findings, evaluation, and community engagement. The Pittsburgh Mining Research Division (PMRD) conducts research on health hazards, safety hazards, and disaster survival and prevention in mining, as well as critical human factors issues relevant to research and system design. The Spokane Mining Research Division (SMRD) focuses on work-related illness, injury, and death in the extractive industries with an emphasis on their unique needs throughout the western United States, including Alaska. Both PMRD and SMRD collaborate intramurally and with partners in industry, labor, academia, and government. At the FY 2024 level, the mining research program would focus on key areas such as noise control and hearing conservation, ground control, lithium-ion battery safety, hydrogen-cell safety, mine ventilation, and emergency disaster response and rescue.

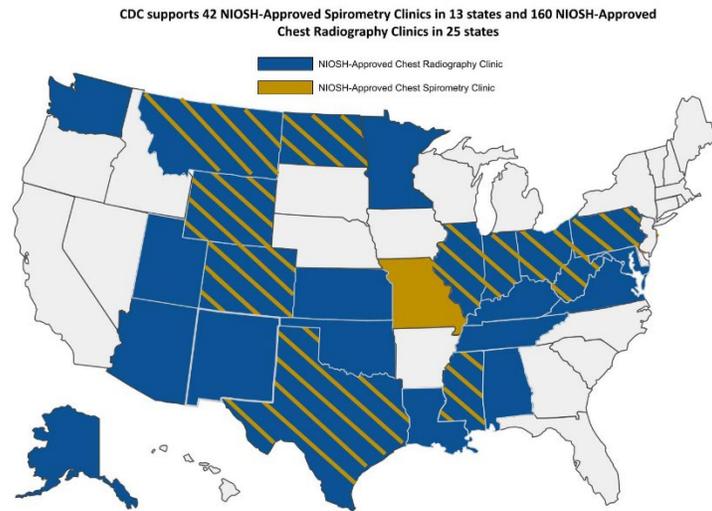
<sup>215</sup> <https://www.cdc.gov/niosh/docs/2016-106/default.html>

<sup>216</sup> <https://www.cdc.gov/niosh/topics/heatstress/heatapp.html>

<sup>217</sup> <https://www.cdc.gov/niosh/mining/researchprogram/index.html>

<sup>218</sup> [https://www.cdc.gov/niosh/mining/researchprogram/strategicplan/MHProgram\\_StrategicAgenda2020-2030.html](https://www.cdc.gov/niosh/mining/researchprogram/strategicplan/MHProgram_StrategicAgenda2020-2030.html)

The [Enhanced Coal Workers' Health Surveillance Program \(ECWHSP\)](#)<sup>219</sup> directly provides screening services via a mobile medical unit. During surveys, CDC staff provide medical testing and screening to coal miners at no cost to miners. Services include a chest radiograph, spirometry test, blood pressure screening, and respiratory assessment questionnaire at miners' worksites or in their communities. In addition to the mobile medical unit, CDC also supports 42 NIOSH-Approved Spirometry Clinics in 13 states and 160 NIOSH-Approved Chest Radiography Clinics in 25 states.



### Firefighter Cancer Surveillance

The [Firefighter Cancer Registry Act of 2018](#)<sup>220</sup> required CDC to develop a [National Firefighter Registry \(NFR\)](#)<sup>221</sup> to collect relevant health and occupational information to better understand the link between workplace exposures and cancer. The registry is modeled after a landmark study in which CDC, with funding assistance from the U.S. Fire Administration, examined whether firefighters have a higher risk of cancer due to job exposures. Once the NFR opens for registration, CDC will work with fire service organizations and other stakeholder groups, to encourage firefighters throughout the country, including career and volunteer, active and retired, and firefighters with and without cancer, to enroll in the NFR. Over time and with broad participation, the data will be used to better understand the types of cancer among firefighters; the prevalence of cancer risk factors and healthy behaviors among firefighters; and the relationship between firefighter cancer and workplace characteristics, exposures, and practices. The data will also be used to explore cancer risk among understudied firefighter groups including women, minorities, volunteers, and firefighters in sub-specialty assignments like wildland firefighters or fire-cause investigators. These analyses will help CDC identify the most important factors associated with firefighters' risk of specific types of cancer, including rare forms of cancer.

Specific to wildland firefighters, CDC is partnering with the United States Forest Service (USFS) and the Department of the Interior on a multi-year study to understand better the potential chemical and physical hazards associated with wildland firefighting and how these exposures affect wildland firefighters' health, especially after multiple fire seasons. During the COVID-19 pandemic, CDC published a NIOSH Science Blog<sup>222</sup> that examined how exposure to wildfire smoke can contribute to an increased likelihood of infection with COVID-19 and increased severity of COVID-19.

<sup>219</sup> <https://www.cdc.gov/niosh/topics/cwhsp/ecwhsp.html>

<sup>220</sup> <https://www.congress.gov/bills/115/congress/115th-congress/house-bill/931>

<sup>221</sup> <https://www.cdc.gov/niosh/firefighters/registry.html>

<sup>222</sup> <https://blogs.cdc.gov/niosh-science-blog/2021/03/30/covid-wildfires/>

In FY 2024, CDC will continue developing formal partnerships to conduct further outreach with the fire service, conduct more in-depth data analysis, explore new data sources, conduct essential data linkages (e.g., state cancer registries), and develop new follow-up questionnaires and resources for firefighters and fire service leaders. This would allow CDC to maximize the NFR data and utility to scientific, public health, and fire service leaders.

### **Per- and Polyfluoroalkyl Substances (PFAS)**

CDC conducts research to learn more about the relationship between [exposure to per- and polyfluoroalkyl substances \(PFAS\)](#)<sup>223</sup> and human health effects. PFAS are a group of synthetic chemicals that have been integrated extensively into consumer products and industrial applications worldwide since the early 1950s. In occupational settings, workers may experience repeated and high levels of exposure to PFAS, and CDC's research is designed to assess the impacts on a variety of industries. CDC is conducting an occupational exposure and health indicator assessment of PFAS in industries with high to moderate PFAS use, such as manufacturing and services sector industries. This study focuses on ongoing exposure to emerging PFAS and includes evaluation of PFAS in blood and air. Additionally, as part of a collaboration with academic partners called the [Fire Fighter Cancer Cohort Study \(FFCCS\)](#),<sup>224</sup> CDC assesses acute exposure to PFAS through fireground response and turnout gear in airport, structural, and wildland-urban interface firefighters. This research study also includes toxicological assessments of aqueous film forming foams and synthetic fluorine free alternatives. Other CDC studies focusing on PFAS include toxicological research studies of dermal absorption and evaluation of firefighter textiles used in turnout gear for the presence of PFAS. This research will improve the understanding of who is exposed, how exposures occur, how much exposure individuals are having, and where interventions will be the most effective. CDC has also responded to multiple requests for technical assistance that include development of educational material and traditional exposure assessment evaluations.

### **Health Hazard Evaluation Program**

CDC field scientists conduct [Health Hazard Evaluations \(HHEs\)](#),<sup>225</sup> a frontline service provided upon request, to determine if workers are being exposed to hazardous materials or harmful conditions and if these exposures affect employee health. Headquartered in Cincinnati, Ohio, the HHE program addresses the work-related health concerns of thousands of workers and managers. Since January 2022, HHE reports have been downloaded 14,456 times and CDC has received 142 HHE requests in 36 states.

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<sup>223</sup> <https://www.cdc.gov/niosh/topics/pfas/default.html>

<sup>224</sup> <https://www.cdc.gov/niosh/firefighters/health.html>

<sup>225</sup> <https://www.cdc.gov/niosh/hhe/default.html>

**Occupational Safety and Health Research Grants<sup>1,2</sup>**

(dollars in millions)	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>
Number of Awards	145	145	145
- New Awards	58	39	41
- Continuing Awards	87	106	104
Average Award	\$0.67	\$0.67	0.67
Range of Awards	\$0.020-\$5.750	\$0.020-\$5.750	\$0.020-\$5.750
<b>Total Awards</b>	<b>\$94.14</b>	<b>\$97.34</b>	<b>\$97.34</b>

<sup>1</sup> These funds are not awarded by formula.

<sup>2</sup> FY2023 and FY2024 number of new and continuing awards are not yet determined.

**Respirator Approval Program and Health Hazard Evaluation Program Infrastructure Support**

Investments in physical infrastructure will also support NIOSH's core programs, as aging facilities result in frequent operational issues such as unexpected power outages, water shutdowns, and environmental control issues. CDC will leverage investments from the HHS Nonrecurring Expenses Fund (NEF) to conduct renovations and upgrade systems that will prepare CDC's Human Performance and Physiology Research Branch laboratories, including the Respirator Approval Program (RAP), at NIOSH's Pittsburgh Facility for future infectious disease outbreaks and pandemics. CDC is also supporting its Health Hazard Evaluation (HHE) program facilities in Cincinnati, Ohio, through consolidating existing campuses into a new central facility through funding from the NEF. This consolidation will increase scientific collaboration, eliminate inefficiencies, and provide researchers with state-of-the-art laboratories and facilities.

**Energy Employees Occupational Illness Compensation Program Act (EEOICPA)**

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Energy Employees Occupational Illness Compensation Program Act (EEOICPA) <sup>1</sup>	\$50.763	\$50.763	\$50.763	\$0

<sup>1</sup>EEOICPA funds are subject to sequestration. Levels reflect post-sequestered funding amount.

The Energy Employees Occupational Illness Compensation Program Act (EEOICPA) is a mandatory federal program that provides compensation to U.S. Department of Energy employees or survivors of employees who have been diagnosed with a radiation-related cancer, beryllium-related disease, or chronic silicosis resulting from duties involving production or testing of nuclear weapons. CDC conducts dose reconstructions to estimate an employee’s occupational radiation exposure for certain cancer cases, evaluates petitions for adding classes of workers to the Special Exposure Cohort (SEC), and provides administrative support to the Advisory Board on Radiation and Worker Health (Advisory Board). The U.S. Department of Labor uses CDC's estimates in making compensation determinations.

**Budget Request**

CDC’s FY 2024 estimate of **\$50,763,000** (post-sequester) in mandatory funding for EEOICPA is level with the FY 2023 enacted level. As mandated by EEOICPA, CDC will use this funding to:

- Complete 2,400 radiation dose reconstructions to support the U.S. Department of Labor's adjudication of claims.
- Evaluate an estimated two petitions to add classes of employees to the Special Exposure Cohort.
- Provide administrative and technical support for the Advisory Board as it reviews technical documents and procedures used for dose reconstruction.
- Publicize acquired information related to radiation exposure at facilities involved with nuclear weapons production, testing, and disposal.

In accordance with EEOICPA, in FY 2024, CDC will complete radiation dose reconstructions for all claims requiring such information to permit final adjudication of the claim. CDC will use radiation monitoring information provided by the U.S. Department of Energy and any relevant information provided by claimants to develop a dose reconstruction report. The number of dose reconstructions completed each year has stabilized at approximately 2,400 and is expected to return to this level following completion of a cybersecurity modernization initiative.

CDC will also evaluate petitions to add classes of employees to the SEC and present the evaluation reports to the Advisory Board, which makes recommendations to the HHS Secretary concerning whether a class of employees should be added to the SEC. SEC-related work has increased in response to the need to conduct more long-term evaluations, consider multiple classes of workers included in an individual petition, and re-evaluate previous petitions/reports as new information becomes available. CDC will engage the Advisory Board to assist in reviewing SEC evaluation reports and the scientific validity and quality of dose reconstruction efforts.

In FY 2022, CDC:

- Completed 1,800 dose reconstructions.
- Received one SEC petition.
- Supported 15 meetings of the Advisory Board, its Subcommittees, and Work Groups.

- Informed recommendations of the Advisory Board to the HHS Secretary concerning the addition of classes of employees to the SEC. No new classes were added to the SEC in FY 2022, thus the total number of classes added as of September 30, 2022 remains at 129.

**World Trade Center Health Program Budget Request<sup>1, 2</sup>**

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	+/- FY 2023 Enacted
World Trade Center	\$641.485	\$709.848	\$782.145	\$72.297

<sup>1</sup> The FY 2024 WTC Health Program amount is an estimate that may be revised during the FY 23 planning process. Totals displayed for FY 2024 align with current projections and do not reflect additional WTCHP appropriations in the FY 2023 enacted.

<sup>2</sup> Reflects the estimated federal share of WTC Health Program only. These amounts are based on trend analysis and are the best estimates at the time but are subject to change, and therefore different from the Zadroga Act of 2010 statutory funding amounts.

The September 11, 2001, terrorist attacks in New York City, at the Pentagon in Arlington, Virginia, and in Shanksville, Pennsylvania, required extensive response, recovery, and cleanup activities. Thousands of responders and survivors were exposed to toxic smoke, dust, debris, and psychological trauma. The James Zadroga 9/11 Health and Compensation Act of 2010 (P.L. 111-347) created the World Trade Center (WTC) Health Program to provide healthcare benefits to eligible responders and survivors beginning on July 1, 2011. On December 18, 2015, the James Zadroga 9/11 Health and Compensation Reauthorization Act was enacted, extending the WTC Health Program through 2090. Pursuant to this statute, the WTC Health Program provides monitoring and treatment benefits to eligible responders and survivors, conducts research on WTC-related health conditions, and maintains a health registry to collect data on those affected by the September 11, 2001, terrorist attacks.

As of December 31, 2022, the WTC Health Program enrollment included 120,308 eligible responders and survivors. The Program has paid claims for eligible treatment, including medication, for more than 41,853 of these responders and survivors in the past year.

**Table 1. WTC Health Program Enrollment**

	Dec. 31, 2021	March 31, 2021	June 30, 2022	Sept. 30, 2022	Dec. 31, 2022
New Members since July 2011 <sup>1</sup>	54,724	56,196	57,624	59,403	61,466
Total Members <sup>2</sup>	115,630	117,095	118,474	120,247	122,308

<sup>1</sup>New members enrolled under the Zadroga Act requirements (adjustments are made each quarter to account for member records changes), including Pentagon and Shanksville, PA.

<sup>2</sup>New members and members enrolled prior to 7/1/2011 (adjustments are made each quarter to account for member records changes).

**Table 2. WTC Health Program Paid Claims**

Healthcare Services <sup>1</sup>	Dec. 31, 2021	March 31, 2021	June 30, 2022	Sept. 30, 2022	Dec. 31, 2022
Members who had monitoring or screening exams	46,136	47,888	48,225	49,877	49,900
Members who had diagnostic evaluations <sup>2</sup>	21,353	20,188	20,228	20,698	20,919
Members who had out-patient treatment	31,558	32,023	32,311	32,248	33,854
Members who had in-patient treatment	937	954	972	1,033	1,044
Members who received medications	29,897	29,892	30,266	31,264	32,536

<sup>1</sup> Based on claims for services that were paid during the previous 12-month period.

<sup>2</sup> For determining if a member has a WTC-related health condition and for certifying that health condition.

**Budget Request**

CDC's FY 2024 estimate of **\$782,145,000** in mandatory Federal share funding for the WTC Health Program is **\$97,240,695** above the FY 2023 enacted level. Funds support the quality care, including treatment of covered WTC-related health conditions for enrolled responders and survivors. Including New York City's required contribution of \$86,905,000, a total of \$865,050,000 in resources will support the WTC Health Program in FY 2024. These funds will be supplemented by additional appropriations in the FY 2023 enacted.

Through FY 2022, the WTC Health Program has certified more than 38,241 cases of cancer —an increase of almost 7,000 cancer certifications since the end of FY 2021. Of those members certified for at least one type of cancer, more than 14,206 members have received cancer care in the first three quarters of FY 2022, compared to approximately 11,900 in all of FY 2021.

The WTC Health Program uses mandatory funding for:

- Monitoring and treatment services, including services for certain types of cancer, for responders, and survivors in the WTC Health Program;
- Infrastructure for the Clinical Centers of Excellence (CCEs) and the Nationwide Provider Network (NPN) to support clinical activities;
- Infrastructure for data centers;
- Extramural research projects;
- Outreach and education projects;
- WTC Health Registry activities; and
- WTC Health Program Scientific/Technical Advisory Committee support.

The WTC Health Program provides monitoring and treatment services via a fee-for-service model of delivery. These services are provided at no cost to the WTC Health Program members. Where applicable, the WTC Health Program recoups money from Workers' Compensation for work-related health conditions. Similarly, the WTC Health Program seeks to coordinate benefits with public and private health insurance plans for treatment provided for WTC-related health conditions that are not work-related. In FY 2024, CDC will continue contracts with CCEs and the NPN to provide administrative and member services that support the provision of healthcare benefits, and contracts with data centers to provide data collection and analysis. CDC will also renew the interagency agreement with the Centers for Medicare and Medicaid Services to reimburse the CCEs and the NPN for clinical services provided to the WTC Health Program members.

The WTC Health Program provides healthcare benefits through CCEs, which work as a clinical consortium, and through the NPN according to standardized medical monitoring protocols, programmatic policies, and procedures across the clinical sites. This standardization and the fee-for-service model enable the WTC Health Program to track claims-level data for monitoring and treatment, analyze the data for program compliance, and report on spending at a more detailed level across the WTC Health Program. The WTC Health Program also engages with labor representatives and members of the New York City community to ensure awareness of emerging issues.

CDC will use FY 2024 funds to continue research projects and epidemiologic studies to help answer critical questions about physical and mental health conditions related to the September 11, 2001, terrorist attacks. Additionally, a portion of the FY 2024 funds will continue the cooperative agreement with the New York City Department of Health and Mental Hygiene for the WTC Health Registry to conduct regular surveys on more than 71,000 registrants. The WTC Health Registry's analysis of these surveys will continue to help assess health effects among persons impacted by exposures to the WTC disaster.

Funds will also support the WTC Health Program Scientific/Technical Advisory Committee. Upon request from the Administrator of the WTC Health Program, the Advisory Committee will make recommendations regarding

additional eligibility criteria, the addition of new health conditions to the list of covered conditions, and research priorities.

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## GLOBAL HEALTH

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Budget Authority	\$646.843	\$692.843	\$764.843	+\$72.000
<b>Total Request<sup>1</sup></b>	<b>\$646.843</b>	<b>\$692.843</b>	<b>\$764.843</b>	<b>+\$72.000</b>
FTEs	1,340	1,367	1,501	134
-- Global HIV/AIDS Program	\$128.921	\$128.921	\$128.921	\$0
-- Global Tuberculosis	\$9.722	\$11.722	\$11.722	\$0
-- Global Immunization Program	\$228.000	\$230.000	\$240.000	+\$10.000
-- Polio Eradication	\$178.000	\$180.000	\$180.000	\$0
-- Measles and Other Vaccine Preventable Diseases	\$50.000	\$50.000	\$60.000	+\$10.000
-- Parasitic Diseases and Malaria	\$27.000	\$29.000	\$31.000	+\$2.000
-- <i>Soil Transmitted Helminth (STH) (non-add)</i>	\$1.500	\$1.500	\$1.500	\$0
-- Global Public Health Protection	\$253.200	\$293.200	\$353.200	+\$60.000

<sup>1</sup>This table reflects totals by budget activity. The FY 2024 budget proposes a single "CDC-Wide Activities and Program Support" Treasury account structure.

**Enabling Legislation Citation:**

PHSA § 214, PHSA § 301, PHSA § 304, PHSA § 307, PHSA § 310, PHSA § 317T,\* PHSA § 319, PHSA § 322, PHSA § 327, PHSA § 340C, PHSA § 361-369, PHSA § 2315, PHSA § 2341, Foreign Assistance Act of 1961 §§ 104A, 104C, 627, and 629, Federal Employees International Organization Service Act § 3, Foreign Employees Compensation Program, Tom Lantos and Henry J. Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria (P.L. 110-293, as amended by P.L. 115-305), PEPFAR Stewardship & Oversight Act of 2013 (Pub. L. 113-56)

**Enabling Legislation Status:** Permanent Indefinite

**Authorization of Appropriations for FY 2022:** Indefinite; Expired/Expiring noted with \*

**Allocation Methods:** Direct Federal/Intramural, Competitive Grants/Cooperative Agreements, Direct Contracts, Interagency Agreements

CDC’s global health mission is to improve and protect the health, safety, and security of Americans while reducing morbidity and mortality worldwide. As the U.S. government lead for infectious disease emergency response, CDC works with countries to detect epidemic threats earlier, respond more effectively, and contain outbreaks before they spread into regional epidemics or global pandemics.

CDC’s trusted partnerships and extensive technical expertise in public health emergency management, disease tracking and reporting systems, workforce training, infection control, and laboratory systems targeting high-hazard pathogens, enable the agency to build local, national, and regional public health capabilities and strengthen global health security. During the global COVID-19 response, CDC leveraged previous investments in global health. For example, CDC experts and partners embedded in regional and country offices were able to quickly pivot to emergency response.

CDC recognizes that the COVID-19 pandemic presents challenges for countries with fragile health systems. CDC is working closely with U.S. government agencies, ministries of health, and other partners to assist countries in responding to COVID-19, while continuing to develop, implement and adapt interventions for malaria, HIV, vaccine-preventable diseases, and other infectious diseases. CDC also continues to mitigate disruptions to the

delivery of lifesaving prevention and treatment activities for these infectious diseases, as COVID-19 threatens years of progress.

### Budget Request

CDC's FY 2024 budget request of **\$764,843,000** for Global Health, is **\$72,000,000** above the FY 2023 enacted level. The increase will support expansion of CDC's work in global health protection, work to increase immunization for measles and other vaccine preventable diseases by the Global Immunization Program, and advancements in the control of malaria and other parasitic diseases.

CDC aims to advance health equity globally by ensuring people around the world can live longer, safer, and healthier lives. CDC's approach to global health is centered on investing in partnerships with ministries of health, regional and multilateral organizations, to build local public health capacities that detect health threats and protect the health of people everywhere.

CDC is committed to ensuring health equity is integrated across all global public health science, interventions, partnerships and capacity and workforce, including addressing the COVID-19 pandemic and long-standing programs related to HIV, tuberculosis, malaria, measles, polio and other high-burden, preventable diseases. CDC works with governments and communities to define vulnerable and underserved populations, identify methods to increase access to public health services, generate evidence to improve service delivery for vulnerable populations, and strengthen public health policy.

For example, at the beginning of the COVID-19 pandemic in March 2020, the risks for pregnant women and their unborn babies were generally unknown. Colombia's National Public Health Institute (INS) and members of the country's Field Epidemiology Training Program (FETP) worked to improve COVID-19 surveillance for this population through linking and analyzing national laboratory and surveillance data and turning this into a routine operation that is now reported online through a monthly bulletin available to public health officials and the public. These efforts demonstrated that COVID-19 was the leading cause of death in pregnant women in Colombia in 2021. Based on these data, in June 2021, the president of Colombia signed a decree to prioritize the vaccination of women during pregnancy and up to 40 days following childbirth, directly citing INS's monthly bulletin. Strengthening Colombia's public health surveillance system helped the country better protect the lives of pregnant women and their unborn babies from the potentially devastating effects of COVID-19.

## GLOBAL HEALTH

### BY THE NUMBERS

- 110—Countries supported by six regional offices and over 60 country offices. This includes new direct CDC engagement in 50 countries as a result of establishment of two new regional offices.
- Over 6,000—Emergency outbreaks investigated by CDC-trained disease detectives since 2005 globally.
- Over 20,000—Graduates of CDC of CDC's Field Epidemiology Training Program, creating a global workforce of field epidemiologists in over 80 countries. These partnerships build national, regional, and local capabilities to stop diseases at the source.
- 2800—The Global Rapid Response Team (GRRT) has supported more than 2,800 deployments culminating in over 158,869 person-days from 2015 to December 2022.
- Over 660—GRRT enables CDC experts to deploy within 72 hours, responding to both international and domestic emergencies, with a standing roster of over 662 CDC responders trained and ready to respond to public health emergencies.
- 11.75 million—People receiving life-saving antiretroviral treatment (ART) from CDC in FY 2021, which is more than half of the 18.96 million people receiving ART support through PEPFAR.<sup>1</sup>
- 9.77 million—CDC supported TB screenings, through PEPFAR, for people living with HIV in 2021. TB is the number one killer of people living with HIV.<sup>1</sup>
- Over 2,000—Travelers who become infected with malaria abroad and then travel to the U.S. each year. In 2021, CDC responded to 2,918 clinical inquiries via its 24/7 hotline to assist healthcare providers with the prevention, diagnosis, and treatment of parasitic diseases, almost half of which were regarding malaria.
- 418—Polio cases from January 1, 2022 - July 27, 2022. Polio incidence has dropped more than 99% since the launch of global polio eradication efforts in 1988. Only Afghanistan and Pakistan remain endemic for polio, and CDC works closely with them to implement program improvements to achieve final eradication.<sup>5</sup>
- 31.7 million—Deaths prevented globally since 2000 due to measles vaccination.<sup>4</sup>

<sup>1</sup> HIV & Tuberculosis. (2021, July 27). From <https://www.cdc.gov/globalhivtb/index.html>

<sup>2</sup> Mace KE, Lucchi NW, Tan KR. Malaria Surveillance – United States, 2017. *MMWR Surveill Summ* 2021;70(no. SS-2):1-35. Retrieved 11 August 2021. <http://dx.doi.org/10.15585/mmwr.ss7002a1>

<sup>3</sup> This Week. (n.d.). Retrieved 12 August 2021., From <http://polioeradication.org/polio-today/polio-now/this-week/>

<sup>4</sup> Dixon MG, Ferrari M, Antoni S, et al. Progress Toward Regional Measles Elimination — Worldwide, 2000–2020. *MMWR Morb Mortal Wkly Rep* 2021;70:1563–1569. DOI: <http://dx.doi.org/10.15585/mmwr.mm7045a1>

<sup>5</sup>This Week. (n.d.). Retrieved 29 July 2022., from <http://polioeradication.org/polio-today/polio-now/this-week/>

\*Unless otherwise noted, all information and calculations are from CDC program data.

<b>Global Health Funding History</b>	
Fiscal Year	Dollars (in millions)
FY 2020	\$570.843
FY 2021 Final	\$591.024
FY 2022 Final	\$646.843
FY 2023 Enacted	\$692.843
FY 2024 President’s Budget	\$764.843

## Program Accomplishments

CDC invests in forward-thinking global infectious disease surveillance, monitoring, and health workforce resources to prevent the next outbreak and intercept emerging health threats early. More than 21,000 disease detectives in more than 80 countries have been trained by CDC's Field Epidemiology Training Program (FETP), and over 12,000 laboratorians in over 20 countries across the Americas, Africa, Asia, and the Middle East have received training from CDC's Global Laboratory Leadership Programme (GLLP), which form the backbone of their countries' frontline health workforce to detect and control health threats at their source before they spread beyond national borders. Additionally, CDC has assisted and supported more than 30 countries, Africa CDC, and 5 Centers of Excellence (COEs) in Colombia, Mozambique, Nigeria, Ukraine, and Zambia to develop their own National Public Health Institute (NPHI) to serve as a public health resource for their neighboring countries and amplify CDC's investments in the region. Finally, CDC leveraged funding to rapidly extinguish high-consequence outbreaks around the globe and manage multiple concurrent complex public health crises. CDC's Global Rapid Response Team (GRRT) of more than 662 highly trained, multidisciplinary staff worked in parallel to deploy to numerous outbreaks across the globe—from Ebola in the Democratic Republic of the Congo, Zika in the Caribbean, to the COVID-19 pandemic within the United States.

CDC vaccinated 15 million children with polio vaccine in Asia, Africa, and Europe in 2022. CDC's polio eradication activities resulted in decreasing the genetic diversity of wild poliovirus type 1 – moving from 8 clusters to 2 clusters in the last three years. Additionally, CDC's investments in the development and deployment of the novel type 2 oral polio vaccine led to over 500 million doses of vaccine delivered, along with a decrease of new emergences over the last two years.

CDC experts work in more than 45 countries and regions around the globe to support evidence-based treatment and prevention interventions, tailored to meet the distinct needs of diverse communities. One of these countries is Botswana, where an estimated 21% of adults live with HIV – one of the highest HIV prevalence rates worldwide. For over two decades, CDC has worked in close partnership with the Botswana Ministry of Health to support evidence-based HIV prevention, treatment, and strategic information programs to maximize the country's response to the HIV epidemic. In July 2022, CDC and the Botswana Government announced the results of a jointly conducted impact survey showing that Botswana was the first country in the world to reach the UNAIDS 95–95–95 targets, a key milestone that demonstrates achieving HIV epidemic control is possible. In Botswana, and as a result of its close partnership with CDC, 95% of adults with HIV knew their HIV status, 98% of those adults who knew their status were on HIV treatment, and 98% of those on treatment were virally suppressed.

With appropriated funding, CDC is building regional capacity in Africa to detect increases in *An. stephensi*-transmitted malaria and helping countries across Africa prepare for *An. stephensi* invasion. CDC has also developed next-generation sequencing techniques which help detect emerging resistance to insecticides and provide clues to countering it. CDC leverages additional funding to lead evaluations of new mosquito control interventions such as spatial repellents and attractive targeted sugar baits; vaccines such as RTS,S which may help reduce the incidence of malaria in fully vaccinated children by 40%; and a new monoclonal antibody that could prevent malaria in children for a full year. CDC experts also develop new diagnostics needed to control and eliminate neglected tropical diseases (NTDs) globally, including testing in the lab, conducting field evaluations, and training countries to use the diagnostics. For example, CDC staff recently trained the national public health reference laboratory in Ghana on using a new onchocerciasis test.

## Global HIV/AIDS Budget Request

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### Budget Request

CDC's FY 2024 budget request of **\$128,921,000** for Global HIV/AIDS is level with the FY 2023 enacted level. In FY 2024, CDC will continue to lead program implementation, and will utilize CDC's scientific and technical experts at headquarters and in country. CDC will continue to use evidence-based approaches to concentrate efforts on countries, populations, and programs where resources can have the greatest public health impact. CDC will also optimize staffing and technical resources to address the highest-priority global HIV needs, while ensuring that ongoing activities and optimization efforts are consistent with overall PEPFAR priorities. Driving impact, CDC will continue to provide a data-driven public health response through:

- Implementing focused case finding and social network strategies by testing family members and partners of those receiving HIV services and expanding access to HIV self-testing.
- Increasing the use of testing for surveillance that informs programs about trends in new HIV infections in the population.
- Improving health information systems that consolidate data from multiple sources enabling more robust analysis to inform decision making.
- Monitoring sentinel events and detecting transmission cycles through case-based surveillance.
- Improving access to optimized ART regimens, particularly for children where optimized treatment options lag behind adults; these optimized ART regimens for both adults and children are more effective, easier to take, have fewer side effects, and have lower risk for the development of HIV drug resistance.

CDC will continue to focus on achieving HIV epidemic control in countries, including through:

- Providing technical support to ensure access to proven methods to decrease HIV incidence, including HIV treatment, pre-exposure prophylaxis (PrEP), and voluntary medical male circumcision.
- Expanding viral load testing services, which measure the effectiveness of HIV treatment for individuals.
- Supporting countries' efforts to deliver essential health services more effectively and efficiently.
- Treating persons upon a positive diagnosis, which saves lives and prevents new infections.

CDC will also continue to enhance countries' abilities to effectively manage HIV co-morbidities, especially tuberculosis (TB), which remains the number one cause of death for those living with HIV. CDC will ensure people living with HIV have access to preventative TB treatment that significantly reduces the chance they will become ill with TB, including through:

- Strengthening TB surveillance and laboratory systems in PEPFAR countries.
- Supporting the screening of people living with HIV for TB.
- Leading PEPFAR-supported efforts to provide access to TB preventive treatment for those who screen negative for TB.
- Initiating immediate care for those who screen positive.

CDC is at the forefront of the fight against HIV in more than 45 countries, working against the health inequities that drive the global HIV epidemic. CDC ensures that rapidly evolving science and data directly inform global HIV programs to accomplish the efficient, cost-effective, and high-impact public health results. As a leading implementer of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), CDC supports international HIV programs and public health systems in Africa, Asia, Central America, and the Caribbean. CDC efforts advance health equity globally by promoting evidence-based interventions in the geographic areas and populations with the greatest HIV burden, prioritizing people most affected by HIV who have limited access to critical public

health services and resources. CDC’s work in PEPFAR addresses inequities in key population (KP) service delivery by strengthening organizational capacity through training and mentoring, awarding Capacity Service Agreement contracts to KP-led organizations, and training and launching social enterprise grants for men who have sex with men (MSM), sex workers, and transgender organizations.

In 2022, more than 38 million people are living with HIV (PLHIV).<sup>226</sup> Importantly, while the numbers of new HIV infections and AIDS-related deaths in some countries were decreasing, challenges persist in ensuring KPs, children and adolescents have access to life-saving HIV health services. In addition, the COVID-19 pandemic caused disruptions in HIV testing, prevention, care, and treatment services and added to the challenges of addressing the needs of PLHIV. Through PEPFAR, CDC’s investments and improved efficiencies in global HIV treatment and prevention addressed these new challenges and preventing the loss of momentum in decreasing infections and deaths.

**CDC’S ROLE IN THE FIGHT AGAINST HIV GLOBALLY**

 <p><b>LONG-STANDING RELATIONSHIP WITH MINISTRIES OF HEALTH</b></p> <p>CDC’s peer-to-peer relationships with Ministries of Health allows us to be a significant driver of U.S. progress to fight HIV worldwide.</p>	 <p><b>GLOBAL REACH AND LOCAL IMPACT</b></p> <p>CDC’s reach allows us to use global insights to strengthen domestic programs and apply lessons learned in the U.S. to help accelerate global progress.</p>	 <p><b>SCIENTIFIC EXPERTISE AND TECHNICAL KNOW-HOW</b></p> <p>CDC’s Division of Global HIV &amp; TB is home to one of the largest cadres of public health experts – including epidemiologists, health economists, and medical officers – devoted to the prevention and treatment of HIV.</p>	 <p><b>A GLOBAL LEADER IN LAB STRENGTHENING</b></p> <p>Strengthening laboratory systems around the globe is a hallmark of CDC’s work.</p>
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Although CDC receives less than half of PEPFAR’s overall funding, CDC’s global efforts account for well over half of key outcomes based on data through September 2021, including 60% of people who received a positive HIV test result, 62% of all people on treatment through PEPFAR, 61% of people living with HIV screened in care for tuberculosis, 63% of antiretroviral therapy (ART) to prevent mother-to-child transmission, and 51% of voluntary medical male circumcisions.<sup>3</sup> CDC’s unique expertise and leadership role in PEPFAR advances global health equity through ART and large-scale implementation of combination prevention programs. Together, CDC efforts save millions of lives, prevent new infections, improve health, and protect families and communities. CDC global HIV and TB efforts also enhance the core public health capabilities that partner countries need to protect their populations from other disease threats. CDC leverages public health science expertise and long-standing partnerships with ministries of health, community organizations, and other global partners to establish country-driven programs and systems that focus on ensuring evidence-based decision making with high-quality HIV monitoring and evaluation. In collaboration with U.S. universities, CDC supports population-based HIV household surveys in PEPFAR supported countries. These surveys directly measure reductions in new HIV infections and high rates of viral load suppression. Together, the results affirm that CDC’s global efforts to control HIV are effective and efficient and some countries are nearing or have already achieved HIV epidemic control.

COVID-19-related disruptions to HIV public health program implementation and service delivery continue to pose challenges that may lead to an increase in HIV and non-HIV related deaths and illness through the disruption of ART. To mitigate this threat, CDC continues to support the expansion of differentiated service delivery models to ensure continued access to treatment and prevention services, while reducing the opportunity for exposure to COVID-19 in crowded clinic settings. These approaches also reduce the burden on fragile health care systems by addressing numerous public health challenges, including COVID-19. Program

<sup>226</sup> CDC Global HIV and TB. Updated December 21, 2021 <https://www.cdc.gov/globalhivtb/index.html>

adaptations, like the acceleration of differentiated services delivery models tailored country-by-country, have led to increased access to HIV prevention and treatment services.

### **Data-Driven Implementation for Rapid Program Improvement**

CDC supports and uses different types of data to implement evidence-based interventions and adapt to specific country and regional HIV epidemic features in real-time. For example, in collaboration with partner countries and U.S. university partners, CDC has been leading HIV focused population-based household surveys, sometimes referred to as population-based HIV impact assessments (PHIA). These surveys provide critical data and analyses used to monitor performance, measure impact, and inform and drive rapid programmatic changes.

Encouragingly, PHIA's conducted in several countries measured significant reductions in new HIV infections and high rates of viral load suppression at a national level. Since 2015, population-based household surveys have been completed in 17 countries, while many of CDC's country partners have been trained on basic laboratory and epidemiological techniques. In FY 2024, CDC will continue to use PHIA data to inform rapid change in programs, including intensive case findings, immediate initiation of treatment for men and young women, and improved treatment initiation and retention of children and youth living with HIV.

### **Innovative Technology and Essential Public Health Platforms Expertise**

Laboratories and surveillance are essential elements of public health platforms and are critical for effective response to HIV and other public health threats. CDC researchers and partners continue to develop innovative and cost-effective tools, including detecting and studying drug resistance and developing new HIV testing technologies that can be used domestically and globally.

CDC developed and implemented Dried Tube Specimen technology, used globally to develop safe, cost-efficient proficiency testing materials to assure the quality and accuracy of rapid HIV tests. CDC also developed a low-cost laboratory-based assay that distinguishes between recent and long-term HIV infections and is used to estimate HIV-1 incidence. CDC has also developed a low-cost rapid test that can be used along with HIV viral load testing to detect recent infections for HIV recent infection surveillance. HIV recent infection surveillance is a clinic-based surveillance that detects a unique signal of new infections not available through other surveillance data, and can be used to better understand and serve populations as part of the public health response.

CDC's disease surveillance activities drive decision-making for PEPFAR program implementation. In FY 2024, CDC will continue to support sustainable country-driven disease surveillance systems and personnel alongside the quality diagnostic services and enhanced public health laboratories needed for success in every PEPFAR country. Quality data provide critical information about behavior, incidence, prevalence, and mortality in a population's pre- and post- HIV diagnosis. In addition, CDC's global HIV platforms will continue to serve as a foundation for many countries' response to emerging pandemics, including expertise in epidemiology, surveillance, contact tracing, and laboratory.

## Global Tuberculosis Budget Request

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Despite being preventable and curable, tuberculosis (TB) remains one of the world’s deadliest infectious diseases. Globally, nearly 2 billion people – a quarter of the world’s population, have latent TB infection. Without treatment, people with latent TB infection can develop TB disease. Approximately 10 million people – including 1.1 million children, become sick with TB disease each year. Drug-resistant TB is a further threat to public health systems worldwide, with nearly half a million people becoming ill with TB disease that does not respond to first-line treatments, and only one in three people accessing treatment at all. The COVID-19 pandemic has had a substantial effect on TB disease trends – in 2021, 1.6 million people lost their lives due to TB, recording the second consecutive year-on-year increase since 2005. Modeling data shows that the COVID-19 pandemic could result in an additional 6.3 million TB cases and 1.4 million TB deaths by 2025, highlighting the potentially devastating effects of the pandemic on global TB programs.<sup>227</sup> CDC approaches TB prevention with a coordinated and focused global response, as global reduction in TB is key to controlling and reducing rates here in the United States.

CDC is on the frontlines in more than 25 countries working with partner governments to prevent, diagnose, and treat TB. CDC supports the sustainability of country efforts to eliminate the disease. CDC leverages our country offices, decades of experience and trusted relationships with partner governments, PEPFAR platforms, and our unique expertise to develop and catalyze innovative, data-driven approaches. CDC focuses on strengthening national TB control programs and strategies in priority countries that have high rates of TB, drug-resistant TB, and TB/HIV co-infection and strengthen surveillance and laboratory systems critical for program success. CDC’s global TB approach closely aligns with the Sustainable Development Goal for TB, the WHO End TB Strategy, and PEPFAR’s continued efforts to accelerate HIV/AIDS epidemic control. CDC equips partner countries with the tools and innovative approaches needed to address the underlying drivers of the epidemic, including missed TB cases, HIV/TB co-infection, and drug-resistant TB.

### Budget Request

CDC’s FY 2024 budget request of **\$11,722,000** for Global Tuberculosis is level with the FY 2023 enacted level.

These funds will focus on infection, prevention, and control programs in Global TB priority countries, expansion of TB preventive treatment access, and providing technical assistance to countries adopting integrated screening and testing for respiratory diseases (e.g., COVID-19, TB, and others). In FY 2024, CDC’s Global TB activities will prioritize the following actions:

- **Prevent:** implement effective TB infection control practices in health facilities and congregate settings and expand these programs into other clinical settings; scale-up preventive treatment for people living with HIV, young children, and those with compromised immune systems.
- **Diagnose:** improve case-finding approaches, particularly for high-risk populations, and improve diagnostic algorithms to optimize use of new and existing diagnostics.
- **Treat:** optimize TB and multidrug-resistant TB (MDR-TB) treatment regimens; improve linkage to care and treatment, especially among people living with HIV; improve treatment adherence and cure rates among patients with drug-resistant TB; and assess costs to patients and barriers to care.
- **Sustain:** scale-up laboratory external quality assurance systems and training; strengthen surveillance systems to improve TB and MDR-TB burden estimates and track program performance; train ministry of health and national TB program staff on critical technical and programmatic areas, including infection control, diagnostics and quality assurance, data management, and operational research.

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<sup>227</sup> [Global Tuberculosis Report 2022 \(who.int\)](https://www.who.int/publications/m/item/global-tuberculosis-report-2022)

In FY 2024, CDC's TB Reference Lab will:

- Continue to provide expert technical assistance to TB Programs and TB Reference Laboratories in the United States and in partner countries around the world.
- Maintain efficiency of diagnostic networks and the accuracy of laboratory and point of care TB testing.
- Provide in-house quality assurance testing.
- Categorize TB drug resistance patterns.

As the COVID-19 pandemic continues to strain and impact TB control programs in partner countries around the world, CDC and partners are working to ensure that essential TB services are prioritized, and that access to TB care is assured and effectively maintained. CDC efforts include:

- Encouraging robust implementation of infection prevention and control measures to ensure the safety of health care workers and patients accessing care at health facilities.
- Ensuring that respiratory infection control measures for COVID-19 are integrated into TB health facilities, including triage and early identification and separation of symptomatic patients, fast tracking or expedited service, implementation of droplet and contact precautions, frequent handwashing, environmental engineering controls and the use of personal protective equipment.
- Supporting bidirectional TB and COVID-19 screening and TB diagnosis during the pandemic, as TB and COVID-19 share many clinical features.
- Implementing innovative adaptations to TB services to sustain and expand key TB treatment and prevention activities, such as multi-month dispensing of medicines and digital and mobile health solutions.

## Global Immunization Budget Request

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CDC's leadership and global immunization expertise dates to 1966, when the agency established the CDC Smallpox Eradication Program. Over forty years have passed since the world eradicated smallpox, and CDC's global immunization efforts now include the control, elimination, and eradication of vaccine preventable diseases (VPDs), as well as strengthening immunization programs worldwide. CDC works to detect, respond, and prevent importations of VPDs into the United States. These efforts protect Americans from VPDs that have been eliminated or no longer circulate in the United States

Global VPD programs face enormous challenges in reaching all individuals and being prepared to respond to large outbreaks. As a result of the COVID-19 pandemic, 25 million children missed basic vaccines through routine immunization service in 2021, 6 million more than before the start of the pandemic. Eighteen million children missed any vaccination in 2021, erasing nearly 30 years of progress in childhood immunizations globally. Almost all zero-dose children—those never vaccinated with a first dose of diphtheria, tetanus, and pertussis (DTP)-containing vaccine—live in low- and middle-income countries, especially in the African and South-East Asian regions.<sup>228</sup> All of these factors increase the risk of importations of VPD to the United States. The COVID-19 pandemic and global vaccine roll-out highlights how vaccination efforts continue to be hampered by weak VPD programs and national vaccine safety monitoring and reporting systems; low levels of vaccine confidence in some populations; variable VPD surveillance and response capacity; poor supply chain management; the absence of adult vaccine programs; and, competing priorities that pull staff into outbreak response and away from essential immunization activities.

Through the polio eradication effort, an estimated 20 million cases of paralysis have been averted.<sup>229</sup> As of December 6, 2022, 30 cases of wild poliovirus were reported in 2022, compared to 6 cases on the same date in 2021. In 2021, Malawi detected an importation of wild poliovirus from Pakistan that has since spread to Mozambique, reminding the world that polio anywhere is a threat everywhere. CDC remains committed to polio eradication, measles elimination, and mitigation of the damage to immunization systems. Current CDC supported global VPD programs are fundamental components of the US Government's Initiative for Global Vaccine Access (Global VAX), and the Global Health Security Agenda's Immunization Action Package. CDC's activities also aim to strengthen country-owned processes and systems to enable the detection and prevention of further pandemic threats as they emerge.

### Budget Request

CDC's FY 2024 budget request of **\$240,000,000** for Global Immunization is **\$10,000,000** above the FY 2023 enacted level. With additional funding, CDC will build on current investments in measles and VPD elimination activities and provide extensive support to up to five countries with the highest level of need, with more targeted investments in additional countries to identify best practices and address urgent issues and needs.

### **Polio Eradication**

CDC is the U.S. lead for scientific and technical efforts in polio eradication. CDC's leadership and guidance in accountability, environmental surveillance, and scientific and programmatic implementation has contributed substantially to the more than 99 percent decline in reported global polio cases.<sup>230</sup> However, to achieve polio

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<sup>228</sup> Immunization Coverage, Geneva: World Health Organization; 2022. Retrieved July 29, 2022 <https://www.who.int/news-room/fact-sheets/detail/immunization-coverage>

<sup>229</sup> Global Polio Eradication Initiative Investment Case 2022-2026: Investing in the promise of a polio-free world, Geneva: World Health Organization; 2022. Retrieved on July 29, 2022 <https://polioeradication.org/wp-content/uploads/2022/04/GPEI-Investment-Case-2022-2026-Web-EN.pdf>.

<sup>230</sup> Our Progress Against Polio. 19 March 2021. Retrieved December 2, 2021. <https://www.cdc.gov/polio/progress/index.htm>.

eradication, CDC and its partners must minimize the risk of poliovirus reintroduction to areas declared polio-free through ongoing surveillance.

Since 2019, 26 countries in the WHO African Region have detected vaccine-derived poliovirus (VDPV). Despite large scale responses in 2020, the spread and circulation continued in 21 countries in the region in 2021. CDC analysis showed that if there had been an aggressive response to the risk of emergent vaccine-derived poliovirus in Northern Nigeria in 2015, over two-thirds of circulating vaccine-derived polio virus 2 (cVDPV2) cases and outbreaks in 19 other countries between 2016 and 2022 would have been prevented. Africa's outbreaks are related to four consequential geographies (Nigeria/Lake Chad basin, DRC, Yemen, and Somalia) based on historical transmission of cVDPV2 and account for 85% of all cVDPV2 detections.

In FY 2024, CDC will continue to support CDC's efforts as part of the Global Polio Eradication Initiative, using proven interventions to move towards global eradication to ensure Americans are no longer at risk from this crippling and sometimes deadly disease. CDC will prioritize activities to stop circulation of wild polio virus in Afghanistan and Pakistan and stop the imported wild polio outbreak in southern Africa. CDC will focus on ending ongoing vaccine-derived poliovirus outbreaks across Africa, and improve disease surveillance capabilities through quality assurance, diagnostic confirmation, and genomic sequencing of samples obtained worldwide. CDC will conduct limited environmental surveillance of polio viruses to ensure prompt detection and to prevent potential outbreaks of paralytic polio disease, while maintaining basic capacity to verify interruption of virus circulation in high-risk countries.

### **Measles and other Vaccine-preventable diseases**

Emerging global health challenges, such as the COVID-19 pandemic, reinforce the value of vaccination in preventing disease and the need for a flexible and sustainable approach to build immunization program capacity to save lives, prevent disability, and protect livelihoods of Americans and populations around the globe. The CDC Global Immunization Strategic Framework 2021–2030 (CDC GISF 2021–2030), launched in July 2021, will guide CDC's investments in building global immunization program capacity and scientific expertise to advance the control and elimination of VPDs over the next ten years.<sup>231</sup>

As a result of the pandemic, coverage of a first dose of a measles-containing vaccine (MCV-1) dropped to 81% in 2021, the lowest level since 2008. This left 24.7 million children vulnerable and a further 14.7 million children received only a first dose of the two-dose regime through regular public health services.<sup>232</sup> Measles was selected as a key immunization indicator for Global Health Security because outbreaks are an early sign that immunizations systems are critically weak, and improved surveillance is critical. Measles serves as an early warning of how much COVID-19 has degraded immunization systems globally. As of July 2022, CDC and WHO have observed a 79% increase globally in measles cases with over 73 million children at risk of measles due to missed vaccinations.

CDC global immunization experts help improve vaccination coverage by working to strengthen immunization systems, identify under- and un-immunized populations, remove barriers to immunization. CDC works through global immunization partnerships to reach populations at risk. CDC's global immunization programs are designed to help rebuild and create vaccine delivery systems that reach the world's most difficult-to-reach populations and close systematic gaps that leave over 20 million un- and under-vaccinated each year.

<sup>231</sup> Global Immunization Strategy Framework 2021-2030 <https://www.cdc.gov/globalhealth/immunization/docs/global-immunization-framework-508.pdf>

<sup>232</sup> Immunization Coverage, Geneva: World Health Organization; 2022. Retrieved July 29, 2022 <https://www.who.int/news-room/factsheets/detail/immunization-coverage>

In FY 2024, with additional funding for Measles and Other Vaccine Preventable Diseases, CDC will focus on mitigating the damage done to essential public health systems by the pandemic and closing gaps that have long existed. CDC will build on current investments in measles elimination by targeting up to five countries with extensive investment and a limited number of additional countries with increased investment. Countries with the highest level of need will be prioritized. These efforts will be complemented by targeted, smaller investments to identify best practices and address urgent issues and needs.

- **Reducing Number of Zero-Dose Children and Increasing Vaccination Across the Life-Course:** Strong immunization programs that focus on delivering immunizations (including COVID-19) to the populations with greatest need, decrease the number of individuals who have not received the appropriate immunizations for their age. CDC will work with governments and communities to define vulnerable and underserved populations, identify methods to increase access to vaccine services, generate evidence to improve immunization service delivery for vulnerable populations, strengthen immunization policy, and utilize supplementary immunization activities when warranted to quickly increase population immunity to epidemic-prone pathogens.
- **Preventing and Mitigating Large and Disruptive Outbreaks and Exportations of Vaccine Preventable Diseases:** Strong immunization programs and immunizations data are key to quickly detect and respond to outbreaks of both new diseases like COVID-19 and epidemic prone diseases to avert regional epidemics or global pandemics. CDC will support the strengthening of VPD eradication, elimination and/or control activities while building capacity for epidemiological and risk assessments to prevent and mitigate outbreaks.
- **Achieving and Maintaining Global and Regional Immunization Goals and Essential Immunization Service Targets:** A strong immunization system that can detect and respond to outbreak-prone vaccine-preventable diseases like measles, rubella, polio, cholera, yellow fever, Ebola, typhoid, and COVID-19 and deliver vaccines or other countermeasures when required is essential to preventing the next pandemic. CDC will work with governments and partners to strengthen the physical and human capacity of their essential immunization programs, develop focused through intensified efforts to better communicate with populations who require services and to prevent diseases that can be prevented through vaccination.

In FY 2024, CDC will strategically target its core VPD activities, such as measles and rubella elimination, to countries with the highest disease burden. CDC will continue to support scientific, technical, and operational experts at CDC headquarters and in the field to respond to VPD outbreaks.

## **Parasitic Diseases and Malaria Budget Request**

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Parasitic diseases lead to devastating health effects for hundreds of millions of people around the world and in the United States. They can be transmitted directly from other people, by insects or animals, from blood or tissue donation, congenitally, or through contaminated food or water. CDC works to protect Americans and the global community from parasitic diseases with three main priorities: reduce parasitic disease related death, illness, and disability in the United States; reduce the global burden of malaria; and control and eliminate targeted neglected tropical diseases (NTDs).

CDC is a global leader in malaria and parasitic disease research and technical innovation. CDC engages in strategic and applied research to accelerate global control and elimination of these deadly diseases. CDC's laboratories, including the insectary and parasitic disease laboratory, provide the critical scientific leadership required to achieve these priorities.

### **Budget Request**

CDC's FY 2024 budget request of **\$31,000,000** for Parasitic Diseases and Malaria is **\$2,000,000** above the FY 2023 enacted level.

In FY 2024, CDC will continue to respond to emergent needs, and the activities of its parasitic disease laboratories, that support the prevention, diagnosis, and treatment of parasitic diseases in the U.S. and globally. CDC will maintain and modernize its reference diagnostic capacity needed by states and countries, U.S. government agencies, and other public health partners. CDC will continue to invest in new testing platforms and next generation sequencing to improve parasitic disease diagnosis and aid in outbreak response. In FY 2024, to address the emerging threat of an invasive mosquito, CDC will provide scientific leadership and expertise to enhance vector detection and rapid response and monitor malaria epidemiological trends. To help close the gap on parasitic disease-related health inequities in the U.S., including to help reverse the rising trend in malaria infections in the U.S., CDC will strengthen prevention as well as diagnosis and treatment of parasitic diseases in the U.S., starting with malaria and Chagas disease. CDC will also continue to support American Samoa efforts to eliminate lymphatic filariasis.

### **Parasitic Diseases in the United States**

CDC diagnoses, supports treatment, and prevents sickness and death in the United States and globally from parasitic infections. CDC maintains the national parasitic disease reference laboratories, including an online, interactive diagnostic resource, and coordinates national surveillance for notifiable parasitic diseases, including malaria. Because diagnostic capacity for parasitic diseases at the state level has declined, states and counties rely on these CDC systems to monitor, accurately diagnose, and treat parasitic diseases. CDC also provides 24/7 expert consultation to health departments, physicians, hospitals, and laboratories and releases life-saving medications not available commercially.

Due to complex parasite biology and scarcity of adequate laboratory tools, cyclosporiasis has been a challenging foodborne illness to detect and investigate. In 2022, 1,129 cases were reported in the United States from 33 states. CDC has developed a novel genotyping tool that is supporting epidemiological investigations conducted by CDC, FDA, and state public health departments. In 2022, CDC used this tool to clarify relationships among clusters of cyclosporiasis illnesses in three states, and this information helped inform FDA's traceback investigations. FDA was able to trace clusters in two different states because of a genetic link, even though the suspect foods in each cluster were different. Ultimately, they turned out to be produced by the same company. Additionally, FDA expanded its traceback investigation of a cluster in another state to include two additional healthcare facilities because of a genetic link among patients at those other facilities, even though no suspect

food could be identified from those secondary clusters. These clusters would not have been linked by traditional epidemiologic methods alone.

As part of ongoing efforts to address health disparities in the United States, CDC has been working with academic institutions in Texas, Massachusetts, and New York to increase health care provider awareness of Chagas disease, a parasitic disease that can result in severe heart and gastrointestinal illness. The CDC-funded institutions have become national resources for information. Since 2015, they have provided over 70 lectures in key locations where providers are likely to have contact with patients at risk for Chagas disease, developed multiple educational activities reaching over 9,200 health care providers, and formed the U.S. Chagas Task Force with over 145 active members representing 75 institutions. In FY 2024, CDC plans to build on these activities in California, New York City, and Massachusetts to expand Chagas disease screening and treatment access through creation of toolkits for screening programs and provider education efforts, including the Extension for Community Healthcare Outcomes (ECHO) model to set up platforms for clinician collaboration and case-based learning.

Intestinal worm infections were once prevalent throughout the southeastern United States, disproportionately impacting communities with poor sanitation and limited access to health care. With resources provided by Congress specifically to address soil transmitted helminth (STH) infections, CDC is working with academic institutions in Alabama and Mississippi to conduct surveillance to identify any ongoing transmission, identify risk factors, and provide linkages to source remediation and capacity building at the state and local level. CDC and partners are completing laboratory testing of collected samples and analyzing information to inform appropriate public health interventions.

**Global Malaria**

**MALARIA IS A PLANE RIDE AWAY**

**MALARIA IS DEADLY**

- Present in 85 countries outside U.S.\*
- Spread by mosquitoes
- Causes fever
- Preventable with medication



**MALARIA IS PREVENTABLE**



**95%** of U.S. residents with malaria did not take all prevention medication

**CLINICIANS, ASK ABOUT TRAVEL AND ASSESS RISK**

- Prescribe prevention medication
- Advise patients to:
  - Take ALL doses
  - Seek care for fever
  - Prevent mosquito bites
- Know how to access IV artesunate



2018 data from the integration of all NMSS and NNDSS cases, CDC reference laboratory reports, and CDC clinical consultations as published in Mace et al. MMWR 2022  
 \* <https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021>

[bit.ly/ss7108a1](https://bit.ly/ss7108a1)

SEPTEMBER 2, 2022

**MMWR**

Figure 1 Malaria is a Plane Ride Away

CDC is a global leader in preventing and treating malaria, providing scientific expertise to endemic countries and partners to improve surveillance, laboratory systems, and management of malaria cases. CDC jointly implements the President's Malaria Initiative (PMI) with USAID in 24 African focus countries and three programs in the Greater Mekong sub-region. CDC plays a unique role within PMI by providing technical leadership and recommendations to the U.S. Global Malaria Coordinator on surveillance, monitoring and evaluation, and operational research, which drives progress toward malaria elimination. A critical asset to CDC's public health mission is its gold standard global reference insectary, which helps support scientists across the country and world, where often this capacity does not exist.

PMI's service delivery platform has been essential to continuing to address malaria during the COVID-19 pandemic across communities in partner countries. In 2021, CDC and PMI campaign activities (e.g., insecticide-treated bed nets, indoor residual spraying, and seasonal malaria chemoprevention) occurred with minimal delays despite the challenges presented due to the COVID-19 pandemic. Program adaptations such as delivering nets and medicines door-to-door to avoid crowded collection points were key in helping to maintain services. CDC leveraged its broad agency expertise in infection prevention and control and COVID-19 mitigation to ensure continuity of routine malaria services. This includes supporting infection prevention and control in health facilities and helping to set up safe fever screening in communities.

Despite recent progress, malaria remains endemic in many regions and countries, and progress has stalled. The parasites that cause malaria and the mosquitoes that carry them continue to evolve and are showing signs of resistance to current treatment drugs or insecticides, making it more difficult and costly to successfully prevent and treat the disease. CDC has partnered with regional public health entomology networks to improve how regions around the world effectively prevent, detect, and respond to vector-borne disease threats. By strengthening entomological laboratory capacity, network partners will be able to detect emerging threats more rapidly and mitigate their impacts.

In 2021, the World Health Organization (WHO) formally recommended the RTS,S malaria vaccine for broader use among children in sub-Saharan Africa and in other regions with moderate to high malaria transmission.<sup>233</sup> This is the first time ever that a vaccine has been recommended to combat malaria. CDC was instrumental in the development and evaluation of the RTS,S vaccine including most recently with the RTS,S pilot introduction in Kenya. CDC continues to lead the pilot evaluation in Kenya including looking at fractional dosing regimens which, if proven equally efficacious, would allow vaccine supply to extend to reach more children. When coupled with other malaria interventions, the new vaccine carries the potential to significantly reduce illness and death from malaria in Africa. Layering use of the vaccine and insecticide treated bed nets results in over 90% of children benefiting from at least one intervention. Due to the initial limited availability of the RTS,S vaccine, there is a need to strategically deploy this vaccine to the specific targeted settings and populations where it is most appropriate and cost effective. In FY 2024, CDC will continue to focus on providing technical support to countries and implement malaria vaccines, where applicable, and strengthen partner countries' immunization systems broadly.

An invasive malaria mosquito vector in Africa, *Anopheles stephensi*, is an emerging international threat that could reverse progress toward global malaria elimination. It is estimated that as this species continues to spread throughout Africa, it could put an additional 126 million people in urban areas at risk of malaria each year. CDC is supporting activities in Djibouti to increase community-based larval source management to control *A. stephensi*, helping countries across West Africa prepare for *A. stephensi* invasion, carrying out molecular analyses of *A. stephensi* from Ethiopia, and building epidemiological capacity to detect increases in *A. stephensi*.

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<sup>233</sup> WHO recommends groundbreaking malaria vaccine for children at risk (October 2021). <https://www.who.int/news/item/06-10-2021-who-recommends-groundbreaking-malaria-vaccine-for-children-at-risk>

transmitted malaria in Ethiopia. However, more will need to be done to respond to this threat. In 2022, Nigeria became the latest country—and the first one outside the Horn of Africa—to confirm the presence of *A. stephensi* mosquitoes. CDC, together with PMI's *Anopheles stephensi* Task Force, is supporting local health officials to monitor for and respond to this emerging threat.

CDC will leverage partnerships and its long-standing malaria field station in western Kenya in FY 2024 to evaluate novel vector control strategies on malaria transmission, including spatial repellents, attractive targeted sugar baits, and the impact of housing modifications (such as closing eaves and screening windows).

### **Neglected Tropical Diseases**

Neglected tropical diseases (NTDs) are a group of diseases, including several parasitic diseases, that cause substantial illness for more than one billion people globally. NTDs impair physical and cognitive development, make it difficult for individuals to farm or earn a living and limit productivity in the workplace.

CDC works to reduce the substantial illnesses and disability caused by NTDs, focusing on those that can be controlled through mass drug administration (MDA) or other low-cost interventions. These include lymphatic filariasis (LF or elephantiasis), onchocerciasis (river blindness), blinding trachoma, schistosomiasis, three soil-transmitted helminths (intestinal worms), and Guinea worm disease.

CDC confirmed 15 human cases of Guinea worm disease in 2021—the lowest number in history—down from about 3.5 million cases in 1986.<sup>234</sup> Cases were identified in four countries: Chad, Ethiopia, Mali, and South Sudan. With only 15 human cases of Guinea worm disease reported in 2021, the goal of eradicating this painful parasitic disease has never been closer. To accelerate elimination, CDC collaborates with partners to create better tests to detect Guinea worm disease in humans and animals (e.g., dogs) more quickly as rapid case detection and containment are crucial to preventing spread. As the global reference lab for the Guinea Worm Eradication Program, CDC is relied upon to confirm if any suspected cases are positive for the *D. medinensis* parasite that causes Guinea worm.

Lymphatic filariasis (LF) is a debilitating NTD that has been targeted for elimination as a public health problem globally. CDC, together with the CDC Foundation and the Pacific Island Health Officers Association, has been providing financial and technical assistance to the Department of Health in American Samoa (ASDOH), the last known area within the U.S. where LF still poses a risk. ASDOH aims to eliminate the disease using the WHO-recommended triple drug therapy which CDC helped evaluate for safety and effectiveness. With CDC support, treatment coverage in the first two rounds of mass drug administration (MDA) surpassed the WHO recommended target. A third round of MDA was carried out September 2021–January 2022, and an impact assessment was conducted in 2022 with technical assistance from CDC. Results of the survey will determine if MDA can be safely stopped. American Samoa is on track to achieve validation of elimination of LF. CDC also continues to support the elimination of LF in Haiti, one of the remaining areas in the Americas with ongoing transmission.

CDC, alongside its partners, recently developed new evidence-based tools for strategies to improve the lives of those who suffer from the painful and debilitating effects of LF. This updated guidance, published in 2021, gives countries with endemic LF a toolkit for carrying out morbidity management and disability prevention programs that will positively impact the lives of those who suffer from long-term consequences of LF.<sup>235</sup>

<sup>234</sup> [Guinea Worm Wrap-Up #284 \(cartercenter.org\)](#)

<sup>235</sup> [Lymphatic filariasis: managing morbidity and preventing disability: an aide-mémoire for national programme managers, 2nd ed. \(who.int\)](#)

As NTD programs move closer to control and elimination targets outlined in the WHO NTD Roadmap (2021-2030), diagnostic tools that can support programs' needs are critical for success.<sup>236</sup> Limitations of existing diagnostic tools undermine confidence that program endpoints are being achieved, threatening measurement of progress toward the 2030 goals. CDC staff will continue to address the diagnostic gap for NTDs in FY 2024, serving on WHO's Diagnostic Technical Advisory Group disease-specific subgroups and developing target product profiles for LF, schistosomiasis, and onchocerciasis.

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<sup>236</sup> [Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030 \(who.int\)](#)

## Global Public Health Protection Budget Request

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In today's closely connected world, a pathogen can spread from a remote area to major cities on all continents in as little as 36 hours. From Ebola and Zika, to influenza and SARS-CoV-2, to mpox and cholera, countries around the world face risks from dangerous pathogens every day.

CDC is the U.S. government's lead for infectious disease outbreak response, implementing global health security activities aimed at keeping Americans safe at home and abroad. CDC advances the U.S. government's Global Health Security Strategy, National Biodefense Strategy, and the National Strategy for COVID-19 Response and Pandemic Preparedness by helping countries strengthen disease surveillance capacities, improve laboratory capabilities, train and deploy disease detectives, and manage public health emergencies.

During the COVID-19 pandemic, CDC leaned heavily on the previous groundwork laid by our decades-long investments that helped establish and build up regional and local emergency response capacity infrastructure. The results of these sustained and forward-thinking investments enabled CDC to respond quickly and efficiently to help countries identify variant strains of SARS-CoV-2, enhance infection control measures, and conduct contact tracing.

CDC's numerous collaborations with partners around the world have helped to substantially bolster global health security. Every outbreak, including influenza, cholera, mpox, and Ebola, has provided CDC the opportunity to learn, advance, and grow the collaborative fight against disease threats. In FY 2024, CDC will continue to leverage these concerted efforts to strengthen global health security and prepare for the next global health crisis.

With its unique scientific and public health expertise, CDC strengthens public health security systems globally at the regional and country levels by closing gaps in global preparedness and addressing global health security challenges to keep Americans safe. CDC leverages networks across ministries of health, academic partners, the private sector, non-governmental organizations, and faith-based and community-based organizations to support this work. CDC subject matter experts monitor disease outbreaks around the clock and prepare rapid response teams to deploy anytime, anywhere in case of emergencies or other public health threats.

Leveraging the lessons learned through COVID-19, CDC is building the knowledge base about the spread and impact of respiratory viruses like SARS-CoV-2 and Respiratory Syncytial Virus (RSV), and amplifying partners' core capacity to stop diseases like these before they spread. CDC provides support to its global partners on sentinel surveillance systems for SARS-CoV-2 and RSV and assists country and regional partners with developing and refining event-based surveillance for respiratory pathogens. CDC also partners with countries to learn more about the burden of SARS-CoV-2, and to conduct global vaccine effectiveness studies, including studies of MERS and the maternal RSV vaccine, as well as studies of the burden and impact of RSV. Finally, CDC is building long-term, effective genomic surveillance for SARS-CoV-2, to ensure the ability of partners to rapidly identify novel viral variants.

CDC's deep subject matter expertise, and long-standing partnerships with countries built through our disease specific portfolio, aids our partners with building their core public health capacities in workforce, emergency response, surveillance, laboratory, and data analytics, ultimately protecting Americans from the devastating impacts of disease outbreaks. Some examples of how CDC's disease specific work builds core capacities to ultimately keep Americans safe include:

- CDC's work in the high incidence meningitis belt in Africa allows the United States and other countries to track strain emergence, and to develop and maintain effective countermeasures for use in the United

States and around the world. Effective countermeasures for this and other bacterial respiratory diseases strengthen domestic and global health security.

- CDC’s collaboration with numerous international partners on surveillance and control of non-malaria vector-borne diseases including dengue, yellow fever, Zika, Japanese encephalitis and plague, assists these partners with developing the capacity for early detection and laboratory strengthening, to evaluate novel vector control strategies and expand vaccination coverage.
- CDC’s partnership with countries to protect the global food supply and prevent the spread of diseases caused by contaminated food, water, or animal contact (enteric diseases) through PulseNet International, a surveillance network of 80 countries for enteric diseases builds laboratory and surveillance capacity and reinforces data sharing across regional laboratory networks. This pathogen-agnostic technology can also be adapted for new pathogens.
- CDC’s Global Action in Healthcare Network (GAIHN) improves country laboratory and IPC capacity and builds off COVID capacity building investments to further strengthen workforce and laboratory (including whole genome sequencing) capacity.
- CDC’s Foodborne, WASH, and fungal disease programs advance international health regulations (IHR) core capacities across foodborne and enteric disease, and ensure that laboratory systems and surveillance are in place to detect pathogens prior to importation to the U.S. These programs also build capacity for sequencing and detection of antimicrobial resistance bacteria (AMR), and can be applied to other pathogens.
- CDC’s work to strengthen global laboratory networks for vaccine-preventable diseases, make much needed reagents available to partner countries for diagnostic testing to support outbreak response and strengthens and modernizes global laboratory capacity for viral diseases, bioinformatics, data visualization capacity, and global data sharing efforts.

CDC’s One Health approach to address shared health threats in partner countries strengthens global health security through coordination, joint priorities for addressing zoonoses, surveillance, advancing laboratory capacity the human-animal-environment interface, implementing a multisectoral, coordinated response, and training a multisectoral workforce. A critical priority of CDC’s investments in global health security is to strengthen disease detection and response capabilities in other countries and regions. For example, the West Africa Ebola epidemic of 2014-2016 actually began in Guinea in December 2013 but was left unidentified until March 2014—by which time it had spread to several other countries. In comparison, during the 2021 Guinea Ebola outbreak, the first case was identified in 15 days—a time short enough to contain the epidemic to a single district.

A key factor contributing to this change was use of global health security funds to support development of the Field Epidemiology Training Program (FETP). Through this program, CDC worked with the Guinea Ministry of Health to build a stronger public health workforce in Guinea and improve overall capacity within the country. To date, the program has trained 179 Guineans—175 of whom remain in key surveillance positions within the Guinean Ministry of Health. These FETP graduates are currently working to combat the COVID-19 pandemic by using their expertise in outbreak management and response, and leading surveillance and contact tracing efforts.

In addition to FETP development, CDC supported Guinea in making significant improvements in laboratory testing capacity, emergency management, data surveillance and analysis, treatment centers, and vaccination

plans—all of which contributed to enabling Guinea to mount a more effective response during the 2021 Ebola outbreak.

### Budget Request

CDC's FY 2024 budget request **\$353,200,000** for Global Public Health Protection is **\$60,000,000** above the FY 2023 enacted level.

Recent and ongoing global health emergencies like COVID-19, Ebola, mpox, cholera, and outbreaks of vaccine preventable diseases like yellow fever, Japanese encephalitis, polio and measles, highlight the existence of critical vulnerabilities that persist in our public health systems globally, and the serious threats that Americans and people all over the world will continue to face. CDC has been a leader in global health security because of the agency's long-standing partnerships at the country and regional levels, and trusted expertise in the foundations of a strong public health system—disease surveillance, laboratory systems, workforce development, and emergency management and response capacities. CDC's scientific expertise and use of data driven approaches help countries identify vulnerabilities in their public health systems, and CDC works hand-in-hand with country partners to develop local and regional capacities to propose priority actions to close those gaps.

CDC's targeted investments in global health security and global immunization programs were leveraged in the COVID-19 outbreak. The public health workforce trained by CDC was, and continues to be, the frontline of the COVID-19 response globally. This workforce is an integral part of country-level emergency response, from the systems and mechanisms ensuring vaccinations are made accessible to the population, to directly administering vaccinations into arms. For example, with the pending approval of dengue vaccines, CDC has developed a Global Dengue Control Plan for roll out and implementation in FY 2024 with its partners. CDC continues to request an increase in its annual funds to sustain work to address deficiencies created by the pandemic, improve preparedness, expand control methods and modernize public health capacities globally.

### **Strategic Regional Presence**

In FY 2020, CDC began building a tangible CDC presence in strategic regions across the globe that allows CDC to meet its core global health mission of protecting Americans by responding more rapidly, efficiently, and effectively wherever disease threats occur. CDC established four regional platforms in Eastern Europe/Central Asia (EECA), Middle East/North Africa Asia (MENA), South America (SAM), and Southeast Asia (SEAS).

In FY 2022, CDC finalized locations for two additional regional offices, the Central America and the Caribbean (CAC) regional platform based in Panama City, Panama, and the East Asia and the Pacific (EASP) regional office based in Tokyo, Japan. In FY 2023 and FY 2024, CDC will identify up to two additional regional platforms, respectively. The regional offices fill critical gaps in CDC's geographic reach and provide additional, flexible technical resources and regional health organization representation.

With continued support in FY 2024, CDC will continue to leverage resources through regional platforms and engage with countries with shared priorities to collaborate with their public health capacities. CDC will focus targeted support where efforts are most needed such as deploying staff and other resources to a country within a region to address outbreaks, providing technical assistance, and advancing key programmatic objectives. CDC will continue to provide technical expertise to countries around the globe to expand and improve disease surveillance, laboratory systems, workforce development, and emergency management and response capacities—the core public health capabilities needed to stop diseases before they spread.

In FY 2021, CDC began conducting regional capacity and health threat assessments and developing 3-to-5-year programmatic strategies for the initial four regional platforms. In FY 2023, these four regions will continue to

implement these strategic plans, focusing on broad-based capacities of public health surveillance and data use, laboratory capacity, workforce development, and emergency preparedness/outbreak response, and on more targeted capacities in infection prevention and control, antimicrobial resistance, vaccine preparedness and disease prevention, border health, vector control, and humanitarian health, among other activities and special investigations.

The regional platforms support global health security activities in 110 countries worldwide—including 50 new countries receiving CDC direct support as a result of establishing the new regional offices in 2022. Cross-country cooperation supported by CDC’s regional platforms can strengthen the core public health capacities of several countries. Regional platforms can also support emerging crises and help to support response and recovery efforts when physical presence within a country is not possible.

For example, the CDC Eastern Europe/Central Asia Regional office based in Tbilisi, Georgia, has leveraged its assets across the region, including those previously based in Ukraine. This office served as a landing pad for CDC staff from Ukraine who were displaced by the conflict, allowing them to continue supporting emergency response efforts and recovery planning through their persevering partnership with Ukrainian Public Health Officials. The regional office quickly rostered CDC staff from across the region to have a list of “just-in-time” deployers with the technical expertise, linguistic capability, and cultural competency to support the Ukrainian response and recovery.

The Eastern Europe/Central Asia Regional Office also worked with partners to improve data collection to inform response, stabilization and recovery efforts by the Government of Ukraine and its partners, provide essential trainings for responders, and support public health systems recovery for health departments, laboratories, and hospitals. The regional office focused on assessment and quality assurance and on IPC/surveillance for hospital-acquired infections and antimicrobial resistance during the surging incidence of traumatic wounds.

## Global Disease Detection and Emergency Response

CDC's Global Disease Detection and Emergency Response mission has evolved over the past 15 years, supporting countries in building their public health capacity to prevent, detect, and respond to disease threats at their source. CDC's Global Disease Detection and Emergency Response activities, which are a part of CDC's global health security portfolio, are coordinated within CDC's overall global health strategy.

In addition to responding to COVID-19, CDC is actively engaged in containing several other ongoing outbreaks including mpox, Marburg, polio, cholera, measles, and influenza. CDC partners with countries to build on existing investments in global health security and help countries make progress toward achieving core health security capabilities with the following activities:

- Establishing workforce training programs to build the next generation of disease detectives and expand this successful program regionally to address disease threats that cross borders.
- Supporting countries in investigating and responding to public health events and emergencies.
- Strengthening laboratory testing capacity, surveillance systems, and reporting, at both the regional and country level.
- As part of CDC's data modernization priorities, developing centralized national databases that include linked suspect case reports and laboratory data for notifiable diseases and syndromes.
- Leveraging CDC leadership and staff in regional and country offices. They are the public health experts, including disease detectives, who keep the United States informed of and engaged in both early detection and containment of overseas health threats.
- Implementing a One Health approach to improve coordination among human, animal, environmental health, and other relevant disciplines and sectors to prevent, detect, and respond to zoonotic diseases and other One Health threats.
- Drawing awareness to the intersection of noncommunicable diseases and infectious diseases globally by highlighting lessons learned from the COVID-19 pandemic.

In FY 2024, CDC will enhance and complement ongoing efforts to strengthen global health security, with continued focus on strengthening the core public health capacities of surveillance, laboratory, workforce development, and emergency response. CDC will expand global health security in-country staffing based on gaps identified through the COVID-19 pandemic, effectively building upon existing CDC presence. CDC's on-the-ground experience, expertise, and relationships with partners will help support countries in identifying emerging threats and addressing health security gaps more rapidly.

Internationally-standardized tools such as the Joint External Evaluations (JEEs), provide objective, multinational review teams that analyze and report transparent data on countries' public health strengths and gaps and help inform strategic investments to fulfill critical challenges. Since 2016, 116 countries have completed JEEs. CDC experts have participated in over 60 percent of these JEE missions to date. CDC partnered with WHO to lead the JEE 3<sup>rd</sup> edition, which will improve implementation of assessment findings that guide country plans and activities conducted by CDC and other partners, and guide allocation of resources for health security. This cycle of assessment and improvement helps ensure that the investments of the U.S. government promote ownership and engender strategic domestic investments by partner countries.

*National Public Health Institutes, Field Epidemiology Training Program, Global Laboratory Leadership Programme, and Global Emergency Response*

In support of CDC's health equity efforts to ensure everyone has an opportunity to be as healthy as possible, CDC supports three interconnected programs to help countries build and strengthen their public health systems. Global emergencies like COVID-19 reinforce the value of preparedness, coordination, and a strong global public

health emergency response capability. CDC’s National Public Health Institutes (NPHI) and Field Epidemiology Training Program (FETP) are critical assets that allow CDC to respond quickly and effectively to outbreaks and public health crises.

CDC also supports global emergency response through its Global Emergency Alert and Response Service (GEARS), which is a CDC headquarters system that augments and broadens disease detection and response capabilities through the Global Rapid Response Team (GRRT) and Global Disease Detection Operation Center (GDDOC). In addition, CDC provides support for emergency management training and emergency operations center structures through the Public Health Emergency Management program (PHEM).

CDC provides intensive technical assistance to countries in developing **NPHIs**, which serve as the focal point of a country’s public health activities. CDC has worked with more than 25 countries since 2011 to develop NPHIs that consolidate public health functions at the national level, bring data and expertise together, and coordinate public health surveillance, laboratory, workforce development, and emergency response. NPHIs sustain CDC’s investment in global health security by creating permanent in-country institutions for the implementation of public health coordination.



In 2021, CDC began supporting NPHI centers of excellence (COEs) in Colombia, Mozambique, Nigeria, Ukraine, and Zambia – countries with longstanding relationships with CDC. Their NPHIs have expertise that can provide their neighbors with technical assistance to rapidly intervene and stop diseases from spreading, respond to public health emergencies, and support the growth and development of neighboring NPHIs. For example, Colombia’s Instituto Nacional de Salud is a leader in emergency preparedness and response, laboratory capacity, workforce development, and improved use of data for public health action.

Many NPHIs are taking the lead to coordinate public health preparedness and response activities for COVID-19. For example, CDC’s NPHI program has worked with the Pakistani Government to support Pakistan’s National Institute of Health (NIH) in emergency response and preparedness capacity building. Pakistan’s NPHI is now leading the nation’s COVID-19 response. It supports testing and emergency operations; formulates case definitions and standard operating procedures; prepares health advisories and guidelines; and compiles and disseminates daily COVID-19 situation reports. Pakistan’s NPHI also directed resources to the country’s COVID-

19 response by providing personal protective equipment, laboratory supplies, test kits, and infection prevention and control training to provincial COVID-19 laboratories. These efforts have enhanced the country's COVID-19 diagnostic capabilities and strengthened health care worker safety. CDC will:

- Initiate NPHI development in new countries, with a goal of up to four new countries.
- Improve linkages among the functions within an NPHI (e.g., surveillance, laboratory, public health workforce, emergency management) in up to two countries through enhanced support and additional technical assistance and planning.
- Strengthen two NPHI Centers of Excellence to enable high-functioning NPHIs to become resources for peer countries, amplifying the impact of CDC's investments.

**FETP** offers a country-based program modeled after CDC's Epidemic Intelligence Service. FETP trains a global workforce of field epidemiologists, or disease detectives by combining classroom training with extended periods of on-the-job experience and mentoring. Epidemiologists graduating from the FETP program become the "boots on the ground" who identify and contain infectious disease threats at the source. Since 2005, CDC-trained disease detectives have investigated more than 6,050 emergency outbreaks including the Ebola outbreak in the Democratic Republic of Congo (DRC), an acute encephalitis outbreak in India, and a HIV/AIDS outbreak in Pakistan.

A 2021 survey of FETP programs documented that 100 percent of all responding FETP programs reported that their trainees, graduates, and staff have been supporting their country's COVID-19 response efforts. Activities include data collection, response, and investigation of COVID-19 cases and contacts. FETP graduates and residents provide COVID-19 screening at borders, risk communication, vaccination, and response coordination at country, regional, and district levels; illustrating how the capacity built through this program has been directly applied to combatting COVID-19 globally.

The first **Global Laboratory Leadership Programme (GLLP)** trainings, bolstering laboratory leadership in 20 countries in 2021-2022, resulted from a Global Health Security Agenda collaboration with CDC and five international partners.<sup>237</sup> The two-year training is being initiated with 119 laboratorians; this is the first laboratory leadership program to emphasize a multisectoral, One Health approach.

**GEARS** provides a crucial role in national security with CDC experts in Atlanta on duty 24/7 monitoring 30-40 potential public health threats each day. This informs CDC's response system of experts who are poised for rapid deployment, when needed.

Since its establishment in 2015, the **GRRT** has led CDC's response to global outbreaks. From 2015-2022, GRRT has provided deployers for 2,876 deployments culminating with over 158,800 person-days responding to public health threats. With a roster of over 662 CDC responders, GRRT enables CDC experts to deploy within 72 hours, responding to both international and domestic emergencies.

GRRT is a critical asset in CDC's ability to respond to concurrent and ongoing outbreaks, from Ebola in Guinea to the earthquake response in Haiti. For example, CDC leveraged GRRT's strong partnerships and incorporated these global health assets into the agency's domestic COVID-19 response. More than 260 surge staff from CDC's Global Rapid Response Team deployed to support five countries, 41 states, the CDC Emergency Operations Center, and six other locations (including the Commonwealth of the Northern Mariana Islands and the U.S. Virgin Islands), quickly pivoting from global focus to domestic COVID-19 response needs.

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<sup>237</sup> [Global Laboratory Leadership Programme \(GLLP\) | Division of Global Health Protection | Global Health | CDC](#)

CDC's **Global Emergency Management and Capacity Development (GEMCD)** program helps countries establish and maintain their own public health emergency management programs by training leaders and staff in Ministries of Health and National Public Health Institutes to identify, prepare for, mitigate, respond to, and recover from public health threats. This training and technical assistance ensures that countries have trained people, established plans and operating procedures, and physical facilities (e.g., Public Health Emergency Operations Centers) to successfully coordinate and manage their own emergency response activities. Besides helping countries identify and plan for specific threats, CDC helps public health leaders and staff understand how to operate within incident management structures and emergency operations centers. Much of this work is conducted within countries at national and sub-national levels.

Additionally, since 2013, CDC has hosted its **Public Health Emergency Management (PHEM)** Fellowship program in Atlanta to train international public health leaders from ministries of health on public health emergency management principles. Fellows in this program establish connections with peers in their own cohort and with other PHEM Fellowship alumni, both within and across different regions. To date, 177 fellows from 45 countries have graduated, many of whom assumed key roles in public health leadership and became champions for establishing emergency management programs within their countries. These investments in workforce training help countries build capacity to quickly address disease threats. Building on FY 2023 accomplishments in Southeast Asia and in the Democratic Republic of the Congo, in FY 2024, the GEMCD program will continue to work with CDC's Regional and Country Offices to scale and adapt the PHEM Fellowship model into immersive trainings on public health emergency management principles that are tailored to specific audiences and needs identified by the countries. As the demand for emergency management technical assistance continues to grow, CDC is evaluating the suitability of establishing Regional Emergency Management Technical Advisors within CDC's Regional Offices to provide technical assistance and establish related partnerships within each region.

## **CDC Implementation of Foreign Assistance Transparency and Accountability Act (FATAA)**

CDC's activities funded by PEPFAR comply with the Foreign Assistance Transparency and Accountability Act (FATAA) of 2016.

To ensure consistency across U.S. government programs that implement PEPFAR and to ensure compliance with monitoring and evaluation directives, including FATAA, the PEPFAR Country Operational Plan Guidance, and PEPFAR Monitoring, Evaluation and Reporting Guidance, and the PEPFAR Evaluation Standards of Practice provide a robust monitoring and evaluation framework. CDC's PEPFAR program works with the Office of the Global AIDS Coordinator to implement this framework and guidance for activities implemented by CDC.

FATAA's requirements for monitoring and evaluation are operationalized at CDC as part of the annual program planning and reporting processes and business cycles, which solicit and monitor CDC funded programs through cooperative agreements with extramural implementing partners. Evaluation and Performance Monitoring Plans are required on every cooperative agreement to ensure alignment and compliance with PEPFAR requirements and FATAA.

## PUBLIC HEALTH PREPAREDNESS AND RESPONSE

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Budget Authority	\$862.200	\$883.200	\$943.200	+\$60.000
PHSSEF – HHS Protect	N/A	\$21.900	\$0	(\$21.900)
<b>Total Request<sup>1</sup></b>	<b>\$862.200</b>	<b>\$905.100</b>	<b>\$943.200</b>	<b>+\$38.100</b>
FTEs	479	502	512	10
-- Domestic Preparedness <sup>2</sup>	\$862.200	\$905.100	\$943.200	+\$38.100

<sup>1</sup> The FY 2023 Report Language provides \$21.9 million from the Public Health and Social Services Emergency Fund (PHSSEF) for HHS Protect, to support activities implemented by CDC. The FY 2024 Budget proposes to shift funding for HHS Protect/Response Ready Enterprise Data Integration platform (RREDI) to CDC.

<sup>2</sup> FY 2022 and FY 2023 Enacted Levels are comparably adjusted to reflect proposed realignment of Public Health Emergency Preparedness Cooperative Agreement; Academic Centers for PH Preparedness; and All Other CDC Preparedness into a new Domestic Preparedness PPA.

**Enabling Legislation Citation:** PHS A § 301, PHS A § 307, PHS A § 310, PHS A § 311, PHS A § 319, PHS A § 319C-1, PHS A § 319D, PHS A § 319F, PHS A § 319F-2\*, PHS A § 319G\*, PHS A § 351A\*, PHS A § 361, PHS A § 2801, PHS A § 2812

**Enabling Legislation Status:** Permanent Indefinite

**Authorization of Appropriations for FY 2022:** Indefinite; Expired/Expiring noted with\*

**Allocation Methods:** Direct, Federal Intramural, Cooperative Agreements, including Formula Grants/Cooperative Agreements; and Contracts

Program Description

The United States must be prepared to face emerging health threats in today’s highly connected world; the COVID-19 pandemic underscored this fact and highlighted the essential need for sustained investment in our domestic public health preparedness and response infrastructure. Local disease outbreaks can quickly escalate into regional, national, and global emergencies. Over the last two decades, we have seen H1N1, Ebola, Zika, SARS-CoV-1 (SARS), SARS-CoV-2 (COVID-19), and mpox. These emerging infectious diseases and localized disease outbreaks spread rapidly and affect populations around the world. CDC’s preparedness efforts rely on its expertise in laboratory science, public health surveillance, epidemiology, and public health emergency management, in addition to its longstanding relationships with federal, state, tribal, local, territorial, and global partners. While the U.S. public health preparedness infrastructure has expanded over the last 20 years, COVID-19’s devastating effects demonstrate the clear need to strengthen America’s investment in preparedness and response.

Budget Request

CDC’s FY 2024 budget request of **\$943,200,000** for Domestic Preparedness is **\$38,100,000** above the FY 2023 enacted level. This request includes a proposal to support the Response Ready Information Platform (RRIP), the next generation of HHS Protect, following the transfer of management of the platform from HHS to CDC. The budget request also sustains FY 2023 enacted funding levels for the Public Health Emergency Preparedness (PHEP) cooperative agreement program, Academic Centers for Public Health Preparedness, and CDC Preparedness and Response Capability.

The FY 2024 budget request of **\$60,000,000** for Response Ready Enterprise Data Integration platform (RREDI), formally HHS Protect, would pay for the software to support a common operating picture and central hub to collect, integrate, and share public health data in near-real time across federal agencies and with state, local, territorial, and tribal partners. The platform will provide speed and efficiency to translate public health data into actionable information, create interactive, geolocation-based data visualizations, and inform resource allocation and medical supply chain decisions.

In FY 2024, CDC will continue to support state, tribal, local, and territorial health departments to ensure their capability, flexibility, and adaptability in the face of naturally occurring or intentional events causing public health emergencies. CDC will continue to fund all 50 states, four large metropolitan areas, and eight U.S. territories and freely associated states through the PHEP cooperative agreement. The request carries forward the budget realignment proposal to establish a single Domestic Preparedness Program, which will create greater flexibility in CDC's ability to respond to public health emergencies and execute resources.

### Health Equity in Preparedness and Response

The COVID-19 pandemic has presented unprecedented challenges and exacerbated longstanding systemic health inequities that put disadvantaged groups at increased risk for COVID-19 illness and death.<sup>238</sup> The United States will inevitably face another global pandemic, which is why CDC works to ensure that the principles of health equity and best practices are at the core of all emergency responses. This is essential not only to ending the COVID-19 pandemic, but also to saving lives during the next public health threat, expected or unexpected.

In alignment with the agency's CORE priorities (Cultivate comprehensive health equity science, Optimize interventions, Reinforce and expand robust partnerships, Enhance capacity and workforce engagements), CDC will partner with state, tribal, local, and territorial (STLT) governments and academia to implement the following seven health equity science, intervention, partnership, and workforce related goals:

- Assess cross-cutting agency activities for populations disproportionately affected in emergencies and incorporate health equity considerations into internal and external funding opportunity guidance, prioritizing frameworks, and performance monitoring to improve health equity in future public health emergencies and disasters.
- Build an equitable and inclusive infrastructure (workforce, systems, resources, and culture) to reflect and support the diverse communities across the nation that we serve in both preparedness and response settings.
- Improve and support the maintenance of a health equity lens in agency-led emergency response by building health equity roles into the CDC All-Hazards plan, by expanding the health equity focus in response-related workforce training, and by coordinating deployment missions to serve specific populations of focus.
- Conduct research and promote research projects that intersect health equity science with Public Health Emergency Preparedness and Response (PHEPR) research, including research projects on specific populations at a disadvantage during an emergency response such as people with disabilities, racial/ethnic minorities, and people in rural/frontier areas.
- Advance health equity for populations at risk of disproportional impact during a public health emergency by including additional health equity considerations in upcoming PHEP guidance, providing technical assistance, and further advancing public health preparedness health equity goals in the 2024-2029 PHEP notice of funding opportunity.

<sup>238</sup> Introduction to COVID-19 Racial and Ethnic Health Disparities, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities/index.html>.

- Develop and deliver an advanced epidemiology training initiative to select members of the current public health workforce in all participating United States- affiliated Pacific Island jurisdictions (U.S. territories and freely associated states) to strengthen regional emergency preparedness and response capacity, jurisdictional surveillance capabilities, and data-driven health interventions and services for populations across the United States- affiliated Pacific Islands (USAPI).

CDC continues to improve health equity for public health preparedness. CDC's Public Health Emergency Preparedness and Response Capabilities: National Standards for State, Local, Tribal, and Territorial Public Health<sup>239</sup> provides a national public health framework consisting of 15 capabilities for prioritizing, organizing, and assessing preparedness. This framework supports cross-cutting preparedness and response priorities, including those related to protecting disproportionately affected populations during public health emergencies. PHEP recipients use the capability standards to advance their public health preparedness and response capacity and their ability to support community partners focused on addressing populations with access and functional needs. PHEP funding, planning, training, and exercising have encouraged partner engagement and fostered strong stakeholder relationships that have led to better outreach, education, and message translations for specific communities. As a result, jurisdictions had established teams and dedicated personnel ready to support populations with access and functional needs or those disproportionately impacted during COVID-19; other jurisdictions stood up just-in-time support staff. Additionally, many jurisdictions modified established plans and adapted existing materials for targeted messaging specific to the COVID-19 pandemic response.

Jurisdictions also leveraged existing resources like HHS emPOWER program to identify populations at increased risk for adverse outcomes, pinpoint needs, and direct resources. These efforts successfully supported those with access and functional needs or populations that were disproportionately impacted by providing targeted:

- Procurement and distribution of PPE
- COVID-19 testing sites (including mobile testing)
- Establishment of isolation and sheltering sites
- Food distribution and transportation
- Vaccination sites, administration, and education

To further ensure inclusivity, CDC will include criteria for strengthening protection of disproportionately affected persons during public health emergencies and related health equity measurements in the 2024-2029 PHEP notice of funding opportunity.

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<sup>239</sup> [https://www.cdc.gov/cpr/readiness/00\\_docs/CDC\\_PreparednesResponseCapabilities\\_October2018\\_Final\\_508.pdf](https://www.cdc.gov/cpr/readiness/00_docs/CDC_PreparednesResponseCapabilities_October2018_Final_508.pdf)

## PUBLIC HEALTH PREPAREDNESS AND RESPONSE

### BY THE NUMBERS<sup>1</sup>

- 62—Health departments from 50 states, four large metropolitan areas, and eight U.S. territories and freely associated states participate in CDC’s Public Health Emergency Preparedness (PHEP) program.
- 68 —Graduates achieving advanced epidemiology degrees through the Strengthen Health Interventions in the Pacific (SHIP) Field Epidemiology Training Program.
- 1,702—Federal, state, territorial, and local emergency responders trained in 2021 through virtual and in-person trainings on topics including distribution and dispensing of medical countermeasures (MCM) and risk communications for hurricanes and other natural disasters.
- 2,300—staff partly or wholly supported by PHEP funding in the 62 PHEP jurisdictions; PHEP recipients funded an additional 3,559 personnel in local health departments.
- 59—CDC Career Epidemiologists and Preparedness Field Assignees are embedded in 46 PHEP jurisdictions, including 34 states, four localities, and eight U.S. territories and freely associated states, assisting jurisdictions with their public health preparedness planning, training, and response efforts and providing targeted technical assistance.
- 5,210+—CDC leaders and responders cumulatively trained (807 unique responders in FY 2022) through the Responder Education and Leadership Academy (RELAy) to be ready on day one of their COVID-19 response assignments.
- 84—CDC response leaders have graduated from the Incident Manager Training and Development Program, increasing the cadre of CDC response leaders by 483%.
- 25%—FY 2022 increase in call volume and 85% in email volume to CDC’s Emergency Operations Center (EOC) watch desk, 1,786% increase in Low Level International Health Regulations (LL IHR) reports, and 1,045% increase in Do Not Board (DNB) notifications in FY 2022 compared to pre-pandemic FY 2019 due to ongoing COVID-19, mpox, and other responses.
- 1.9 million—CDC Responder days worked by over 8,000 personnel to support the COVID-19 response within the Incident Management Structure in CDC’s EOC.
- 85,000—CDC responder days worked to support the 2022 Multi-National mpox response within CDC’s Incident Management System structure, by a total of over 1,200 personnel.
- 468—Permits issued through CDC’s regulatory authority (42 CFR Part 71.54), using the electronic eIPP system for facilities importing SARS-CoV-2 into the United States as of January 1, 2022.
- 399,610 —Reports disseminated through the Epi-X system from January 2020 through Dec 6, 2022 (58,795 in CY 2022).

<sup>1</sup>All information and calculations are from CDC program data.

<b>Public Health Preparedness and Response Funding History</b>	
Fiscal Year	Dollars (in millions)
FY 2020	\$827.200
FY 2021	\$839.614
FY 2022 Final	\$862.200
FY 2023 Enacted	\$905.100
FY 2024 President’s Budget	\$943.200

## **Domestic Preparedness Programs**

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### **Public Health Emergency Preparedness Cooperative Agreement (PHEP)**

#### Program Description

In 2022, CDC commemorated the 20<sup>th</sup> anniversary of the Public Health Emergency Preparedness (PHEP) program, which was established after the terrorist and subsequent anthrax attacks of September 2001. CDC established the PHEP cooperative agreement program to develop nationwide expertise in public health emergency preparedness and response, including capabilities to distribute and dispense medical countermeasures, establishing laboratory and epidemiologic systems that enable early threat detection and identification, and training and supporting public health professionals for day-to-day health department operations and surge capacity.

Two decades later, the PHEP program continues to support CDC's core capabilities, particularly in the areas of developing a diverse public health workforce, supporting state-of-the-art laboratories, and sustaining domestic preparedness.

#### Program Accomplishments

During FY 2023, CDC provided additional support for state, local, and territorial (SLT) preparedness in several areas. The increase supported key local health department activities through additional funding for more than 400 local planning jurisdictions that are part of the PHEP program's Cities Readiness Initiative (CRI). Additional funds also advanced SLT workforce development initiatives, including continued implementation of the nationwide Career Epidemiology Field Officer (CEFO) program and expansion of the Preparedness Field Assignee (PFA) program. Funds also supported a dedicated PHEP health equity officer to improve STLT preparedness planning for populations disproportionately impacted by public health emergencies or incidents. The additional funding also enabled CDC to help modernize critical preparedness infrastructure with the replacement of obsolete chemical laboratory testing equipment for 10 testing laboratories in the Laboratory Response Network for Chemical Threats (LRN-C).

#### **Local Support to Enhance Operational Readiness**

CDC provides funding to PHEP recipients to strengthen their medical countermeasure planning and response capabilities. These include providing monthly virtual and in-person training; fulfilling requests for specialized support and assistance; and demonstrating how community planners can use tools such as the COVID-19 surge tool, pandemic influenza electronic exercise tool, and the vaccine targeting checklist in their planning and exercising.

Since 2004, the PHEP program's Cities Readiness Initiative (CRI) has enabled state and local jurisdictions to respond to public health emergencies that require life-saving medicines and medical supplies. Specifically, CRI funds 72 cities and metropolitan areas (at least one in every state) to develop, test, and maintain plans to quickly receive medical countermeasures (MCM) from the Strategic National Stockpile and distribute and dispense them to local communities. In FY 2022, PHEP recipients received approximately \$71.6 million in CRI funding, a \$7 million (11%) increase over FY 2021 funding. The funding supports all-hazards planning for MCM distribution and dispensing, as well as preparedness activities across all 15 Public Health Emergency Preparedness and Response Capabilities: National Standards for State, Local, Tribal, and Territorial Public Health within these large metropolitan areas.

CDC's Operational Readiness Review (ORR) is a rigorous, evidence-based assessment that evaluates a jurisdiction's planning capabilities and operational capacity across the 15 preparedness and response capabilities. CDC subject matter experts help PHEP recipients improve their planning and operations in support of national health security efforts by:

- Providing targeted technical assistance to address gaps
- Offering state, local, and territorial planners ongoing training
- Supporting innovative partnerships and other strategies to identify staffing solutions for operations
- Developing guidance and training to clarify annual and five-year exercise requirements and to test all-hazards preparedness and response plans more effectively

In the 2021-2022 PHEP budget period, the ORR focused on the PHEP COVID-19 response, which provided a unique opportunity to evaluate PHEP COVID-19 response activities across the nation. CDC is currently analyzing recipient data, which should be available in early 2023.

### **Preparedness Planning Improves COVID-19 Response**

Before 9/11, state, local, and territorial (SLT) health departments lacked critical systems for launching an emergency response while conducting routine public health activities. Today, with the support of CDC's PHEP program, SLT health departments have built and maintained public health emergency management systems and established community partnerships they leveraged to support their COVID-19 response activities.

PHEP funding has been instrumental in building electronic laboratory, surveillance, and data-sharing systems; developing and testing all-hazards response plans; establishing a nationwide system for rapid delivery of lifesaving interventions; building emergency operations centers and risk communications systems; buying personal protective equipment (PPE) for responders and SLT caches of medical countermeasures; and funding communications and information technology equipment and maintenance support. Additionally, CDC preparedness staff, supported by the PHEP program and embedded in SLT jurisdictions, have played critical roles in the COVID-19 pandemic response, in many cases helping to lead the response in their jurisdictions.

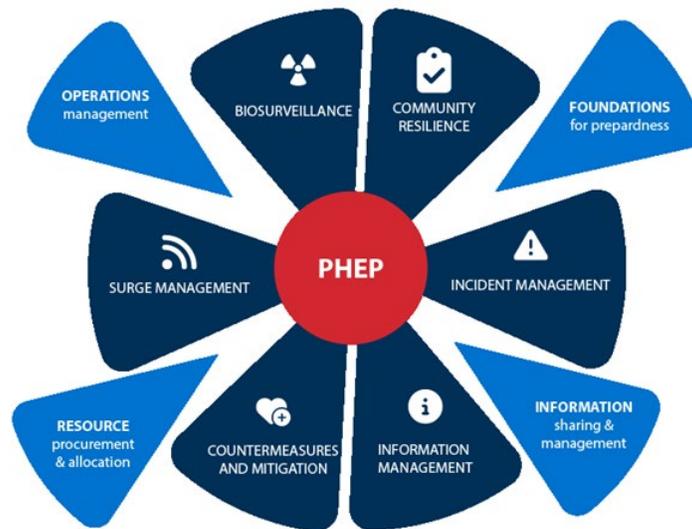
Dedicated CDC preparedness funding over the past two decades built many of the basic capacities and capabilities that accelerated the SLT public health response to the COVID-19 pandemic. PHEP-funded infrastructure and CDC guidance provided through PHEP enabled PHEP recipients to stand up emergency operations functions, provide medical-grade warehousing capability and logistics, coordinate mass vaccination and cold chain management functions, and rapidly distribute millions of laboratory test kits, PPE, and other critical supplies needed to respond to the COVID-19 pandemic.

Recipients credited CDC's [Public Health Emergency Preparedness and Response Capabilities: National Standards for State, Local, Tribal, and Territorial Public Health](#)<sup>240</sup> with creating a strong foundation that readied jurisdictions for the COVID-19 pandemic response. Based on findings from internal reviews and assessments, subject matter expert feedback from the practice community, and input from allied federal agencies and professional associations, CDC established six preparedness capability domains. Within the six preparedness capability domains, recipients reported that Emergency Public Health and Warning, Information Sharing, Public Health Laboratory Testing, Community Preparedness, and Emergency Operations Coordination capabilities contributed the most to a strong foundation overall for the COVID-19 response. These capabilities were closely followed by Medical Countermeasure Dispensing and Administration, Medical Materiel Management and

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<sup>240</sup> [Public Health Preparedness Capabilities: National Standards for State and Local Planning | State and Local Readiness | CDC](#)

Distribution, Nonpharmaceutical Interventions, and Public Health Surveillance and Epidemiological Investigation capabilities.



More specifically, recipients reported that during the COVID-19 pandemic response, they leveraged the strong **foundations** for public health pre-paredness they had developed over the past two decades as a result of PHEP funding, training, planning, and exercising, as well as previous response experiences.

**Information management** and sharing of situational information during the COVID-19 response were strengthened because of CDC’s preparedness and response capability standards, and the PHEP program built a robust understanding of **resource** procurement and allocation that resulted in strong capabilities for staffing; distribution and dispensing of personal protective equipment (PPE); testing; and vaccine administration during the COVID-19 pandemic response. Lastly, successful **operations** management of ongoing, expanded, and sustained support for the COVID-19 pandemic response was attributed to capacity built by the PHEP program since 2002.

For example:

- Existing PHEP-funded contact tracing and quarantine protocols developed during the 2015 Ebola response accelerated New York’s initial COVID-19 response. In addition, throughout the COVID-19 response, Chicago relied on its existing relationship with the Illinois Department of Public Health to coordinate the management of Chicago’s Medical Reserve Corps (MRC) volunteers. Chicago used the statewide Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) System and the IllinoisHelps.net to recruit, manage, and deploy volunteers during the response.
- Nevada used PHEP funding to maintain and sustain a robust volunteer management system which allowed for the quick registration and validation of volunteers. The number of volunteers increased significantly from 200 to more than 6,000 during the pandemic.
- PHEP funding and exercising enabled Puerto Rico to perform medical evaluation and fit tests for its public health responders, maintaining the health of its personnel. Also, Puerto Rico’s PHEP-funded PPE cache established prior to the beginning of the COVID-19 pandemic enabled the jurisdiction to protect the health and safety of its responders and health care personnel.
- Through PHEP, Maryland supported local and state responders, such as emergency medical service providers, with resources and supplies, including PPE.

- PHEP-funding was integral in the building, maintenance, and training of users for the Michigan Disease Surveillance System (MDSS). MDSS successfully processed significant increases in referrals with only minor issues that were quickly resolved and is considered the foundation of Michigan's COVID-19 case surveillance and data processes.
- Massachusetts established an Academic Public Health Consortium and recruited volunteers for its Academic Public Health Volunteer Corps (APHVC) to support local boards of health. The consortium increased its deployment of volunteers and supported 47 local health departments. Corps members provide health communications and social media support, community outreach, translation services, data analysis, and partnership support.
- The Virginia Medical Reserve Corps (MRC) grew from approximately 9,000 to more than 36,000 approved volunteers. MRC volunteers actively supported contact tracing, community-based testing, public education, outbreak investigations, respiratory fit testing, vaccination clinics and other efforts. Since March 2020, there have been 82,329 MRC volunteer deployments across Virginia.
- Washington created a statewide COVID-19 language access plan that requires all state agencies to identify and translate all vital COVID-19 information into the state's top 36 languages through a state master contract. The plan also supports telephonic interpretation services.

### **Laboratory Preparedness and Response**

Established more than twenty years ago, the Laboratory Response Network (LRN) is a national security asset for preparedness and rapid response to biological, chemical, and other high-priority public health emergencies. CDC manages this coordinated national network of public health and other laboratories that provide timely, reliable laboratory tests for biological (LRN-B) and chemical (LRN-C) threats. CDC supports the LRN with expertise in biological and chemical threats, laboratory science, public health response, and clinical recommendations as well as deployment of specific cleared assays. CDC's longstanding partnerships with state and local health agencies and other federal partners connect experts for supporting the LRN. Public health officials use LRN test results to make critical decisions that protect the public from harm. For example, in recent years, outbreaks of exposures to poisoned synthetic cannabinoids and nonfatal drug overdoses were all tested in LRN-C laboratories. In 2021, following the recall of a commercial lead screening kit, LRN-C laboratories provided surge laboratory testing capacity for children's lead surveillance programs in several states. LRN-C test results serve as a critical role in medical countermeasures throughout the United States.

PHEP funding supports both LRN-B and LRN-C state and local laboratories. State public health departments determine how many and what type of laboratories are needed in their jurisdictions and allocate PHEP funds accordingly. Funding for LRN-B supports routine and reliable testing for biological threats, emerging infectious diseases including COVID-19, and high-consequence pathogens—such as Ebola and smallpox. Investments in the LRN-B smallpox preparedness capabilities meant that on May 17, 2022, the U.S. was able to identify the first case of mpox through the Massachusetts LRN-B laboratory and then quickly alert other LRN-B laboratories to expand testing to detect additional cases. The cleared assay had already been deployed from CDC to the LRN-B, and nearly 70 public health laboratories across the nation were able to perform the non-variola orthopoxvirus test on day one of this outbreak. From May 17 through June 30, 2022, the LRN-B tested more than 2,000 specimens and expanded testing capacity within public health laboratories to 8,000 tests per month in 78 public health laboratories. To enhance access to testing, the LRN-B provided materials, technical assistance and training that allowed five commercial laboratories to begin testing for mpox in July 2022, resulting in a combined testing capacity of up to 80,000 specimens per week.

CDC's LRN-B provides an adaptive and scalable framework to respond to individual public health threats at the state and/or local level, as well as large outbreaks or large-scale threat events. In FY 2024, these LRN-B laboratories will continue to use PHEP funding to support testing readiness and strengthen national security for biothreats and emerging infectious diseases. However, without sustained investments, the LRN-B may struggle to maintain the existing capabilities or expand to prepared for new or emerging infectious disease threats.

Additionally, PHEP provides specific funds for the specialized equipment, reagents, test methods, and analysts required for LRN-C Level 1 laboratories to maintain the highest level of national surge testing capacity. In FY 2024, LRN-C Level 1 labs will continue to receive dedicated PHEP funding to purchase and maintain critical instrumentation and other lab equipment; train staff and conduct proficiency testing; and support participation in local, state, and national exercises. Importantly, local and state health departments have recently leveraged this established CDC testing capacity to support local responses to the opioid epidemic, which is estimated to have claimed more than 100,000 lives in the 12-month period ending in February 2022<sup>241</sup>.

Over the last two years, CDC:

- Collaborated with the Department of Defense and deployed a 510(k)-cleared assay to Advanced LRN-B laboratories that can detect multiple high-consequence pathogens within one hour.
- Obtained 510(k) clearance from the U.S. Food and Drug Administration to enhance its *B. anthracis* real-time PCR Assay and three clearances for the non-variola orthopoxvirus assay to expand capacity and in support of the mpox response.
- Collaborated with the Department of Defense and deployed a 510(k)-cleared assay to Advanced LRN-B laboratories that can detect multiple high-consequence pathogens within one hour.
- Distributed instruments to select LRN-B laboratories for the new resazurin dye-based antimicrobial susceptibility test and trained 29 laboratory scientists to conduct the Etest for *B. anthracis* antimicrobial susceptibility.
- Partnered with LRN-C member laboratories to introduce high resolution mass spectrometry (HRMS) capabilities for detecting unknown and emerging chemical threats.
- Implemented HL7 messaging capabilities into several LRN-C laboratories, ensuring real-time access to laboratory response data.
- Updated the instrumentation for testing exposures to nerve agents in 35 LRN-C laboratories and volatile organic compounds in 14 LRN-C laboratories.
- Initiated a pilot to establish an LRN-R to increase the national capacity to test for internal radiation contamination.

In 2021, thanks to the local and state chemical threat laboratory capacity maintained by CDC, the LRN-C laboratory in Texas was able to rapidly test and provide results for acute and chronic mercury exposures in a 2-year-old. In 2022, the LRN-C laboratory in Nevada provided testing for a case involving accidental thallium poisoning of several members of a southern Nevada family. Several LRN-C laboratories have also supported medical countermeasures on several suicide attempts using castor beans (e.g., a natural source of ricin) this year. And LRN-C laboratories continue to work alongside FBI and LRN-B partners to respond to dozens of unknown white powder samples annually.

With CDC's support and expertise for local laboratories, laboratories are more prepared than ever to quickly identify threats. In 2020 and 2021, CDC conducted 2,859 tests in more than 120 LRN-B member laboratories. CDC is uniquely positioned to provide leadership to the LRN's network of integrated laboratories, assuring consistent and confident detection of biological and chemical threat agents and emerging infectious diseases. In

<sup>241</sup> [www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm](https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm)

FY 2023 and 2024, the LRN will continue developing, improving, and deploying diagnostic assays to enhance public health laboratory preparedness response.

### **CDC Support to State and Local Public Health Departments**

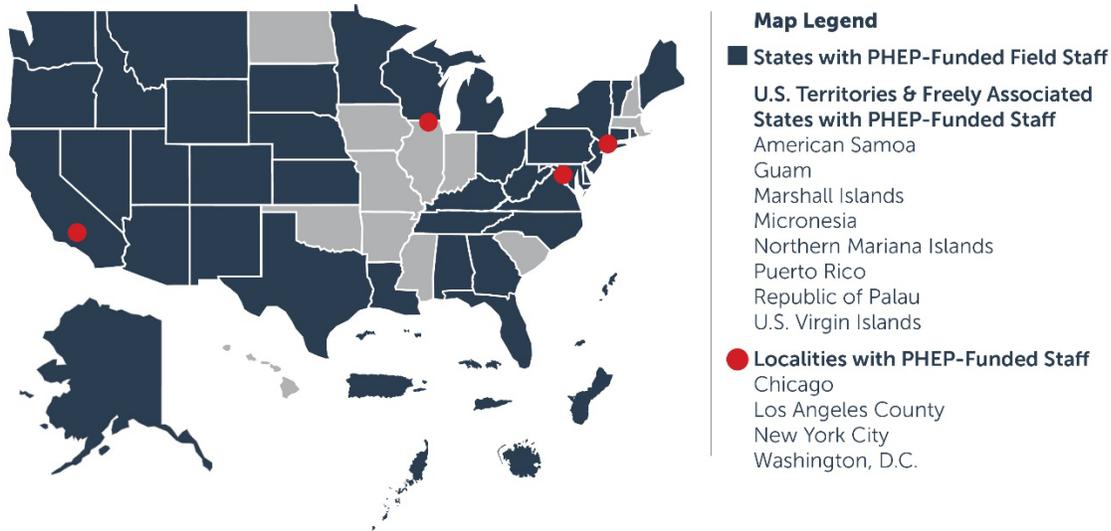
The majority of PHEP funding supports staffing in PHEP recipients' jurisdictions and funding to local health departments and tribal entities in their jurisdictions. The PHEP program supports more than 2,300 staff in SLT health departments who work daily to strengthen public health preparedness and response capabilities. These staff provide critical public health expertise where emergencies begin—at the local level—enabling faster and more effective responses. Areas of expertise include epidemiology, surveillance, outbreak response, information technology, MCM distribution, and MCM dispensing.

As of December 2022, 71 CDC preparedness field staff are embedded in 50 SLT jurisdictions, including 38 states, four localities, and eight U.S. territories and freely associated states. Having trained and dedicated staff providing direct technical assistance and other CDC support is critical to ensuring health departments are prepared to protect the health of their communities. PHEP-funded preparedness professionals use their public health emergency management skills to help states, localities, and territories prepare for and respond to both small and large public health emergencies. These field staff provide a direct two-way connection between CDC and SLT public health partners, leveraged during active responses, including the current COVID-19 response. These specialized preparedness field staff include:

- **44 Career Epidemiology Field Officers** (CEFOs) who strengthen health departments' epidemiological and response capacity and capabilities for public health emergencies. CEFOs provide mentorship and train state, local, and territorial staff and students in public health emergency management principles, supporting the next generation of public health professionals.
- **27 Preparedness Field Assignees** (PFAs) who support preparedness programs after graduating from the Public Health Associate Program. PFAs are a vital link in the public health preparedness workforce pipeline and help to fill state-level staffing and preparedness capacity gaps.

## Public Health Emergency Preparedness (PHEP) Program

### 2022 PHEP-Funded Field Staff



CDC has significantly enhanced its preparedness field staff program by creating a national CEFO network to support the emergency preparedness and response activities of every state, territory, and locality directly funded by the PHEP cooperative agreement. When fully implemented, the national network will include 57 CEFOs directly funded by CDC to support all 50 states, Chicago, Los Angeles County, New York City, and Washington, D.C. The CEFO network also includes three regional CEFOs assigned to the U.S. - affiliated Pacific Islands and the Caribbean territories to build their preparedness and response capabilities. Since its inception, the national CEFO network has added 16 new centrally funded CEFOs, with several additional placements underway. The new CEFO assignments are in Alaska, Colorado, Connecticut, Delaware, Kansas, Los Angeles County, Louisiana, Maine, Nevada, New Mexico, New York, Ohio, Rhode Island, Texas, Utah, and Wisconsin. As of December 2022, 38 centrally funded CEFOs support 44 jurisdictions. In addition to the centrally funded CEFO network, several public health departments elect to use their PHEP funding to host additional CEFOs to further advance their jurisdictional preparedness and response efforts.

Skilled in public health disaster response, CEFOs provide invaluable support during public health emergencies. CEFOs continue to serve in many jurisdictions as CDC’s embedded official points of contact (POCs) for the STLT Task Force. In addition, many CEFOs quickly pivoted to support critical mpox response roles despite ongoing COVID-19 response activities, including leading initial response efforts in California and Washington.

Health departments are also benefiting from recent changes to CDC’s Preparedness Field Assignees (PFA) program. CDC is expanding the PFA program to meet the growing preparedness and response needs of PHEP jurisdictions. CDC is initiating a phased approach to strategically grow the PFA program and initially added 11 additional PFAs in FY 2023 to provide boots-on-the-ground support to state and local preparedness program and provide early-career professionals with additional field experience in state and local emergency preparedness and response.

In FY 2024, CDC will continue to work closely with funded state, local, and territorial health departments to apply the lessons learned from recent large-scale responses including COVID-19 to identify and develop

potential reforms to the PHEP program. Based on recent internal and external feedback on advancing PHEP program, CDC has developed a Public Health Response Readiness Framework with 10 strategic program priorities to organize these improvements:

1. **Develop threat-specific planning** to address evolving threat environment and support medical countermeasure logistics.
2. **Enhance partnerships (federal and nongovernmental organizations)** to effectively support community preparedness efforts.
3. **Expand local support** to improve jurisdictional readiness to handle public health emergencies
4. **Improve administrative and budget preparedness systems** to support timely jurisdictional responses.
5. **Build workforce capacity** to meet jurisdictional surge management needs and support staff recruitment, retention, resilience, and mental health.
6. **Modernize data** collection and systems to improve situational awareness and information sharing with healthcare and other partners.
7. **Strengthen risk communications activities** to improve proficiency in disseminating critical public health information and warnings.
8. **Incorporate health equity** considerations to improve support of underserved and higher-risk populations.
9. **Advance capacity of public health laboratories** to characterize emerging threats through testing and surveillance.
10. **Prioritize community recovery efforts** to support health department reconstitution and reflection on lessons learned from public health emergency responses.

### PHEP Funding for Local Jurisdictions

The PHEP program funds local health departments primarily through three types of funding allocations:

1. **State Health Department Allocations to Local Health Departments:** There are 39 state PHEP recipients with decentralized governance structures that allocate PHEP funding to their local health departments via contracts or subawards; the remaining 11 states have centralized structures whereby they manage funds wholly at the state level and cannot allocate funds to local health departments.
2. **Direct PHEP Funding to Four Large Metropolitan Areas:** Chicago, Los Angeles County, New York City, and Washington, D.C receive PHEP funds directly from CDC.
3. **Cities Readiness Initiative (CRI):** States allocate PHEP funding to large, heavily populated planning jurisdictions. Approximately 60 percent of the U.S. population resides in one of these jurisdictions. There is at least one CRI jurisdiction in every state.

All 50 states used their FY 2022 PHEP investments to support more than 3,500 full- or part-time personnel at the local level.

<b>PHEP Awards*</b>			
(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget
Number of Awards	62	62	62
- New Awards	0	0	0
- Continuing Awards	62	62	62
Average Award	\$10.271	TBD	TBD
Range of Awards	\$.370-\$44.400	TBD	TBD
Total Awards	\$651.788	TBD	TBD

\*CDC awards PHEP funding using the formula established under section 319C-1of the Public Health Service Act. The formula includes a base funding amount, plus funding for population- based on risk and “carve-outs” for Cities Readiness Initiative and Level 1 Chemical Labs.

## **Academic Centers for Public Health Preparedness**

Recent emerging infectious threats (e.g., COVID-19 pandemic and mpox outbreak) coupled with the increasing severity of natural disasters demonstrate the dynamic nature of public health threats and their impact on our nation and world. Academic Centers enable public health practitioners and academic and cross-sector partners to collectively ensure that new knowledge is available to inform decision-making and the rapid implementation of interventions that protect the public's health during times of crisis. CDC will continue to support research, translation, dissemination, and training to improve the nation's ability to prepare for, respond to, and recover from local and national emergencies.

In FY 2024, CDC will:

- Establish broad partnerships to enhance the evidence base to strengthen preparedness and response practice and the 15 Public Health Emergency Preparedness and Response National Standards at the federal, state, tribal, local, and territorial levels.
- Disseminate and socialize a public health emergency preparedness and response (PHEPR) research agenda that incorporates health equity goals for (STLT) health departments emphasizing the 15 public health preparedness capability standards.
- Advance preparedness and response workforce capabilities through the development and delivery of training programs focused on building hazards and disaster research skills among STLT practitioners and tribal and rural communities.

## **CDC Preparedness and Response**

CDC supports critical infrastructure and research to facilitate the prevention of, and rapid response to, public health emergencies by:

- Developing and coordinating an emergency preparedness and response research agenda. This work builds and evaluates the underlying scientific framework supporting the nation's capacity to prepare for and respond to public health emergencies. Examples of research topics include anthrax response coordination; chemical, radiological, and biological response support; and the special needs of children during responses.
- Ensuring, through the Select Agent Program, that laboratories working with the most dangerous biological agents and toxins do so as safely and securely as possible.
- Staffing, operating, and maintaining a 24/7 Emergency Operations Center (EOC) from which CDC deploys scientific experts; coordinates delivery of supplies and equipment to incident sites; monitors response activities; and provides resources in supporting the public health needs of all populations according to specific cultural, linguistic, and environmental factors. In addition to providing continuous Incident Management System (IMS) response support for Polio (activated December 2, 2011; ongoing), over the last two years CDC activated its IMS structures for COVID-19 (January 21, 2020; ongoing) and Multi-National mpox (June 28, 2022; ongoing) responses.
- Using the Graduated Response Framework to guide the management of CDC's public health emergency responses, ensuring effective and efficient operations regardless of the event's size and scope.
- Designing and conducting emergency management training and exercises that prepare public health leaders and staff to respond to all types of emergencies. During the COVID-19 response, CDC implemented training to ensure responders can operate efficiently during the ongoing COVID-19 response.

- Enhancing the Laboratory Response Network (LRN) through CDC’s development of guidance, training, and proficiency testing for member labs enables rapid detection of biological, chemical, and radiological threats.

CDC will continue to focus on these mission-critical activities.

### **Response Ready Enterprise Data Integration platform (formerly HHS Protect)**

CDC’s FY 2024 Budget request proposes the transfer of the Response Ready Enterprise Data Integration platform (RREDI), the next generation of HHS Protect, from PHSSEF to CDC. The 2019 COVID-19 pandemic has made clear the utility of having a Common Operational Picture that enables and establishes a core public health data management and integration platform for use during and in the steady-state time periods between agency-level emergency responses that can be relied on during an emergency. Management of the RREDI platform was transferred to CDC from HHS in FY 2022. This common operational picture enables secure sharing data in near-real time across federal, state, and local governments and the healthcare industry. It serves as an important tool to support policymakers, provide critical data to the new Center for Forecasting and Outbreak Analytics, and communicate the latest timely information for COVID-19 and mpox as well as future threats and public health responses. It has enabled data-driven discussions and collaboration between federal, state, and local counterparts around topics such as hospital capacity, data quality issues, compliance issues, and state needs.

The FY 2024 Budget will support several critical needs so this platform can continue its success. These include:

- Software licensing to support CDC activities and ecosystem
- Services and staff to support platform management and response support for future outbreaks
- Help Desk support to fully support users of the platform
- System and workforce development training for a data-savvy workforce to operate the platform
- Support to provide security monitoring (software and services)
- Management of agreements to allow data sharing between CDC and external partners
- Integration of other CDC data, tools, and platforms with this platform
- Support of an interagency governance structure to provide strategic objectives and aligning to CDC strategic planning

### **Safe and Secure Use of Dangerous Biological Agents and Toxins**

Scientific research in laboratories is critical to our nation’s defense against both naturally occurring diseases and bioterrorism. Laboratory research with biological select agents and toxins can lead to important breakthroughs in vaccine development, drug therapies, diagnostic testing, and other discoveries that save lives. Common examples of select agents and toxins include anthrax, Ebola virus, bubonic plague, and ricin. If handled incorrectly—or in the hands of the wrong people—select agents and toxins can pose a severe threat to the health and safety of people, plants, or animals.

CDC develops, implements, and enforces regulations to ensure this work is done as safely and securely as possible. This includes managing two critical programs: the Federal Select Agent Program (FSAP) and the Import Permit Program (IPP).

## Federal Select Agent Program

CDC partners with the U.S. Department of Agriculture (USDA) to manage the Federal Select Agent Program (FSAP). Together, the agencies develop and enforce regulations on the possession, use, and transfer of 68 biological pathogens and toxins can pose a severe threat to human, animal, and/or plant health, and animal and plant products. Laboratories researching with select agents and toxins must register with the FSAP. CDC oversees approximately 86 percent of the registered entities (with the rest overseen by USDA).

CDC routinely inspects the nearly 250 registered laboratory facilities to ensure compliance with the select agent regulations. These inspections allow CDC to confirm that appropriate biosafety and security measures are in place, and that laboratorians are adequately trained to implement plans and procedures for the containment of select agents at each facility.

Using appropriated funds, CDC developed and implemented the electronic Federal Select Agent Program (eFSAP) information system. FSAP and the regulated community use this two-way, high-security, web-based communication portal to improve regulatory oversight through process improvements. Due to this investment in eFSAP, during the COVID-19 pandemic, CDC has been able to continue FSAP programs operations remotely.

## Import Permit Program

CDC's Import Permit Program (IPP) regulates the importation of infectious biological materials that could cause disease in humans to prevent the introduction and spread of these materials into the United States. Prior to issuing import permits, IPP reviews all applications to ensure facilities have appropriate biosafety measures in place for working with these imported materials. As needed, the IPP also inspects the applicant's facility to confirm implementation of measures to minimize the risk of accidental release of infectious biological agents or vectors of human disease (e.g., mosquitoes, rodents). CDC issues more than 3,000 import permits each year.

CDC developed the electronic Import Permit Program (eIPP) information system, a moderate security, cloud-based information system, for receiving all import permit applications from potential U.S. importers. This investment enabled CDC to continue IPP program operations remotely.

In FY 2024, CDC will continue to:

- Ensure the safe and secure handling of biological agents and toxins.
- Monitor imports of infectious biological materials, which is critical to national security and public health.
- Inspect laboratories working with select agents and toxins and imported materials.
- Enhance eFSAP and eIPP information systems to continue to evolve CDC operations.

## Effective Public Health Emergency Management

CDC's Emergency Management Program (EMP) prepares the agency to facilitate well-coordinated responses to emergencies and disasters, including disease outbreaks, natural disasters, and other public health threats. The EMP integrates public health practice with emergency management principles using the National Incident Management System.<sup>242</sup> An Incident Management System (IMS) is an internationally recognized model for effectively managing emergency responses. Having an IMS in place organizes the command and control for a response so that CDC can rapidly understand the public health problem and develop interventions that reduce harm and save lives during public health emergencies. CDC's largest scale emergency response activities are

<sup>242</sup> The National Incident Management System is a comprehensive, nationwide, systematic approach to incident management, including the command and coordination of incidents, resource management, and information management. [https://www.fema.gov/sites/default/files/2020-07/fema\\_nims\\_doctrine-2017.pdf](https://www.fema.gov/sites/default/files/2020-07/fema_nims_doctrine-2017.pdf)

centralized in the agency's Emergency Operations Center (EOC). No matter the type of threat—from infectious diseases to natural disasters and terrorism—highly trained experts and scientists gather in the EOC to monitor information, prepare for known and unknown events, and provide real-time, coordinated response capability. CDC responders include thousands of the nation's top experts in respiratory diseases, epidemiology, laboratory science, and public health data and analytics. In FY 2022, over 4,150 personnel worked over 653,600 CDC responder days for the COVID-19 response, and more than 900 personnel worked over 44,000 CDC responder days for the 2022 Multi-National mpox response.

CDC experts continue to work 24/7 to:

- **Respond** to 40,803 incoming/ongoing calls in FY 2022 to the EOC watch desk from medical professionals, state and local health authorities, and the public.
- **Guide** Americans, business, and government entities through clearance of 3,355 COVID-19 and 275 mpox information products in FY 2022.
- **Share** information on social media about outbreaks
  - Social media posts in FY 2022: 5,911 (COVID-19) and 464 (mpox)
  - Impressions in FY 2022: 1.0 billion (COVID-19) and 59,545,747 (mpox)

### **Identifying and Preparing CDC's Public Health Response Workforce**

CDC has historically relied on active and passive identification of volunteers to meet its urgent and long-term staffing needs. Response leaders often struggle to find ready, willing, and able volunteers with the right skillsets for the job, and responders frequently need to recruit their own replacements. These challenges re-emerged during COVID-19, mpox, Ebola, and other recent responses. To address them, CDC is proposing a legislative proposal to enhance the CDC Ready Responder program to change the way the agency identifies and prepares responders ahead of public health emergencies. The new program centralizes coordination and preparation of staff across the agency for both on-site and virtual headquarters-based response. This initiative will ensure that CDC can rapidly establish and maintain response activities when emergencies occur, and it will bring clarity to how staff can support emergency responses.

The CDC Ready Responder program incorporates active and continuous qualification and management of responders rostered into cadres (a group of people trained for a particular purpose or profession) based on experience, training, participation in preparedness activities (such as exercises), and supervisory-approved availability. As the training resources for cadres are developed, staff may be asked to complete training before joining the cadre or as requirements are established. Training requirements will depend on when staff join a cadre relative to the development of the training program, and CDC intends to leverage and expand its existing responder training programs to support the initiative.

### **Incident Manager Training and Development Program**

The Incident Manager Training and Development Program (IMTDP) continues to be a key success in how CDC strengthens response leader capacity. Since its inception in 2015, IMTDP has graduated a total of 84 CDC response leaders, increasing the cadre of CDC Incident Managers by six-fold. In concert with CDC's Graduated Response Framework, CDC now has a trained cadre to lead and manage responses at the program/center/agency-wide levels, including two simultaneous agency-wide responses with COVID-19 and mpox responses. For example, 97 percent (n=68) of existing IMTDP alumni have served in the COVID-19 response. Of those, 12 IMTDP alumni and faculty served in top leadership roles as the COVID-19 Incident Manager (IM), Principal Deputy IM, or Deputy IM. Additionally, 30 percent (n=21) have served in leadership roles within the mpox response, including, as mpox IM or Deputy IM. Lastly, a 6-session mpox IM Orientation

was provided to orient incoming IMS Leadership Team to the functional roles of the IMS General Staff as part of transition planning.

### **Responder Education and Leadership Academy**

In March 2020, IMTDP expanded its proven training model and strategy to the broader CDC responder workforce through the Responder Education and Leadership Academy (RELAY). Like IMTDP, RELAY's mission is to enhance CDC's response capabilities through people, programs, and products. In FY 2022, a virtual orientation to working in the EOC, EOC Day One, trained over 800 unique CDC COVID-19 Responders, including Officers and Fellows from the Epidemic Intelligence Service, Laboratory Leadership Service, Presidential Management Fellows, and Global Rapid Response Teams. Additionally, RELAY participated in CDC's Cobalt Magnet 2022 (CM22) functional exercise by activating the Responder Training Team and delivered an EOC Day One to 58 exercise participants and an orientation on exercise basics to 52 exercise participants in the State Coordination Task Force (SCTF).

### **Emergency Operation Center IT Modernization**

In 2020, a comprehensive analysis of the current state and future needs of IT systems that support daily EOC operations and emergency responses was completed. The analysis identified gaps in integration and interoperability of EOC applications. To mitigate these gaps, CDC developed a 3-year roadmap (CDCReady) to modernize and harmonize EOC applications.

The EOC Modernization Initiative will (1) Establish a cloud-based platform upon which the EOC will integrate response operations and support applications, data analytics, and data warehousing and (2) Reimagine, re-engineer, and enhance individual business applications and integration into CDCReady.

The EOC IT Modernization effort will complete its Phase 1 Objectives of establishing a cloud-based infrastructure and consolidating systems for a subject matter expert database, on-call schedule, and inventory management.

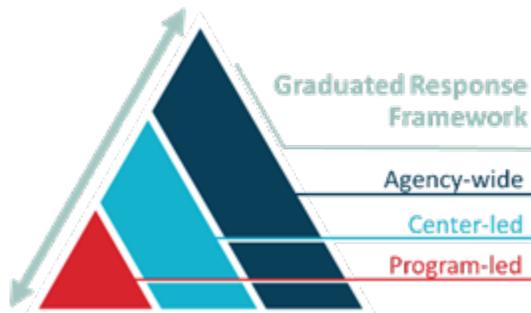
### **Data Analytics and Visualization & Common Operating Picture Integration for Situational Awareness**

Under CDC's larger Data Modernization Initiative (DMI) aimed at modernizing core data and surveillance infrastructure across federal and state public health entities, CPR/DEO is working to establish a Common Operating Picture (COP) that will integrate data for emergency preparedness and response purposes. Situational Awareness DMI efforts have the following benefits:

- Accelerate transition and integration of interoperable data pipelines, analytical tools, and automated technologies developed by John's Hopkins University (JHU) Applied Physics Lab (APL) to provide CDC's EOC with public health analytical capabilities to collect, share, and automated analysis and delivery of decision generating analytics.
  - o This activity supports phased integration and technical migration of adaptable, reusable, and sustainable capabilities interoperable with agency and cross-jurisdictional partners.
- Provide technical support in integrating digital health technologies and roadmaps to support transition, sustainment, and integration of interoperable data exchange services, systems interfaces, and automated processes to improve data integration, health information exchange, and cross jurisdictional reporting.
  - o This activity will improve data management, informatics, and cross-jurisdictional coordination; delivers surge capacity and simplifies workforce development and application of data analytic skills and support.

## Graduated Response Framework

In 2022, CDC finalized the Graduated Response Framework (GRF), GRF CONOPS which serves as a blueprint for the management of CDC's three-level GRF and works in conjunction with the CDC All-Hazards Plan. (AHP) The GRF allows responses to transition between levels as operational needs and resource requirements change over the course of an event.



**State Table: Public Health Emergency Preparedness Cooperative Agreement<sup>1</sup>**

	<b>FY 2022 Actual</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$9,021,541	TBD	TBD	TBD
Alaska	\$5,760,000	TBD	TBD	TBD
Arizona	\$13,142,567	TBD	TBD	TBD
Arkansas	\$6,662,659	TBD	TBD	TBD
California	\$44,440,891	TBD	TBD	TBD
Colorado	\$10,828,721	TBD	TBD	TBD
Connecticut	\$7,756,083	TBD	TBD	TBD
Delaware	\$5,405,020	TBD	TBD	TBD
Florida	\$32,589,946	TBD	TBD	TBD
Georgia	\$17,715,933	TBD	TBD	TBD
Hawaii	\$5,642,210	TBD	TBD	TBD
Idaho	\$5,382,980	TBD	TBD	TBD
Illinois	\$16,605,455	TBD	TBD	TBD
Indiana	\$11,702,107	TBD	TBD	TBD
Iowa	\$7,158,236	TBD	TBD	TBD
Kansas	\$6,818,460	TBD	TBD	TBD
Kentucky	\$8,553,495	TBD	TBD	TBD
Louisiana	\$8,919,448	TBD	TBD	TBD
Maine	\$5,510,000	TBD	TBD	TBD
Maryland	\$11,777,135	TBD	TBD	TBD
Massachusetts	\$13,800,043	TBD	TBD	TBD
Michigan	\$16,981,692	TBD	TBD	TBD
Minnesota	\$12,131,089	TBD	TBD	TBD
Mississippi	\$6,601,489	TBD	TBD	TBD
Missouri	\$11,383,901	TBD	TBD	TBD
Montana	\$5,210,000	TBD	TBD	TBD
Nebraska	\$5,483,678	TBD	TBD	TBD
Nevada	\$7,297,816	TBD	TBD	TBD
New Hampshire	\$5,663,127	TBD	TBD	TBD
New Jersey	\$16,344,236	TBD	TBD	TBD
New Mexico	\$6,949,221	TBD	TBD	TBD
New York	\$19,763,713	TBD	TBD	TBD
North Carolina	\$15,894,002	TBD	TBD	TBD
North Dakota	\$5,210,000	TBD	TBD	TBD
Ohio	\$18,224,028	TBD	TBD	TBD
Oklahoma	\$7,950,479	TBD	TBD	TBD
Oregon	\$8,444,226	TBD	TBD	TBD
Pennsylvania	\$19,783,265	TBD	TBD	TBD
Rhode Island	\$5,369,497	TBD	TBD	TBD

	<b>FY 2022 Actual</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
South Carolina	\$10,404,117	TBD	TBD	TBD
South Dakota	\$5,210,000	TBD	TBD	TBD
Tennessee	\$12,135,779	TBD	TBD	TBD
Texas	\$42,270,242	TBD	TBD	TBD
Utah	\$7,461,137	TBD	TBD	TBD
Vermont	\$5,210,000	TBD	TBD	TBD
Virginia	\$15,885,898	TBD	TBD	TBD
Washington	\$13,507,141	TBD	TBD	TBD
West Virginia	\$5,229,883	TBD	TBD	TBD
Wisconsin	\$11,917,508	TBD	TBD	TBD
Wyoming	\$5,210,000	TBD	TBD	TBD
<b>Subtotal States</b>	<b>\$584,321,094</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Localities</b>				
Chicago	\$10,207,392	TBD	TBD	TBD
Washington, D.C.	\$6,5327,834	TBD	TBD	TBD
Los Angeles County	\$20,923,151	TBD	TBD	TBD
New York City	\$20,055,935	TBD	TBD	TBD
<b>Subtotal Localities</b>	<b>\$57,714,312</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Territories</b>				
American Samoa	\$413,424	TBD	TBD	TBD
Guam	\$543,123	TBD	TBD	TBD
Marshall Islands	\$418,761	TBD	TBD	TBD
Micronesia	\$478,510	TBD	TBD	TBD
Northern Mariana Islands	\$408,982	TBD	TBD	TBD
Puerto Rico	\$6,653,125	TBD	TBD	TBD
Republic of Palau	\$370,357	TBD	TBD	TBD
Virgin Islands	\$466,932	TBD	TBD	TBD
<b>Subtotal Territories</b>	<b>\$9,753,214</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Total</b>	<b>\$651,788,620</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>States/Localities/Territories</b>				

<sup>1</sup> [Final PHEP Budget Period 3 \(Fiscal Year 2021\) Funding September 2021 \(cdc.gov\)](https://www.cdc.gov/funding/2021/09/2021-fiscal-year-budget-period-3)

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## CDC-WIDE ACTIVITIES AND PROGRAM SUPPORT

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Budget Authority	\$333.570	\$563.570	\$828.570	\$265.000
Prevention and Public Health Fund	\$160.000	\$160.000	\$210.000	+\$50.000
<b>Total Request<sup>1,2</sup></b>	<b>\$493.570</b>	<b>\$723.570</b>	<b>\$1,038.570</b>	<b>+\$315.000</b>
FTEs	2,234	2,265	2,330	65
-- Preventive Health and Health Services Block Grant (PPHF)	\$160.000	\$160.000	\$160.000	\$0
-- Public Health Leadership and Support	\$113.570	\$128.570	\$143.570	+\$15.000
-- Infectious Disease Rapid Response Reserve Fund	\$20.000	\$35.000	\$35.000	\$0
-- Public Health Infrastructure and Capacity	\$200.000	\$350.000	\$600.000	+\$250.000
-- Center for Forecasting and Outbreak Analytics, Program Level	N/A	\$50.000	\$100.000	+\$50.000
-- <i>Center for Forecasting and Outbreak Analytics (PPHF) (non-add)</i>	N/A	N/A	\$50.000	+\$50.000

<sup>1</sup>This table reflects totals by budget activity. The FY 2024 budget proposes a single "CDC-Wide Activities and Program Support" Treasury account structure.

<sup>2</sup>FY 2022 Operating Level does not include Ukraine Supplemental funding (\$54 million). The FY 2023 Enacted level does not include Disaster Relief Supplemental Appropriations Act funding (\$86 million).

**Enabling Legislation Citation:** PHS A § 301, PHS A § 304, PHS A § 306\*, PHS A § 307, PHS A § 308, PHS A § 310, PHS A § 310A\*, PHS A § 311, PHS A § 317, PHS A § 317F, PHS A § 319, PHS A § 319A, PHS A § 319D, PHS A § 322, PHS A § 325, PHS A § 327, PHS A § 361-369, PHS A § 391\*, PHS A § 399G, PHS A § 399U, PHS A Title XIX Part A, PHS A § 2821, Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, 2019 (P.L. 115-245, Division B)

**Enabling Legislation Status:** Permanent Indefinite

**Authorization of Appropriations for FY 2022:** Indefinite; Expired/Expiring noted with\*

**Allocation Methods:** Direct Federal/Intramural, Contracts, Competitive Grants/Cooperative Agreements

### Program Description

The CDC-Wide Activities and Program Support account supports cross-cutting agency functions that drive coordination, enhance foundational capacities, and support CDC's ability to deliver rapid, decisive responses to emerging public health threats. The proposed investments are also critical to identifying and repairing systemic weaknesses that create vulnerabilities in America's health security and contribute to health disparities among Americans.

### Budget Request

CDC's FY 2024 budget request for CDC-Wide Activities and Program Support of **\$1,038,570,000** is \$315,000,000 above FY 2023 enacted level. Within this total, the FY 2024 request includes an increase of **\$250,000,000** over FY 2023 Enacted for Public Health Infrastructure and Capacity, **\$50,000,000** over FY 2023 Enacted for the Center for Forecasting and Outbreak Analytics, and **\$15,000,000** over FY 2023 Enacted for Public Health Leadership and Support.

<b>CDC-Wide Funding History</b>	
<b>Fiscal Year</b>	<b>Dollars (in millions)</b>
FY 2020 (BA)	\$198.570
FY 2020 (PPHF)	\$160.000
FY 2021 (BA)	\$123.570
FY 2021 (PPHF)	\$160.000
FY 2022 (BA)	\$333.570
FY 2022 (PPHF)	\$160.000
FY 2023 Enacted (BA)	\$563.570
FY 2023 Enacted (PPHF)	\$160.000
FY 2024 President's Budget (BA)	\$828.570
FY 2024 President's Budget (PPHF)	\$210.000

**Program Accomplishments**

The Center for Forecasting and Outbreak Analytics (CFA) provided critical information to State and Federal officials to aide in decision making during the recent mpox outbreak in the United States. Leveraging cloud computing infrastructure made possible through CDC’s Data Modernization Initiative (DMI), CFA developed models that allowed CDC to make and disseminate mpox forecasts along with other information describing the shape of the outbreak. In addition to providing an assessment of the national mpox trajectory, CFA engaged with public health officials and decision makers to develop six analyses focusing on U.S. jurisdictions experiencing the highest mpox incidence. These technical reports were developed and shared publicly, at the pace of the outbreak, to support timely and informed decision making.

In 2022, CDC continued its efforts to build workforce capacity in the United States, providing states with Public Health Infrastructure and Capacity funding to address their most urgent needs and support the people and systems needed to effectively protect health in their jurisdiction. Everyone in the United States lives in a jurisdiction that received funding for recruiting, retaining, and training public health workers who can support communities in ensuring food and water is safe, detect and track diseases, stop outbreaks, provide preventive care for mothers and children, and respond to future threats.

## CDC-WIDE ACTIVITIES AND PROGRAM SUPPORT

### BY THE NUMBERS

- 3.97 billion—Total views of CDC websites in 2020; 858,128 total CDC-INFO calls and emails answered in 2020.
- 4,000—Correspondences answered on over 1,000 topic areas from stakeholders, including Congress, academia, the business sector, employers, and other federal, state, and local partners.
- 297— Public Health Associate Program (PHAP) associates in FY 2021 working in public health organizations to increase delivery of essential public health services in 47 states and Washington, D.C.; four territories; and in 23 tribal host sites or tribally-focused assignments. Associates deployed over 300 times to support the national COVID-19 response.
- 36—*Healthy People 2020* Topic Areas addressed by Preventive Health and Health Services Block Grant recipients.
- 875—Members of an online peer learning community for performance improvement in health departments, coordinated by the National Network of Public Health Institutes. Learning events addressed COVID-19, such as how quality improvement methods were used to rapidly test and refine COVID-19 testing activities.
- 672—Registrants for the annual Public Health Improvement Training (PHIT) in 2021. The virtual training event significantly increased audience reach by more than 100% compared to the traditional in-person event. Nearly 80% of participants were from health departments representing 45 states and DC, four territories, and 14 unique tribal health organizations. 99% of respondents reported they plan to use or adapt specific tools or examples from PHIT in their work.
- 88%—U.S. population served by an accredited health department as of July 2021. The Public Health Accreditation Board (PHAB), supported by CDC, has accredited 386 health departments—39 state, four tribal, and 343 local health departments.<sup>1</sup> More than 80% of accredited health departments indicated that accreditation helped their COVID-19 response.<sup>2</sup>
- \$10 million—Savings to the U.S. government, with \$12,000 in savings to each state or local health department, since CDC began creating medical illustrations previously acquired through commercial licensing.

\*References:

<sup>1</sup> Public Health Accreditation Board. Accredited Health Departments. Available at: <http://www.phaboard.org/news-room/accredited-health-departments/>

<sup>2</sup> Public Health Accreditation Board. PHAB Survey of Health Departments and Site Visitors During Response to COVID-19 Pandemic, July 2020. Available at: <https://phaboard.org/wp-content/uploads/Strategic-Planning-Survey-Findings-Final-July-2020.pdf>

\*Unless otherwise noted, all information and calculations are from CDC program data.

## Public Health Infrastructure and Capacity Budget Request

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The COVID-19 pandemic, mpox, polio, and other health threats continue to present challenges for the nation's public health agencies.<sup>2,3</sup> Over the past decade, local health departments have lost 56,000 jobs<sup>2,3</sup>, in state and local governments. Historically, only 14 percent of CDC's annual base funding allowed jurisdictions to support foundational capacities that cut across diseases and conditions. As the nation continues to respond to emerging threats, state and local health departments, which are on the front lines, are playing catch-up, while trying to build the critical foundational capacities needed to respond.

In a series of listening sessions conducted by CDC, state and local public health officials and partners across the country consistently articulated a need for flexibility to address specific jurisdiction needs and build capacity. Jurisdictions also emphasized a need for sustainability to support and maintain a more robust public health system. Informed by these conversations, CDC announced the new [Strengthening U.S. Public Health Infrastructure, Workforce, and Data Systems](#) funding opportunity to support public health infrastructure.

In November 2022, CDC awarded \$140,000,000 from Public Health Infrastructure and Capacity to 107 state, local, and territorial public health jurisdictions. This grant funding will help create a foundation for CDC's public health infrastructure work and provide maximum flexibility so jurisdictions can address their most pressing needs. In addition, national partners are receiving funding to support the work of the recipient jurisdictions by providing training and technical assistance, evaluating programs, and facilitating coordination and communication across grantees and CDC. CDC plans to award additional funds with the increase provided in FY 2023.

### Budget Request

CDC's FY 2024 request of **\$600,000,000** for the Public Health Infrastructure and Capacity is **\$250,000,000** above FY 2023 Enacted.

This funding will help state, territorial, and local public health systems address long-standing public health issues and support public health response. These investments seek to create a resilient public health system by allowing investments in areas needed by health departments, including the capacity to surge for local, state, regional, or national emergencies, conduct long-term public health planning, and expand or create new evidence-based approaches.

With the FY 2024 request, CDC will continue to support jurisdictional health departments and national partners to provide technical assistance in building foundational capabilities. This aligns with the Public Health National Center for Innovations (PHNCI) framework in the areas of assessment and surveillance, community partnership development, equity, organizational competencies, policy development and support, accountability and performance management, emergency and preparedness and response, and communications.

CDC will directly fund state, local, and territorial health departments to meet national quality standards, conduct performance improvement activities, increase communication and collaboration across the public health system, and assess the ability of health departments to meet changing conditions and needs. With this

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<sup>2,3</sup> DeSalvo, K., B. Hughes, M. Bassett, G. Benjamin, M. Fraser, S. Galea, N. Garcia, and J. Howard. 2021. Public Health COVID-19 Impact Assessment: Lessons Learned and Compelling Needs. *NAM Perspectives*. Discussion Paper, National Academy of Medicine, Washington, DC.

<sup>2</sup> <https://doi.org/10.31478/202104c> // <https://nam.edu/public-health-covid-19-impact-assessment-lessons-learned-and-compelling-needs/>

<sup>2</sup> <https://www.route-fifty.com/health-human-services/2021/11/state-and-local-government-employment-application-drop-snowballing/186824/>

<sup>3</sup> Data from <https://www.astho.org/profile/state-health-agency-expenditures-data-brief/2010-to-2018/>, inflation adjustments calculated using the Biomedical Research and Development Price Index

investment, health departments will strengthen their abilities to effectively respond to a range of public health threats, while maintaining programs and services in other areas of longstanding public health need.

## Foundational Public Health Services

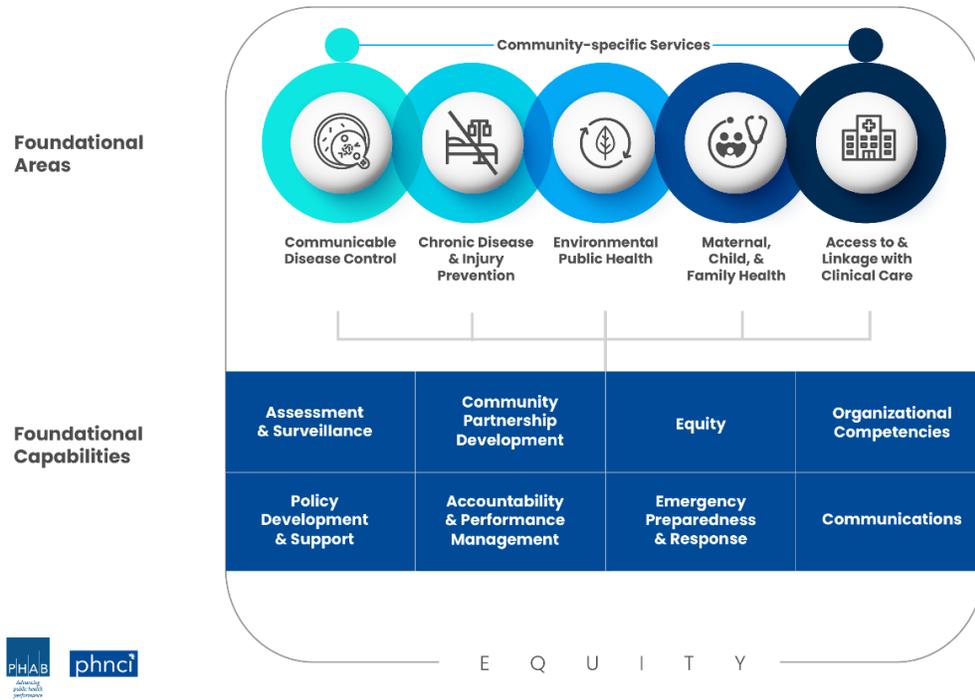


Image from The Public Health National Center for Innovations: [FPHS](#) | [PHNCI](#)

Through this grant, Strengthening U.S. Public Health Infrastructure, Workforce, and Data Systems, jurisdictions received disease-agnostic funding to establish their own foundational capabilities aligned with the Foundational Public Health Services (PHNCI), a framework for a minimum set of capabilities that should be available in every community. These core capabilities are often neglected with siloed, disease-specific funding streams. Investment in foundational capabilities, including communication, policy development, and community partnerships, leads to measurable change for state, local, and territorial health departments.

The grant also enables CDC to provide technical assistance to jurisdictions to support their workforce and improve their foundational capabilities through three national health partners, the Association of State and Territorial Health Officials (ASTHO), National Network of Public Health Institutes (NNPHI), and Public Health Accreditation Board (PHAB). In addition to technical assistance, these organizations will evaluate the program and facilitate coordination and communication across grantees.

Investing in public health infrastructure will enable health departments to hire and ensure competencies are maintained in their workforce and to benefit from advances in scientific technology for addressing health threats. Sustained investment in public health infrastructure will allow public health departments to:

- Hire and retain a skilled, diverse workforce capable of surging to meet local, regional, or national needs.

- Innovate and establish better practices to collect data, address health equity, and support cross-sector, cross-jurisdictional, and regionally appropriate collaborations with rural pharmacies, academic centers, and industry.
- Support technological improvements to state and regional public health labs and build scalable, cutting-edge scientific capabilities that keep pace with technology.
- Conduct performance improvement to build and sustain high-quality services and meet the needs of local populations.

**Public Health Infrastructure and Capacity** <sup>1,2,3,4</sup>

(dollars in millions)	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
	<b>Final</b>	<b>Enacted<sup>4</sup></b>	<b>President's Budget</b>
Number of Awards <sup>3</sup>	107	107	107
- New Awards	107	0	0
- Continuing Awards	0	107	107
Average Award	\$1.308	\$2.290	\$3.925
Range of Awards	\$0.259-\$6.008	TBD	TBD
<b>Total Awards</b>	<b>\$140.000</b>	<b>\$245.000</b>	<b>\$420.000</b>

<sup>1</sup> Table only reflects funds from CDC's annual appropriation.

<sup>2</sup> These funds are awarded by formula.

<sup>3</sup> Awards noted for A2: Foundational Capabilities. Does not include Component B awards to public health partners.

<sup>4</sup> FY 2023 awards are estimates and will total at least \$245M. This is consistent with report language accompanying the FY 2023 Consolidated Appropriations Act that requires "no less than 70 percent of this funding be awarded to health departments".

## **Center for Forecasting and Outbreak Analytics Budget Request**

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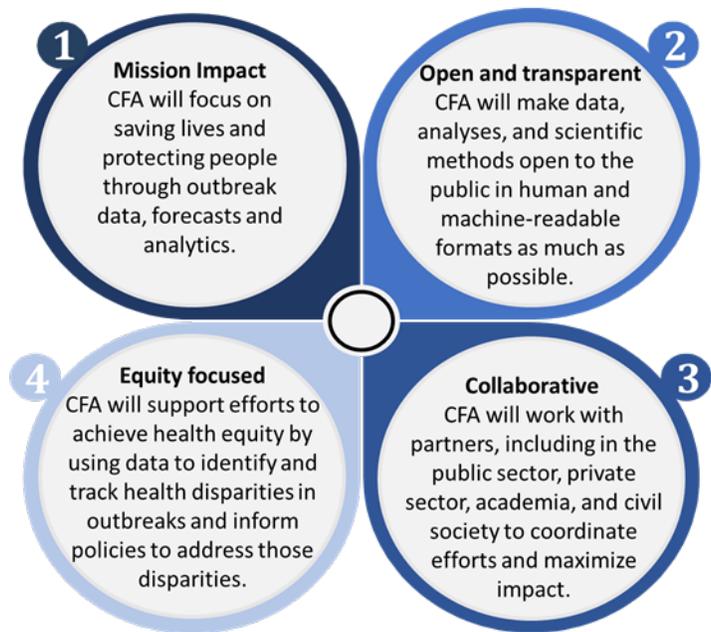
CDC's Center for Forecasting and Outbreak Analytics (CFA) is building a national capability to support the U.S. Government and our partners with advanced analytics, disease modeling, and outbreak analytics. While CFA is building this critically needed capability, the Center is also providing insights to inform the CDC and USG response on priority concerns like COVID-19, acute hepatitis of unknown cause in children, mpox, polio, and Ebola. The Center has three core functions: 1) predicting emerging threats through advanced analytics, 2) informing decision makers and communicating with the public about actions they can take to respond to these threats, and 3) innovating new analytic approaches and technologies. CFA's core principles of achieving mission impact, operating with openness and transparency, collaborating with private and public sector partners, and focusing on equity are central in designing, building, and carrying out its functions.

### **Budget Request**

CDC's FY 2024 budget request of **\$100,000,000**, including **\$50,000,000** from the Prevention and Public Health Fund (PPHF), is **\$50,000,000** above the FY 2023 enacted level. CFA was established and initially supported with \$200,000,000 provided through the American Rescue Plan Act. With an initial operating budget of \$100,000,000 per year, this level will sustain current activities such that the Center can continue to work building a national capability for outbreak forecasting, advanced analytics, decision support, and innovation. This funding is critical for establishing the Center's baseline operational capacity and implementing activities that advance U.S. readiness for public health response. In FY 2024, this investment will advance CDC's goal of enabling timely, effective decision-making to improve outbreak response through data, modeling, and analytics. CDC will initiate activities related to three additional operational capabilities:

- Enhanced capacity development and embedded analytics staff at the State, Tribal, Local, and Territorial levels as an on-ramp to building robust forecasting and analytic capabilities at these jurisdictional levels;
- Broaden engagement to increase the speed of information exchange related to disease forecasts, models, and outbreak analytics and improve the coordination of data collection critical to answering questions that will help to protect Americans from emerging public health threats; and
- Provide proof-of-concept for new approaches to data preparedness for outbreak analytics, such as exploring mechanisms to identify a repeated, cross-sectional representative random sample of the U.S. population.

CDC is leveraging cloud computing to pioneer a virtual analyst environment, allowing U.S. Government modelers to collaborate in real-time. In the pilot stage, this new technology has been used across CDC and by collaborators outside of CDC, including from the Administration for Strategic Preparedness and Response (ASPR). Prior to the partnership with CFA, ASPR's modeling team managed an agent-based model for COVID-19 that lived outside of the HHS operating environment. CDC partnered with ASPR to bring their model into the HHS infrastructure and is building out the resource to include a suite of models that are accessible to key partners. Through this collaboration, disease experts throughout the U.S. Government can answer critical public health questions more quickly, without going through a third party. Additionally, CDC is working in the cloud environment, making tools available to others.



CDC has used CFA modeling tools to provide public health decision makers with timely information on mpox transmission dynamics. To further support the mpox response, CDC delivered four technical reports to share key data and projections of the outbreak. These reports were published quickly to keep up with the dynamic nature of the outbreak and were shared widely with public health leaders throughout the country. Inclusion of a qualitative risk assessment in these reports delivered the bottom line to support decision making. Through these and other activities, CDC is addressing a critical need to improve the U.S. Government's ability to forecast and model emerging health threats and take timely action to mitigate social and economic disruption associated with them.

Taking effective action and minimizing adverse consequences of infectious and non-infectious health threats requires informing federal, state, local, tribal, and territorial partners, the international community, the private sector, and the public. Building on CDC's existing modeling and analytics expertise, CDC is expanding and enhancing methods, tools, and workforce capacity to provide the nation with the kind of disease forecasting and modeling that can inform policymakers and the public about ongoing and emerging threats and how to mitigate them. As an interagency resource for early warnings related to emerging biological threats and trigger systems for actions, the Center will continue enhancing the public health system in detecting, responding to, and eventually preventing future epidemics and outbreaks.

## Public Health Leadership and Support Budget Request

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The Public Health Leadership and Support line funds CDC's Immediate Office of the Director, as well as other units throughout the agency, that enhance collaboration and coordination both within and outside CDC. These funds support the many essential cross-cutting activities including communications, policy, science and health equity that enable CDC to manage with efficiency, transparency, and accountability.

In FY 2022, CDC launched [CDC Moving Forward](#),<sup>244</sup> an effort to modernize CDC to better prepare the agency for future public health challenges to include the next pandemic. Through lessons learned from COVID-19 to improve how we deliver our science, guidance, and programs to the American people, the agency continues to modernize its operations and organizational structure. These changes will improve accountability, collaboration, communication, and timeliness within CDC and with our customers, at all levels of the organization.

### Budget Request

CDC's FY 2024 budget request of **\$143,570,000** for Public Health Leadership and Support is **\$15,000,000** above FY 2023 enacted level. CDC provides public health leadership, responsive and timely communication, and strong partnership support to non-governmental organizations working on public health issues. With increased funding, CDC will continue to enhance partnerships that promote CDC's guidance, communication, and strategy at all levels of government and industry. These investments will support communication with the public, Congress, academia, the business sector, employers, and other federal, state, and local partners through written communications, funding opportunities, audits, briefings, and other engagements. Funds will also support the agency's scientific leaders who advise and deploy for CDC's urgent and emergent public health response activities, and CDC's support for public health agency accreditation at the state and local levels.

CDC will continue to provide public health leadership to the nation and fulfill its responsibilities for responsive and timely communication to the public, key partners, and Congress. Staff offices will continue to work across the agency to maintain its commitment to minority health and health equity, equal employment opportunity (EEO), efficient business services, and responsive communications, legislative, and policy functions. With support from this line, CDC

- Coordinates review of policies and other documents across the agency and with other federal agencies to ensure consistent federal policies.
- Ensures CDC's science, programs, and recommendations are accessible, understandable, and actionable and maximize public trust and credibility.
- Serves as an incubator for new and promising policies, programs, and systems so that CDC's science goes further, faster, and has the greatest public health impact. Identifies high-value prevention and public health policies and interventions; increases the understanding and use of credible evidence of preventions' impacts by policymakers, health care, and public health professionals; and catalyzes collaboration among public health, health care, and other sectors.
- Provides leadership to CDC on all matters related to EEO and works to foster an inclusive culture at CDC through equity, opportunity, and respect. Ensures workforce fairness through Diversity, Equity, Inclusion and Accessibility (DEIA) for all CDC staff through the framework and guidance established by the FY 2020 CDC EEO Strategic Plan and the FY 2022 CDC DEIA Strategic Plan. In accordance with Executive Order 14035 and the subsequent government-wide DEIA Strategic Plan, CDC developed a robust DEIA Strategic Plan and is working to ensure the accuracy of workforce demographic data to inform the agency's EEO initiatives and efforts.

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<sup>244</sup> [www.cdc.gov/about/organization/cdc-moving-forward.html](http://www.cdc.gov/about/organization/cdc-moving-forward.html)

- Administers the agency's budget, grants and contracts, facilities, physical security, workforce health and wellness, human resources, and information technology programs. Align activities with the President's Management Agenda and Cross-Agency Priority (CAP) goals and funds the Office of Appropriations.
- Represents the agency in Washington, D.C., to the Department of Health and Human Services, other agencies, and the Washington, D.C. policy community. Receive and respond to requests for information and assistance from Congress. Work closely with CDC's Office of the Director, program leadership, policy offices, and Office of Appropriations to respond to congressional requests. The office also works with the Government Accountability Office (GAO) and the Office of the Inspector General (OIG) to facilitate audits and engagements.

CDC is increasing support for jurisdictions with fewer public health resources and public health infrastructure to increase and improve delivery of services to high-risk and underserved populations. As required in the FY 2023 Omnibus, CDC will stand up an **Office of Rural Health** to serve as a focal point for rural public health and to implement a strategy to meet the unique public health challenges of rural populations. The Office will coordinate across CDC programs.

### Improving Health Equity

CDC works to scale up and develop new evidence-based, innovative strategies that address health disparities and longstanding inequities, including social determinants of health. CDC's Office of Health Equity provides leadership for CDC-wide policies, strategies, planning, and evaluation to eliminate health disparities. Central to achieving these goals is transforming the public health workforce to ensure diversity and health equity competencies in existing and future staff, accelerating momentum and public health action to advance health equity for all.

CDC develops and implements diverse strategies and policies toward these goals:

- Collaboration with internal and external partners to address systemic racism in public health and healthcare, gender discrimination, and gendered racism in the workplace.
- Leveraging implementation science and analytic methods throughout CDC's programs, policies, data systems, and funding structures to achieve greater coordination, systems changes, and innovations.
- Engagement and mobilization of community-based organizations and trusted leaders.
- Strengthening of critical networks of state and local minority health and health equity offices.

In FY 2021, CDC launched its new CORE framework. The acronym represents: **C**ultivate comprehensive health equity science; **O**ptimize interventions; **R**einforce and expand robust partnerships; and **E**nhance Capacity and workforce diversity and inclusion to accelerate eliminating health inequities and achieving health equity. This innovative framework engages every part of the agency to incorporate health equity as a foundational element of CDC's work, including identifying transformational goals designed to advance CDC's health equity impact.

In FY 2022, CDC launched the Notice of Funding Opportunity for the CDC John R. Lewis Undergraduate Public Health Scholars Program (formerly the CDC Undergraduate Public Health Scholars (CUPS) program) and the Dr. James A. Ferguson Emerging Infectious Diseases Fellowship. The programs include awards to state, local, community, and other entities to provide student internship and fellowship opportunities to work in various public health settings, including community organizations, health departments, university-based programs, and federal agencies. Over the course of the programs, CDC anticipates training over 1,500 participants.

Expectations of CDC's leadership have grown and become more complex. Globally, individuals' increased consumption of electronic media has transformed almost every type of interaction they have with both

businesses and government. Urgent challenges in public health are becoming more numerous and frequent, with CDC managing multiple responses at once. The Public Health Leadership and Support (PHLS) line advances agency priorities in communications, policy, and science. As CDC transforms its capacity for response, it streamlined decision making into the Immediate office of the Director. However, while the need for responsiveness has grown, the PHLS line supporting these efforts has remained flat at less than one percent of CDC's annual budget authority.

### **Expanding Partnerships and Collaborations**

CDC will sustain and improve its activities with partners across the public health system. CDC will continue strengthening health departments and enhancing public health system coordination and collaboration to advance public health priorities. It will support expert convenings, including the Infectious Diseases Board of Scientific Counselors (BSC), which advises on emerging topics such as Acute Flaccid Myelitis, food, and waterborne illnesses, vaccinating with confidence, and COVID-19. It will also further build the capacity of Indian Country to identify and mitigate public health threats by managing the CDC/ATSDR Tribal Advisory Committee, connecting tribal nations to CDC programs, providing funding for building and improving tribal health infrastructure, and coordinating tribal consultations to improve American Indian and Alaska Native health. CDC will continue to provide leadership and support for public health strategies, programs, and systems improvements in the five U.S. territories and three freely associated states, recognizing their unique cultural, political, geographic, and disease-burden needs.

CDC will also build and scale collaborative work within the agency. Efforts will include supporting a workgroup focused on improving public health among people experiencing homelessness and high-risk populations. CDC will also prioritize coordination and leadership in ongoing performance monitoring, program planning and improvement, policy analysis, evidence generation, and partnership development across the agency's strategic priorities and current and emerging health issues. CDC's development and use of strategic planning and performance management across its Centers, Institutes, and Offices will provide forums for future collaboration.

## **Infectious Diseases Rapid Response Reserve Fund Budget Request**

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Following the epidemic of Ebola in West Africa, and Zika in the Americas, both situations for which CDC lacked sufficient funding for early response, the Infectious Diseases Rapid Response Reserve Fund (IDRRRF) was created by Congress in 2019. The fund provides CDC a source of resources to quickly address emerging outbreaks and prevent future infections. The IDRRRF was intended as a flexible and immediate source of funds, for CDC to use to respond quickly to an urgent problem, on the ground, to stop spread of a problem in or to the United States. It is available for CDC to use to respond to public health emergencies caused by infectious diseases, or infectious disease emergencies with the significant potential to occur and to affect the national security and health of Americans.

The IDRRRF has been a source of funds for immediate action to address Ebola Virus Disease in Africa in 2019. The investments from IDRRRF also supported CDC's early and aggressive response to the global outbreak of COVID-19 and community spread in the United States. CDC prioritizes use of this finite resource to address situations that pose the highest threat to Americans, including, against ongoing or future health threats. Currently, IDRRRF is supporting CDC's mpox response activities and providing capacity to detect and respond to Ebola Virus Disease (EVD) outbreaks in Africa, including possible reintroduction of Ebola related to prior outbreaks

### **Budget Request**

CDC's FY 2024 budget request of **\$35,000,000** for the Infectious Diseases Rapid Response Reserve Fund is level with FY 2023 enacted. This continued investment allows CDC to respond quickly when an imminent public health emergency is detected, as with mpox, EVD, and COVID-19.

In 2023, IDRRRF investments continue to support surveillance and response of EVD, along with CDC's response to the ongoing multinational mpox outbreak. CDC leveraged IDRRRF funds to successfully respond to and prepare for three EVD outbreaks in FY 2021 in the Democratic Republic of the Congo (DRC) and in the Republic of Guinea (Guinea), followed by an outbreak in April 2022 in DRC. Rapid, coordinated response efforts initiated by the affected countries led to rapid containment of cases. CDC coordinated with federal and international partners to improve on-the-ground efforts for surveillance, laboratory, border health, and community engagement. These outbreaks were contained within the affected regions, with no further spread to other countries. Most recently, an Ebola outbreak was reported on September 20, 2022, in Uganda. CDC worked to support the Uganda Ministry of Health (MOH) and the international community through surveillance, laboratory, border health and screening, and infection prevention and control activities. Resources have been allocated to support funneling of international arrival passengers with recent travel to Uganda and enhanced entry screening activities in the United States. On January 11, 2023, the Uganda Ministry of Health declared that the outbreak was over. Monitoring to ensure no new cases emerge is ongoing. As seen in the prior EVD outbreaks, detecting and responding to infectious disease outbreaks at their sources has been proven to be the most cost-effective strategy for preventing their spread.

In July 2022, CDC allocated IDRRRF funds for CDC's mpox response, testing, and surveillance activities to quickly respond to the mpox outbreak that began in May 2022. Early in the response, CDC rapidly scaled up testing and surveillance capacity. Current activities focus on testing, vaccination, and rapid response coordination in jurisdictions, to provide education and encourage vaccination. Since mid-August 2022, the average number of new mpox cases reported has steadily decreased. As cases decline, CDC is sustaining response efforts to prevent a resurgence of cases and outbreaks. A critical component to preventing a resurgence of cases is strengthening vaccination efforts, particularly efforts to reach and build trust in disproportionately impacted populations, including racial/ethnic minorities. CDC will also sustain capacity for testing, community outreach, and education.

CDC continues to support surveillance and testing capacity to aid jurisdictions in rapidly responding to new cases or clusters, preventing future large-scale outbreaks in the United States. CDC will continue to reassess its needs and activities as the mpox response continues.

## **Preventive Health and Health Services Block Grant Budget Request**

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CDC administers the Preventive Health and Health Services (PHHS) Block Grant program, which funds 61 recipients, including all 50 states, the District of Columbia, two American Indian tribes, five U.S. territories, and three freely associated states. Recipients implement innovative and community-driven methods that meet their priority public health needs while linking their goals and objectives to the national *Healthy People* priorities. The PHHS Block Grant supports various public health activities, including clinical services, public education, preventative screenings and services, data surveillance, outbreak control, and chronic disease prevention. Additionally, recipients often partner and share resources with local and tribal public health organizations, community organizations, and others to achieve their goals.

In March 2021, CDC published the results of an evaluation<sup>245</sup> of activities from July 2018 to June 2019 that underscored the PHHS Block Grant's support of work to improve address emerging public health needs and practice evidence-based public health. While the 2021 data collection on standardized measures to reduce the burden on recipients was postponed due to the COVID-19 pandemic, smaller evaluative studies and rapid assessments have provided a deeper dive into understanding this program's value and describing the outputs and outcomes that will be implemented. Data from these studies can be shared to demonstrate grant accountability. The proposed studies and activities include:

1. A rapid quantitative assessment on the use of PHHS Block Grant funds on COVID-19 related activities to better understand whether and how the Block Grant supported efforts to address the pandemic.
2. A special study on how the PHHS Block Grant addresses social determinants of health and health disparities.
3. Sharing findings from a current innovation study on how the PHHS Block Grant supports the implementation of innovative approaches and how recipients determine the effectiveness of those approaches.

### **Budget Request**

CDC's FY 2024 budget request of **\$160,000,000** from the Prevention and Public Health Fund resources for Preventive Health and Health Services Block Grant is level with FY 2023 enacted level. In FY 2024, CDC will continue to administer the program and work with recipients to address their locally identified public health priorities. In addition, CDC will continue to support these jurisdictions to use evidence-based methods and interventions; reduce risk factors, such as poor nutritional choices, smoking, and lack of physical activity; establish policy, social, and environmental changes; monitor and re-evaluate funded programs; and leverage other funding sources.

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<sup>245</sup> <https://www.cdc.gov/phhsblockgrant/evaluation.htm>.

**Recipient Table: Preventive Health and Health Services Block Grant (PPHF)**

	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Alabama	\$2,440,814	\$2,440,812	\$2,454,933	\$14,121
Alaska	\$533,831	\$533,831	\$536,834	\$3,003
Arizona	\$1,835,868	\$1,835,868	\$1,853,924	\$18,056
Arkansas	\$1,372,512	\$1,372,512	\$1,379,203	\$6,691
California	\$10,456,372	10,456,372	\$10,515,205	\$58,833
Colorado	\$1,903,234	\$1,903,234	\$1,923,673	\$20,439
Connecticut	\$2,230,840	\$2,230,840	\$2,241,045	\$10,205
Delaware	\$285,248	\$285,248	\$287,667	\$2,419
Washington, D.C.	\$1,198,812	\$1,198,812	\$1,207,931	\$9,119
Florida	\$4,576,987	\$4,576,987	\$4,634,919	\$57,932
Georgia	\$4,755,025	\$4,755,025	\$4,793,352	\$38,327
Hawaii	\$1,207,745	\$1,207,745	\$1,215,834	\$8,089
Idaho	\$571,281	\$571,281	\$578,325	\$7,044
Illinois	\$3,573,434	\$3,573,434	\$3,576,703	\$3,269
Indiana	\$2,571,090	\$2,571,090	\$2,584,512	\$13,422
Iowa	\$1,687,805	\$1,687,805	\$1,697,468	\$9,663
Kansas	\$1,397,130	\$1,397,130	\$1,403,868	\$6,738
Kentucky	\$2,058,551	\$2,058,551	\$2,069,124	\$10,573
Louisiana	\$4,485,748	\$4,485,748	\$4,511,871	\$26,123
Maine	\$1,380,337	\$1,380,337	\$1,388,395	\$8,058
Maryland	\$2,895,436	\$2,895,436	\$2,914,387	\$18,951
Massachusetts	\$4,175,000	\$4,175,000	\$4,203,152	\$28,152
Michigan	\$6,061,050	\$6,061,050	\$6,090,728	\$29,678
Minnesota	\$3,899,275	\$3,899,275	\$3,925,897	\$26,622
Mississippi	\$2,241,691	\$2,241,691	\$2,252,174	\$10,483
Missouri	\$3,836,556	\$3,836,556	\$3,856,685	\$20,129
Montana	\$1,023,483	\$1,023,483	\$1,030,904	\$7,421
Nebraska	\$2,531,092	\$2,531,092	\$2,548,387	\$17,295
Nevada	\$603,718	\$603,718	\$611,898	\$8,180
New Hampshire	\$2,211,836	\$2,211,836	\$2,226,215	\$14,379
New Jersey	\$4,432,940	\$4,432,940	\$4,459,508	\$26,568
New Mexico	\$2,172,186	\$2,172,186	\$2,185,019	\$12,833
New York	\$10,562,807	\$10,562,807	\$10,621,140	\$58,333
North Carolina	\$4,225,213	\$4,225,213	\$4,257,622	\$32,409
North Dakota	\$392,482	\$392,482	\$396,312	\$3,830
Ohio	\$6,954,285	\$6,954,285	\$6,988,866	\$34,581
Oklahoma	\$1,437,401	\$1,437,401	\$1,445,519	\$8,118
Oregon	\$1,101,927	\$1,101,927	\$1,111,737	\$9,810
Pennsylvania	\$7,328,234	\$7,328,234	\$7,364,266	\$36,032
Rhode Island	\$729,846	\$729,846	\$734,093	\$4,247
South Carolina	\$1,890,585	\$1,890,585	\$1,906,350	\$15,765
South Dakota	\$356,879	\$356,879	\$359,521	\$2,642
Tennessee	\$2,492,873	\$2,492,873	\$2,511,471	\$18,598
Texas	\$6,237,926	\$6,237,926	\$6,323,297	\$85,371
Utah	\$1,487,184	\$1,487,184	\$1,503,520	\$16,336
Vermont	\$419,896	\$419,896	\$422,130	\$2,234
Virginia	\$3,127,953	\$3,127,953	\$3,149,594	\$21,641
Washington	\$1,537,124	\$1,537,124	\$1,557,194	\$20,070

<b>West Virginia</b>	\$1,381,409	\$1,381,409	\$1,386,669	\$5,260
<b>Wisconsin</b>	\$3,005,592	\$3,005,592	\$3,021,333	\$15,741
<b>Wyoming</b>	\$350,691	\$350,691	\$352,464	\$1,773
Tribes				
<b>Kickapoo Tribe</b>	\$46,193	\$46,193	\$46,512	\$319
<b>Santee Sioux</b>	\$46,193	\$46,193	\$46,512	\$319
<b>American Samoa</b>	\$82,132	\$82,132	\$81,896	(\$236)
<b>Guam</b>	\$341,382	\$341,382	\$343,189	\$1,807
<b>Marshall Islands</b>	\$40,299	\$40,299	\$40,740	\$441
<b>Micronesia</b>	\$98,627	\$98,627	\$99,018	\$391
<b>Northern Mariana Islands</b>	\$61,711	\$61,711	\$62,127	\$416
<b>Puerto Rico</b>	\$2,402,045	\$2,402,045	\$2,403,334	\$1,289
<b>Republic of Palau</b>	\$32,766	\$32,766	\$32,972	\$206
<b>Virgin Islands</b>	\$269,265	\$269,265	\$270,862	\$1,597
Subtotal States	<b>\$141,627,234</b>	<b>\$141,627,232</b>	<b>\$142,572,838</b>	<b>\$945,606</b>
Subtotal Tribes	<b>\$92,386</b>	<b>\$92,386</b>	<b>\$93,024</b>	<b>\$638</b>
Subtotal Territories	<b>\$3,328,227</b>	<b>\$3,328,227</b>	<b>\$3,334,138</b>	<b>\$5,911</b>
<b>Total Resources</b>	<b>\$145,047,847</b>	<b>\$145,047,845</b>	<b>\$146,000,000</b>	<b>\$952,155</b>

<sup>1</sup>Reflects amount of funding distributed through CDC-RFA-OT21-2102: The Preventive Health and Health Services Block Grant.

**Public Health Infrastructure and Capacity** <sup>1,2,3</sup>

	<b>FY 2022 Final</b>	<b>FY 2023 Enacted</b>	<b>FY 2024 President's Budget</b>	<b>FY 2024 +/- FY 2023</b>
Alabama	\$2,093,506	\$3,802,717	TBD	TBD
Alaska	\$489,627	\$711,797	TBD	TBD
Arizona	\$3,099,814	\$5,278,450	TBD	TBD
Arkansas	\$1,353,364	\$2,376,351	TBD	TBD
California	\$15,450,383	\$27,225,574	TBD	TBD
Colorado	\$2,456,318	\$4,038,333	TBD	TBD
Connecticut	\$1,401,552	\$2,469,216	TBD	TBD
Delaware	\$579,169	\$884,358	TBD	TBD
District of Columbia	\$485,173	\$703,215	TBD	TBD
Florida	\$8,611,294	\$15,668,131	TBD	TBD
Georgia	\$4,030,685	\$7,304,167	TBD	TBD
Hawaii	\$705,441	\$1,127,703	TBD	TBD
Idaho	\$822,876	\$1,354,018	TBD	TBD
Illinois	\$4,869,459	\$8,920,614	TBD	TBD
Indiana	\$2,741,279	\$4,819,285	TBD	TBD
Iowa	\$1,263,682	\$2,203,519	TBD	TBD
Kansas	\$1,186,172	\$2,054,146	TBD	TBD
Kentucky	\$2,096,308	\$3,576,328	TBD	TBD
Louisiana	\$1,960,098	\$3,545,619	TBD	TBD
Maine	\$692,303	\$1,102,385	TBD	TBD
Maryland	\$2,483,944	\$4,323,361	TBD	TBD
Massachusetts	\$2,732,665	\$4,802,684	TBD	TBD
Michigan	\$3,867,928	\$6,990,511	TBD	TBD
Minnesota	\$2,231,785	\$3,837,413	TBD	TBD
Mississippi	\$1,400,605	\$2,467,390	TBD	TBD
Missouri	\$2,539,566	\$4,430,553	TBD	TBD
Montana	\$602,588	\$929,491	TBD	TBD
Nebraska	\$1,113,093	\$1,681,524	TBD	TBD
Nevada	\$1,570,677	\$2,563,357	TBD	TBD
New Hampshire	\$654,495	\$1,029,524	TBD	TBD
New Jersey	\$3,307,949	\$6,143,133	TBD	TBD
New Mexico	\$1,040,978	\$1,774,335	TBD	TBD
New York	\$8,266,828	\$15,467,859	TBD	TBD
North Carolina	\$4,198,314	\$7,395,426	TBD	TBD
North Dakota	\$495,924	\$723,932	TBD	TBD
Ohio	\$4,354,012	\$7,927,269	TBD	TBD
Oklahoma	\$2,138,546	\$3,425,938	TBD	TBD
Oregon	\$1,839,066	\$3,080,584	TBD	TBD
Pennsylvania	\$4,954,497	\$9,084,494	TBD	TBD
Rhode Island	\$602,811	\$929,921	TBD	TBD
South Carolina	\$2,029,157	\$3,678,707	TBD	TBD
South Dakota	\$544,076	\$816,729	TBD	TBD
Tennessee	\$3,181,699	\$5,436,254	TBD	TBD
Texas	\$12,542,093	\$22,316,220	TBD	TBD
Utah	\$1,161,815	\$2,007,207	TBD	TBD
Vermont	\$450,861	\$637,090	TBD	TBD
Virginia	\$3,209,684	\$5,721,975	TBD	TBD
Washington	\$2,796,179	\$4,925,087	TBD	TBD

West Virginia	\$886,058	\$1,475,780	TBD	TBD
Wisconsin	\$2,394,292	\$4,150,590	TBD	TBD
Wyoming	\$427,289	\$591,664	TBD	TBD
<b>Territories and Freely Associated States</b>				
America Samoa	\$269,700	\$391,259	TBD	TBD
Guam	\$323,299	\$334,386	TBD	TBD
Micronesia	\$293,788	\$2,838,510	TBD	TBD
Puerto Rico	\$1,593,179	\$338,065	TBD	TBD
Virgin Islands	\$295,697	\$293,004	TBD	TBD
Northern Mariana Islands	\$272,315	\$268,125	TBD	TBD
Palau	\$259,405	\$316,756	TBD	TBD
Marshall Islands	\$284,640	\$391,259	TBD	TBD
<b>Subtotal States</b>	<b>\$136,407,977</b>	<b>\$240,219,895</b>	<b>TBD</b>	<b>TBD</b>
<b>Subtotal Territories and FAS</b>	<b>\$3,592,023</b>	<b>\$4,780,105</b>	<b>TBD</b>	<b>TBD</b>
<b>Total Resources</b>	<b>\$140,000,000</b>	<b>\$245,000,000</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup> Table only reflects funds from CDC’s annual appropriation. These estimates are consistent with report language accompanying the FY 2023 Consolidated Appropriations Act that requires “no less than 70 percent of this funding be awarded to health departments”.

<sup>2</sup> These funds are awarded by formula.

<sup>3</sup> Awards noted for A2: Foundational Capabilities. Does not include Component B awards to public health partners; funded by American Rescue Plan Act and Public Health Infrastructure and Capacity

## BUILDINGS AND FACILITIES

(dollars in millions)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY2023
Budget Authority	\$30.000	\$40.000	\$55.000	\$15.000
<b>Total Request<sup>1</sup></b>	<b>\$30.000</b>	<b>\$40.000</b>	<b>\$55.000</b>	<b>\$15.000</b>
-- Buildings and Facilities	\$30.000	\$40.000	\$55.000	\$15.000

<sup>1</sup> This table reflects totals by budget activity. The FY 2024 budget proposes a single "CDC-Wide Activities and Program Support" Treasury account structure.

Safe, secure, and fully operational laboratories, buildings, and facilities equip CDC with the infrastructure needed to protect Americans from the threat of disease, respond to evolving public health needs, and rapidly address public health emergencies. CDC works 24/7 to protect the health and security of our nation. The COVID-19 pandemic, mpox outbreak, and other emergencies require urgent action, and CDC laboratories and facilities must continue to be ready to respond. This requires continuous maintenance not normally found in a traditional facilities program.

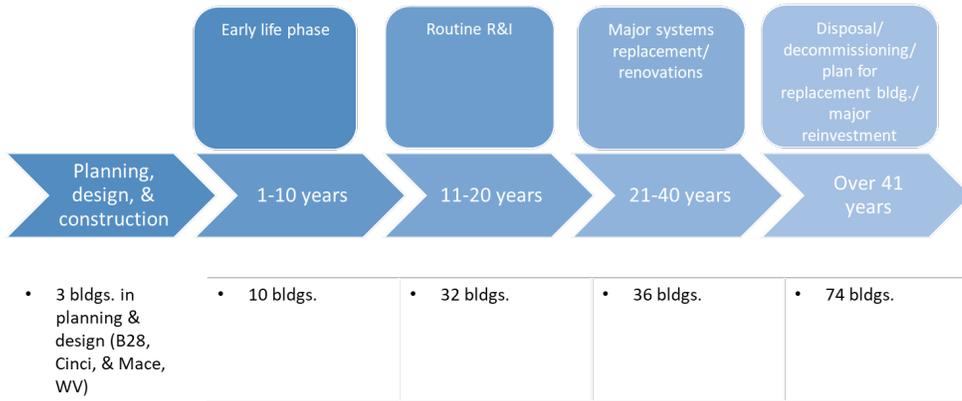
Buildings and Facilities (B&F) funds are used to replace, maintain, and improve existing CDC facilities and construct new facilities necessary to meet CDC's mission. CDC's building repair and improvement needs are nationwide—covering CDC-owned facilities in seven states and San Juan, Puerto Rico. The gross square footage of CDC's assets has nearly doubled since 2000. Older facilities, such as those on the National Institute for Occupational Safety and Health (NIOSH) Pittsburgh Campus, increase operating costs due to inefficiency and strain portfolio-wide resources with a burdensome backlog of maintenance and repair. Aging facilities and infrastructure also contribute to the failure of equipment and systems in laboratories, causing frequent water leaks and other urgent and costly emergency repairs. Building 15, built in 1987 and home to Bio Safety Level (BSL) 2 and 3 laboratories, currently houses the oldest laboratories on CDC's Roybal Campus. Without modernization and refurbishment, this building requires continuous repair. Challenges such as these hinder CDC's ability to perform critical laboratory response diagnostics and research.

### CDC BUILDINGS AND FACILITIES

#### BY THE NUMBERS

- 25,000+—personnel working in CDC's facilities and protecting Americans from health threats every day.
- 7.7 million—gross square feet of space supporting CDC's public health mission.
- 3.1 million—gross square feet of laboratories.
- 179—owned assets, including 152 buildings and 27 support structures.
- 74—buildings over 40 years old.
- \$4.1 billion—functional replacement value of CDC buildings and facilities.

## Lifecycle of CDC’s Buildings\*



\*Federally Owned Buildings. Excludes land, structures, and utilities.

CDC continues to identify opportunities for investments in facilities and leased properties that will ensure facilities across the United States are safe, meet CDC’s public health mission, and operate efficiently. CDC operates in several leased spaces in the Atlanta, GA area which house over 4,500 people, and many of these leases will expire by 2026. By consolidating staff from leased space into owned facilities, CDC will reduce operating costs and gain efficiencies in operational services. The new Johnny Isakson Public Health Research Building on the CDC Chamblee Campus was funded through the FY 2020 Appropriations Act and HHS Nonrecurring Expenses Fund (NEF) and named in the Consolidated Appropriation Act of FY 2021. Once operational, the building will consolidate between 1,800 and 2,000 staff and save \$85 million over the next 30 years.

### Budget Request

CDC’s FY 2024 budget request of **\$55,000,000** for Buildings and Facilities is **\$15,000,000** above the FY 2023 enacted level. This funding supports renovations to existing buildings, as well as repair and improvements (e.g., laboratory ventilation upgrades, structural repairs, roof replacements, and electrical and mechanical repairs) needed to restore, maintain, and improve CDC’s assets. This investment will allow CDC to make progress reducing its backlog of maintenance and repairs.

In FY 2022, the aggregate Functional Replacement Value (FRV) of the owned facilities for CDC is reported as \$4.1 billion, and its aggregate backlog of maintenance and repair (BMAR) is reported as \$193.8 million (4.7% of the FRV). The FY 2022 budget of \$109 million allocates \$79.0 million (.02% of the FRV) for Capital Projects, \$30 million (.01% of the FRV) for R&I funded projects, and less than \$25,000 for disposal. The FY 2024 budget request including new NEF requests is \$129.5 million (.03% of the FRV). NEF Requests make up \$74.5 million (.02% of the FRV) and R&I funded projects will receive \$55.0 million (0.01% of the FRV, or 28.3% of the BMAR). The FY 2024 NEF requests are discussed in more detail in the NEF chapter.

CDC laboratories and facilities are critical to the nation’s defense against health and national security threats, and many of these facilities are deteriorating. The FY 2024 request of \$55,000,000 will be used to repair and improve CDC-owned buildings and laboratories and protect these assets through a rigorous preventive maintenance program. This investment is critical to keeping CDC facilities fully functional and prepared to identify, respond to, and eliminate the next disease threat to our nation.

While CDC's scientists continue to respond to urgent public health needs, the laboratories and facilities supporting these activities continue to require improvements and maintenance necessary for CDC to conduct its critical mission. CDC prioritizes repair and improvement projects by need and available funding within the following categories:

- Execution of fire and life safety required improvements
- Mission-critical support projects
- Replacement of technologically antiquated mechanical and electrical infrastructure
- Improvement of campus energy and water efficiency, and increased resiliency in alignment with federal requirements
- Reduction of the current backlog of maintenance and repair

Several high priority fire and life safety projects as well as emergency projects are planned for FY 2024. Aging infrastructure in laboratory buildings at all federally-owned locations requires major mechanical, electrical, and plumbing system replacements. Components in these systems, such as built-in laboratory equipment, roofs, chillers, and boilers, will be replaced. Many building support systems and elements need to be replaced or repaired, including elevators, superstructure, fire alarm systems, and heating, ventilation, and air conditioning systems.

Critical program support projects and facilities maintenance planned in FY 2024 include:

- The urgent replacement of domestic water piping compromised by Microbially Induced Corrosion. Beginning several years ago, minor leaks began increasing in volume, creating risk of lab disruption and flooding damage to the Building 110 Environmental Research Laboratory at the Chamblee Campus.
- Replacement of cage washers critical for sanitizing animal cages that have potentially infectious waste.
- Replacement of the Building 23 insectary control panel on the Roybal Campus which has been used almost continuously for 12 years and has required a significant increase in repairs.
- Replacement of the NIOSH Morgantown, West Virginia, boiler plant that provides steam for heat, humidity, hot water, and sanitation for the entire campus. The boilers are over 50 years old and starting to show signs of failing; the renovation will replace the main components as well as replace the de-aerator tank, pumps, lighting, flooring, and pipes.
- Repair and/or replacement of aging and corroded system parts of the chilled water units on the San Juan Campus; this includes chiller low flow control, water piping, control valves, expansion tank, and replacement of outdated variable frequency drives, pumps, and motors that have reached the end of their useful life.

CDC's facilities strategy addresses a variety of future needs that are critical and directly support the Agency's public health mission. Investing in CDC facilities will:

- Enable CDC to maintain high-quality and cutting-edge public health emergency response capabilities.
- Enhance key occupational safety and health laboratory space, lab support space, and office space.
- Maintain safe and functional facilities to continue mission critical work in public health.
- Reduce CDC's overall repair and maintenance operating costs to preserve facility functionality and preparedness activities.
- Reduce the footprint of leased facilities, reduce costs and save taxpayer dollars, and improve security and resilience.

CDC's current priority infrastructure needs at its federally-owned facilities include:

- Space conversion to increase laboratory space in Building 401 on Ft. Collins, Colorado Campus
- Laboratory controls and Building Automation System Upgrades for Buildings 17 and 103
- Upgrade Roybal Campus Central Utility Plant chillers

In addition to CDC’s owned space, CDC maintains leases at three different office parks in the Atlanta area: (1) The District at Chamblee, (2) Century Center, and (3) Corporate Square. CDC also maintains a lease at a warehouse in Chamblee. CDC is leasing space in 11 buildings for 4,500 staff in the Atlanta area at approximately \$27 million annually [all lease negotiations and executions are handled by the General Services Administration (GSA)]. Rent for leased facilities is allocated through CDC’s Working Capital Fund. CDC is actively working to reduce its leased portfolio in FY 2023 and FY 2024 by housing all Atlanta-based CDC staff on one of CDC’s secure government-owned campus.

All CDC facilities meet requirements in the Americans with Disability Act as well as the Architectural Barriers Act to provide accessible facilities that allow full participation by persons with disabilities. In addition, reasonable accommodation requests from staff pertaining to the built environment are routinely implemented.

<b>Buildings and Facilities Funding History</b>	
<b>Fiscal Year</b>	<b>Dollars (in millions)</b>
FY 2020	\$25.000
FY 2021	\$30.000
FY 2022 Final	\$30.000
FY 2023 Enacted	\$40.000
FY 2024 President’s Budget	\$55.000

Projects In-Progress

High-Containment Continuity Laboratory

The 2018 Consolidated Appropriations Act directed CDC to utilize \$240 million from budget authority and directed another \$240 million to be transferred from the NEF for the high-containment laboratory project. The High-Containment Continuity Laboratory (HCCL) will provide approximately 175,000 gross square feet, containing both the laboratory space for research on viruses that threaten the nation’s public health security and mechanical systems space containing the highly specialized building systems to support the laboratory space. Additionally, the HCCL will contain state-of-the art biosafety features, including pathogen containment through high-efficiency HEPA filters, and advanced security to restrict access to laboratories and support spaces.

The design of the HCCL is complete. Construction of the HCCL is scheduled to begin in summer 2024 with an estimated completion date of spring 2028. CDC anticipates that commissioning of the laboratory will be completed, and the facility will become operational in fall 2029.

Cincinnati

CDC, working with the General Services Administration (GSA), identified a potential site for a new facility to consolidate NIOSH’s Cincinnati Research Facilities into one central location. This project is supported with \$194 million from the NEF. The Environmental Impact Statement (EIS) assessment and associated Record of Decision (ROD) have been completed. CDC, working with GSA, is in the process of purchasing the site for the facility.

Design of the project was completed in fall 2021. The construction contract is anticipated to award in Spring 2023 pending the status of the land acquisition. Project completion is anticipated in early FY 2026.

#### Underground Mining Research Facility

As directed in the FY 2021 Consolidated Appropriations Act, CDC is proceeding with acquiring a replacement underground mining research facility to support mining research capabilities no longer available at the former NIOSH Lake Lynn facility. CDC has identified a candidate replacement site in West Virginia and negotiated a purchase agreement. The Final Environmental Impact Statement (FEIS) required by the National Environmental Policy Act (NEPA) was completed and published in the public domain in July 2021. CDC issued a Record of Decision (ROD) in October 2021 indicating plans to pursue property acquisition and development of the site. CDC is expecting to acquire the land in early 2023. Design and construction of the facility is anticipated to take approximately three years.

#### Chamblee Campus Expansion

In FY 2020, CDC received \$225 million from the NEF to construct the Johnny Isakson Public Health Research Building and supporting infrastructure on CDC's Chamblee Campus. This will allow for the consolidation of 1,600 to 2,000 staff into a new office building. The new building will maximize space utilization rates, minimize long-term operating and maintenance costs, and provide opportunities for increased operational efficiencies. The design of the Johnny Isakson Public Health Research Building is complete, and construction is underway, with occupancy anticipated in the second quarter of calendar year 2024.

#### NIOSH Pittsburgh Campus

Aging buildings on the NIOSH Campus in Pittsburgh, Pennsylvania have frequent infrastructure and utility repair needs, which add to CDC's backlog of maintenance and repairs. In FY 2021, CDC received \$14 million from the NEF to renovate the National Personal Protective Technology Laboratory (NPPTL) at the Pittsburgh Campus. The renovated laboratory space will support NPPTL's Human Performance and Physiology Research Branch Laboratories and the NPPTL respirator certification program as well as needed laboratory support. Design is complete and construction is planned for FY 2023 with occupancy of the new lab space anticipated in early 2024.

## Sustainability

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Sustainability at CDC is embedded in design and construction standards. This supports the public health mission, generates a financial return on investment, and promotes a positive environmental impact. Following the recent completion of the agency's first net-zero energy parking deck on the Roybal Campus in Atlanta, Georgia, CDC is working to make progress towards the climate and sustainability goals set forth by the President in Executive Order (EO) 14057: *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*. CDC is taking a holistic sustainable approach when developing long-term strategic plans for agency facilities and operations. In addition, CDC continues work to support facility resiliency against the impacts of climate change, exemplified in the construction of solar array canopies and battery backup storage at the San Juan, Puerto Rico Campus.

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## NONRECURRING EXPENSES FUND (NEF)

### Budget Summary (Dollars in Thousands)

	FY 2022 <sup>2</sup>	FY 2023 <sup>3</sup>	FY 2024 <sup>4</sup>
<b>Notification<sup>1</sup></b>	\$65,000	\$35,000	\$74,500

<sup>1</sup> Pursuant to Section 223 of Division G of the Consolidated Appropriation Act, 2008, notification is required of planned use.

<sup>2</sup> Notification submitted to the Committees on Appropriations in the House of Representatives and the Senate on June 17, 2021.

<sup>3</sup> Notification submitted to the Committees on Appropriations in the House of Representatives and the Senate on September 23, 2022.

<sup>4</sup> This represents the total amount to be notified as a planned use of funds in a FY 2024 notification letter; this amount is a planned estimate and subject to final approval. Consistent with congressional direction included in the FY 2023 Joint Explanatory Statement, HHS plans to fund the design and construction of the new mine safety research facility from the NEF. The NEF allocation for this facility will be included in a future notification.

**Authorizing Legislation:**

Authorization..... Section 223 of Division G of the Consolidated Appropriations Act, 2008  
 Allocation Method..... Direct Federal, Competitive Contract

**Program Description and Accomplishments**

The Nonrecurring Expenses Fund (NEF) permits HHS to transfer unobligated balances of expired discretionary funds from FY 2008 and subsequent years into the NEF account. Congress authorized use of these funds for capital acquisitions necessary for the operation of the Department, specifically information technology (IT) and facilities infrastructure acquisitions.

**Budget Allocation FY 2024**

**Building 401 Renovation**

Renovation of Building 401 on the Fort Collins, Colorado campus will support CDC’s public health mission and provide the laboratory, insectary, and vivarium space to meet CDC’s vector-borne disease research objectives. CDC is planning to renovate portions of the first and second floor of Building 401 to recapture and convert existing administrative space to approximately 11,000 gross square feet of laboratory space (while retaining ~25% of administrative space). The converted space will expand the vivarium and insectary, animal holding rooms, and the molecular testing lab. This renovation will also allow for more space per laboratory to meet HHS laboratory space standards. In order to execute this project, CDC also proposes a general provision to provide authority to renovate on leased land.

**Roybal Campus Central Utility Plant Chillers Upgrade**

CDC’s chilled water system is responsible for maintaining operating temperature for the Roybal Campus and the cold room temperatures required inside laboratory spaces. CDC is planning to replace aging chillers and their associated pumps, cooling towers, piping, and controls. When complete, the Central Utility Plant will be restored to a fully operational status with all existing deficiencies corrected, giving CDC another 20+ years of chilled water service to CDC’s campus.

**Laboratory Controls and Building Automation System (BAS) Upgrades for CDC’s Roybal Campus Building 17 and Chamblee Campus Building 103**

CDC’s ability to respond to infectious disease threats depends upon the operational readiness of its laboratories. However, laboratory operations are very demanding on building utility systems, causing more rapid

deterioration through increased density of utilization than a comparable office building. The cost to maintain laboratory space is approximately 40% higher per square foot than office space.

To ensure the safety of staff and continuity of laboratory operations, CDC is planning to replace the entire BAS in its Building 17 Biological Safety Level 2&3 laboratory on the Roybal Campus and the Building 103 laboratory on the Chamblee Campus where these needs have become urgent.

### **Budget Allocation FY 2023**

#### **National Health and Nutrition Examination Survey (NHANES)**

CDC plans to utilize \$35.0 million in NEF resources to replace and upgrade essential National Health and Nutrition Examination Survey (NHANES) Mobile Examination Center (MEC) vehicles, equipment, and IT in order to sustain CDC's public health infrastructure. NHANES is the primary source of data for multiple HHS programs and initiatives including the Dietary Guidelines for Americans, the U.S. Surgeon General's Report on Oral Health in America, and the Healthy People 2030 objectives. The new MEC infrastructure will allow the agency to expand its reach to American citizens and conduct public health nutrition examination surveys. CDC will acquire the vehicles and equipment in FY 2023 for field operations in FY 2025.

### **Budget Allocation FY 2022**

#### **National Institute of Occupational Safety and Health (NIOSH) Cincinnati Land Development**

CDC, working with the General Services Administration (GSA), identified a potential site for a new facility to consolidate NIOSH's Cincinnati Research Facilities into one central location. This project is supported with a total of \$194.0 million from the NEF, \$65.0 million of which was allocated in FY 2022 to address rising construction costs. The Environmental Impact Statement assessment and associated Record of Decision have been completed. CDC, working with GSA, is in the process of purchasing the site for the facility. Design of the project was completed in fall 2021. The construction contract is anticipated to award in Spring 2023 pending the status of the land acquisition. Project completion is anticipated in early FY 2026.

### **Budget Allocation FY 2021 and prior**

#### **NIOSH Pittsburgh Campus**

Aging buildings on the NIOSH Campus in Pittsburgh, Pennsylvania, have frequent and costly infrastructure and utility repair needs, which add to CDC's backlog of maintenance repairs and disrupt NIOSH's support to American workers. In FY 2021, CDC received \$14.0 million from the NEF to renovate the National Personal Protective Technology Laboratory (NPPTL) at the Pittsburgh Campus. The renovated laboratory space will support NPPTL's Human Performance and Physiology Research Branch Laboratories; NPPTL's respirator certification program mission focused on workplace health and safety; and the research and development of new personal protective equipment technologies. The research conducted at NPPTL provides ongoing protection for America's workers and has been of critical importance to certifying respirators during the COVID-19 pandemic. Renovation of the facilities will enable more efficient and effective research. Design is complete and construction is scheduled to begin in FY 2023. Occupancy of the new lab space is anticipated for early 2024.

**Chamblee Campus Expansion**

In FY 2020, CDC received \$225.0 million from the NEF to construct the Johnny Isakson Public Health Research Building and supporting infrastructure on CDC's Chamblee Campus for consolidation of 1,600 to 2,000 staff into a new office building. The new building will maximize space utilization rates, minimize long-term operating and maintenance costs, and provide opportunities for increased operational efficiencies. The design of the Johnny Isakson Public Health Research Building is complete, and construction is underway, with a goal for occupancy in the second quarter of calendar year 2024. This project is critical to the agency's strategy to reduce reliance on expensive leased property.

**High-Containment Continuity Laboratory (HCCL)**

Safe, modern containment facilities help us protect Americans from the deadliest disease threats and emerging pathogens. The 2018 Consolidated Appropriations Act directed CDC to utilize \$240.0 million in budget authority and \$240.0 million from the NEF to support the High Containment Continuity Laboratory project. The HCCL will enable CDC to continue to protect, defend, and respond to the most infectious disease threats involving high-consequence pathogens. The design of the new 165,000 square foot high containment laboratory is complete, and construction is anticipated to begin in fall 2023, with an estimated completion date of Summer 2027. CDC anticipates that commissioning of the laboratory will be completed in Winter 2028.

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## WORKING CAPITAL FUND

### CDC FY 2024 WORKING CAPITAL FUND TABLE<sup>1</sup>

(dollars in thousands)

CDC Programs	FY 2023 Estimate	FY 2024 Estimate
Immunization and Respiratory Diseases	\$58,096	TBD
HIV/AIDS, Viral Hepatitis, STI and TB Prevention	\$61,989	TBD
Emerging and Zoonotic Infectious Diseases	\$101,220	TBD
Chronic Disease Prevention and Health Promotion	\$52,891	TBD
Birth Defects, Developmental Disabilities, Disability and Health	\$11,938	TBD
Environmental Health	\$28,955	TBD
Injury Prevention and Control	\$26,471	TBD
Public Health Scientific Services	\$76,160	TBD
Occupational Safety and Health	\$47,923	TBD
Global Health	\$57,684	TBD
Public Health Preparedness and Response	\$40,719	TBD
CDC Wide Activities	\$24,635	TBD
<b>CDC Program Total</b>	<b>\$588,681</b>	<b>TBD</b>
<b>Other CDC Funding Sources</b>		TBD
<i>Agency for Toxic Substances and Disease Registry</i>	\$11,867	TBD
<i>Energy Employees Occupational Illness Compensation Program Act (EEOICPA)</i>	\$2,976	TBD
<i>Vaccines for Children</i>	\$31,982	TBD
<i>World Trade Center</i>	\$6,648	TBD
<i>PEPFAR</i>	\$54,896	TBD
<i>Other Reimbursable Income</i>	\$24,352	TBD
<b>Other CDC Programs Contributions Total</b>	<b>\$132,721</b>	<b>TBD</b>
<b>Total CDC Programs Contributions</b>	<b>\$721,402</b>	<b>TBD</b>

<sup>1</sup> Estimates are based on the WCF Governance Board approved operating budget for FY 2023. The estimate is distributed across budget lines on a pro-rata basis until consumption data is collected and bills are issued. These estimates do not include: Specialized Service Agreements, adjustments for increases or decreases to program activities, or supplemental appropriations (e.g., COVID-19 and GHSA), which will result in a change to the consumption/billing across budget lines.

The Working Capital Fund (WCF) is a revolving fund with extended availability and serves as the funding mechanism for centralized business services support across CDC. Business service offices provide services to CDC programs and the WCF bills programs for the services consumed based on pre-established rates. Services include office and other space management, information technology, financial transactions, and security services. The WCF supports CDC's core operations to achieve the agency's public health mission.

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## REIMBURSEMENTS AND TRUST FUNDS

(dollars in millions)	FY 2020 Actual	FY 2021 Actual	FY 2022 Estimate	FY 2023 Estimate
Reimbursements and Trust Funds	\$199.000	\$661.000	\$693.000	\$693.000

**Authorizing Legislation:** PHS 214, 301, 306(b)(4), 311, 353; Consolidated Appropriations Act, 2016 (P.L. 114-113)

CDC's reimbursable activities provide scientific and programmatic expertise to other agencies and organizations. CDC has a long history of partnering with other federal agencies in the shared interest of improving public health and prevention programs. Examples of these activities include:

- CDC will continue its longstanding agreements with other agencies of the Public Health Service, HHS, and others associated with CDC's health statistics studies. CDC will continue to provide scientific and programmatic expertise in areas such as genetic diseases, laboratory tests, investigations, development of worker safety guidance, and training and model screening programs.
- CDC will continue the association between the Epidemiology Program at Department of Veterans Affairs (VA) and the National Center for Health Statistics (NCHS). NCHS will perform searches of the National Death Index (NDI) for VA in research and surveillance studies. The Epidemiology Program conducts research and surveillance studies on the health of veterans to understand the causes and patterns of their health and illnesses. The data and research findings from these studies help VA health professionals improve healthcare practices for veterans. The findings also help VA leadership and Congress improve health policies for veterans.
- CDC will continue to work with the U.S. Agency on International Development (USAID) on various projects including the President's Malaria Initiative. PMI was launched in 2005 with the goal of reducing malaria-related mortality by 50% across 15 high-burden countries in sub-Saharan Africa. CDC contributes scientific expertise, including on the focus interventions of insecticide-treated mosquito nests (ITNs), indoor residual spraying (IRS), accurate diagnosis and treatment with artemisine-based combinations therapies (ACTs), and intermittent preventive treatment of pregnant women (IPTp). To date, excluding the five new PMI countries announced in 2017, all 19 PMI focus countries in Africa have data from paired nationwide surveys and have documented declines in all-cause mortality rates among children under five.
- In addition to reimbursable agreements and user fees, CDC receives funds from Cooperative Research and Development Agreements (CRADAs) to enhance and facilitate collaboration between the agency's laboratories and various partners. CDC provides research personnel, laboratory facilities, materials, equipment, supplies, intellectual property, and other in-kind contributions, and uses the income from CRADAs to continue to improve programs.

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# PERFORMANCE BY ACTIVITY

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## IMMUNIZATION AND RESPIRATORY DISEASES

### Immunization Program and Program Implementation and Accountability

**Performance Measure for Long Term Objective: Ensure that children and adolescents are appropriately vaccinated**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
1.2.1c Achieve and sustain immunization coverage in children 19 to 35 months of age for one dose of MMR vaccine (Intermediate Outcome)	FY 2020: 93% Target: 90% (Target Exceeded)	90%	90%	Maintain
1.2.1h Achieve and sustain immunization coverage of at least 90% in children 19-35 months of age for at least 4 doses of pneumococcal conjugate vaccine (Intermediate Outcome)	FY 2020: 83% Target: 90% (Target Not Met)	90%	90%	Maintain
1.2.1i Achieve and sustain immunization coverage of at least 80% in children 19- to 35-months of age for 2-3 doses of rotavirus (Intermediate Outcome)	FY 2020: 77% Target: 80% (Target Not Met but Improved)	80%	80%	Maintain
1.2.2a Achieve and sustain immunization coverage of at least 80% in adolescents 13 to 15 years of age for 1 dose of Tdap (tetanus and diphtheria toxoids and acellular pertussis) (Intermediate Outcome)	FY 2020: 90% Target: 90% (Target Met)	90%	90%	Maintain
1.2.2b Achieve and sustain immunization coverage of at least 80% in adolescents 13 to 15 years of age for 1 dose of meningococcal conjugate vaccine (MenACWY) (Intermediate Outcome)	FY 2020: 89% Target: 87% (Target Exceeded)	87%	90%	Maintain
1.L.1: Achieve and sustain vaccination coverage of at least 80% for receiving recommended doses of human papillomavirus (HPV) vaccine (among adolescents 13-15 years of age)	FY 2021: 54.5% (Baseline)	60%	65%	+5

**Performance Measures for Long Term Objective: Increase the proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
1.3.1b Increase the percentage of adults aged 65 and older who are vaccinated with at least one dose of pneumococcal vaccine (Intermediate Outcome)	FY 2019: 67% Target: 85% (Target Not Met)	85%	85%	Maintain
1.3.2c Increase the percentage of non-institutionalized adults ages 19 to 64 at increased risk of pneumococcal disease who are vaccinated with at least one dose of pneumococcal vaccine (Intermediate Outcome)	FY 2020: 23% Target: 29% (Target Not Met)	29%	29%	Maintain
1.3.3a Increase the percentage of adults aged 18 years and older who are vaccinated annually against seasonal influenza (Intermediate Outcome)	FY 2020: 50% Target: 70% (Target Not Met but Improved)	70%	70%	Maintain

**Performance Trends:** Immunization continues to be one of the most effective public health interventions. CDC supports the implementation of state-based immunization programs making vaccines available to children, adolescents, and adults. CDC estimates that, among children born during 1994–2018, vaccination will prevent an estimated 419 million illnesses, 26.8 million hospitalizations, and 936,000 early deaths over the course of their lifetimes, at a net savings of \$406 billion in direct costs and \$1.88 trillion in total societal costs<sup>246</sup>.

CDC achieved levels near or above national (Healthy People 2020) targets for most of the routinely recommended childhood vaccinations. Since FY 2010, measles, mumps, and rubella (MMR) vaccinations exceeded 90% coverage rates (Measure 1.2.1c). Rotavirus vaccine coverage among children increased by 20 percentage points from 59% in FY 2010 to 79% in FY 2021 an improvement over FY 2020 results (Measure 1.2.1i). Four dose coverage of pneumococcal conjugate vaccine (PCV13) was 85% (Measure 1.2.1h) in FY 2021, slightly higher than FY 2010 (ranging from 82%-84%); however, coverage with three doses PCV13 has exceeded 90% since 2010. CDC has demonstrated an 87% decline in PCV13-type pneumococcal disease among children less than five years old in the U.S. Although CDC did not meet targeted coverage rates for PCV, strategies to improve the fourth dose of PCV coverage are in place and are similar to those used to improve the uptake of other vaccines, and CDC expects similar gains in the future.

Starting in March 2020 with the onset of the COVID-19 pandemic, CDC observed notable declines in pediatric outpatient visits and routine childhood vaccination<sup>247</sup>. Declines were also observed in the number of measles-containing vaccine doses administered in a study of eight U.S. health care organizations serving publicly and privately insured patients. For example, in Michigan, more than 20% fewer vaccine doses were administered to children less than 18 years of age in May 2020, compared to a similar time period in 2018-2019<sup>248</sup>, leaving children and communities at risk for preventable disease and outbreaks. Some recovery has been observed in

<sup>246</sup> Benefits from Immunization during the Vaccines for Children Program Era – United States, 1994–2013. MMWR, 25 April 2014.

<sup>247</sup> Santoli JM, Lindley MC, DeSilva MB, et al. Effects of the COVID-19 Pandemic on Routine Pediatric Vaccine Ordering and Administration — United States, 2020. MMWR Morb Mortal Wkly Rep 2020;69:591–593. DOI: <http://dx.doi.org/10.15585/mmwr.mm6919e2>.

<sup>248</sup> Bramer CA, Kimmins LM, Swanson R, et al. Decline in Child Vaccination Coverage During the COVID-19 Pandemic — Michigan Care Improvement Registry, May 2016–May 2020. MMWR Morb Mortal Wkly Rep 2020;69:630–631. DOI: <http://dx.doi.org/10.15585/mmwr.mm6920e1>.

vaccine<sup>249</sup>, however, a deficit still exists at the time of this writing. In August 2020, CDC issued a call to action to increase vaccinations in children and is working with partners to address catch up vaccinations in children.

At the end of 2016, CDC's Advisory Committee on Immunization Practices (ACIP) revised the HPV vaccination recommendation – adolescents starting the vaccine series before age 15 years should receive two doses separated by 6–12 months, all others should receive three doses. We anticipate that the change in recommendation will make it easier for clinicians to provide quality care and protect their patients from cancers caused by HPV infections. In FY 2021, among 13–17-year-olds, 50 states, including D.C., achieved 45% up-to-date coverage with the HPV vaccine (Measure 1.1). Similarly, in FY 2021, 46 states achieved 80% coverage for the meningococcal conjugate vaccine and 51 states achieved 80% coverage for the Tdap vaccine (Measures 1.1, 1.J).

CDC met the target for tetanus, diphtheria, and acellular pertussis (Tdap) and meningococcal conjugate vaccine in FY 2021. Tdap vaccine coverage increased from 74% in FY 2010 to 90% in FY 2021 (Measure 1.2.2a). Meningococcal conjugate vaccine (MCV4) coverage increased from 65% in FY 2010 to 88.5% in FY 2021, which exceeded the target and is similar to the FY 2019 and 2020 results (Measure 1.2.2b). Most states achieved target coverage rates for select child and adolescent vaccinations (Measures 1.C-1.D) in FY 2020, with little to no change from states' FY 2019 vaccination coverage rates. Strategies to improve vaccination coverage include provider assessment and feedback, use of reminder notifications, immunization information systems, and regular assessment of coverage levels in the National Immunization Survey.

During the past decade, vaccination coverage levels among older adults increased slightly as CDC implemented national strategies and partnered with state and local public health departments to promote adult immunization among healthcare providers and state and local governments. Pneumococcal vaccination for adults 65 and older has stayed within the range of 67% to 69% over the past four years; FY 2017 and FY 2018 results improved over FY 2016 by two percentage points (69% vs. 67%) but dropped to 67% for FY 2019 (Measure 1.3.1b). In 2014, ACIP recommended that adults receive two types of pneumococcal vaccine: one dose of PCV13 followed by a dose of PPSV23. Surveys assessing vaccination coverage are currently unable to determine which pneumococcal vaccine has been received; therefore, CDC is only able to assess receipt of at least one dose. CDC did not meet the FY 2020 target for pneumococcal vaccination coverage among noninstitutionalized adults at increased risk for pneumococcal disease; coverage remained below 25% for the past five years (range 22.6-24.5%) (Measure 1.3.2c). Measure 1.3.3a reflects the universal influenza vaccination recommendation and aligns with ACIP's recommendation (as of 2010) for the seasonal influenza vaccine. Seasonal influenza vaccination rates for adults ages 18 years old and over increased slightly from 42% in FY 2015 to 50% in FY 2020. Interpretation of these results should take into account limitations of the survey, including reliance on self-report of vaccination status. Flu vaccination coverage among adults remains at about 5 in 10 adults reporting receipt of a flu vaccination.

In FY 2022, four measures addressing hepatitis B vaccine, Influenza vaccine, Tdap vaccine, and meningococcal conjugate vaccine (Measure ID 1.C, Measure ID 1.D, Measure ID 1.I, and Measure ID 1.J) were retired. CDC does not believe these are strong measures to demonstrate the value of the program's work. The reported data points should focus on key program public health outcomes, which can be seen with other measures. CDC's goal is to ensure routine childhood vaccination coverage is met in pediatric and adolescent populations; however, there are more effective measures of key coverage data points for immunization public health outcomes. To measure vaccination coverage data, outcome measures would be more effective because it reflects the short term (e.g. one-year) impact of immunization program processes. Achieving high vaccination coverage leads to higher levels of population immunity, which reduces occurrence of vaccine-preventable diseases and prevents outbreaks of vaccine-preventable diseases that have been eliminated in the U.S. (e.g., polio).

<sup>249</sup> Langdon-Embry M, Papadouka V, Cheng I, Almashhadani M, Ternier A, Zucker JR. Notes from the Field: Rebound in Routine Childhood Vaccine Administration Following Decline During the COVID-19 Pandemic — New York City, March 1–June 27, 2020. *MMWR Morb Mortal Wkly Rep* 2020;69:999–1001. DOI: <http://dx.doi.org/10.15585/mmwr.mm6930a3>.

In FY 2024, CDC is revising the HPV measure to align with the Healthy People 2030 HPV measure - ([Increase the proportion of adolescents who get recommended doses of the HPV vaccine — IID08](#)) Achieve and sustain vaccination coverage of at least 80% for receiving recommended doses of human papillomavirus (HPV) vaccine among adolescents 13-15 years of age (Measure 1.L.1). In FY 2021, vaccination coverage was 54.5%.

CDC's efforts to improve adult vaccination coverage rates include:

- Increasing patient and provider education to improve demand and implement system changes in practitioner office settings to reduce missed opportunities for vaccinations.
- Funding state and local health departments to implement the Standards for Adult Immunization Practice in large health care systems, community health centers, pharmacies, and other settings.
- Partnering with professional organizations (e.g., American Pharmacists Association, American College of Physicians, American Academy of Family Physicians, American College of Obstetricians and Gynecologists) and other organizations (e.g., National Association of Chain Drug Stores, National Association of Community Health Centers, American Immunization Registry Association) to develop and implement strategies to improve adult immunization at provider, practice, and systems levels.
- Enhancing evidence-based communication campaigns to increase public awareness about adult vaccines and recommendations. CDC routinely conducts literature reviews and surveys of the public and healthcare providers to provide a deeper understanding of the target audiences for development of adult immunization communication messages and campaigns.
- Partnering with the National Adult and Influenza Immunization Summit, a national coalition of partners and stakeholders represented by clinicians, public health, industry, government, and other entities with the common goal to promote immunization for adults.
- Expanding the reach of vaccination programs including new venues such as pharmacies and other retail clinics. CDC has existing partnerships to implement adult immunization practice standards, HPV vaccination, and pandemic vaccine program planning efforts to expand access to pandemic vaccine. As of 2016-2017 influenza season, nearly one in four adults who got an influenza vaccine were vaccinated in a pharmacy or retail setting.
- Designing and funding investigations into the factors associated with disparities in adult vaccination among racial and ethnic minority populations and projects designed to expand the evidence base for interventions to increase vaccination among adults with chronic medical conditions and underserved populations.
- Collaborating with numerous existing and new partners to expand flu vaccine coverage, with specific efforts to address racial and ethnic disparities for the 2021 – 2022 influenza season. For example, CDC is working with the National Association for Community Health Centers to implement evidence-based strategies to increase adult vaccination coverage among underserved priority populations. In addition, CDC has developed a large portfolio of new, partnerships to promote COVID-19 and flu vaccination in high-risk populations, including communities of color, those living in rural settings, adults with chronic medical conditions (cardiovascular, diabetes, chronic lung conditions, etc.) and those in congregate settings (i.e., long-term care facilities, homeless shelters, and prisons).

## Influenza Planning and Response

### Performance Measures for Long Term Objective: Protect Americans from infectious diseases – Influenza

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
1.M Number of virus specimens received and fully characterized using deep sequencing from global National Influenza Centers for use in determining vaccine strain selection annually (Output)	FY 2021: 1,309 Target: 4,500 (Target Not Met)	4,500	4,500	Maintain
1.P Percentage of influenza partner countries reporting data routinely into WHO FluNet (Output)	FY 2021: 70% Target: 90% (Target Not Met)	90%	80%	-10
1.Q The number of state/territorial/local health departments with full and partial laboratorians and/or influenza coordinators trained and funded through Epidemiology and Laboratory Capacity (ELC) grant (Output)	FY 2021: 57 Target: 57 (Target Met)	57	57	Maintain
1.R Increase the percentage of influenza partner countries with a respiratory disease surveillance system that demonstrates qualitative improvements by meeting two quality indicators (Output)	FY 2021: 61% Target: 70% (Target Not Met)	70%	70%	Maintain

**Performance Trends:** As a World Health Organization (WHO) Collaborating Center for Influenza, CDC enhances global capacity to monitor influenza viruses and inform vaccine policy and treatment recommendations.

### Domestic Surveillance

CDC enhances state and local capacity to gather influenza epidemiology and laboratory data for systematic and accurate surveillance of seasonal and novel influenza viruses by providing training and resources to its grantees. Assisting states, territories, and local health departments to staff laboratorians or influenza coordinators directly aligns with CDC’s goal of enhancing and maintaining sustainable domestic influenza surveillance systems that operate year-round. The support for state/local public health capacity is paramount to the success of domestic surveillance for both seasonal and pandemic influenza preparedness. In FY 2021, there were 57 jurisdictions with full and/or partially funded state, territorial, or local laboratorians or influenza coordinators. CDC training and support of epidemiologists serving as influenza surveillance coordinators in every state and some local jurisdictions has allowed for continuously improving surveillance systems that provide data to inform timely response to annual influenza epidemics. This training and support also provided surveillance systems and a trained workforce that were able to be immediately repurposed to respond to the COVID-19 pandemic (Measure 1.Q).

During FY 2021 CDC received and characterized 1,309 virus specimens using next generation sequencing (NGS) from the global National Influenza Centers for use in vaccine strain selection (Measure 1.M). This is lower than the targeted range, due to the unusually low influenza virus circulation that occurred. CDC has completed its goal of fully converting to NGS for virus genome characterization. CDC has worked extensively with its state and local partners to determine an appropriate representative sample of virus specimens to fully characterize. This process is called “right-sizing” and is a significant program performance enhancement, aimed at sequencing

smart to achieve more targeted results efficiently and streamlining resources. A targeted range of 4,000-7,000 viruses fully characterized using NGS is appropriate for annual influenza epidemics. This number will naturally rise and fall annually, depending upon the incidence of disease and severity of each influenza season.

### **Global Surveillance**

CDC strengthens global health security by equipping partner nations' capacity to improve and sustain influenza detection and response capabilities through timely reporting into their respective influenza surveillance systems and submitting influenza testing data to WHO FluNet. CDC's efforts to strengthen international influenza epidemiological and virological surveillance and pandemic preparedness have increased in the number of CDC-funded countries routinely reporting to WHO FluNet from 40% in FY 2005 to 80% in FY 2019. The emergence of SARS-CoV-2 virus led to a decrease in FY 2020 to 59%; however, in FY 2021, this increased to 70% of countries that routinely reported to WHO FluNet. We believe this increase signals a shift towards routine surveillance of SARS-CoV-2 virus, allowing influenza testing and reporting to stabilize. Additionally, almost all countries reported at least sporadically in FY 2021. Ongoing global shortages in laboratory reagents and materials continued to limit testing capacity; supply chain interruptions and border closures exacerbated these shortages. CDC-funded countries continued to leverage influenza surveillance staff and infrastructure for national COVID-19 response activities and are now including COVID-19 reporting to the WHO FluNet platform (Measure 1.P).

CDC, along with the World Health Organization, recognizes the importance of collecting weekly data from persons with influenza-like illness or severe acute respiratory infection to characterize circulating influenza viruses. In FY 2021, 61% of Influenza Division partner countries met two quality indicators for demonstrating qualitative improvements in surveillance. We believe this increase from FY 2020 performance (50%) signals a return to routine surveillance for influenza, despite the change in surveillance and testing priorities following the emergence of the SARS-CoV-2 virus (Measure 1.R). CDC is working with our partner countries to understand their challenges and expects the influenza surveillance numbers to normalize in the coming years.

# HIV/AIDS, VIRAL HEPATITIS, SEXUALLY TRANSMITTED INFECTIONS, AND TUBERCULOSIS

## Domestic HIV Prevention and Research

Contextual Indicators	Most Recent Result
2.1.1 Reduce the number of new HIV diagnoses by at least 75%	FY 2020: 30,346
2.1.3 Increase the percentage of people with HIV who know their serostatus to 95%	FY 2019: 86.7%
2.1.9 Reduce the number of new HIV infections by 75%	FY 2019: 34,800
2.1.10 Increase the percentage of persons with diagnosed HIV infection who are virally suppressed to at least 95%	FY 2020: 64.6%
2.2.8 Increase the number of persons prescribed PrEP among those who have indications for PrEP (increase PrEP coverage)	FY 2020: 24.7%

### Performance Measures for Long Term Objective: Reduce new HIV infections

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
2.1.7 Increase the proportion of adolescents (grades 9-12) who abstain from sexual intercourse or use condoms if currently sexually active (Outcome)	FY 2019: 87.7% Target: 87.5% (Target Exceeded)	87.7%	N/A <sup>1</sup>	N/A

<sup>1</sup> Targets and results are set and reported biennially.

### Performance Measures for Long Term Objective: Increase access to care and improve health outcomes for people living with HIV

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
2.2.9 Increase the percentage of all persons with newly diagnosed HIV infection in CDC-funded testing sites who are linked to HIV medical care in ≤ 30 days after HIV diagnosis in order to assist national efforts to achieve viral suppression (Outcome)	FY 2020: 76.4% Target: 85% (Target Not Met)	85%	85%	Maintain

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
2.2.10 Increase the percentage of all persons with newly diagnosed HIV infection in CDC-funded testing sites who were interviewed for partner services (Outcome)	FY 2020: 76.8% Target: 85% (Target Not Met)	85%	85%	Maintain
2.2.11 Increase the number of jurisdictions complying with the requirement to report all CD4 and viral load values to CDC (Output)	FY 2020: 46 (Target Not Met but Improved)	53	53	Maintain

**Performance Trends:** As the number of persons with HIV increases due to better, life-prolonging treatments, so does the need for CDC prevention activities. The estimated number of people with undiagnosed and diagnosed HIV in the United States is 1.2 million with an estimated 34,800 new HIV infections in 2019. The longstanding National HIV/AIDS Strategy (NHAS) built the foundation for a coordinated approach to ending HIV. The updated NHAS (2022-2025) identifies a set of priorities and strategic action steps tied to measurable outcomes for moving the nation forward in addressing the domestic HIV epidemic. The strategies and outcomes outlined by the NHAS have informed the federal initiative, Ending the HIV Epidemic in the U.S. (EHE), which aims to reduce new infections by 75% in the next five years and by 90% in the next ten years. The EHE initiative also identified six corresponding HIV indicators to help quantify progress being made towards EHE goals: incidence, knowledge of status, diagnoses, linkage to HIV medical care, viral suppression, and PrEP coverage (Measures 2.1.1, 2.1.3, 2.1.9, 2.1.10, 2.2.8). These indicators use 2017 baseline data. While the COVID-19 pandemic has disrupted public health efforts to address HIV prevention (e.g., reductions in HIV testing), CDC will continue adapting HIV prevention services to ensure they are available to Americans at highest risk for HIV.

CDC monitors HIV through the National HIV Surveillance System<sup>250</sup> using the data to direct prevention efforts and provide researchers, policymakers, and the public with a timely understanding of HIV trends in the U.S. Reducing the number of new HIV infections is a shared national and CDC priority. During 2015-2019, new HIV infections decreased. Incidence decreased from 2015 (37,800 infections) to 2019 (34,800 infections) (Measure 2.1.9). The percentage of persons living with diagnosed HIV infection at year-end 2019, compared with 2010, increased from 82.3% to 86.7% in the United States<sup>251</sup> (Measure 2.1.3). The HIV surveillance supplemental report *Estimated HIV Incidence and Prevalence in the U.S., which provides data on estimated incidence, prevalence, and knowledge of status in the U.S.*, was not published this year. COVID-19 disruptions in HIV testing and care during 2020 made estimation of incidence, prevalence, and knowledge of status unreliable.

In 2020, there were 30,346 new HIV diagnoses in the United States, an improvement from 2019 in reducing the number of new diagnoses (Measure 2.1.1). Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. CDC's analysis of HIV diagnoses data from 2015 to 2019 reveals rates of diagnosis continue to be highest among Black/African American persons compared to other racial/ethnic groups and

<sup>250</sup>With more than 80 percent of diagnosed cases reported, HIV and AIDS case surveillance data meet high standards for completeness of reporting.

<sup>251</sup>Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2015–2019. HIV Surveillance Supplemental Report 2021;26(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published May 2021.

Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2019. HIV Surveillance Supplemental Report 2021;26(No.2). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published May 2021.

higher in the South compared to other regions. However, rates of diagnoses for all racial/ethnic groups decreased from 2015-2019 except for among American Indian/Alaskan Native persons, which increased by 18%. Additionally, rates of diagnoses decreased among all age groups except for those aged 25-35, which remained stable. Diagnoses also declined during this period among men and women but increased among transgender male-to-female (MTF) and transgender female-to-male (FTM) adults and adolescents. Of the six populations of particular interest to HIV prevention programs in state and local health departments - (1) Gay, Bisexual, and Other Men Who Have Sex with Men, (2) Persons Who Inject Drugs (PWID), (3) Transgender Persons, (4) Women, (5) Adolescents and Young Adults, and (6) Children Aged <13 Years - HIV diagnoses decreased except for among PWID and transgender persons. These trends suggest that intensified HIV testing and prevention efforts among MSM are having an impact.<sup>252</sup> In addition, from 2015 to 2019, the rate and number of deaths remained stable, with the rate of deaths in the South decreasing. While there were reductions across all major demographic groups, disparities persist. Rates (per 1,000 people with diagnosed HIV) of HIV-related deaths during 2017 were highest by race/ethnicity among persons of multiple races (7.0) and Black/African American persons (5.6), followed by White persons (3.9) and Hispanic/Latino persons (3.9). Focused public health efforts must continue to maintain the positive trends. Among regions most affected and among groups at substantial risk for HIV, accelerated efforts must continue to ensure access to testing, treatment, and prevention strategies, to ensure that every American has the knowledge and tools needed to protect themselves and their partners from HIV.

Diagnosis of HIV is only the first step in reducing infection. It is estimated that 38% of all transmissions come from those unaware of their HIV status and 43% of transmissions from those aware but not in care<sup>253</sup>. Patients must be linked to, and retained, in medical care to achieve and maintain viral suppression (having very low levels of HIV [viral load] present in the body). Evidence shows that viral suppression helps people with HIV to maintain their health and prevents sexual transmission of HIV to others. In 2020, 64.6% of persons with diagnosed HIV infection were virally suppressed, an improvement over 2019 (65.5%) (Measure 2.1.10). Recognizing the benefits of early treatment, and linkage to HIV medical care for all persons with newly diagnosed HIV infection, CDC's linkage to care goal was initially changed from within three months of diagnosis to within one month of diagnosis to be consistent with the NHAS 2020 HIV prevention goal of ensuring 85% of all persons with diagnosed HIV are linked to medical care within one month of diagnosis. In FY 2022, CDC replaced the NHAS measure with a CDC program measure that focuses on CDC-funded testing sites' ability to link persons to HIV medical care in ≤ 30 days after HIV diagnosis. In FY 2020, 76.4% of persons with newly diagnosed HIV infection in CDC-funded testing sites were linked to HIV medical care in ≤ 30 days after HIV diagnosis (Measure 2.2.9). Early linkage to HIV care and treatment, especially when viral suppression is attained and sustained, is positively correlated with better health outcomes, thus helping persons living with HIV live longer, healthier lives and lowering their risk of transmission of HIV to others.

The majority of Americans with HIV are aware of their infection due, in part, to expanded HIV testing efforts. CDC estimates that 86.7% of people with HIV were aware of their status in 2019, up from 82.3% in 2010 (Measure 2.1.3). This means one out of seven people with HIV in 2019 did not know their status. CDC directly funds testing that identifies one-third of the HIV diagnoses each year. CDC's Expanded Testing Initiative prevented an estimated 3,380 HIV infections in its first three years and saved an estimated \$1.2 billion in direct medical costs<sup>254</sup>. Data for FY 2020 indicate that CDC-funded HIV testing programs performed approximately 1.3 million HIV tests, further increased routine HIV testing in health care and community settings, and identified about 6,500 previously undiagnosed cases of HIV infection<sup>255</sup>. Testing provides a bridge to care for people with HIV. For those who receive an HIV diagnosis, the test is the first step toward care and treatment. For those who

<sup>252</sup>Centers for Disease Control and Prevention. CDC HIV Prevention Progress Report, 2019. <https://www.cdc.gov/hiv/pdf/policies/progressreports/cdc-hiv-preventionprogressreport.pdf>.

<sup>253</sup>Li Z, Purcell DW, Sansom SL, Hayes D, Hall HI. Vital Signs: HIV Transmission Along the Continuum of Care — United States, 2016. *MMWR Morb Mortal Wkly Rep* 2019;68:267–272.

<sup>254</sup><https://www.cdc.gov/nchhstp/budget/infographics/docs/preventing-new-hiv-infections-P.pdf>.

<sup>255</sup><https://www.cdc.gov/hiv/pdf/library/reports/cdc-hiv-annual-HIV-testing-report-2020.pdf>.

are not infected, but at risk, testing opens the door to prevention services, like pre-exposure prophylaxis (PrEP) that can keep them healthy and HIV free.

Partner services programs are essential in preventing and controlling HIV in the U.S. and offer benefits to three principal groups: persons with HIV, their partners, and the community. A function of partner services is notifying partners of persons with diagnosed HIV infection of their possible HIV exposure and risk. Other functions of partner services interventions include prevention counseling, testing for HIV and other sexually transmitted infections (STIs), treatment or linkage to medical care, and linkage or referral to other prevention and social services. Partner services have been associated with positive behavior changes and reduced risk for HIV infection, along with reduced HIV transmission. Among all people newly diagnosed with HIV through CDC-funded HIV testing programs in 2020, 76.8% were interviewed for partner services<sup>256</sup> (Measure 2.2.10). In 2019, 96% of the 14,610 partners with a notification method reported were notified of their potential HIV exposure. Of the 6,295 partners tested and who had a documented HIV test result, 1,214 were newly identified as HIV-positive<sup>257</sup>. As the cornerstone of national HIV prevention and surveillance, beginning in 2018 through 2023, CDC awarded approximately \$400 million per year to state and local health departments to implement a comprehensive HIV surveillance and prevention program to prevent new HIV infections and achieve viral suppression among persons living with HIV. Additionally, CDC will continue to provide expert advice and assistance to recipients to further improve performance in these areas.

CDC also supports efforts to get effective HIV biomedical prevention tools, like pre-exposure prophylaxis (PrEP), into the community and in the hands of persons who need them most. In December 2021, CDC published the updated Clinical Practice Guidelines for PrEP for HIV Prevention and an accompanying Clinical Providers Supplement. CDC most recently published an updated guideline in 2018. The updated PrEP guideline and supplement reflect the latest science and are intended to help physicians effectively prescribe all FDA-approved pre-exposure prophylaxis (PrEP) medications to patients and to increase PrEP use among all people who could benefit. The revisions update existing guidance using the current evidence base, incorporate recent and potential FDA actions on PrEP medications, clarify specific aspects of clinical care, and improve usability of the guideline with summaries and flowcharts for clinicians.

For those at high risk for HIV, PrEP can significantly reduce the risk of HIV infection if taken daily. To address barriers in prescribing PrEP among health care providers, in 2016, CDC initiated an online Continuing Medical Education program, "Preventing HIV Infection in the Primary Care Setting: The Role of Pre-Exposure Prophylaxis (PrEP)." Over the course of the program's two-year accreditation, 26,663 clinicians accessed the program, with 13,327 taking the final test for continuing education credits. A follow-up course titled, "Advancing PrEP in Practice: Practical Strategies for Everyday Challenges" was released in 2017 and was accredited until March 25, 2021. At the program's conclusion, 22,181 healthcare providers had accessed this course, with 6,416 participants taking the final test for continuing education credits. In June of 2020 CDC released another continuing education program titled "HIV Testing, Prevention, and Treatment: A Stepwise Approach." While this program addresses the entire prevention-care continuum, it does include information about prescribing PrEP. As of August 1, 2022, 23,086 healthcare providers had accessed this course, with 12,241 participants taking the final test for continuing education credits.

In August 2018, CDC launched "Prescribe HIV Prevention" (PHP), an additional PrEP/PEP educational resource for clinicians. This communication effort supports healthcare providers to use PrEP and post-exposure prophylaxis (PEP) to prevent new HIV infections and improve health outcomes for patients at high risk for acquiring HIV. "Prescribe HIV Prevention" is part of CDC's "Let's Stop HIV Together" communication campaign designed to help reduce HIV incidence in the United States. The PHP initiative includes print and electronic resources that outline PrEP/PEP clinical trials and efficacy, prescribing information, and lab monitoring

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<sup>256</sup><https://www.cdc.gov/hiv/pdf/library/reports/cdc-hiv-annual-HIV-testing-report-2020.pdf>

<sup>257</sup><https://www.cdc.gov/hiv/pdf/library/reports/cdc-hiv-partner-services-annual-report-2019.pdf>.

procedures, as well as patient education materials. Resources are distributed via CDC-INFO, at conferences, and are made available for download on the PHP website. During FY 2020 and FY 2021, 2,657 PHP resource kits, 2,959 brochures, and 3,145 posters were distributed by CDC-INFO. An additional 26,529 brochures and 1,135 posters were downloaded from the website. The PrEP page within the HIV Nexus website had 31,617 views. CDC also supports HIV prevention programs through technical assistance. From April 1, 2019 to June 30, 2022, there were 90 technical assistance requests (completed and in progress) related to PrEP.

Data show an increase in awareness of PrEP and willingness to either use it or prescribe it, although additional awareness and implementation efforts are needed, particularly among most affected populations and their care providers, to scale up this highly effective biomedical intervention. In FY 2020, 24.7% of persons with indications for PrEP were prescribed PrEP (Measure 2.2.8). Reflecting CDC's continued investment in supporting the nation's HIV prevention workforce and improving its overall performance, CDC will award up to \$120 million over five years to 17 organizations under its new program, Capacity Building Assistance (CBA) for High Impact HIV Prevention Program Integration. The program, which began on April 1, 2019, supports the federal initiative, Ending the HIV Epidemic in the U.S. By strengthening the capacity and improving the performance of the nation's HIV prevention workforce – including thousands of staff within state and local health departments, community-based organizations (CBOs) and healthcare organizations – the program will provide the communities with the highest burden additional expertise, technology and resources required to address the HIV epidemic.

The funding supports a CBA Provider Network that is implementing national training, regional technical assistance, continuous quality improvement and sustainability for CBOs, and marketing and administrative support. By enabling the HIV prevention workforce to optimally plan, integrate, implement, and sustain comprehensive programs and services, the CBA Provider Network will help make it possible to achieve the nation's HIV prevention goals. The CBA program is designed to respond to the evolving needs of the HIV prevention workforce and differs from previous capacity building programs in several important ways. Successes that have resulted from the CBA program include the following:

- Additional training options available in a variety of formats and at different skill levels, to effectively reach a wide range of HIV service providers. From April 1, 2019, through June 30, 2022, CDC conducted a total of 483 training sessions (including in-person classroom, live virtual training, training of trainers, trainer orientations) for 4,839 participants; updated 12 training curricula; converted 14 training curricula into live virtual trainings, developed 10 new curricula which were translated into Spanish, and there are 10 curricula being either converted and updated to a live virtual training or translated into Spanish.
- Tailored technical assistance services, with an increased focus on responding to specific regional and jurisdictional capacity building needs and preferences; addressing implementation challenges for HIV prevention programs and services; and peer-to-peer learning, support, and mentorship. From April 1, 2019 to June 30, 2022, CDC delivered 475 technical assistance support services to a total of 436 unduplicated organizations.
- Better support to senior and mid-level HIV prevention program managers within CBOs by conducting a web-based distance learning program that addresses programmatic continuous quality improvement and organizational sustainability. The National Learning Community for HIV CBO Leadership is a distance-based learning program that provides a tailored learning experience that will empower participants to manage the people, programs, and organizations to end the HIV epidemic in the U.S. The program is comprised of online self-paced short courses designed by and for CBO HIV program managers, a virtual, cohort-based Creative Problem Solving Intensive, and an online community of peers, coaches, and mentors in the HIV prevention workforce. As of June 30, 2022, 32 learners attended the pilot for this program; since the live launch on March 15, 2021, 179 learners have enrolled; and 244 submitted the eligibility assessment (220 were eligible; 24 were ineligible to participate). Thirty-one

learners applied to the Creative Problem-Solving Intensive, and seven were deemed eligible and currently participate.

The success in preventing new HIV infections among people who inject drugs (PWID) is threatened by national increases in unsafe, nonsterile injection practices that have been rising due to the opioid crisis. In 2019, seven percent of new HIV infections in the U.S. were among PWID. Research shows that syringe services programs (SSPs), community-based prevention programs that address drug use and infectious disease, offer several benefits as part of a comprehensive HIV prevention strategy. SSPs can play a role in preventing HIV among PWID, can facilitate entry into substance use disorder treatment (including medication-assisted treatment) and medical or social services, and do not increase illegal drug use. CDC supports state and local communities who wish to use Federal funds to implement syringe services programs (SSPs), after consulting with CDC and in accordance with state and local law. As of March 2022, health departments in 44 states and DC, one territory, and one tribal nation have adequately demonstrated need and received CDC concurrence according to Federal law. The opportunity for CDC and its recipients to use federal funds to support certain components of SSPs provides at-risk communities with an additional HIV prevention tool.

CDC-led studies and broader scientific evidence demonstrate that school health programs can positively impact health-risk behaviors, health, and educational outcomes, and are cost effective. CDC is supporting state and local education agencies and addressing critical health issues including HIV/AIDS, STIs, and teen pregnancy prevention in schools. For example, the percentage of high school students who have ever had sexual intercourse decreased from 54.1% in 1991 to 38.4% in 2019. The percentage of adolescents in grades 9 to 12 abstaining from sexual intercourse, or using condoms if currently sexually active, increased from 86.3% in FY 2013 to 87.7% in FY 2019, exceeding CDC's FY 2019 target (Measure 2.1.7). However, condom use among currently sexually active students decreased from 63.0% in 2003 to 54.3% in 2019.

CDC, in collaboration with state and local health departments, is working to better monitor the effects of HIV medical care through expanded reporting of CD4 and viral load test results. Test results are vital indicators of which patients are in care and virally suppressed, and those patients who have fallen out of care. In FY 2020, 46 jurisdictions complied with the requirement to report all CD4 and viral load values to CDC an increase over FY 2019 (Measure 2.2.11). CDC data from 46<sup>258</sup> jurisdictions with complete laboratory reporting demonstrate progress on increasing linkage to care and viral suppression compared to previous national estimates. Data from these jurisdictions represent 93.7% of the total number of HIV diagnoses in the U.S. CDC continues to prioritize expanded reporting of CD4 and viral load reporting in the HIV surveillance and prevention program.

With stronger reporting, CDC's Data to Care tools increase health department capacity to use routinely collected HIV surveillance data to identify and follow up with people with HIV who are not in care. CDC continues to learn best practices through Data to Care demonstration projects and related activities in the HIV surveillance and prevention program. From 2012-2016, seven health departments used HIV surveillance and other data to re-engage 82% of persons with HIV diagnosis in their jurisdictions who were known to be out of care and offered linkage or reengagement services. CDC expanded Data to Care activities to all U.S. health department jurisdictions in 2018. As of December 2021, 52 jurisdictions had begun reporting Data to Care investigation outcome data and CDC is working with jurisdictions to evaluate program outcomes.

Complete reporting of laboratory results that includes HIV molecular sequence data also supports efforts to rapidly detect and interrupt clusters of active HIV transmission. Cluster detection and responses uses data routinely reported to health departments to identify communities where HIV may be spreading quickly. Once clusters are identified, public health officials can identify gaps in and barriers to prevention and care services and direct resources to ensure that these services (engagement in care, partner services, HIV testing, PrEP, SSPs)

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<sup>258</sup> There are 45 states and DC that meet the criteria of complete lab reporting (i.e., have the law, 95% of labs are reporting to the state and 95% of labs received by the state are reported to CDC).

reach the populations that need them most, which in turn saves health care dollars associated with HIV and other related health outcomes. Health departments can identify clusters in numerous ways, including by providers or CBOs who report an increase in diagnoses, by contact tracing through partner services that identifies a group of people with potentially related infections, or through routinely reported surveillance data. Surveillance data can identify clusters either through detecting increased diagnoses in a particular geographic area or population subgroup or through analysis of HIV molecular sequence data, which are routinely reported in most jurisdictions. In 2021, CDC collaborated with state and local health departments to address 72 clusters of HIV infections identified through CDC molecular analysis at the national level. Additionally, 51 jurisdictions use a bioinformatics tool developed and managed by CDC that allows these health departments to identify molecular clusters of HIV infections within their jurisdiction in near-real time. CDC includes highlighted stories from community on a new webpage, showing how cluster and outbreak response efforts are used to detect HIV cases and prevent greater transmission. CDC is working to ensure that all jurisdictions can incorporate HIV sequence data into existing laboratory reporting processes and address barriers to this reporting. Using these data in near-real time to inform prevention efforts requires close coordination between surveillance and prevention programs and between state and local programs.

## Viral Hepatitis

### Performance Measures for Long Term Objective: Reduce the rates of viral hepatitis in the United States

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
2.6.4 Increase the number of health departments (states and District of Columbia) reporting acute and chronic viral hepatitis data of sufficient quality to be included in national surveillance reports (Output)	FY 2019: 32 Target: 30 (Target Exceeded)	45	45	Maintain
2.6.7 Reduce estimated new hepatitis A virus infections (Output)	FY 2019: 37,700 Target: 5,800 (Target Not Met)	4,000	4,000	Maintain
2.6.8 Reduce estimated new hepatitis B virus infections (Output)	FY 2019: 20,700 Target: 20,800 (Target Exceeded)	18,000	18,000	Maintain
2.6.9 Reduce estimated new hepatitis C virus infections (Output)	FY 2019: 57,500 Target: 41,467 (Target Not Met)	35,000	35,000	Maintain
2.6.10 Reduce reported rate of hepatitis C-related deaths per 100,000 population (Outcome)	FY 2019: 3.33/100,000 Target: 3.75/100,000 (Target Exceeded)	3.00/100,000	3.00/100,000	Maintain
2.6.11 Reduce reported rate of hepatitis B-related deaths per 100,000 population (Outcome)	FY 2019: 0.42/100,000 Target: 0.43/100,000 (Target Exceeded)	0.37/100,000	0.37/100,000	Maintain

**Performance Trends:** In the United States, hepatitis A virus (HAV), hepatitis B (HBV), and hepatitis C virus (HCV) are the main causes of viral-induced hepatitis. Approximately 2.2 million civilian, noninstitutionalized adults had hepatitis C virus infection in the United States during January 2017 – March 2020<sup>259</sup>, and in 2013-2016 an estimated 862,000 people were living with hepatitis B. Without treatment, chronic viral hepatitis can result in severe liver disease, liver cancer, and death. Together, HBV and HCV infections cause more than half of all liver cancer cases in the United States. Fortunately, hepatitis B can be treated, and hepatitis C can be cured. The introduction of life-saving medications to cure hepatitis C has resulted in declining hepatitis C mortality in the United States, however treatment rates are low overall and vary by age and insurance payor. Between 2019 – 2020, approximately one third of adults aged 18-69 with private insurance and one quarter of Medicaid and Medicare recipients initiated DAA treatment within 12 months of diagnosis. This progress, though, is uneven, as CDC data reveal persistent, significant racial and ethnic disparities in viral-hepatitis-related mortality rate; for example, non-White Medicaid recipients were up to 27% less likely to initiate timely DAA treatment as were White persons. Testing is the first step in accessing treatment, yet about two-thirds of people living with hepatitis B and about 40% of the people living with hepatitis C in the United States are not aware of their infection. Further, new viral hepatitis cases continue to rise among reproductive age adults associated with illicit drug use.

Hepatitis A cases increased during 2016-2021, mainly due to large outbreaks involving person-to-person transmission occurring nationally among persons who use drugs and persons experiencing homelessness. During 2019, the number of reported hepatitis A cases was 18,846 -- a 51% increase from 2018 -- which corresponds to 37,700 estimated infections after adjusting for under-identification and underreporting of cases (Measure 2.6.7). Of the hepatitis A cases reported that included risk factor data in 2019, 46% reported injection drug use. Since 2016, CDC has received reports from 37 states experiencing outbreaks of hepatitis A spread through person-to-person contact among people who use drugs, people who are homeless or have unstable housing, men who have sex with men, and people who are currently or were recently incarcerated. While a few states have continued to experience smaller outbreaks, overall trends in recent years are encouraging: the last four months of 2019 revealed a steady reduction in newly reported hepatitis A cases, and beginning in July 2021, reported cases declined 75% compared to the peak. As of July 2022, 20 states have declared their hepatitis A outbreaks over.

In 2019 there were an estimated 20,700 hepatitis B virus infections in the United States, a decrease from 2018 (Measure 2.6.8). Hepatitis B cases were similarly driven by injection drug use, with 35% of acute hepatitis B cases that included risk factor data reporting injection drug use. In 2019, the reported rate of hepatitis B-related deaths (or mortality) was 0.42 per 100,000 population -- exceeding the target of 0.43 per 100,000 (Measure 2.6.11).

Between 2014 and 2019, the United States experienced an almost 89% increase in the number of estimated cases of acute hepatitis C, from 30,500 in 2014 to 57,500 in 2019 (Measure 2.6.9). New CDC data from 2019 shows that of the cases reporting risk factors, 67% reported injection drug use. In 2020, CDC updated its hepatitis C screening recommendations and now recommends hepatitis C testing for every adult at least once, pregnant women during every pregnancy, and everyone with ongoing risk factors regularly. The death rate for hepatitis C during 2019 was 3.33 deaths per 100,000 population, representing a 32% decrease from the mortality rate during 2015 (4.91 deaths per 100,000 population) (Measure 2.6.10). As noted above, significant racial and ethnic disparities exist and persist. In 2019, the highest hepatitis C-related mortality rates continue to

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<sup>259</sup> The NHANES national probability sample includes the noninstitutionalized, civilian population of the United States; because it excludes certain populations known to have high hepatitis C prevalence from its sampling frame, NHANES underestimates the true prevalence of hepatitis C in the United States. During 2013–2016, researchers estimated that an additional 0.25 million persons in high-risk population groups unaccounted for by NHANES data were infected. [[CDC Estimates Nearly 2.4 Million Americans Living with Hepatitis C | CDC](#)]

be among American Indian/Alaska Native persons (8.63 per 100,000 population) and non-Hispanic Black persons (5.44 per 100,000 population).

To stop the spread of hepatitis A, hepatitis B, and hepatitis C and increase the number of persons vaccinated, tested, and directed to lifesaving care and treatment, CDC partners with health departments, medical centers, and community-based organizations to test, link to care and treatment, prevent, monitor, and respond to viral hepatitis in the United States. In FY 2021, CDC launched the *Integrated Viral Hepatitis Surveillance and Prevention for Health Departments* (IVHSP) program that supports core viral hepatitis outbreak response, surveillance, and prevention activities in 59 jurisdictions (49 states, eight cities/counties, Washington, D.C., and Puerto Rico). Priorities include increasing health department surveillance capacity, access to hepatitis B and hepatitis C testing, prevention and treatment services, state and large city viral hepatitis elimination planning, outbreak detection, and investigation and control. During the first year of funding, most recipients either initiated or completed jurisdiction-specific plans for viral hepatitis elimination and rapid outbreak detection and response. In addition, 17 jurisdictions were funded to complete special projects to improve access to substance use disorder and viral hepatitis services in settings disproportionately affected by drug use. 54,468 clients were served across six types of settings, including syringe services programs (SSPs), substance use disorder treatment centers, and health centers. These services included a total of 10,731,345 syringes distributed. The IVHSP program is aided by the Viral Hepatitis Prevention and Surveillance Virtual Learning Collaborative (VLC), which is a partnership between CDC and the National Alliance of State and Territorial Aids Directors (NASTAD). The VLC provides viral hepatitis health department staff with technical assistance that builds surveillance and prevention capacity. CDC, in partnership with NASTAD, also supports state and local health departments and SSPs with training and technical assistance through the National Harm Reduction Technical Assistance Center (NHRTAC) to better implement SSP programs and increase cultural competence when working with people who use drugs.

### **Expanding Testing and Linkage to Lifesaving Care for Persons Living with Hepatitis B and Hepatitis C**

Ongoing national increases in hepatitis C incidence are primarily associated with injection drug use. People who inject drugs are also at increased risk for hepatitis B and other infectious diseases. Performance results from CDC's recently completed Improving Hepatitis B and C Care Cascades supplemental program revealed promising models for expanding viral hepatitis testing and treatment to populations who inject drugs. The interventions centered around integrating viral hepatitis testing, vaccination, and treatment in 'high impact settings' -- health care provider and other facilities (such as syringe service programs) dedicated to serving these hard-to-reach populations. Unpublished results show that the interventions led to 49,505 tests conducted among individuals receiving services in high-impact settings (including correctional facilities and substance use disorder treatment facilities), with 5,947 active hepatitis B and hepatitis C infections identified, and over two-thirds referred to care and treatment. Building on these successes and lessons learned, CDC's IVHSP funds 59 state and local health departments to expand and facilitate access to viral hepatitis testing, treatment, and vaccination (contingent on funding) for people who inject drugs. The new program will also address persistent health inequities by expanding much needed hepatitis B and hepatitis C treatment, prevention, and care to other underserved and disproportionately affected populations. By focusing on reaching the highest-need populations, these newly funded prevention and treatment activities will equip jurisdictions across the nation to meet CDC's viral hepatitis performance targets in the years to come.

Syringe services programs (SSPs) are an essential component of viral hepatitis prevention and offer people who inject drugs a range of services including: 1) access to and disposal of sterile syringes and injection equipment; 2) overdose prevention; 3) linkage to substance use disorder treatment; and 4) vaccination, testing, and linkage to care and treatment for infectious diseases. CDC's hosts the National Harm Reduction Technical Assistance Center (NHRTAC) to ensure SSPs and health departments receive timely, expert advice on strengthening their capacity to enhance drug user health. Since June of 2020, the NHRTAC has supported over 500 requests from harm reduction programs and the community and developed over 100 deliverables to support a wide range of

topics. Examples of the types of requests for assistance received included: adapting SSPs to COVID-19 restrictions, starting new SSPs, and building monitoring and evaluation capacity.

### **Supporting Efforts to Prevent Mother-to-Child Transmission of Hepatitis B Virus and Hepatitis C Virus**

Vaccination is the cornerstone of hepatitis B prevention. Hepatitis B vaccination is recommended for all newborns (birth dose), infants (routine childhood immunization), and adults through age 59 years. Virtually all newborns infected with hepatitis B remain infected for life, resulting in one in four infected individuals dying of hepatitis B-related cirrhosis and liver cancer. Hepatitis B birth dose vaccination is the cornerstone of preventing perinatal hepatitis B infection from mother to child.

The elimination of mother-to-child transmission of hepatitis B was an articulated goal in the National Academies' 2017 report, "A National Strategy for the Elimination of Hepatitis B and C," as well as the Viral Hepatitis National Strategic Plan 2021-2025; it is also the priority for CDC-funded Perinatal Hepatitis B Prevention Programs (PHBPP). Evaluation data confirm that perinatal hepatitis B prevention programs are an effective way to prevent hepatitis B infection among infants. CDC is supporting PHBPP by promoting: 1) timely administration of the first hepatitis B immune globulin (HBIG) vaccine dose (within 12 hours of birth) to infants born to mothers living with HBV, 2) completion of the hepatitis B vaccine series, and 3) post-vaccination blood testing to evaluate the infant's response to the vaccine and their HBV infection status. In addition, the American Association for the Study of Liver Diseases (AASLD) guidelines for maternal antiviral therapy to reduce perinatal HBV transmission was published in 2018. CDC ACIP included this AASLD recommendation in the 2018 hepatitis B recommendations.

CDC also continues to pursue opportunities for reducing new hepatitis B viral infections in populations other than children. In 2021, CDC ACIP voted unanimously to recommend hepatitis B vaccination for adults 19 through 59 years of age and adults 60 years and older with risk factors for hepatitis B infection. Adults aged ≥60 years without known risk factors for hepatitis B may also receive hepatitis B vaccination. CDC published the new recommendations in April 2022 and released new materials, including web content and provider messages, promoting hepatitis B vaccination among adults.

To advance detection of HCV infection and linkage to care among pregnant women, CDC launched a partnership with the American College of Obstetrics and Gynecology (ACOG) in September 2021 to improve uptake of recommendations for prenatal HCV screening during each pregnancy. ACOG will disseminate prenatal HCV screening recommendations to their membership, develop patient oriented informational material on HCV screening, host webinars on HCV screening and linkage to care, and incorporate hepatitis C screening into routine prenatal testing panels. ACOG has also partnered with CDC and a large commercial laboratory in the creation of an updated obstetrics laboratory panel that includes HCV antibody screening with reflex to nucleic acid amplification testing, if seropositive.

### **Helping State and Local Jurisdictions Respond to Hepatitis A Outbreaks**

Hepatitis A cases have increased during 2016-2021, mainly resulting from the large, nationwide outbreaks involving person-to-person transmission among adults using drugs and experiencing homelessness. Most adults are susceptible to hepatitis A (11.9% self-reporting receipt of two or more doses of the vaccine in 2019), through lack of childhood exposure or vaccination, and are vulnerable to infection. Vaccination is the best way to bring down new hepatitis A cases and prevent more than 95% of infections. In response to these outbreaks, CDC has assisted state and local jurisdictions with epidemiological and lab support; and in February 2019, ACIP and CDC updated the hepatitis A vaccine recommendations to include an indication for vaccination among persons experiencing homelessness.

CDC and the ACIP updated the full recommendations for hepatitis A vaccination in 2020, adding two new populations for which vaccination is recommended: 1) all children aged 2-18 years who have not previously

received the hepatitis A vaccine (catch-up vaccination); 2) and all persons with HIV aged 1 year and older. Catch-up vaccination provides a strategy for improving population protection against HAV infection faster than relying on childhood vaccination alone. Persons with HIV who have underlying liver disease are at increased risk for severe disease from HAV infection and there is substantial susceptibility to HAV among this population. In addition, it was revealed during the ongoing person-to-person hepatitis A outbreaks that hepatitis A vaccination might not provide long-term protection among persons with HIV based on breakthrough infections. The 2020 ACIP recommendations provide guidance on vaccination, administering immune globulin and postvaccination serologic testing for persons with HIV.

### **Building and Improving Surveillance Capacity**

Recent increases in cases of hepatitis A and hepatitis C highlight the importance of public health surveillance to identify and respond to outbreaks, and to better identify people at risk for infections. The number of cases reported to CDC is an underestimate of the true number of cases occurring, and case reports do not always include sufficient demographic or risk information. Most states have laws that require reporting of hepatitis A, hepatitis B, and hepatitis C. However, the current volume of viral hepatitis testing overwhelms the existing surveillance capacity of most state and local health departments, and most do not have the resources to process the laboratory results and perform case investigations, classify cases, and act on the data. If the United States is to reverse the current trend of steady increases in reported acute hepatitis cases, improvements in surveillances and monitoring efforts are needed. Accurate and complete case identification is especially needed and requires proactive, direct engagement with providers, laboratories, and patients. These improvements would help to rapidly detect and prevent new viral hepatitis infections. They would also help ensure that hepatitis C-infected persons receive appropriate care and curative treatment to prevent transmission and avoid premature death.

During 2017 through 2020, CDC provided resources to 17 states (Colorado, Florida, Georgia, Indiana, Kentucky, Louisiana, Maine, Massachusetts, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Tennessee, Utah, Washington, and West Virginia) to improve viral hepatitis surveillance case reporting and data quality. In the remaining states, health departments identified other resources to cover expenses related to reviewing laboratory testing and conducting case investigation to better understand the trends in viral hepatitis. In FY 2019, 32 states reported acute and chronic viral hepatitis data, exceeding the target of 30 (Measure 2.6.4). To ensure that more states and local jurisdictions have the capacity for high-quality, comprehensive viral hepatitis surveillance, CDC began investing in 59 jurisdictions (49 state and 10 county or city health departments, including District of Columbia) as of May 2021. These efforts, along with CDC's release of updated surveillance guidelines in August 2021, will further increase the number of states submitting quality data to CDC.

### **Enhancing Surveillance and Prevention with State-of-the-Art Diagnostic Technologies**

CDC's viral hepatitis lab supports viral hepatitis surveillance, uses innovative research techniques to develop novel diagnostic methods, and studies how viruses replicate and cause disease. In support of this mission, the Association of Public Health Laboratories (APHL), in coordination with CDC, hosted a webinar in October 2021 to examine and identify the highest-priority diagnostic tools needed to advance hepatitis C elimination in the United States over the next five years. APHL published a draft meeting report for public comment (comment period ending July 2022). In 2021, the viral hepatitis laboratory completed 89 confirmatory and other viral hepatitis tests for state and local health departments to support their surveillance efforts. In addition, CDC's viral hepatitis laboratory also supported the COVID-19 response by testing over 10,000 SARS-CoV-2 samples from Oct 2020 to September 2021. Before the COVID-19 pandemic, the lab typically completed over 16,000 confirmatory tests annually -- approximately 183 times more than in 2021.

CDC continues to use its novel, web-based system, Global Hepatitis Outbreak and Surveillance Technology (GHOST), which allows investigators to identify genetic variants of hepatitis A and hepatitis C viruses and map patterns of their transmission. Public health laboratories from 27 states have been trained in using GHOST. This technology was used to investigate and track the spread of the recent (2017-2021), multi-state hepatitis A

outbreaks. This modern molecular surveillance of viral hepatitis can be applied to other infectious diseases in the future and may help establish a platform for effective collaboration and communication across the public health system.

### Sexually Transmitted Infections

#### National Level Performance Measures and CDC Contextual Indicators for Long Term Objective: Reduce pelvic inflammatory disease in the United States

Contextual Indicators	Most Recent Result
2.7.6e Increase the proportion of sexually active women aged 16-24 enrolled in commercial health plans who are screened for chlamydia infections	FY 2020: 48.4%
2.7.6f Increase the proportion of sexually active females enrolled in Medicaid plans who are screened for chlamydia infections: Females aged 16-24 years	FY 2020: 57.9%
2.7.7 Reduce the rate of symptomatic gonorrhea cases in men	FY 2020: 180.8

#### Performance Measures for Long Term Objective: Reduce pelvic inflammatory disease in the United States

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
2.9.1 Reduce the rate of primary & secondary syphilis in women aged 15-44 (per 100,000 population) <sup>1</sup> (Outcome)	FY 2020: 10.8/100,000 (Baseline)	8.48/100,000	7.70/100,000	-0.78
2.9.2 Reduce the rate of congenital syphilis (per 100,000 live births) (Outcome)	FY 2020: 57.3/100,000 (Baseline)	62.3/100,000	60.3/100,000	-2
2.9.4 Increase the proportion of potential congenital syphilis cases averted (Outcome)	FY 2020: 62.52% Target: 75% (Target Not Met)	75%	75%	Maintain
2.9.5 Reduce the rate of primary and secondary syphilis (Outcome)	FY 2020: 12.7/100,000 Target: 9 (Target Not Met)	13.3 /100,000	13.3/100,000	Maintain

<sup>1</sup> Baseline and targets updated to align with HHS Healthy People 2030 (STI-03).

**Performance Trends:** Coronavirus disease 2019 (COVID-19) significantly affected trends in sexually transmitted infections (STIs) during 2020 – resulting in likely underreporting of infections and possibly increased STI transmission. Data for 2020 show that STI cases and rates in the United States decreased during the early months of the COVID-19 pandemic, but most resurged by the end of that year. Ultimately, reported cases of gonorrhea, syphilis, and congenital syphilis surpassed 2019 levels, while chlamydia declined. The decrease in chlamydia is likely due to changes in STI screening, not a reduction in new infections. Most people with chlamydia usually have no signs or symptoms and most cases are identified through screening at routine

preventive care visits. Therefore, it is likely chlamydia was disproportionately affected by reduced screening during the pandemic, resulting in undiagnosed infections.

New STIs total nearly \$16 billion in direct medical costs. The continued upward trajectory of most STIs is expected as many individuals experienced delays in care and treatment due to reduced or suspended STI services, activities, and drug and test shortages during the COVID-19 pandemic. Coupled with reduced resources, CDC had to further prioritize program activities and initiatives, reducing actions where necessary, to maintain current targets. Local and state COVID-19 response efforts led to the reallocation of disease intervention specialists. By October 2020, 53% of jurisdictions had discontinued disease intervention specialists' field work and 28% of disease intervention specialists had been permanently reassigned to assist with the COVID-19 response. Shortages of STI testing supplies continued to impact STI operations with 44% of clinics experiencing STI test shortages in early 2021.

Despite these disruptions and challenges, CDC assures the provision of quality sexually transmitted infection services in both the public and private sectors through technical assistance, issuing and promoting clinical guidelines and recommendations, and providing education and training for health and medical professionals. CDC's STI work also supports surveillance, case investigation, contact tracing, and connection to care for patients diagnosed with STIs and HIV, outbreak response, assurance of appropriate screening and treatment by providers, and providing reliable and trustworthy STI information to the public.

Even in the face of a pandemic, health departments reported 2.4 million cases of chlamydia, gonorrhea, and syphilis to CDC in 2020. Aside from the consequences of the COVID-19 pandemic, data suggest that multiple factors may be contributing to the alarming increase in STIs: reduced access to STI prevention and care, including late prenatal care; decreases in condom use among vulnerable groups; and drug use. CDC supports local efforts, such as disease intervention specialists, outbreak response teams, and training for health care providers, as well as community/partnership engagements. Screening improvements and investments in non-traditional evidence based and innovative STI prevention strategies will avert infections and improve national health outcomes, and will prove cost-effective due to the high, and increasing, economic burden associated with STIs and their related health consequences.

In March 2021, the National Academies of Sciences, Engineering, and Medicine (NASEM) published "Sexually Transmitted Infections: Adopting a Sexual Health Paradigm" that lays out a holistic framework with a focus on sexual health in the context of broader health and well-being. The recommendations in this report helped inspire and guide CDC and other federal partners as they developed their implementation plans for HHS's STI National Strategic Plan: 2021-2025 – an inaugural national strategic plan for STI prevention, diagnosis, treatment, and care designed to meet substantial, achievable, and measurable goals to reduce the rates of STIs and improve outcomes. In Fall 2021, CDC, along with other federal partners developed a federal implementation plan to support the strategic plan goals, objectives, and strategies. The implementation plan will set forth CDC's commitments to policies, initiatives, and activities to meet the goals of the STI Plan and will be published for transparency and accountability. CDC will examine challenges from a health equity lens, address STI-related stigma, and take a syndemic approach to developing its implementation framework to accelerate progress toward ending the STI, HIV, viral hepatitis, and opioid epidemics. CDC will also support STI research, technology, and innovation. Actions involve addressing syndemic-related social determinants of health and implementing harm reduction strategies in STI care settings, as well as optimizing STI care services in Ending the HIV Epidemic (EHE) jurisdictions through identification of new HIV infections, individuals at higher risk for HIV, and PrEP-eligible individuals. HHS is expected to release the STI federal implementation plan in late 2022.

CDC's long-term STI objectives are to eliminate congenital syphilis, prevent primary and secondary syphilis, prevent antimicrobial resistant gonorrhea, and prevent STI-related pelvic inflammatory disease (PID), ectopic pregnancy, and infertility. PID is a major cause of infertility, ectopic pregnancy, and chronic pelvic pain. Infections due to *Chlamydia trachomatis* and *Neisseria gonorrhoea* are major causes of PID. As part of CDC's

flagship program among state, cities, and territories to prevent and control STDs, recipients prioritize activities to support the long-term objectives mentioned above while working to address STD-related outbreaks and reduce STD-related health disparities. Priority populations for these activities include adolescents and young adults, men who have sex with men, and pregnant people. Several other state- and/or jurisdiction-based programs support these priorities as well.

Reported chlamydial infection rates among women have increased since the late 1980s. In part, this reflects expanded chlamydia screening activities, the use of increasingly sensitive diagnostic tests, increased emphasis on case reporting from providers and laboratories, and improvements in reporting systems. The increase may also reflect a true increase in morbidity. CDC is collaborating with the health care sector to increase adherence to existing recommendations and developing tools for providers to increase awareness and assist with chlamydia screening implementation. Private and public health plans have improved screening rates for chlamydia, increasing slightly from 2012 to 2020 (commercially insured, 44.2% to 48.4% [Measure 2.6.7e]; Medicaid, 57.9% to 57.9% [Measure 2.6.7f]); screening rates dipped slightly from 2019-2020 (52.4% to 48.4%; 61.8% to 57.9%) most likely due to the impacts of COVID-19 on healthcare seeking behaviors. Although chlamydia test rates are increasing among sexually active women aged 15-25 years, the slower growth in chlamydia testing rates may relate to the change in the 2009 American Congress of Obstetricians and Gynecologists (ACOG) Pap testing guidelines, and possibly increases in long-acting reversible contraceptives. Innovative approaches to conduct chlamydia testing during wellness and preventive visits apart from Pap testing are still needed.

In 2020, a total of 677,769 gonorrhea cases were reported. Rates of reported gonorrhea have increased 111% since the historic low in 2009. During 2019–2020, the overall rate of reported gonorrhea increased 5.7%. During 2019–2020, rates increased among both males and females and in three regions of the United States (Midwest, Northeast, and South). Rates of reported gonorrhea increased in most racial/Hispanic ethnicity groups, with the greatest increases observed among non-Hispanic Black/African American persons and non-Hispanic persons of multiple races. In 2020, the rate of symptomatic gonorrhea cases in men decreased from 192.4 cases per 100,000 in 2019 to 180.8 cases per 100,000 (Measure 2.7.7). While the rate improved, the proportion of men with gonorrhea reporting symptoms is increasing (62.3% in 2017 up to 65.55% in 2021). Reduced screening and delay in care seeking during the pandemic may have impacted these case counts. Antimicrobial resistance remains an important consideration in the treatment of gonorrhea. CDC is retiring its measure of patients who received treatment with a CDC recommended antibiotic regimen for gonorrhea as it has achieved a level of performance where future movement on the target will be minimal and the measures cyclical nature and dependence of CDC's release of STI Treatment Guidelines for gonorrhea. CDC will continue to collect and report this data when relevant, including for the years immediately following a change to the treatment guidelines.

Reported rates of primary and secondary (P&S) syphilis, the most infectious stages of the disease, are the highest that they have been in more than 20 years. CDC identified a new baseline (10.8/100,000) for reducing the rate of primary and secondary syphilis among women aged 15-44 in 2020<sup>260</sup>, which better reflects the current state of syphilis rates and efforts to reduce them. The rate has steadily increased from 6.9 cases per 100,000 in 2018 to 8.7 cases per 100,000 in 2019 and to 10.8 cases per 100,00 in 2020 (Measure 2.9.1). In 2020, the total rate of P&S syphilis across sexes increased to 12.7 cases per 100,00 missing the target, but the rate of increase slowed to 6.8% (11.9 to 12.7) from 11% (10.7 to 11.9) in 2019 (Measure 2.9.5). Because the rates of syphilis continue to increase, CDC has made significant investments in programs that focus on surveillance, screening recommendations, epidemiologic studies, and disease intervention specialists. To prevent further increases of syphilis among women, disease intervention specialists play a critical role in identifying and responding to syphilis cases among women and their male partners through case interviews and contact tracing.

<sup>260</sup> <https://www.cdc.gov/std/statistics/2020/overview.htm#Syphilis>

Congenital syphilis (CS) has become an alarming problem that urgently requires awareness, attention, and action. Data from the 2020 STD Surveillance Report found that the number of CS cases spiked for the sixth year in a row. In 2020, there were a total of 2,148 cases – an increase over the previous year. It has been almost two decades since this many cases were reported. In 2020, the congenital syphilis rate was 57.3 cases per 100,000 live births (Measure 2.9.2), the highest reported rate since 1998, and short of the 2019 target. This increase represents a 15% increase relative to 2019 (48.5 cases per 100,000) and 254% increase relative to 2016. Preliminary data (as of March 2022) show nearly 2,268 cases of congenital syphilis in 2021<sup>261</sup>, an increase of 6%, which 33 states reporting increases. As has been observed historically, this increase in the congenital syphilis rate has paralleled P&S syphilis among women during 2015-2019 (178.6%)<sup>262</sup>. Early 2021 data already shows increases in P&S syphilis among adults, which has increased by 34% (10,620 cases) in women and 9% (36,614 cases) in men. CDC re-baselined measure 2.9.2 in FY 2020 to align its targets with the STI National Strategic Plan, which covers 2021–2025.

Congenital syphilis is a preventable disease, which could be eliminated through consistent and effective screening and treatment before and during pregnancy and timely treatment of infected women. Elimination of CS would contribute to reductions in lost pregnancies, stillbirths, infant deaths, and preterm/low birth weight infants. The proportion of potential congenital syphilis cases averted decreased in 2020 to 62.5% from 65.5% in 2018, missing the target (Measure 2.9.4). CDC is retiring its measure of the percentage of pregnant women screened for syphilis at least one month before delivery because the level of performance is unlikely to move beyond recent levels. This measure continued to exceed the 2020 target and is an indication that providers are improving adherence to CDC recommendations for screening pregnant women for syphilis. CDC will continue to monitor this metric to ensure that it does not decrease.

In 2021, CDC invested an additional \$1.5 million to fund four jurisdictions to develop, implement, and evaluate interventions to reduce congenital syphilis locally. With the funding, recipients will work to influence one or more of the critical opportunities for congenital syphilis prevention during pregnancy, such as increasing use of prenatal care, more timely and targeted syphilis testing, and/or appropriate syphilis treatment upon syphilis diagnosis. Although sites are in the beginning phases of implementation, one has partnered with a local jail to provide testing for women of reproductive age and has already tested 164 clients. Of those, 100 of the tests were viable with a positivity rate of 24%. Syphilis screening for women receiving treatment for substance use disorders is also being pursued as well as screening in emergency departments. CDC is also working with the CDC-funded National Network of STD Prevention Training Centers to improve knowledge of congenital syphilis screening recommendations among healthcare providers, including screening at multiple points during pregnancy in high morbidity areas.

In 2021 CDC released the *Sexually Transmitted Infections Treatment Guidelines, 2021*. This gold standard guidance used world-wide provides current evidence-based diagnostic, management, and treatment recommendations, and serves as a source of clinical guidance for managing sexually transmitted infections (STIs). With 26 million new STIs occurring each year, totaling nearly \$16 billion in medical costs, evidence-based prevention, diagnostic, and treatment recommendations are critical to halting continued increases.

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<sup>261</sup> Centers for Disease Control and Prevention (CDC). Congenital Syphilis: Preliminary 2020 Data. Last Reviewed September 15, 2021. Available at: <https://www.cdc.gov/std/statistics/2020/Congenital-Syphilis-preliminaryData.htm>.

<sup>262</sup> Centers for Disease Control and Prevention (CDC). Sexually Transmitted Disease Surveillance 2018. Atlanta: U.S. Department of Health and Human Services; 2018.

## Tuberculosis

### Performance Measures for Long Term Objective: Decrease the rate of cases of tuberculosis (TB) among U.S. born persons in the United States

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
2.8.1 Decrease the rate of cases of tuberculosis among U.S.-born persons (per 100,000 population) (Outcome)	FY 2020: 0.70/100,000 Target: 1.1/100,000 (Target Exceeded)	1.0/100,000	0.5/100,000	-0.5
2.8.2 Increase the percentage of newly diagnosed TB patients who complete treatment within 12 months (where ≤12 months of treatment is indicated) (Outcome)	FY 2018: 89.1% Target: 92% (Target Not Met)	93%	93%	Maintain
2.8.3 Increase the percentage of culture-positive TB cases with initial drug susceptibility results reported (Outcome)	FY 2020: 96.5% Target: 98.5% (Target Not Met)	98.5%	98.5%	Maintain
2.8.4 For contacts to sputum acid-fast bacillus smear-positive TB cases who have started treatment for newly diagnosed latent TB infection, increase the proportion of TB patients who complete treatment (Outcome)	FY 2019: 79.9% Target: 72% (Target Exceeded)	75%	80%	+5

**Performance Trends:** In 2022, the United States reported a total of 7,860 tuberculosis (TB) cases (2.4/100,000 population) for 2021. Reported TB incidence rose 9.4% during 2021 compared with 2020 (2.2/100,000 population) but was lower than TB incidence in 2019 (2.7/100,000 population). Concerns remain about delayed or missed TB diagnoses associated with the COVID-19 pandemic. Among persons born in the U.S., the rate in 2021 was 0.8/100,000 (Measure 2.8.1). U.S. TB case rates remain at levels 24 times higher than the national goal of one case per million population, disproportionately affecting racial and ethnic minority populations and those spending time in close contact with one another, for example, in homeless shelters, correctional facilities, and long-term care facilities.

Treating TB disease until cured is credited with keeping multidrug-resistant (MDR) TB disease in the United States steady at one percent of the total number of new TB cases per year. In comparison, the World Health Organization estimated that globally, 3.36% of new cases of TB were multi-drug resistant in 2019. CDC and partners remain vigilant about finding and treating persons with active TB disease.

CDC and its funding recipients use performance indicators to monitor programmatic activities that are tied to the U.S. goal of one TB case per million people. By monitoring progress against these indicators, CDC can determine where programs require additional technical assistance.

CDC supports public health laboratory testing for drug resistance and use of Advanced Molecular Detection (AMD)<sup>263</sup> tools to genetically map TB specimens to develop a database to better understand and halt the spread of the disease. For example, AMD methods have enabled CDC to identify extensive ongoing TB transmission within the United States, particularly among high-risk populations. In 2020, 96.5% of culture-positive TB cases underwent initial drug susceptibility testing, which is lower than the target of 98.5% (Measure 2.8.3).

In addition to preventing drug resistance, completion of treatment for TB disease immediately reduces the spread of TB. In 2018, 89.1% of patients with TB disease completed a curative course of treatment for TB within 12 months (Measure 2.8.2). Completion of therapy may be more difficult for people with health problems such as HIV infection, diabetes, substance use disorders, and persons experiencing homelessness or who have been incarcerated. In 2022, CDC released new interim guidance for a 4-month treatment regimen to treat drug-susceptible TB disease. The guidance is based on results from the largest drug-susceptible TB disease treatment trial that CDC has sponsored, with more than 2,500 participants enrolled at 34 clinical sites in 13 countries. Shortening treatment for TB disease can benefit patients, families, healthcare providers and health systems. This is especially important in the era of COVID-19, which has caused widespread disruptions to care and treatment access for many people with TB disease. In 2022, CDC and collaborators from New York City Department of Health and Mental Hygiene and Columbia University published a two-year study comparing electronic directly observed therapy (eDOT) with traditional, in-person directly observed therapy (DOT). The results demonstrated eDOT was at least as effective as traditional in-person DOT for ensuring high adherence to treatment while enabling patient-centered care for tuberculosis (TB) disease. This information was shared broadly among the TB prevention and control community.

CDC-funded recipients conduct contact investigations for every case of infectious TB disease, evaluating more than 50,000 people every year. CDC measures each step of the care cascade for people who were exposed to someone with infectious TB disease beginning with the identification of contacts, medical evaluation for TB disease or latent TB infection, and initiation of treatment as needed. CDC reported that in 2019, 79.9% of persons at highest risk for TB disease completed treatment for latent TB infection (Measure 2.8.4).

Untreated TB disease can be fatal. If sick people are not promptly diagnosed, people in close contact with them will get sick as well. During 2021, CDC continued to monitor COVID's impact on TB recipients' capacity since most TB programs experienced partial or high impact on staff capacity and essential TB control services as they devote staff to the COVID-19 response. Public health workers with expertise in TB control remain in demand because of their skills in contact tracing, infection control, and clinical expertise. TB programs have also needed to divert resources, such as hospital isolation rooms and personal protective equipment, to the COVID-19 response. Additionally, drugs used in TB treatment are vulnerable to shortage because there are few FDA-approved manufacturers that make them in the United States. During FY 2022, TB programs continued to report lack of access to TB first-line drugs.

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<sup>263</sup> <http://www.cdc.gov/amd/project-summaries/tuberculosis-surveillance.html>.

## EMERGING AND ZONOTIC INFECTIOUS DISEASES

### Emerging Infectious Diseases

**Performance measure for Long Term Objective: Build and Strengthen health information systems capacity in state and local health departments**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
3.G Proportion of test orders and results processed through Electronic Test Orders and Result Reporting (ETOR) at the PHL (Output)	FY 2021: 33% (Baseline)	60%	75%	+15

**Performance measures for Long Term Objective: Protect Americans from death and serious harm caused by medical errors and preventable complications of healthcare**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
3.3.3 Reduce the central line-associated bloodstream infection (CLABSI) standardized infection ratio (SIR) (Outcome)	FY 2020: 0.86 Target: 0.50 (Target Not Met)	0.40	0.40	Maintain
3.3.2b Reduce invasive healthcare-associated Methicillin-resistant Staphylococcus aureus (MRSA) infections <sup>1</sup> (Outcome)	FY 2019: 55,400 (Baseline)	30,400	30,400	Maintain

**Performance Measures for Long Term Objective: Improve vaccination safety and effectiveness**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
3.7.1 Increase the number of associations between vaccines and adverse health events evaluated to ensure the safety of vaccines used in the U.S. (Outcome)	FY 2021: 1,198 pairs Target: 1,100 pairs (Target Exceeded)	1,250	1,300	+50
3.I Percentage of Vaccine Events Reporting System (VAERS) reports received electronically (Output)	FY 2021: 98.5% Target: 85% (Target Exceeded)	95%	99%	+4

**Performance Trends:** Electronic Test Order Reporting (ETOR) replaces paper-based orders and results, which accelerates workflows at the public health labs; streamlines ordering from and sending results back to clinicians, hospitals, and commercial laboratories; and decreases errors and duplicate reporting. In FY 2021, 33% of test orders and results were processed through ETOR at public health laboratories (Measure 3.G).

HAI-AR Prevention: CDC provides national leadership in healthcare-associated infection (HAI) prevention and provides the scientific foundation for preserving quality care, improving patient safety, and advancing U.S. healthcare practices. Adherence to CDC guidelines is the standard of care for HAI prevention of infections such as central line-associated bloodstream infection (CLABSI), catheter-associated urinary tract infection (CAUTI), surgical site infection (SSI), *Clostridioides difficile* infections (CDI), and invasive methicillin-resistant *Staphylococcus aureus* (MRSA) infections. In addition, many HAIs, including CLABSI can be caused by antimicrobial-resistant (AR) pathogens.

After several years of declining rates of HAIs, data from CDC's National Healthcare Safety Network (NHSN), have shown that increases in certain HAIs during 2020 continued into 2021, such as CLABSI, CAUTI, and invasive hospital-onset MRSA, including those caused by other AR pathogens like *Candida auris*.<sup>264,265</sup> For some of these infections, the increases seen in 2020 and 2021 present a strong contrast to the consistent declines in incidence observed prior to the COVID-19 pandemic. The COVID-19 pandemic continues to impact hospitals, many of which are faced with extraordinary circumstances of increased patient caseload, staffing challenges, and other operational changes due to the COVID-19 pandemic that may have limited the implementation and effectiveness of standard infection prevention practices. This was most evident during the delta variant wave in fall 2021. In addition, the impact of COVID-19 on patients, especially respiratory failure requiring longer ventilator care, may have increased the likelihood of some HAIs as well as AR related infections. CDC's analysis, *COVID-19: U.S. Impact on Antimicrobial Resistance, Special Report 2022*, found significant surges in antibiotic use and AR infections in U.S. hospitals during the first year of the pandemic, including a 15% increase in both resistant hospital-onset infections and deaths. The data highlight the need to strengthen infection prevention and control practices and build resiliency in these programs to withstand future pandemics or events that strain the healthcare system and return to the steady progress in patient safety prior to the pandemic.

Reducing HAIs across all healthcare settings supports HHS' mission to prevent infections, improve patient safety, combat AR and its complications, as well as reduce excess U.S. healthcare costs. These efforts also align with the National Action Plan to Prevent Healthcare-Associated Infections: Roadmap to Elimination (National HAI Action Plan),<sup>266</sup> National Action Plan for Combating Antibiotic Resistance Bacteria (CARB),<sup>267,268</sup> and Healthy People 2030 Goals. CDC did not meet its FY 2020 target for reducing the CLABSI SIR with a result of 0.86, representing a 14% decrease compared to the 2015 baseline (Measure 3.3.3). As previously mentioned, the 2020 increase in CLABSI was likely due to the increased burden on healthcare providers and strain on infection prevention and control programs within healthcare facilities wrought by the COVID-19 pandemic.<sup>269</sup> CDC did meet other 2020 National HAI Action Plan targets, e.g., CAUTI and CDI. The FY 2024 target will remain level with the previous year due to the increased burden of HAIs related to the COVID-19 pandemic as CDC continues to work towards decreasing HAIs.

FY 2020 data for Measure 3.3.2b is expected in the fall and will serve as a new baseline, and the National Action Plan for Combating Antibiotic-Resistant Bacteria, 2020-2025 reduction in AR overall will provide temporary FY 2024 and 2025 targets until the new HAI Action Plan becomes available. As mentioned above, hospital onset MRSA infections increased 13% during the first year of the COVID-19 pandemic due to the increased burden on healthcare personnel and strain on infection control programs within hospitals. However, healthcare-associated community-onset (HACO) infections decreased in 2020 compared to 2019 enough to cause the overall measure to decrease. CDC and the Emerging Infection Program (EIP) sites are still reviewing the data, but possible explanations for this decrease include fewer patients seeking outpatient care and targeted efforts by CDC and

<sup>264</sup> <https://doi.org/10.1017/ice.2021.362>

<sup>265</sup> <https://doi.org/10.1017/ice.2022.116>

<sup>266</sup> <http://www.nejm.org/doi/full/10.1056/NEJMoa1408913>

<sup>267</sup> [https://obamawhitehouse.archives.gov/sites/default/files/docs/national\\_action\\_plan\\_for\\_combating\\_antibiotic-resistant\\_bacteria.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/national_action_plan_for_combating_antibiotic-resistant_bacteria.pdf)

<sup>268</sup> <https://www.hhs.gov/sites/default/files/carb-national-action-plan-2020-2025.pdf>

<sup>269</sup> <https://doi.org/10.1017/ice.2021.362>

CMS to enhance infection prevention and control practices in nursing homes, which were greatly impacted by the COVID-19 pandemic. CDC will continue to provide support, technical expertise, and resources to public health and healthcare partners to reduce MRSA and CLABSI infections across healthcare settings, including monitoring the long-term impact of the COVID-19 pandemic on infection prevention.

**Immunization Safety:** CDC is the nation’s leading public health agency responsible for providing a safe, effective supply of all licensed vaccines approved for use in the United States. CDC conducts post-licensure vaccine safety monitoring on vaccines licensed and recommend for routine use in the public by ACIP. CDC uses the Vaccine Safety Datalink<sup>270</sup> (VSD) Network and the Vaccine Adverse Event Reporting System<sup>271</sup> (VAERS) to monitor vaccine safety, and, in 2021, introduced the v-safe smartphone-based tool as an active surveillance system for COVID-19 vaccines. VAERS is a joint effort with the U.S. Food and Drug Administration (FDA). Together, these surveillance systems evaluate vaccine risks, monitoring any known and potential adverse events for new and existing vaccines, and rapidly detecting unusual patterns of vaccine adverse events. In addition, VSD works with multiple integrated health systems to conduct vaccine safety pair studies to further assess whether any adverse health events are actually caused by vaccines. For example, to address safety questions for pregnant women and better understand health outcomes for individuals who receive COVID-19 vaccination during pregnancy, multiple VSD studies were done to review different health outcomes for those who received the COVID-19 vaccine during pregnancy versus those that were unvaccinated. One study provided additional evidence that pregnant women are at higher risk for severe illness from COVID-19 infection without the vaccine and found that COVID-19 vaccination during pregnancy was not associated with increased risk for preterm birth or small-for-gestational-age at birth. These VSD findings help address scientific knowledge gaps when there is limited information available and also strengthens existing evidence that COVID-19 vaccines are safe during pregnancy and support current U.S. vaccination recommendations for pregnant persons.

In FY 2021, there were 56 additional vaccine-adverse event pair studies conducted through VSD totaling 1,198 pair studies conducted to-date. This exceeds CDC’s 2021 targets (Measure 3.7.1) and more than doubles the total vaccine-adverse event pair studies conducted since FY 2015. Data from VSD and other CDC studies show that the current U.S. vaccine supply is the safest in history.

VAERS serves as the nation’s established ‘early warning’ system for post licensure vaccine safety for both routine immunizations and COVID-19 vaccines. Electronic submission of VAERS vaccine safety reports helps to improve program decision-making by increasing the timeliness, quality, and quantity of these vaccine safety reports and enhances CDC’s ability to quickly evaluate and disseminate safety information to healthcare providers and consumers. For example, within three weeks of beginning the use of Johnson & Johnson (J&J)/Janssen COVID-19 vaccine in the United States, VAERS data identified reports of what would later be termed thrombosis with thrombocytopenia syndrome (TTS) after this vaccine, leading to a pause in the use of the vaccine as its safety was reevaluated. VAERS data was also instrumental in guiding the CDC Advisory Committee on Immunization Practices (ACIP) to issue a rare preferential recommendation for the mRNA COVID-19 vaccines over J&J/Janssen’s vaccine. Data from VAERS were also key to corroborating reports from Israel and the Department of Defense of myocarditis after mRNA COVID-19 vaccination, and provided robust, early data to help describe and provide context for the risk of myocarditis after these vaccines. VAERS contributed key data showing that the risk of myocarditis after mRNA COVID-19 vaccination was outweighed by the consequences of COVID-19 disease. VAERS continues to provide timely and sensitive monitoring of COVID-19 vaccines safety as these vaccines are authorized for younger patients and people with particular health conditions (e.g., solid organ transplant recipients). Although these adverse events are rare, CDC continues to monitor and evaluate reports received in VAERS and uses this data to inform vaccine policies and to raise awareness to clinicians and the public.

<sup>270</sup> <http://www.cdc.gov/vaccinesafety/ensuringsafety/monitoring/vsd/index.html>.

<sup>271</sup> <http://www.cdc.gov/vaccinesafety/ensuringsafety/monitoring/vaers/index.html>.

At this time, approximately 98.5% of all VAERS reports were submitted electronically in FY 2021, which exceeds 2021-2023 targets (Measure 3.I). CDC and FDA continue to implement these information technology enhancements to further increase electronic reporting in VAERS. Improvements include updates to the VAERS reporting interface to facilitate electronic reporting and additional revisions to the VAERS form for more direct electronic reporting.

Vaccine safety is a vital part of the nation’s response to the COVID-19 pandemic and these core activities continue to be a critical part of CDC’s COVID-19 response. As new vaccines are developed and become available, the public’s knowledge of their safety, both initially and during extended use, is an important part of a successful national vaccination program. New vaccine safety systems have been developed, e.g., v-safe, and other data sources have been added to enhance CDC’s existing vaccine safety infrastructure to ensure COVID-19 vaccines have undergone the most intensive safety monitoring in U.S. history. CDC and FDA have also scaled up VAERS for enhanced COVID-19 safety surveillance, and CDC and FDA expect an increase in electronic reporting to VAERS going forward. Taken together, these multi-layered systems have been leveraged for COVID-19 vaccines to form the most robust vaccine safety monitoring effort in U.S. history.

**Vector-Borne Diseases**

**Performance measure for Long Term Objective: Protect Americans from Infectious Diseases—Vector-borne**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
3.H Number of states that report tick surveillance data to CDC’s vector surveillance system (ArboNET) (Output)	FY 2022: 31 Target: 20 (Target Exceeded)	35	40	+5

**Performance Trends:** CDC serves as a national and international leader in the prevention of vector-borne viral, bacterial, and rickettsial diseases. Since 2004, reported vector-borne disease cases have more than tripled, with ten new vector-borne germs discovered or introduced in the U.S. in the last two decades years, seven of which were tickborne. Additionally, approximately three-quarters of reported vector-borne disease cases are tickborne disease cases. This measure reflects state capacity to conduct tick surveillance, which is a vital component to preventing and controlling tickborne disease and one of the core competencies for prevention and control. Vector surveillance allows public health departments to know which vectors are present in their area, which informs the selection and implementation of vector-borne disease prevention programs.

In FY 2022, CDC exceeded the target of having 20 states report tick surveillance data to CDC's vector surveillance system. A total of 31 states, plus the District of Columbia, reported tick surveillance data to CDC in FY 2022, surpassing the previous FY 2023 target a year early. The more rapid success that the program achieved can be attributed to continued increases in FY 2021 and FY 2022 CDC funding that was used to support vector surveillance within states, and CDC’s increase in the provision of technical assistance to support this activity within states. These factors have continued to positively impact CDC's progress on this long-term objective and CDC has therefore already surpassed FY 2022 and FY 2023 targets, reaching the FY 2023 target a year early. For this reason, the target for FY 2023 was increased from 30 states to 35 states and a target of 40 states was set for FY 2024 to reflect recent progress and set challenging targets for the future.

## Antimicrobial Resistance

### Performance measure for Long Term Objective: Reduce the spread of antimicrobial resistance

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
3.2.3a Maintain the proportion of all <i>E. coli</i> or <i>Klebsiella spp.</i> that are carbapenem-resistant, causing CLABSI or CAUTI in adult intensive care units (ICUs) at ≤7% (Outcome)	FY 2020: 2.3% Target: 7.0% (Target Exceeded)	7.0%	7.0%	Maintain
3.2.4b Reduction in hospital-onset <i>Clostridioides difficile</i> infections standardized infection ratio (SIR) (Outcome)	FY 2020: 0.52 Target: 0.70 (Target Exceeded)	0.45	0.40	-.05

**Performance Trends:** CDC is a leader in the fight to combat antibiotic resistance. CDC is committed to protecting America's health, safety, and interests through science, surveillance, and services. Antibiotic resistance (AR) is a growing crisis internationally, and some AR infections are already untreatable.

Carbapenem-resistant Enterobacteriaceae (CRE), “the nightmare bacteria,” are a group of bacteria resistant to almost all drugs. Because of limited treatment options, CRE bloodstream infections can be fatal in nearly half of all cases. In FY 2020, the proportion of all *E. coli* or *Klebsiella spp.* that are carbapenem-resistant causing CLABSI or CAUTI in adult patients was 2.3% (Measure 3.2.3a). These results may have been due to CDC's ongoing prevention efforts to prevent infections and contain the spread of resistant pathogens quickly across hospitals and other healthcare settings. With CDC’s AR Solutions Initiative, CDC continues to implement Containment Strategy and has also made recent investments to better detect, track, and respond to CRE infections at the state and local levels.

*Clostridioides difficile* infection (CDI)<sup>272</sup> is a preventable, life-threatening bacterial infection that can occur in both inpatient and outpatient healthcare settings. Infections occur most often in people who have taken antibiotics for other health conditions. CDC provides data-driven strategies and tools for targeted intervention to the healthcare community to help prevent CDI, as well as resources to help the public safeguard their own health. These strategies to reduce CDI include improving antibiotic use, infection control, and healthcare facility cleaning and disinfection. CDI prevention is a national priority, with a 2020 target to reduce CDI overall by 50% in the National Action Plan for CARB and reduce hospital-onset CDI by 30% in the current National HAI Action Plan<sup>273</sup>. In FY 2020, the SIR for hospital-onset CDI was 0.52 (Measure 3.2.4b), exceeding not just the 2020 target, but also surpassing the 2020 HAI Action Plan CDI goal. CDC is also on track to meet the 2020-2025 National Action Plan for CARB targets for CDI. The current FY 2024 target reflects CDC's efforts to expand on prevention efforts to continue these decreases.

<sup>272</sup> <http://www.nejm.org/doi/full/10.1056/NEJMoa1408913>.

<sup>273</sup> <https://health.gov/hcq/prevent-hai-action-plan.asp>.

## Food Safety

### Performance measures for Long Term Objective: Protect Americans from infectious diseases – foodborne illnesses

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
3.C Increase the epidemiologic capacity of ELC Section F1 recipients for <i>Salmonella</i> , <i>Listeria</i> , and <i>Shiga</i> Toxin-producing <i>E. coli</i> (STEC), surveillance and outbreak investigations (Output)	FY 2020: 59% Target: 75% (Target Not Met)	85%	85%	Maintain
3.D Percentage of isolates of priority PulseNet pathogens ( <i>Salmonella</i> , <i>Shiga</i> toxin-producing <i>E. coli</i> , and <i>Listeria monocytogenes</i> ) sequenced and uploaded to the PulseNet National Database (Output)	FY 2020: 87% Target: 70% (Target Exceeded)	85%	85%	Maintain
3.E Increase the percentage of cases with positive culture-independent diagnostic tests (CIDTs) for <i>Shiga</i> toxin-producing <i>E.coli</i> (STEC) and culture isolation attempted or specimen metagenomics obtained (Output)	FY 2020: 53% Target: 89% (Target Not Met)	90%	90%	Maintain

**Performance Trends:** CDC estimates the burden of foodborne disease in the U.S. to be approximately 48 million cases per year (one out of every six Americans), 128,000 hospitalizations, and 3,000 deaths per year. Foodborne disease is mostly preventable, but controlling and preventing outbreaks requires that we understand the foods and settings that cause illness. Fast and effective outbreak investigations are needed to identify and remove contaminated food from the market to prevent additional illnesses and improve the safety of the nation’s food supply.

In 2019, the standard method for outbreak detection in PulseNet changed to whole-genome sequencing (WGS) of bacteria in food that cause human illness. Tracking the progress of this new method is important because the degree to which it is adopted affects the sensitivity of outbreak detection, and multiple trends could affect PulseNet’s ability to detect outbreaks in a positive or negative direction. Data indicates in FY 2020, 87% of isolates of priority PulseNet pathogens (*Salmonella*, *Shiga* toxin-producing *E. coli*, and *Listeria monocytogenes*) were sequenced and uploaded to the PulseNet National Database (Measure 3.D). These data exceeded the FY 2020 target, in part, because COVID-19 impacted the volume of isolates received by state laboratories, resulting in a lower isolate volume.

With the change in PulseNet to use WGS to detect foodborne outbreaks, CDC expects to see an increase in suspected clusters of foodborne disease, which, in turn, will need to be interviewed in order to determine if they are part of an outbreak. CDC invests in improving interview capacity in state and local health departments in order to also improve the availability of data for multistate foodborne outbreak investigations. Tracking state epidemiologic interview capacity is important to help identify and address challenges in the availability of epidemiologic data critical for multistate foodborne outbreak investigations. The FY 2020 result of 59% of cases interviewed in multistate outbreaks of *Salmonella*, *Listeria*, and STEC (Measure 3.C) is below the FY 2020 target (75%) and may indicate a lack of staffing capacity to conduct all interviews. Additionally, cases may have been lost to follow-up or refused to be interviewed with a supplemental questionnaire. Interviewing completeness (percent of eligible cases interviewed) was lower in 2020, compared to 2019 as fewer jurisdictions were able to

report completeness data for STEC and Listeria. During 2020 and into 2021, all jurisdictions reported disruption of routine enteric disease activities due to COVID-19. This included staff being reassigned, fewer cases and clusters of enteric disease being identified, and decreased capacity to conduct interviews and investigations.

Recent changes in diagnostic practices at clinical laboratories across the United States to more culture-independent methods is challenging CDC's ability to find outbreaks and monitor disease trends. Culture-independent diagnostic tests (CIDTs) are commonly used by physicians to rapidly diagnose their patients' diseases. These tests do not provide the data needed by CDC to link cases to outbreaks unless laboratories perform additional testing to isolate cultures, a process called reflex culture. Tracking the increased use of CIDTs and the proportion of specimens for which reflex culture is performed is important to better understand surveillance data on enteric bacteria, identify foodborne disease outbreaks, and inform program decisions.

FY 2020 data show 53% of cases with positive CIDTs for STEC and culture isolation were attempted or specimen metagenomics were obtained (Measure 3.E). This is below the FY 2020 target, and possibly indicates a lack of resources for state and local health departments related to reflex culture procedures. Additionally, during FY 2020, many public health laboratories activated their continuity of operations plans in response to COVID-19 and culture isolation was not prioritized during this time.

CDC uses the CaliciNet national surveillance system to detect and characterize norovirus outbreaks by supporting state and territorial public health laboratories. Laboratories that are not certified to perform norovirus testing can submit outbreak specimens for norovirus typing to one of the five CaliciNet Outbreak Support Centers (CN-OSCs) or to directly to CDC's National Calicivirus Laboratory. Through the combined testing efforts of the CaliciNet Regional Support Centers and an additional 20 state public health labs national coverage by CaliciNet for all 50 states is achieved. CDC will retire this measure as it has achieved its level of performance.

## National Healthcare Safety Network

### Performance measure for National Healthcare Safety Network

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
3.3.4 Increase the number of hospitals and other selected health care settings that report into the National Healthcare Safety Network (NHSN) (Output)	FY 2021: 37,600 Target: 23,000 (Target Exceeded)	36,500	37,000	+500

**Performance Trends:** CDC's National Healthcare Safety Network (NHSN) is the nation's most comprehensive and widely used surveillance and quality improvement system to identify emerging and enduring threats across healthcare, such as COVID-19, healthcare-associated infections (HAIs), and antimicrobial resistant (AR) infections. NHSN data drive HAI prevention and improve quality of care at local, state, and national levels, supporting goals mentioned in the National Action Plan for CARB, and the HHS HAI Action Plan to protect American lives. NHSN data are also used by the following partners:

- Healthcare professionals to improve the quality of patient care
- State health departments to comply with state reporting requirements and to target HAI prevention efforts
- The Centers for Medicare and Medicaid Services (CMS) to implement and tailor interventions through CMS' improvement programs (e.g., Quality Improvement Networks and Hospital Improvement Innovation Networks) to prevent infections in all healthcare settings, and

- The Agency for Healthcare Research and Quality to evaluate HAI implementation strategies in healthcare.

CDC continues to enroll and provide support for healthcare facilities in NHSN to report HAIs, including those caused by resistant bacteria. In FY 2021, CDC greatly exceeded its target for the number of hospitals and other selected healthcare settings that report into NHSN. To provide essential data for the COVID-19 response, CDC developed additional reporting modules for both hospitals and nursing homes in FY 2020 and FY 2021. Following the enactment of CMS COVID-19 reporting requirements for nursing homes, as of January 2022, there are over 37,600 facilities reporting patient safety and/or COVID-19 data in NHSN (Measure 3.3.4). This includes all hospitals, more than 7,900 dialysis facilities, more than 4,700 outpatient clinics, and more than 17,900 nursing homes and other long term care facilities, including around 15,400 CMS-certified long term care facilities. Thus, the number of facilities enrolled and reporting to NHSN have exceeded both targets for FY 2020 and FY 2021. In addition, CDC tracks the whole scope of critical HAIs/AR infections (e.g., MRSA, CLABSI, CAUTI, SSI, and CDI) being captured in NHSN by healthcare facilities as well as the number of reporting modules (e.g., antibiotic use and antibiotic resistance data) being used across multiple healthcare settings to prevent infections, enhance healthcare quality, and improve patient care. CDC continues efforts to modernize NHSN, automate reporting, decrease reporting burden, and increase its value to providers and partners. FY 2024 targets were chosen to encourage continued participation of nursing homes in other NHSN patient safety modules, in addition to their newly mandated participation in COVID-19 reporting modules. However, additional changes to state and CMS quality reporting requirements and programs could lead to changes in the number of facilities participating in NHSN.

## Quarantine and Migration

**Performance measures for Long Term Objective: Prevent the importation of infectious diseases to the U.S. in mobile human, animal, and cargo populations**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
3.4.9 Increase the number of U.S. ports of entry that have demonstrated a validated capability to respond to a communicable disease event involving mobile populations (Output)	FY 2021: 42 Target: 43 (Target Not Met but Improved)	49	49	Maintain

**Performance Trends:** CDC enhances the public health security of U.S. communities and addresses infectious disease risks associated with international travel and globally mobile populations by executing regulatory responsibilities and implementing cost-effective public health programs, in collaboration with local, state, and federal partners, to prevent the importation and spread of disease into and within the United States.

Improving refugee vaccination prior to resettlement is a key public health priority for CDC as it is cost-effective, prevents the importation of infectious diseases, and improves the health of the refugee and the public health security of U.S. communities. CDC will retire its measure for the proportion of U.S.-bound refugees who received at least one dose of age-appropriate routine vaccination -- using the proportion of age-eligible refugees receiving at least one dose of a measles vaccine as a proxy. However, CDC has achieved its level of performance for this measure and given CDC’s accomplishments, there is little room for additional growth.

There are over 320 Department of Homeland Security-designated air, sea, and land ports of entry into the United States. CDC Quarantine Stations are strategically located at 20 ports of entry and land-border crossings that cover approximately 80% of arriving international travelers. Quarantine station officials are available 24/7 and rapidly respond to ensure appropriate public health action to prevent further spread of communicable diseases.

Having a validated capability to respond to communicable disease events involving travelers at all U.S. ports of entry is integral to CDC's preparedness to events like the COVID-19 pandemic. In FY 2021, CDC continued its multi-year strategic focus of developing a validated response to a communicable disease event capability at sub ports across the nation. Each station’s jurisdiction covers numerous sub-ports to ensure full public health coverage for all U.S. ports of entry for arriving international travelers. Quarantine station officials often need to direct the public health response remotely, usually via emergency medical service units and local public health authorities, working closely with other ports in their respective jurisdictions and state and local public health partners.

Performing this task is made more effective, efficient, and resilient over time if sub-ports are able to demonstrate a validated public health response capability. In FY 2021, the number of U.S. ports of entry (POEs) that demonstrated a validated capability to respond to a communicable disease event involving mobile populations was 42 which was below the target (Measure 3.4.9). The resources required to respond to the COVID-19 pandemic, the Afghanistan repatriation (and welcoming of allies) efforts, and the multi-national mpox outbreak limited the availability of subject matter expertise and field capacity to reach the target. To address this shortfall, CDC has begun the implementation of a “priority sub port” strategy based on travel volume, current plans development status, and repatriation port status to target POEs nearing a validated capability; and identifying and recruiting advocates at each Quarantine Station POE to serve as the lead for validating capabilities within their respective jurisdictions. CDC is also evaluating the COVID-19 response, with respect to the availability of CDC and local resources, to determine if any sub-ports engaged in the response were able to

demonstrate a validated capability. However, given the COVID-19 pandemic continues, CDC will keep the FY 2024 target level with the FY 2023 target.

CDC has increased the percentage of panel sites that use the eMedical system to transfer immigrant medical exam data to CDC beyond its target for this measure and there is little room for additional growth. CDC has achieved a result that will continue to be maintained and therefore will retire this measure.

## CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION

Chronic diseases are the leading causes of death and disability in the United States, and account for 70% of all deaths annually (almost 1.7 million). These diseases also cause major limitations in daily living for approximately one out of every ten people. The contextual indicators below track long-term health outcomes influenced by CDC's Chronic Disease Prevention and Health Promotion program.

Contextual Indicator	Most Recent Result
Coronary Heart Disease: Reduce the annual age-adjusted rate of coronary heart disease deaths (per 100,000 population)	FY 2019: 88.0
Stroke: Reduce the annual age-adjusted rate of stroke deaths (per 100,000 population)	FY 2019: 37.0
Diabetes: Reduce the annual age-adjusted rate of diabetes-related deaths (per 100,000 population)	FY 2020: 93.6

Over the past decade, CDC has worked to improve cardiovascular health and reduce coronary heart disease and stroke mortality through its support of cross-cutting public health strategies and leveraging resources to develop partnerships that promote healthy lifestyle behaviors, environments, and communities. CDC has also established relationships between clinical practices and the community to improve healthcare quality.

From 2000 to 2019, the annual age-adjusted death rate for coronary heart disease declined from 186.9 to 88.0 per 100,000. During the same time frame, the annual age-adjusted rate of stroke deaths declined from 60.8 to 37.0 per 100,000. From 2007 to 2019, the age-adjusted rate of diabetes-related deaths also declined from 74.0 to 69.3 per 100,000 but have increased to 93.6 per 100,000 in 2020. This increase is likely due to the COVID-19 pandemic, as people with diabetes are more likely to become severely ill or die from COVID-19 than people without diabetes. CDC contributes to these successes by addressing multiple contributing factors including reductions in per capita cigarette smoking, improvements in the integration of clinical and other preventive services, expansion of clinical and community-based resources, support for self-management of chronic diseases and conditions, and advancement of environmental approaches to promote health and reinforce healthy behaviors. CDC's inter-related programs in chronic disease focus not only on specific diseases, but also on those risk factors that contribute to chronic diseases and conditions at all stages of life.

### Tobacco Prevention and Control

#### Performance Measures for Long Term Objective: Reduce death and disability due to tobacco use

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
4.6.2a Reduce the annual adult per-capita combustible tobacco consumption in the United States (Intermediate Outcome)	FY 2020: 1,004 Target: 838 (Target Not Met)	693	631	-62
4.6.3 Reduce the proportion of adults (aged 18 and over) who are current cigarette smokers (Intermediate Outcome)	FY 2020: 12.5% Target: 12% (Target Not Met but Improved)	9.9%	9.2%	-0.7

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
4.6.4 Increase proportion of the U.S. population that is covered by comprehensive state and/or local laws making workplaces, restaurants, and bars 100% smoke-free (no smoking allowed, no exceptions) (Intermediate Outcome)	FY 2021: 62.3% Target: 65.2% (Target Not Met but Improved)	69.2%	71.1%	+1.9
4.6.5a Reduce the proportion of adolescent’s grades 6 through 12 who are current users of any tobacco product (Outcome)	FY 2021: 29.3% Target: 13.6% (Target Exceeded)	13.6%	13.6%	Maintain
4.6.8 Increase the proportion of ever cigarette smokers aged ≥ 18 years who are former cigarette smokers (quit ratio) (Outcome)	FY 2020: 64.6% Target: 63.8% (Target Exceeded)	67.5%	68.6%	+1.1

**Performance Trends:** Although cigarette smoking remains the leading cause of preventable disease and death in the United States, the tobacco<sup>274</sup> product landscape continues to diversify and includes multiple tobacco products such as, cigars, cigarillos and little cigars, pipe tobacco, roll-your-own tobacco, and hookah. The annual adult per capita combustible tobacco product consumption remained unchanged from 1,004 cigarette equivalents in FY 2019 to 1,004 cigarette equivalents in FY 2020 (Measure 4.6.2a). Additionally, the percentage of adults who currently smoked cigarettes decreased from 20.6% in 2009 to 12.5% in FY 2020, an improvement from 14% in FY 2019 (Measure 4.6.3).

Nearly all tobacco product use begins during youth and young adulthood. Youth use of tobacco products in any form is unsafe, irrespective of whether it is smoked, smokeless, electronic, or in another form (e.g., oral nicotine products). In 2021, an estimated 2.25 million (29.3%) U.S. middle and high school students currently used any tobacco product, with 740,000 (2.7%) reporting current use of ≥2 tobacco products (Measure 4.6.5a). E-cigarette use among youth remains a public health concern. E-cigarettes are the most commonly used tobacco product among youth. In 2021, 11.3% of high school students (1.72 million) and 2.8% of middle school students (320,000) currently used e-cigarettes.<sup>275</sup> The youth tobacco product use target remains unchanged until CDC

<sup>274</sup>References to tobacco refer to commercial tobacco and not the sacred and traditional use of tobacco by some American Indian communities.

can reestablish the target baseline with comparable data. This is due to changes in survey administration and data collection methods, necessitated by the COVID-19 pandemic. Most young people who use tobacco products want to quit and have been unfairly targeted by the tobacco industry with tactics known to appeal to youth. CDC efforts to address tobacco use among youth include 1) continuing to monitor tobacco use trends, including through the National Youth Tobacco Survey; 2) educating the public about the risks of youth use of tobacco, including e-cigarettes; and 3) supporting state and local tobacco prevention and control efforts through the National Tobacco Control Program. CDC will continue to work to decrease the proportion of adolescents who use tobacco products. The adverse health effects of tobacco smoking are not limited to the person who smokes. Exposure to secondhand smoke from burning tobacco products causes significant disease and death; there is no risk-free level of secondhand smoke exposure.

Between FY 2005 and FY 2018, the percentage of the population covered by comprehensive smoke-free laws that prohibit smoking in all indoor areas of private worksites, restaurants, and bars more than tripled. As of February 2022, 62.3% of all U.S. residents are covered by comprehensive smoke-free laws at the state or local level (Measure 4.6.4), missing the FY 2021 target, but meeting the FY 2019 target and slightly increasing over FY 2020. While progress has been made, nearly 38% of the U.S. population is still not protected by state or local level comprehensive laws prohibiting smoking in all indoor areas of bars, restaurants, and private worksites; moreover, only 28 states, American Samoa, the District of Columbia, the Marshall Islands, Puerto Rico, and the U.S. Virgin Islands have adopted such laws as of March 31, 2022.

CDC will continue to supply credible evidence showing the dangers of secondhand smoke, as well as proven interventions to reduce exposure, which provide a strong foundation for state and community efforts to promote smoke-free environments. CDC research contributes to the evidence base that informs the activities of CDC's National Tobacco Control Program (NTCP), a nationwide investment that supports all 50 states, the District of Columbia, eight U.S. territories, and 12 tribal organizations for comprehensive tobacco control efforts including reducing secondhand smoke exposure.

CDC connects people who smoke with resources to help them quit, including a free quitline portal, 1-800-QUIT-NOW, which links callers to their state quitline, as well as web-based, text-based, and app-based cessation support resources. Evidence-based web and text-based services are an important complement to 1-800-QUIT-NOW, as texting services may reach people who want additional quit support but may be less likely to call a quitline.

CDC's *Tips® From Former Smokers® (Tips®)* campaign, the first-ever federally funded national tobacco education campaign, has been on air since 2012. *Tips®* profiles real people who are living with serious long-term health effects due to smoking and secondhand smoke exposure. *Tips®* is effective at increasing calls to 1-800-QUIT-NOW and at helping people quit. From 2012-2018, the *Tips®* campaign was associated with more than 1.3 million additional calls to 1-800-QUIT-NOW. That is an increase of 72.2% compared to weeks when *Tips®* was not on air. In addition, from 2012-2018, CDC estimates more than 16.4 million people who smoke attempted to quit and approximately 1 million successfully quit because of the *Tips* campaign. During the first 19 weeks of the 2022 campaign (through July 10), a total of 230,779 calls have been made to 1-800-QUIT-NOW. Recent findings indicate that the quit ratio, or the proportion of people  $\geq 18$  years who formerly smoked cigarettes among those who ever smoked, has increased. In FY 2020, the quit ratio was a 64.6%, an increase from 61.7% in FY 2019 (Measure 4.6.8). CDC will continue to provide resources to state quitlines, as well as state tobacco control

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<sup>275</sup> Gentzke AS, Wang TW, Cornelius M, et al. Tobacco Product Use and Associated Factors Among Middle and High School Students — National Youth Tobacco Survey, United States, 2021. *MMWR Surveill Summ* 2022;71(No. SS-5):1–29. DOI: <http://dx.doi.org/10.15585/mmwr.ss7105a1>

programs, as part of its National Tobacco Control Program. In addition, CDC will continue the Tips from Former Smokers® campaign on national TV, radio, print, digital, and out-of-home media.

**Nutrition, Physical Activity, and Obesity**

**Performance Measures for Long Term Objective: Promote evidence-based interventions to improve nutrition, increase physical activity, and reduce obesity**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
4.11.7 Increase the proportion of infants that are breastfed at 6 months (Intermediate Outcome)	FY 2018 56.7% Target: 63.8% (Target Not Met)	65.8%	65.9%	+0.1
4.11.8a Increase the contribution of vegetables to the diets of the population aged 2-18 years (cup equivalents per 1,000 calories) <sup>1</sup> (Intermediate Outcome)	FY 2018: 0.49 (Baseline)	N/A	0.55	N/A
4.11.8b Increase the contribution of vegetables to the population aged 19 years and older (cup equivalents per 1,000 calories) <sup>1</sup> (Intermediate Outcome)	FY 2018: 0.80 (Baseline)	N/A	0.86	N/A
4.11.9 Increase the proportion of adults (age 18 and older) that engage in leisure-time physical activity <sup>2</sup> (Intermediate Outcome)	FY 2020: 73.9% (Baseline)	N/A	75.5%	N/A
4.11.10a Reduce the age-adjusted proportion of adults (age 20 years and older) who have obesity <sup>1</sup> (Intermediate Outcome)	FY 2018: 42.4% (Baseline)	N/A	40.9%	N/A
4.11.10b Reduce the proportion of children and adolescents (ages 2 through 19) who have obesity <sup>1</sup> (Intermediate Outcome)	FY 2018: 19.3% (Baseline)	N/A	17.8%	N/A
4.U Increase the average percentage of	FY 2021: 31.2% Target: 31.5%	33.5%	34.5%	+0.1

obesity prevention standards fully met across states for licensed Early Care and Education (ECE) centers (Output)	(Target Not Met but Improved)			
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**Performance Trends:** Breastfeeding: The proportion of infants that are breastfed at six months (Measure 4.11.7) increased from 46.6% in 2009 to 56.7% in 2018, missing the target of 63.8%. To meet its targets, CDC will continue to support birthing hospitals, worksites, and communities in implementing policies and practices that help women breastfeed and address racial disparities in breastfeeding. CDC increased efforts to improve support for breastfeeding in the community by focusing efforts on continuity of care. Continuity of care efforts include increasing equitable access to lactation resources and culturally congruent lactation support within the communities where women live. In addition to building the capacity of communities and breastfeeding coalitions to implement sustainable policy, systems, and environmental improvements focused on promoting and supporting breastfeeding. CDC funds states, communities, and organizations with national reach to improve access to breastfeeding supports. These investments have contributed to improvements in initiation and duration of breastfeeding. CDC funded activities have contributed to about 1 million babies being born per year in almost 600 hospitals with supportive breastfeeding practices across 50 states, Washington D.C., and Puerto Rico. This accounts for 27% of babies born annually in the U.S.

Early Care and Education (ECE): Of the 21.2 million children from birth through age 5, approximately 3 in 5 (about 12.5 million, or 59%) are in a nonparental care arrangement at least once a week, with center-based care being the most frequently reported care type. There are national standards for physical activity and nutrition in ECE setting. Measure 4.U captures the progress that the nation is making toward all 47 high-impact obesity prevention standards, including healthy weight best practices in infant feeding, nutrition, physical activity, and screen time. The average percentage of obesity prevention standards fully met across states for licensed ECE centers has increased from 20.5% in FY 2016 to 31.2% in FY 2021 and increase over FY 2020 and nearly meeting the target. CDC continues to provide funding and direct technical assistance to states to work on specific activities designed to have statewide impact by embedding nutrition and physical activity standards or implementation supports for these standards into their state ECE system. This occurs through state licensing, integrating the use of an evidence-based intervention into state systems and improving the capacity of technical assistance providers on CDC’s topic areas to support ECE providers to improve their nutrition and physical activity policies and practices. For example, in September 2021, Texas passed new childcare regulations for licensed childcare facilities and homes, which align with 22 of the 47 High Impact Obesity Prevention Standards. These licensing changes will impact 14,644 ECE programs, which serve over 1 million children.

CDC also supports professional development opportunities for ECE providers through the development of on-demand online training modules in partnership with Penn State University's Better Kid Care (BKC) program. In FY 2018, eight new modules were created, bringing the total number of nutrition and physical activity-related modules that CDC supports on the BKC professional development system<sup>276</sup> to 15 to support ECE providers. CDC has been tracking the ECE providers uptake of these modules. As of May 2022, ECE providers achieved a cumulative total of 81,625 training hours for fiscal years 2017-2022 from these 15 modules.

Healthy Eating: The total vegetable intake remains low for all populations. Data indicate in 2017-2018 children age 2-18 years consumed 0.49 cup equivalents of vegetables per 1,000 calories and adults consumed 0.80 cup equivalents per 1,000 calories (Measures 4.11.8a-b). Making progress in improving diet is challenging given the complex and multiple factors that influence the marketing of, access to, affordability of, and consumption of both healthy and less healthy food options. CDC will continue to work with state, local, tribal, and territorial

<sup>276</sup><http://extension.psu.edu/youth/betterkidcare/early-care>.

health departments to help worksites, schools, childcare, and community settings to support access to healthy food and beverage choices for people of all ages.

**Active Living:** The proportion of adults who engage in leisure-time physical activity increased from 63.8% in FY 2008 to 74.6% in FY 2018. After FY 2018 the National Health Interview Survey changed the question and methodology. As a result, new data cannot be compared to previous results, thereby establishing a new baseline of 73.9% in 2020 (Measure 4.11.9). The proportion of adults that meet current aerobic physical activity guidelines increased from 43.5% in 2008 to 54.2% in 2018, reducing the risk for many chronic diseases. CDC's Active People, Healthy Nation<sup>SM</sup> is a national initiative to help 27 million Americans become more physically active by 2027. CDC funds states, communities, and organizations with national reach to design communities that are safe and easy for people of all ages and abilities to be physically active. In addition, CDC trains states and communities to implement strategies to improve the walkability of communities. For example, the CDC funded *Walkability Action Institute* has trained cross-disciplinary teams representing public health, planning, transportation, elected officials, and other disciplines in 79 jurisdictions in 32 states and two territories. As a result of the training, the jurisdictions cumulatively achieved over 850 outcomes related to improving walkability with a focus on community and transportation design for over 41 million Americans (e.g., adopting Complete Streets policies and revising Comprehensive Land Use plans). CDC will continue to promote the critical need for safe and easy places for physical activity and help implement high impact strategies for walking and walkable communities like Complete Streets and Safe Routes to Schools. As of April 2022, over 1,670 Complete Streets policies, including those adopted by 35 state governments plus the Commonwealth of Puerto Rico, and Washington D.C., have been reported to the National Complete Streets Coalition.

**Obesity:** CDC funds several interventions that target obesity as well as other related chronic diseases. The percentage of all children and adolescents (ages two to 19 years) that have obesity was 16.8% in FY 2008 and 19.3% in FY 2018 (Measure 4.11.10b). Due to the COVID-19 pandemic, the National Health and Nutrition Examination Survey (NHANES) did not collect the regular FY 2020 data. Instead, the National Center for Health Statistics released a combined 2017-2018 plus 2019 - pre pandemic (March 2020) data set and estimates in June 2021. These data are not independent of the prior FY 2018 results. These data showed that 19.7% of children aged 2 through 19 years had obesity. There has been progress among children from lower-income families enrolled in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). Among children aged two through four years enrolled in WIC, obesity declined from 15.9% in 2010 to 13.9% in 2016, and then increased to 14.4% in 2018. Research shows behaviors that influence excess weight gain include early infant weight gain, lack of responsive feeding approaches, eating high-calorie, low-nutrient foods and beverages, physical inactivity, sedentary activities such as watching television or other screen devices, medication use, and sleep routines. Public health and healthcare practitioners can educate individuals about healthy lifestyle choices and ways to improve their diet and increase physical activity. However, it can be difficult for many children and parents to make healthy food choices and get enough physical activity due to underlying social determinants of health (e.g., housing insecurity, food insecurity, education, poverty). Places such as childcare centers, schools, worksites, or communities can affect diet and activity through the foods and drinks offered and the opportunities provided for physical activity. To meet its targets, CDC will continue promoting good nutrition and physical activity in children and adolescents, caregivers, and individuals to help prevent obesity.

In addition, through initiatives such as the Childhood Obesity Research Demonstration (CORD) project, CDC will continue to study and promote ways to support children with obesity. CORD 3.0 funds five recipients for five years (funding period 2019 – 2024). Through CORD 3.0, CDC is increasing the availability and number of packaged, effective Family Healthy Weight Programs (FHWP) for children from lower-income families. CDC provides technical expertise and support to researchers to package their existing, effective FHWP in clinics and community sites that are feasible, convenient, and acceptable to diverse families. This includes testing the packages in additional sites for comparable outcomes. Sites include federally qualified health centers (FQHCs), and community health centers. With this work and the lessons and successes from CORD 1.0 and 2.0, CORD 3.0

is packaging 5 scale-able, sustainable evidence-based family healthy weight programs for implementation in a broad range of settings that serve low-income children and families.

In adults, NHANES data show 42.4% had obesity in 2017-2018 (Measure 4.11.10a). Due to the COVID-19 pandemic, NHANES did not collect the regular FY 2020 data. Instead, the National Center for Health Statistics released a combined 2017-2018 plus 2019 - pre pandemic (March 2020) data set and estimates in June 2021. These data are not independent of the prior FY 2018 results. These data showed that 41.9% of adults had obesity. Community factors that can affect diet and physical activity include the affordability and availability of healthy food options (e.g., fruits and vegetables, whole grains, lean proteins), peer and social supports, marketing and promotion, and policies that determine whether a community is designed to support healthy food access and physical activity. CDC will continue to support recipients in implementing evidence-based strategies to help increase healthy eating and active living through partnerships with states, territories, tribes, and communities throughout the U.S.

## School Health

### Performance Measures for Long-Term Objective: Improve the health and well-being of youth and prepare them to be healthy adults

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
4.12.6 Increase the percentage of schools that do not sell less healthy foods and beverages (soda pop or fruit drinks, baked goods, salty snacks, candy, sports drinks) <sup>1</sup> (Outcome)	FY 2022: 53.4% Target: 72% (Target Not Met)	N/A	60%	N/A
4.12.7: Percentage of schools that have established, implemented and/or evaluated a Comprehensive School Physical Activity Program (CSPAP) (Outcome)	FY 2022: 48.7% (Baseline)	N/A	51%	N/A
4.12.8: The percentage of secondary schools that provide case management for students with chronic health conditions (e.g., asthma, diabetes) (Outcome)	FY 2022: 74.5% (Historical Actual)	N/A	78%	N/A

<sup>1</sup> Targets and results are set and reported biennially.

### Performance Trends:

Schools have direct contact with more than 95% of our nation’s young people aged 5 to 17 years, for about 6 hours per day and up to 13 critical years of their social, psychological, physical, and intellectual development. Schools play an important role in promoting health and safety by helping children and adolescents establish

lifelong health patterns. Obesity rates among school-aged children and adolescents have more than tripled since 1980. The prevalence of obesity is higher among youth aged 6-11 years (20.7%) and adolescents aged 12-19 years (22.2%) compared with children aged two to five years (12.7%). The 2019 Youth Risk Behavior Survey shows that approximately 32% of high school students have the weight status of overweight or obesity, demonstrating the need for CDC's Healthy Schools Program's continued focus on childhood obesity prevention - healthy eating and physical activity promotion. CDC promotes effective strategies including establishing a Comprehensive School Physical Activity Program (CSPAP) with physical education as the foundation, to support healthy eating in schools through a Comprehensive Framework and improve school health services to address obesity and other chronic conditions. During the COVID-19 pandemic, CDC assisted states, school districts and school-level staff to implement virtual learning to adapt healthy eating and physical activity strategies to support student development at home. In addition, CDC provides a virtual school demonstrating health promoting practices and policies and a robust e-learning platform to support continued professional development for teachers and administrators. Finally, CDC also provides an online portal and training for school health teams to use the School Health Index to assess their health-promoting policies and practices and provide recommendations for improvements.

**Physical Education:** The Task Force on Community Preventive Services recommends enhanced, school-based physical education as an effective strategy for increasing physical activity among students. Physical education classes increase students' daily moderate to vigorous physical activity and therefore help children and adolescents meet daily physical activity recommendations. CDC will replace its measure tracking the establishment of multi-component physical education policies and replace it with a measure tracking the percentage of schools that have established, implemented and/or evaluated a Comprehensive School Physical Activity Program (CSPAP). The new measure aligns with CDC's School Health Guidelines to Promote Healthy Eating and Physical Activity and the recommendations of the American Heart Association and SHAPE America. The 2020 School Health Profiles data report released in August of 2022 establishes a baseline of 48.7% of states for this measure (Measure 4.12.7).

**Nutrition Environment:** Students attending schools that sell high-calorie, low nutrient foods and beverages outside the school food service program have lower intake of fruits and vegetables and higher daily percentage of calories from total fat and saturated fat<sup>277</sup>. Most children and adolescents do not meet recommendations for healthy eating (fruits, vegetables, and dairy) and 40% of high school students are not eating even one vegetable each day (CDC YRBS, 2019). Measure 4.12.6 is based on Institute of Medicine (IOM) standards that exceed the U.S. Department of Agriculture (USDA) Smart Snacks standards and tracks the percentage of schools limiting student purchases to healthier snack food and beverages. Results from the 2020 School Health Profiles report showed that 53.2% of secondary schools did not sell less nutritious food and beverages outside of the school food service program. This is level with FY 2018 results. A contributing factor may include relaxed school nutrition standards in response to the COVID-19 pandemic. Of the 44 states that reported data in 2020, the proportion of schools not selling less healthy food and beverages ranged from 35.2% in Louisiana to 87.6% in Hawaii. CDC will continue to work with State Education Agencies to identify and addresses challenges to increasing healthy food options and factors contributing to success in providing healthy food options in our nation's schools.

**Case Management for Chronic Health Conditions:** In the United States, more than 40% of school-aged children and adolescents have at least one chronic health condition, such as asthma, obesity, food allergies, or other physical conditions. Schools are an ideal setting to teach and provide students with opportunities to manage their chronic health conditions and provide support for students through case management so that students are able to consistently attend school and be ready to learn. Case management is a critical school health service that many students with chronic health conditions need to properly manage their condition during the school day and at home with family members. CDC is introducing a new measure that tracks the percentage of secondary

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<sup>277</sup> [https://www.cdc.gov/healthyyouth/data/profiles/pdf/2016/2016\\_Profiles\\_Report.pdf](https://www.cdc.gov/healthyyouth/data/profiles/pdf/2016/2016_Profiles_Report.pdf).

schools that provide case management for students with chronic health conditions, documenting the progress of chronic condition management in schools. The 2020 School Health Profiles data showed 74.5% of schools provided case management to students with chronic conditions (Measure 4.12.8).

### Heart Disease and Stroke

**Performance Measures for Long Term Objective: Reduce risk factors associated with heart disease and stroke**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
4.11.5a: Increase the proportion of persons 18+ in the U.S. population with high blood pressure who have it under control (<140/90) <sup>1</sup> (Outcome)	FY 2020: 49.3% Target: 58.9% (Target Not Met but Improved)	N/A	61.7%	N/A
4.11.14 Increase the proportion of persons aged 21 years and older in the US population, for whom therapy is recommended, that are using medication to manage their blood cholesterol <sup>1</sup> (Outcome)	FY 2018: 52.0% Target: 51.2% (Target Exceeded)	N/A	57.2%	N/A
4.N1 Increase the percentage of at risk WISEWOMAN participants who received at least one evidence-based healthy behavior support service (Output)	FY 2019: 74.0% Target: 60.0% (Target Exceeded)	64%	64%	Maintain
4.N2 Increase the number of evidence-based behavioral support services provided to WISEWOMAN participants (Output)	FY 2019: 25,044 Target: 31,000 (Target Not Met)	34,000	34,000	Maintain

<sup>1</sup>Targets and results are set and reported biennially.

**Performance Trends:** High blood pressure, also known as Hypertension, affects one in two adults and is the greatest modifiable risk factor for heart disease, stroke, and other chronic diseases. In 2020, nearly 700,000 American deaths included hypertension as a primary or contributing cause. In addition, uncontrolled hypertension leads to largely preventable heart attacks, strokes, kidney disease, heart failure, dementia, and complications of pregnancy that results in lifetime risks of cardiovascular disease for women and their offspring.

For 2017-March 2020 time period, the rate of blood pressure control among all U.S. adults 18 and older with hypertension reached 49.3%, up slightly from 49.2% control in 2013-2014 and below the target of 58.9% (Measure 4.11.5a). The data suggest that younger men ages 18-39 had significantly lower rates of control compared to men over the age of 40, and control rates are lower among Blacks, Hispanic-, and Asian-Americans

compared to Whites. Blood pressure control rates are also significantly lower in rural areas. Potential reasons for this include continued increases in obesity and diabetes, high rates of physical inactivity, lack of access to quality healthcare, and failure of clinicians and health systems to prioritize hypertension control. Improving hypertension control will save lives, improve health and resiliency, and reduce costs. CDC's strategic plan for preventing heart disease and stroke specifically lists reducing and controlling hypercholesterolemia (along with high blood pressure) as a primary goal. High cholesterol is a significant risk factor for cardiovascular disease, which is the #1 killer of Americans. CDC's measure—to assess whether people for whom medication is recommended are on medication—is an effective way of showing progress towards control (Measure 4.11.14). Statins reduce the synthesis of cholesterol in the liver and are one of the most effective lipid lowering medications available. In 2013-2014 baseline data, 47.2% of persons aged 21 years and older, for whom therapy was recommended, were using medications to manage their blood cholesterol. The prevalence of persons using medication to manage their blood cholesterol reached 52.0% by 2017-18 exceeding the target.

**State Based Programs:** CDC provides all 50 states and the District of Columbia with funding, expertise, and technical assistance to implement programs to improve cardiovascular health and improve blood pressure control through proven, evidence-based strategies. These approaches include encouraging multidisciplinary team-based approaches to care, increasing the use of electronic health records and health IT to improve diagnosis of high blood pressure and patient follow-up, and promoting patient self-management of high blood pressure. Grantee states have seen success in these approaches. For example, Kentucky was able to improve its blood pressure control rates from 48% at baseline to 62% in year 5, beating its five-year target of 53%. Also, in Oregon, the state's work to promote blood pressure self-monitoring, team-based care and the use of health IT led to partner health systems seeing their blood pressure control rates improve from 53% to 68%. Participating health systems in CDC's nationwide state program cover an estimated 31 million people.

In FY 2018, CDC initiated a five-year cooperative agreement that provides funding to support state and local health departments to prevent and manage both cardiovascular disease and diabetes in high burden populations and communities. Prior to the onset of the pandemic, in the first two years of funding, the program had achieved a 6% improvement in blood pressure control rates among participating health systems and centers. CDC also supports the design, testing, and evaluation of innovative state and local strategies. These strategies include exploring ways to incentivize reporting and promote the use of evidence-based quality measurement at the clinician level, supporting the development and expansion of telehealth technology to promote management of hypertension and high blood cholesterol, and enhancing referral participation and adherence in cardiac rehabilitation programs in traditional, community, and home-based settings. CDC recipients continue to work to improve services in rural areas that face some of the biggest cardiovascular disease disparities. For example, Pennsylvania has recruited over 80 sites, mostly in rural areas to help improve high blood pressure and cholesterol management activities. Also, Arizona has partnered with the University of Arizona to provide patients in rural areas with high-risk conditions or issues accessing care with the latest telehealth equipment to improve the self-management of high blood pressure and cholesterol.

State heart disease and prevention programs funded by CDC are continuing to experience tremendous challenges due to COVID-19. These issues led state and local public health agencies across the country to cancel, delay, and significantly truncate programmatic activities. Additionally, all funded recipients reported their clinical partners faced considerable obstacles in responding to the challenges of COVID-19, which delayed data collection and face-to-face patient services associated with the programs. While all state programs are now up and running, the impact of the pandemic on CVD prevention programs is expected to last into the final year of this funding cycle (2023) as these delays continue to affect recipients' performance measures requirements and regular program updates to CDC. In response to the continuing challenges and uncertainties, CDC will continue to provide specialized technical assistance and support flexibilities where appropriate, such as expanding remote access options, adjusting program activities, and extending timelines for evaluations and fiscal reports.

Million Hearts®: Within its first five-year cycle (2012-2016), CDC Million Hearts® prevented an estimated 135,000 heart attacks, strokes, and other related acute cardiovascular events. CDC Million Hearts® also saved \$5.6 billion in direct medical costs, and much of those savings were realized by public insurance like Medicare and Medicaid. Since 2014, Million Hearts® has partnered with the National Association of Community Health Centers (NACHC) on quality improvement projects in a diverse set of clinics to improve diagnosis and control of high blood pressure and high blood cholesterol for people who rely on community health centers. These improvements are being scaled and spread by Health Center Controlled Networks (HCCNs) and the lessons learned are being shared through courses offered to all clinicians by the American Medical Association and through numerous peer reviewed publications. Recently, for example, even with the disruptions in health care delivery due to the COVID-19 pandemic, Million Hearts worked with 32 health centers to improve blood pressure control and improve cholesterol management for African Americans. Though this project took place at a time when many people stopped making routine visits to their doctor, during one reporting period, the participating health centers reported a 4.1mmHg decrease in systolic blood pressure of African American adults, and almost 2000 high risk patients received a statin prescription, with the proportion of those receiving doses most appropriate for their condition increasing from 6.9% to 19.4 % within one year.

WISEWOMAN: In FY 2018, CDC launched a five-year cooperative agreement with 27 state health departments and three tribal organizations receiving funding. For the first time, CDC included an innovation component that funds seven awardees to support the development and testing of innovative strategies to expand the reach and impact of the WISEWOMAN program. Awardees are implementing and evaluating innovative strategies designed to reduce risks, complications, and barriers to the prevention and control of heart disease and stroke and contribute to the evidence base to address CVD in underserved communities. These strategies emphasize targeting hard to reach women through engagement with local and community services and the application of bi-directional referrals, thus improving the exchange of information between providers and community-based organizations. For example, from January 2014 to June 2018, Utah conducted 17,435 heart disease and stroke risk factor screenings for 10,537 women and provided 41,005 healthy behavior support services. In addition, Utah was able to provide risk reduction counseling focused on nutrition, physical activity, smoking cessation, and medication adherence for high blood pressure with all screenings. In FY 2019, 74% of at-risk women (program participants) received at least one support service, exceeding the target (Measure 4.N1). However, program recipients only provided 25,044 evidence-based healthy behavior support services to WISEWOMAN participants, missing the FY 2019 target (Measure 4.N2). The program year associated with FY 2019 funds began in September 2019, and WISEWOMAN likely missed the target because the COVID-19 pandemic began in middle of the program year (March 2020), halting or slowing many program operations.

WISEWOMAN continues to face significant challenges due to the COVID-19 pandemic resulting in halting of the National Breast and Cervical Cancer Early Detection Program (NBCCEDP)-sponsored breast and cervical cancer screenings and services. As a result, WISEWOMAN programs are continuing to experience challenges with being unable to engage in enrollment activities for potential new WISEWOMAN participants because NBCCEDP is solely responsible for determining participant eligibility through screening and navigation services. Additionally, WISEWOMAN programs work collaboratively with NBCCEDP providers to implement a critical component of the program model, the integrated office visit, wherein breast and cervical cancer navigation and screening activities are the core services being offered. However, WISEWOMAN recipients have successfully adapted by providing healthy behavior support services (HBSS) via telehealth. We are hopeful that funded states will continue to utilize virtual options for service delivery and continue to maximize impact to reach the target population. FY 2024 targets remain flat as a new cooperative agreement will be implemented with new recipients.

## Diabetes

### Performance Measures for Long Term Objective: Improve prevention, detection, and management of diabetes

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
4.11.12 Reduce the age-adjusted incidence of diagnosed diabetes per 1,000 among U.S. adults aged 18 to 84 (Outcome)	FY 2019: 6.1 Target: 7.2 (Target Exceeded)	5.6	5.6	Maintain
4.11.13a Increase the cumulative number of CDC recognized organizations delivering the National DPP lifestyle intervention that show a reduction in risk of developing type 2 diabetes among 60% or more of their program completers (Outcome)	FY 2021: 818 Target: 750 (Target Exceeded)	880	945	+65
4.S Increase the annual number of people with at least one encounter at an ADA recognized or ADCES accredited diabetes self-management education and support (DSMES) program (Output)	FY 2021: 911,694 Target: 1,167,128 (Target Not Met)	1,227,128	1,257,128	+30,000
4.T Increase the cumulative number of participants enrolled in CDC recognized organizations for the prevention of type 2 diabetes (Output)	FY 2021: 584,654 Target: 470,811 (Target Exceeded)	800,000	850,000	+50,000

<sup>1</sup> Targets updated to align with HP 2030.

**Performance Trends:** CDC estimates that more than 96 million American adults aged 18 years or older, or one in three adults, have prediabetes, and eight out of 10 people with prediabetes do not know they have it<sup>278</sup>. Without a structured intervention, many of these individuals will develop type 2 diabetes within five years<sup>279</sup>. The Diabetes Prevention Program clinical trial showed that participants who engage in these lifestyle changes through a structured program can lose five to seven percent of their body weight and reduce development of type 2 diabetes by as much as 58% (71% for those 60 years of age and older)<sup>280</sup>. Based on this research, CDC established the National Diabetes Prevention Program (National DPP) in 2010 to address the growing epidemic of type 2 diabetes. The National DPP lifestyle change program is led by trained coaches who facilitate

<sup>278</sup> <https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf>.

<sup>279</sup> <https://www.cdc.gov/diabetes/prevention/about-prediabetes.html>.

<sup>280</sup> <https://www.cdc.gov/diabetes/data/statistics-report/index.html>

participants' strategies for eating a healthy diet, increasing physical activity, and developing coping skills. CDC also established the Diabetes Prevention Recognition Program to serve as the quality assurance component of the National DPP, awarding CDC recognition to program delivery organizations that can meet national quality standards and achieve outcomes proven to prevent or delay the onset of type 2 diabetes. CDC aims to continue reducing the age-adjusted incidence of diagnosed type 2 diabetes among U.S. adults aged 18 to 84 (Measure 4.11.12). Although the national rate of diabetes incidence (6.1 new cases per 1,000 adults in 2019) has moved below the Healthy People 2020 target (7.2 new cases per 1,000 adults), FY 2021-24 targets will align with HP 2030 objectives (5.6 new cases per 1,000 adults). Recent estimates predict that about one in three American adults will develop diabetes during their lifetime. The continued growth of the diabetes burden in terms of absolute prevalence, lifetime risk, years spent with diabetes, and the incidence rate remaining considerably higher than it was in the 1990s, are all contributing factors indicating a need for continued large-scale prevention efforts like the National DPP. Participation in the National DPP lifestyle change program can improve health and effectively reduce type 2 diabetes incidence.

As of June 2022, cumulative enrollment in the National DPP lifestyle change program exceeded 635,000. In FY 2021 there were 584,654 cumulative participants exceeding the target (Measure 4.T). Evaluated participants have lost an average of 5.4 percent of their body weight, lowering their risk of developing type 2 diabetes. To date, there are more than 2,200 CDC-recognized organizations offering the program in-person, online, and through distance learning. CDC aims to increase the cumulative number of participants enrolled in CDC recognized organizations to 850,000 by the end of FY 2024. Another goal is to increase by 65, the number of CDC-recognized organizations that show a reduction in risk of developing type 2 diabetes among 60% or more of their program completers (4.11.13a). In FY 2021, there were 818 CDC-recognized organizations achieving this requirement, an increase over FY 2020 and exceeding the target.

Achieving insurance coverage is a critical step for increasing enrollment in the National DPP. Currently, 29 states have secured health insurance coverage for the National DPP lifestyle change program for more than 5 million public employees and their dependents. Twenty state Medicaid programs have approved decisions to include the program as a benefit for eligible Medicaid beneficiaries and are in various stages of defining and implementing the benefit. In addition, over 85 employers across the U.S. include the National DPP lifestyle change program as a covered health or wellness benefit for their employees at high risk for type 2 diabetes, and 54 commercial health plans provide some coverage for the program. Approximately 26 million American adults with prediabetes 65 years or older could directly benefit from the Medicare Diabetes Prevention Program, which is administered by the Centers for Medicare and Medicaid Services.

CDC's national prediabetes campaign increases awareness of prediabetes and the National DPP lifestyle change program. This campaign directs viewers to a 1-minute prediabetes risk test, enabling millions of Americans learn their risk for prediabetes and how to prevent or delay type 2 diabetes. As of June 2022, the campaign resulted in 1.7 million online prediabetes risk test completions and 11.5 million video prediabetes risk test completions. In addition, the campaign has documented 4.8 million unique visitors to the campaign website and nearly 200,000 visits to the National DPP website to find a lifestyle change program. The campaign has received a total of \$163 million in donated ad equivalency support. Since the campaign launch, awareness of the term "prediabetes" reached a high of 68% in 2022 (up from a 50% baseline in 2015) among English speakers nationally. Among Spanish speakers, awareness of the term reached a high of 87% in 2022, up from 53%.

CDC strives to prevent diabetes complications through diabetes self-management education and support (DSMES). DSMES improves A1C levels and reduces healthcare costs by decreasing hospitalizations, hospital re-admissions, and emergency room visits among people with diabetes. CDC supports all 50 states, and Washington D.C. through a five-year cooperative agreement (Improving the Health of Americans Through Prevention and Management of Diabetes and Heart Disease and Stroke) to improve access to, participation in, and coverage for ADA-recognized or ADCES-accredited DSMES programs among people with diabetes. CDC also works with states to increase engagement of pharmacists in the provision of medication management or DSMES

for people with diabetes. Strategies being implemented include: 1) Improving access to and participation in ADA-recognized and ADCES-accredited DSMES programs in underserved areas; 2) Expanding or strengthening DSMES coverage among public or private insurers and employers; and 3) Increasing engagement of pharmacists in the provision of medication management or DSMES for people with diabetes.

In 2021, approximately 2,057 DSMES sites offered services across the U.S., and nearly 1 million people with diabetes participated in an ADA-recognized or ADCES-accredited services that met national quality standards. The number of people with at least one encounter at a recognized or accredited DSMES program in FY 2021 was 911,694, which did not meet the target of 911,694 (Measure 4.S). COVID-19 presented challenges to offering DSMES services, such as: suspension of in-person classes, staffing shortages due to furloughs or reassignments to support COVID-19 related activities, lower partner participation, and decreased commitment to the accreditation and recognition processes. There were 111 new DSMES programs established in 2021 and 351 programs closed. CDC aims to increase access to DSMES services by establishing new DSMES sites in underserved areas. Cooperative agreement recipients, with training and technical assistance provided by CDC, have identified potential gaps and opportunities to engage in policy and systems-level work that could reduce barriers to access and utilization in underserved areas; strengthen support for DSMES among health care systems, providers, insurers, and policy makers; improve DSMES coverage; and increase participation in recognized or accredited DSMES programs.

CDC's diabetes surveillance programs, the United States Diabetes Surveillance System, and the SEARCH for Diabetes in Youth study, have documented 20-year improvements in some diabetes-related complications while identifying new areas of concern. These include recent increases in amputation rates, hyperglycemic episode rates, and hyperglycemic deaths; continued increases in diabetes incidence in youth; and continued disparities in diabetes burden among people from racial and ethnic minority groups. CDC implemented three programs aimed at prioritizing solutions to diabetes complications and persistent disparities – the Natural Experiments for Translation in Diabetes 3.0 (NEXTD-3), Location, Environmental Attributes, and Disparities (LEAD), and the Diabetes in Children, Adolescents, and Young Adults (DiCAYA) study.

NEXT-D3 study sites have developed an acute preventable diabetes complication measure. The complication measure captures conditions that occurred due to deferring or skipping necessary diabetes care. Current activities include examining whether certain public health and nutrition programs, such as the Supplemental Nutrition Assistance Program and Women, Infants, and Children, are associated with improvements in cardiometabolic and diabetes management, and assessing acute and chronic diabetes-related complications among people receiving care in community health centers.

The LEAD network is a CDC-funded research collaboration among four US universities and CDC, examining community characteristics associated with geographic disparities in diabetes risk across the country. Preliminary results suggest that relative availability of food outlet types (grocery stores, supermarkets, and fast-food restaurants) was associated with type 2 diabetes risk in multiple community types and locations. Early evidence also shows that a healthier food environment does not necessarily mitigate the role of neighborhood socioeconomic environment on type 2 diabetes risk.

Assessments of data collected during CDC's 20-year SEARCH for Diabetes in Youth Study describe the incidence of type 1 and type 2 diabetes in youth aged < 20 years and examine trends by age, sex, race, and ethnicity. Incidence rates for both type 1 and type 2 diabetes are surging among youth. This can result in developing serious health complications at an earlier age than people who develop diabetes as an adult. CDC has also engaged in a new study to assess the burden of diabetes by type in children, adolescents, and young adults (DiCAYA study). Like SEARCH, DiCAYA is a national, multi-center study that aims to modernize diabetes surveillance efforts (i.e., using electronic health record data) and monitor trends in diabetes prevalence and incidence. Supplemental funds were added in FY 2022 to analyze the impact of COVID-19 on diabetes incidence in this age group.

## Cancer Prevention and Control

### Performance Measures for Long Term Objective: Improve health outcomes related to cancer

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
4.9.2 Increase the percent of adults age 50 to 75 receiving colorectal cancer screenings <sup>1</sup> (Outcome)	FY 2020: 69.7% Target: 69.5% (Target Exceeded)	N/A	71%	+1.5
4.9.5a Increase the mean colorectal screening rate among Colorectal Cancer Control Program (CRCCP) health system clinics (Outcome)	FY 2021: 48% (Baseline)	53%	55%	+2
4.Q Number of breast or cervical cancers and pre-malignant lesions detected among women served (Outcome)	FY 2021: 9,406 Target: 10,800 (Target Not Met)	10,900	11,000	+100
4.R Number of women served through the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) (Outcome)	FY 2021: 299,139 Target:350,000 (Target Not Met)	365,000	375,000	+10,000
4.V Increase the percentage of CDC-funded state central cancer registries receiving laboratory data through a cloud-based platform (Output)	FY 2020: 90% Target: 75% (Target Exceeded)	100%	100%	Maintain

<sup>1</sup>Targets and results are set and reported biennially.

**Performance Trends:** Cancer is the second leading cause of death in the United States, resulting in over 599,500 deaths annually – over 1,640 deaths each day. Cancer is responsible for more potential years of life lost than all other causes of death combined. Since cancer patients overall are living longer, the number of cancer survivors is expected to increase to more than 20 million by 2026.

The number of new cancers can be reduced, and many cancer deaths can be prevented. Scientific research shows that policy and environmental changes can reduce the risk for cancer and improve survival after cancer treatment. Effective screening tests are available to detect breast, cervical, and colorectal cancers, and to find lung cancers (among heavy smokers only). Finding cancers early makes it possible for treatment to be more effective. CDC is actively focused on increasing breast, cervical and colorectal cancer screening rates through direct screening provided to women who have low incomes and are under- and uninsured women; and by emphasizing the implementation of evidence-based interventions in health system clinics, expansion of patient navigation to reduce barriers to screening, and partnering with community-based organizations to reach disadvantaged women and connect them to screening services.

Breast and Cervical Cancer: Women ages 50 and older are at highest risk for breast cancer and benefit the most from screening. Modeling studies show that compared to those not screened, biennial mammography screening reduces breast cancer deaths by 25% among women ages 50-74. Since 2015, the incidence rate of late-stage diagnosis among women ages 50-74 has gradually decreased. CDC will retire this measure because of the challenges with its ability to impact all women ages 50 – 74 who are at risk for breast cancer given the small proportion of women the NBCCEDP serves. During 2016–2017, only 5.3% of U.S. women were eligible for NBCCEDP breast cancer screening services, and the program served 15.0% of those eligible. CDC’s current five-year cooperative agreement for the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) funds all 50 states, the District of Columbia, five U.S. territories, two freely associates states, and 13 American Indian/Alaska Native tribes or tribal groups to increase breast and cervical cancer screening rates in underserved populations. This cooperative agreement requires recipients to provide direct screening services to program-eligible women and increase clinic-level cancer screening rates by implementing evidence-based strategies provide patient navigation to assist with overcoming barriers to screening and expand outreach into communities to reach populations who are disparately affected by breast and cervical cancer.

It is important to note that COVID-19 has had a significant negative impact on access to preventive health services in FY 2020 and FY 2021. CDC conducted an analysis of NBCCEDP screening data to examine the impact of COVID-19. Trends show increasing test volume in the second half of 2020; however, neither breast nor cervical cancer screening volume reached pre-COVID-19 levels. In March 2021, monthly breast cancer screening volume reached 98% of pre-COVID-19 levels, but by June, fell to 11% below the pre-COVID-19 level for that month. In contrast, cervical cancer screening volume was 8% greater than the pre-COVID-19 monthly screening level in March 2021 and remained 2% greater in June. CDC is continuing to monitor the recovery of screening through the NBCCEDP. To reflect the impact and reach of the NBCCEDP, two measures for the NBCCEDP are reported: 1) number of cancers and pre-malignant lesions detected and 2) total number of women served by the program. In FY 2021, the NBCCEDP reported 9,406 cancers and pre-malignant lesions detected (Measure 4.Q), 1,394 fewer than the target of 10,800. The total number of women served by the NBCCEDP (Measure 4.R) in FY 2021 was approximately 299,139, 50,861 fewer than the target of 350,000. The measure captures a broader spectrum of the program’s activities including direct cancer screening, diagnostic follow-up including for women referred into the NBCCEDP, and navigation of women along the cancer continuum from early detection to treatment referral. CDC anticipates the program can meet future targets by continuing to provide direct screening services and implementing population-level activities within health systems and communities as required in the cooperative agreement. However, critical to the program’s success in meeting future targets will be the ability of NBCCEDP recipients to fully and quickly recover from the significant impact of the pandemic on screening.

Colorectal Cancer: Colorectal cancer (CRC) is the second most commonly diagnosed cancer and the second leading cause of cancer deaths among cancers affecting both men and women in the U.S. CRC screening can detect cancer early, when treatment is more effective, and a colonoscopy can prevent cancer by finding and removing precancerous polyps before they turn into cancer. In FY 2020, 69.7% of adults aged 50-75 were up to date on CRC screening for CRC (Measure 4.9.2), about a 0.90 percentage point improvement over FY 2018.

In July 2022, the Colorectal Cancer Control Program (CRCCP) entered year 3 of 5-year cooperative agreement funding 35 recipients to increase CRC screening among underserved populations aged 45-75. Recipients partner with clinics and health systems with low screening rates that serve a high percentage of populations with lower incomes to implement evidence-based strategies known to be effective in increasing CRC cancer screening (e.g., patient and provider reminders, reduction of structural barriers, and provider assessment and feedback), recommended by the Task Force on Community Preventive Services.

The definition of those eligible for colorectal cancer screening changed in May of 2021, when the U.S. Preventive Service Task Force expanded the age range recommended for CRC screening to include those 45-49 years old be

incorporated into those eligible for colorectal cancer screening. While this changed practice and reimbursement coverage, standard measures of CRC screening rate (e.g., UDS, HEDIS) have not all officially changed to include those 45-49. We anticipate that the measurement specifications will change in 2023 and will also likely affect screening rates in the CRCCP as the program will align with updated measures to incorporate this new, largely unscreened population.

In the new cooperative agreement, several factors have impacted colorectal screening rates for the program. At the end of the first program year (June 2021), the program included 381 clinics of which 250 were new and 131 clinics were continuing from the previous initiative. This influx of new clinics with lower baseline screening rates, led to an overall drop in the median baseline screening rate among the 381 clinics to 50% in 2020. Additionally, the SARS CoV-2 pandemic impacted cancer screening rates nationally and this impact can be seen in the median screening rate in 2021 of 48% down from the screening rate of 50% in 2020. This is consistent with the drop seen nationally. Moving forward, CDC will replace this measure with a new measure to include all program clinics participating throughout the 5-year program period rather than a single cohort of clinics from year 1 of the program. This will provide a more comprehensive assessment of performance. Additionally, since the quality of program data has improved over time with the implementation of data quality reviews and provision of technical assistance by CRCCP recipients to their partner clinics, the new measure will calculate the mean rather than median to account for any outliers and provide a more accurate picture of results across the program.

Cancer Registries: CDC has prioritized data modernization to move to more real-time data collection in a cloud-based platform. Increasing the number of CDC-funded state central cancer registries receiving electronic cancer pathology reports via a cloud-based platform is important to continue efforts for onboarding laboratories capable of providing electronic cancer pathology reports. This will allow for real-time identification of cancer incidence for 90-95% of cancer diagnoses. In 2021, 90% of CDC-funded cancer registries received lab data through a cloud-based platform for real-time reporting, exceeding the target and an increase over FY 2020 baseline (Measure 4.V).

## Oral Health

### Performance Measures for Long Term Objective: Prevent oral health diseases and promote effective interventions that support optimal oral health

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
4.7.1 Increase the proportion of the people served by community water systems who receive optimally fluoridated water <sup>1</sup> (Intermediate Outcome)	FY 2018: 73% Target: 76.5% (Target Not Met but Improved)	N/A	76.5%	N/A

<sup>1</sup>Targets and results are set and reported biennially.

**Performance Trends:** For more than 75 years, community water fluoridation has been a safe and healthy way to effectively prevent tooth decay and was recognized by CDC as one of 10 great public health achievements of the 20th century. CDC works with national partners, states, communities, and water operators to support the U.S. population having access to optimally fluoridated water to prevent tooth decay. Information about populations served by community water systems (CWS), including both systems that adjust and that do not adjust fluoride levels, is reported to the Water Fluoridation Reporting System (WFRS) by state oral health or drinking water programs, and data are released on a biennial basis. The decision to implement or continue community water fluoridation is made at the state or local level. CDC supports the decision-making process by sharing evidence-

based research about the safety, effectiveness, and cost-effectiveness of community water fluoridation. In 2018, 73% of the CWS had access to optimally fluoridated water (Measure 4.7.1). This was an improvement over FY 2016 but did not meet the FY 2018 target.

As part of its role in promoting community water fluoridation, CDC offers a variety of resources designed to build the capability of state drinking water program officials, state and local health department staff, oral health program staff, and water system operators to improve and maintain the quality and results of community water fluoridation. This includes Fluoridation Learning Online, a web-based modular training course providing information on the fundamentals of community water fluoridation, including how fluoride works and why we use it, how state programs support and communicate fluoridation’s benefits, and how water treatment systems are designed and operate. Several states have elected to award water operator continuing education credits/training units for learners who complete Fluoridation Learning Online, including Arkansas, Colorado, Iowa, Louisiana, Missouri, New Hampshire, North Dakota, Rhode Island, Vermont, and West Virginia. CDC also released Fluoridation Resources Online, a non-credit companion course designed to be a lasting resource for water operators and fluoridation program managers.

Rural communities often experience the greatest disadvantage in terms of receiving the benefits of water fluoridation, because of the challenges and relative high cost associated with scaling traditional fluoridation technologies for use in small, rural public water systems. Of the 40,000 public water systems that do not currently provide optimally fluoridated water, an estimated 32,000 are small systems, serving about 19 million people. Recognizing that significant disparities persisted within these communities, CDC invested in a Small Business Innovation Research project to explore the feasibility of a fluoride delivery system designed specifically for this environment. The resulting fluoride tablet system became commercially available in Summer 2021, allowing small public water systems to provide fluoridated water to their customers safely and cost-effectively. CDC identified access to this technology as one of CDC’s CORE Health Equity Science and Intervention strategies because of its potential to accelerate oral health equity. This new technology provides a lower-cost option for small water systems that serve between 50 and 10,000 people to increase the number of people with access to optimally fluoridated water. Each state drinking water program has permitting requirements for installing new technology and/or equipment at water systems, and CDC is working with these states as requested to provide information and technical assistance for large-scale pilot testing.

**Safe Motherhood and Infant Health**

**Performance Measures for Long Term Objective: To improve the health of women and infants through public health surveillance, research, capacity building and science-based practices**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
4.8.5 Reduce birth rates among adolescent females aged 15 to 19 years (per 1,000 females) (Outcome)	FY 2020: 15.4 Target: 17.4 (Target Exceeded)	16.1	16.0	-0.1
4.8.7 Decrease the infant mortality rate (infant deaths in the first year of life) per 1,000 live births) (Outcome)	FY 2020: 5.4 Target: 5.66 (Target Exceeded)	5.35	5.33	-0.02
4.8.8 Reduce the ratio of in-hospital maternal deaths per 100,000 delivery	FY 2019: 5.58 Target: 6.4 (Target Exceeded)	5.6	5.4	-0.2

hospitalizations <sup>1</sup> (Outcome)				
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<sup>1</sup> Targets adjusted to align with FY 2018 baseline.

**Performance Trends:** CDC strengthens the evidence base for effective interventions that improve both maternal and infant health.

**Birth Rate Among Adolescent Females:** The birth rate for teenagers aged 15-19 has decreased over 50% in the past decade. This rate dropped from 17.4 per 1,000 in 2018 to 15.4 per 1,000 in 2020, reaching yet another record low for the U.S. and exceeding the target (Measure 4.8.5).

**Infant Mortality Rate:** The infant mortality rate is the number of deaths per 1,000 live births that occur before the infant’s first birthday. In 2020, the infant mortality rate in the U.S. was 5.4 deaths for every 1,000 births (Measure 4.8.7), exceeding the target, and an improvement over the previous year. CDC works to prevent these deaths through a range of activities. CDC funds the Sudden Unexpected Infant Death (SUID) Case Registry in 22 states and jurisdictions, covering about one in three SUID cases in the United States. SUID is the death of an infant less than one year of age that occurs suddenly and unexpectedly and whose cause of death is not immediately obvious before investigation. SUIDs include deaths from SIDS, accidental suffocation and strangulation in bed, and deaths with unknown cause. Participating states and jurisdictions use data about SUID trends and circumstances to develop strategies to improve death investigations and reduce future deaths. Current SUID Case Registry awardees have contributed 4 years of robust data to better our understanding of associated risk and protective factors. Innovative collaborations have led to data sharing across agencies that serve women, infants, children, and families, including hospitals, housing authorities, childcare organizations, prisons, and clinical care practitioners. These data have resulted in changing policies and practices within these agencies to promote safe sleep and reach disparate populations. As a result of the Case Registry, awardees have also increased the availability of death scene investigations in their communities including instruction on using dolls for reenactments.

**In-Hospital Maternal Deaths:** Maternal deaths during delivery hospitalization is an important measure of progress to monitoring and improving maternal mortality. In 2019, the ratio was 5.58 in-hospital maternal deaths per 100,000 delivery hospitalizations, a nearly 20% improvement over FY 2018 and exceeding the target (Measure 4.8.8). In our work to eliminate preventable maternal mortality, in FY 2021 CDC has made 30 awards, supporting 31 states for the Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM) Program. This funding directly supports agencies and organizations that coordinate and manage Maternal Mortality Review Committees to identify, review, and characterize maternal deaths; and identify prevention opportunities. In FY 2021, CDC also supported 13 state-based Perinatal Quality Collaboratives (PQCs), which are networks of teams working to improve health outcomes for mothers and babies, and the National Network of Perinatal Quality Collaboratives. PQC members identify health care processes that need to be improved and use the best available methods to make changes as quickly as possible. For example, the Illinois Perinatal Quality Collaborative (ILPQC) improved timely treatment for pregnant women with severe high blood pressure, increasing the percentage of patients treated within 60 minutes from 41% at baseline to 79% in one year. The ILPQC also decreased the overall rate of severe pregnancy complications and maternal deaths within 1 year of pregnancy by 27%, from 12% to 8%. Finally, the ILPQC increased use of medication-assisted treatment (MAT) for all pregnant and postpartum women with opioid use disorder in birthing hospitals, with the greatest improvement in MAT rates among Black patients.

## Arthritis

**Performance Measures for Long Term Objective: Reduce pain and disability and improve quality of life among people affected by arthritis**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
4.10.1 Increase the age-adjusted percentage of adults (age 18+) diagnosed with arthritis who were counseled by a doctor or other health professional to be physically active or exercise to help arthritis or joint symptoms, in states funded by the CDC Arthritis Program <sup>1</sup> (Outcome)	FY 2019: 70% (Baseline)	71%	N/A	N/A

<sup>1</sup>Targets and results are set and reported biennially.

**Performance Trends:** Recent projections indicate that arthritis prevalence and arthritis-associated limitations are increasing and confirm that arthritis remains a top cause of morbidity, work limitations, and compromised quality of life. Arthritis affects more than 58.5 million adults, almost 60% of whom are working aged adults (< 65) and is projected to affect 78.4 million adults by 2040. There is good evidence that physical activity can reduce joint pain, improve function, and halt or delay physical disability among adults with arthritis, but physical activity levels are lower for adults with arthritis than adults without arthritis. Adults with arthritis are more likely to engage in physical activity and self-management education programs when recommended by a health care provider. This strategy and an emphasis on provider recommendations are reflected in CDC’s state arthritis program and will be reflected in other, future activities of the arthritis program.

The current arthritis program state cooperative agreement (FY 2018 – FY 2022) has given the program an opportunity to work with 13 states over the five-year period of performance on innovative activities. The BRFSS 2019 age-adjusted pooled estimate for the 13 funded states serves as a baseline for the program performance measure and indicates 70% of adults with arthritis reported being counseled about the benefits of physical activity for managing arthritis by a health care provider that year (Measure 4.10.1). The target for currently funded states is to increase this percentage by 1% for an age-adjusted pooled estimate of 71% within 5 years (by FY 2023).

## Behavioral Risk Factor Surveillance System (BRFSS)

### Performance Measures for Long Term Objective: Improve validity, coverage, and dissemination of BRFSS

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
4.P Increase the average percentage of completed cell phone interviews to maintain population coverage in the Behavioral Risk Factor Surveillance System (BRFSS) (Output)	FY 2021: 73% Target: 68% (Target Exceeded)	73%	77%	+4

**Performance Trends:** CDC established the Behavioral Risk Factor Surveillance System (BRFSS) as a landline telephone-based health survey system conducted by states and territories to monitor population risk factors for chronic disease and other leading causes of death and disability. CDC moved to a dual, but separate, landline and cellular telephone sampling frame in 2011. Since then, CDC has demonstrated measurable improvements in reaching cell phone respondents, with the average percentage of completed cell phone interviews increasing to 73% in FY 2021 (Measure 4.P). National Health Interview Survey (NHIS) estimates indicate that the number of households with only wireless telephones is still growing. Preliminary NHIS results show that between the second half of 2020 and the second half of 2021 wireless only households increased from 65.8% to 68.7%. As the BRFSS landline sample continues to yield fewer completed surveys, states are increasingly dependent on the cell phone sample to capture an effective representation of their state population.

## BIRTH DEFECTS AND DEVELOPMENTAL DISABILITIES

### Child Health and Development

Contextual Indicators	Most Recent Result
5.1.5e Increase the proportion of children 8 years of age who have autism spectrum disorder but do not have intellectual disability who were first evaluated by age 36 months <sup>1</sup>	FY 2022: 45.5%
5.1.5f Increase the proportion of children 8 years of age who have intellectual disability and autism spectrum disorder who were first evaluated by age 36 months <sup>1</sup>	FY 2022: 61.1%

<sup>1</sup>Results are reported biennially.

#### Performance Measures for Long-Term Objective: Prevent birth defects and developmental disabilities

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
5.1.8a Increase the percentage of primary care providers who screen women of reproductive age for risky alcohol use (Outcome)	FY 2021: 38.1% Target: 49.3% (Target Not Met but Improved)	50.6%	50.6%	Maintain
5.1.8b Increase the percentage of primary care providers who provide appropriate, evidence-based interventions to reduce alcohol-exposed pregnancy for those at risk (Outcome)	FY 2021: 38.9% Target: 43.8% (Target Not Met but Improved)	46.3%	46.3%	Maintain
5.1.10 Increase the proportion of Hispanic women of reproductive age who have an optimal blood folate concentration for neural tube defect prevention <sup>1</sup> (Outcome)	FY 2017: 81.3% Target: 81.6% (Target Not Met)	82.6%	N/A	N/A

<sup>1</sup> Data reported biennially (in odd years).

**Performance Trends:** Birth defects affect three percent of infants and account for more than 20% of infant deaths in the U.S. A primary way CDC prevents birth defects is by identifying and reducing risk factors (such as exposure to alcohol or other substances in pregnancy) and by identifying and increasing protective factors (such as sufficient levels of folate in the blood). CDC works to increase the percentage of primary care providers who (a) screen women of reproductive age for risky alcohol use and (b) provide appropriate, evidence-based interventions to reduce alcohol-exposed pregnancy for those at risk (Measures 5.1.8a-b). CDC supports national organizations that work with healthcare professionals to promote screening and brief intervention (SBI) for risky alcohol use for women of reproductive age. This includes family medicine physicians, obstetricians and gynecologists, nurses, medical assistants, and social workers. Recipients promote member awareness of risk alcohol use, clinician guidelines to support alcohol SBI, and implementing requirements for healthcare provider recertification.

The FY 2021 targets for the fetal alcohol spectrum disorder (FASD) performance measures 5.1.8a and 5.1.8b were not met, however FY 2021 results were an improvement over FY 2020 for both measures. It is important to note that there have been fluctuations in alcohol screening and brief intervention percentages since 2012, resulting in an overall net increase in alcohol screening and a significant increase in brief intervention. There are also variations across healthcare provider types. For example, since 2012, obstetricians and gynecologists (ob/gyns) reported the highest increases in brief intervention when compared with other healthcare providers. Also, in 2021, a higher percentage of nurse practitioners reported screening women of reproductive age for alcohol use and a similar percentage of internists reported conducting brief intervention compared to those for ob/gyns. Alcohol screening and brief intervention percentages, as well as variations in these percentages by healthcare provider type, will continue to be closely monitored in the coming years. CDC also plans to update current performance measures to provide more refined target estimates on alcohol screening and brief intervention and better reflect current priority areas. Efforts to improve healthcare provider practices of alcohol screening and brief intervention continue to be a key program focus area and there are new activities planned to partner with a broader range of public health and clinical groups using a multidisciplinary, collaborative approach. Educational products targeting specific clinician groups have been developed and online training is now available, and the clinical champions network has been expanded. New clinical decision support (CDS) tools to promote screening and brief intervention for alcohol use have been developed for electronic health records and have been shared broadly. In 2022, a pilot was conducted to test two of the CDS tools in a clinical setting; a final report of this pilot and the CDS tools can be found on CDS Connect<sup>3</sup>.

Finally, the impact of the pandemic on substance use overall is being studied to determine if the stress of the pandemic has resulted in changes in population trends. A recent study<sup>281</sup> examining mental health and substance use trends in September 2020 estimated that 15.1% of adults increased substance use to cope with the stress of the COVID-19 pandemic, with higher rates reported among Hispanic (27.9%) and Black non-Hispanic (18.5%) populations. System-based efforts may not be enough to improve screening and brief interventions; therefore, in 2022, CDC plans to conduct formative research to understand the disparities related to alcohol and other substance-related screening and brief interventions and better reach underserved populations. Results from this effort will be used to improve and enhance screening and brief intervention efforts moving forward. In 2023, CDC also plans to provide new data on healthcare provider practices regarding alcohol screening and brief intervention in pregnant populations, including information on disparities.

To prevent neural tube defects (NTDs), CDC works to help women of reproductive age attain optimal concentrations of folate, a B vitamin, in their blood. For many reasons, Hispanic mothers have higher prevalence of NTD-affected births compared to non-Hispanic white and black women. CDC monitors red blood cell folate

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<sup>281</sup> <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2776559>

concentrations among women of reproductive age, including Hispanic women, to inform interventions in these populations. Based on data from NHANES, 81.3% of Hispanic women of reproductive age (12-49 years) were found to have an optimal blood folate concentration for neural tube defects prevention in FY 2017 (Measure 5.1.10). In April 2016, FDA approved voluntary folic acid fortification of corn masa flour, a major food staple for many Hispanic women. Corn masa flour products with folic acid reached the first store shelves at the end of the summer 2016. CDC assessed the effects of this voluntary fortification and the data after corn masa flour fortification (NHANES 2017–2018) showed essentially no change in the proportion of Hispanic women of reproductive age who have an optimal blood folate concentration when compared to data pre-fortification (NHANES 2007–2016). In 2017–2018, more Hispanic women reported consuming enriched cereal grain products (63.8%) as their only source of folic acid compared to previous years (56.3%). This trend is also reflected in the overall population but is magnified in the Hispanic population. Hispanic women who were less acculturated, primarily speaking Spanish at home, showed more substantial improvements than Hispanic women overall, with 84.6% of this subpopulation reaching optimal blood folate concentrations. To improve the stability and reliability of statistical estimates, additional years of NHANES data are needed to assess the effects of voluntary fortification of corn masa flour with folic acid on optimal blood folate concentrations, in particular as it relates to the acculturation status of Hispanic women. Beginning in FY 2023, CDC plans to examine the availability in the United States of retail corn masa flour and corn masa flour products voluntarily fortified with folic acid. In addition, CDC is conducting formative research with Hispanic women of reproductive age to understand their current knowledge, attitudes, and practices around folic acid intake and neural tube defects prevention.

Since 2019, CDC has supported neonatal abstinence syndrome (NAS) activities including the development of a standard case definition. CDC worked to evaluate and develop best practices for NAS surveillance methods to support tracking and improve understanding of health outcomes associated with NAS. CDC has exceeded its target by supporting six sites to implement the NAS definition and will retire this measure. CDC’s Autism and Developmental Disabilities Monitoring (ADDM) Network monitors the prevalence of ASD and other developmental disabilities in 11 communities across the United States. In 2018, CDC updated and simplified the ADDM methodology and data system to directly reflect community identification of autism by healthcare provider diagnosis or special education eligibility. These changes provide similar prevalence estimates as the previous method and allowed for faster publication of results, expanded tracking of early autism identification, and the ability to support more sites than under the previous methods. The most recent ADDM data estimated that 1 in 44 children living in ADDM Network communities have ASD. In addition to providing a prevalence estimate, ADDM data are used to track the age at which children with ASD receive developmental evaluations and ASD diagnoses. CDC revised its measures to better evaluate the proportion of children with early identification of ASD and to look at children with and without intellectual disability. The proportion of children 8 years of age who have intellectual disability and ASD who were first evaluated by age 36 months increased from 58.4% in FY2020 to 61.1% in FY 2022. The proportion of children who have ASD but do not have intellectual disability who were first diagnosed by age 36 months increased from 38.6% in FY 2020 to 45.5% in FY 2022 (Measures 5.1.5e-f).

**Health and Development for People with Disabilities**

**Performance Measures for Long-Term Objective: Improve the health and quality of life of Americans with disabilities**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
5.2.8 Decrease the proportion of young children with permanent hearing loss whose enrollment status for early	FY 2019: 17.0% (Baseline)	13.0%	12.0%	-1

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
intervention services in unknown (Outcome)				
5.2.9 Decrease the disparity between adults with and without a disability who report no aerobic activity <sup>1</sup> (Outcome)	FY 2019: 17.2% (Baseline)	13%	N/A	N/A

<sup>1</sup>Targets and results reported biennially

**Performance Trends:** CDC is committed to helping children with developmental disabilities and their families get the support they need to thrive. As part of this commitment, CDC has made clear and sustained progress in improving the lives of children who are deaf and hard of hearing through early identification and intervention. This progress has been made possible by CDC’s support for the implementation and use of state and territory-based Early Hearing Detection and Intervention (EHDI) Information Systems. CDC is building on the success of these systems with two Cooperative Agreements, which have been awarded to 39 jurisdictions and one University. These Cooperative Agreements reflect the latest phase in CDC’s work to ensure young children with hearing loss are identified early and receive the intervention services that can help them reach their full potential.

Hearing loss among young children can have serious consequences and is relatively common compared to other newborn conditions (at least 6,000 infants identified each year in the United States). Without early identification and intervention, hearing loss can have a profound and lasting impact on the speech and language, social, and emotional development on thousands of children born each year. By building on previous successes in helping children with hearing loss, CDC has developed a new measure that is designed to maximize the proven benefits of early identification and intervention and promote improved long-term outcomes. The relevance of this measure is reflected by the fact that in 2019, it was unknown if 17% of the young children identified with a permanent hearing loss were actually receiving recommended intervention services (Measure 5.2.8). This is an issue because the benefits and return on investment from early identification are reduced without the timely receipt of intervention. By decreasing the proportion of children where it is unknown if they are receiving intervention, CDC can help ensure all children with hearing loss are receiving valuable and recommended services while concurrently reducing the need for longer-term investments in services, and directly supporting ongoing academic success. Progress towards this measure in year 2020 was similar to the baseline in 2019, which can be considered a positive outcome given the likely impact of the COVID-19 pandemic, which interrupted the delivery of health care services in many regions in 2020, including newborn hearing screening, diagnostic and intervention services. As a result, infants born in 2020 and needing follow-up diagnostic and intervention services may have experienced delays or had difficulties obtaining these services.

CDC also works to ensure that people with disabilities have the same opportunities for good health as people without disabilities. CDC is dedicated to promoting inclusive communities, programs, and policies that provide opportunities for people with disabilities and their families to live full, healthy lives. CDC plans to continue to provide guidance to stakeholders to help public health programs become fully accessible and inclusive by offering effective tools and resources to improve the accessibility of program materials focused in particular on healthy living (such as physical activity and nutrition) and COVID-19 guidance.

More than 1 in 4 U.S. adults has a disability. These are adults with serious difficulty walking or climbing stairs; hearing; seeing; or concentrating, remembering, or making decisions. Living with a disability is often associated with significant health risk factors and increased economic costs compared with not having a disability. Physical inactivity is one of the leading risk factors for noncommunicable diseases mortality. Adults with disabilities are

three times more likely to have heart disease, stroke, diabetes, or cancer than adults without disabilities. Aerobic physical activity can help reduce the impact of these chronic diseases, yet nearly half of all adults with disabilities get no leisure time aerobic physical activity. Reducing the aerobic inactivity disparity between adults with and without a disability have a major public health impact across the United States. In 2019, the disparity between adults with and without a disability who report no aerobic activity was 17.2% (Measure 5.2.9).

**Public Health Approach to Blood Disorders**

**Performance Measures for Long-Term Objective: Improve the health and quality of life for Americans with blood disorders**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
5.3.2 Decrease the prevalence of hemophilia treatment inhibitors among Community Counts - Health Outcomes Monitoring System for People with Bleeding Disorders at HTC's (Outcome)	FY 2021: 5.0% Target: 5.5% (Target Exceeded)	4.4%	4.2%	-0.2
5.B Increase the proportion of children less than 4 years old with severe hemophilia A or B who are prescribed early prophylaxis (Output)	FY 2021: 82.7%% Target: 77% (Target Exceeded)	84.5%	85.0%	+0.5

**Performance Trends:** CDC protects people and prevents complications of blood disorders by reducing the prevalence of inhibitors among hemophilia patients and increasing the proportion of very young hemophilia patients receiving early prophylaxis treatment. Through Community Counts, CDC collects data on health issues and medical complications for people living with bleeding disorders, incorporates screening for inhibitors, and monitors treatment use, including prophylaxis, to facilitate best practices that help prevent or eradicate complicated, costly, and debilitating health conditions.

Approximately 15-20% of people with hemophilia develop an inhibitor, a condition where the body stops accepting the factor treatment product (which helps the blood clot properly) as a normal part of blood. The body treats the “factor” as a foreign substance and mounts an immune system response to destroy it with an inhibitor. When people develop inhibitors, treatments to prevent and stop bleeding episodes are less effective. Special treatment is required until the body stops making inhibitors, which can increase hospitalizations, compromise physical function, and exceed \$1,000,000 a year for a single patient.

Discovering an inhibitor as soon as possible helps improve outcomes and reduce costs. Although hemophilia care providers widely accept that development of an inhibitor is a serious issue, routine screening for inhibitors is not current practice for local laboratories because of the high cost and the inability to perform the proper tests.

In FY 2020 and FY 2021, the prevalence of hemophilia treatment inhibitors surpassed the target by eight percent and seven and a half percent respectively (Measure 5.3.2). The continued decrease in inhibitor prevalence demonstrates marked improvement for the population's management of complications. For the second

consecutive fiscal year, this performance measure has been exceeded and the Community Counts program has established new targets for FY 2024.

People with hemophilia are also at risk for joint bleeds, a health problem that occurs when a person bleeds internally into their joints causing damage. Joint bleeds can happen following injury or trauma but can also occur spontaneously. Frequent joint bleeds can lead to joint disease, an irreversible condition, making mobility painful and difficult. CDC data shows that regular treatment to prevent bleeding (prophylaxis) initiated before age 4 has the greatest impact on preventing bleeds, thereby preventing joint disease. Data from the Community Counts program helps CDC measure and monitor the proportion of children less than 4 years old with severe hemophilia A or B who are prescribed early prophylaxis.

In FY 2021 82.7% of children less than 4 years old were prescribed early prophylaxis, an increase over FY 2020 and exceeding the FY 2021 target (Measure 5.B). One factor that may have contributed to this increase in FY 2020 and the continued increase in FY 2021 was the use of Hemlibra, a new prescription treatment used for prophylaxis among children and adults with hemophilia A to prevent the frequency of bleeding events. Data from Community Counts show that the use of Hemlibra increased from 4.2% in 2019 to 7.4% in 2020. CDC scientists continue to monitor treatment utilization in Community Counts and engage with HTC and community partners on the importance of early prophylaxis and assess the impact of CDC's programs and partnerships to reduce complications from bleeding disorders.

## ENVIRONMENTAL HEALTH

### Childhood Lead Poisoning Prevention

Contextual Indicator	Most Recent Result
6.2.5a Reduce health disparities associated with blood lead levels in children aged 1-5 in the U.S. such that: a. The gap in blood lead levels between black children and children of other races is reduced (Contextual Indicator) <sup>1</sup>	FY 2015-2016: Result: 0.20
6.2.5b Reduce health disparities associated with blood lead levels in children aged 1-5 in the U.S. such that: b. The gap in blood lead levels between children living above the federal poverty level and those living below the poverty level is reduced (Contextual Indicator) <sup>1</sup>	FY 2015-2016: Result: 0.17

<sup>1</sup> Data is reported every four years.

**Performance Trends:** CDC measures the reduction in health disparities associated with blood lead levels in children, which are valuable indicators of the success of lead interventions nationwide (Measures 6.2.5a-b). Lead exposure can affect nearly every system in the body and is associated with numerous behavioral and learning problems (e.g., reduced IQ, attention deficit hyperactivity disorder, juvenile delinquency, and criminal behavior). Even low levels of lead in a child’s blood can affect IQ, the ability to pay attention, and academic achievement.

While overall child lead levels in the U.S. have fallen significantly in the last decade, reducing disparities is critical to decreasing the average blood lead levels among all young children. An estimated 29 million homes in the United States have one or more significant lead-containing paint or dust hazards, which places children at high risk of lead poisoning. NCEH’s Lead Program supports 62 jurisdictions that serve more than 20 million children under the age of six.

Due to COVID-19, nearly half a million children missed blood lead testing during the first 5 months of 2020, compared with data from 2019. Similarly, the number of children younger than 6 years tested for lead exposure declined by 66% in April 2020, compared with April 2019.<sup>282</sup> In February 2021, CDC published information about the decline and called on health care providers and public health agencies to ensure that children are tested as soon as possible if they missed a scheduled blood lead test or a required follow-up test for a prior blood lead level test. Additionally, CDC and its partners found innovative methods to combat the reductions in blood lead testing during the pandemic. These included virtual home visits and partnering and coordinating with other state agencies and programs such as Women, Infants and Children and immunization programs.

Among children ages 1-5 years, the blood lead level corresponding to the highest 5th percentile declined from 2.91 µg/dL in the 2011-12 NHANES to 2.02 in 2017-18. Based on 2015-2016<sup>283</sup> data, CDC exceeded the performance target for reducing the gap in blood lead levels between black children and children of other races and for reducing the gap in blood lead levels between children living above the federal poverty level and those living below the poverty level. The National Center for Health Statistics released the most recent cycle of 2017-2018 NHANES blood lead level data in June 2020. However, public access to the 2017-2018 pediatric lead data is restricted because of privacy concerns. CDC is in the process of requesting access to the restricted-use data to compute updated performance measure values, noting that access to and analysis of data might be delayed due to the COVID-19 pandemic.

<sup>282</sup> [https://www.cdc.gov/mmwr/volumes/70/wr/mm7005a2.htm?s\\_cid=mm7005a2\\_x](https://www.cdc.gov/mmwr/volumes/70/wr/mm7005a2.htm?s_cid=mm7005a2_x)

<sup>283</sup> <https://www.cdc.gov/nchs/nhanes/index.htm>.

CDC continues its efforts to reduce health disparities associated with blood lead levels in children by providing resources and technical assistance to our jurisdictional partners for identification of children most at risk for lead exposure, conducting primary prevention activities where they live, attend school, worship and play, and using principles of health equity to ensure that all children exposed to lead have an equal opportunity to receive appropriate medical treatment and social services.

**Environmental and Health Outcome Tracking Network**

**Performance Measures for Program: Environmental Public Health Tracking**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
6.C Number of public health actions undertaken (using Environmental Health Tracking data) that prevent or control potential adverse health effects from environmental exposures (Output)	FY 2021: 80 Target: 45 (Target Exceeded)	60	60	Maintain

**Performance Trends:** The Environmental and Health Outcome Tracking Network covers over 185 million people, which made up about 57% of the population in the U.S. in 2021. The Tracking Network serves as a source of information on environmental hazards and exposures, population data, and health outcomes. Since FY 2013, CDC has consistently exceeded expectations for the number of data-driven actions to improve public health using the Tracking Network (Measure 6.C). CDC is refining how public health actions are captured and anticipates that the total number of actions may be reduced or remain flat. FY 2023 targets are increased slightly over previous year targets as a result. From FY 2005 to FY 2021, state and local public health officials have used the Tracking Network to implement over 820 data-driven public health actions to save lives and prevent adverse health effects that are due to environmental exposures.

For example, in 2021 over 80 public health actions were reported, with COVID, heat stress illness, climate change, and air quality as the most common environmental health topics addressed. Policies included requiring city agencies to use organic pest control measures in parks and requiring a licensure program for radon professionals to ensure they consistently and correctly measure home radon levels. Programs or interventions described by Tracking recipients included hosting free COVID testing events in areas identified as high-risk based on sewer shed surveillance data and ensuring that K-12 public school locations with the highest lead exposure risk for receive prioritized testing of lead in drinking water. The Tracking Network also serves as a source of information for health professionals, elected officials, researchers, parents, and the public on environmental hazards and exposures, population data, and health outcomes. Because of CDC’s concerted efforts to encourage Tracking awardees to report public health actions, CDC continues to meet this important measure of program success.

**Environmental Health Laboratory**

**Performance Measures for Program: Environmental Health Laboratory**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
6.1.1 Number of environmental chemicals and	FY 2021: 349 Target: 400 (Target Not Met)	415	420	+5

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
nutritional indicators that are measured in surveys and studies of the U.S. population (Output)				
6.1.3 Number of laboratories participating in DLS Quality Assurance and Standardization Programs to improve the quality of their laboratory measurements (Output)	FY 2021: 1,463 Target: 2,295 (Target Not Met)	2,000	2,050	+50
6.1.4 Number of chronic disease biomarkers included in standardization programs that improve the quality of laboratory measurements (Output)	FY 2021: 20 Target: 21 (Target Not Met)	26	28	+2
6.A Number of environmental chemicals for which methods were developed or improved (Output)	FY 2021: 46 Target: 55 (Target Not Met)	65	70	+5
6.B Number of laboratory studies conducted to measure levels of environmental chemicals in exposed populations (Output)	FY 2021: 58 Target: 92 (Target Not Met)	80	85	+5

**Performance Trends:** CDC’s biomonitoring measurements track environmental chemical and nutrition indicator levels within the U.S. population and provide national reference information for scientists, physicians, and health officials. CDC also provides voluntary quality assurance and standardization programs that help ensure the quality and comparability of important laboratory measurements for chronic diseases, newborn screening disorders, nutrition status, and environmental exposures. CDC's environmental health laboratory output decreased in FY 2021 because of the COVID-19 pandemic and adherence to guidelines to maintain a safe working environment for laboratory scientists. CDC expects laboratory operations to resume at full capacity by 2023.

Despite challenges related to the COVID-19 pandemic, CDC measured 349 environmental chemicals and nutrition indicators in surveys and studies in FY 2021 (Measure 6.1.1). CDC updated the National Report on Human Exposure to Environmental Chemicals, reporting biomonitoring data for more than 400 chemicals in a new online format that is easier to use and will enable faster release of important results. New data in FY 2022 include 74 chemicals reported for the first time: chromium, nickel, and glyphosate in urine and methyl isobutyl ketone in blood.

CDC continues to innovate to monitor Americans' exposure to chemicals of concern. In FY 2022, CDC released the first nationally representative exposure data for glyphosate and updated data for ethylene oxide. By FY 2024, CDC intends to add new measurements for several new chemicals, including urine fluorine and muconic acid, while also cycling out some measurements for chemicals infrequently detected in the U.S. population.

In FY 2021, the number of laboratories using CDC quality assurance and standardization programs decreased by about 25%, from 1,996 in FY 2020 to 1,463 in FY 2021, because of reduced capacity during the COVID-19 pandemic. CDC expects an upward trend to resume by FY 2024 (Measure 6.1.3).

CDC added lipoprotein(a), a risk factor for cardiovascular disease, to its chronic disease biomarkers standardization program in FY 2021 which kept the result level with the previous year, just missing the target. CDC anticipates adding two additional biomarkers to its programs in FY 2023 and two biomarkers in FY 2024 (Measure 6.1.4).

In FY 2021, CDC developed or improved 46 tests to measure environmental chemicals, which was fewer than expected because of reduced laboratory access during the COVID-19 pandemic (Measure 6.A). CDC developed a method for measuring urinary fluoride that will help evaluate Americans' fluoride levels based on recommendations about the optimal levels of fluoride in drinking water needed to prevent tooth decay. In FY 2024, CDC expects to develop or improve methods for more than 70 environmental chemicals.

In FY 2021, CDC collaborated on 58 studies of environmental chemicals (Measure 6.B), fewer than expected because of delays resulting from the COVID-19 pandemic. These studies help identify populations with harmful or higher than normal exposures. For example, CDC measurements of four per- and polyfluoroalkyl substances (PFAS) helped document an association between gestational exposure to some PFAS and cardiometabolic risk in adolescence. CDC expects an upward trend to continue in FY 2024 as laboratory operations fully resume and anticipated collaborative opportunities increase.

CDC also ensures the quality of newborn screening for preventable diseases. Since FY 2013 CDC has consistently met the target to provide quality assurance materials for all 50 states. In FY 2021, CDC launched a proficiency testing program using a newly developed renewable source of quality assurance materials to ensure accurate testing to detect spinal muscular atrophy (SMA). All U.S. newborn screening laboratories received these materials for the first time this year. CDC also provided cystic fibrosis quality assurance materials covering 23 pathogenic variants identified by leading national organizations. CDC will retire this measure as it has achieved its desired level of performance. CDC will continue providing services and technical assistance to states in support of newborn screening for conditions on the HHS Recommended Uniform Screening Panel.

## Asthma

Contextual Indicator	Most Recent Result
6.B.2.4 Reduce visits to emergency departments (EDs) for asthma among U.S. children (aged 0-17 years) (Contextual Indicator) <sup>1</sup>	FY 2019: 108.4

<sup>1</sup> ED visit rate per 10,000 population

### Performance Measure for Program: Asthma

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
6.2.4a: Increase the percent of National Asthma Control Program funding recipients that expand or scale up EXHALE interventions (Output)	FY 2021: 20% (Baseline)	24%	27%	+3

**Performance Trends:** In the U.S., nearly 25 million people have asthma, including more than 5.5 million children. While there is no cure for asthma, self-management training can teach people to manage their disease with medical care and to prevent asthma attacks by avoiding triggers. Uncontrolled asthma results in significant costs to families and society when individuals go to the emergency department or are hospitalized for an asthma exacerbation. Children ages 0-17 years have a higher ED visit rate compared with adults ages 18 and over. In 2010, the average annual ED visit rate with asthma as the first-listed diagnosis was 98.2 per 10,000 children compared with 44.7 per 10,000 adults. In FY 2019, the rate of asthma related ED visits among U.S. children was 108.4 per 10,000 children (Measure 6.B.2.4). CDC’s National Asthma Control Program (NACP) and Controlling Childhood Asthma and Reducing Emergencies initiative seeks to decrease the number of emergency department visits and hospitalizations through a tiered approach for asthma control by using interventions with the strongest evidence of effectiveness. Comprehensive asthma control strategies (based on the National Institutes of Health’s Guidelines for the Diagnosis and Management of Asthma) are vital to helping people to stay out of the hospital, avoid the emergency department, and manage their asthma.

CDC is retiring its measure for the proportion of individuals with current asthma who report receiving asthma self-management training from a doctor or other health care provider, as it is not as sensitive to small changes in the number adults newly diagnosed with asthma and may be affected by recall bias from individuals. CDC will replace this measure with a new measure from CDC’s current asthma cooperative agreement that focuses on the percent of NACP-funded recipients who have expanded or scaled up EXHALE interventions. EXHALE is a technical package of evidence-based interventions that work together to reduce asthma exacerbations and prevent asthma-related ED visits and hospitalizations in adults and children. Increasing the expansion or scale-up of these interventions each year will reach more people with asthma and improve their quality of life. In FY 2021, 20% of NACP-funded recipients expanded or scaled up EXHALE interventions (Measure 6.2.4a).

## Environmental Health Activities

### Performance Measures for Program: Environmental Health Activities

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
6.1.5 Number of states using National Environmental Assessment Reporting System (NEARS) to prevent foodborne illness outbreaks (Output)	FY 2021: 26 Target: 27 (Target Exceeded)	32	32	Maintain

**Performance Trends:** CDC’s National Environmental Assessment Reporting System (NEARS) provides a standardized reporting tool used by state, tribal, local, and territorial food safety programs to identify environmental factors that they can routinely monitor to prevent or mitigate foodborne illness outbreaks associated with food service establishments (e.g., worker health policies and food handling practices).

There was a decrease in the number of states using NEARS by 1 (Measure 6.1.5); however, adoption by city and county health departments and other jurisdictions increased. Of 64 NEARS participants, thirty-eight (60%) are county and city health departments. Although CDC does not fund jurisdictions to use NEARS, CDC is committed to continuing the NEARS Explorer Program with health departments and jurisdictions that want to use NEARS and anticipates interest in other jurisdictions will continue to increase.

Clostridium perfringens bacteria are one of the most common causes of foodborne illness. NEARS data allow us to better understand the root causes of C. perfringens outbreaks in restaurants. Our findings suggest that restaurants can take steps to reduce the impact of outbreaks by providing food safety training and certification programs for staff, conducting routine maintenance on equipment, using only properly working equipment, and training workers on how to properly use equipment. Analysis of NEARS data allowed CDC to make these actionable recommendations to state, tribal, local, and territorial health departments.

## INJURY PREVENTION AND CONTROL

### Intentional Injury Prevention

**Long Term Objective: Achieve reductions in the burden of injuries, disability, or death from intentional injuries for people at all life stages**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
7.1.6 Reduction in suicide rates among vulnerable populations selected by Comprehensive Suicide Prevention Program recipients (Outcome)	FY2021: 0% (Baseline)	3%	6%	+3
7.F Increase the number of prevention and response strategies from CDC’s Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence being implemented by state and local health departments funded through the multistate ACEs cooperative agreement (Output)	FY 2021:15 Target: 15 (Target Met)	30	30	Maintain
7.G Expand the number of evidence-based resources on best practices and core components of trauma-informed care for clinical practice that are available on the National Center for Injury Prevention and Control website (Output)	FY 2021: 0 (Baseline)	5	7	+2
7.1.8 Increase the percentage of Rape Prevention Education (RPE) states that are assessing community-level risk and protective factors related to sexual violence perpetration & victimization (Outcome)	FY 2022: 80% (Baseline)	82%	84%	+2

**Performance Trends:** CDC is leading efforts to prevent suicide and stop violence before it begins and reaching out to audiences with new prevention strategies. CDC addresses the needs of those at risk by applying proven prevention strategies. CDC is assessing the impact of these strategies and approaches through its performance measure which tracks the percentage of Rape Prevention Education<sup>284</sup> (RPE) funded states that assess the outcomes and impact of sexual violence prevention activities. CDC will retire its measure and replace it with a new measure that will be built into the next NOFO starting in FY 2024. The FY 2022 baseline for the new measures – the percentage of Rape Prevention Education (RPE) states that are assessing community-level risk and protective factors related to sexual violence perpetration & victimization was 80% (Measure 7.1.8).

The Preventing Adverse Childhood Experiences: Data to Action programmatic initiative is the mechanism through which CDC will ensure that states and intrastate partners have access to the best available evidence for ACEs prevention and response, and this metric tracks the extent to which CDC’s evidence-based strategies are achieving uptake and traction in applied settings. In FY 2021, 15 prevention and response strategies were being implemented by state and local health recipients (Measure 7.F). Relatedly, Measure 7.G ensures that CDC is pushing to generate and disseminate resources on trauma-informed care for clinical settings (and other partners), to ensure that system responses to people who have experienced ACEs are not harmful.

CDC is introducing a new measure on reducing suicide rates among vulnerable populations selected by CDC's Comprehensive Suicide Prevention Program recipients (Measure 7.1.6). The 2021 baseline (0% reduction) will have progressive annual targets to ultimately align with the Comprehensive Suicide Prevention Program goal of a 10% reduction in suicide and suicide attempts among vulnerable populations by 2025. This program was awarded to nine recipients in FY 2020 and the total recipients increased to 11 in FY 2021. Recipients are focused on implementing and evaluating a comprehensive public health approach to suicide prevention, with attention to vulnerable populations. A comprehensive approach to suicide prevention is characterized by: strong leadership that convenes multi-sectoral partnerships; prioritization of data to identify vulnerable populations and to better characterize risk and protective factors impacting suicide; leveraging existing suicide prevention programs; selection of multiple and complementary strategies with the best available evidence to fill gaps; effective communication; and rigorous evaluation of the overall approach and individual activities with an eye towards quality improvement and sustainability. Program recipients use local data to identify populations disproportionately affected by suicide, including Veterans, middle-aged men, youth, people living in rural areas, LGBTQ, and others.

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<sup>284</sup><https://www.cdc.gov/violenceprevention/rpe/index.html>.

## Unintentional Injury Prevention

**Long Term Objective: Achieve reductions in the burden of injuries, disability, or death from unintentional injuries for people at all life stages**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
7.2.7b Reduce age-adjusted annual rate of overdose deaths involving synthetic opioids other than methadone (e.g., fentanyl) among states funded through CDC’s multi-state surveillance and prevention cooperative agreement (per 100,00 residents) (Outcome)	FY 2020 : 19.3 <sup>2</sup> Target: 8.0 (Target Not Met)	7.7	7.7	Maintain
7.2.7c Reduce the age-adjusted rate of overdose deaths involving natural and semisynthetic opioids (T40.2) or methadone (T40.3) as a contributing cause of death among states funded through CDC’s multi-state surveillance and prevention cooperative agreement (per 100,000 residents) (Outcome)	FY 2020: 5.2 <sup>2</sup> Target: 3.9 (Target Not Met)	3.6	3.6	Maintain
7.2.8 Increase the number of data-driven public health actions applied by Core SIPP recipients that promote injury prevention and community readiness. (Outcome)	FY 2022: 80% (Baseline)	TBD	TBD	N/A

<sup>1</sup>The Core SIPP program is cross-cutting and is supported by both the Intentional and Unintentional Injury Prevention budget lines.

<sup>2</sup>Cooperative agreement – 29 states.

**Performance Trends:** Unintentional injuries are the leading cause of death for individuals ages 1 to 44 in the United States. Additionally, over half of the total medical and work loss costs of injury deaths are attributable to unintentional injuries (\$129.7 billion)<sup>285</sup>.

CDC supports intentional and unintentional injury prevention activities through the Core State Injury Prevention Program (Core SIPP) and prior to that the Core State Violence and Injury Prevention Program (Core SVIPP) (Measure 7.2.5). The Core SVIPP notice of funding was awarded to 23 states from 2016 to 2021 and 100% of the state awardees achieved 100% compliance in using data to assess state outcomes. CDC will retire this measure because the target was achieved and Core SVIPP concluded in FY 2021. CDC is updating this measure to focus on the next cycle, the Core State Injury Prevention Program (Core SIPP). State health departments play a critical role in the prevention of injury. Core SIPP works primarily with health departments to use data and research to identify and respond to existing and emerging injury threats. Recipients use data and research to implement public health actions that prevent injury. Core SIPP aims to increase protective factors and reduce risk factors, with a focus on adverse childhood experiences, traumatic brain injury, and transportation safety. Recipients can use up to 25% of their award to address local priority injury topics, such as increasing the violence prevention evidence base and demonstrating public health impact.

CDC has been tracking the rise of opioid and drug overdose deaths and using the data to inform prevention activities to curb this alarming epidemic. Over 560,000 people have died from overdoses involving opioids – prescription or illicit in the United States from 1999 through 2020. Provisional data through February 2022 indicate that trends in opioid overdose deaths continued to increase, mostly due to rises in deaths from illicitly manufactured fentanyl. These trends were further accelerated during the COVID-19 pandemic. In response to a sharp increase in synthetic opioid deaths in 2020, CDC released a health advisory through the Health Alert Network (HAN) in December 2020. This HAN advised clinicians and public health officials of the rise in synthetic opioid overdoses, the increase in overdose deaths involving psychostimulants with abuse potential, the changing geographic distribution of drug classes, and recommendations for responding to these increases<sup>286</sup>. Data show that both fatal<sup>287</sup> and non-fatal<sup>288</sup> overdoses are on the rise.

In FY 2019, CDC launched its Overdose Data to Action (OD2A) funding opportunity. This program funds 47 states, Washington, D.C., 16 localities, and two territories to advance the understanding of the opioid overdose epidemic and to scale-up prevention and response activities which builds on previous surveillance efforts to foster an interdisciplinary, comprehensive, and cohesive public health approach to the complex and changing nature of the opioid overdose epidemic.

CDC has tailored its response as the epidemic continues to evolve. In FY 2024, CDC will continue to support recipients along the trajectory of moving from data to action, building upon work completed through OD2A. In July 2022, CDC released two grant opportunity forecasts, “CDC-RFA-CE23-2302—Overdose Data to Action in States” and “CDC-RFA-CE23-2303—Overdose Data to Action: Limiting Overdose through Collaborative Actions in Localities (OD2A: LOCAL)”. These new cooperative agreements will build off the work and gains made through previous overdose surveillance and prevention investments supporting state health departments.

<sup>285</sup> <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6438a4.htm>.

<sup>286</sup> CDC Health Alert Network, CDCHAN-00438: Increase in Fatal Drug Overdoses Across the United States Driven by Synthetic Opioids Before and During the COVID-19 Pandemic, Published December 17, 2020, 8:00 AM ET. <https://emergency.cdc.gov/han/2020/han00438.asp>

<sup>287</sup> Mattson CL, Kumar S, Tanz LJ, Patel P, Luo Q, Davis NL. Drug Overdose Deaths in 28 States and the District of Columbia: 2020 data from the State Unintentional Drug Overdose Reporting System (SUDORS). SUDORS Data Brief, No 1. Atlanta, GA: Centers for Disease Control and Prevention, U.S. Department of Health and Human Services; 2022.

<sup>288</sup> Holland KM, Jones C, Vivolo-Kantor AM, et al. Trends in US Emergency Department Visits for Mental Health, Overdose, and Violence Outcomes Before and During the COVID-19 Pandemic. *JAMA Psychiatry*. 2021;78(4):372–379. doi:10.1001/jamapsychiatry.2020.4402

In FY 2019, CDC measured progress in reducing overdose deaths involving all opioids among the states funded specifically for its Prevention for States program. In FY 2020, the age-adjusted annual rate of opioid deaths involving prescription opioids was 5.2 per 100,000 residents among states funded for the OD2A program (Measure 7.2.7c). This did not meet the FY 2020 target and was likely exacerbated by the COVID-19 pandemic. The age-adjusted annual rate of opioid deaths involving synthetic opioids other than methadone (e.g., fentanyl) in FY 2020 was 19.3 per 100,000 residents among states funded for the OD2A program (Measure 7.2.7b). This did not meet the FY 2020 target and was likely exacerbated by the COVID-19 pandemic as well as growing overdose deaths resulting from illicitly manufactured fentanyl. The growing issue of polysubstance use means that an opioid-involved overdose often occurs in combination with exposure to other opioids and/or other non-opioid substances. Some examples of polysubstance exposures found in combination in overdose deaths include: illicitly-manufactured fentanyl (IMF) and heroin; illicitly-manufactured fentanyl and cocaine; heroin and methamphetamine; and prescription or illicit opioids and benzodiazepines. The overdose epidemic has grown increasingly complex by co-involvement of prescription and illicit drugs. A recent CDC study found that twenty-five jurisdictions reported 16,236 overdose deaths during January–June 2019. Most overdose deaths (83.8%) involved one or more of four illicit drugs (IMFs [61.5%], cocaine [28.3%], heroin [28.2%], or methamphetamine [17.6%]); nearly one half (49.8%) of these deaths involved two or more of those drugs<sup>289</sup>.

CDC will continue to strengthen surveillance activities, identify interventions, and implement prevention programs that address the evolving nature of the epidemic. In the face of stay-at-home orders due to COVID-19, several states funded through CDC's Overdose to Action (OD2A) have succeeded in deploying harm reduction measures. Since March 1, 2021 in Ohio, through a first responder partnership, 328 naloxone kits have been distributed and more than 500 clients have been referred to treatment services. In Louisiana, public health opioid prevention outreach coordinators (OPOCs) continued to rebuild relationships and found alternative ways to educate Louisiana residents on overdose prevention and awareness. OPOCs successfully made contact through virtual and in-person outreach to more than 4,000 individuals since September 1, 2020. CDC's Drug Overdose Surveillance and Epidemiology (DOSE) System analyzes data from electronic health records to rapidly identify outbreaks and provides situational awareness of changes in suspected drug overdose-related emergency department visits at the local, state, and regional levels ensuring consistent and accurate reporting across all entities that make it easier to compare data across states. Since 2019, 41 states and the District of Columbia have provided data to CDC on a monthly basis which is publicly accessible through an interactive dashboard. In addition, CDC developed an interactive data visualization tool, the State Unintentional Drug Overdose Reporting System (SUDORS) dashboard, which displays fatal overdose data from 2020. Participating jurisdictions provide data abstracted from multiple data sources including death certificates, medical examiner/coroner reports, and postmortem toxicology. The SUDORS dashboard can inform prevention and response efforts by educating partners about location-specific circumstances and risk factors associated with drug overdose death; alerting healthcare providers, public health professionals, medical examiner and coroner offices, and other partners of newly emerging drug threats; informing drug overdose prevention and response planning using toxicology and circumstance data; and evaluating the impact of overdose prevention and response efforts.

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<sup>289</sup>Vital Signs: Characteristics of Drug Overdose Deaths Involving Opioids and Stimulants — 24 States and the District of Columbia, January–June 2019 | MMWR (cdc.gov).

## PUBLIC HEALTH SCIENTIFIC SERVICES

### Health Statistics

**Performance Measures for Long Term Objective: Monitor trends in the nation’s health through high-quality data systems and deliver timely data to the nation’s health decision-makers**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
8.A.E.2 Reduce the number of months after data year for release of the final mortality and natality files (Outcome; Efficiency)	FY 2020: 11 Target: 11 (Target Met)	11	11	Maintain
8.A.1.1b Sustain the percentage of Federal Power Users (key federal officials involved in health and health care policy or programs) that indicate that data quality is good or excellent (Outcome)	FY 2021: 100% Good or Excellent Target: 100% Good or Excellent (Target Met)	100% Good or Excellent	100% Good or Excellent	Maintain
8.A.1.1e Achieve and sustain the percentage of NCHS website users that are satisfied with data relevance and ease of access (Outcome)	FY 2021: 61.7% (Baseline)	65%	65%	Maintain
8.A.1.3 Increase the number of web visits as a proxy for use of NCHS data (Output)	FY 2021: 34.4 Million Target: 13 Million (Target Exceeded)	13.5 Million	15 million	+1.5 million
8.G Number of adults interviewed in the National Health Interview Survey (Output)	FY 2021: 29,842 Target: 27,000 (Target Exceeded)	27,000	29,000	+2,000

**Performance Trends:** CDC uses several indicators to measure its ability to provide timely, useful, and high-quality data. In FY 2020, CDC released its 2020 mortality and natality data 11 months after the data year, on target with the goal of 11 months (Measure 8.A.E.2). With the ongoing epidemic of drug overdose deaths and the COVID-19 pandemic, more timely data informs relevant, evidence-based policy decisions and planning. Faster access to these data also facilitates timely evaluation and research efforts for natality and all causes of death, providing critical information on public health issues impacting the nation. CDC’s progress on expediting mortality data releases has been especially valuable in supporting evidence-based policy decisions during the COVID-19 pandemic, as the agency has released provisional COVID-19 mortality statistics on a weekly basis through the National Vital Statistics System. Additionally, starting in February 2022, the time lag for provisional drug overdose data was shortened from six months to four months.

To drive program improvements, CDC assesses user satisfaction and perceptions of data utility. CDC has revised this measure to assess the percentage of NCHS website users that are satisfied with data relevance and *ease of access*, as accessibility is a key focus for CDC in its role implementing the Foundations for Evidence-Based

Policymaking Act of 2018 (Measure 8.A.1.1e). CDC is improving access to NCHS online data sources, including integrating and simplifying existing points of access. Projects underway include developing a scalable data query system and a single data repository with standard and searchable metadata - with the goal of improving user experiences in accessing and using NCHS data. The number of visits to the NCHS website is nearly three times more than the average number of visitors since 2015, likely due to the increased focus on available data during the pandemic. Similarly, CDC interviews Federal Power Users (key federal officials involved in health and health care policy or programs) to assess their satisfaction with CDC's Health Statistics products and services, including data quality, ease of data accessibility and use, professionalism of staff, relevance of data to major health issues, and relevance of data to user needs. One hundred percent of federal power users rated NCHS as "good" or "excellent" in data quality in 2021 - reflecting a 20 percentage point improvement from the 2019 measure and meeting the 2021 target (Measure 8.A.1.1b).

CDC tracks the number of web visits to assess the frequency of NCHS data utility. There were 34.4 million web visits in FY 2021, which exceeded the target (Measure 8.A.1.3). This data indicates a sharp increase in web traffic compared to the previously flat trend of 12 million visits annually since FY 2013. This substantial change is driven by increased attention on health statistics during the COVID-19 pandemic, including COVID-19 mortality data provided by the National Vital Statistics System. The Vital Statistics Rapid Release program provides access to timely vital statistics for public health surveillance through quarterly releases of provisional estimates of births, deaths, and infant deaths. This program helps to increase public interest in the data and enables potential users to easily find recent data on the website. NCHS builds on an initiative launched in 2017 to provide the earliest information on drug overdose deaths - a recognized public health crisis prior to the COVID-19 pandemic. To better inform policy and decision makers, counts of provisional drug overdose deaths are published on the NCHS website monthly. As a result, the public and policymakers were informed of a nearly 30% increase in overdose deaths from 2020 to 2021 months before the final data were available. Recent improvements in timeliness and data quality have led to a significant increase in the number of states reporting the specific drugs or drug classes involved in drug overdose deaths, improving public health professionals' ability to track recent rises in specific drug classes, such as fentanyl. These data are also widely used by CDC and HHS to monitor overdose deaths. Leveraging this progress from the drug overdose death data releases, NCHS was able to quickly respond to the COVID-19 crisis and release COVID-19 death data on a daily and weekly basis to provide insightful information to public health policymakers and leaders on the pandemic and its associated health disparities.

The National Health Interview Survey (NHIS) interviewed 29,842 adults in 2021, a large increase from 2017 and 2018 numbers (26,742 and 25,417, respectively) and exceeding its 2021 performance target by almost 3,000 adults (Measure 8.G). This improvement is the result of a better-than-expected response rate following the implementation of the survey questionnaire redesign. The NHIS redesign reduced the length of the survey and eliminated the family-level interview before the adult interview. Both the NHANES and NHIS were impacted in FY 2020 and 2021 due to challenges posed by the ongoing COVID-19 pandemic. For example, after more than a year out of the field, NHANES mobile examination centers began conducting test runs in July 2021, allowing staff to confirm that data collection procedures are safe for themselves and participants. NHANES staff are continuing to monitor COVID-19 virus prevalence as they return to full in-person operation, which began in August 2021. The 2022 NHANES data collection cycle is proceeding as planned – mobile examination centers are visiting sampled communities while maintaining safe COVID-19 protocols.

**Surveillance, Epidemiology, and Laboratory Services**

**Performance Measures for Long Term Objective: Lower barriers to data exchange across jurisdictions as part of an integrated strategy for public health surveillance and response**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
8.B.1.4 Increase the percentage of notifiable disease messages transmitted in HL7 format to improve the quality and streamline the transmission of established surveillance data (Output)	FY 2021: 74% Target: 40% (Target Exceeded)	40%	40%	Maintain
8.B.1.6 Increase the percentage of non-federal emergency department facilities that participate in the National Syndromic Surveillance Program to improve the coverage of syndromic surveillance data (Output)	FY 2021: 71% (Baseline)	78%	80%	+2

**Surveillance Performance Trends:** State and local efforts to monitor, control, and prevent the occurrence and spread of infectious and noninfectious diseases are dependent on timely, high-quality data obtained from disease surveillance, a cornerstone of public health practice. The National Notifiable Diseases Surveillance System (NNDSS) is a CDC collaboration with 57 state, local, and territorial public health jurisdictions to receive infectious disease data collected by 3,000 health departments for further analysis and use by CDC programs to better inform disease outbreaks and guide public health interventions. Currently, more than 120 diseases and conditions are under continuous nationwide surveillance.

CDC continues to maximize its use of advanced technology, data, and exchange standards. These efforts have further strengthened and modernized the NNDSS infrastructure and helped ensure effective data-sharing and collaboration with relevant partners. The NNDSS Modernization Initiative (NMI) is providing the final standardization enhancements to maximize the system’s ability to provide more comprehensive, timely, and higher quality data to CDC programs. This improved data enables CDC programs to implement timelier public health interventions and develop more informed health policies. Throughout this initiative, CDC is making the NNDSS infrastructure more robust to implement modern, interoperable, standardized data and exchange mechanisms.

The recent investments made in technology and infrastructure have made it possible to retire of some of CDC’s older legacy systems. These investments also positioned CDC to efficiently receive data related to the COVID-19 outbreak. Within hours of the COVID-19 emergency declaration, CDC’s NNDSS issued a COVID-19 event code, which states used to notify CDC of cases, and updated the Message Validation, Processing, and Provisioning System to accept COVID-19 case data and make it available to CDC programs. The data received as a result of this work positioned CDC’s disease experts and Emergency Operations Center to better understand and support the national response. Furthermore, the impacts of COVID-19 have amplified the need for improvements in

public health practice to achieve health equity. In support of CDC efforts to advance health equity, particularly those to reduce disparate health outcomes by race and ethnicity, programs are exploring opportunities to address the broader purpose of data, surveillance, and analytics: data to inform action.

The high volume of COVID-19 cases reported to CDC, which substantially increased the results for Measure 8.B.1.4 in 2020 continued to impact the measure during 2021, with 74% of messages for new notifiable disease cases transmitted in HL7 format. While this greatly exceeds the FY 2021 target of 40%, it is unlikely to be sustained at this level when COVID-19 recedes. During the 2021 calendar year, NNDSS processed an average of over 1.8 million new HL7 case notifications each month. Based on the prioritization of COVID-19 response activities by the public health jurisdictions, further implementation of Message Mapping Guides (MMG) for the other conditions has been slow but continues to progress. CDC has decided to maintain the 40% target for FY 2022 and FY 2023.

CDC has made tremendous progress in transmitting notifiable disease messages in HL7 format. As of December 2021, 45 of the 57 reporting jurisdictions have implemented at least one of the new HL7 messages and 34 of the 45 have implemented more than one. Forty three jurisdictions are using NNDSS to send COVID-19 notifications to CDC. Of these, 38 jurisdictions are sending notifications in the HL7 format. In addition to the increase in the percentage of notifiable disease messages transmitted in HL7 format resulting from the COVID-19 response, data transmissions continue to improve and remain much more stable indicating that CDC has achieved a more routine and reliable mode.

With the influx of data modernization funding and the best practices adopted to date, CDC anticipates more states transmitting notifications via HL7 messaging and for states to begin transmitting health data related to sexually transmitted diseases, vector-borne diseases, and foodborne diseases. Efforts in 2022 will focus on modernizing the NNDSS infrastructure to take advantage of cloud-native technology, making the processing of incoming case notifications faster and more stable. As we move beyond 2022, NNDSS will transition to an operations mode that seeks continuous innovation and enhancement while laying the foundation for next generation case-based surveillance.

The National Syndromic Surveillance Program (NSSP) provides local, state, and federal health officials with a near real time system for detecting, understanding, and monitoring health events. By tracking symptoms of patients in emergency departments—before a diagnosis is confirmed—public health can detect unusual levels of illness to determine whether a response is warranted. On a daily basis, local, state, and federal health officials analyze syndromic data to improve their common awareness of health threats over time and across regional boundaries. With this capability, syndromic data can serve as an early warning system for public health concerns such as flu outbreaks and have been used in responses for opioid overdoses, vaping-associated lung disease, Zika virus infection, and natural disasters. Throughout the COVID-19 response, state health officials have used syndromic surveillance data to understand and monitor the spread of the outbreak throughout the general population, targeted populations in high-risk environments such as long-term care facilities, and federal health officials have used syndromic data as an early indicator for local and regional trends and to analyze the outbreak's impact on other sectors of the medical system.

CDC is using a new measure aimed at increasing the percentage of non-federal emergency department facilities that participate in the NSSP to improve the coverage of syndromic surveillance data (Measure 8.B.1.6). In FY 2021, 71% of non-federal emergency department facilities participated in the NSSP. CDC believes the achieved coverage for Emergency Department (ED) visits captured in the NSSP under-estimates the system's true coverage due to bias introduced by COVID-19's impact on non-COVID-19 Emergency Department (ED) procedures and visits resulting in an overall decline of ED visits across the nation. Documentation on this observation can be found in CDC's MMWR Volume 69, Issues No. 23 (June 12, 2020) and No. 25 (June 26, 2020) respectively.

**Performance Measures for Long-Term Objective: Improve access to and reach of scientific public health information among key audiences to maximize health impact**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
8.B.2.1a Increase the electronic media reach of the <i>Morbidity and Mortality Weekly Report</i> (MMWR) through use of mechanisms such as the MMWR website and social media outlets, as measured by page views, social media followers, and email subscribers (Output)	FY 2021: 53,326,660 <sup>1</sup> Target: 21,993,998 (Target Exceeded)	30,000,000	31,500,000	+1,500,000
8.B.2.2b Increase the electronic media reach of CDC Vital Signs through use of Vital Signs-specific metrics, as measured by Vital Signs page views and email subscribers (Output)	FY 2021: 2,267,419 Target: 2,769,831 (Target Not Met)	3,053,739	3,053,739	Maintain

<sup>1</sup> Since 2018, the followers to CDC’s Main Twitter and Facebook accounts were added to this number. They share MMWR content each week.

**Epidemiology Performance Trends:**

During FY 2021, CDC provided critical epidemiological data and recommendations for solving public health problems to more than 161,000 clinicians and public health professionals through an extensive network of electronic communication channels for the Morbidity and Mortality Weekly Report (MMWR). This decline in number of subscribers from FY 2019 is the result of a change in how CDC subscribers are managed Agency-wide. During FY 2021, MMWR published more than 400 reports, a 24% increase from FY 2019. MMWR content is shared widely, with traditional and social media coverage averaging in the top three percent compared with other journals. Webpage views for MMWR increased during FY 2021; thus, MMWR has exceeded its overall target by 70% (Measure 8.B.2.1a). This increase is largely due to the high volume of published reports related to the COVID-19 response. During February 2020–October 2021, MMWR published more than 360 COVID-19 response reports. MMWR expects its reach, as influenced by webpage views, to return to normal once COVID-19 begins to decrease and has set the FY 2022 and FY 2023 targets at 30,000,000.

The COVID-19 reports have been of high quality and have received a tremendous amount of attention, as highlighted by their high Altmetric scores. Of these reports, 75% (269/361) received Altmetric scores of >500. This is notable as any report scoring >222 falls into the top 1% of research outputs tracked by Altmetric. Most of these reports continue to accrue attention weeks after they are released. In addition, COVID-19 reports published through October 2021 already have been cited approximately 19,000 times.

To communicate MMWR science more effectively to external audiences, during FY 2019 MMWR launched new communications guidance for all CDC reports. This guidance provides modern communication strategies for the digital and social media age. This was the first update to MMWR communications guidance in more than 30 years. MMWR also partnered with influential public health partners to share content more effectively with their audiences. These modernized strategies partially explain the substantial increase in web traffic during FY 2020 and FY 2021.

CDC Vital Signs is a monthly science and communication program that targets the public, state and local health departments, healthcare professionals, and policymakers through an MMWR report, web page, and print,

broadcast, social, and electronic media on a specific, important topic. Because of COVID-19, the program did not release any issues in FY 2021. Views of the Vital Signs website remained high, meeting 82% of the FY 2021 target, even when no new issues were released. Because each Vital Signs issue provides the most up-to-date data at release, the meaningfulness of the topic and data endures for several years.

The measure was revised this cycle to measure the electronic media reach of CDC Vital Signs more accurately. The previously used metric included impressions made on five major social media channels. However, *Vital Signs* discovered that these impressions were linked to the CDC website, not the Vital Signs sub-CDC website. This measure was then revised so that the electronic media reach of CDC Vital Signs included only its own sub-website plus Adobe subscriptions to that website (Measure 8.B.2.2b).

Based on the revised measure, we set a five percent increase year-over-year in the target counts for electronic communication to the Vital Signs website alone. It is noteworthy that, in the past year, despite little new content, *Vital Signs* engaged many people who have maintained an active interest in *Vital Signs'* content, offering a testament to the quality and accessibility of this publication.

**Performance Measures for Long Term Objective: Improve the efficiency and accuracy of public health and clinical laboratory testing**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
8.B.3.2c Increase registrations for CDC laboratory education and training courses and events as measured across all learning dissemination platforms (Output)	FY 201: 93,442 Target: 42,715 (Target Exceeded)	61,510	67,661	+6,151

**Laboratory Standards and Services Performance Trends:**

Maintaining a safe and prepared laboratory workforce is vital to the success of the national and global public health response system. CDC creates, delivers, and maintains trainings on topics relevant to the laboratory workforce to build laboratory professionals' competence through laboratory quality, safety, informatics, and emergency preparedness and response capacity-building resources. Laboratory training provides basic continuing education for new laboratory professionals, provides updates or refreshers on current methodology, helps maintain regulatory compliance, and introduces new technology and techniques to improve test procedures.

CDC revised its measure to a more meaningful indicator that reflects the progress towards creating and maintaining a highly competent public health and clinical laboratory workforce. Further, this revised measure is more suitable to tracking incremental change over time and provides a more accurate picture of how many learners access CDC laboratory educational resources than the previous indicator. Through eLearning syndication and using existing and establishing new learning platforms, CDC has initiated a multi-pronged strategy for wide-scale dissemination to expand access to its education and training courses and events to clinical and public health laboratory professionals across the U.S. Monitoring the expansion of overall registrations ensures CDC is effectively reaching intended audiences with critical education and training resources, while also providing insight to improve promotion, outreach, and access strategies.

In FY 2021, CDC delivered more than 120 laboratory systems trainings that included: 52 online (eLearning) courses; one live virtual Training of Trainers course focused on Packaging and Shipping of Dangerous Goods; one virtual reality course focused on biosafety cabinet use; one recurring webinar focused on Bloodborne Pathogens; one recurring virtual seminar focused on Biological Risk Assessment, and recurring live virtual workshops organized by APHL focused on both Mycology and Packaging and Shipping (seven Mycology sessions and 30 Saf-T-Pak sessions). There were 24 offerings of the Bloodborne Pathogens webinar. While the Biological Risk Assessment seminars are traditionally held in-person, seven seminars were offered virtually this year. Overall, 96% of respondents indicated a positive training outcome.

Topics for new trainings are chosen based on regular assessment of the target audience’s training needs and recommendations from CDC laboratory professionals. Staff with extensive instructional design experience tailor the content and format of training resources – from live workshops to on-demand eLearning to virtual reality – to maximize learner engagement. During FY 2021, CDC leveraged a range of promotion tactics (social media posts, presentations at virtual conferences and live meetings) to spread the word on new training resources, particularly those relevant to the emergency response to COVID-19. This approach, coupled with the urgent need for laboratory training during the pandemic contributed to CDC exceeding its target by more than twofold (93,442) on this measure (Measure 8.B.3.2c). In FY 2022, CDC will launch a new learning management system, OneLab REACH (Rapid Education and Capacity-building Hub) tailored specifically to the needs of clinical laboratory professionals. Providing a centralized online hub for CDC-created laboratory training resources should help CDC meet its FY 2022 target for this measure.

**Public Health Workforce and Career Development**

**Performance Measures for Long Term Objective: Develop and implement training to provide for competent, sustainable, and empowered public health workforce able to meet emerging and future health challenges**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
8.B.4.2 Increase the number of CDC trainees in state, tribal, local, and territorial public health agencies <sup>1</sup> (Output)	FY 2021: 462 Target: 294 (Target Exceeded)	294	294	Maintain
8.B.4.4 Increase the number of times CDC’s free accredited courses passed by learners to earn Continuing Education (CE), demonstrating successful achievement of educational content <sup>2</sup> (Output)	FY 2021: 1,291,720 Target: 430,000 (Target Exceeded)	557,000	613,000	+56,000

<sup>1</sup>Includes ALL (new and continuing) CDC PHSS-funded trainees in the Epidemic Intelligence Service (EIS), Laboratory Leadership Service (LLS), Preventive Medicine Residency and Fellowship (PMR/F), Public Health Informatics Fellowship Program (PHIFP), Prevention Effectiveness (PE) Fellowship, Public Health Associate Program (PHAP), and the CDC/CSTE Applied Epidemiology Fellowship.

<sup>2</sup>Measure language updated to clarify the measure. Methodology remains the same.

**Performance Trends:** CDC fellowship programs promote experiential service and mentored learning at the agency and in the field. CDC fellowship programs offer unique experiences in one of many public health critical disciplines, including applied epidemiology, laboratory sciences, Preventive medicine, public health management, and data science. This focus on service while learning allows CDC fellows and trainees to fill critical workforce needs at CDC and in state, tribal, local, and territorial (STLT) public health agencies, while training for careers in public health.

CDC increased the number of fellows and trainees in STLT public health agencies from 333 trainees in FY 2020 to 462 in FY 2021. Increased placements were made possible due to COVID-19 supplemental funding to fellowship programs that place fellows in STLT public health agencies rather than at CDC headquarters (Measure 8.B.4.2). CDC expects trainee placements to return to normal and will maintain current targets for FY 2022 and FY 2023.

Focusing funding on field placement programs offers CDC fellows and trainees an invaluable opportunity to work alongside other professionals across a variety of public health settings. Throughout these training programs, CDC provides hands-on experience that will serve as a foundation for our fellows' public health careers. After completing CDC programs, graduates are qualified to apply for jobs with public health agencies and data shows that the majority of CDC fellowship graduates stay in federal, state, or local public health.

In 2008, the Association of Schools and Programs in Public Health warned that by 2020, "the nation will be facing a shortfall of more than 250,000 public health workers." Unfortunately, the COVID-19 pandemic brought into light the depth of this shortfall and overburdened frontline public health workers. In the next five to ten years, a substantial number of long-time public health workers plan to leave their jobs or retire, taking with them critical knowledge and experience. The next generation of public health professionals needs to be trained and prepared to fill these vacancies. Additionally, the current workforce must stay up-to-date on the latest science, guidelines, and recommendations from CDC to inform both public health and healthcare practice. An effectively trained public health workforce is our first line of defense against disease outbreaks, like COVID-19, natural disasters, and other health threats domestically and globally. CDC designs, develops, and accredits quality learning opportunities and ensures these opportunities are available to the public health and health care workforce. CDC provides continuing education (CE) for seven different professional disciplines, which are required to keep skills and licensures current, and are delivered at little to no cost to the learner. Access to accredited training opportunities is essential for the public health workforce to maintain and improve knowledge and skills for the greatest impact on health outcomes.

The accredited learning opportunities CDC provides to the public health workforce help ensure workers are able to maintain licensure and certification requirements, improve knowledge and skills, and ultimately enhance their overall competency. In FY 2021, CDC awarded over 952,590 free CE credits, contact hours, and units to more than 190,106 unique health professionals who earned CE credits 1,291,720 times resulting in over \$12.3 million in savings to the workforce (Measure 8.B.4.4). Although FY 2021 results were higher than usual due to the COVID-19 response, CDC anticipates continued demand for accredited learning opportunities through the response and has adjusted FY 2023 target accordingly.

## OCCUPATIONAL SAFETY AND HEALTH

### National Occupational Research Agenda (NORA)

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Contextual Indicator	Most Recent Result
9.1.4 Reduce employer reported nonfatal work-related injuries resulting in one or more days from work (per 10,000 FTE)	FY 2020: 82.85

**Performance Measures for Long Term Objective: Conduct research to reduce work-related illnesses and injuries**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
9.1.1b: Increase the effectiveness of occupational safety and health programs by implementing peer review recommendations (Outcome)	FY 2021: 5 out of 5 Target: Score 4 out of 5 or better based on an external review (Target Exceeded)	Score 4 out of 5 or better based on an external review	Score 4 out of 5 or better based on an external review	Maintain

**Performance Trends:** CDC’s role in occupational safety and health is to conduct research and transfer findings into practice through partners and stakeholders, rather than implement workplace safety and health programs. The contextual indicator, focused on non-fatal work-related injuries, is an example of the type of health outcome to which CDC’s research contributes. The national rate of injuries resulting in one or more days away from work per 10,000 FTE (full-time equivalents) has been trending downward for several years, from 104.3 in 2011 to 82.85 in 2020 (Measure 9.1.4). To contribute to further reductions, CDC is focusing its research on high-burden areas such as musculoskeletal disorders (sprains and strains) and motor vehicle crashes and is investigating the potential benefits and risks of emerging technologies such as robots and exoskeletons.

CDC received a five out of five for its new measure to track achievement of a plan to implement recommendations received during the program reviews conducted in FYs 2017-2019 (Measure 9.1.1b). Five NIOSH programs were reviewed by an external panel of experts who provided scores for relevance and impact and a set of specific recommendations for NIOSH to consider. During year one of the plan, CDC conducted focus groups and interviews with researchers, programs, and leadership to assess motivations and barriers to collecting information on the impact of its research and implementing review panel recommendations. CDC reexamined its program review materials to understand why review panels might provide recommendations that are beyond the capacity of programs to implement. The NIOSH Board of Scientific Counselors, a Federal Advisory Committee, will review the plan and score progress each year from FY 2021-2025.

## Other Occupational Safety and Health Research

### Performance Measures for Long Term Objective: Reduce workplace illness, injury, and mortality in targeted sectors

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/-FY 2023
9.2.2e: Achieve and sustain percentage of active underground and surface coal mines in the U.S. that possess NIOSH-approved plans to perform surveillance for respiratory disease (Outcome)	FY 2022: 98% Target: 93% (Target Exceeded)	93%	93%	Maintain
9.2.3c Increase the number of product and manufacturing site audits completed to ensure the quality of NIOSH certified respirators (Outcome)	FY 2021: 445 Target: 250 (Target Exceeded)	250	260	+10
9.2.3d Reduce the percentage of respirable coal mine dust overexposures for the tailgate shearer operator (Outcome)	FY 2022: 2.9% Target: 3.0% (Target Exceeded)	3.0%	3.0%	Maintain
9.2.4 Achieve and sustain the percentage of respondents indicating that NIOSH HHEs helped improve workplace conditions <sup>1</sup> (Outcome)	FY 2020: 83% Target: 90% (Target Not Met)	90%	90%	Maintain
9.B Number of certification decisions issued for personal protective equipment (Output)	FY 2021: 746 Target: 400 (Target Exceeded)	400	425	+25
9.E Number of research articles published in peer-review publications (Output)	FY 2021: 288 Target: 275 (Target Exceeded)	250	250	Maintain
9.K Annual NIOSH website visits (Output)	FY 2021: 14,528,798 Target: 7,000,000 (Target Exceeded)	7,000,000	7,500,000	+500,000

<sup>1</sup> This measure is reported as a five-year average because the number of HHEs requested varies and therefore year-to-year fluctuations are normal and expected.

<sup>2</sup>Subscribers were purged in 2021 resulting in 15,000 lost subscribers. FY 23 target was adjusted to account for this loss.

## Performance Trends:

### Reducing Hazardous Exposures

Exposure to coal mine dust causes various pulmonary diseases, including coal workers' pneumoconiosis and Chronic Obstructive Pulmonary Disease (COPD)<sup>290</sup>. CDC works with coal mines in the U.S. to develop plans to perform surveillance for pneumoconiosis and COPD. In FY 2022, 98% of active underground and surface coal mines in the U.S. had NIOSH-approved plans to perform surveillance for respiratory disease (Measure 9.2.2e). The targets remain at 93% percent as CDC works with mines to incorporate spirometry into their plans, a requirement recently added by the Mine Safety and Health Administration (MSHA).

Tailgate shearer operators traditionally have shown the greatest percentage of samples that exceed allowable limits for dust exposure because they are positioned in close proximity to the longwall cutting machine (shearer), where there are high levels of dust (Measure 9.2.3d). The percentage of respirable coal mine dust overexposures for tailgate shearer operators dropped from 13.1% in FY 2017 to 2.9% in FY 2022, which can be attributed to use of the continuous personal dust monitor (CPDM) and the lower permissible level of coal dust exposure (2.0 to 1.5 milligrams per cubic meter). The near real-time feedback from the CPDM allows miners to adjust their work practices or operating parameters to lower dust levels if they are approaching the limit.

An estimated 20 million workers use Personal Protective Equipment to protect themselves from death, disability, and illnesses. CDC's Personal Protective Technology program provides expertise from many scientific disciplines to advance federal research on respirators and other personal protective technologies for workers. In FY 2021, CDC completed 445 product and manufacturing site audits exceeding the target (Measure 9.2.3c). The ongoing COVID-19 pandemic continued to cause a disruption in CDC's routine site audit activities for 2021 as some international countries and some U.S. states imposed strict travel restrictions. CDC continued to test international and stockpiled respirators to ensure they performed adequately to protect U.S. workers who were using these products. These efforts contributed to improved worker protection as 223 respirators from 50 different manufacturers were assessed. This accounts for the increased number being reported in 2021. Since the target of 250 product and manufacturing site audits has been exceeded over the last five years, the target for FY 2024 has been increased to 260.

Additionally, FY 2021 data demonstrate improvements in the inventory and quality of respiratory protection for workers in all industry sectors through 746 certified respirator decisions, an eight percent decrease from FY 2020 but still 35% higher than FY 2019 (Measure 9.B). COVID-19 created an urgent need to increase the supply of NIOSH-approved respirators and CDC rose to meet this challenge, significantly increasing the rate of approval decisions for devices submitted. Notable parts of this effort include adding more than 29 new manufacturing sites for current approval holders and evaluating 26 domestic and three Canadian prospective first-time applicants for conformance to the requirements to become a NIOSH approval holder. Since the target of 400 certified respirator decisions has been exceeded over the last five years, the target for FY 2024 has been increased to 425.

CDC responds to employer, employee, and union requests for workplace Health Hazard Evaluations<sup>291</sup> (HHEs). CDC assesses the workplace and employees' health by reviewing records and/or conducting on-site testing. Based on the findings, CDC recommends ways to reduce hazards and prevent work-related illness. CDC conducts a follow-up survey of HHE participants to evaluate the program, including whether workplace conditions improved as a result of CDC's recommendations (Measure 9.2.4). The five-year average percentage of respondents who felt NIOSH helped improve workplace conditions was 83% in 2020, ten percentage points lower than the previous year mostly due to a very low response rate. In an effort to increase participation, questionnaires were sent to recipients on multiple occasions in multiple forms. COVID-19 and business closures

<sup>290</sup> <https://www.cdc.gov/copd/index.html>.

<sup>291</sup> [http://www.cdc.gov/niosh/hhe/pdfs/HHE\\_2014\\_Annual\\_Report.pdf](http://www.cdc.gov/niosh/hhe/pdfs/HHE_2014_Annual_Report.pdf).

and changes in personal addresses may have had an impact on response rates as a large number of questionnaires were returned with unavailable addresses. Due to COVID-19, very few site visits were conducted in 2020. Instead of conducting typical HHEs, CDC staff participated in COVID field deployments and provided technical assistance.

### **Expanding Occupational Safety and Health Influence**

CDC communicates current research and recommendations on occupational safety and health (OSH) with its partners and stakeholders through several avenues. These include its website and social media presence, research publications and related promotions, and federal cross-agency and cross sector committee membership.

- **Website:** There were 14,528,798 visits to CDC's NIOSH website in FY 2021 a decrease from FY 2020 but still approximately double the number from FY 2019 (Measure 9.K). Much of the traffic increase was related to COVID-19. While the number of web visits is expected to level off in the future as some traffic moves from the web to mobile applications and videos, the target for FY 2024 has been increased from 7,000,000 visits to CDC's NIOSH website to 7,500,000.
- **Social Media:** NIOSH's Science Blog provides a plain language summary of CDC's OSH research findings or new guidance and provides links to more detailed information and other resources elsewhere on the NIOSH website. The number of subscribers has fluctuated since a change in FY 2018 in how CDC subscribers were managed agency wide. However, this metric is not as meaningful as engagement metrics like email open rate, which are not feasible at this time. Therefore, CDC has retired the measure. Overall views of the NIOSH Science Blog are still captured in Measure 9.K: Annual NIOSH website visits.
- **Publications:** CDC published 288 research articles in peer-reviewed publications in FY 2021, a similar level as recent years (Measure 9.E). Fewer publications are expected in FY 2021 and beyond, as CDC conducts fewer occupational safety and health studies due to the retirement of prolific senior scientists.
- **Outreach:** CDC also produced 170 information products to expand the reach of many of these publications in FY 2021 with other audiences, such as employers, workers, unions, public health departments, and the public. In FY 2021 CDC published a technical report that summarizes research to improve science-based recommendations on the use of filtering facepiece respirators with an exhalation valve. While this type of respirator increases the comfort and wear time for the wearer, the exhalation valve raises concern due to the risk of spreading disease in particle emissions through the valve. This research confirms that filtering facepiece respirators can reduce particle emissions at levels similar to other face coverings, such as surgical masks, and can be modified to further reduce particle emissions.
- **Consensus standards:** In FY 2021, CDC participated more than 70 voluntary consensus standards committees that often made use of CDC research findings related to occupational safety and health. Voluntary consensus standards committees are groups of industry and government representatives that work together to decide on rules of standardization to maximize compatibility, interoperability, safety, and quality. For example, in in FY 2021, NIOSH was vice chair of the committee that published ANSI/ISEA Z87.62-2021, the first industry standard to for eye and face protectors used in occupational settings where spray and spurt biological hazards pose a risk. Previously, a gap between safety glasses and the wearer's cheek allowed bloodborne pathogens and debris to sometimes bypass the safety glasses. The new standard requires eyewear that prevents this, helping to protect millions of healthcare workers, first responders, and veterinary workers.

## GLOBAL HEALTH

### Global HIV/AIDS

**Performance measures for Long Term Objective: Partner with ministries of health, international and local partners and other United States Government (USG) agencies to achieve the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) goals of reducing the worldwide rate of new HIV infections and saving lives by focusing on highly effective, evidence-based HIV interventions and quality laboratory service: (1) antiretroviral treatment for prevention and health benefits, (2) voluntary medical male circumcision, and (3) laboratory and point of care testing site quality improvement programs**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
10.A.1.5 Increase the number of adults and children with HIV infection receiving antiretroviral therapy (ART) <sup>1</sup> (Output)	FY 2021: 11,749,307 Target: 10,489,699 (Target Exceeded)	9,500,154	12,098,877	+2,598,723
10.A.1.7 Increase the number of males age 15 and over circumcised as part of the minimum package of male circumcision for HIV prevention services <sup>2</sup> (Output)	FY 2021: 1,361,928 Target: 700,000 (Target Exceeded)	700,000	700,000	Maintain
10.A.1.8 Increase the total number of laboratories and Point of Care Testing sites enrolled in a continuous quality improvement program (Output)	FY 2021: 10,774 Target: 8,543 (Target Exceeded)	10,050	10,050	Maintain

<sup>1</sup> Targets and results reflect all people on ART, not just those with advanced HIV infection.

**Performance Trends:** Global HIV funding supports CDC’s essential role in implementing the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) in more than 45 countries and regions. Reaching epidemic control in the fight against HIV is a priority for the U.S. Government. Preventing new HIV infections is achievable and critical to stem the global HIV epidemic, even in the absence of an HIV vaccine.

Through its work with PEPFAR and in-country partners, CDC is helping reduce AIDS-related deaths by focusing on accountability, quality, and the use of data to improve decision-making and to enhance program focus.

In partnership with local governments and Ministries of Health in 40 countries, CDC-supported programs helped provide ART to 11,749,307 men, women, and children living with HIV, of the 18.96 million supported by PEPFAR (Measure 10.A.1.5). Even through the COVID-19 pandemic, CDC met and exceeded its treatment target for FY 2021, equating to approximately 62% of people supported by PEPFAR on treatment. CDC headquarters staff will continue to work with in-country CDC staff and partners to find those who are HIV positive and link them to treatment. CDC will do this through:

- (1) Continued collaboration with Ministries on planning and implementing same-day or same-week treatment initiation and increasing access to self-testing;<sup>292</sup>

<sup>292</sup> <https://www.cdc.gov/globalhivtb/who-we-are/resources/keyareafactsheets/scaling-up-hiv-care-and-treatment.pdf>.

- (2) Implementing strategies, such as differentiated service delivery models like multi-month dispensation and spacing of clinical appointments for patients who are succeeding on treatment and have suppressed viral loads, that declutter waiting rooms and increase continuity of treatment and adherence to antiretroviral therapy;
- (3) Ensuring accessibility and quality of viral load testing for treatment monitoring and management;
- (4) Expanding opportunities for antiretroviral optimization, providing for easier and less resistant treatment options for adults and children.
- (5) Expanding opportunities for the identification and management of co-occurring communicable (e.g., TB) and non-communicable diseases affecting people living with HIV to decrease morbidity and mortality and improve their well-being.

In FY 2021, CDC-supported partners in 13 high priority PEPFAR countries performed 1,361,928 voluntary medical male circumcisions (VMMCs) of males aged 15 and older by a qualified clinician, exceeding the FY 2021 target (Measure 10.A.1.7). CDC collaborates with country programs to scale-up VMMC by expanding task shifting, increasing the number of dedicated VMMC teams, and supporting mobile services. CDC continues to focus on safety and has developed an adverse events management and reporting guide for use in both VMMC service programs and community health facilities which may see clients in follow up, actively analyzes notifiable adverse events submitted to PEPFAR’s notifiable adverse events surveillance system, and routinely conducts quality assurance assessments to PEPFAR-supported sites. In addition, CDC continues to help programs address rare cases of tetanus among VMMC clients and continues to promote adapting service delivery programs to reach men at higher risk of HIV. CDC will continue to focus on outreach services to hard-to-reach populations in the highest burden regions and evaluating sustainable program delivery models for programs reaching their established goals of circumcising at least 90% of men in their communities.

Laboratory testing is the only way to diagnose and confirm existence of disease, gauge if medications are working, and measure overarching vital indicators. Point of Care Testing (POCT) sites allow traditional laboratory testing to be completed near the point of care or near the patient. CDC supports a Continuous Quality Improvement (CQI) process for laboratories and Point of Care Testing (POCT) sites to support accuracy of results. The CQI process works with sites to improve quality by continuously evaluating how they work and identifying ways to improve their processes. This reduces waste, increases efficiency, and increases staff (internal) and patient (external) satisfaction. The more laboratory and POCT sites that participate in CQI processes and receive accreditation or become certified, the more trust is built into the system. Trust in the accuracy of tests allows those who are found to be HIV positive to be immediately placed on medications which reduces the virus in the blood, lowers opportunity for continued HIV transmission, and moves CDC closer to its goal of controlling the HIV epidemic. By the end of 2021, CDC supported an enrollment of 10,774 laboratories or POCT sites in CQI programs globally, exceeding the FY 2021 target (Measure 10.A.1.8). In future years, as countries begin to place more local resources into fighting their HIV epidemics, additional sites will be transitioned.

CDC provides scientific expertise to support all CDC Global HIV countries working directly with Ministries of Health to achieve and sustain HIV epidemic control and address the needs of the nearly 11.8 million people receiving antiretroviral treatment. In FY 2023, CDC anticipates increasing technical assistance services, including reestablishing any technical assistance relationships lost during the COVID-19 pandemic.

## **Global Tuberculosis (TB)**

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**Performance measures for Long Term Objective: Partner with ministries of health, international and local partners, and other United States Government (USG) agencies to speed up progress in the fight against TB worldwide, by focusing on highly effective, evidence-based TB interventions, to include reaching the high-risk HIV population**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
10.G.1 Increase the number of adults and children with TB and HIV infection receiving antiretroviral therapy (ART) (Output)	FY 2021: 110,364 Target: 105,151 (Target Exceeded)	105,151	105,151	Dec 31, 2024

**Performance Trends:** Despite being preventable and curable, TB remains the world’s second deadliest infectious disease, behind COVID-19.. For the first time in over a decade, the number of people who died from TB increased in 2020 – 1.5 million people died from TB, including 214,000 people living with HIV (PLHIV). Additionally, TB diagnosis fell by 18 percent, from 7.1 million in 2019 to 5.8 million in 2020. Nearly one fourth of the world’s population – 1.7 billion people – are infected with TB bacteria, with an estimated 10 million becoming ill with the disease in 2020. Effectively addressing TB[1] in the United States requires global TB intervention. CDC plays an important role in this effort and more broadly in the WHO End TB Strategy. CDC remains an integral part of the U.S. Government’s efforts to address global TB through PEPFAR, the Global Health Security Agenda<sup>293</sup> (GHSa), and the National Strategy for Combating Antibiotic-Resistance Bacteria<sup>294</sup>.

To speed up progress against TB, CDC is developing best practices in laboratory science to diagnose TB, supporting cutting-edge research to create better TB screening tests, helping to create the global roadmap to stop TB in children, and establishing effective strategies to end TB and other infectious disease transmission in health facilities. Access to and initiation of antiretroviral therapy (ART) for those found to be living with HIV and TB is imperative to reducing the burden of disease, and in an effort to support this strategy, CDC’s global TB program initiated ART with 110,364 people living with HIV (PLHIV) and TB in FY 2021 (Measure 10.G.1). The global TB program exceeded the FY 2021 target. To increase the number of people on ART, CDC supports the provision of ART within TB medical clinics as an integrative approach, providing frequent TB testing of HIV positive clients, and providing TB treatment at HIV treatment centers. In a continued effort to end TB, CDC continues to focus on TB preventive treatment (TPT) for PLHIV, TB contacts, and young children. Since 2017, CDC has directly supported 6,073,576 cumulative TPT completions. With the COVID-19 pandemic, TB clinics in many countries were significantly slowed in their ability to provide treatment support. CDC incorporated TPT and TB treatment into differentiated service delivery models often found in HIV clinics. This switch aided in a global acceleration of TPT access and helped to ensure the meeting and exceeding of the UN High Level Meeting on TB’s targets of 6 million PLHIV on TPT.

## Global Immunization

Contextual Indicator	Most Recent Result
10.B.1.3 Reduce the number of countries in the world with endemic wild polio virus (Outcome)	FY 2020: 2

**Performance measure for Long Term Objective: Help domestic and international partners achieve World Health Organization's goal of global polio eradication**

<sup>293</sup> <https://www.cdc.gov/globalhealth/security/ghsagenda.htm>.

<sup>294</sup> <https://www.hhs.gov/sites/default/files/carb-national-action-plan-2020-2025.pdf>.

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
10.B.1.2a Increase the number of children vaccinated with Polio Vaccine as a result of non-vaccine operational support funding to implement national or subnational supplemental immunization campaigns in Asia, Africa, and Europe (Output)	FY 2021: 15,000,000 Target: 5,000,000 (Target Exceeded)	5,000,000	6,000,000	+1,000,000

**Performance measure for Long Term Objective: Help domestic and international partners achieve World Health Organization's goal of global polio eradication**

Contextual Indicator	Most Recent Result
10.B.2.1 Reduce the number of global measles-related deaths (Outcome)	FY 2020: 60,700

**Performance measures for Long Term Objective: Work with global partners to reduce the cumulative global measles-related mortality by 95% compared with CY 2000 estimates (baseline 777,000 deaths) and to maintain elimination of endemic measles transmission in all 47 countries of the Americas**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
10.B.2.2 Maintain number of non-import measles cases in all 47 countries of the Americas as a measure of maintaining elimination of endemic measles transmission (Outcome)	FY 2020: 1 Target: 0 (Target Not Met)	0	0	Maintain
10.B.2.3 Increase the number of countries that achieve at least 90% immunization coverage in children under 1 year of age for DTP3 (three shot series of vaccines covering diphtheria, tetanus, and pertussis) (Outcome)	FY 2020: 79 Target: 143 (Target Not Met)	143	143	Maintain

**Performance Trends:** Global immunization funding advances polio eradication and measles mortality reduction and elimination efforts. CDC is the lead technical monitoring agency for the Independent Monitoring Board of the Global Polio Eradication Initiative<sup>295</sup> (GPEI). The number of countries reporting endemic wild poliovirus (WPV) dropped to two in FY 2020 (Measure 10.B.1.3).

Countries at highest risk for polio importation and circulating vaccine-derived poliovirus outbreaks have low routine immunization coverage levels (less than 80%), sub-optimal outbreak response, and weak health systems. CDC's expanded measure of polio vaccination (Measure 10.B.1.2a) improves accuracy by measuring children vaccinated by all types of polio vaccine. It reflects changes to the composition of the global supply of polio vaccine and CDC's enhanced financial support for operational costs of supplemental vaccination rounds, including social mobilization. In FY 2021, CDC vaccinated 15,000,000 children with polio vaccine in Asia, Africa,

<sup>295</sup> <http://www.polioeradication.org/>.

and Europe, exceeding the targets by 10 million children. The increased number of ongoing outbreaks of vaccine-derived poliovirus across Africa and parts of Southeast Asia resulted in an increased need for special vaccination campaigns to compensate for inadequate coverage by routine immunization systems in high-risk countries. However, CDC does not anticipate the same level of performance in subsequent years but has increased FY 2024 targets to increase by 1 million. CDC's lead role as one of the five core partners in the Global Polio Eradication Initiative (GPEI) will be limited which will eliminate the capacity to verify interruption of poliovirus circulation in 10 high-risk countries. However, CDC will continue to work with partners to reach its vaccination targets, focusing efforts on those areas that have been historically difficult to reach due to security issues and/or political instability.

Reducing cumulative global measles-related mortality by 95% compared with CY 2000 estimates presents unique challenges. Since CY 2008, CDC's collaboration with the Pan American Health Organization has helped ensure cases are detected and contained when measles cases are imported to the Americas (Measure 10.B.2.2). The collapse of public health systems in Venezuela resulted in that country re-establishing endemic transmission of measles in late 2018. The Measles and Rubella Initiative updated the formula for calculating global measles mortality in 2018 with the following parameters: new measles vaccination coverage and annual country measles surveillance data. The updated formula uses and is responsive to annual trends in surveillance data, allowing the model to reflect measles outbreaks better. The actual results from 2017 onward reflect the improved measurement. Measles mortality fell to 60,700 in 2020<sup>296</sup>, representing a 94% decrease since FY 2000 (Measure 10.B.2.1). However, measles immunization activities worldwide were significantly impacted by the COVID-19 pandemic as campaigns around the world were delayed and staff were diverted to support COVID-19 response efforts. Despite 193 (99%) countries having access to standardized quality-controlled laboratory testing, measles surveillance deteriorated in 2020. The number of specimens submitted was the lowest in over a decade. Measles immunization coverage declined in all but one WHO region with 22.3 million infants not receiving their first dose of measles-containing vaccine (MCV1) in 2020 - an increase of 3 million from 2019. This is the largest annual increase of infants missing MCV1 in 20 years. Large and disruptive measles outbreaks were reported in 26 countries; 17 of which occurred in Africa. Measles outbreaks illustrate weaknesses in immunization programs more broadly. As a result, vigorous efforts are urgently needed to expand and strengthen immunization services and surveillance systems to prevent disease and death before large-scale outbreaks and preventable deaths occur, especially as the world reopens from COVID-19-related lockdowns. CDC is working closely with its partners to implement improvements to the quality of the supplemental immunization activities and target efforts to areas with high measles-related mortality.

The number of countries that achieve at least 90% immunization coverage in children under one year of age for DTP3 (third dose diphtheria, tetanus, pertussis vaccine) is the globally accepted performance indicator for national immunization programs. The number of countries meeting this coverage threshold for DTP3 decreased from 125 in FY 2019 to 79 in FY 2020 (Measure 10.B.2.3). The decrease comes from 35 countries that did not report data in 2020 due to COVID-19-related disruptions, and from other countries that were not able to maintain gains from recent years, falling below the 90% coverage level. Ten countries report coverage of 87-89%, indicating how close some nations are to reaching the target. Globally, the COVID-19 pandemic resulted in a major decrease in global DTP3 coverage from 86% in 2019 to 83% in 2020. To assist both countries who struggle to maintain gains and those that struggle to reach the 90% target, CDC is conducting evaluations to study supply and demand factors that can impact and increase coverage.

CDC's administrative measure will be discontinued in FY 2024 as part of agency-wide streamlining efforts. CDC will continue efforts to minimize administrative overhead while maximizing direct spending for field-related activities.

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<sup>296</sup> Dixon MG, Ferrari M, Antoni S, et al. Progress Toward Regional Measles Elimination — Worldwide, 2000–2020. *MMWR Morb Mortal Wkly Rep* 2021;70:1563–1569. DOI: <http://dx.doi.org/10.15585/mmwr.mm7045a1>

## Global Health Protection

**Performance measures for Long Term Objective: To increase the number of public health staff skilled in epidemiology and surveillance in low and middle-income countries**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
10.F.1c Number of cumulative Field Epidemiology Training Program (FETP) – Frontline graduates (Output)	FY2021: 13,537 Target: 12,435 (Target Exceeded)	15,974	16,786	+812
10.F.1d Number of cumulative Field Epidemiology Training Program (FETP) – Intermediate and FETP – Advanced graduates (Output)	FY2021: 6,954 Target: 6,780 (Target Exceeded)	7,449	7,631	+182

**Performance Trends:** International Field Epidemiology Training Programs (FETP) are recognized worldwide<sup>297</sup> as an effective means to strengthen countries’ capacity in surveillance, epidemiology, and outbreak response. These graduates strengthen public health capacity so individual countries are able to transition from U.S.-led global health investments to more long-term host country ownership. Frontline is a three-month program that aims to increase the number of capable public health workers in a community setting. Intermediate is a nine-month program for mid-level health officials, and Advanced is a two-year, intensive program that aims to prepare leaders for work at the national level. All three tiers help countries meet International Health Regulation guidelines. In FY 2021, there were 13,537 Frontline program graduates and 6,954 Intermediate/Advanced program graduates. By tracking the number of people who graduate from FETP – Frontline and Intermediate/Advanced programs every year, CDC can better gauge its impact on developing other countries’ abilities to prevent, detect, and respond to disease outbreaks.

## Parasitic Diseases and Malaria

Contextual Indicators	Most Recent Result
10.C.1 Increase the percentage of children under five years old who slept under an insecticide-treated bed net the previous night in PMI target countries <sup>1</sup> (Outcome)	FY 2021: 54.5% (median)

<sup>1</sup>PMI was implemented in each of the 19 focus countries by 2012. Therefore, starting in FY 2014, data from all 19 countries were included to calculate the median, using the most recent estimate available from each country.

**Budget Output Measure for Long Term Objective: Decrease the rate of deaths from all causes in children under five in the President’s Malaria Initiative (PMI) target countries**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
10.C.A The number of CDC authored publications that inform the global evidence for malaria control and prevention programs (Output)	FY 2021: 76 Target: 155 (Target Not Met)	155	155	Maintain

297 Traicoff D et al. 2015. Strong and flexible: Developing a three-tiered curriculum for the Regional Central America Field Epidemiology Training Program. *Pedagogy in Health Promotion* 1(2): 74–82. <http://php.sagepub.com/content/1/2/74.full.pdf+html>.

**CDC Performance Measure for Long Term Objective: To deliver timely and accurate reference diagnostic laboratory services for the detection of parasites in specimens submitted by domestic and international public health partners to CDC**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
10.C.4 The percentage of laboratory test results reported within the expected turn-around time upon receipt by CDC labs (Outcome)	FY 2021: 96% Target: 90% (Target Exceeded)	90%	90%	Maintain

**Performance Trends:** Malaria prevention and treatment tools are among the most cost-effective interventions available to improve global maternal and child health and survival. CDC’s research informs the development of new tools to manage and mitigate threats from drug and insecticide resistance, guides future program and policy decisions, and builds the capacity of host country governments through strategic partnerships.

The President’s Malaria Initiative<sup>298</sup> (PMI), which is led by USAID and co-implemented together with CDC, has been scaling up the use of malaria prevention and treatment tools since 2005, and currently works in the Greater Mekong Subregion and in 24 countries in sub-Saharan Africa.

The percentage of children under five years old who slept under an insecticide-treated bed net the night before decreased slightly to 54.5% in FY 2021 (Measure 10.C.1). National surveys are routinely conducted every two to three years which limits direct comparison from one year to the next. While only one PMI country—Niger—has achieved the 85% goal, four additional countries have reported having over 65% of children under five years sleeping under an insecticide-treated bed net the night before. PMI anticipates this trend will continue the longer countries are part of PMI and pursue full scale-up of interventions.

CDC continues to develop global policy documents, guidelines, and peer-reviewed scientific publications. In addition to the 16th Annual PMI Report to Congress<sup>299</sup>, CDC co-authored reports such as "Association of *Plasmodium falciparum* kelch13 R561H genotypes with delayed parasite clearance in Rwanda: an open-label, single-arm, multicentre, therapeutic efficacy study<sup>300</sup>" which shows how CDC scientists—alongside partners—used next-generation tools and techniques to confirm partial artemisinin drug resistance in Rwanda, leading to better recommendations for malaria treatment. CDC also co-authored "*Anopheles stephensi* Mosquitoes as Vectors of *Plasmodium vivax* and *falciparum*, Horn of Africa, 2019<sup>301</sup>" describing the spread of *An. stephensi* across the Horn of Africa which threatens to increase the risk of malaria within urban areas. CDC and PMI are working to learn how and where *An. stephensi* is spreading, how to control it most effectively, and strongly support WHO’s call for intensified surveillance and targeted vector control. The CDC co-authored article "Safety, immunogenicity and efficacy of PfSPZ Vaccine against malaria in infants in western Kenya: a double-blind, randomized, placebo-controlled phase 2 trial<sup>302</sup>" showed that administration of the PfSPZ vaccine by direct venous inoculation was well tolerated in infants; however, there was no significant vaccine effectiveness at 6 months in infants. These vaccine regimens will likely not be pursued further in this age group. This trial

<sup>298</sup> <http://www.pmi.gov/>.

<sup>299</sup> [U.S. President’s Malaria Initiative 16th Annual Report to Congress \(d1u4sg1s9ptc4z.cloudfront.net\)](https://www.pmi.gov/16th-annual-report-to-congress)

<sup>300</sup> [Association of Plasmodium falciparum kelch13 R561H genotypes with delayed parasite clearance in Rwanda: an open-label, single-arm, multicentre, therapeutic efficacy study - The Lancet Infectious Diseases](https://www.thelancet.com/journal/S1473-3099(21)00000-0)

<sup>301</sup> [Anopheles stephensi Mosquitoes as Vectors of Plasmodium vivax and falciparum, Horn of Africa, 2019 - Volume 27, Number 2—February 2021 - Emerging Infectious Diseases journal - CDC](https://www.cdc.gov/mmwr/preview/mmwrhtml/6702a1.htm)

<sup>302</sup> [Safety, immunogenicity and efficacy of PfSPZ Vaccine against malaria in infants in western Kenya: a double-blind, randomized, placebo-controlled phase 2 trial | Nature Medicine](https://www.nature.com/articles/s41591-021-12111-1)

nonetheless paved the way for new trials of novel interventions, such as monoclonal antibodies against malaria, to be tested at this site.

The number of peer-reviewed papers published decreased slightly from 82 in FY 2020 to 76 in FY 2021, which did not meet the target (Measure 10.C.A). All publications contribute to growing the evidence base to support policy and program needs. CDC anticipates some variation in the number of publications from year to year based on the publication process and the timelines for study initiation, completion, and data analysis, as well as competing demands such as the COVID-19 response. CDC's malaria researchers authored (or co-authored) an additional 27 publications in FY 2021 in support of CDC's COVID-19 response and other public health threats.

As a significant health concern in the U.S., malaria and other parasitic diseases have a tremendous impact on global morbidity and mortality, due to increased international travel, importations, and domestically acquired infections. CDC's parasitic disease labs serve as global and national resources for ensuring efficient and high-quality analyses, which are essential to timely and accurate diagnosis and treatment. In FY 2021, CDC analyzed and reported results for 96% of submitted specimens in a timely manner (within the expected turnaround times posted in the CDC test directory for each test) exceeding the target of 90% (Measure 10.C.4). Results reflect 11 months of diagnostic testing (October 1, 2020—August 31, 2021). In September 2021, CDC's Parasitic Diseases Laboratory paused all diagnostic testing operations for parasitic diseases to implement laboratory system improvements. CDC is utilizing a phased, prioritized approach for bringing tests back online. CDC webpages are routinely updated to reflect the list of tests that have resumed to date.

## PUBLIC HEALTH PREPAREDNESS AND RESPONSE

### State and Local Preparedness and Response Capability

**Performance Measures for Long Term Objective: Enhance and sustain preparedness and response capability across state, local, and territorial health departments**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
13.5.3 Increase the percentage of public health agencies that directly receive CDC Public Health Emergency Preparedness funding that can convene, within 60 minutes of notification, a team of trained staff that can make decisions about appropriate response and interaction with partners (Outcome)	FY 2021: 96% Target: N/A <sup>1</sup>	96%	96%	Maintain

<sup>1</sup> Reporting requirement was waived due to COVID-19. Data will not be reported for FYs 2019, 2020, and 2021.

**Performance Trends:** CDC uses Public Health Emergency Preparedness (PHEP) recipient-reported data to aid jurisdictions in identifying preparedness gaps and developing targeted strategies to improve performance across operations. The ability to assemble key staff for timely decision-making and the establishment of effective incident management structures are essential components of a public health emergency response.

CDC has modified FY 2019, FY 2020, and FY 2021 PHEP program requirements as a result of the current COVID-19 pandemic response underway in the 62 PHEP jurisdictions. To support this critical work and reduce recipient burden, CDC has integrated PHEP planning requirements with COVID-19 pandemic response activities, allowing recipients to use their response to the current public health incident to demonstrate their preparedness capabilities. All jurisdictions are supporting active EOC activations. The funds related to measure ID 13.5.3 are spent to support these EOC activations which includes the daily assembly of their incident management (IM) roles for the ongoing COVID-19 response by maintaining their emergency response operations, coordination, etc.

**Performance Measures for Long Term Objective: Integrate and enhance existing surveillance systems at the local, state, national, and international levels to detect, monitor, report, and evaluate public health threats**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
13.1.3 Increase the number of Laboratory Response Network (LRN) member laboratories able to use their current Laboratory Information Management System (LIMS) for LRN-specific electronic data exchange (Output)	FY 2021: 57 Target: 63 (Target Not Met but Improved)	65	65	Maintain

**Performance Trends:** Laboratory results are a critical component of public health practice and help guide decisions during public health response. To support early detection and response activities, public health laboratories that are members of the Laboratory Response Network (LRN) must have the capacity to share standard electronic data in real-time with CDC. Local, county, and state public health laboratories have more

widely adopted Electronic Laboratory Reporting (ELR), using standardized HL7 codes for data exchange with partners.

To accomplish the goal of increasing the number of LRN member laboratories that use Laboratory Information Management System (LIMS) for LRN-specific electronic data exchange (Measure 13.1.3), CDC provides technical assistance and funding to LRN member laboratories to update their LIMS and data messaging systems to facilitate ELR HL7 messaging. LRN laboratories are migrating to new data reporting systems. This measure will be updated to reflect those changes. Challenges to increasing the number of LRN laboratories that can submit data to CDC using HL7 messages has been largely due to competing priorities within health departments, especially the national response to the COVID-19 pandemic and mpox responses and limited staff and expertise. Typically, most laboratories have only one or two dedicated informatics staff who are focused on maintenance and upgrades to existing systems and implementation of new data flows. Additionally, the LRN Chemical Threats (LRN-C) program is revising their data requirements which has impacted LRN-C laboratories' willingness to implement ELR for LRN-C. CDC plans to retire and replace this measure to reflect the current strategy for LRN electronic data exchange, which will further standardize reporting requirements.

The National Syndromic Surveillance Program (NSSP) provides local, state, and federal health officials with a near real time system for detecting, understanding, and monitoring health events. Throughout the COVID-19 response, state health officials have used syndromic surveillance data to understand and monitor the spread of the outbreak throughout the general population, targeted populations in high-risk environments such as long-term care facilities and federal health officials have used syndromic data to analyze the outbreak's impact on other sectors of the medical system.

**Performance Measures for Long Term Objective: Enhance and sustain nationwide and international laboratory capacity to gather, ship, and screen and test samples for public health threats and to conduct research and development that lead to interventions for such threats**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
13.3.1 Sustain the percentage of Laboratory Response Network (LRN) laboratories that have demonstrated ability to rapidly detect select biological threat agents (Output)	FY 2021: 96% Target: 92% (Target Exceeded)	92%	92%	Maintain

**Performance Trends:** Laboratory Response Network (LRN) challenge panel program ensures laboratories within the network have the ability to rapidly identify biological threat agents. This includes performing LRN assays using agent-specific testing algorithms and available electronic resources to submit results. In FY 2021, 96% of LRN laboratories passed the challenge panel on the first attempt (Measure 13.3.1), exceeding the target (92%). Future targets will remain fixed at 92% which provides CDC with sufficient confidence in the capabilities of the LRN network.

## CDC-WIDE ACTIVITIES AND PROGRAM SUPPORT

### Buildings and Facilities

**Performance Measures for Long Term Objective: Improve efficiency and sustainability of CDC Facilities**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
12.E.2 Increase the percent of CDC facilities (10,000 square feet and above) that meet the Guiding Principles for High Performance and Sustainable Federal Buildings (Efficiency)	FY 2021: 29.6% Target: 15% (Target Exceeded)	TBD <sup>1</sup>	TBD <sup>1</sup>	TBD <sup>1</sup>
12.E.1a Improve energy (E) consumption per square foot <sup>1</sup> (Efficiency)	FY 2021: 29.0% Target: 30% (Target Not Met but Improved)	TBD <sup>1</sup>	TBD <sup>1</sup>	TBD <sup>1</sup>
12.E.1b Improve water (W) consumption per square foot (Efficiency)	FY 2021: 37.2% Target: 26% (Target Exceeded)	TBD <sup>1</sup>	TBD <sup>1</sup>	TBD <sup>1</sup>

<sup>1</sup>As advised by HHS: metrics and targets are expected to be revised by EO 14057: Catalyzing America’s Clean Energy Economy Through Federal Sustainability Executive Order issued on 12/8/21. Data will be provided when guidance is available. EO 14057 Implementing instructions provided by CEO in May 2022 and distributed via HHS do not include revised annual targets for Energy, Water, or Sustainable buildings. CDC has been advised that these targets are still being formulated.

**Performance Measures for Long Term Objective: Improve CDC's Buildings and Facilities processes and performance<sup>1</sup>**

Measure	Most Recent Result and Target	FY 2023 Target <sup>2</sup>	FY 2024 Target <sup>2</sup>	FY 2024 +/- FY 2023
12.2.1c Improve Condition Index (CI), as measured by the ratio of the functional replacement value (FRV) of an asset with its backlog of maintenance and repair (BMAR) needs (Output)	FY 2021: 74.87 Target: 90 (Target Not Met but Improved)	90	90	Maintain
12.2.1d Reduce non-mission dependency, as measured by the percentage of real property assets that are not deemed directly necessary to support the Agency's mission (Output)	FY 2021: 0.96% Target: 2% (Target Exceeded)	2%	2%	Maintain

12.2.1e Improve building utilization <sup>3</sup> (Output)	FY 2021: 6.92% Target: 5% (Target Not Met)	5%	5%	Maintain
12.2.1f Improve buildings and facilities operating costs (Output)	FY 2021: \$13.91/sq. ft. Target: \$10.29/sq. ft. (Target Not Met)	\$10.29/sq. ft	\$10.29/ sq. ft	Maintain

<sup>1</sup> Targets are set by HHS and align to Executive Order 13327; the Federal Real Property Council (FRPC) defines the metrics.

<sup>2</sup> Projected only, targets do not exist from FRPC for beyond FY 2016.

<sup>3</sup> Under-utilized (U); The Federal Real Property Council removed the metric Over-utilization (O) for FY 2013 and forward.

**Performance Trends:** CDC's mission is executed in a safe, sustainable, and dynamic workplace environment for approximately 23,000 CDC staff while ensuring efficiency, environmental stewardship, and appropriate management of agency assets due to the Office of Safety, Security, and Asset Management's (Building and Facilities) leadership. In FY 2021, CDC continued to exceed the target of a 15% increase in Gross Square Feet (GSF) for buildings that are 10,000 sq. ft. and above and that meet the Guiding Principles for High Performance and Sustainable Federal Buildings (Measure 12.E.2) by maintaining 29.6%. Major high-performance buildings are currently in design and construction phases at Chamblee, Roybal, and Cincinnati Campuses. This is expected to increase the GSF of Guiding Principle compliant buildings over the next several years. CDC expects that we may also see smaller gains with the demolition of older and poor performing buildings.

Past targets and baselines set for improving energy consumption (Measure 12.E.1a) were based on the Energy Policy Act of 2005 per Executive Order (EO) 13834. This EO was rescinded and replaced in January 2021 by EO 14057. EO 14057 Implementing instructions provided by CEQ in May 2022 and distributed via HHS do not include revised annual targets for Energy, Water, or Sustainable buildings. CDC has been advised that these targets are still being formulated. Data will be provided when guidance is available. New targets are anticipated in late 2022.

In FY 2021, CDC's energy consumption improved from 27.1% to 29.0%. In FY 2021, CDC operations were better adjusted to COVID-19 conditions and were able to leverage the lower campus population to improve efficiencies. Energy savings were also improved with the new 375KW solar array implemented with the newly constructed Roybal Campus Parking Deck. CDC is planning to award a new Utility Energy Services Contracting (UESC) task order (Phase 2 to Atlanta Gas Light Company for Roybal and Chamblee campuses) in Q4 of FY 2023. If approved, highlights of this performance contract include:

Implementation costs around \$8.5M with simple payback: 13-14 years

- The scope includes the following selected conservation measures: LED upgrades, lighting control system upgrades, central utility plant (CUP) cooling tower variable frequency drives (VFDs), and new advanced metering.

CDC continues to implement energy saving projects that will increase the use of renewable energy, efficiencies, and resiliencies while simultaneously decrease costs. Some examples of energy saving projects include:

- A new facility to consolidate CDC's National Institute for Occupational Safety and Health (NIOSH) Research Facilities in Cincinnati, which is currently in the final stages of design. Design targets include Leadership in Energy and Environmental Design (LEED)-compliant, guiding principle (GP)-compliant, and high-performance components. The CDC established a goal for the facility of LEED

Gold under LEED v4 Building Design & Construction. As currently designed, the facility is projected to achieve a Fitwel 2-Star Certification.

- Design targets for the construction of Chamblee Building 108 and supporting infrastructure improvements for the Chamblee Campus, which include high-performance design for Building 108, campus-wide utility improvements, and LEED certification. This project also includes upgrades to the Chamblee central utility plant to improve energy efficiencies and resiliency.
- 192KW Solar Array at San Juan is planned to come online in fall 2022. This will improve energy efficiency and enhance resiliency to campus functions via battery backup systems

With a banner year in water consumption reduction of 37.2% (Measure 12.E.1b) in FY 2021, CDC far exceeded the target of 26%. The Building 108 design is expected to improve water consumption on a per square foot basis at CDC over the next several years due to efficiency improvements.

CDC improved but did not meet its target for improving its condition index (CI) in FY 2021 (Measure 12.2.1c). The decrease in un-weighted CI from FY 2020 (73.02 CI) to FY 2021 (74.87 CI) is a result of replacing older assets and bringing new assets online. CDC's weighted CI decreased from FY 2020 (97.23 CI) to FY 2021 (95.14 CI). This reduction is expected to be remedied over next several years with large investments in both repair and improvement projects and new capital construction targeted specifically at improving or replacing some of assets with the poorest CI scores.

CDC maintained its target for reducing non-mission dependency assets that are not deemed directly necessary to support CDC's mission (Measure 12.2.1d) in FY 2021 with a result of 0.96%. The FY 2021 under-utilization rate went from 6.20% in FY 2020 to 6.92% in FY 2021 (Measure 12.2.1.e). This slight increase is due to changes in very small assets. CDC will continue disposing under-utilized assets to meet or exceed this target.

CDC's operating costs is maintained at \$13.91/sq. ft. for FY 2020 and FY 2021 (Measure 12.2.1f). Overall, utility and maintenance costs stayed steady in FY 2021. Maintenance costs are largely affected by annual maintenance contract renewals. While energy costs have decreased by improved operating efficiencies, increases to utility rates have offset any potential savings. Most assets are not tabulated individually for maintenance costs or metered individually for energy costs. They are pro-rated according to square footage and asset type. It was found that some of this empirical data needed adjustment beyond the yearly increases in utility and maintenance contracts. CDC also reiterates that the target for reduced operating costs does not take into account high operating costs associated with laboratory assets. CDC's laboratories comprise approximately 44% of its square footage, resulting in disproportionately higher operating costs. CDC's annual operating cost result has changed by less than \$1/square foot since FY 2005. Benchmarking studies have indicated CDC's asset portfolio is in the medium range of operating costs for similarly equipped institutional and private real asset portfolios with similar laboratory to non-laboratory asset ratios.

## PUBLIC HEALTH LEADERSHIP AND SUPPORT

### State, Tribal, Local and Territorial Support

**Performance Measures for Long Term Objective: Improve the capacity and performance of state, tribal, local, and territorial public health agencies to more efficiently and effectively manage and deliver high quality programs and services to protect the public’s health**

Measure	Most Recent Result and Target	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
11.B.4.1a (State) Increase the percentage of nationally PHAB <sup>1</sup> accredited state public health agencies (Intermediate Outcome)	FY 2021: 76.5% Target: 78% (Target Not Met but Improved)	82%	84%	+2
11.B.4.1b (Local) Increase the percentage of nationally PHAB <sup>1</sup> accredited local public health agencies (Intermediate Outcome)	FY 2021: 15.4% Target: 15% (Target Exceeded)	16%	18%	+2

<sup>1</sup>Public Health Accreditation Board

**Performance Trends:** Health departments serve Americans where they live, work, and play; every American benefits from their services and never has this been as visible as in the nation's response to the COVID-19 pandemic. CDC support and resources to state, tribal, local, and territorial public health departments help improve the effectiveness, efficiency, and quality of public health programs. Additionally, CDC assists health departments in meeting the nationally recognized, practice-focused, and evidence-based standards of the Public Health Accreditation Board (PHAB)<sup>303</sup>. Meeting these standards provides health departments with tools to advance the quality and performance of public health programs and services and better positions them to rapidly respond to emerging threats and challenges. CDC funds and supports the continuous improvement of the national accreditation program.

Accredited health departments now serve approximately 91% of the U.S. population as of July 2022. PHAB has accredited 417 health departments—40 states, five tribes, and 372 local health departments (including 305 individually accredited local health departments and 67 county health departments through a centralized state application). In 2018, PHAB reaccredited the first health departments and 68 health departments are reaccredited as of July 2022. An additional 82 health departments have formally entered the initial accreditation process and 73 health departments are engaging in reaccreditation. CDC partially met FY 2021 targets with 76.5% of state and 15.4% of local agencies accredited or reaccredited as of the end of 2021 (Measures 11.B.4.1a-b).

A survey in July 2020 of more than 80% of accredited health departments indicated that, overall, accreditation has helped their response to the COVID-19 pandemic in the areas of preparedness plans and policies and relationships with other sectors and stakeholders<sup>304</sup>. Annual evaluation findings also consistently report benefits to participating in accreditation. June 2021 evaluation data indicate that the program has stimulated quality improvement (95% of accredited health departments agree), improved accountability and transparency (89%), and improved the capacity of the department to provide high quality programs and services (82%) and

<sup>303</sup> <http://www.phaboard.org/about-phab/>.

<sup>304</sup> Public Health Accreditation Board. PHAB Survey of Health Departments and Site Visitors During Response to COVID-19 Pandemic, July 2020. Available at: <https://phaboard.org/wp-content/uploads/Strategic-Planning-Survey-Findings-Final-July-2020.pdf>.

strengthened the utilization of resources (71%)<sup>305,306</sup>. Four years after accreditation, 73% reported that accreditation has helped the health department use health equity as a lens for identifying and addressing health priorities and 68% indicated that it strengthened the utilization of resources<sup>3</sup>. Additionally, comparative studies, published in peer review journals, used longitudinal data to identify substantial differences between accredited and non-accredited health departments. Within a few years after the program had launched and sites began to receive accreditation, the PHAB-accredited sites tended to offer a higher percentage of public health activities, contribute more effort to almost all those activities, and report higher levels of contribution from most other public health system partners<sup>307</sup>. Another study found substantial increases in quality improvement engagement among accredited health departments compared to ones not engaged in accreditation<sup>308</sup>.

From FY 2011-2018, CDC's Accreditation Support Initiative (ASI) provided funding and support to 268 local, tribal, and territorial health departments, and state associations. The ASI investments are still being realized. Of the local sites that received ASI awards through 2018, approximately half (52.1%) are now accredited, while approximately three-quarters (72%) of local ASI sites supported during the first three years (2011-2013) have now been accredited.

Since FY 2019, a similar program, "Strong Systems, Stronger Communities (SSSC)" replaced ASI. SSSC similarly promotes performance improvement activities related to achieving national standards and seeking PHAB accreditation at state, local, tribal, and territorial health department levels. In FY 2019, 30 sites (nine state, three territorial, eight local, and ten tribal) were provided with small awards or customized capacity building and technical assistance to complete projects that improve their performance, meet national accreditation standards, and/or promote connections across the public health system. In FY 2020, 31 new sites (nine state, three territorial, eight local, eleven tribal) were supported for similar work. In FY 2021, state and local health departments received technical assistance on request, and nine tribal sites were competitively selected for small awards to support efforts to use the PHAB standards to strengthen their public health infrastructure.

In addition, CDC invests in cross-cutting capacity building and performance improvement cooperative agreement programs for health departments through which recipients have been able to prepare for and obtain accreditation. This includes the Preventive Health and Health Services (PHSS) Block Grant. For the last four years, block grant recipients have consistently chosen to invest almost 30% of their funding in public health infrastructure to enhance workforce, data and information systems, laboratory services, epidemiology capacity, and performance improvement and accreditation. In FY 2020, recipients invested \$40M in public health infrastructure, of which 66% supported activities aligning with the performance improvement and accreditation-related objectives in Healthy People.

Another CDC cooperative agreement mechanism initiated in FY 2018 now supports 25 tribal nations or tribal organizations on activities to enhance the quality and performance of the tribal public health system, including infrastructure, workforce, data and information systems, programs and services, resources and communication, and partnerships. The funding is well-aligned with supporting efforts toward meeting the national standards for public health accreditation.

Targets established through FY 2024 are achievable; the field is still benefitting from previous investments in an accreditation preparation and application process with a significant lead time. However, COVID implications continue to cause many delays and elongated timelines. Sites not applying for or achieving reaccreditation can

<sup>305</sup> NORC at the University of Chicago. "Assessing Outcomes from Public Health Accreditation." April 2020. Available at: [NORC\\_slides-for-web-April-2020.pdf \(phaboard.org\)](https://phaboard.org).

<sup>306</sup> Evaluating the Impact of National Public Health Department Accreditation—United States, 2016 (MMWR, August 12, 2015/65(31);803-806).

<sup>307</sup> Ingram RC, Mayes GP, Kussainov N. Changes in local public health system performance before and after attainment of national accreditation standards. Supplement, Impact of Public Health Accreditation. *Journal of Public Health Management and Practice*. 2018 (24:suppl 3), S25-S34.

<sup>308</sup> Beitsch LM, Kronstadt J, Robin N, Leep C. Has voluntary public health accreditation impacted health department perceptions and activities in quality improvement and performance management? Supplement, Impact of Public Health Accreditation. *Journal of Public Health Management and Practice*. 2018 (24:suppl 3), S10-S18.

also impact the proportion of accredited sites. Nine sites—all local health departments—are no longer accredited, mostly due to not applying for reaccreditation, as a result of financial or staff time considerations and the impact of COVID. CDC plans to continue funding improvements and updates to the PHAB national accreditation program and the advancement of reaccreditation. During 2021, CDC supported PHAB in producing and vetting updates to the national standards. Revised standards and measures, which incorporate updates in areas such as health equity, data surveillance, and emergency preparedness, were released in spring 2022. CDC supported PHAB in the development and 2022 launch of the Pathways Recognition Program which provides a stepwise process intended to help tribal, territorial, and smaller local health departments advance towards accreditation status. Just as the public expects organizations such as schools and hospitals to be accredited, the national accreditation program for health departments is establishing growing expectations for health departments to meet national standards and become accredited.

## WORKING CAPITAL FUND

### Performance Measures for Working Capital Fund

Measure	Most Recent Result	FY 2023 Target	FY 2024 Target	FY 2024 +/- FY 2023
15.2.2 Maintain the percent of invoices paid on time (Efficiency)	FY 2021: 99.9% Target: 98% (Target Exceeded)	98%	98%	Maintain
15.5.1 Maintain the variance between annual revenues and annual costs (Efficiency)	FY 2021: 11.8% Target: 3% (Target Not Met)	3%	3%	Maintain
15.5.2 Maintain the variance between estimated and actual cost (Efficiency)	FY 2021: 9.35% Target: 1% (Target Not Met)	1%	1%	Maintain
15.5.3 Maintain the percent of bills that require correction (Efficiency)	FY 2021: 0% Target: 10% (Target Exceeded)	9%	9%	Maintain

**Performance Trends:** CDC’s Office of the Chief Operating Officer actively supports CDC’s goals and customers through fiscal stewardship and sound financial strategy. Annually, CDC has secured an unqualified audit opinion on the agency’s financial statements since FY 1999.

The Office of Management and Budget's Prompt Payment rule requires federal agencies to pay vendors in a timely manner and assesses late interest penalties against agencies that pay vendors after a payment due date. CDC has maintained a greater than 99% prompt payment level since FY 2013 (Measure 15.2.2). CDC will continue to exceed the 98% requirement of on time payments by ensuring program offices, the acquisition office, and the payment office communicate with each other and the agency's vendors.

CDC’s Working Capital Fund (WCF) aims to achieve greater efficiency and transparency through the provision of Agency-wide business services. Currently, CDC estimates costs for business services 18 months prior to final fiscal year obligations being made. In FY 2021, CDC continued to receive supplemental funding for the COVID-19 response after the start of the fiscal year and as a result did not meet its target (Measure 15.5.1). CDC will maintain its FY 2023 target in FY 2024; however, due to the nature of the ongoing emergency work, CDC expects some continued variation.

In measuring performance from a Center, Institute, Office (CIO) perspective in FY 2021, the original cost estimate varied 9.35% from the actual costs charged (Measure 15.5.2). Due to continued process improvements, CDC also exceeded its target of 10% for monthly bills requiring correction (Measure 15.5.3). CDC will keep FY 2024 targets for these measures level with the previous year.



## FY 2024 DISCONTINUED MEASURES TABLE

**Measure ID 1.C: Number of states (including Washington, D.C.) achieving 65% coverage for one birth dose of hepatitis B vaccine (19–35 months of age) (Output)**

FY	Target	Result
2024	Discontinued	N/A
2023	51	N/A
2022	51	Sep 30, 2023
2021	51	51 (Target Met)
2020	51	50 (Target Not Met but Improved)
2019	51	49 (Target Not Met but Improved)
2018	50	48 (Target Not Met)

CDC will retire this measure because it is not an effective measure as it does not focus on key programmatic outcomes.

**Measure ID 1.D: Number of states (including Washington, D.C.) achieving 30% coverage for influenza vaccine (6–23 months of age) (Output)**

FY	Target	Result
2024	Discontinued	N/A
2023	51	N/A
2022	51	Aug 31, 2023
2021	51	50 (Target Not Met)
2020	51	51 (Target Met)
2019	51	49 (Target Not Met)
2018	49	50 (Target Exceeded)

CDC will retire this measure because it is not an effective measure as it does not focus on key programmatic outcomes.

**Measure ID 1.I: Number of states (including Washington, D.C.) achieving 80% coverage for ≥ one dose of Tdap vaccine (13-17 years of age) (Output)**

FY	Target	Result
2024	Discontinued	N/A
2023	51	Oct 1, 2024
2022	51	Aug 23, 2023
2021	51	51 (Target Met)
2020	51	51 (Target Met)
2019	51	49 (Target Not Met)

FY	Target	Result
2018	51	50 (Target Not Met)

CDC will retire this measure because it is not an effective measure as it does not focus on key programmatic outcomes.

**Measure ID 1.J: Number of states (including Washington, D.C.) achieving 80% coverage for up-to-date with ≥ one dose of meningococcal conjugate vaccine (13-17 years of age) (Output)**

FY	Target	Result
2024	Discontinued	N/A
2023	51	Oct 1, 2024
2022	51	Oct 1, 2023
2021	51	Oct 1, 2023
2020	51	46 (Target Not Met but Improved)
2019	51	45 (Target Not Met but Improved)
2018	51	40 (Target Not Met)

CDC will retire this measure because it is not an effective measure as it does not focus on key programmatic outcomes.

**Measure ID 1.L: Number of states (including Washington, D.C.) achieving 45% coverage for up-to-date with the full series of human papillomavirus vaccine (13-17 years of age) (Output)**

FY	Target	Result
2024	Discontinued	N/A
2023	51.0	Oct 1, 2024
2022	51.0	Oct 1, 2023
2021	51.0	50 (Target Not Met but Improved)
2020	51.0	49.0 (Target Not Met but Improved)
2019	51.0	44.0 (Target Not Met but Improved)
2018	51.0	37.0 (Target Not Met)

CDC will retire this measure because it is not an effective measure as it does not focus on key programmatic outcomes.

**Measure ID 2.7.5: Increase the proportion of gonorrhea patients who are treated with a CDC-recommended antibiotic regimen for gonorrhea (Outcome)**

FY	Target	Result
2024	Discontinued	N/A
2023	87.6%	Mar 30, 2025
2022	87.6%	Mar 30, 2024
2021	87.6%	Mar 30, 2023
2020	87.6%	71.4% (Target Not Met)
2019	87.6%	85.6% (Target Not Met)
2018	87.6%	85.8% (Target Not Met but Improved)

This measure is being retired due to several years of the target being nearly met and achieving a level of performance where future movement on the target will be minimal.

**Measure ID 2.9.3: Increase percentage of pregnant women screened for syphilis at least one month before delivery (Outcome)**

FY	Target	Result
2024	Discontinued	N/A
2023	92.8 %	Dec 31, 2025
2022	92.8 %	Dec 31, 2024
2021	92.8 %	Dec 31, 2023
2020	87.2 %	92% (Target Exceeded)
2019	87.2 %	92 % (Target Exceeded)
2018	85.9 %	90.7 % (Target Exceeded)

This measure continued to exceed the 2020 target and is an indication that providers are improving adherence to CDC recommendations for screening pregnant women for syphilis. The performance on this measure is strong, although it is unlikely that results will continue to increase given how high the actuals are; therefore, it is being retired.

**Measure ID 3.F: Cumulative number of states providing reports of confirmed norovirus outbreaks to Calicinet (Output)**

FY	Target	Result
2024	Discontinued	N/A
2023	30	Dec 31, 2023
2022	30	Dec 31, 2022
2021	30	30 (Target Met)
2020	30	30 (Target Met)
2019	28	30 (Target Exceeded)
2018	28	30 (Target Exceeded)

CDC will retire this measure because it does not expect any changes to the number of states providing Caclinet reports of confirmed norovirus.

**Measure ID 3.4.8: Increase the proportion of U.S.-bound refugees with at least one dose of age-appropriate routine vaccinations (Outcome)**

FY	Target	Result
2024	Discontinued	N/A
2023	90.0 %	Jan 31, 2024
2022	85.0 %	Jan 31, 2023
2021	75.0 %	96.5 % (Target Exceeded)
2020	75.0 %	96.5 % (Target Exceeded)
2019	73.0 %	98.0 % (Target Exceeded)
2018	70.0 %	96.0 % (Target Exceeded)

CDC has far exceeded its target for this measure for the past several years and there is little room for additional growth. CDC will retire this measure.

**Measure ID 3.B: Increase the percentage of panel sites that use the eMedical system to transfer immigrant medical exam data to CDC (Output)**

FY	Target	Result
2024	Discontinued	N/A
2023	95	Dec 31, 2023
2022	93	Dec 31, 2022
2021	93	94 (Target Exceeded)
2020	30	83 (Target Exceeded)
2019	Set Baseline	20 (Baseline)

CDC has exceeded the target for this measure for the past several years and there is little room for additional growth. CDC will retire this measure.

**Measure ID 4.12.5: Increase the number of states that have developed and adopted a state-level multi-component physical education policy for schools. (Output)**

FY	Target	Result
2024	Discontinued	N/A
2022	43 %	Dec 31, 2024
2020	43 %	Dec 31, 2022
2018	59 %	Dec 31, 2021

The data source for this measure is not CDC data and CDC does not control the timeline for data analysis. CDC will retire this measure and replace it with a more comprehensive measure.

**Measure ID 4.9.1: Decrease the incidence rate of late-stage breast cancer diagnosis in women ages 50 to 74 (per 100,000). (Intermediate Outcome)**

FY	Target	Result
2024	Discontinued	N/A
2023	97	Mar 31, 2026
2022	97	Mar 31, 2025
2021	97	Mar 31, 2024
2020	98	Mar 31, 2023
2019	98.5	96.4 (Target Not Met)

CDC will retire this measure because of the challenges with its ability to impact all women ages 50 – 74 who are at risk for breast cancer given the small proportion of women the NBCCEDP serves.

**Measure ID 4.9.5: Increase the median colorectal screening rate among Colorectal Cancer Control Program (CRCCP) health system clinics (Outcome)**

FY	Target	Result
2024	Discontinued	N/A
2023	59 %	Jul 31, 2024
2022	59 %	Jul 31, 2023
2021	59 %	48% (Target Not Met)
2020	58 %	50 % (Target Not Met)
2019	56 %	55.2 % (Target Not Met but Improved)
2018	54 %	52.6 % (Target Not Met but Improved)

This measure includes a single cohort of clinics which may not provide a comprehensive assessment of the program’s performance. CDC will retire this measure and replace it with a more comprehensive measure.

**Measure ID 5.A: Increase the number of states using a standard case definition to track neonatal abstinence syndrome (Output)**

FY	Target	Result
2024	Discontinued	N/A
2023	6	Dec 31, 2023
2022	6	Dec 31, 2022
2021	4	6 (Target Exceeded)
2020	2	4 (Target Exceeded)
2019	Set Baseline	N/A <sup>309</sup>

This measure is being retired because CDC worked to evaluate and develop best practices for NAS surveillance methods to support tracking and improve understanding of health outcomes associated with NAS. CDC has exceeded its target by supporting six sites to implement the NAS definition.

<sup>309</sup>Baseline result should be 0.

**Measure ID 6.F: Number of states assisted with screening newborns for preventable diseases (Output)**

FY	Target	Result
2024	Discontinued	N/A
2023	50	Oct 31, 2023
2022	50	Oct 31, 2022
2021	50	50 (Target Met)
2020	50	50 (Target Met)
2019	50	50 (Target Met)
2018	50	50 (Target Met)

CDC will retire this measure because it has reached peak performance and there will not be additional gains. The measure is no longer a useful indicator of program growth as there no room for improvement.

**Measure ID 6.2.4: Increase the proportion of those with current asthma who report they have received self – management training for asthma in populations served by CDC funded state asthma control programs (Output)**

FY	Target	Result
2024	Discontinued	N/A
2023	50%	Dec 31, 2023
2022	50%	Dec 31, 2022
2021	50%	47.7% (Target Not Met but Improved)
2020	50%	44% (Target Not Met)
2019	50%	46% (Target Not Met)
2018	50%	46% (Target Not Met but Improved)

This measure is no longer useful to gauge program performance as the level of performance has remained level for several years. CDC will retire this measure.

**Measure ID 7.1.5: Increase the percent of Rape Prevention and Education (RPE) funded states that assess outcomes and impact of sexual violence prevention activities. (Intermediate Outcome)**

FY	Target	Result
2024	Discontinued	N/A
2023	100%	Jul 31, 2023
2022	100%	100% (Target Met)
2021	70%	100% (Target Exceeded)
2020	50%	60% (Target Exceeded)
2019	35%	40% (Target Exceeded)
2018	24%	24% (Target Met)

This measure will be retired as a new funding opportunity announcement is set to begin in FY 2024. A new, measure will be introduced to reflect the activities of the new announcement.

**Measure ID 7.2.5: Increase the percent of Core SVIPP funded states that assess outcomes and impact of injury and violence prevention strategies using surveillance data. <sup>310[40]</sup> (Intermediate Outcome and Developmental)**

FY	Target	Result
2024	Discontinued	N/A
2023	100 %	Jul 31, 2024
2022	100 %	Jul 31, 2023
2021	100 %	100 % (Target Met)
2020	100 %	100 % (Target Met)
2019	100 %	100 % (Target Met)
2018	95 %	100 % (Target Exceeded)

Because the target was achieved and Core SVIPP concluded in FY 2021, CDC will retire this measure so that it can focus on the next cycle - the Core State Injury Prevention Program (Core SIPP).

**Measure ID 9.L: Number of NIOSH Science Blog Subscribers (Output)**

FY	Target	Result
2024	Discontinued	N/A
2023	30,000	Dec 31, 2023
2022	48,000	Dec 31, 2022
2021	44,000 <sup>311</sup>	26,546 (Target Not Met)
2020	58,000	42,725 (Target Not Met but Improved)
2019	42,000	18,760 (Target Not Met)
2018	48,900	59,139 (Target Exceeded)

Subscribers are no longer considered a meaningful measure of successful outreach, therefore, CDC will retire this measure.

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<sup>311</sup>FY 21 target adjusted to reflect a change in methodology regarding how CDC subscribers are managed Agency-wide

**Measure ID 10.B.E.1: Increase the percentage of the annual budget that directly supports the program purpose in the field. (Efficiency)**

<b>FY</b>	<b>Target</b>	<b>Result</b>
2024	Discontinued	N/A
2023	85 %	Apr 30, 2024
2022	85 %	Apr 30, 2023
2021	85 %	85% (Target Met)
2020	88 %	85 % (Target Not Met)
2019	88 %	85 % (Target Not Met)
2018	89 %	85 % (Target Not Met but Improved)

CDC will retire this measure because it is no longer useful in evaluating programmatic activities.

# SUPPLEMENTAL TABLES

**OBJECT CLASS TABLE – DIRECT**

(dollars in thousands)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
<b>Personnel Compensation:</b>				
Full-Time Permanent (11.1)	\$886,757	\$976,678	\$1,290,318	\$313,640
Other than Full-Time Permanent (11.3)	\$103,420	\$113,907	\$145,794	\$31,887
Other Personnel Comp. (11.5)	\$52,589	\$57,922	\$74,137	\$16,215
Military Personnel (11.7)	\$94,502	\$104,085	\$133,145	\$29,059
Special Personal Service Comp. (11.8)	\$2,665	\$2,935	\$3,757	\$822
<b>Total Personnel Compensation</b>	<b>\$1,139,934</b>	<b>\$1,255,528</b>	<b>\$1,647,150</b>	<b>\$391,622</b>
Civilian personnel Benefits (12.1)	\$382,113	\$420,861	\$538,675	\$117,815
Military Personnel Benefits (12.2)	\$26,457	\$29,140	\$37,276	\$8,136
Benefits to Former Personnel (13.0)	\$451	\$497	\$636	\$139
<b>Subtotal Pay Costs</b>	<b>\$1,548,955</b>	<b>\$1,706,026</b>	<b>\$2,223,737</b>	<b>\$517,712</b>
Travel (21.0)	\$28,102	\$30,952	\$37,955	\$7,003
Transportation of Things (22.0)	\$8,639	\$9,515	\$11,668	\$2,153
Rental Payments to GSA (23.1)	\$2,213	\$2,437	\$3,012	\$575
Rental Payments to Others (23.2)	\$3,870	\$4,263	\$5,227	\$964
Communications, Utilities, and Misc. Charges (23.3)	\$3,996	\$4,402	\$5,398	\$996
NTWK Use Data TRANSM SVC (23.8)	\$0	\$0	\$0	\$0
Printing and Reproduction (24.0)	\$1,921	\$2,116	\$2,595	\$479
Other Contractual Services (25):	<u>\$2,028,792</u>	<u>\$2,234,520</u>	<u>\$2,740,065</u>	<u>\$505,544</u>
Advisory and Assistance Services (25.1)	\$898,573	\$989,692	\$1,213,603	\$223,911
Other Services (25.2)	\$82,541	\$90,911	\$111,478	\$20,568
Purchases from Government Accounts (25.3)	\$926,983	\$1,020,983	\$1,251,973	\$230,990
Operation and Maintenance of Facilities (25.4)	\$29,746	\$32,762	\$40,174	\$7,412
Research and Development Contracts (25.5)	\$21,629	\$23,822	\$29,211	\$5,390
Medical Services (25.6)	\$5,562	\$6,126	\$7,512	\$1,386
Operation and Maintenance of Equipment (25.7)	\$63,760	\$70,225	\$86,113	\$15,888
Subsistence and Support of Persons (25.8)	\$0	\$0	\$0	\$0
Consultants, other and misc. (25.9)	\$0	\$0	\$0	\$0
Supplies and Materials (26.0)	\$66,104	\$72,807	\$90,270	\$17,463
Equipment (31.0)	\$57,424	\$63,247	\$77,556	\$14,309
Land and Structures (32.0)	\$5,881	\$6,477	\$7,875	\$1,398
Investments and Loans (33.0)	\$0	\$0	\$0	\$0
Grants, Subsidies, and Contrib. (41.0)	\$3,742,454	\$4,121,956	\$5,011,692	\$889,736
Insurance Claims and Indemnities (42.0)	\$194	\$213	\$260	\$46
Interest and Dividends (43.0)	\$1	\$1	\$1	\$0
Refunds (44.0)	\$0	\$0	\$0	\$0
<b>Subtotal Non-Pay Costs</b>	<b>\$5,949,591</b>	<b>\$6,552,906</b>	<b>\$7,993,573</b>	<b>\$1,440,666</b>
<b>Total Budget Authority</b>	<b>\$7,498,546</b>	<b>\$8,258,932</b>	<b>\$10,217,311</b>	<b>\$1,958,378</b>
<b>Average Cost per FTE</b>				
<b>Civilian FTEs</b>	<b>11,331</b>	<b>11,778</b>	<b>12,299</b>	<b>521</b>
Civilian Average Salary and Benefits	\$126	\$133	\$167	\$33.4
Percent change	N/A	6%	25%	19%
<b>Military FTEs</b>	<b>742</b>	<b>743</b>	<b>743</b>	<b>0</b>
Military Average Salary and Benefits	\$163	\$179	\$229	\$50
Percent change	N/A	10%	28%	17.9%
<b>Total FTE<sup>1</sup></b>	<b>12,073</b>	<b>12,521</b>	<b>13,042</b>	<b>521</b>
<b>Average Salary and Benefits</b>	<b>\$128</b>	<b>\$136</b>	<b>\$171</b>	<b>\$34</b>
<b>Percent change</b>	<b>N/A</b>	<b>6%</b>	<b>25%</b>	<b>19%</b>

<sup>1</sup> Total FTEs represents Direct and Working Capital Fund (WCF) FTE. ATSDR and Reimbursable employees are not included.

**SALARIES AND EXPENSES**

(dollars in thousands)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
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Rental Payments to Others (23.2)	\$3,870	\$4,263	\$5,227	\$964
Communications, Utilities, and Misc. Charges (23.3)	\$3,996	\$4,402	\$5,398	\$996
Printing and Reproduction (24.0)	\$1,921	\$2,116	\$2,595	\$479
Other Contractual Services (25):	<u>\$2,028,792</u>	<u>\$2,234,520</u>	<u>\$2,740,075</u>	<u>\$505,555</u>
Advisory and Assistance Services (25.1)	\$898,573	\$989,692	\$1,213,603	\$223,911
Other Services (25.2)	\$82,541	\$90,911	\$111,478	\$20,568
Purchases from Government Accounts (25.3)	\$926,983	\$1,020,983	\$1,251,973	\$230,990
Operation and Maintenance of Facilities (25.4)	\$29,746	\$32,762	\$40,174	\$7,412
Research and Development Contracts (25.5)	\$21,629	\$23,822	\$29,211	\$5,390
Medical Services (25.6)	\$5,562	\$6,126	\$7,512	\$1,386
Operation and Maintenance of Equipment (25.7)	\$63,760	\$70,225	\$86,113	\$15,888
Subsistence and Support of Persons (25.8)	\$0	\$0	\$10	\$10
Supplies and Materials (26.0)	\$66,104	\$72,807	\$90,270	\$17,463
<b>Subtotal Non-Pay Costs</b>	<b>\$2,141,425</b>	<b>\$2,358,575</b>	<b>\$2,893,187</b>	<b>\$534,612</b>
Rental Payments to GSA (23.1)	\$2,213	\$2,437	\$3,012	\$575
<b>Total, Salaries &amp; Expenses and Rent</b>	<b>\$3,692,593</b>	<b>\$4,067,038</b>	<b>\$5,119,936</b>	<b>\$1,052,898</b>
<b>Direct FTE<sup>1</sup></b>	<b>12,073</b>	<b>12,521</b>	<b>13,042</b>	<b>521</b>

<sup>1</sup>Total FTEs represents Direct and Working Capital Fund (WCF) FTE. ATSDR and Reimbursable employees are not included.

## OBJECT CLASS TABLE – PREVENTION AND PUBLIC HEALTH FUND

(dollars in thousands)	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
<b>Personnel Compensation:</b>				
Full-Time Permanent(11.1)	\$12,943	\$12,943	\$16,996	\$4,054
Other than Full-Time Permanent (11.3)	\$1,088	\$1,088	\$1,429	\$341
Other Personnel Comp. (11.5)	\$480	\$480	\$630	\$150
Military Personnel (11.7)	\$630	\$630	\$827	\$197
Special Personal Service Comp. (11.8)	\$202	\$202	\$266	\$63
<b>Total Personnel Compensation</b>	<b>\$15,343</b>	<b>\$15,343</b>	<b>\$20,148</b>	<b>\$4,805</b>
Civilian personnel Benefits (12.1)	\$5,273	\$5,273	\$6,924	\$1,651
Military Personnel Benefits (12.2)	\$171	\$171	\$224	\$53
Benefits to Former Personnel (13.0)	\$0	\$0	\$0	\$0
<b>Subtotal Pay Costs</b>	<b>\$20,786</b>	<b>\$20,786</b>	<b>\$27,296</b>	<b>\$6,510</b>
Travel (21.0)	\$216	\$216	\$284	\$68
Transportation of Things (22.0)	\$25	\$25	\$32	\$8
Rental Payments to GSA (23.1)	\$0	\$0	\$0	\$0
Rental Payments to Others (23.2)	\$0	\$0	\$0	\$0
Communications, Utilities, and Misc. Charges (23.3)	\$0	\$0	\$1	\$0
NTWK Use Data TRANSM SVC (23.8)	\$0	\$0	\$0	\$0
Printing and Reproduction (24.0)	\$4	\$4	\$5	\$1
Other Contractual Services (25):	<u>\$144,483</u>	<u>\$144,483</u>	<u>\$189,733</u>	<u>\$45,250</u>
Advisory and Assistance Services (25.1)	\$90,996	\$90,996	\$119,495	\$28,499
Other Services (25.2)	\$741	\$741	\$973	\$232
Purchases from Government Accounts (25.3)	\$49,085	\$49,085	\$64,458	\$15,373
Operation and Maintenance of Facilities (25.4)	\$0	\$0	\$0	\$0
Research and Development Contracts (25.5)	\$784	\$784	\$1,030	\$246
Medical Services (25.6)	\$30	\$30	\$40	\$10
Operation and Maintenance of Equipment (25.7)	\$2,846	\$2,846	\$3,738	\$891
Subsistence and Support of Persons (25.8)	\$0	\$0	\$0	\$0
Consultants, other and misc. (25.9)	\$0	\$0	\$0	\$0
Supplies and Materials (26.0)	\$47,018	\$47,123	\$49,718	\$2,595
Equipment (31.0)	\$3,540	\$3,548	\$3,743	\$195
Land and Structures (32.0)	\$0	\$0	\$0	\$0
Investments and Loans (33.0)	\$0	\$0	\$0	\$0
Grants, Subsidies, and Contributions (41.0)	\$684,181	\$684,181	\$898,457	\$214,275
Insurance Claims and Indemnities (42.0)	\$0	\$0	\$0	\$0
Interest and Dividends (43.0)	\$0	\$0	\$0	\$0
Refunds (44.0)	\$0	\$0	\$0	\$0
<b>Subtotal Non-Pay Costs</b>	<b>\$882,514</b>	<b>\$882,514</b>	<b>\$1,158,904</b>	<b>\$276,390</b>
<b>Total Budget Authority</b>	<b>\$903,300</b>	<b>\$903,300</b>	<b>\$1,186,200</b>	<b>\$282,900</b>
<b>Average Cost per FTE</b>				
<b>Civilian FTEs</b>	<b>116</b>	<b>116</b>	<b>166</b>	<b>50</b>
Civilian Average Salary and Benefits	\$172	\$172	\$158	-\$14.189
Percent change	N/A	0%	-8%	-8%
<b>Military FTEs</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>0</b>
Military Average Salary and Benefits	\$160	\$160	\$210	\$50
Percent change	N/A	0%	31%	31.3%
<b>Total FTEs<sup>1,2</sup></b>	<b>121</b>	<b>121</b>	<b>171</b>	<b>50</b>
<b>Average Salary and Benefits</b>	<b>\$172</b>	<b>\$172</b>	<b>\$160</b>	<b>\$2</b>
<b>Percent change</b>	<b>N/A</b>	<b>0%</b>	<b>-7%</b>	<b>-7%</b>

<sup>1</sup> PPHF FTEs based on direct hire estimates

<sup>2</sup> PPHF Civilian Avg. Salary only includes partial compensation

## OBJECT CLASS TABLE – REIMBURSABLE<sup>1</sup>

Object Class	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
<b>Personnel Compensation:</b>				
Full-Time Permanent(11.1)	\$45,603	\$41,476	\$41,476	\$0
Other than Full-Time Permanent (11.3)	\$20,557	\$18,697	\$18,697	\$0
Other Personnel Comp. (11.5)	\$6,043	\$5,496	\$5,496	\$0
Military Personnel (11.7)	\$7,216	\$6,563	\$6,563	\$0
Special Personal Service Comp. (11.8)	\$476	\$433	\$433	\$0
<b>Total Personnel Compensation</b>	<b>\$79,896</b>	<b>\$72,666</b>	<b>\$72,666</b>	<b>\$0</b>
Civilian Personnel Benefits (12.1)	\$26,802	\$24,377	\$24,377	\$0
Military Personnel Benefits (12.2)	\$2,302	\$2,094	\$2,094	\$0
Benefits to Former Personnel (13.0)	\$0	\$0	\$0	\$0
<b>Subtotal Pay Costs</b>	<b>\$109,001</b>	<b>\$99,137</b>	<b>\$99,137</b>	<b>\$0</b>
Travel (21.0)	\$4,627	\$4,208	\$4,208	\$0
Transportation of Things (22.0)	\$2,463	\$2,240	\$2,240	\$0
Rental Payments to GSA (23.1)	\$1,446	\$1,315	\$1,315	\$0
Rental Payments to Others (23.2)	\$479	\$436	\$436	\$0
Communications, Utilities, and Misc. Charges (23.3)	\$965	\$878	\$878	\$0
NTWK Use, Data Transm Svc (23.8)	\$0	\$0	\$0	\$0
Printing and Reproduction (24.0)	\$219	\$199	\$199	\$0
<b>Other Contractual Services (25):</b>				
Advisory and Assistance Services (25.1)	\$115,695	\$105,225	\$105,225	\$0
Other Services (25.2)	\$17,823	\$16,210	\$16,210	\$0
Purchases from Government Accounts (25.3)	\$134,507	\$122,335	\$122,335	\$0
Operation and Maintenance of Facilities (25.4)	\$9	\$8	\$8	\$0
Research and Development Contracts (25.5)	\$626	\$569	\$569	\$0
Medical Services (25.6)	\$254	\$231	\$231	\$0
Operation and Maintenance of Equipment (25.7)	\$60,863	\$55,356	\$55,356	\$0
Subsistence and Support of Persons (25.8)	\$0	\$0	\$0	\$0
Consultants, other and misc (25.9)	\$0	\$0	\$0	\$0
<b>Subtotal Other Contractual Services</b>	<b>\$329,777</b>	<b>\$299,934</b>	<b>\$299,934</b>	<b>\$0</b>
Supplies and Materials (26.0)	\$14,079	\$12,805	\$12,805	\$0
Equipment (31.0)	\$16,248	\$14,777	\$14,777	\$0
Land and Structures (32.0)	\$0	\$0	\$0	\$0
Investments and Loans (33.0)	\$0	\$0	\$0	\$0
Grants, Subsidies, and Contributions (41.0)	\$244,343	\$222,231	\$222,231	\$0
Insurance Claims and Indemnities (42.0)	\$46,160	\$41,983	\$41,983	\$0
Interest and Dividends (43.0)	\$0	\$0	\$0	\$0
Refunds (44.0)	\$0	\$0	\$0	\$0
<b>Subtotal Non-Pay Costs</b>	<b>\$660,806</b>	<b>\$601,007</b>	<b>\$601,007</b>	<b>\$0</b>
<b>Total Budget Authority</b>	<b>\$769,807</b>	<b>\$700,143</b>	<b>\$700,143</b>	<b>\$0</b>
Reimbursable FTEs	261	85	85	0
Military FTEs	26	15	15	0
<b>Total FTEs</b>	<b>287</b>	<b>100</b>	<b>100</b>	<b>0</b>

<sup>1</sup> FY 2023 and FY 2024 Reflect Reimbursable Ceiling estimates.

## DETAIL OF FULL-TIME EQUIVALENT EMPLOYMENT (FTE)

	FY 2022			FY 2023			FY 2024		
	Civilian	CC	Total	Civilian	CC	Total	Civilian	CC	Total <sup>2</sup>
<b>Immunization and Respiratory Diseases</b>	<b>845</b>	<b>67</b>	<b>912</b>	<b>906</b>	<b>68</b>	<b>974</b>	<b>956</b>	<b>68</b>	<b>1024</b>
Direct	839	67	906	906	68	974	956	68	1024
Reimbursable	6	-	6	-	-	-	-	-	-
<b>HIV/AIDS, Viral Hepatitis, STI and TB Prev.</b>	<b>1,058</b>	<b>68</b>	<b>1,126</b>	<b>1,051</b>	<b>64</b>	<b>1,115</b>	<b>1,103</b>	<b>64</b>	<b>1,167</b>
Direct	1,058	68	1,126	1,051	64	1,115	1,103	64	1,167
Reimbursable	-	-	-	-	-	-	-	-	-
<b>Emerging and Zoonotic Infectious Diseases</b>	<b>1,451</b>	<b>126</b>	<b>1,577</b>	<b>1,497</b>	<b>123</b>	<b>1,620</b>	<b>1,497</b>	<b>123</b>	<b>1,620</b>
Direct	1,404	119	1,523	1,495	123	1,618	1,495	123	1,618
Reimbursable	47	7	54	2	-	2	2	-	2
<b>Chronic Disease Prevention and Health Promotion</b>	<b>807</b>	<b>46</b>	<b>853</b>	<b>822</b>	<b>43</b>	<b>865</b>	<b>862</b>	<b>43</b>	<b>905</b>
Direct	797	45	842	822	43	865	862	43	905
Reimbursable	10	1	11	-	-	-	-	-	-
<b>Birth Defects, Developmental Disabilities, Disability and Health</b>	<b>201</b>	<b>9</b>	<b>210</b>	<b>199</b>	<b>9</b>	<b>208</b>	<b>204</b>	<b>9</b>	<b>213</b>
Direct	200	9	209	199	9	208	204	9	213
Reimbursable	1	-	1	-	-	-	-	-	-
<b>Environmental Health</b>	<b>452</b>	<b>31</b>	<b>483</b>	<b>448</b>	<b>30</b>	<b>478</b>	<b>513</b>	<b>30</b>	<b>543</b>
Direct	414	29	443	436	29	465	501	29	530
Reimbursable	38	2	40	12	1	13	12	1	13
<b>Injury Prevention and Control</b>	<b>479</b>	<b>26</b>	<b>505</b>	<b>514</b>	<b>29</b>	<b>543</b>	<b>555</b>	<b>29</b>	<b>584</b>
Direct	456	25	481	514	29	543	555	29	584
Reimbursable	23	1	24	-	-	-	-	-	-
<b>Public Health Scientific Services</b>	<b>1,495</b>	<b>79</b>	<b>1,574</b>	<b>1,554</b>	<b>82</b>	<b>1,636</b>	<b>1,613</b>	<b>82</b>	<b>1,695</b>
Direct	1,413	78	1,491	1,529	82	1,611	1,588	82	1,670
Reimbursable	82	1	83	25	-	25	25	-	25
<b>Occupational Safety and Health</b>	<b>989</b>	<b>79</b>	<b>1,068</b>	<b>974</b>	<b>75</b>	<b>1,049</b>	<b>974</b>	<b>75</b>	<b>1,049</b>
Direct	986	79	1,065	974	75	1,049	974	75	1,049
Reimbursable	3	-	3	-	-	-	-	-	-
<b>Global Health</b>	<b>1,214</b>	<b>126</b>	<b>1,340</b>	<b>1,231</b>	<b>136</b>	<b>1,367</b>	<b>1,365</b>	<b>136</b>	<b>1,501</b>
Direct	1,163	113	1,276	1,185	122	1,307	1,319	122	1,441
Reimbursable	51	13	64	46	14	60	46	14	60
<b>Public Health Preparedness and Response</b>	<b>419</b>	<b>60</b>	<b>479</b>	<b>447</b>	<b>55</b>	<b>502</b>	<b>457</b>	<b>55</b>	<b>512</b>
Direct	419	59	478	447	55	502	457	55	512
Reimbursable	-	1	1	-	-	-	-	-	-
<b>Cross-Cutting Activities and Program Support</b>	<b>2,182</b>	<b>52</b>	<b>2,234</b>	<b>2,220</b>	<b>45</b>	<b>2,265</b>	<b>2,285</b>	<b>45</b>	<b>2,330</b>
Direct	2,182	52	2,234	2,220	45	2,265	2,285	45	2,330
BA	547	23	570	622	20	642	687	20	707
WCF	1,635	29	1,664	1,597	25	1,622	1,597	25	1,622
<b>CDC Total<sup>1,2</sup></b>	<b>11,592</b>	<b>768</b>	<b>12,360</b>	<b>11,862</b>	<b>758</b>	<b>12,620</b>	<b>12,383</b>	<b>758</b>	<b>13,141</b>
<b>CDC Direct Total</b>	<b>11,331</b>	<b>742</b>	<b>12,073</b>	<b>11,778</b>	<b>743</b>	<b>12,521</b>	<b>12,299</b>	<b>743</b>	<b>13,042</b>
<b>CDC Reimbursable Total</b>	<b>261</b>	<b>26</b>	<b>287</b>	<b>85</b>	<b>15</b>	<b>100</b>	<b>85</b>	<b>15</b>	<b>100</b>

<sup>1</sup> CDC FTE only. Excludes ATSDR.

<sup>2</sup> FTE displayed reflect updated actual levels for FY 2022, which may differ from the system of record.

## DETAIL OF POSITIONS<sup>1,2,3,4</sup>

	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget
<b>Executive Level<sup>4</sup></b>			
Executive level I			
Executive level II			
Executive level III			
Executive level IV			
Executive level V			
<b>Subtotal</b>			
<b>Total-Executive Level Salary</b>			
ES-6			
ES-5			
ES-4			
ES-3			
ES-2			
ES-1			
<b>Total - SES</b>	<b>42</b>	<b>37</b>	<b>36</b>
<b>Total - SES Salary</b>	<b>\$6,734,009</b>	<b>\$7,199,327</b>	<b>\$7,290,607</b>
GS-15	827	834	803
GS-14	2,504	2,469	2,390
GS-13	3,839	3,722	3,609
GS-12	1,911	1,842	1,794
GS-11	876	825	802
GS-10	27	25	24
GS-9	483	468	456
GS-8	56	49	47
GS-7	347	340	274
GS-6	18	15	14
GS-5	195	166	151
GS-4	5	4	2
GS-3	1	1	1
GS-2	3	2	0
GS-1	0	0	0
<b>Subtotal</b>	<b>11,092</b>	<b>10,762</b>	<b>10,367</b>
<b>Total - GS Salary</b>	<b>\$1,163,759,127</b>	<b>\$1,219,601,019</b>	<b>\$1,253,189,572</b>
<b>Average ES level</b>			
<b>Average ES salary</b>			
<b>Average GS grade</b>	12.0	12.0	12.0
<b>Average GS salary</b>	\$104,919	\$113,325	\$120,883
<b>Average Special Pay Categories</b>			
<b>Average Comm. Corps Salary</b>	\$126,445	\$140,838	\$149,974
<b>Average Wage Grade Salary</b>	\$63,821	\$71,957	\$79,944

<sup>1</sup> Includes special pays and allowances

<sup>2</sup> Totals do not include reimbursable FTEs

<sup>3</sup> This table reflects "positions" not full-time equivalent(s) (FTEs)

<sup>4</sup> Executive level data not available

## CDC FULL TIME EQUIVALENTS FUNDED BY THE AFFORDABLE CARE ACT, P.L. 111-148

(dollars in millions)																							
ACA Sec.	2014 Total	2014 FTEs	2015 Total	2015 FTEs	2016 Total	2016 FTEs	2017 Total	2017 FTEs	2018 Total	2018 FTEs	2019 Total	2019 FTEs	2020 Total	2020 FTEs	2021 Total	2021 FTEs	2022 Total	2022 FTEs	2023 Total	2023 FTEs	2024 Total	2024 FTEs	
<b>PPHF Program</b> <sup>1,2</sup>																							
Healthcare-associated Infections (HAI)	4002	\$12.0	6.4	\$12.0	6.4	\$12.0	6.4	\$12.0	6.4	\$12.0	6.4	\$12.0	6.4	\$12.0	6.4	\$12.0	6.4	\$12.0	6.4	\$12.0	6.4	\$12.0	6.4
Million Hearts	4002	\$4.0	2.1	\$4.0	2.1	\$4.0	2.1	\$4.0	2.1	\$4.0	2.1	\$4.0	2.1	\$4.0	2.1	\$4.0	2.1	\$4.0	2.1	\$4.0	2.1	\$4.0	2.1
National Early Care Collaboratives	4002	\$4.0	1.0	\$4.0	1.0	\$4.0	1.0	\$4.0	1.0	\$4.0	1.0	\$4.0	1.0	\$4.0	1.0	\$4.0	1.0	\$4.0	1.0	\$4.0	1.0	\$4.0	1.0
Public Health Workforce	4002	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0
Antibiotic Resistance Initiative	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total</b>		<b>\$20.0</b>	<b>9.5</b>	<b>\$20.0</b>	<b>9.5</b>	<b>\$20.0</b>	<b>9.5</b>	<b>\$20</b>	<b>9.5</b>														

<sup>1</sup>Excludes employees or contractors who: Are supported through appropriations enacted in laws other than PPACA and work on programs that existed prior to the passage of PPACA; Spend less than 50% of their time on activities funded by or newly authorized in ACA; or who work on contracts for which FTE reporting is not a requirement of their contract, such as fixed price contracts.

<sup>2</sup>CDC tracks total contract costs for ACA activities in the Affordable Care Act Object Class Table but does not track individual contract staff.

(dollars in millions)																							
ACA Sec.	2014 Total	2014 FTEs	2015 Total	2015 FTEs	2016 Total	2016 FTEs	2017 Total	2017 FTEs	2018 Total	2018 FTEs	2019 Total	2019 FTEs	2020 Total	2020 FTEs	2021 Total	2021 FTEs	2022 Total	2022 FTEs	2023 Total	2023 FTEs	2024 Total	2024 FTEs	
<b>ACA Program</b> <sup>1,2</sup>																							
Childhood Obesity PL 114-10	4306	\$0.0	1.1	\$0.0	1.1	\$0.0	0.0	\$10.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0
Medical Monitoring in Libby, MT	1032 3	\$4.0	1.1	\$4.0	0.9	\$4.0	0.9	\$4.0	0.9	\$4.0	0.9	\$4.0	0.9	\$4.0	0.9	\$4.0	0.9	\$4.0	0.9	\$4.0	0.9	\$4.0	0.9
<b>Total</b>		<b>\$4.0</b>	<b>2.2</b>	<b>\$4.0</b>	<b>2.0</b>	<b>\$4.0</b>	<b>0.9</b>	<b>\$14.0</b>	<b>0.9</b>	<b>\$4.0</b>	<b>0.9</b>												

<sup>1</sup>Excludes employees or contractors who: Are supported through appropriations enacted in laws other than PPACA and work on programs that existed prior to the passage of PPACA; Spend less than 50% of their time on activities funded by or newly authorized in ACA; or who work on contracts for which FTE reporting is not a requirement of their contract, such as fixed price contracts.  
<sup>2</sup>CDC tracks total contract costs for ACA activities in the Affordable Care Act Object Class Table but does not track individual contract staff.

## PHYSICIANS' COMPARABILITY ALLOWANCE (PCA) WORKSHEET

1) Department and component:

Centers For Disease Control and Prevention

2) Explain the recruitment and retention problem(s) justifying the need for the PCA pay authority.

*(Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*

CDC has found that SES salaries do not meet the threshold to attract top level senior officials for critical science-focused positions who are appointed under SES. The use of PCA is critical, as it allows CDC to recruit and retain top level senior officials who possess requisite scientific expertise, and whose national/international stature command salaries which exceed the SES salary level.

3-4) Please complete the table below with details of the PCA agreement for the following years:

	PY 2022 (Actual)	CY 2023 (Estimates)	BY* 2024 (Estimates)
3a) Number of Physicians Receiving PCAs	1	1	1
3b) Number of Physicians with One-Year PCA Agreements	0	0	0
3c) Number of Physicians with Multi-Year PCA Agreements	1	1	1
4a) Average Annual PCA Physician Pay (without PCA payment)	183100	183100	183100
4b) Average Annual PCA Payment	14,000	30,000	30,000

\*BY data will be approved during the BY Budget cycle. Please ensure each column is completed.

5) Explain the degree to which recruitment and retention problems were alleviated in your agency through the use of PCAs in the prior fiscal year.

*(Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*

The use of PCA has enabled successful recruitment of physicians to key positions at CDC. It is anticipated that the failure to offer PCA to CDC physicians could would have a negative impact on CDC's global mission.

6) Provide any additional information that may be useful in planning PCA staffing levels and amounts in your agency.

The need will remain to pay PCA to any new physicians appointed under SES. Market pay will be utilized for all new accessions for physicians appointed under Title 5. It is anticipated that the current physician on PCA will be eligible for the maximum amount of \$30,000 in BY 2023.

## RESOURCES FOR CYBER ACTIVITIES

*(Dollars in millions)*

Cyber Category	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 +/- FY 2023
Cyber Human Capital.....	0.281	0.562	0.562	--
Sector Risk Management Agency (SRMA).....				--
Securing Infrastructure Investments.....				--
Technology Ecosystems.....				--
Zero Trust Implementation.....	1.152			--
Other NIST CSF Capabilities.....	<u>72.481</u>	<u>76.391</u>	<u>76.939</u>	<u>+0.548</u>
Detect.....	10.873	11.509	11.509	--
Identity.....	35.063	36.624	37.172	+0.548
Protect.....	21.098	22.648	22.648	--
Recover.....	1.016	1.046	1.046	--
Respond.....	4.431	4.564	4.564	--
<b>Total Cyber Request.....</b>	<b>73.914</b>	<b>76.953</b>	<b>77.501</b>	<b>+0.548</b>

## FY 2018-2024 CONSOLIDATED CDC GRANTS TABLE

These funds are awarded by formula. Δ  
 These funds are not awarded by formula. ●  
 These funds are awarded partially by formula. ‡

(dollars in millions)	FY 2018 Final	FY 2019 Final	FY 2020 Final	FY 2021 Final	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	FY 2024 PB +/- FY 2023 Enacted	% Formula
<b>Immunization Cooperative Agreements</b>									Δ
- Number of Awards	64	64	64	64	64	TBD	TBD	TBD	
- Total Awards	\$369.77	\$369.77	\$301.54	\$369.77	\$438.50	TBD	TBD	TBD	
<b>Enhancing Reviews and Surveillance to Eliminate Maternal Mortality Grants</b>									●
- Number of Awards	N/A	N/A	24*	30	40	54	62	8	
- Total Awards			\$9.076	\$11.17	\$14.20	\$25.10	\$30.70	+\$5.60	
<b>Tribal Epidemiology Centers for Public Health Infrastructure (TECPHI)</b>									●
- Number of Awards	N/A	N/A	N/A	N/A	13	13	13	0	
- Total Awards					\$6.80	\$6.80	\$6.80	\$0	
<b>Tribal Practices for Wellness in Indian Country (TPWIC)</b>									●
- Number of Awards	N/A	N/A	N/A	N/A	36	36	36	0	
- Total Awards					\$5.35	\$5.35	\$5.35	\$0	
<b>Behavioral Risk Factor Surveillance System (BRFSS) Grants</b>									●
- Number of Awards	57	57	57	56	56	56	56	0	
- Total Awards	\$13.20	\$13.47	\$14.39	\$22.44	\$22.49	\$22.49	\$22.49	\$0	

<b>National Notifiable Diseases Surveillance System (NNDSS) Grants</b>									●
- Number of Awards	63	63	58	64	64	64	64	0	
- Total Awards	\$10.25	\$9.72	\$10.00	\$8.85	\$8.85	\$11.04	\$11.04	\$0	
<b>Safe Water Grants</b>									●
- Number of Awards	19	19	19	29	29	29	29	0	
- Total Awards	\$2.46	\$2.46	\$2.46	\$2.46	\$2.46	\$2.46	\$2.46	\$0	
<b>Tracking Network Grants</b>									●
- Number of Awards	26	26	26	26	26	33	TBD	TBD	
- Total Awards	\$22.61	\$22.61	\$20.15	\$19.63	\$16.25	TBD	TBD	TBD	
<b>State Biomonitoring Cooperative Agreements</b>									●
- Number of Awards	N/A	N/A	N/A	N/A	6	6	6	0	
- Total Awards					\$5.00	\$5.00	\$5.00	\$0	
<b>Newborn Screening Cooperative Agreements</b>									●
- Number of Awards	N/A	N/A	N/A	N/A	5	5	5	0	
- Total Awards					\$1.99	\$1.99	\$1.99	\$0	
<b>Asthma Grants to Health Departments</b>									●
- Number of Awards	26	25	25	25	25	25	TBD	TBD	
- Total Awards	\$15.70	\$15.70	\$15.70	\$15.70	\$15.70	\$15.70	TBD	TBD	
<b>Building Resilience Against Climate Effects (BRACE) Cooperative Agreement</b>									●
- Number of Awards	N/A	N/A	N/A	N/A	11	11	52	41	
- Total Awards					\$4.30	\$20.80	\$20.80	\$0	
<b>Safe Water Grants (EHC)</b>									●
- Number of Awards	N/A	N/A	N/A	N/A	29	29	29	0	
- Total Awards					\$2.46	\$2.46	\$2.46	\$0	
<b>ELC Cooperative Agreements</b>									●
- Number of Awards	N/A	N/A	N/A	N/A	64	64	TBD	TBD	
- Total Awards					\$197.04	TBD	TBD	TBD	

<b>ALS Research Grants</b>									●
- Number of Awards	N/A	N/A	N/A	N/A	7	8	8	0	
- Total Awards					\$3.10	\$3.20	\$3.20	\$0	
<b>PHEP Awards</b>									Δ
- Number of Awards	N/A	N/A	N/A	N/A	62	62	62	0	
- Total Awards					\$651.79	TBD	TBD	TBD	
<b>Childhood Lead Poisoning Prevention Grants</b>									●
- Number of Awards	35	48	48	62	62	72	110	38	
- Total Awards	\$10.99	\$14.97	\$19.97	\$23.98	\$23.98	\$36.00	\$55.00	+\$19.00	
<b>Rape Prevention and Education Grants</b>									Δ
- Number of Awards	55	55	55	53	53	TBD	TBD	TBD	
- Total Awards	\$34.14	\$34.14	\$39.00	\$42.87	\$42.87	TBD	TBD	TBD	
<b>National Violent Death Reporting System (NVDRS) Grants</b>									Δ
- Number of Awards	41	41	52	52	52	52	TBD	TBD	
- Total Awards	\$10.28	\$10.64	\$16.26	\$16.83	\$16.83	\$16.83	TBD	TBD	
<b>Overdose Data to Action: State and OD2A: Local Grants</b>									●
- Number of Awards	43	43	101	66	66	91	TBD	TBD	
- Total Awards	\$48.25	\$72.15	\$244.19	\$258.13	\$290.00	\$290.00	TBD	TBD	
<b>Core State Violence and Injury Prevention Program Grants</b>									●
- Number of Awards	23	23	23	23	23	TBD	TBD	TBD	
- Total Awards	\$6.72	\$6.72	\$6.72	\$6.72	\$6.72	TBD	TBD	TBD	
<b>Occupational Safety and Health Grants</b>									●
- Number of Awards	183	136	147	145	145	145	145	0	
- Total Awards	\$97.28	\$46.99	\$90.09	\$94.14	\$94.14	\$97.34	\$97.34	\$0	
<b>NSSP Grants</b>									●
- Number of Awards	31	31	31	51	51	51	51	0	

CDC FY 2024 Congressional Justification

- Total Awards	\$6.56	\$6.56	\$6.56	\$6.56	\$6.56	\$6.56	\$6.56	\$0
<b>Public Health Infrastructure</b>								
- Number of Awards	N/A	N/A	N/A	N/A	107	107	107	0
- Total Awards	N/A	N/A	N/A	N/A	\$140.00	\$245.00	\$420.00	+\$175.00

## **DIGITAL MODERNIZATION EXPERIENCE ACT (IDEA)**

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### **Modernization of the Public-Facing Digital Services – 21<sup>st</sup> Century Integrated Digital Experience Act**

The 21st Century Integrated Digital Experience Act (IDEA) was signed into law on Dec. 20, 2018. It requires data-driven, user-centric website and digital services modernization, website consolidation, and website design consistency in all Executive Agencies. Departments across the federal landscape are working to implement innovative digital communications approaches to increase efficiency and create more effective relationships with their intended audiences. The American public expects instant and impactful communications – desired, trusted content available when they want it, where they want it, and in the format they want it. If the consumer is not satisfied they move on and our opportunity for impact is lost.

#### **Modernization Efforts**

In FY 2019 HHS engaged Department leadership and developed a Digital Communications Strategy that aligns with the requirements of IDEA. In FY 2020, HHS Digital Communications Leaders began implementation of the Strategy in alignment with IDEA, beginning to align budgets to modernization requirements.

As the result of a comprehensive review of costs associated with website development, maintenance, and their measures of effectiveness, HHS will prioritize:

- Modernization needs of websites, including providing unique digital communications services, and
- Continuing development of estimated costs and impact measures for achieving IDEA.

Over the next four years HHS will continue to implement IDEA by focusing extensively on a user-centric, Digital First approach to both external and internal communications and developing performance standards. HHS will focus on training, hiring, and tools that drive the communication culture change necessary to successfully implement IDEA.

Over the next year, HHS Agencies and Offices will work together to continue to implement IDEA and the HHS Digital Communications Strategy across all communications products and platforms.

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# CDC SPECIFIC ITEMS

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## CDC DRUG CONTROL PROGRAM AGENCY

### Resource Summary

<i>(Dollars in Millions)</i>	FY 2022 Final	FY 2023 Enacted	FY 2024 Request
<b>Drug Resources by Function</b>			
Prevention	\$470.579	\$459.579	\$667.369
Harm Reduction	\$38.000	\$69.000	\$69.000
<b>Total Drug Resources by Function</b>	<b>\$508.579</b>	<b>\$528.579</b>	<b>\$736.369</b>
<b>Drug Resources by Decision Unit</b>			
Opioid Overdose Prevention and Surveillance	\$490.579	\$505.579	\$713.369
Infectious Diseases and the Opioid Epidemic <sup>1</sup>	\$18.000	\$23.000	\$23.000
<b>Total Drug Resources by Decision Unit</b>	<b>\$508.579</b>	<b>\$528.579</b>	<b>\$736.369</b>
<b>Drug Resources Personnel Summary</b>			
Total FTEs (Direct Only) <sup>2</sup>	197	198	203
Opioid Overdose Prevention and Surveillance	189	190	195
Infectious Diseases and the Opioid Epidemic	7	7	7
<b>Drug Resources as a Percent of Budget</b>			
Total Agency Budget <sup>3,4</sup>	\$8,401.846	\$9,184.132	\$11,580.583
Drug Resources Percentage	6.1%	5.8%	6.4%

<sup>1</sup> Infectious Diseases and the Opioid Epidemic supports CDC in reducing morbidity, mortality, and incidence of infectious diseases associated with drug use.

<sup>2</sup> Includes vacancies.

<sup>3</sup> Excludes ATSDR and mandatory programs; includes funding from the Prevention and Public Health Fund and PHS Evaluation Transfers.

<sup>4</sup> FY 2023 Enacted level is comparably adjusted to reflect \$21.9 million within CDC's total for HHS Protect. The FY 2023 Joint Explanatory Statement provides \$21.9 million from the Public Health and Social Services Emergency Fund (PHSSEF) for HHS Protect, to support activities implemented by CDC.

### Program Summary

#### **MISSION**

The Centers for Disease Control and Prevention (CDC) serves as the nation's public health agency and exercises expertise in developing and applying disease prevention and control, environmental health, as well as health promotion and health education activities designed to improve the health of the people of the United States.

CDC supports the National Drug Control Strategy through its surveillance activities and by advancing data-driven prevention strategies to address drug use and overdose. CDC works to prevent overdose and other substance use-related harms under its five strategic priorities:

- Monitoring, analyzing, and communicating trends
- Building state, local, tribal, and territorial capacity
- Supporting providers, health systems, payers, and employers
- Partnering with public safety and community organizations
- Raising public awareness and reducing stigma

Foundational to CDC's work are the six guiding principles of promoting health equity, addressing underlying factors, partnering broadly, taking evidence-based action, advancing science, and driving innovation. These principles align with and crosscut the Department of Health and Human Services Overdose Prevention Strategy and work to accomplish the same goals through a public health approach.

CDC uses data to tailor prevention activities that address drug overdoses as well as other negative health effects of the epidemic. For example, in response to the rise in deaths attributable to illicit opioids, stimulants, and other emerging substance threats, CDC is improving the timeliness and comprehensiveness of drug overdose data. CDC is also strengthening partnerships with public safety and scaling up public health and harm reduction strategies, including syringe services programs (SSPs), to expand access to evidence-based treatment to assist in sustaining long-term recovery and reduce substance use-related harms, such as the rising rates of infectious diseases such as hepatitis C and HIV, as well as stigma. Across the agency, CDC has dedicated efforts to reach disproportionately affected populations (e.g., tribes, minority, and rural communities) with a focus on advancing racial equity and ensuring all communities have an equitable opportunity to prevent overdose and substance use-related harms in addition to fighting the overdose crisis.

### **METHODOLOGY**

CDC determined the drug control budget using the relevant amounts under the Consolidated Appropriations Act, 2023, P.L. 117-328. CDC is committed to an approach that protects the public's health and prevents drug overdose and substance use-related harms.

### **BUDGET SUMMARY**

CDC's FY 2024 request of **\$736,369,000** for CDC's total drug resources is **\$207,790,000** over the FY 2023 enacted level, which reflects funding by decision units - Opioid Overdose Prevention and Surveillance and Infectious Diseases and the Opioid Epidemic. Activities within these decision units support multiple initiatives included in ONDCP Policy Priorities and the National Drug Control Strategy.

### **Opioid Overdose Prevention and Surveillance**

CDC conducts activities in five strategic priorities that capitalize on CDC's scientific expertise: 1) monitoring, analyzing, and communicating trends; 2) building state, tribal, local, and territorial capacity; 3) supporting providers, health systems, payors, and employers; 4) partnering with public safety and community organizations; and 5) raising public awareness and reducing stigma. Efforts help states improve surveillance and data analysis; build capacity among state, tribal, local, and territorial jurisdictions to use data and surveillance to prevent overdose; provide support for providers and health systems prevention (including use of prescription drug monitoring programs, or PDMPs, as a clinical decision support tool); enhance partnerships with public safety and first responders; establish and improve linkages to medications for opioid use disorder and other supportive services through harm reduction activities; and empower individuals to make informed choices.

To effectively advance activities within each of these priorities, timely, high-quality data are necessary for public health officials and decision makers. Data can help policymakers and the public understand the extent of the problem, how various populations are being affected, focus resources, and evaluate the effectiveness of prevention and response efforts. CDC plays a critical role in improving data collection by helping states improve their surveillance systems to better monitor the overdose crisis and optimize evidence-based prevention efforts. In FY 2017, CDC began funding states to collect data on both fatal and nonfatal overdoses. Since then, CDC-supported surveillance improvements have helped public health experts adapt to the rapidly changing crisis, such as identifying communities at risk and implementing tailored strategies to link individuals to evidence-based harm reduction, care, and treatment. Data have also equipped communities with the necessary information to help save lives in cases of nonfatal overdose. For example, Alaska used emergency department

data collected as a part of state surveillance activities to identify opioid overdose clusters. Public health surveillance experts used these data to collaborate with public safety staff to send message alerts to the public.

CDC's State Unintentional Drug Overdose Reporting System (SUDORS), a module of the National Violent Death Reporting System, allows states to collect data on all unintentional or undetermined intent drug overdose deaths in one place. As a result, states can spot trends and understand factors leading up to overdose deaths. Data collected by SUDORS include valuable contextual information from death scene investigations, detailed information on toxicology and drugs contributing to death, the route of administration, decedent demographics, and other risk factors associated with fatal overdose. Mortality reporting has been incentivized to provide SUDORS data as quickly as 6-11 months after the death occurs. This is a critical data system that allows communities to spot trends and understand contextual and environmental factors leading up to overdose deaths, with the end goal of preventing overdose and related harms while expanding access to treatment and long-term recovery. For example, Connecticut used SUDORS data to identify an increase in drug overdose deaths involving xylazine in 2019. The state notified CDC and neighboring states about the increase and inquired if similar increases were occurring in other jurisdictions. CDC disseminated Connecticut's data to funded jurisdictions and published a *Morbidity and Mortality Notes from the Field* publication detailing the characteristics of xylazine deaths captured in SUDORS to inform prevention efforts.

The CDC DOSE system was developed to analyze data from syndromic surveillance systems to rapidly identify outbreaks and provide situational awareness of changes in drug overdose-related emergency department (ED) visits at the local, state, and regional level. DOSE leverages timely ED syndromic data captured by health departments to gather aggregate data on ED visits involving suspected all drug, all opioid, heroin, and all stimulant overdoses. Aggregate data include demographic characteristics of those who overdosed, such as sex, age, and county of patient residence. Jurisdictions share their data with CDC as frequently as every two weeks either by uploading data using a secure server or allowing DOSE staff access to their data in CDC's National Syndromic Surveillance Program's (NSSP) BioSense platform.<sup>312</sup> The number of jurisdictions included in the calculations of monthly and annual percent change estimates in rates will vary over time. Comparisons between jurisdictions should not be made because of variations in data quality, completeness, and reporting across jurisdictions. In 2019, we enhanced DOSE to include more states (i.e., from 32 states + DC to 47 states + DC), additional drug indicators (i.e., all drugs, all opioids, heroin, and all stimulants) and also asked health departments to share available data more quickly. With the next round of funding, DOSE will be positioned to become a fully national system and can work with our funded state health departments. Data are readily accessible and updated each month in an interactive dashboard<sup>313</sup> that can be used to improve coordination and strategic planning for intervention and response efforts. As a complement to DOSE, CDC has also enhanced the data collected in EDs to include overdose-related EMS transports using biospatial data, urine drug tests from Quest and Millennium Health, and comprehensive toxicology testing of left-over urine samples from individuals following an acute overdose to uncover emerging substances.

This, along with other initiatives within CDC's response to drug overdose prevention, interventions to prevent infectious diseases associated with injecting drug use, and support of primary prevention strategies aimed at youth support the Administration's drug policy priorities across all seven priority areas.

CDC helps build state, local, and territorial capacity to prevent overdose through its [Overdose Data to Action \(OD2A\) program](#). OD2A supports states, localities, and territories to advance the understanding of the drug overdose epidemic and to scale up surveillance and prevention strategies. This overarching support is made up of two distinct cooperative agreements: Overdose Data to Action in States (OD2A-S), which supports state

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<sup>312</sup> <https://www.cdc.gov/nssp/index.html>

<sup>313</sup> <https://www.cdc.gov/drugoverdose/nonfatal/dashboard/index.html>

health departments and Overdose Data to Action: LOCAL, which supports local and territorial health departments.

CDC supports providers and healthcare systems with resources to support and increase safe and effective pain care, maximize the use of prescription drug monitoring programs (PDMP), and advance insurer and health systems interventions at the federal, state, and local level. Pain, particularly chronic pain, can lead to impaired physical functioning, poor mental health, and a reduced quality of life. In addition, CDC provides patient resources, clinician guidance, continuing medical education, and other health professional training to advance better pain care, with specific focus on under-resourced populations (e.g., rural and tribal communities). CDC updated and replaced the 2016 Guideline for Prescribing Opioids for Chronic Pain, modifying the title to CDC Clinical Practice Guideline for Prescribing Opioids for Pain, in late 2022. CDC continues to leverage the Guideline to help healthcare systems integrate its best practices and associated quality improvement (QI) measures into their clinical practice, including managing long-term opioid therapy.

CDC collaborates with multiple public health and public safety collaborations to strengthen and improve efforts to reduce drug overdoses. These partnerships allow for effective implementation of programs and help advance promising strategies that address the overdose epidemic. The [Overdose Response Strategy \(ORS\)](#) is a unique collaboration between CDC and the [High Intensity Drug Trafficking Areas \(HIDTA\)](#) program designed to enhance public health and public safety partnerships. The mission of the ORS is to help communities reduce fatal and non-fatal drug overdoses by connecting public health and public safety agencies, sharing information, and supporting evidence-based interventions.

To raise awareness about the risks of overdose, CDC provides individuals and their employers resources and information they need to make informed choices. CDC's four evidence-based campaigns, known together as [Stop Overdose](#), are meant to prevent and reduce drug overdose in young adults ages 18 to 34. The campaigns address the risks of polysubstance use, the dangers of fentanyl, the life-saving power of naloxone, and stigma around treatment and recovery for substance use disorder.

### **Infectious Diseases and the Opioid Epidemic**

As the nation continues to respond to the overdose epidemic, we must also stop the rising infectious diseases associated with drug use, such as hepatitis C and HIV, and other drug-use-associated skin and soft tissue infections.

CDC's work to eliminate infectious diseases associated with drug use is built upon three key strategic priorities. First, **CDC is strengthening the syringe services program infrastructure nationwide and further integrating SSPs into the U.S. public health system.** SSPs are harm reduction programs where syringes and other sterile equipment are a) distributed to prevent disease transmission, and b) collected for safe disposal. These programs are often implemented with other medical and social services vital to improve the health of people who use drugs. In FY23, CDC invested nearly \$8.5 million to strengthen 65 SSPs across 31 jurisdictions through the ["Strengthening Syringe Services Programs"](#) cooperative agreement. In addition, CDC invests in efforts to ensure that SSPs offer effective, evidence-based harm reduction programs, practices, and policies – both by researching and disseminating science about drug user health, as well as offering robust technical assistance and consultation through programs such as the [National Harm Reduction Technical Assistance Center](#) (in partnership with SAMHSA).

Second, **CDC is working to decrease stigma experienced by people who use drugs** to increase access to services that save lives and improve health. Toward this end, in FY23 CDC invested \$4.8 million to support evidence-based services that reduce morbidity and mortality of infectious diseases associated with drug use in high-impact settings such as hospital emergency departments and correctional settings, as well as SSPs.

Finally, **CDC is establishing coordinated surveillance and monitoring systems for infectious disease indicators associated with drug use.** By better understanding people who use drugs and the programs that serve them, our nation can better stop infectious diseases associated with drug use and improve the health of people who use drugs. CDC advances this work through CDC's National HIV Behavioral Surveillance cycle with people who inject drugs, as well as other surveys, such as the National SSP Annual Survey.

### **EQUITY**

CDC's priorities for equity in drug control are described under program activities above, and the agency is participating in implementation of Executive Orders issued by the Biden Administration including Executive Order 13985 (Advancing Racial Equity and Support for Underserved Communities Through the Federal Government) and Executive Order 14035 (Executive Order on Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce).

CDC's FY 2024 budget request includes increases to programs that address longstanding health disparities among racial and ethnic minority groups and other disproportionately affected communities around the country. CDC is committed to reducing health disparities, achieving health equity, and fostering a diverse public health workforce, including persons with live experience, to ensure all people can achieve lifelong health and wellbeing. CDC partners with and provides funding to community-based and national organizations to implement effective prevention programs, fosters collaborations with providers and clients, supports local school districts in establishing effective health and wellness strategies, and conducts scientific studies to provide better diagnostics and behavioral tools for prevention.

In addition, the development and implementation of the agency's new CORE Health Equity Science and Intervention Strategy (CORE) challenges all CDC Centers, Institutes, Offices and programs across the Agency to examine their programmatic priorities and identify transformative goals and action plans for advancing health equity in the areas of science, intervention, partnerships, and workforce. Through the CORE strategy, CDC is embedding health equity into the fabric of our work at all levels. To ensure an effective health equity strategy for our nation, CDC is committed to bringing together partners from different sectors to gain collective expertise and perspectives, inform next steps, and create a shared commitment to reduce health inequities.

# SIGNIFICANT ITEMS

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## **SIGNIFICANT ITEMS IN FY 2023 APPROPRIATIONS REPORT – CONFERENCE**

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Significant items for inclusion in the FY 2024 Centers for Disease Control and Prevention Congressional Justification from the Joint Explanatory Statement to H.R.2617 - Consolidated Appropriations Act, 2023, enacted on December 29, 2023.

### **Advanced Molecular Detection (AMD)**

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The agreement includes an increase to bolster genomic epidemiology expertise and capacity. The agreement requests a status update on how funding provided in the American Rescue Plan Act (P.L.117-2) and in fiscal year 2022 appropriations have increased capabilities at public health departments in the fiscal year 2024 Congressional Justification. *(Page 24, Joint Explanatory Statement to the Consolidated Appropriations Act, 2023)*

#### Action taken or to be taken

With supplemental and annual appropriations, CDC's Advanced Molecular Detection (AMD) program has greatly expanded support to states for activities and workforce related to genomic sequencing, analytics, and disease surveillance of viruses and other organisms. Over \$415 million in ARP supplemental funding has been awarded directly to state, local, and territorial health departments to increase their work in genomic epidemiology, and CDC anticipates awarding additional ARP funds over the next few years to continue supporting these activities.

By the end of calendar year 2022, 68 state, city and county public health laboratories were generating SARS-CoV-2 sequences, analyzing the variant data, and openly sharing these sequences through public genome repositories as part of national genomic surveillance efforts. This is a significant increase from just two years prior, when only 23 public health laboratories were generating data in 2020. With AMD support, state, local, and territorial public health laboratories generated over 690,000 SARS-CoV-2 sequences in calendar year 2022, compared to fewer than 18,000 in 2020. These substantial increases in sequencing and the ability to produce actionable sequence data will help improve continued surveillance for SARS-CoV-2 and establish critical capacity for pathogen-agnostic surveillance and response, which will better protect the health of Americans from this and other disease threats.

Since the program's inception, AMD has also provided training and support to states for bioinformatic analysis and data pipeline standardization, and has continued to support and expand a network of regional bioinformaticians and training leads which provide peer-to-peer support to other jurisdictions. In FY 2022, AMD established five Pathogen Genomics Centers of Excellence (PGCoEs), with each site as a collaboration between a state or local public health department and one or more academic centers. Together, these centers form a network of partnerships between state health departments and academic centers to foster and improve innovation and technical capacity in pathogen genomics, molecular epidemiology, and bioinformatics.

### **Antimicrobial and Antibiotic Resistance (AR)**

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The agreement includes an increase for activities and directives outlined in House Report 117-403. In addition, CDC is directed to improve data collection and increase support for U.S. health departments to detect, contain, and prevent AR infections and increase collaborative efforts at the international, national, regional, State, tribal, and local levels. Finally, the agreement directs CDC to work with other HHS agencies to provide an annual briefing described under the section of the explanatory statement dealing with the Office of the Secretary within 30 days of enactment of this Act and every succeeding annual appropriations Act. *(Page 27, Joint Explanatory Statement to the Consolidated Appropriations Act, 2023)*

#### Action taken or to be taken

CDC conducted a briefing for the Committee on February 7, 2023.

## **Emerging Infectious Diseases - Wastewater Surveillance**

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The agreement includes an increase for emerging infectious disease work. In addition, recognizing the important role wastewater testing plays for our Nation's biosecurity, the agreement encourages CDC to continue working with States and localities to broaden the scope of wastewater surveillance capabilities to track COVID-19 and additional pathogens and to assist with public health data analysis. The agreement requests information in the fiscal year 2024 Congressional Justification on best practices in developing wastewater surveillance programs in rural settings and institutions of higher education, and strategies to increase participation among State and local governments and correctional facilities. *(Page 28, Joint Explanatory Statement to the Consolidated Appropriations Act, 2023)*

### Action taken or to be taken

CDC is working with partner agencies and organizations to ensure that small, rural, and Tribal communities have the necessary resources and support to participate in the National Wastewater Surveillance System (NWSS). Through commercial testing contracts, CDC has worked with health departments to expand wastewater surveillance capacity to communities without existing coverage to provide valuable, timely data on COVID-19 variants of concern and mpox. This included prioritizing more rural communities and communities identified as more vulnerable to COVID-19, using CDC's Social Vulnerability Index and vaccination coverage. In addition to the commercial testing contract, NWSS is supporting Tribal communities through the Tribal Public Health Capacity Building and Quality Improvement Umbrella Cooperative Agreement.

NWSS has worked with academia since its inception, and they continue to be trusted partners in the development of wastewater surveillance efforts in the United States. Implementation of wastewater surveillance activities on university campuses is coordinated at the local level and supported through NWSS like any sampling within the sewer network (versus at the wastewater treatment plant, which is the primary focus of NWSS). Wastewater surveillance at correctional facilities has proven to be a useful tool to detect and control outbreaks in these high-density facilities. NWSS is developing best practices for wastewater surveillance in correctional facilities and is working with internal and external partners to determine the appropriate implementation partners and scale.

## **Mississippi Delta Health Collaborative (MDHC)**

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The agreement encourages CDC to build on its longstanding investment in MDHC by working to replicate the work in additional sites while maintaining the current strategy. The agreement directs CDC to provide an update on these activities in the fiscal year 2024 Congressional Justification. *(Page 35-36, Joint Explanatory Statement to the Consolidated Appropriations Act, 2023)*

### Action taken or to be taken

The Mississippi Delta Health Collaborative Program (MDHC) implements population-wide and priority population approaches to prevent and control high blood pressure and reduce health disparities associated with high blood pressure among adults in the 18-county Mississippi Delta Region. With CDC funding, the state has partnered with community health workers, pharmacists, community organizations, local leaders and businesses, and faith-based groups to improve access to heart disease and stroke screening and care, identify and address medication challenges, and reduce the burden of hypertension and heart disease among people who live in rural and other areas that put them at a higher risk of heart disease and stroke.

By bringing health screenings to unconventional places, like churches and barbershops, MDHC reaches individuals at highest risk for CVD who may not have access to regular medical care. Peer-to-peer screenings and outreach have led to increased medical referrals and intervention.

MDHC works across the 18-county Mississippi Delta region. This includes engagements with faith-based organizations to support Congregate Health Programs; collaborations with local facilities via the joint-use agreements, to allow for community access to facilities in order to increase opportunities for safe locations to engage in physical activities; and partnerships with local clinicians and community health workers to strengthen community to clinical links designed to assist individuals with management and control of risk factors associated with CVD. CDC is working to replicate these and other successes in more sites across the 18-county Delta region.

Despite workforce challenges due to COVID-19, the MDHC continued addressing the burden of hypertension and high cholesterol. The Clinical Community Health Worker Initiative (CCHWI) has increased enrollment, continued encounters by using phones and telehealth resources, and increased the number of partnering CCHWI healthcare systems to continue diagnosing and managing patients with hypertension. Community grantees have continued patient education, safe screenings, and community programs. Paradoxically, the COVID-19 pandemic may have caused an increased awareness about heart diseases in the Mississippi Delta.

The MDHC maintained partnerships with eight health care systems in the Delta and supports 13 CHWs working across these systems and their various satellite clinics. The patients supported by the CCHWI of the MDHC experienced an average improvement (decrease) in systolic blood pressure of 7.1% and improvement (decrease) of diastolic blood pressure of 6.3% this past year.

### **Reducing E-cigarette Use During Pregnancy**

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The agreement supports CDC's efforts to address tobacco use during pregnancy and encourages CDC to include initiatives specifically targeted at e-cigarette use during pregnancy, including initiatives to raise awareness among patients and clinicians about the risks of e-cigarette use during pregnancy. CDC is encouraged to partner with other HHS agencies to ensure pregnant women can access safe and effective tobacco cessation services and medications. The agreement requests an update on these activities in the fiscal year 2024 Congressional Justification. *(Page 36, Joint Explanatory Statement to the Consolidated Appropriations Act, 2023)*

#### Action taken or to be taken

CDC will continue to communicate health messages on the dangers of tobacco use, including e-cigarette use, during pregnancy through CDC's web site, social media channels and presentations. CDC will continue to collaborate with HHS agencies and non-federal partners to promote clinical interventions for pregnant patients. CDC will continue to support the Pregnancy Risk Assessment Monitoring System (PRAMS) to collect site-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. PRAMS includes questions about tobacco use, including cigarettes and e-cigarettes. These data can inform programs and policies aimed at reducing tobacco use during pregnancy.

### **Surveillance for Emerging Threats to Mothers and Babies**

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Surveillance for Emerging Threats to Mothers and Babies - The agreement includes an increase to expand the efforts and reach of SET-NET Surveillance for Emerging Threats to Mothers and Babies to detect and respond to emerging threats to mothers and babies. The agreement directs CDC to provide a briefing to the Committees on its spend plan for this funding within 90 days of enactment of this Act and an update on these activities in the fiscal year 2024 Congressional Justification. Finally, CDC was provided additional funding in fiscal year 2019 to expand its Zika surveillance to determine the long-term health impacts of infants born to mothers infected with the Zika virus. The agreement requests an update in the fiscal year 2024 Congressional Justification from this ongoing surveillance. *(Page 41, Consolidated Appropriations Act, 2023, Joint Explanatory Statement)*

#### Action taken or to be taken

CDC will offer a briefing to the Committee on the SET-NET Spend Plan.

***SET-NET Zika Surveillance Activities***

CDC continues to monitor the impact of the 2016-2017 Zika virus outbreak on children born to people with laboratory confirmed Zika virus infection during pregnancy. On January 21, 2022, CDC published the first MMWR report describing CDC's surveillance activities on Zika-associated birth defects, which combined data from the U.S. states, DC and U.S. territories and freely associated states. The report found that approximately 5% of infants being followed had any Zika-associated brain or eye defect, and one third of infants had more than one defect reported.

CDC will continue collecting information on a large cohort of children born to pregnant people with laboratory evidence of Zika virus exposure in Puerto Rico through March of 2023, when the last of these children reach age five years of age. Analyses will continue to better understand the longer-term impacts of Zika on neurodevelopment, specifically looking at neurological sequelae and delays in reaching developmental milestones, among children with and without Zika-associated birth defects. Early findings show the frequency of autism spectrum disorder diagnosis was 3.5% among children aged  $\geq 18$  months with Zika exposure in the U.S. Zika Pregnancy and Infant Registry (USZIPR). Among those who received screening at 18 months, the frequency was 5.4%.

## SIGNIFICANT ITEMS IN FY 2023 APPROPRIATIONS REPORT - HOUSE

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Significant items for inclusion in the FY 2024 Centers for Disease Control and Prevention Congressional Justification from House Report 117-403.

### Immunization Rates

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Immunization Rates.—The Committee is concerned about the marked decline in routine vaccines as a result of the pandemic. The Committee encourages CDC to continue surveillance and laboratory efforts, and to promote HPV vaccination in support of the Administration’s Cancer Moonshot Initiative. In addition, the Committee requests information in the fiscal year 2024 Congressional Budget Justification on how the Advisory Committee on Immunization Practices (ACIP) can support both routine and emergency reviews in real time to ensure timely access to immunizations. Furthermore, the Committee recognizes that office-based physicians are trusted sources of health care information and delivery, and encourages CDC to consider their role in vaccination efforts. (Page 71, House Report 117-403)

#### Action taken or to be taken

To help address pandemic-related declines in routine immunizations, CDC is launching [Let’s RISE](#),<sup>314</sup> an effort to equip partners and health care providers with actionable strategies, resources, and data to support getting all Americans back on schedule with their routine immunization. CDC is also committed to working with healthcare professionals to improve adult vaccination rates and reduce the number of missed opportunities for vaccinations. Through the [Vaccinate with Confidence](#)<sup>315</sup> platform, CDC provides resources for healthcare providers to [talk with patients about COVID-19 vaccination](#)<sup>316</sup> and other vaccinations. HPV vaccination can prevent more than 90% of cancers caused by HPV and prevent cancer precursors. CDC has been supporting the National HPV Vaccination Roundtable, a coalition of public, private, and voluntary organizations with expertise relevant to increasing HPV vaccination rates in the United States. In FY 2024, CDC will continue to promote vaccine uptake, working with professional and other organizations to increase awareness, education, and training on HPV vaccination for cancer prevention. CDC will also enhance collaborations with health systems, health plans, and payors to increase vaccine uptake and continue to improve HPV vaccination coverage.

The Advisory Committee on Immunization Practices (ACIP) is a federal advisory committee, composed of medical and public health experts, that provides advice and guidance to the CDC Director on the most effective means to prevent vaccine-preventable diseases in the United States. Recommendations made by the ACIP are reviewed by the CDC Director and, if adopted, are published as official CDC/HHS recommendations in the Morbidity and Mortality Weekly Report (MMWR). ACIP generally meets three times a year for in-person meetings at CDC to make vaccine recommendations. Due to COVID-19, ACIP meetings have been held more frequently and virtually to allow ACIP members to review data and make decisions in a timely manner. ACIP continues to work towards ensuring that both routine and emergency reviews for immunization recommendations are consistent with timely access to immunizations.

### Antibiotic Resistance (AR)

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The Committee includes an increase of \$20,000,000 to enhance capacity to combat the growing threat of antibiotic resistant bacteria. The Committee recognizes the importance of addressing the problem of antibiotic-resistant bacteria through a One Health approach and by tracking resistance through local, regional, national, and global surveillance. In addition, the Committee urges CDC to develop improved data collection and surveillance of *Clostridioides difficile* (C diff.), including working with State and local partners as part of the

<sup>314</sup> <https://www.cdc.gov/vaccines/partners/routine-immunizations-lets-rise.html>

<sup>315</sup> <https://www.cdc.gov/vaccines/covid-19/vaccinate-with-confidence.html>

<sup>316</sup> <https://www.cdc.gov/vaccines/covid-19/hcp/engaging-patients.html>

Nationally Notifiable Diseases Surveillance System. The Committee urges CDC to assist State and local partners in increasing awareness of antibiotic stewardship as it relates to C diff. The Committee requests an update in the fiscal year 2024 Congressional Budget Justification on these activities. (Page 74, House Report 117-403)

#### Action taken or to be taken

In the Consolidated Appropriations Act, 2023 CDC received \$197,000,000 for Antibiotic Resistance (AR) activities. In fiscal year 2023, CDC continues critical investments in strengthening core AR epidemiology, laboratory, containment, and response capacity across One Health in all states and around the world to combat the threat of antimicrobial-resistant threats. CDC supported health department programs in all 50 states, as well as several large cities and territories, to address resistant healthcare, foodborne, and community infections (such as resistant sexually transmitted diseases). CDC led domestic and global One Health efforts to address the problem of antimicrobial-resistant pathogens by tracking resistance through local, state, regional, and global surveillance, including expanded AR surveillance efforts through the Global Antimicrobial Resistance Laboratory and Response Network.

CDC works with state and local health departments, healthcare providers, the Centers for Medicare and Medicaid Services (CMS) and other federal partners, and other public health partners to reduce *Clostridioides difficile* (*C. diff*) infections (CDI) and to track and report national progress toward preventing and reducing CDI in many types of healthcare facilities. The Council of State and Territorial Epidemiologists (CSTE) standardizes surveillance case definitions and maintain the Nationally Notifiable Condition list with input from CDC, other agencies, and public health partners. State and local laws dictate which of these diseases and conditions are reported to the state, and subsequently, to CDC's Nationally Notifiable Diseases Surveillance System (NNDSS), although reporting of selected diseases and conditions is recommended by CSTE. CDC and CSTE have previously discussed the possibility of making CDI nationally notifiable. Given the broad CDI reporting requirements to NHSN as part of multiple CMS quality reporting programs, NNDSS-related reporting would lead to additional reporting burden for public health departments, healthcare facilities, and healthcare providers. CDC is moving towards a new NHSN surveillance definition that will combine test results and treatment for *C. diff* to inform a fully automated measure that will increase the accuracy of detecting clinically significant infections and would further lessen burden on facilities reporting in NHSN.

Coordinated infection prevention and control and antibiotic stewardship efforts over the last few years have effectively reduced CDI in healthcare. Preliminary 2022 data show that CDI has decreased by more than half in acute care hospitals since 2015 with a similar decrease in all healthcare associated CDI since 2011. CDC will continue to work with public health partners to promote novel and emerging approaches to prevention and treatment of CDI.

#### **Emerging Infectious Diseases - Wastewater Surveillance**

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The Committee includes an increase of \$20,000,000 for emerging infectious disease work, including laboratory capacity and wastewater surveillance. The Committee commends CDC for implementing the National Wastewater Surveillance System (NWSS) with partners at health laboratories and academic institutions to better track COVID-19. The Committee encourages CDC to support staff sharing arrangements among multiple local health departments implementing NWSS and efforts to stand up systems in rural settings that do not have access to centralized wastewater treatment services. The Committee requests information in the fiscal year 2024 Congressional Budget Justification on best practices in developing wastewater surveillance programs in rural settings, and strategies to increase participation in the NWSS among State and local governments, institutions of higher education, and correctional facilities. (Page 74-75, House Report 117-403)

Action taken or to be taken

In the Consolidated Appropriations Act, 2023, CDC did not receive any funding dedicated to wastewater surveillance. Please see the response under the Consolidated Appropriations Act, 2023 Significant Item section of the same title.

**Mycotic Disease**

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The Committee provides an increase of \$2,000,000 in Emerging Infectious Diseases for mycotic diseases, including, but not limited to, surveillance and prevention, building capacity in the State and local health departments, cooperative agreements, education of the public and healthcare providers, and laboratory support. The Committee requests an update in the fiscal year 2024 Congressional Budget Justification on how this funding is being utilized. *(Page 75-76, House Report 117-403)*

Action taken or to be taken

In the Consolidated Appropriations Act, 2023, CDC received \$2,000,000 for Mycotic Disease. In FY 2023, CDC continues to work with federal, state, and local partners to prevent, control, and respond to fungal diseases. CDC is supporting state and local health departments, the Mycoses Study Group, and other relevant institutions to address the threat of invasive fungal infections. Additional activities CDC will continue to work on include building laboratory capacity for pathogen identification, susceptibility testing, diagnostics evaluation, and next-generation methods; establishing surveillance to understand emerging trends, health disparities, risk factors, and geographic spread; and promoting disease awareness and educational campaigns so patients can receive appropriate diagnosis and treatment faster to save lives.

**Vector-Borne Disease**

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The Committee includes an increase of \$12,000,000 for enhanced vector-borne disease activities, including Lyme Disease and tickborne diseases. The Committee includes funding to support training and the development of communities of practice in vector-borne disease prevention and control for the regions of the U.S. that account for the largest burden of vector-borne disease. The Committee urges CDC to increase provider and public awareness of Lyme and known tickborne diseases (TBD) in differential diagnoses, to practice shared decision making, to be aware of the existence of two sets of differing Lyme Disease Clinical Guidelines, and to encourage the public to take preventive measures. The Committee requests an update in the fiscal year 2024 Congressional Budget Justification on the use of advanced and emerging technologies for the development of improved diagnostics, including a timeline on when improved diagnostics may become commercially available for Lyme disease. In addition, the Committee notes that the pandemic response necessitated the disruption of mosquito control and abatement efforts by many State and local health departments and notes the importance of continuing mosquito prevention efforts. The Committee is aware of the ongoing challenges faced by the U.S. territories in the Caribbean and the Pacific regarding control and management of vector-borne diseases. The Committee urges CDC to support the training and research needs of the U.S. territories and encourages the use of the Mosquito Abatement for Safety and Health Program to provide grants and technical assistance to States and political subdivisions to prevent and control mosquito-borne diseases. In addition, the Committee requests CDC, in consultation with other appropriate agencies, to provide information in the fiscal year 2024 Congressional Budget Justification on the ecological structure and epidemiological factors that must be known and monitored to estimate the mosquito-borne infectious disease outbreak risk. *(Page 76, House Report 117-403)*

Action taken or to be taken

In the Consolidated Appropriations Act, 2023, CDC received an increase of \$13,500,000 for Vector-Borne Disease. To continue efforts to address vector-borne diseases, CDC published a new funding opportunity announcement in November 2022 entitled, "Strengthening Training, Evaluation, and Partnerships in the

Prevention and Control of Vector-Borne Diseases,” which will ensure the support of regional centers that support training and development of communities of practice in vector-borne disease prevention and control. CDC has also continued to increase provider and public awareness of Lyme disease, tickborne diseases, and other vector-borne diseases, including through new clinician training modules and updated health communication resources. In response to the Committee’s interest in the use of advanced and emerging technologies for the development of improved Lyme disease diagnostics, CDC continued to provide technical review to support the Department of Health and Human Services LymeX diagnostic prize challenge, run by the Office of the Assistant Secretary for Health. CDC’s Advanced Molecular Detection program also initiated new research using CRISPR and RNA technologies to develop new diagnostic techniques and technologies for early and accurate Lyme disease diagnosis. The results of this early research will inform the timeline for the future commercialization of such assays, if they prove promising in the coming two years.

There are several ecological structure and epidemiological factors that must be known and monitored to estimate the mosquito-borne infectious disease outbreak risk. The factors that must be known include: 1) the prevalence of mosquitoes that transmit pathogens (vector mosquitoes); 2) the infection rate within those mosquitoes; and 3) the degree to which animals and people are immune to the infection (population immunity). The prevalence of vector mosquitoes depends on environmental factors that influence how mosquitoes develop and how long they live; two of these important factors are temperature and rainfall. The infection rate in vector mosquitoes depends on whether there are animal hosts and the prevalence of infection in those animal hosts. Population immunity of animal hosts that results from previous exposure to the pathogen reduces the number of hosts that may be infected, which in turn reduces transmission; this is also true among people, as the more people who have been previously infected, the fewer people there are who are susceptible to that infection after being bitten by infected mosquitoes. Through CDC’s vector-borne disease prevention and control program, jurisdictions receive support to learn about each of these factors within their jurisdictions, by conducting vector surveillance, testing vector mosquitoes in their jurisdictions for pathogens, and conducting surveillance of mosquito-borne diseases in animals and people.

## **Breast and Cervical Cancer**

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The Committee includes an increase of \$10,000,000 to increase the provision of critical, lifesaving breast cancer screening and diagnostic services to uninsured and underinsured women, supporting the Cancer Moonshot goal to increase the percentage of women served by the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) who have rarely or never been screened. In addition, the Committee is concerned with the public health impact from triple-negative breast cancer, named as such because it tests negative for estrogen receptors, progesterone receptors, and excess HER2 protein and thus does not respond to treatments developed for these subtypes. The Committee supports efforts to increase awareness of triple negative breast cancer and incorporate diagnoses strategies in existing breast cancer screening, diagnosis and linkage to care health programs. Furthermore, the Committee encourages recipients to implement navigator programs to help patients overcome barriers and have the resources they need. The Committee requests information in the fiscal year 2024 Congressional Budget Justification outlining current activities to support navigation services. (*Page 78, House Report 117-403*)

### Action taken or to be taken

In the Consolidated Appropriations Act, 2023, CDC received an increase of \$8,500,000 for Breast and Cervical Cancer activities, of which \$4,000,000 is dedicated to NBCCEDP. To increase awareness of triple negative breast cancer, CDC currently has a dedicated web page ([Triple-Negative Breast Cancer | CDC](https://www.cdc.gov/cancer/breast/triple-negative.htm))<sup>317</sup> to educate women on the topic, including a virtual simulation tool in which women can have an interactive conversation with “Linda”, a virtual triple negative breast cancer survivor. The steps to diagnose triple negative breast cancer are routinely done on anyone diagnosed with breast cancer as a standard of care from the American College of

<sup>317</sup> <https://www.cdc.gov/cancer/breast/triple-negative.htm>

Pathology. In support of the President’s Cancer Moonshot Initiative, funding is used by NBCCEDP award recipients to support patient navigation services within the clinics and health care facilities they partner with to help provide screening services for women served by their programs. These patient navigation services help women get cancer screening, receive follow-up care if they have abnormal test results, and get referred to treatment if needed. During the last five year cooperative agreement (July, 2017 – June, 2022), program survey data shows the total number of women who received navigation services increased 21 percent. Within the total number of women receiving navigation services during this time:

- The number of women navigated to completed screening increased 43%
- The number of women navigated for diagnostic services increased 38%
- The number of women navigated to completed diagnostic services increased 47%

## Glaucoma

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The Committee requests information in the fiscal year 2024 Congressional Budget Justification on efforts to reach African American and Hispanic communities through the glaucoma program. *(Page 79, House Report 117-403)*

### Action taken or to be taken

CDC continues to invest in activities to improve vision and eye health, including assessing population estimates, trends, and health disparities through the [Vision Health Initiative](#) (VHI).<sup>318</sup> CDC supports glaucoma detection projects across the country through VHI’s Glaucoma Detection Program.

CDC will continue to fund cooperative agreements with three academic institutions and a coordinating center to reach populations disproportionately affected by vision loss, including African American and Hispanic populations. These populations are less likely to have access to eye care to detect and manage glaucoma and other eye diseases in community-based settings. The funded recipients – the University of Alabama at Birmingham, Columbia University, and the University of Michigan – established the [Screening and Interventions for Glaucoma and Eye Health Through Telemedicine \(SIGHT\) studies](#)<sup>319</sup> to improve glaucoma detection and management among populations at high risk for glaucoma. By partnering with organizations such as the New York City Housing Authority and Federally Qualified Health Centers, they are bringing eye care services to under-resourced communities and addressing barriers such as unemployment, poverty, and lack of health insurance, transportation, and community resources such as optometrists and ophthalmologists.

## Interstitial Cystitis

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The Committee requests an update in the fiscal year 2024 Congressional Budget Justification on education, outreach, and public awareness activities related to interstitial cystitis. *(Page 80, House Report 117-403)*

### Action taken or to be taken

CDC’s grantee, Boston’s Children’s Hospital (BCH), is working with the Interstitial Cystitis Association (ICA) to support outreach and awareness. The ICA raises awareness and serves as a central hub for healthcare providers, researchers, and millions of patients living with Interstitial Cystitis (IC). ICA serves as a key resource for those who suffer with constant urinary urgency and frequency and extreme bladder pain. Through the efforts of ICA, millions of patients have obtained reliable, accurate information about the diagnosis and treatment of this debilitating disease. In FY 2022, ICA:

- Initiated a social media strategy to raise awareness of the epidemiologic study and findings

<sup>318</sup> [https://www.cdc.gov/visionhealth/index.htm?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fvisionhealth%2Fhome%2Findex.html](https://www.cdc.gov/visionhealth/index.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fvisionhealth%2Fhome%2Findex.html)

<sup>319</sup> <https://sightstudies.org/>

- Launched digital media outreach through social media and other advertising, including on the Boston public transit system
- Executed campaign evaluation activities to guide continuing efforts (quantified through page views and overall enrollment at both BCH and Inspire.com)
- Increased participation in the survey on patient perspectives and outcomes regarding the experience, care and treatment of IC

## **Spina Bifida**

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The Committee requests an update in the fiscal year 2024 Congressional Budget Justification on efforts to address the transitional and adult care needs of the growing, aging spina bifida community. *(Page 84, House Report 117-403)*

### Action taken or to be taken

CDC appreciates the Committee's support to improve the transition from pediatric to adult care to address needs of the growing, aging spina bifida community. Spina bifida is a complex condition requiring lifelong, expensive treatment. With the right care, most people with spina bifida can lead full, productive lives. CDC collects and analyzes data to evaluate health outcomes and medical services for patients with spina bifida and seeks to improve the quality of care received by these patients nationwide.

CDC's National Spina Bifida Patient Registry gathers data from children and adults who receive care at spina bifida specialty clinics. These data help us understand more about the care received and the impact of care and services on health outcomes and quality of life. Evaluation of this information leads to improvements in the care and treatment of spina bifida and its comorbidities, which in turn improves mental health and educational and social outcomes. For example, [a journal article](#)<sup>320</sup> using data from CDC's National Spina Bifida Patient Registry shows that specific sociodemographic, medical, and functional factors are associated with the likelihood of employment for young adults living with spina bifida. Clinicians can consider findings such as factors related to employment when helping young adults transition into adulthood.

## **Opioid Abuse and Overdose Prevention**

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The Committee includes an increase of \$25,000,000 to enhance activities, including outreach capacity and to help eliminate racial disparities in overdose deaths and improve access to prevention and treatment services. In addition, the Committee notes that CDC is currently conducting efforts focused on chronic pain as directed in House Report 117–96, and requests an update in the fiscal year 2024 Congressional Budget Justification on the status of these efforts. In addition, the Committee requests an update in the fiscal year 2024 Congressional Budget Justification on the percentage of funding provided to local communities for each entity receiving funds under this heading. *(Page 89, House Report 117-403)*

### Action taken or to be taken

In the Consolidated Appropriations Act, 2023 CDC received \$505,579,000 for Opioid Abuse and Overdose Prevention Activities.

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<sup>320</sup> <https://onlinelibrary.wiley.com/doi/10.1111/dmcn.15456>

### **Chronic Pain Activities**

CDC leverages several data sources to understand the impact of chronic pain. For example, data from the 2019-2021 National Health Interview Survey (NHIS) is analyzed to provide estimates of the prevalence of chronic pain and high-impact chronic pain among adults in the United States and among population groups defined by demographic, geographic, socioeconomic, and health status characteristics.

CDC continues to research chronic pain and pain management in the United States using nationally representative population-based survey data (such as the Medical Expenditure Panel Survey (MEPS) and the National Ambulatory Medical Care Survey (NAMCS). Additional work is being conducted using administrative claims data from commercially insured patients and the Medicare and Medicaid population. For example, recent studies published by CDC scientists examined the prevalence of chronic pain and the prevalence of opioid prescriptions, nonopioid prescriptions, and nonpharmacological therapies among chronic pain patients.<sup>321,322</sup>

CDC conducted outreach to people living with pain, their caregivers, and the clinicians who help manage their pain in support of developing the *2022 CDC Clinical Practice Guideline for Prescribing Opioids for Pain* (2022 Clinical Practice Guideline), which provides recommendations for clinicians to provide evidence-based treatment for pain care for patients. CDC posted two notices in the Federal Register to learn more about values and preferences related to pain and pain management options (including but not limited to the benefits and harms of opioid use) to complement ongoing guideline update efforts. The first Federal Register Notice (FRN) solicited input through public comment, and the second solicited input through individual conversations with patients who experience pain, caregivers, and clinicians. CDC reviewed thematic summaries of public comments and individual conversations to learn more about patients', caregivers', and clinicians' values and preferences before drafting the updated guideline.

The 2022 Clinical Practice Guideline provides recommendations to promote a multimodal and multidisciplinary approach to pain management and implementation strategies to reduce disparities in pain management care.<sup>323</sup> In addition, policies and programs that address primary injury prevention, improved access to affordable, culturally responsive health care, and more effective pain management therapies can mitigate the burden of chronic pain. CDC released a suite of translation and communication materials to support implementation of the 2022 Clinical Practice Guideline.<sup>324</sup> The agency remains committed to working with clinical partners and patient organizations to improve pain care by giving patients and clinicians the data, tools, and guidance they need to make informed, individualized, and patient-centered treatment decisions.

### **Support for Opioid Overdose Prevention in Local Jurisdictions**

CDC began providing direct funding for local health departments in 2019 with the launch of the Overdose Data to Action cooperative agreement, which provided \$55 million per year to 16 large city and county health departments. In 2023, CDC is expanding support to up to 40 local communities via the Overdose Data to Action: Limiting Overdose through Collaborative Actions in Localities (OD2A: LOCAL) cooperative agreement. This \$80 million a year cooperative agreement will directly fund city and county health departments and territories to conduct overdose-related surveillance and prevention activities and decrease overdose morbidity and mortality at the local level. Funded recipients will emphasize reducing disparities and implementing evidence-based strategies, including harm reduction and linkage to and retention in care.

Percentages of funding provided to local communicates for each entity receiving funds under this heading can be found within the Injury Prevention and Control budget narrative.

<sup>321</sup> <https://academic.oup.com/painmedicine/article/20/10/1948/5211340?login=true>

<sup>322</sup> [https://www.ajpmonline.org/article/S0749-3797\(20\)30227-0/fulltext](https://www.ajpmonline.org/article/S0749-3797(20)30227-0/fulltext)

<sup>323</sup> <https://www.cdc.gov/mmwr/volumes/71/rr/rr7103a1.htm>

<sup>324</sup> <https://www.cdc.gov/opioids/healthcare-professionals/index.html>

## **Public Health Preparedness Cooperative Agreements**

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The Committee includes an increase of \$20,000,000 to enhance investments in State, local, and territorial health departments to quickly detect, monitor, and respond to health threats. Public health system investments serve as the backbone for disaster and outbreak response in every State and the pandemic has shown that increased funding for preparedness is necessary for a baseline of consistent protection. The Committee directs that grant recipients incorporate Limited English Proficient (LEP) Individuals into their emergency response. Grant recipients must ensure that they are conducting tailored and robust outreach efforts to LEP communities. In addition, the Committee requests the fiscal year 2024 Congressional Budget Justification include a State distribution table, which should also include how funding is being allocated to local health departments and how States are determining these allocations. *(Page 93, House Report 117-403)*

### Action taken or to be taken

In the Consolidated Appropriations Act, 2023, CDC received \$20,000,000 for Public Health Preparedness Cooperative Agreements.

CDC will submit a state distribution table showing allocation of funding as a formal report to congress. Information on state and local funding allocations can be found in the Public Health Preparedness and Response budget narrative.