

NCHHSTP

NATIONAL CENTER FOR HIV/AIDS, VIRAL HEPATITIS, STD, AND TB PREVENTION

ANNUAL REPORT 2015



**Centers for Disease
Control and Prevention**
National Center for HIV/AIDS,
Viral Hepatitis, STD, and
TB Prevention

FOREWORD

I am excited to share with you the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Annual Report 2015, which highlights some of the Center's key achievements from 2015.

Through our programs and collaborations with partners—including state and local health departments, federal agencies, state and local education agencies, universities, and nonprofit community-based organizations—we are seeing many positive results, including:

- Seeing signs of progress in the fight against HIV, with a 19% decrease in annual HIV diagnoses in the United States from 2005 to 2014. HIV diagnoses declined among heterosexuals, people who inject drugs, and African American women. Gay, bisexual and other men who have sex with men (MSM) continue to be most heavily affected by HIV. Diagnoses among MSM increased 6% over the decade, driven largely by increases among black and Latino MSM, while diagnoses among white MSM declined over the decade. NCHHSTP is working to reduce HIV incidence and disparities by focusing on high impact prevention.
- Collaborating with the Indiana State Health Department, NCHHSTP helped respond to an outbreak of HIV and Hepatitis C virus in Indiana. NCHHSTP assisted the state in investigating and working to rapidly control the outbreak among people who were injecting oxycodone, a prescription opioid.
- Issuing a clinical advisory to alert physicians and other health-care providers to a growing number of cases of ocular syphilis, which can cause blindness.
- Establishing a Drug Susceptibility Testing Reference Center for TB at the California Microbial Diseases Laboratory. The Center, established in partnership with the Association of Public Health Laboratories, provides quality-assured testing for public health laboratories with low test volumes.
- Leading a highly viewed CDC Grands Rounds session on adolescent health. About 2,000 viewers watched the live webcast.
- Adopting a new NCHHSTP Strategic Plan Through 2020. The plan guides the Center's prevention efforts and sets ambitious targets to track progress toward key goals.

NCHHSTP implemented many additional successful activities in 2015 to reduce incidence, morbidity, mortality, and health inequity associated with our diseases. These activities and accomplishments were possible because of contributions of our expert and diverse staff and our partners, for whom we are grateful. You can find more about NCHHSTP's programs at <http://cdc.gov/nchhstp>.

Jonathan Mermin, MD, MPH

RADM and Assistant Surgeon General, USPHS

Director, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention





ABOUT NCHHSTP

The National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) at the Centers for Disease Control and Prevention (CDC) saves lives, protects people, and reduces health disparities by preventing HIV, viral hepatitis, sexually transmitted diseases (STDs), and tuberculosis (TB). The infectious diseases NCHHSTP focuses on share similar or overlapping 1) risk factors such as risky sexual activity and drug use; 2) disease interactions, such as HIV increasing risk for active TB and STD as biomarkers for HIV acquisition; and 3) at-risk populations—including some racial and ethnic minorities, men who have sex with men (MSM), adolescents, and injection drug users. These diseases also share similar social determinants, including poor access to health care, stigma, discrimination, incarceration, homelessness, and poverty.

To address these overlapping health issues, NCHHSTP implements multidisciplinary programs, policy, research, surveillance, and evaluation. This report provides some highlights of the Center's activities and accomplishments during 2015.

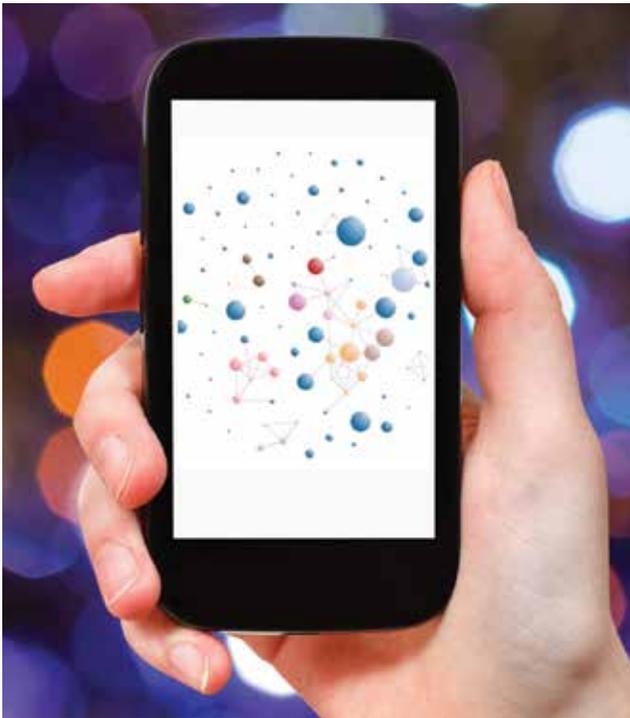
NCHHSTP STRATEGIC PLAN

In 2015, NCHHSTP adopted a new *National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention: Strategic Plan through 2020*. The plan updates the Center's previous strategic plan and serves as a blueprint for achieving the Center's vision of a future "free of HIV, viral hepatitis, STDs, and TB."

The plan sets forth goals to reduce incidence, morbidity, mortality, and health disparities related to HIV, viral hepatitis, STDs, and TB. It includes a number of key progress indicators with ambitious targets to track progress toward the plan's goals. The indicators are aligned with national plans including the *National Prevention Strategy*, the *National HIV/AIDS Strategy: Updated to 2020*, and the *HHS Action Plan for the Prevention, Care and Treatment of Viral Hepatitis*.

The plan reflects the Center's guiding principle of high impact prevention, which emphasizes the most cost-effective and scalable programs, policies, and research. It identifies six strategies to help reach the plan's goals. These strategies are:

- Using data for program improvement
- Scientific discovery and evaluation
- Increasing knowledge and adoption of healthy behaviors
- Prevention through healthcare
- Program collaboration and service integration
- Achieving organizational excellence



Global Hepatitis Outbreak and Surveillance Technology (GHOST) is a web-based system that uses novel bioinformatics technology to analyze Hepatitis C virus samples' unique "fingerprint" and identify potential transmission clusters.

USING DATA FOR PROGRAM IMPROVEMENT

NCHHSTP uses data for program improvement to better target interventions to those at highest risk, prioritize use of funds and resources, and refine existing programs. In doing so, NCHHSTP uses surveillance data, other strategic data, modeling and results from program evaluation and research studies.

Some examples of NCHHSTP activities that used data to improve programmatic efforts include:

- Expanded the Medical Monitoring Project (MMP) system's capacity to collect data on all persons living with an HIV diagnosis (including those out of HIV care). The MMP is a surveillance system designed to learn more about the care, treatment, and prevention experiences and needs of people living with HIV. It consists of a cross-sectional, national sample survey that assesses the clinical and behavioral characteristics of adults with HIV who are receiving outpatient medical care in the United States and Puerto Rico. The expansion to include all people diagnosed with HIV, not just those receiving care, will improve the usefulness of MMP data. This information can be used to guide policy and funding decisions aimed at increasing engagement in care and improving quality of care for people living with HIV throughout the United States.
- Identified 18 suspected large TB outbreaks by using geospatial statistics methods and national TB genotyping data. These outbreaks occurred between April 2014 and March 2015. About 78% of the suspected outbreaks were initially identified by NCHHSTP, rather than being reported by local TB programs. This surveillance effort, targeting large outbreaks using geospatial and genotyping techniques, allows NCHHSTP to identify and respond to outbreaks more quickly.
- Continued monitoring antimicrobial susceptibility in *N. gonorrhoeae* through the Gonococcal Isolate Surveillance Project (GISP), the longest continuously operating antimicrobial susceptibility surveillance program in the United States. Data from GISP have repeatedly informed revisions to national guidelines for gonorrhea treatment, including the 2015 STD Treatment Guidelines. Because of the emergence of resistance to other antimicrobials during the past three decades and declining susceptibility to cefixime, in recent years only a single treatment option is recommended for gonorrhea

treatment: dual therapy with ceftriaxone (an injectable cephalosporin) and an oral dose of azithromycin. Monitoring of susceptibility to cephalosporins and azithromycin is particularly important to ensure the effectiveness of the only remaining recommended treatment option.

- Initiated a 5-year cooperative agreement with three grantees to model epidemiologic and economic outputs and outcomes of HIV, viral hepatitis, STDs, tuberculosis, including for school-age populations. Grantees are Emory/Johns Hopkins University, Harvard University Prevention Policy Modeling Lab, and the University of California at San Francisco. Results of these efforts will be used to improve programs, focus activities, adjust policies, and refine the targeting of NCHHSTP funding.
- Published updated “State HIV Prevention Progress Reports,” which show each state’s progress toward meeting key goals and objectives of the *National HIV/AIDS Strategy: Updated to 2020*. The results showed that progress toward meeting NHAS goals is uneven across the country. More than half of states improved on 6 of 11 indicators, and as a nation, goals were met for reducing deaths (19.2 per 100,000). However, large disparities persist, especially in the Southern states. The data showed substantial gaps between Southern states and the rest of the country on two key indicators—death rate among people with diagnosed HIV infection and knowledge of HIV status. People in Southern states were less likely to know of their HIV infection, and thus were not receiving HIV care and treatment they need to stay healthy and protect their partners.

SCIENTIFIC DISCOVERY AND EVALUATION

Ensuring that programs are based on science is the key to prevention efforts and activities for HIV, STDs, viral hepatitis, and tuberculosis. NCHHSTP addresses critical scientific gaps by identifying, developing, and evaluating interventions, policies, and technologies. Some examples of improving program effectiveness by using scientific discovery and evaluation include the following.

- Advanced Molecular Detection (AMD) is rapidly changing the practice of laboratory science by delivering a greater level of detailed information on infectious diseases. AMD combines the latest pathogen identification technologies with enhanced capabilities in bioinformatics and advanced epidemiology to be more effective in understanding, preventing, and controlling infectious diseases. At NCHHSTP, AMD has been used to respond to the antimicrobial-resistant gonorrhea threat, identify hepatitis C outbreaks, accurately identify chains of transmission between individuals affected in large TB outbreaks, and integrate data into network investigations of NCHHSTP focus diseases. One of NCHHSTP’s AMD projects is “Building State and Local Bioinformatics Capacity for HIV Transmission Networks.” Funded in March 2015, this project is building state and local capacity to analyze HIV transmission networks to inform public health actions. Another HIV-related AMD project is using molecular HIV surveillance to assess the prevalence of drug resistant HIV strains and describe HIV transmission patterns in 27 jurisdictions.
- Published two studies of cost estimate data showing that hepatitis C therapy with new

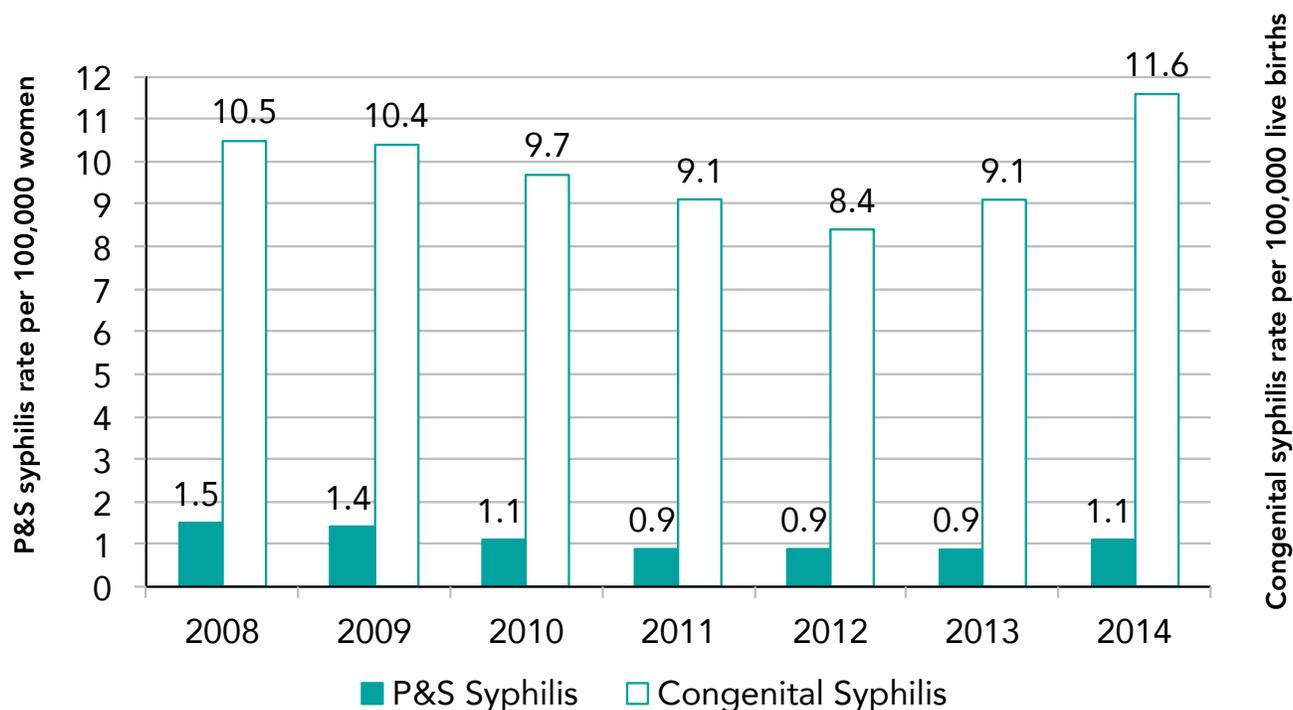
highly effective drugs is cost effective for many patients. One of the studies estimated that testing and linkage to care could avert approximately 320,000 deaths.

- Published analysis of STD surveillance data in the November 13, 2015, *Morbidity and Mortality Weekly Report (MMWR)* highlighting increases in congenital syphilis from 2012 to 2014. Although the United States had previously experienced an overall decline in the rate of congenital syphilis, reaching a low of 8.4 cases per 100,000 live births in 2012, during the period 2012–2014, the national congenital syphilis rate increased 38%. This rapid increase in the congenital syphilis rate coincided with a 22% national increase in the rate of primary and secondary syphilis among women in the same period.

Analyses of surveillance data showed that a substantial percentage of congenital syphilis cases are attributable to a lack of prenatal care. Even among those receiving some prenatal care, the detection and treatment of maternal syphilis often occurs too late to prevent congenital syphilis. Women who are uninsured or underinsured and women with substance use issues have been found to be at increased risk for receiving inadequate or no prenatal care, placing them at increased risk for congenital syphilis.

- NCHHTP’s TB Trials Consortium, in collaboration with the AIDS Clinical Trials Group, completed a study that found use of the Xpert MTB/RIF assay, a rapid test widely used to detect TB and drug resistance to rifampin in areas with a high prevalence of

RATES OF PRIMARY AND SECONDARY SYPHILIS IN WOMEN AND CONGENITAL SYPHILIS, 2008-2014



tuberculosis, performed comparably in the United States, an area of much lower TB prevalence. The findings suggest that Xpert could be used in the initial evaluation of suspected TB in the United States.

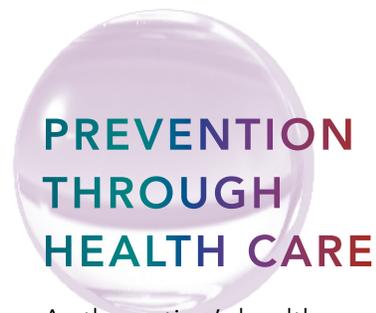
INCREASE KNOWLEDGE AND ADOPTION OF HEALTHY BEHAVIORS

Knowledge about transmission of infection, effects on health, and how to prevent HIV, viral hepatitis, STDs, and TB is critical for people to be able to adopt healthy behaviors, yet is highly variable in the United States. All persons, especially young people and people who are members of disproportionately affected groups, need knowledge and skills to practice healthy behaviors. NCHHSTP health communications campaigns have raised awareness about HIV and viral hepatitis. NCHHSTP assistance to state and local education agencies has helped ensure that health education policies and practices support adolescent health needs and information to educate young people about HIV and other STDs. Selected activities included the following:

- Participated in a highly viewed CDC Public Health Grand Rounds session entitled, “Adolescence: Preparing for Lifelong Health and Wellness.” About 2,000 viewers watched the live webcast on adolescent health, which was presented on August 18, 2015. The Grand Rounds session, led by the Division of Adolescent Health, explored the role of schools, communities, parents and families in helping adolescents avoid risk and adopt healthy behaviors.
- Developed additional resources for parents to help them engage with teens regarding sexual health, including production of two

fact sheets—*Promoting Parent Engagement in Schools to Prevent HIV and Other STDs among Teens: Information for State and Local Education Agencies* and *Talking with Your Teens about Sex: Going Beyond “the Talk.”*

- Published an updated *Compendium of Evidence-Based Interventions and Best Practices for HIV Prevention* with the addition of 10 new evidence-based interventions (EBIs) in May 2015. Specifically, two EBIs improve HIV medication adherence outcomes, one of which additionally reduces risky sexual behaviors among people living with HIV. Four new EBIs address HIV-related risk behaviors among MSM, including both MSM of color and young MSM.
- Updated a number of fact sheets providing basic STD prevention and treatment information for gay, bisexual, and other MSM, including “What Gay, Bisexual and Other Men Who Have Sex with Men Need to Know About Sexually Transmitted Diseases Fact Sheet” and “Syphilis & MSM Fact Sheet.”



CDC'S 2014 SCHOOL HEALTH PROFILES: FINDINGS SUGGEST TOO FEW SCHOOLS TEACH PREVENTION OF HIV, STDs, AND PREGNANCY

In the United States, fewer than half of high schools and only a fifth of middle schools teach all 16 topics recommended by CDC as essential components of sexual health education.

Those findings are based on CDC's *2014 School Health Profiles*. These state-based surveys ask schools from 44 participating states whether they teach essential topics in HIV, STDs, pregnancy prevention, and other health topics. CDC selects age-appropriate topics for middle schools and high schools based on the scientific evidence for what helps youth avoid risk.

Findings from the report show that:

- The percentage of high schools that teach all 16 topics as part of a required course in grade 9, 10, 11, or 12 ranges from 21% (in Arizona) to 90% (in New Jersey).
- In most states, fewer than half of high schools teach all 16 topics and only three states (New Jersey, New York, and New Hampshire) have more than 75% of high schools achieving this goal.
- The percentage of middle schools teaching all 16 topics in a required course in grade 6, 7, or 8 ranges from 4% (in Arizona) to 46% (in North Carolina).
- In no state did more than half of middle schools meet the goal, and in most states less than 20% did.

Schools provide an important avenue for reaching youth with critical knowledge and skills related to sexual health and reducing risk for HIV, STDs and unintended pregnancy. It's critical that students receive age-appropriate, medically accurate instruction across key areas of sexual health beginning in elementary and continuing in both middle school and high school curricula. CDC recommends using the National Health Education Standards and the Health Education Curriculum Analysis Tool to develop such curricula with the aim of increasing both functional knowledge and skills.

As the nation's health-care system undergoes change, new opportunities continue to emerge for furthering the prevention of HIV, STDs, viral hepatitis, and tuberculosis. NCHHSTP is working to engage the health-care system in areas such as screening for hepatitis C, HIV infection, and STDs; expanding reimbursement for preventive services; and implementing creative linkages between health departments and health-care providers and clinics.

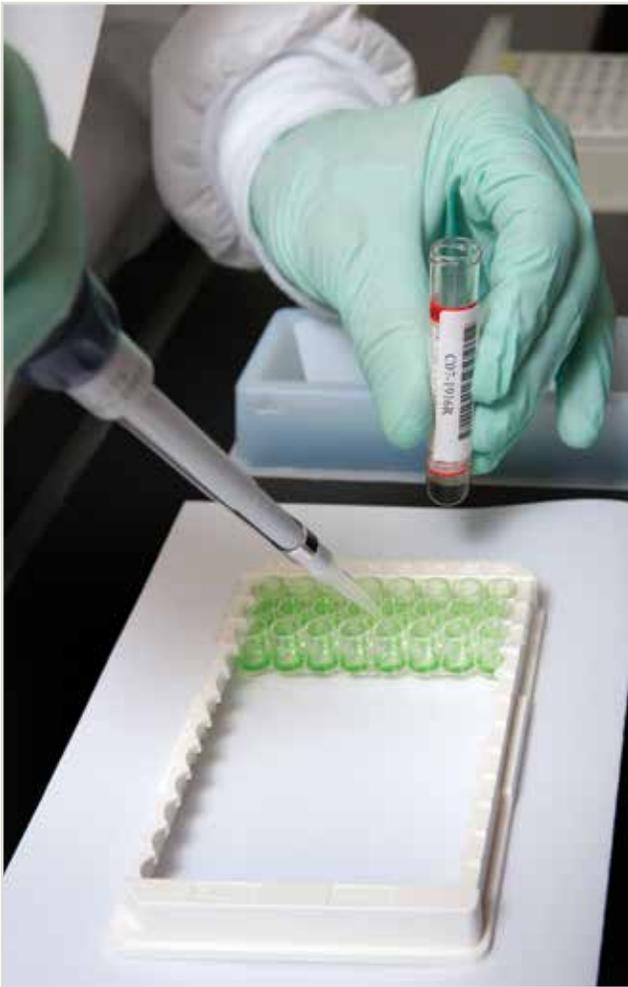
One important way NCHHSTP engages with health-care providers is by issuing evidence-based guidelines regarding the treatment and diagnosis of its focal diseases. For example, NCHHSTP issued *Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014*, which updated recommendations issued in 2003. The new recommendations were viewed more than 44,000 times in the first months they were online, and they were downloaded more 18,680 times through June 30, 2015. The guidelines are aimed at clinical health-care providers, nonclinical providers, and health department staff.



In addition, to advance prevention through health care, NCHHSTP:

- Launched the *HIV Screening. Standard Care.* campaign in March 2015, a new resource for health care providers <http://www.cdc.gov/actagainstaids/campaigns/hssc/index.html>. Produced in partnership with the *American Journal of Medicine*, the new online resource center provides HIV screening campaign materials, interactive video, access to free peer-reviewed journal articles and materials, and information about continuing medical education (CME) opportunities for HIV care providers.
- Developed new electronic ads aimed at health-care providers about the importance of HIV, STD, pregnancy education, testing and prevention for young people for rotation on Medscape’s CDC page.

- Published the *2015 Sexually Transmitted Diseases Treatment Guidelines* and released an updated app, available for free for Android and Apple mobile devices (www.cdc.gov/std/tg2015) In the first 6 weeks after posting the guidelines, they were visited or downloaded more than 350,000 times.
- Completed the second phase of a pilot project for providing clinical decision support systems aimed at improving STI prevention, in collaboration with the National Association of Community Health Centers and the Alliance of Chicago. This phase of the project demonstrated the potential of a CDC-developed and maintained guideline repository that transmits clinical guidelines in a standard format (via a web service) and distributes them to an electronic medical record (EMR) application. This lays the groundwork for cloud-based delivery of CDC recommendations to EMRs and has the potential for reaching clinical practitioners at the point of care.
- Published two new clinical training resources on pelvic inflammatory disease. The first, a *Self-Study STD Module—Pelvic Inflammatory Disease (PID)*, provides web-based continuing education to guide clinicians in the diagnosis, treatment, and prevention of PID. The module is tailored to nurses, nurse practitioners, nurse-midwives, physician assistants, and physicians working in women’s health. The second module is the *STD Curriculum Module on PID*, developed for faculty in clinical education programs.



Testing for latent tuberculosis infection.

- Released a *Guide to Comprehensive Hepatitis C Counseling and Testing*. The manual provides guidance for counseling people at risk for or potentially infected with hepatitis C, as well as guidance on testing procedures, and interpretation of results.
- Released an interactive online course for clinicians, *Interactive Core Curriculum on Tuberculosis: What the Clinician Should Know*. This web-based course provides basic concepts of diagnosing and treating latent TB infection and TB disease for clinicians and public health professionals. The course covers TB in the United States, transmission and pathogenesis, TB testing and diagnosis, treatment of latent TB infection and TB disease, and infection control in health-care settings. Continuing education credits are available.
- Funded the Pre-Exposure Prophylaxis (PrEP) Support Hotline for Clinicians at the University of California, San Francisco, in collaboration with the Health Resources and Services Administration. The hotline is a dedicated, national toll-free consultation services for clinicians considering prescribing PrEP for their patients. Clinicians seeking advice and consultation can call the hotline at 855-HIV-PrEP (855-448-7737).
- Developed an online toolkit for healthcare providers to help improve patient medication adherence. Medication adherence among patients living with HIV is a critical step in breaking the chain of HIV transmission. This toolkit offers healthcare providers evidence-based strategies for improving adherence with four e-learning modules and an Every Dose, Every Day™ (E2D2) mobile app.

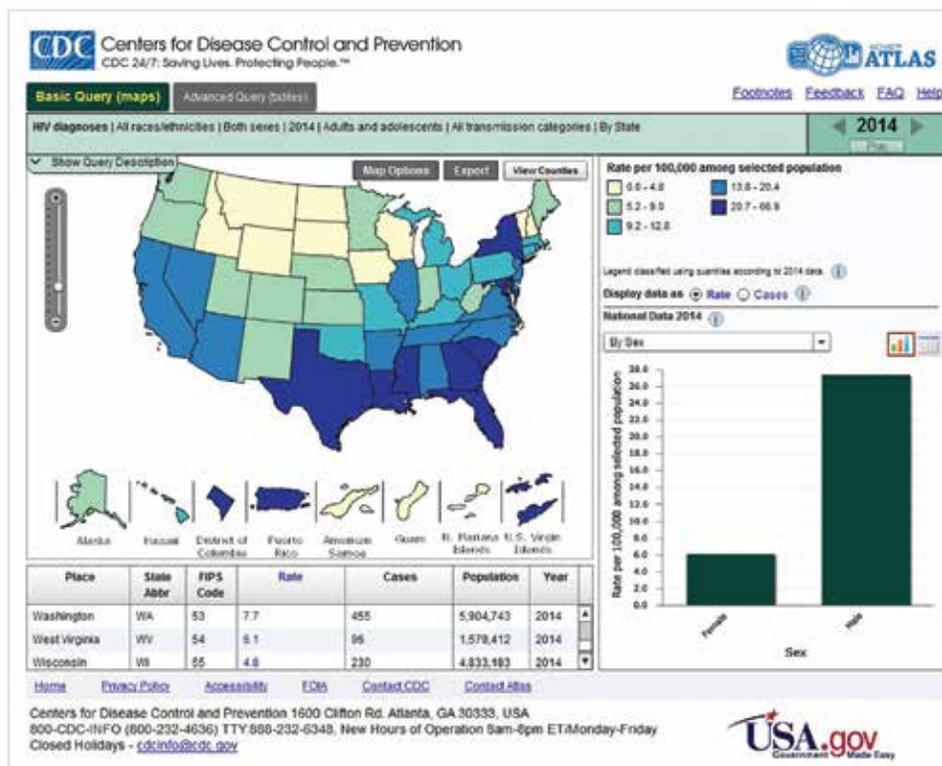
PROGRAM COLLABORATION AND SERVICE INTEGRATION (PCSI)

PCSI promotes better collaboration across NCHHSTP’s divisions and disease focal areas. Through PCSI, NCHHSTP strengthens collaborative work across disease-specific programs, develops capacities that can be shared across programs, and integrates services at the individual, or client, level. One such PCSI project is the *NCHHSTP Atlas*, which provides surveillance data on HIV, TB, viral hepatitis, and STDs in an easy-to-use tool. The Atlas was updated in 2015 with new data and functions. The Atlas is the one-stop shop for NCHHSTP’s most recent surveillance data on HIV, viral hepatitis, STDs, and TB. It also provides 10 years of the most essential data for these disease at the national, state, and county levels, and by populations. A new “advanced query” lets users create custom tables and drill down further into the data for important subpopulations.

NCHHSTP also is working with partners to make recommendations for a disease intervention specialist certification (DIS) process. The DIS Certification Project is a comprehensive, inclusive effort to develop recommendations to strengthen and formalize the role of DIS in areas such as STD, HIV, TB, Ebola and other communicable diseases; and emergency preparedness and response. Certification will help standardize and validate the knowledge, skills, and abilities of DIS, as well as help standardize and improve training.

ORGANIZATIONAL EXCELLENCE

NCHHSTP has undertaken multiple efforts to recruit, retain, and improve the performance of its public health workforce. These efforts include internships, mentoring programs, career development seminars, and a coaching and leadership initiative for its team leads, branch chiefs and division directors and associate directors in the Office of the Director. NCHHSTP has also



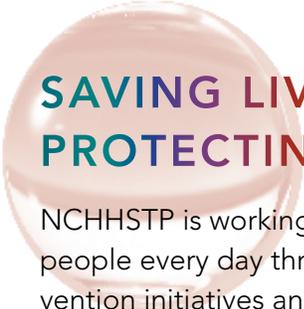
The NCHHSTP Atlas is a tool that allows users to analyze, map, and create tables using more than 10 years of HIV, STD, viral hepatitis, and tuberculosis data that are reported to CDC.

improved the effectiveness and efficiency of its business, information, and scientific administrative systems to support HIV, viral hepatitis, STD and TB prevention programs nationwide.

Highlights of these activities aimed at achieving organizational excellence include:

- Participated in a Pilot Hiring Project with the CDC Human Resources Office, which resulted in a shortened time to recruit and hire NCHHSTP staff.
- Implemented three new activities—an NCHHSTP Employee Engagement Pulse Survey, the Deputy Director’s Mentoring Award, and Administrative Staff Training.
- Provided Leadership Training and Supervisory Workshops in response to requests from staff for additional training for frontline supervisors.
- Provided laboratory staff training as a part of the continuing Laboratory Workforce Development Initiative.
- Offered field staff seven training classes on Leadership and Objective Review Panels with a total of 115 participants.
- Offered the NCHHSTP Learn@Lunch Career Development series, a monthly lunchtime series on career topics. The series was attended by more than 4,000 participants in 2015 from throughout CDC, either in person or via CDC webcasts.
- Improved quality assurance effectiveness and efficiency for information products in e-clearance. This finding is based on viewpoint surveys of authors in 2013 and clearance reviewers in 2014.

- Provided guidance, support and information to new employees through the NCHHSTP Ambassador program, which works with new staff within their first 60 days on the job and assisted with employees’ transition into the Center workforce.
- Offered an Employee Shadowing Program in the spring and fall of 2015. The short-term professional development opportunity pairs a mentor, with a “shadower” who shadows the mentor’s job for up to 3 days.
- Developed and implemented training to educate Information systems owners and IT development staff on the responsibilities and obligations related to new federal requirements related to technology acquisition.



SAVING LIVES, PROTECTING PEOPLE

NCHHSTP is working to save lives and protect people every day through its public health prevention initiatives and programs.

HIV IN THE UNITED STATES

HIV continues to pose a substantial threat to the health of Americans, though NCHHSTP has made strides in reducing that threat through HIV prevention. In the United States today, about 1.2 million people are living with HIV, and about 40,000 infections are diagnosed each year. Prevention efforts have helped keep the number of new diagnoses stable in recent years, and substantial progress has been achieved in some key populations.

Trends in HIV diagnoses from 2005-2014 show some promising signs of progress. Although progress has been uneven and severe disparities continue for many populations, annual HIV diag-

noses in the United States dropped by 19% from 2005 to 2014, with declines over the decade among heterosexuals, people who inject drugs, and African American women. Gay, bisexual, and other MSM continue to be most heavily affected by HIV in the United States. MSM represent approximately 2% of the U.S. population, but accounted for about 67 % of all persons with HIV diagnosed in 2014.

Diagnoses among gay and bisexual men increased about 6% over the decade from 2005 to 2014, driven largely by increases among black (22%) and Latino (24%) MSM, while diagnoses among white MSM declined by 18% over the decade. However, after years of steep increases, diagnoses among black MSM and young black MSM stabilized in the last 5 years (2010-2014), with a less than 1% increase in the 5-year period for black MSM overall, and a 2% decline among young black men. Diagnoses increased 13% among Latino MSM and 16% among young Latino MSM during the 5-year period. Efforts must accelerate progress among black and white men, and urgently address the upward trends in the burden of HIV infection among Hispanic/Latino men.

TOOLS FOR HIV PREVENTION

NCHHSTP is maximizing the impact of HIV prevention tools within the framework of high-impact prevention (HIP). Through HIP, the Center is working to advance goals of *the National HIV/AIDS Strategy: Updated to 2020* and to help ensure that HIV prevention efforts have the greatest possible impact. HIP focuses on using the most cost-effective, scalable interventions.

To reduce new HIV infections, NCHHSTP continues to invest in high impact prevention, funding proven interventions that will have the greatest possible impact on reducing the spread of HIV in the United States. Recent scientific advances have shown that antiretroviral therapy (ART) not only preserves the health of people living with HIV, but also dramatically lowers their risk of transmitting HIV to others by reducing the amount of virus in the body. These developments have transformed HIV prevention and NCHHSTP is working to ensure that those who are HIV infected receive ART. By ensuring that everyone with HIV is aware of their infection and receiving the treatment they need, we can sharply reduce HIV mortality and new infections in the United States.



Panel discussing National HIV/AIDS Strategy Updated to 2020 at Morehouse School of Medicine in Atlanta, July 30, 2015.

One new HIV prevention tool that NCHHSTP introduced in 2015 is the HIV Risk Reduction Tool, available on the CDC website at <https://wwwn.cdc.gov/hivrisk/>. The tool helps people determine how best to protect themselves and their partners. The interactive tool allows users to compare the risks of different sexual activities and to see how one or a combination of prevention methods—such as condoms, PrEP, or HIV treatment for those living with HIV – could change their level of protection. Issued as a beta release, CDC anticipates continued refinements of the tool over time, as the agency pilots the tool with users and incorporates feedback and new findings.

NCHHSTP authors also published an analysis in *JAMA Internal Medicine* in 2015 that showed that more than 90% of new HIV infections in the United States could be averted by diagnosing people living with HIV and ensuring they receive prompt, ongoing care and treatment. Using statistical modeling, the authors developed the first U.S. estimates of the number of HIV transmissions from people engaged at five consecutive stages of care (including those who are unaware of their infection, those who are retained in care and those who have their virus under control through treatment). The research also showed that the further people progress along the HIV care continuum, the less likely they are to transmit their virus. An estimated 30% of new HIV infections were transmitted by people who did not know that they were infected, highlighting the importance of getting tested. The model estimated that transmission rates dropped by 94% among those who were in treatment and had achieved viral suppression.

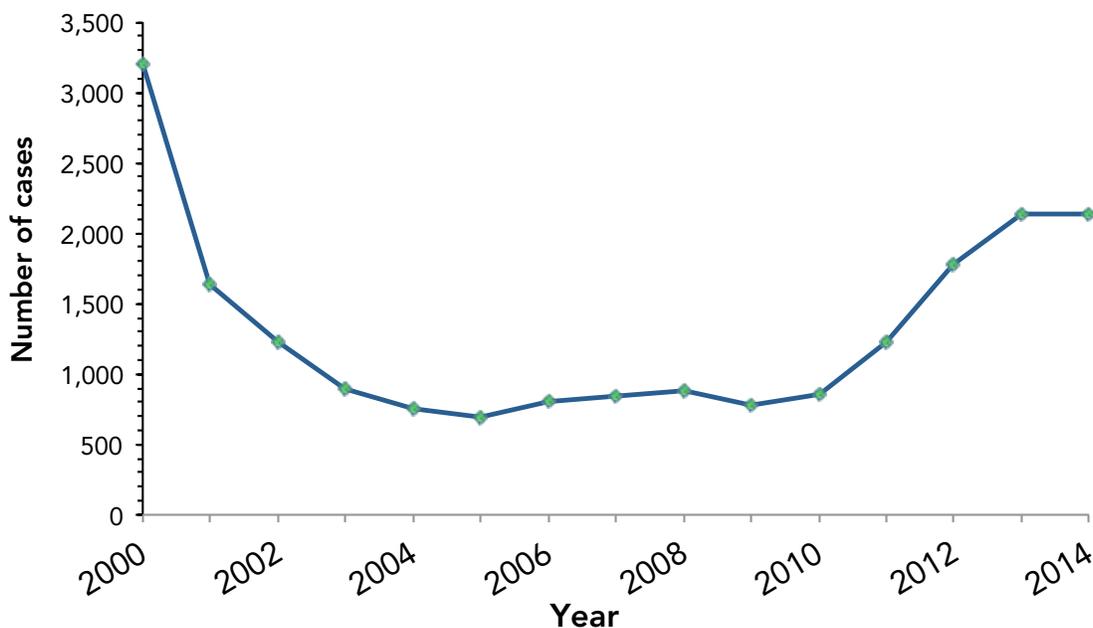
DAILY PILL CAN PREVENT HIV FOR THOSE AT VERY HIGH RISK

PrEP is a preventive method for people at very high risk for HIV to lower their chances of getting infected by taking a medication every day. PrEP consists of a combination of two HIV medicines (tenofovir and emtricitabine) approved for daily use.

People at high risk who should be offered PrEP include about one in four sexually active gay and bisexual men, about one in four people who inject drugs, and 1 in 200 sexually active heterosexual adults. When taken every day, PrEP is safe and highly effective in preventing HIV infection. PrEP is even more effective if it is combined with other ways to prevent new HIV infections, such as condom use or drug abuse treatment. A 2015 survey found that about 34% of primary care doctors and nurses had never heard of PrEP.

NCHHSTP partnered with the National Institutes of Health (NIH) in a Phase II clinical study designed to identify PrEP pill-taking schedules that people are most likely to follow, with several different schedules studied. NCHHSTP conducted a study arm in Bangkok, which showed that 85% of the participating MSM and transgender women took daily pills as instructed. In September 2015 NCHHSTP initiated a 3-year demonstration project to support health departments in implementing PrEP and Data to Care—using data to identify HIV-diagnosed persons not in care and link them to care. NCHHSTP funded 12 state/local health departments for PrEP demonstration activities. PrEP is also supported through the flagship health department cooperative agreement.

REPORTED NUMBER OF ACUTE HEPATITIS C CASES – UNITED STATES, 2000–2014



Source: CDC, National Notifiable Diseases Surveillance System (NNDSS)

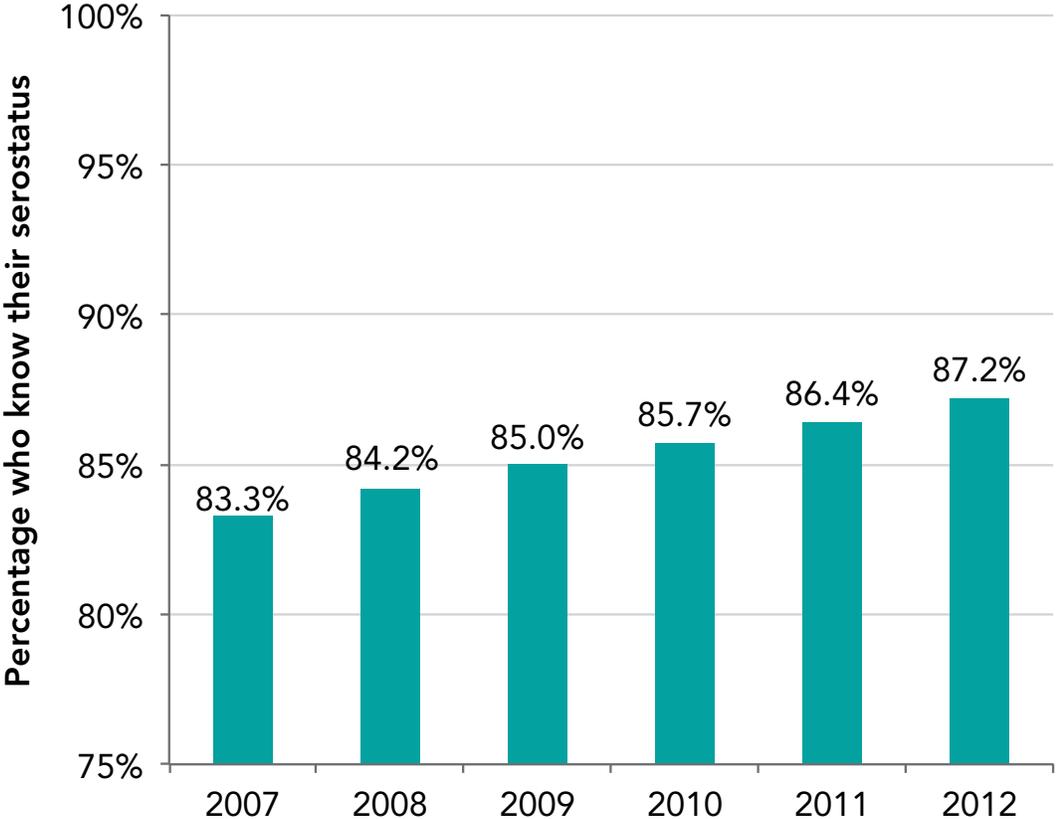
HIV AND HEPATITIS C OUTBREAK IN INDIANA

For the first time, CDC responded to an outbreak by establishing a center-level Emergency Operations Center at NCHHSTP. In March 2015, Indiana declared an HIV-related public health emergency in Scott County, a rural county in southeast Indiana, in response to a large outbreak of HIV and hepatitis C infections among persons who inject drugs and state officials asked CDC for assistance. The Indiana State Department of Health began the investigation on January 23, 2015, after Indiana disease intervention specialists reported 11 confirmed HIV cases traced to Scott County, where on average fewer than one infection per year had been identified previously. The majority of cases were in residents of the same community and were linked to syringe-sharing partners injecting the prescription opioid oxycodone, an oral

semi-synthetic opioid analgesic. As of April 2016, 190 people were diagnosed with HIV infection in southeastern Indiana. Of those, about 90% were coinfecting with hepatitis C. Additional people were identified with HCV mono-infection.

NCHHSTP assisted the state, providing more than 90 staff members to investigate and rapidly control the outbreak. NCHHSTP staff in the field assisted in contact tracing, collecting and processing epidemiologic data, providing technical assistance on testing and treatment, and researching factors that contributed to the outbreak. Twenty-four Division of STD Prevention Disease Intervention Specialists (DIS) assigned to provide assistance to state STD programs and twenty-five state STD/HIV DIS from other states were mobilized to Indiana; identified infected

PERCENTAGE OF PEOPLE LIVING WITH HIV WHO KNOW THEIR SEROSTATUS



persons through case investigation, contact tracing and field testing for HIV and HCV, and connected them to care. Staff from the Substance Abuse and Mental Health Administration and the Health Resources and Services Administration also partnered with CDC on the response.

NCHHSTP laboratories provided technical expertise, including conducting novel molecular analyses to reveal the pattern of infection in the community. About 500 specimens were tested using a new Global Hepatitis Outbreak and Surveillance Technology for molecular investigation of hepatitis C. Three hundred forty-one HCV strains were sequenced. The analysis revealed that multiple hepatitis C strains were present among newly HIV infected persons.

NCHHSTP also assisted Indiana by identifying curriculum for school districts in the affected communities to use to address students' health education needs. Staff conducted additional Youth Risk Behavior Surveillance System surveys in the school districts, analyzed data, and reported results back to the school and state health department officials.

CDC issued a Health Advisory on April 24, 2015 to alert other public health departments and health-care providers about the possibility of similar outbreaks among people who inject drugs in their communities and to provide guidance to assist in the identification and prevention of any outbreaks. The Health Advisory recommended a comprehensive approach to preventing drug-related HIV and hepatitis transmission, including strategies to prevent and treat substance abuse,



Posters from the Indiana State Department of Health's HIV public awareness campaign.

as well as a range of proven tools to reduce sexual and drug-related risk. For example, the advisory recommended that health-care providers ensure all persons diagnosed with hepatitis C infection are tested for HIV infection and all who are HIV infected be tested for hepatitis C. It also recommended that all persons with substance abuse problems be referred for medication-assisted treatment and counseling services. The advisory also recommended that health-care providers:

- Ensure persons receiving treatment for HIV and/or HCV infection adhere to prescribed therapy and are engaged in ongoing care.
- Encourage HIV and HCV testing of syringe-sharing and sexual partners of persons diagnosed with either infection.
- Report all newly diagnosed HIV and HCV infections to the health department.

The outbreak in Indiana is symptomatic of a growing epidemic of prescription drug abuse in areas of the United States. New hepatitis C infections have also risen in the last few years, increasing 150% over a 4-year period, and are believed to be primarily attributable to injection drug use.

DEVELOPING BEST PRACTICES FOR REACHING THOSE INFECTED WITH HEPATITIS B VIRUS OR HEPATITIS C VIRUS

Viral hepatitis is a major cause of illness and death in the United States. Viral hepatitis infections affect many Americans—from the very young—infants born to mothers with hepatitis B infection—to Baby Boomers with chronic hepatitis C infection. Chronic viral hepatitis is the leading cause of liver cancer and liver transplantation in the United States.

An estimated 3.5 million Americans have chronic hepatitis C. Baby boomers are five times more likely to have hepatitis C than Americans of other ages.



Poster from the Know More Hepatitis campaign, featuring the message that people born from 1945 to 1965 are 5 times more likely to have Hepatitis C virus infection.

Approximately 850,000 Americans are living with hepatitis B. Hepatitis B is common in many Asian, Pacific Island, and African countries, and many people with chronic hepatitis B became infected as infants or young children, as they did not have the benefit of routine childhood hepatitis B vaccination.

HEPATITIS B

Acute hepatitis B has been declining in incidence since 1990, mainly due to vaccination strategies. The number of reported cases has remained relatively stable since 2009. A total of 2,953 acute cases were reported in 2014. However, chronic hepatitis B remains a major public health challenge. CDC investigations report approximately 850,000 chronic HVB-infected persons in the United States, although other studies have estimated as many as 2.2 million persons living with hepatitis B infection in the United States.

Vaccination, screening and education are key components of hepatitis B virus prevention and control strategies in the United States. CDC's

Advisory Committee on Immunization Practices recommends that all infants, preferably at birth, should receive a birth dose of the vaccine and all children and adolescents through age 18 should receive the complete 3-dose series.

NCHHSTP continues to provide critical research that informs updates to the hepatitis B vaccine recommendations. In 2015, NCHHSTP staff developed new guidance to shorten the interval for postvaccination blood testing for infants born to mothers infected with hepatitis B virus, providing earlier protection for infants.

NCHHSTP is also working to help those with chronic hepatitis B through a program that tests those at higher risk and links them to care. NCHHSTP has funded three community-based testing and linkage to care programs for foreign-born persons with hepatitis B in California, Chicago, and Northern New Jersey. The goal of the program is to strengthen healthcare capacity to test and link foreign-born persons with chronic hepatitis B virus infection to high quality care. In its first year, 1,702 hepatitis B surface antigen tests, which indicate acute or chronic hepatitis B infection, have been performed, and 109 people with positive results were identified. Of those, more than 60% have been linked to high-quality care. In the second year CDC will perform additional testing and hepatitis B vaccination of household contacts of those with positive test results.

In 2015, NCHHSTP continued to raise awareness about hepatitis B through the multilingual campaign it launched in 2013, *Know Hepatitis B*. The campaign seeks to increase awareness and testing among Asian Americans and Pacific Islanders. The campaign was

created and launched in partnership with Hep B United, a coalition of community groups around the country.

HEPATITIS C

NCHHSTP published a study in May 2015 that identified the emerging U.S. epidemic of hepatitis C infection among young people under 30 years old who inject drugs (PWID). Surveillance data from four states (Kentucky, Tennessee, Virginia, and West Virginia) showed a substantial increase (364%) in the number of cases of acute HCV infection from 2006 to 2012 among persons aged ≤ 30 years. Those affected were primarily non-Hispanic white residents from both urban and nonurban areas, with the rate of cases from nonurban areas more than double the rate of cases from urban areas. Urban and nonurban cases had the same distribution by sex. Among cases with identified risk information, injection drug use was the most commonly reported risk (73%).

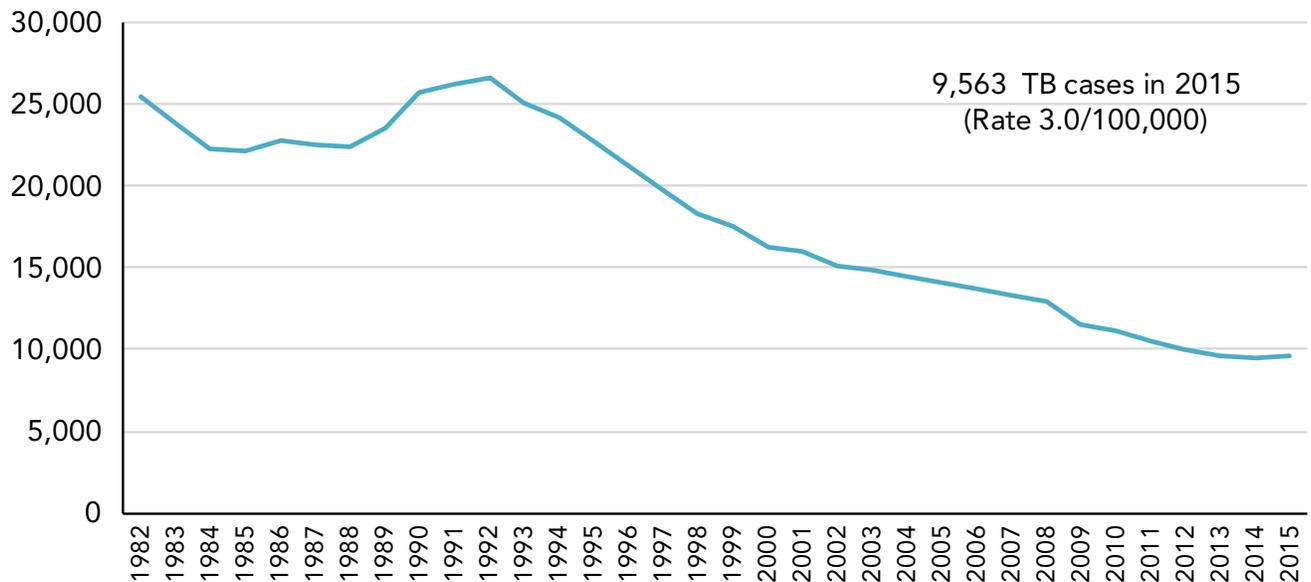
In response to the growing data pointing to this emerging epidemic of acute HCV among young PWID, NCHHSTP has demonstration projects in two rural areas—one near Cincinnati and one in rural New Mexico. These two ongoing projects

seek to demonstrate a model for testing and treating young rural residents who inject drugs.

NCHHSTP also funded community-based testing and cure programs for hepatitis C in Baltimore, Chicago, and Seattle/King County as part of \$5 million dollar, 4-year, cooperative agreement to strengthen healthcare capacity to diagnose and cure HCV. Initial efforts have focused on:

- Identifying and educating populations disproportionately affected by hepatitis C, such as Baby Boomers.
- Incorporating hepatitis C testing in primary care practices.
- Training primary care providers on hepatitis C clinical care.
- Developing case management models.
- Strengthening public health surveillance systems to perform longitudinal monitoring on hepatitis C care and outcomes.
- Improving the quality of hepatitis C care delivered through use of electronic medical record systems.

REPORTED TUBERCULOSIS (TB DISEASE) CASES UNITED STATES, 1982–2015



ADDRESSING TB IN THE UNITED STATES

After two decades of progress toward TB elimination in the United States, preliminary data from CDC’s National Tuberculosis Surveillance System revealed TB incidence leveled off at approximately 3.0 new cases per 100,000 people from 2013 to 2015. Preliminary data reported to the National Tuberculosis Surveillance System indicate that TB incidence among foreign-born persons in the United States (15.1 cases per 100,000) has remained approximately 13 times the incidence among U.S.-born persons (1.2 cases per 100,000).

TB is increasingly found in hard-to-reach populations and locations. In 2015, NCHHSTP provided on-site technical assistance and recommendations to two state and local programs to help with TB outbreaks and control efforts involving populations such as homeless persons, persons in corrections institutions, and adults with mental illness. NCHHSTP also uses genotyping, a

laboratory-based analysis of the genetic material of the bacteria that cause TB disease, to better track TB outbreaks and transmission.

Up to 13 million people in the United States are estimated to have latent TB infection (LTBI), and about 86% of TB cases in the United States are the result of reactivated LTBI. While people with LTBI are not infectious or symptomatic, they may develop TB disease, especially if they have a weakened immune system, caused by factors such as diabetes or HIV infection. NCHHSTP made gains toward developing more cost effective ways to treat LTBI in 2015 with completion of a CDC-funded TB Trials Consortium study of a shorter LTBI treatment regimen that is self-administered. Currently, implementation of the shorter regimen is limited by a requirement that the treatment be given via directly observed therapy.

EXPANDING TOOLS FOR COMBATING TB IN THE UNITED STATES

NCHHSTP, in collaboration with the Association of Public Health Laboratories, established a Drug Susceptibility Testing (DST) Reference Center for tuberculosis at the California Microbial Diseases Laboratory. The DST Reference Center provides quality-assured first-line drug susceptibility testing for U.S. public health laboratories with low test volumes (<50 DST/year), while providing additional access to molecular testing and second-line DST when needed. As of September 2015, 13 public health laboratories have enrolled for full services, with an additional two low-volume public health laboratories enrolling for molecular and second-line testing services. Low-volume labs that were formerly performing tests in-house or referring to other labs likely have been able to reduce their costs and redirect staff time and resources by using the DST Reference Center's services.

NCHHSTP has also initiated drug susceptibility testing for bedaquiline, the first new drug treatment for TB in more than 40 years. NCHHSTP's lab is one of the few in the world offering drug susceptibility testing for bedaquiline.

FIGHTING STDS

NCHHSTP is fighting the STD epidemic by providing resources to state and local health departments to support STD prevention, by issuing guidelines for STD treatment, conducting evaluation, and monitoring the epidemic. NCHHSTP provides information about STDs through its web pages, which are among the most popular on the CDC website. The STD site web pages from October 1, 2014 through July 21, 2015, were viewed more than 38.5 million times.

Reported cases of chlamydia, gonorrhea, and syphilis all increased in 2014, the first time this has happened since 2006, according to data NCHHSTP published in 2015. The approximately 1.4 million reported cases of chlamydia, a rate of 456 cases per 100,000 population, is up 3% since 2013. In 2014, there were 350,062 reported cases of gonorrhea (a rate of 111 per 100,000) and 19,999 reported cases of primary and secondary syphilis, a rate of 6 per 100,000. Rates of primary and secondary syphilis, the most infectious stages of the infection, and gonorrhea have both increased since 2013, by 15% and 5% respectively.

STDs affect young people, particularly women, most severely. However, increasing rates among men contributed to the overall increase across all three diseases in 2014. About half of gay or bisexual men diagnosed with syphilis in 2014 were also HIV-positive.

Young people between the ages of 15 and 24 accounted for the highest rates of chlamydia and gonorrhea in 2014, and almost two-thirds of all reported cases. Additionally, previous estimates suggest that young people in this age group acquire approximately half of the estimated 20 million new STDs diagnosed each year.

In June 2015, NCHHSTP released the updated *Sexually Transmitted Diseases Guidelines, 2015*,



with new diagnostic, treatment and prevention recommendations. The guidelines emphasize treatment, but also include prevention strategies and diagnostic evaluation. These updated guidelines include recommendations on 1) alternative treatment regimens for *Neisseria gonorrhoeae*; 2) the use of nucleic acid amplification tests for the diagnosis of trichomoniasis; 3) alternative treatment options for genital warts; 4) updated HPV vaccine recommendations and counseling messages; 5) annual testing for hepatitis C in persons with HIV infection. They can be accessed at <http://www.cdc.gov/std/tg2015/default.htm>.

The guidelines note that *Neisseria gonorrhoeae* (the bacteria that causes gonorrhea) over the years has become increasingly resistant to treatment. Only one regimen is recommended for treatment of gonorrhea in the United States—dual therapy with two antibiotics: ceftriaxone and azithromycin. Clinicians who diagnose *N. gonorrhoeae* infection in a person with suspected cephalosporin treatment failure should perform culture and antimicrobial susceptibility testing, consult an infectious-disease specialist, and report the case to CDC through state and local public health authorities.

NCHHSTP is studying ways to address the problem of *N. gonorrhoeae* drug resistance. In 2015, the CDC STD lab assessed gonorrhea in vitro susceptibility to a novel antibiotic that

inhibits DNA biosynthesis. This antibiotic demonstrated a high level of antimicrobial activity against gonorrhea, including isolates with decreased susceptibility or resistance to currently available agents.

NCHHSTP is raising the awareness about the increasing rates of congenital syphilis in the United States and is working with health departments, professional organizations, and other federal agencies to address barriers to obtaining early and adequate prenatal care for the majority of vulnerable pregnant women.

CLINICAL ADVISORY ISSUED NOTING CASES OF OCULAR SYPHILIS

CDC issued a Clinical Advisory on reported cases of ocular syphilis in 2015 to physicians and other health-care providers to alert them to a growing number of cases of ocular syphilis, which can cause blindness. Between December 2014 and March 2015, 12 cases of ocular syphilis were reported from San Francisco and Seattle. Subsequent case finding indicated more than 200 cases reported over the past 2 years from 20 states. The majority of cases were among HIV-infected gay and bisexual men; a few cases occurred among heterosexual men and women who were not HIV infected. Several of the cases resulted in blindness.

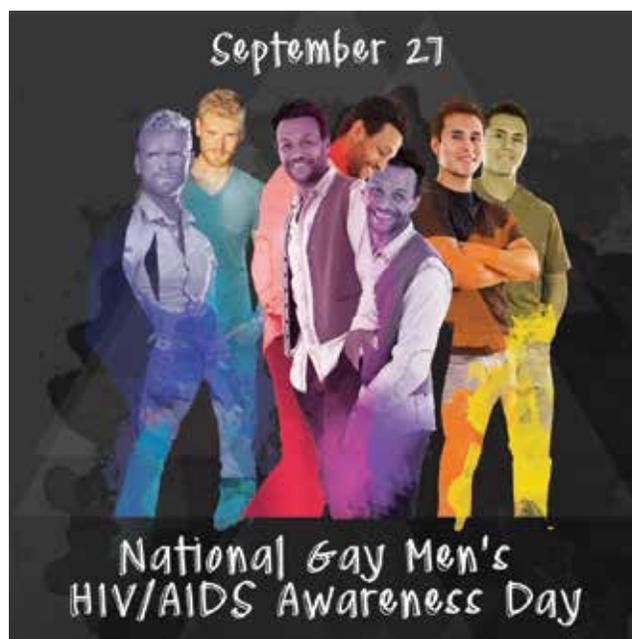
The advisory noted that clinicians should be aware of ocular syphilis and screen for visual complaints in any patient at risk for syphilis, especially gay and bisexual men, HIV-infected persons, and others with risk factors. All patients with syphilis should receive an HIV test if their status is unknown or previously HIV-negative. The advisory also noted that cases of ocular syphilis should be reported to state or local health departments within 24 hours of diagnosis.

WORKING TO DECREASE HEALTH DISPARITIES

NCHHSTP strives to reduce health disparities in HIV/AIDS, viral hepatitis, STDs, and TB. Some of the greatest health disparities are by race and ethnicity. For example, African Americans continue to be disproportionately affected by HIV and gonorrhea in the United States. While African Americans are approximately 13% of the total U.S. population, they accounted for almost half (44%) of all HIV diagnoses and 43% of all gonorrhea cases in 2014. Asians and Pacific Islanders make up less than 5% of the total U.S. population, but account for more than 50% of Americans living with chronic hepatitis B. In addition, Asians make up 18% of Americans diagnosed with TB in 2014. Disparities also exist by age, gender, sexual orientation, country of birth, and geographic region. They are driven by social determinants of health, including education, economic status, and access to health care.

Gay, bisexual, and other men who have sex with men (MSM) are disproportionately affected by HIV, as well as by STDs. MSM account for 67% of newly diagnosed HIV infections, and 61% of infectious syphilis cases in 2014. In the past decade, new HIV diagnoses have decreased among all major groups except MSM, with MSM experiencing a 5% increase from 2003 to 2014. MSM are >40 times more likely to have HIV than other men. The trends varied among MSM by race and ethnicity. As noted previously, diagnoses among gay and bisexual men increased about 6% over the decade from 2005 to 2014, driven largely by increases among black and Latino MSM, while diagnoses among white MSM declined by 18% over the decade.

Working to decrease health disparities is a key focus for NCHHSTP. Some examples of activities in 2015 that aimed to address health disparities are highlighted below.



NEW PROJECTS FUNDED TO ADDRESS HIV AMONG MSM AND TRANSGENDER PERSONS

In September 2015, NCHHSTP awarded three funding opportunity announcements focused on prevention of HIV in MSM. These were:

- “Health Departments Demonstration Projects to Reduce HIV Infections and Improve Engagement in HIV Medical Care among Men Who Have Sex with Men (MSM) and Transgender Persons” — a new project designed to support state and local health departments to implement PrEP and Data-to-Care demonstration projects prioritizing populations of MSM and transgender persons at high risk for HIV infection, particularly persons of color.
- “Health Department Demonstration Projects for Comprehensive Prevention, Care, Behavioral Health, and Social Services for Men who Have Sex with Men of Color at Risk for and

Living with HIV Infection”—a 4-year project supporting state and local health departments in creating community collaboratives to provide comprehensive models of HIV prevention and care services for MSM of color who are at substantial risk for or living with HIV.

- “Training and Technical Assistance for Health Department Demonstration Projects for Comprehensive Prevention, Care, Behavioral Health, and Social Services For Men Who Have Sex with Men of Color at Risk for and Living with HIV Infection”—a 3-year project supporting a cooperative agreement partner to provide training and technical assistance to health departments and their collaborative partners.

COMPREHENSIVE HIGH-IMPACT HIV PREVENTION PROJECTS FOR CBOS AWARDED

In July 2015, CDC awarded \$216 million over 5 years to 90 community-based organizations (CBOs) under PS15-1502, “Comprehensive High-Impact HIV Prevention Projects for CBOs.” This new funding supports HIV prevention services to those at greatest risk, including people of color, men who have sex with men, transgender individuals, and people who inject drugs. The CBOs will use the new funding to deliver high-impact HIV prevention strategies that include HIV testing, condom distribution, adherence to anti-retroviral therapy among HIV-positive individuals, and access to PrEP and post-exposure prophylaxis (PEP) for individuals at high risk of infection. Also, for the first time in its nearly 30-year history, the funding program includes a component that allows organizations to pool their expertise and resources into Prevention Partnerships. Through these partnerships, organizations will contribute

their own unique expertise to help deliver more comprehensive prevention services to those in greatest need.

PATH TOWARD ELIMINATION OF HCV PROJECT IN THE CHEROKEE NATION

NCHHSTP is assisting the Cherokee Nation in a project to screen and treat for HCV. The Path toward Elimination of HCV Project is designed to improve Native American health by eliminating HCV among American Indians in the Cherokee Nation Health System. Currently, the Cherokee Nation suffers from a large burden of HCV, with an estimated 6% living with Hepatitis C, prompting them to begin this project to optimize care and move toward HCV elimination. NCHHSTP is assisting with planning, implementation, monitoring, and evaluation of this effort that brings together a coalition of public health, clinical care, and academic medicine partners. In addition to helping to improve health of the Cherokee Nation, the project will serve to inform similar programs to move toward eliminating HCV infection in other populations.



Shown at the launch of a project to eliminate HCV infection in the Cherokee Nation, Oklahoma, are (left to right) Jonathan Mermin, NCHHSTP Director; Bill John Baker, Principal Chief of the Cherokee Nation, Oklahoma; and John Ward, Director of the NCHHSTP Division of Viral Hepatitis.

NCHHSTP also:

- Released the Spanish version of the web-based course, *TB 101 for Health-care Workers*. The course is designed to educate health-care workers about basic concepts of TB prevention and control in the United States. The course is aimed at newly hired TB program staff and health-care workers.
- Launched the *Act Against AIDS (AAA)* Instagram account, making it CDC's first disease-specific Instagram account. This new social media account supports AAA campaign activities in reaching a diverse, young adult population through compelling and creative pictures and videos. Some examples of the content for Instagram include photos from AAA-sponsored community events, partner outreach activities, national awareness day activities, videos, and infographics.
- Held the 2015 National HIV Prevention Conference, the only major meeting in the United States to focus exclusively on HIV prevention. The conference brought together community leaders, public health professionals, clinicians, advocates and other interested individuals to refine, improve and strengthen the nation's response to HIV. More than 3,000 attended the conference.
- Launched a new HIV testing campaign at the National HIV Prevention Conference. *Doing It* is a new campaign that encourages adults to get tested for HIV and know their status. A part of the *Act Against AIDS* initiative, this prevention and testing campaign includes videos, palm cards, social media, posters, and public service announcements from community leaders and celebrities.



Poster for the HIV campaign, *Doing It*, a national HIV testing and prevention campaign designed to motivate adults to get tested for HIV and know their status.

- Funded four grantees to continue a pilot project on Community Approaches to Reducing Sexual Transmitted Diseases (CARS). The CARS project will address disparate STI rates in local communities through community engagement methods, including establishing community advisory boards, developing community partnerships with organizations, businesses, and educational institutions. The grantees are targeting young women of color and young transgender women of color in Chicago; adolescents and young adults in high risk zip codes in Baltimore City; black and Latino youth in high risk zip codes in Philadelphia; and young gay, bisexual and transgender women in Southeast Michigan.

NCHHSTP GOALS AND INDICATORS OF PROGRESS

NCHHSTP has established three priority goals and a set of measurable indicators of progress. Additional critical program indicators are monitored by NCHHSTP divisions and funded programs. These three priority goals and corresponding indicators, along with current results and the 2020 targets, are shown below.

GOAL 1: DECREASE INCIDENCE OF INFECTION

Indicator	Current Result	2020 Target
1.1 Reduce rate of new diagnoses		
1.1.a HIV	12.6/100,000 (2013)	9.7 new diagnoses per 100,000 population
1.1.b Acute hepatitis B in adults 19 and older	1.3 symptomatic cases per 100,000 population (2014)	0.5 symptomatic cases per 100,000
1.1.c Acute hepatitis C	0.7 symptomatic cases per 100,000 population (2014)	0.25 symptomatic cases per 100,000 population
1.1.d TB	3.0 cases per 100,000 (2014)	1.4 cases per 100,000 population
1.2 Reduce the annual rate of increase of primary & secondary syphilis	15.1% (2013 to 2014)	5%
1.3 Increase the percentage of high school students nationwide who abstained from sexual intercourse or, if currently sexually active, who used a condom during last sexual intercourse	87.3% (2015)	90.6%

GOAL 2: DECREASE MORBIDITY AND MORTALITY

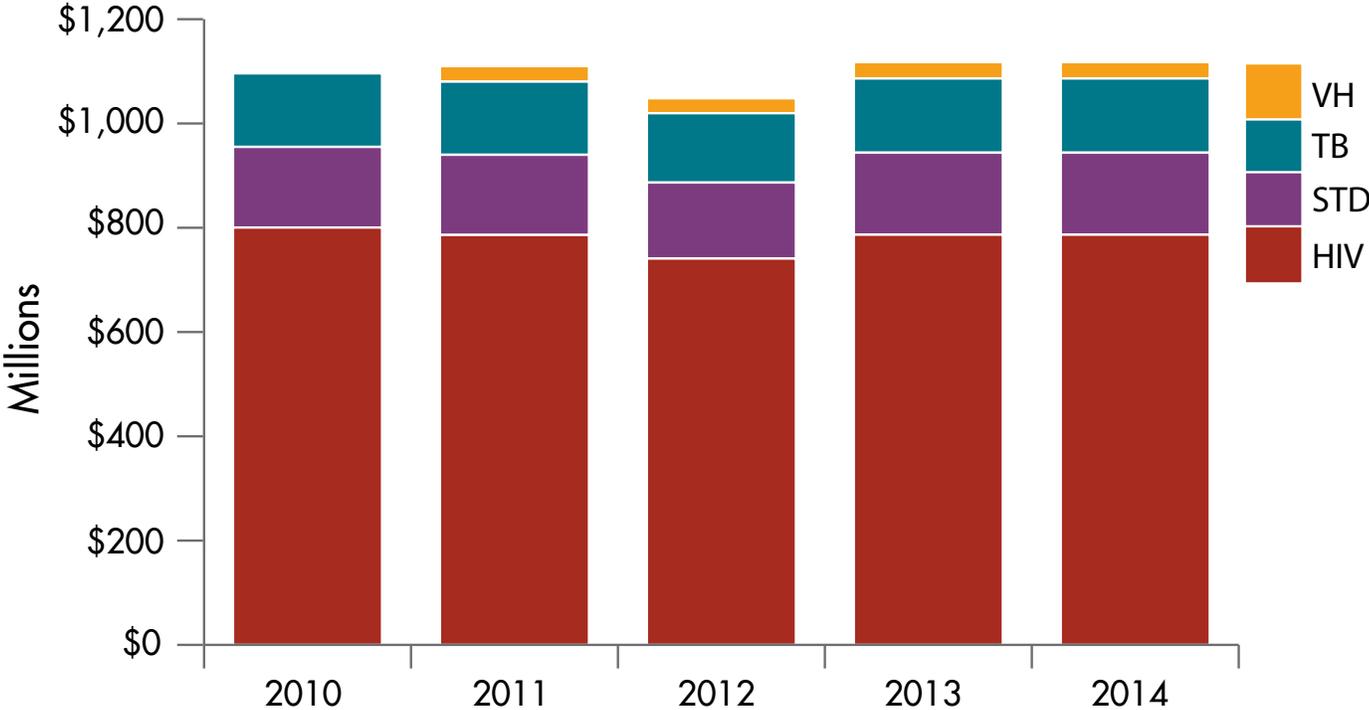
Indicator	Current Result	2020 Target
2.1 Reduce deaths		
2.1.a HIV	18.0 deaths per 1,000 persons with diagnosed HIV infection (2012)	15.5 deaths per 1,000 persons with diagnosed HIV infection
2.1.b Hepatitis B	1,843 (2014)	1,754
2.1.c Hepatitis C	19,659 (2014)	16,370
2.2 Increase the percentage of HIV-diagnosed persons aged 18 years and older whose most recent HIV viral load test in the past 12 months showed that HIV was suppressed	50.1% (2012)	80%
2.3 Increase the proportion of gonorrhea patients treated with a CDC-recommended antibiotic regimen	2014 data not available	90%
2.4 Increase the percentage of people who are aware of their infection		
2.4.a HIV	87.2% (2012)	90%
2.4.b Hepatitis B	33% (2009)	66%
2.4.c Hepatitis C	54% (2013-2014)	66%
2.5 Increase the percentage of sexually experienced high school students nationwide who have been tested for HIV	17.2% (2015)	24.6%
2.6 Increase HIV testing among STD clinic patients who are diagnosed with an acute STD	70.7% of clinic visits in 2014	79%
2.7 Increase the percentage of young sexually active females who were screened for Chlamydia trachomatis infection	Women 16-20: 45.1% Women 21-24: 53.2% (2013)	Women 16-20: 49.6% Women 21-24: 58.5%

GOAL 3: DECREASE HEALTH DISPARITIES

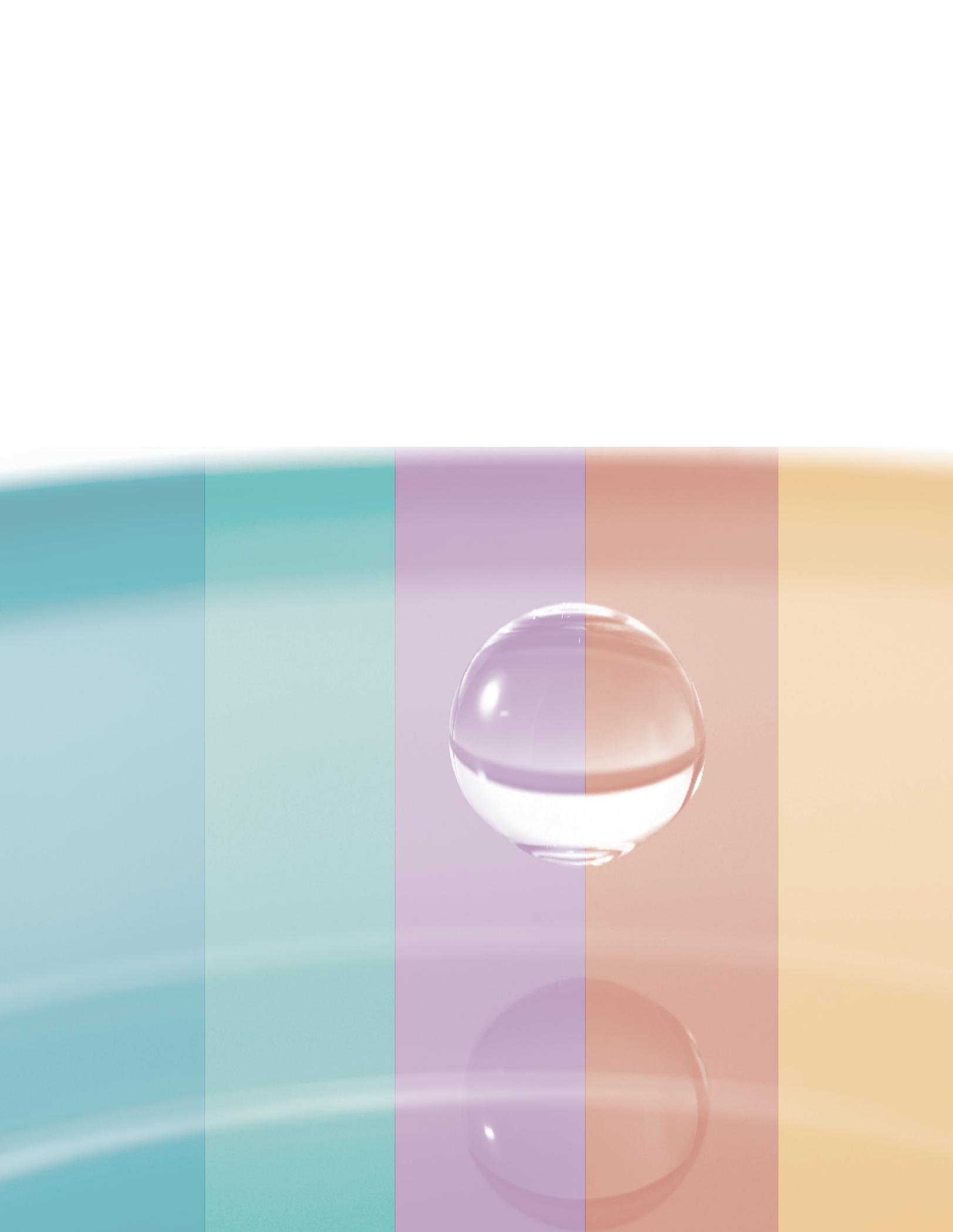
Indicator	Current Result	2020 Target
3.1 Reduce the rate of new diagnoses among racial/ethnic populations with rates above the national average		
3.1a Estimated rate of new HIV diagnoses (national: 12.6/100,000 in 2013)	Black or African American: 46.0/100,000 Hispanic or Latino: 16.3/100,000	Black or African American: 37.0/100,000 Hispanic or Latino: 10.1/100,000
3.1b Reported rate of TB (national rate: 3.0/100,000 in 2014)	Asian: 17.8/100,000 Native Hawaiian or Other Pacific Islander: 16.9/100,000 Hispanic or Latino: 5.0/100,000 Black or African American: 5.1/100,000 American Indian or Alaska Native: 5.0/100,000	Asian: 14.9/100,000 Native Hawaiian or Other Pacific Islander: 5.5/100,000 Hispanic or Latino: 2.1/100,000 Black or African American: 2.9/100,000 American Indian or Alaska Native: 2.6/100,000
3.2 Reduce new HIV infections among high-risk populations: – Gay and bisexual men – Young Black gay and bisexual men – Black females – People living in the southern United States	Gay and bisexual men: 23.0/100,000 (2013) Young Black gay and bisexual men: 119.1/100,000 (2013) Black females: 1.4/100,000 (2013) People living in the southern United States: 0.4/100,000 (2013)	Gay and bisexual men: 17.4/100,000 Young Black gay and bisexual men: 93.0/100,000 Black females: 1.4/100,000 People living in the southern United States: 0.28/100,000
3.3 Reduce the number of TB cases in foreign-born persons per 100,000 per year	15.4 per 100,000 (2014)	11.1 cases per 100,000

Indicator	Current Result	2020 Target
<p>3.4 Increase the percentage of HIV-diagnosed persons whose most recent HIV viral load test in the past 12 months showed that HIV was suppressed</p> <ul style="list-style-type: none"> – Youth aged 13-24 years – Persons who inject drugs (PWID) 	<p>Youth aged 13-24 years: 38.0% (2012)</p> <p>PWID: 42.8% (2012)</p>	<p>Youth aged 13-24 years: 80%</p> <p>PWID: 80%</p>
<p>3.5 Reduce the percentage of sexual minority male high school students in major urban centers who have engaged in HIV/STD risk behaviors</p>	<p>34.1% (2013)</p>	<p>30.7% (2019)</p>

NCHHSTP BUDGET FY 2010-2014



Notes: FY 2012 VH amount includes \$10 million from ACA/PPHF. HIV funding includes HIV school health funding.





National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
1600 Clifton Road NE, Atlanta, GA 30333
Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov, Web: www.cdc.gov/nchhstp

