

Board of Scientific Counselors Center for
Preparedness and Response (BSC, CPR)
Meeting Tuesday, November 2, 2021
Webinar

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**CENTER FOR PREPAREDNESS AND RESPONSE (CPR)
BOARD OF SCIENTIFIC COUNSELORS (BSC) MEETING
TUESDAY, NOVEMBER 2, 2021
WEBINAR**

Roll Call, Welcome and Call to Order

Kimberly Lochner, ScD; Deputy Associate Director for Science, CPR and Designated Federal Official, CPR BSC

The BSC meeting began with roll call to ensure that quorum was present. If quorum was lost at any point, a break would be taken, or the meeting would be adjourned until a quorum was resumed. Since this was a webinar, members were asked to keep their video on and to alert Dr. Lochner's staff should there be any technical difficulties. A roll call was conducted, and quorum was present. Dr. Lochner monitored attendance throughout the meeting to ensure quorum was upheld.

Dr. Lochner reviewed the BSC responsibilities, as per its charter, and the conflict-of-interest waivers. All Confidential Financial Disclosure Report Update Forms were asked to be completed and returned to Dr. Lochner prior to the meeting, if there were any changes made since last submitted. Members were asked to identify any conflicts of interest. No conflicts were identified.

Dr. Lochner stated that the meeting would be led by the BSC Chair, Dr. Suzet McKinney. If voting was required only the Special Government Employee (SGE) Members and Ex Officio Members would vote. Discussions would be facilitated by the BSC Chair and should not be conducted through the Zoom chat feature.

All participants agreed to having their comments recorded and speakers were instructed to identify themselves before speaking to ensure an accurate record was created.

Suzet McKinney, DrPH, MPH; Chair, CPR BSC

Dr. McKinney called the CPR/BSC Webinar to order at 12:35 PM EST and welcomed those in attendance.

Message from Acting Principal Deputy Director

Debra Houry, MD, MPH, Acting Principal Deputy Director, CDC

Dr. Houry was the Director of the Injury Center for seven years. She worked closely with the center's BSC to drive input on several matters, such as the opioid prescribing guidelines, concussion guidance for clinicians, and secondary reviews on grants. Dr. Houry provided a brief update on the coronavirus disease 2019 (COVID-19) science agenda and health equity focus.

Dr. Rochelle Walensky, CDC Director, and Dr. Houry created the CDC Public Health Science Agenda for COVID-19, which builds on the ongoing pandemic-related work. The agenda's six priority areas include COVID-19 disease detection, burden, and impact; transmission of SARS-CoV-2; natural history of infection; protection of healthcare and non-healthcare work settings; prevention mitigation and intervention strategies; and social, behavior, and communication science. The broad-base nature of the agenda will allow it to remain relevant as the knowledge expands.

COVID-19 has brought social and racial injustice and health inequity to the forefront of public health. CDC is developing strategies to create comprehensive health equity science, which will optimize interventions and enhance workforce engagement. In July 2021, each part of the CDC agency submitted health equity science and intervention goals that will address the impacts of social determinants of health outcomes. Partners from multiple sectors will be invited to collaborate with the agency to bring about solutions. Each center of CDC also presented its goals for the upcoming year. Lastly, CDC is relaunching its Vital Signs initiative, and health equity will be a key theme across all topics.

CPR Director: Update

Ian Williams, PhD, MS, Acting Director, CPR

Dr. Williams informed the BSC that Dr. Henry Walke will begin his new role as CPR Director on November 7, 2021. Prior to becoming the CPR Director, Dr. Walke was the Incident Manager for the COVID-19 Response and also served as the Director of the Division of Preparedness and Emerging Infections in the National Center for Emerging Zoonotic Infectious Diseases. Dr. Walke was present for the meeting and briefly introduced himself to the BSC.

Since the last BSC meeting, the Division of Select Agents and Toxins (DSAT) released two annual reports: the 2020 annual report of the Federal Select Agent Program (FSAP) at the end of September 2021 and the 2020 FSAP Inspection Report Annual Summary at the end of August 2021. The [CPR Strategic Plan](#) also was published on the CPR website. An overview of the plan was presented at the Spring 2021 webinar And an Action Plan template has been completed. Strategies to identify metrics and actions that gage progress on key annual focus areas are part of the plan. Currently, CPR is working to collect data for the report, which is due in the later part of November 2021. CPR is also planning for the 2022 strategic planning process. More updates on the strategic planning process will come in future BSC meetings.

COVID-19 remains the key focus for CPR. CDC is nearing 22 months of activation of its incident management system due to the pandemic. It has invested more than 10 million CDC staff hours into the COVID-19 response. Dr. Williams concluded with a review of the meeting agenda and topics to be covered.

CPR Division Updates and Discussion

Mark Davis, Associate Director, Financial and Management Services, CPR, Division of State and Local Readiness (DSLRL)

Mr. Davis' presentation provided an update on the Public Health Emergency Preparedness (PHEP) Program, which celebrates its 20th anniversary next year. DSLR is examining ways to showcase and build on the program's success. The division is advancing public health emergency preparedness by addressing lessons learned from COVID-19 and other recent responses, while also modernizing the PHEP program to address future public health threats and responses. Longer-term transformational initiatives will be around six key areas:

- Health equity
- Laboratory Response Network for Radiological Threats (LRN-R)
- Public health recovery
- Data modernization
- Tribal support
- Site visit strategy

The objectives for these major initiatives have been prioritized for execution over the next year based on the level of urgency and effort required for each.

In 2021, a PHEP budget increase allowed for the expansion of the Career Epidemiology Field Officer (CEFO) Program. Field staff provide two-way communication and situational awareness for CDC, U.S. Department of Health and Human Services (HHS), and other federal inter-agencies. Jurisdictions can now obtain a CEFO at no cost, which is especially helpful to smaller jurisdictions who are in need of senior field staff expertise. The national CEFO network will support emergency preparedness and response activities of every state, locality, and territory directly funded by the PHEP cooperative agreement. When fully implemented the national network will include 56 CEFOs directly funded by CDC.

The Public Health Crisis Response Cooperative Agreement enables CDC to rapidly award emergency response funds to state, local, tribal, and territorial public health agencies. Nearly \$3 billion was awarded over the last few years for COVID-19, the opioid crisis, and hurricane response activities. A new notice of funding opportunity will be announced soon and DSLR is considering ways to increase eligibility to include more recipients.

At the conclusion of the presentation, no further recommendations or comments were given from the BSC to DSLR.

Samuel S. Edwin, Ph.D., Director, Division of Select Agents and Toxins (DSAT), CPR

DSAT oversees two key regulatory programs. The Federal Select Agent Program (FSAP) regulates the possession, use, or transfer of biological agents or toxins that have the potential

to pose a severe threat to public health and safety. The Import Permit Program (IPP) controls the importation of infectious biological agents, infectious substances, and vectors capable of causing communicable disease in humans. The FSAP is managed jointly with the Animal and Plant Health Inspection Service (APHIS), which is part of the U.S. Department of Agriculture (USDA) under its Division of Agricultural Select Agents and Toxins (DASAT). Regulatory activities include the following:

- Promulgate the select agent regulations
- Provide oversight of possession, use, and transfer
- Conduct inspections
- Approve registrations
- Approve individual access to select agents and toxins
- Receive reports of a theft, loss, or release
- Take appropriate enforcement actions
- Serve as a resource on compliance with the regulations

Since the May 2021, DSAT has published the [2020 Federal Select Agent Program Inspection Report Processing Annual Summary](#) and the [2020 Annual Report of the Federal Select Agent Program](#). The inspection report is an annual analysis of inspection report timeliness data. In 2020, 157 final inspection reports were sent to entities within FSAP's goal of 30 business days. The report also underscored how the changes made during the COVID-19 pandemic aided efficiencies in FSAP's mission.

The 2020 Annual Report of the Federal Select Agent Program was the 6th annual report. It was published on September 28, 2021. The report provided insight into the regulatory activities of the program and examined its regulatory functions and compliance with the select agent regulations at laboratories across the nation. The report also highlighted engagement with the regulated community throughout the year to ensure compliance. In addition, it offered insight into key changes made to program operations during the COVID-19 pandemic. Program statistics found in the report included the following:

- Numbers and types of registered entities, as well as amendments to registrations
- Top registered select agents or toxins
- Security risk assessments performed
- Number of inspections conducted
- Key observations related to inspection findings and compliance with the select agent regulations
- Reported thefts, losses, and releases of select agents/toxins
- Identifications and transfers of select agents/toxins
- Publications and outreach activities

There are 244 registered entities. There were 149 inspections conducted in 2020. Currently, 8,121 individuals have been given authority to work with select agents and toxins. Access was

denied to 12 individuals. There were no releases of select agents and toxins that resulted in illness among the general public, death or transmission among workers, or transmission to the outside of a laboratory into the surrounding environment or community.

FSAP normally hosts an in-person workshop for the regulated community, but due to COVID-19, the program offered an online series of webinars. There were six monthly webinars in 2021, which averaged 191 attendees. Topics included discussions related to compliance with the select agent regulations.

The Import Permit Program issues more than 2,000 import permits annually. The program also conducts inspections; provides outreach and training; and collaborates with its partners. This year, IPP issued 2,588 import permits. Of those, 781 were for SARS-CoV-2, seven for human remains, and one was a live bat permit. There were 53 total inspections, with 31 being remote and 22 on-site.

Recommendations and Comments to DSAT from the BSC:

- Explore a mechanism that will measure the effectiveness of the educational webinar approach adapted during COVID-19.
- Check for trends showing lack of training as a result of the COVID-19 shutdown.

Chris Brown, PhD, MPH, CPH, Director, Division of Emergency Operations (DEO), CPR

Dr. Brown began by providing an update on response activities. DEO is supporting a number of responses to public health emergencies at various levels. There are two ongoing agency-wide responses: polio and COVID-19. There is one center-led response to the 2021 Operation Allies Welcome and two ongoing program-led responses: 2021 Haiti Earthquake and 2021 Hurricane Ida Recovery. The center-led 2020 DRC Ebola response has been deactivated.

DEO has trained more than 2,261 responders in the Emergency Operations Center Day One orientation. It has also led efforts in the CDC and HHS/ASPR COVID-19 Response Tabletop Exercise, which focused on COVID-19 during the upcoming fall and winter.

DEO has conducted 14 Clinician Outreach and Communication Activity (COCA) calls to more than 90,000 clinicians on various topics related to the COVID-19 response. It has also disseminated four COVID-19 Health Alert Network (HAN) advisories and cleared 4,042 documents that provide critical updates to CDC's public health guidance during the pandemic.

DEO processed, equipped, dispatched, and tracked more than 1,200 field deployments to over 160 locations, domestic and international and continues to support over 2,100 Incident Management System staff, who are filling positions within the COVID-19 response. DEO has issued over 190,000 personal protective equipment (PPE) to field deployers, while continuing monthly PPE replenishment to quarantine stations.

In 2021, there was an increase of 110% in emails, 16% increase in calls, and 1,251% increase in low level international health regulations. This is a significant upsurge over the previous operational period in 2019.

DEO also managed 3,282 Low Level International Health Regulations requests to identify and notify international travelers.

The Situational Awareness Team provides decision support products, analytics, and data in support of responses. The team has produced, maintained, and updated more than 99,015 reports and analytic products.

DEO is also working to modernize its legacy IT systems. There are two major goals under the project. The first is to establish a cloud-based platform upon which the EOC will integrate response operations and support applications, data analytics, and data warehousing. The second goal is to reimagine, re-engineer, and enhance individual business applications and integration. DEO is in phase one of the modernization. During this phase, the cloud-based infrastructure will be established and available for development and several high priority systems, such as the subject matter expert database, on-call schedule, and inventory, will be modernized and consolidated.

The Graduated Response Framework (GRF) is CDC's new approach used to respond to all public health emergencies, regardless of size and complexity. The GRF Steering Committee directs the GRF work. Since the May 2021 BSC meeting, the governance charter was finalized and approved for the GRF Working Group. There was also significant progress made on the development of the GRF Concept of Operations(CONOPS), which provides a high-level overview of how the GRF should be operationalized.

CONOPS will guide emergency responses at all levels. It is comprised of a base document that describes capabilities and considerations needed minimally to begin a response and it is built upon the All-Hazards Plan. Workgroups were convened under the steering committee to plan and develop implementation guidance. The steering committee began reviewing the base document in October and will have it next meeting in November 2021.

DEO utilized the CPR Strategic Plan to develop strategies that will help it execute on DEO's key annual focus areas. The illustration below shows the twelve, high-level priority areas, where DEO can be impactful. Some of the areas will require corporation with centers, institute, and offices (CIO) partners and others will to build DEO's internal capacity. This is for fiscal years 2022-2024. This will be updated as progress is made. Progress will also be tracked against the annual focus areas of the CPR strategies.

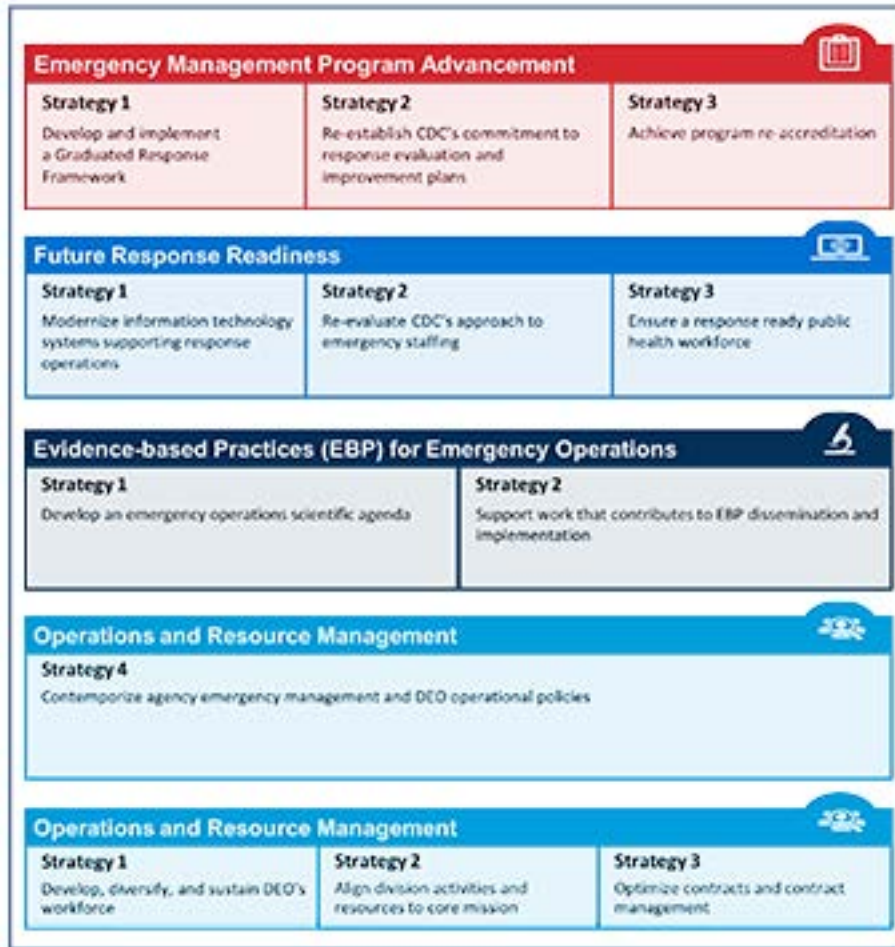


Figure 1. DEO High-Level Priorities for FY 2022-2024

Recommendations and Comments to DEO from the BSC:

- CDC should develop evidence-based communication material and disseminate them to state and local departments.
- Work with other partners who can help advance science communication efforts and can assist CDC with efforts to build capacity at the local level where resources are limited.

Data Strategy and Execution Workgroup (DSEW): Overview & Future Direction

Ian Williams, PhD, MS, Acting Director, CPR

Dr. Williams provided an update on the COVID-19 Data Strategy and Execution Workgroup. COVID-19 public health response data can be categorized into four general buckets. The first is national data for situational awareness. These types of data track the trajectory of the pandemic across the U.S. down to the county level daily. Examples include aggregate case

data, lab data, and vaccination data. The next is data that characterize the epidemiology of the pandemic. Examples are line level case surveillance data, mortality surveillance, syndromic surveillance of ER/urgent care visits, nursing home data, and modeling. The third is sentinel surveillance data, which is routine surveillance data in select populations or settings, such as COVIDNet, virologic/genomic strain surveillance, and wastewater surveillance. The last are special studies which are conducted to answer specific questions. They are reported periodically when data are available and include data such as large-scale geographic seroprevalence surveys and electronic healthcare data.

The Data Strategy and Execution Workgroup (DSEW) was created to address several issues with public health emergency response data, including siloed program data that are not integrated or connected; lack of modernized and timely data systems; and lack of real-time access to situational awareness data.

The workgroup is a multidisciplinary, U.S. Government interagency team, and was created in June 2020 as part of the Joint Coordination Cell (JCC) incident management structure under the direction of the White House COVID-19 Task Force. When the JCC demobilized in February 2021, DSEW transitioned to an HHS function. ASPR and CDC now serve as DSEW co-leads under the direction of HHS leadership and the White House COVID-19 Data Manager. The goal is to have at the federal level an improved, modernized, and authenticated national datasets or “sources of truth.”

DSEW’s mission is to ensure comprehensive, geographically localized and timely information is effectively used to combat the COVID-19 pandemic in the US, and to ensure federal government and state, tribal, local, and territorial (STLT) partners have accurate, complete, timely datasets, a unified system for data and analytics, and robust analytical capabilities. Efforts are focused on:

- Integrating data from cases, laboratory testing, syndromic surveillance, hospitalizations, healthcare utilization, supply chain capacities, and vaccination
- Coordinating data and analytics efforts to support the whole-of-US government COVID-19 response

The workgroup includes staff across the U.S. Government, as well as contracted partners and operates through an interagency structure. Federal agencies are looking to utilize similar data and analytics around COVID-19 responses and to coordinate, govern and streamline response efforts. DSEW’s organizational structure brings together subject-matter experts from across government. Each team within DSEW has an interagency leadership structure, with CDC public health experts working as co-leads alongside leads from other agencies. DSEW also helps coordinate outreach to the states on data reporting and quality. Daily operations are closely integrated with CDC, the Assistant Secretary for Preparedness and Response (ASPR), HHS Office of the Chief Information Officer (OCIO), and interagency COVID-19 working groups. DSEW analysis is shared with senior leadership at CDC, HHS, Federal Emergency Management Agency (FEMA), and the White House.

The coordinated effort will eliminate duplicative data work across agencies. Usage of DSEW's analyses will eliminate the need for agencies to create their own reports for situational awareness across a broad range of indicators. Instead agencies can build off DSEW's existing reports and processes as needed to address additional information requirements. Below is an illustration of the DSEW operational framework.

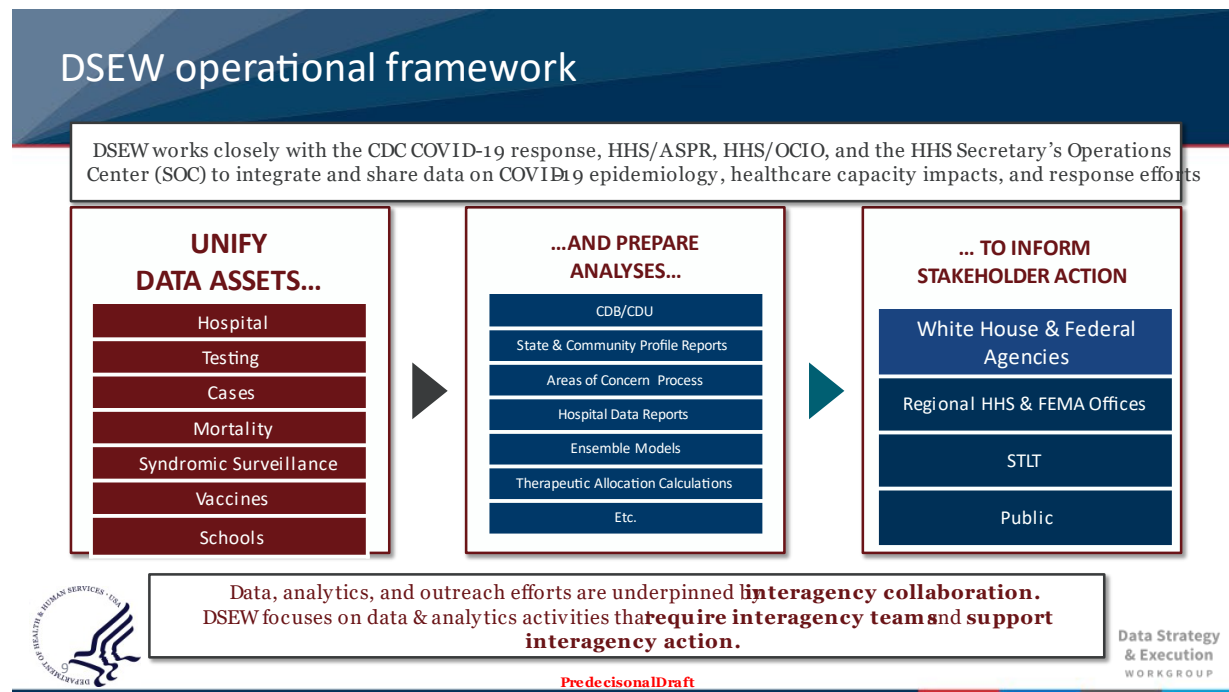


Figure 2. DSEW Operational Framework Chart

DSEW is using a federal platform called HHS Protect to consolidate the data. HHS Protect is a secure data platform for authentication, amalgamation, and sharing of information across the U.S. government COVID-19 response. It houses more than 200 data sources and enables flexible data management, integration, visualization, and analytics. The platform also allows for the building of data lineages or pipelines, data science workbooks, dashboards, no-code analysis, live-updating reports, and open application programming interfaces. HHS Protect is managed by HHS OCIO but will be migrated to CDC for long-term management. DSEW also uses HHS Protect as the primary data hub underpinning its analytic products. The system also serves as a backend for a number of data sources used in the CDC COVID-19 Data Tracker.

Over the next six months, DSEW will perform the following activities:

- Continue to support the White House and HHS data needs/questions
 - Tailored, daily, weekly, and ad hoc analyses for interagency use
 - Efforts focus on integrating data from cases, laboratory testing, syndromic surveillance, hospitalizations, healthcare utilization, supply chain capacities, school data, and vaccination

- Creating and maintaining unified data assets for interagency use in HHS Protect
 - Determine future state of HHS Protect for future public health emergency responses
- Determine longer-term plan for hospital data
 - Technical working group recommendations to HHS Secretary
- Continue to transition work back to Agency programs where appropriate
- Institutionalize DSEW best practices including a governance structure for use during future public health emergencies
 - Preserve interagency coordination functions

Recommendations and Comments to DSEW from the BSC:

- Sometimes the most important information needed is something that is not being routinely collected. As issues emerge around transmission, immunity, or vaccination, the need for information that is not routinely collected or in the existing datasets arises. Consider information that is not being collected and rapidly determine ways to begin mining this type of information in an outbreak or epidemic setting.
- Equity maps that show social determinants of health can help identify and examine priority populations.
- Association of Public Health Laboratories (APHL) utilizes wastewater testing as a potential trigger. As numbers increase, communication resources are leveraged, and community messages are disseminated directing individuals to get tested for COVID-19.
- Ensure the data collected is integrated into the local health departments' data systems.
- There is eagerness to collect data from the public but a lack of eagerness to disseminate information back that can then be acted upon. Ensure data is disseminated back to the public.
- It would be valuable to have behavioral data and communication surveillance data. The private sector, such as social media, collects these types of data.
-
- Gain input from the communities themselves. What do they recommend? What do they want? What do they need in terms of data to determine their next steps?
- There needs to be a discussion on the political determinants of health and its impact. There should be an objective assessment of political decisions made and the results that have come from them. Think of a way it can be integrated to provide contextual data. Study how political decisions can impact health outcomes.

COVID-19 Response Update

Barbara Mahon, MD, MPH, COVID-19 Incent Manager

In the U.S., COVID-19 case trends over the last couple of months have been moving in the right direction. There have been roughly 70,000 cases per day on average, which is a 6.6% decrease. There are 5,353 hospitalization on average per day, which is a 9.7% reduction, and a little over 1,000 deaths per day, which is a 11.9% decline. The lowest case rates are in the southeast, and

the highest case rates are in Alaska, New England and the Rocky Mountains regions. These variations could be attributed to seasonality changes seen in respiratory viruses.

The Delta COVID-19 variant accounts for more than 99% of the U.S. cases. For that reason, examining the sub-lineages of the Delta variant allows better characterization of community spread. The top sub-lineage is B.1.617.2, which is present in 54% of the cases. The AY.4.2, however, has recently received media attention and accounts for 12% of cases in the United Kingdom. AY.4.2 is rare in the U.S. with only ten strains discovered thus far. The sub-lineage is undergoing characterization. All other variants of COVID-19 (Alpha, Beta, Gamma, Iota, Kappa, Mu) have been characterized as variance being monitored (VBM) and account for <0.1% of the cases.

Over two-thirds (66.8%) of the U.S. population have received at least one dose of vaccine and over half (58%) of the population are fully vaccinated. The older the age group, the greater the population that has been vaccinated. The uptake is greatest in the New England states. The CDC COVID Data Tracker now includes preliminary vaccine impact and effectiveness data. Overall effectiveness against hospitalization has held up. Vaccine effectiveness against infection, on the other hand, has declined. Booster doses of the vaccine was recommended for a number of populations on September 24, 2021. Roughly 14 million people have received booster doses.

Going forward, CDC will focus on the following topics:

- Respiratory illness burden as winter months approach
- Updating surveillance strategies for current stage of the pandemic
- Evaluating and, if indicated, updating mitigation strategies at community and individual levels
- Surveillance and readiness for possible new variants
- Evaluating vaccine effectiveness and durability
- Evaluating epidemiology and management of post-COVID conditions
- International issues, especially supporting vaccine delivery and administration
- Eventual transition of emergency response activities to home programs

Integrating Health Equity as Core Tenant of CDC's Preparedness and Response Activities.

Rosa Abraha, MPH, Public Health Advisor, Office of Policy, Planning, and Evaluation

CDC's CORE Commitment to Health Equity was launched in summer 2021 and is a collective effort led by the Office of Science, Office of Minority Health and Health Equity, and the Office of the Associate Director for Policy and Strategy. CORE means:

- **C**ultivate comprehensive health equity science

- Optimize interventions
- Reinforce and expand robust partnerships
- Enhance capacity and workforce engagement

The vision is for all people to have the opportunity to attain the highest level of health possible. This initiative challenges CDC to integrate health equity into the fabric of all of its work. Every division across the agency has been tasked with developing health equity goals and milestones for CORE.

CPR's unique role is ensuring that health equity principles and best practices are at the core of all preparedness efforts for pandemic and emergency responses. Its vision of health equity preparedness is to maximize CPR and its programs' ability to promote health equity in all-hazards preparedness because a prepared community is a resilient one free of health inequity. CPR also has a health equity vision for response, which is to incorporate lessons learned from the COVID-19 pandemic and CDC's response to it and integrate health equity principles and best practices into all future response activities.

Ms. Abraha reviewed several long-term goals that will help CPR meet its health equity vision. This is not an exhaustive list of all the health equity efforts.

Incorporating Health Equity in CPR's Science-Funded Projects

Goal: CPR's Office of Science & Public Health Practice (OSPHP) will incorporate health equity considerations into internal and external CPR funding opportunity guidance, prioritization frameworks, and performance monitoring to improve health equity in future public health emergencies and disasters.

Purpose: To expand the evidence base and strengthen CDC scientific preparedness and response readiness for populations potentially disproportionately impacted during public health emergencies.

Incorporating Health Equity in CDC's Emergency Management Program

Goal: CPR's Division of Emergency Operations (DEO) will incorporate health equity principles into CDC's emergency response plans and training curricula.

Purpose: To integrate equity planning principles into all phases of emergency management and better CDC responders with the skills to incorporate health equity best practices in their response activities.

Promoting Health Equity to Advance State and Local Readiness

Goal: CPR's Division of State of Local Readiness (DSLRL) will incorporate additional health equity considerations recommended by the Next Generation of PHEP initiative into the 2024-2029 PHEP notice of funding opportunity program guidance.

Purpose: To strengthen jurisdictional preparedness planning and response readiness for populations potentially disproportionately impacted during public health emergencies.

Promoting Health Equity to Strengthen Regional Preparedness and Response Capacity

Goal: DSLR will develop and deliver a master's-level epidemiology training initiative to select members of the current public health workforce in all participating U.S.-affiliated Pacific island jurisdictions (U.S. territories and freely associated states).

Purpose: To advance health equity and strengthen regional emergency preparedness and response capacity, jurisdictional surveillance capabilities, and data-driven health interventions and services for populations across the U.S.-affiliated Pacific Islands (USAPI).

In January 2021, CPR launched its Social Determinants of Health Action Plan (C-SAP). This is a five-year plan that incorporates social determinants of health (SDOH) and health equity considerations in CPR's existing programmatic efforts to promote primary preparedness and community resilience. The Office of Policy, Planning, and Evaluation contracted with Leavitt Partner Group due to their expertise in health care delivery and health care consulting. Leavitt conducted an environmental scan of over 100 federal policies, innovative alliances, resilient community models, and global SDOH interventions. They also conducted key informant interviews with CDC partners to find feasible and high impact strategies to include in the action plan.

As a result of Leavitt's study, the following strategies have been proposed for the 2021 SDOH Action Plan.

- Collaborate with CDC Foundation and private sector public health partners to develop innovative models to support the work of PHEP jurisdictions whose activities address SDOH and promote health equity. Organizational support may include time, resources, partnerships, and subject matter expertise.
- Develop a national community of practice for PHEP recipients and their partners to gather and disseminate learnings on SDOH to drive best practices and increase recipient ability to respond to future public health emergencies.
- Utilize CPR's preparedness and response capabilities to assess and address SDOH by:
 - Integrating SDOH and health equity considerations in threat-specific response plans and exercises.
 - Incorporating health equity experts in all responses.
 - Harnessing DEO's emergency management resources to proactively monitor/address SDOH and health equity.

The proposed strategies will be rolled out over the next four to five years, but is dependent on funding. The first phase will focus on feasibility testing and logistical gathering. The next step is to pilot test and make incremental improvements. The last stage is to have a full scale roll out with concurrent evaluation.

CPR is also expanding and promoting diversity, equity, and inclusion in the workforce. In order to effectively reflect and support diverse communities, the workforce must be equitable and inclusive. CPR's Management and Resource Office (MRO) will build an equitable and inclusive CPR infrastructure to reflect and support the various communities across the nation that it served in both preparedness and response settings. To accomplish this task, CPR will focus on three key strategies:

- Assess CPR's diversity, equity, and inclusion (DEI) efforts and develop a plan of action to reduce workplace barriers, challenges, and inequalities to increase diversity, equity, and inclusion.
- Develop a DEI communication strategy to keep all CPR stakeholders and others across HHS informed and aware of our DEI efforts to increase transparency.
- Develop internal and external partnerships to enhance DEI efforts, address SDOH and promote health equity while leveraging resources to reduce duplication of effort.

Recommendations and Comments from the BSC:

- Utilize the science already collected regarding the social determinants of health. A lot has already been collected and should be explored before more studies are conducted. Build on what is already there. Engage community groups, who are experiencing adversity, to develop solutions. Also gain help from the BSC members.
- Create specific outcomes for the next year, two years, five years, etc., and develop an evaluation plan that will measure if those outcomes were achieved.
- Examine this from a systems perspective and remember to challenge assumptions and beliefs. Have conversations that will uncover root thoughts and beliefs that are preventing progression.
- Take a wellbeing perspective like the one advocated by the Robert Wood Johnson Foundation. Equitable wellbeing should be the goal. This is an evolving arena and CDC could lead the way in translating this science into action.

Public Comment Period

Bridget Brown asked about the services CDC is offering to those aspiring to work in the preparedness and response field, particularly in the area of volunteerism, staffing, and equity. Mr. Mark Davis suggested checking with the local health department to see if they have plans or initiatives that includes students in their support work. CDC also offers various fellowships. Ms. Robin Soler suggested Ms. Brown check CDC Train, which includes roughly 4,000 courses that are free to the public. There is also a new Public Health AmeriCorps being launched for states to develop a volunteer corps for public health. CDC Train is ensuring the program has

coordinated online training for volunteers. CDC is also working with the Association of Schools and Programs of Public Health to develop free online certificates targeted to different audiences that will help with understanding public health emergency preparedness and response science and practice.

Meeting Recap

There will be a short meeting in December 2021 regarding standing up a new workgroup. Information will be disseminated shortly. Plans for the spring meeting are in progress.

Dr. Lochner recapped some of the themes heard during the meeting. They were as follows:

- Challenges with the public health workforce and obstacles faced at the state and local level and efforts DSLR is undertaking to address those issues
- Graduated Response Framework and response staffing
- Health equity presentation demonstrated how important the commitment to health equity is to CPR's mission, programs, data, and science. There are gaps but work is ongoing to address those areas.

Meeting Adjourn

With no further comments, the meeting was adjourned 4:11 PM EST.

CERTIFICATION

I hereby certify that to the best of my knowledge, the foregoing minutes of November 2, 2021, meeting of the Center for Preparedness and Response (CPR) BSC are accurate and complete.

February 1, 2022

Date

_____/S/_____

Suzet McKinney, Dr. P.H., M.P.H.

Chair, Board of Scientific Counselors, CPR

APPENDIX A: CPR BSC Webinar Meeting Attendance Roster

CPR BSC Webinar Meeting Attendance Roster November 2, 2021

NAME	AFFILIATION	PRESENCE (11.02.21)
Suzet McKinney	Chair and SGE	Via Zoom
David Fleming	SGE	Via Zoom
Jennifer Horney	SGE	Via Zoom
David Lakey	SGE	Via Zoom
Marissa Levine	SGE	Via Zoom
Catherine Slempp	SGE	Via Zoom
Vish Viswanath	SGE	Via Zoom
Dawn Wooley	SGE	Via Zoom
Paula Bryant (NIH)	Ex Officio	Via Zoom
Kristin DeBord (HHS)	Ex Officio	Via Zoom
Michele Askenazi (NACCHO)	Liaison	Via Zoom
Benjamin Chan (CSTE)	Liaison	Via Zoom
Christina Egan (APHL)	Liaison	Via Zoom
Parham Jaber (ASTHO)	Liaison	Via Zoom
Laura Magaña (ASPPH)	Liaison	Via Zoom
A.J. Schall (NEMA)	Liaison	Via Zoom

APPENDIX B: CPR BSC Membership Roster

DESIGNATED FEDERAL OFFICIAL

Kimberly Lochner, ScD
Deputy Associate Director for Science,
CPR Centers for Disease Control and Prevention
Atlanta, Georgia

CHAIR

Suzet McKinney, D.Ph., M.P.H.
Principal, Director of Life Sciences
Sterling Bay
Chicago, Illinois
Term: 8/6/2018 – 9/30/2021

MEMBERS

David Fleming, MD
Distinguished Fellow, Trust for America's Health (TFAH)
Bainbridge, Washington
Term: 11/7/2019 - 9/30/2023

Jennifer A. Horney, MPH, PhD
Professor, College of Health Sciences
STAR Health Sciences Complex
Newark, Delaware
Term: 5/13/2021 – 9/30/2022

Brent Pawlecki, MD
Chief Health Officer
The Goodyear Tire & Rubber Company
Akron, Ohio
Term: 2/12/2019 - 9/30/2022

Catherine C. Slemp, MD, MPH
Public Health Policy and Practice, Consultant
Milton, West Virginia
Term: 2/08/2016 – 9/30/2022

Kasisomayajula Viswanath, PhD, MA, MCJ
Lee Kum Kee Professor, Health Communication
Department of Social and Behavioral Sciences
Harvard T.H. Chan School of Public Health
Boston, Massachusetts
Term: 2/15/2019 – 9/30/2022

Dawn Patricia Wooley, Ph.D.
Professor, Neuroscience, Cell Biology, and Physiology
Wright State University
Dayton, Ohio
Term: 8/1/2018 – 9/30/2021

David L. Lakey, MD
Chief Medical Officer
The University of Texas System
Austin, Texas
Term: 5/13/2021 – 9/30/2024

Marissa J. Levine, MD, MPH
University of South Florida
College of Public Health
Tampa, Florida
Term: 5/13/2021 – 9/30/2024

EX OFFICIO MEMBERS

Office of the Assistant Secretary for Preparedness and Response (ASPR)
Department of Health & Human Services
Kristin L DeBord, PhD
Director, Strategy Division
Washington, District of Columbia

Food and Drug Administration
RADM Denise M. Hinton
Chief Scientist, Office of the Commissioner
U.S. Department of Health and Human Services
Silver Spring, Maryland

National Institutes of Health
Paula Bryant, Ph.D.
Director, Office of Biodefense, Research Resources
and Translational Research
Division of Microbiology and Infectious Diseases
National Institute of Allergy and Infectious Diseases
Rockville, Maryland 20852

LIAISON REPRESENTATIVES

Christina Egan, PhD, CBSP
Association of Public Health Laboratories (APHL)
Chief, Biodefense Laboratory, Wadsworth Center
New York State Department of Health

Albany, New York

Laura Magana, PhD
Association of Schools and Programs of Public Health (ASPPH)
President and CEO
Washington, District of Columbia

Parham Jaber, MD
Association of State and Territorial Health Officials (ASTHO)
Chief Deputy Commissioner
Virginia Department of Health
Richmond, Virginia

Benjamin P. Chan, MD, MPH
Council of State and Territorial Epidemiologist (CSTE)
State Epidemiologist
New Hampshire Department of Health and Human Services
Division of Public Health Services
Concord, New Hampshire

Michele Askenazi, MPH, CHES
National Association of County and City Health Officials (NACCHO)
Director, Emergency Preparedness and Response
Tri-County Health Department
Greenwood Village, Colorado

Jamie Ritchey MPH, PhD
Director, Tribal Epidemiology Center (TEC)
Inter-Tribal Council of Arizona (ITCA)
Phoenix, Arizona

A. J. Schall
Director, Delaware Emergency
Management Agency
National Emergency Management Association (NEMA)
Smyrna, Delaware

APPENDIX C: Acronyms

APHL	Association of Public Health Laboratories
API	Application Programming Interfaces
ASPPH	Association of Schools and Programs of Public Health
ASPR	Assistant Secretary for Preparedness and Response (HHS)
ASTHO	Association of State and Territorial Health Officers
BSC	Board of Scientific Counselors
CEFO	Career Epidemiology Field Officer
CDC	Centers for Disease Control and Prevention
CIO	Centers, Institute, and Offices
CONOPS	Concept of Operations
COVID-19	Coronavirus Disease 2019
CPR	Center for Preparedness and Response (CDC)
CSTE	Council of State and Territorial Epidemiologists
DEO	Division of Emergency Operations (CDC)
DEI	Diversity, Equity, and Inclusion
DSAT	Division of Select Agents and Toxins (CDC)
DSEW	Data Strategy and Execution Workgroup
DSLRL	Division of State and Local Readiness (CDC)
ELC	Epidemiology and Laboratory Capacity
EOC	Emergency Operations Center
FEMA	Federal Emergency Management Agency
FSAP	Federal Select Agent Program
HAN	Health Alert Network
HHS	US Department of Health and Human Services
IPP	Import Permit Program
JCC	Joint Coordination Cell
LRN-R	Laboratory Response Network for Radiological
MRO	Management and Resource Office (CDC)
OCIO	Office of the Chief Information Officer (HHS)
OSPPH	Office of Science & Public Health Practice (CDC)
PHEP	Public Health Emergency Preparedness
PPE	Personal Protective Equipment
SDOH	Social Determinants of Health
SGE	Special Government Employee
STLT	State, Tribal, Local, and Territorial
USAPI	U.S.-Affiliated Pacific Islands
USDA	United States Department of Agriculture