Board of Scientific Counselors (BSC)
Center for Preparedness and Response (CPR) Meeting
Thursday, March 30, 2023
Hybrid (In-person/Virtual)

Contents

BOARD OF SCIENTIFIC COUNSELORS (BSC)
CENTER FOR PREPAREDNESS AND RESPONSE (CPR)
MEETING
THURSSDAY, MARCH 30, 2023
VIRTUAL/IN-PERSON

Roll Call, Welcome

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

Dr. Lochner reviewed the BSC responsibilities, as per its charter, and the conflict-of-interest waivers. Members were requested to identify any conflicts and no conflicts were identified.

Dr. Lochner monitored attendance throughout the meeting to ensure quorum was upheld. BSC Members attending via Zoom were asked to keep their video on to assure attendance. The BSC Members were instructed not to conduct discussions through the Zoom chat feature. Public comments would occur during the public comment portion of the agenda only.

After roll call and quorum was met, Dr. Lochner turned the meeting over to the BSC Chair, Dr. Slemp.

The meeting was called to order at 9:06 AM EDT.

Welcome and Update

Henry Walke, MD, MPH; Director, ORR, Centers for Disease Control and Prevention (CDC)

Dr. Walke highlighted a few of CPR's activities. On February 21, 2023, CPR became the Office of Readiness and Response (ORR). The name change reflects CDC's charge to strengthen and prioritize readiness and response. The office will report to the immediate office of the CDC Director and will remain the hub for preparedness, readiness, and response efforts. The BSC will continue to be referred to as the Board of Scientific Counselors of the Center for Preparedness and Response until the name is updated pending approval of the BSC charter in November 2023.

ORR continues to support response both domestically and internationally. National and international events are monitored for coronavirus disease 2019 (COVID or COVID-19) and support is provided to state, territorial, local, and tribal partners. The Center also continues to monitor local and international cases of Monkeypox (mpox). Thankfully, cases have dropped significantly. ORR is also actively supporting response to the 2023 Marburg Virus Disease that is affecting Equatorial Guinea and Tanzania. This effort was elevated to a center-led response in early March 2023. CDC and the Agency for Toxic Substances and Disease Registry (ATSDR) are working closely with the U.S. Environmental Protection Agency (EPA) and the Ohio and Pennsylvania departments of health to assess the public health impacts of the train derailment

in East Palestine, OH. Technical assistance is being provided as well as a rapid assessment of chemical exposure to better understand and address any public health needs.

A welcome was extended to the newest special government employee (SGE) board member, Dr. Julie Fischer. Recognition was also given to four BSC members, who will be retiring from the board: Drs. Jennifer Horney, Brent Pawlecki, Vish Viswanath, and Cathy Slemp. Dr. Lochner is also leaving her role as the designated federal official (DFO) for the BSC.

Office of Policy, Planning, and Evaluation: Update

Chris de la Motte Hurst, MPH; Deputy Associate Director of Policy, Office of Policy, Planning, and Evaluation, CPR, CDC

The Office of Policy, Planning, and Evaluation (OPPE) is aligning its strategic plan to the larger CDC goals. The Office continues to make progress towards its planning priorities, which were updated in October 2022. Following the launch of the strategic plan, division leadership tracked progress across the plan elements and developed the key annual focus areas (KAFA) along with milestones and performance measures that will guide implementation actions. On a quarterly basis, a progress report is provided to leadership to ensure accountability. More resources are being brought to carry out strategic planning efforts. One of the resources highlighted was the Resource Management System, which will support alignment across budget and strategic planning activities.

There have been calls for CDC to be more action-based, bring science to practice expeditiously, and reform staffing policies and practices, all to improve preparedness and readiness. The strategic plan addresses those requests. CPR was tasked with supporting a significant number of the implementation actions created by the Moving Forward Priority Action Teams. This effort will ensure that readiness and response activities are integrated. Formal budgets, performance, and legislative activities are tracked as well as analyzed to determine how administrative statues will affect daily operations. In 2021, the strategic plan was linked to the division and office leadership's performance plans, and most recently, OPPE assessed the Senior Executive Service members' performance plans to confirm that their work ties directly to the strategic plan.

OPPE has participated in numerous congressional activities. At the end of 2022, the Prevent Act provided some of the authorities to help facilitate responses. For 2023, the focus is on the Pandemic and All-Hazards Preparedness Act Reauthorization. Public Health Emergency Preparedness (PHEP) is a key component of the statute. Work is occurring across the Agency with other federal partners, such as the Office of the Assistant Secretary for Preparedness and Response (ASPR), and CDC Washington colleagues to supply information, advice, and draft language as needed.

The FY24 President's Budget Proposal was recently released. ORR was allotted $943 million for its program funds. This is a $38 million increase from FY23 for domestic preparedness. Included is $20 billion mandatory funding (over five years) for the United States Department of Health and Human Services (HHS) in support of priorities outlined in the 2021 American Pandemic Preparedness: Transforming Our Capabilities Plan and 2022 National Biodefense Strategy and Implementation Plan. This will provide $6.1 billion to CDC. Funds will be utilized for the following activities:

- Modernize and build lab capacity
- Strengthen data systems and enhance domestic and global disease surveillance, biosafety, and biosecurity efforts
- Support capabilities for monitoring and evaluating vaccine and medical countermeasure safety and effectiveness

Comments from the BSC:

- With the train derailment, there will be a lot of impact also on the supply chain, so consider how that will affect the public. How people will get to work, if they are able, and how does that then impact the ability to obtain medications and other essential items they may need?
- There may be instances where rapid engagement will require the use of relationships and partnerships within the community to make it happen. Communities need to have data and rapid feedback on the data.
- We are only as strong as the weakest country system. There is a concern regarding low-income countries. Their systems for data collection are not strong and therefore not enough data is collected.
- Data has to be translated and used in a way that can inform policy and practice. This will require a strategic vision and operational plan of some kind.
- Data collection and particularly data surveillance needs to be more broadly defined to include social behavioral science data.
- There may also be the need to examine capacity building capabilities. There are talented people in low-income communities but sometimes that talent is limited and dispersed. So, how do you build training and capacity in these countries? Surveillance data, policies, communications have to coordinate with one another. This type of interdisciplinary work requires a different kind of training and mindset. This has to be a part of the strategic plan.
- One of the challenges with the COVID response was not being able to answer questions regarding the purpose of the response. The federal plan for Equitable Long-Term Recovery and Resilience came out towards the end of 2022. It set a framework for health and wellbeing. We have to determine our purpose in a response. Is it to protect physical health or to protect something more holistic or complete? Are we capturing the necessary data that would allow us to examine these aspects and other perspectives that really matter to the public?

- The democratization of data is a trend that CDC needs more understanding around. Part of that is sequencing data and placing it into public databases so that people around the world know what is happening and how the response is evolving.
- In the greater Cincinnati region, communities, hospitals, and other systems in public health came together to share local data, regional data and information as well as bring together its cross-sector partners, such as businesses, schools, and government. This was done to gain an understanding of what was happening in the region, explore ideas for how to address any issues, and determine what policies made sense based on the current situation.

CDCReady Responder: Update

Chris Brown, PhD, MPH, CPH; Director, Division of Emergency Operations

The CDC Response Workforce Coordination Program has now been branded the CDCReady Responder. This was created to address a response environment that was becoming increasingly complex. Response activity has increased significantly over the years. Currently, there are seven emergency responses occurring across the centers and a few of those are using the resources of the Emergency Operation Center (EOC).

One of the challenges the Division of Emergency Operations (DEO) encounters in every response is staffing and COVID exacerbated that point. Staff was spending an inordinate amount of time trying to find backup staff for their positions. This included deeming which individual had the right skill set to continue their work when they rolled off, desired a break, or needed to return to their home base to perform their regular job functions. The search was time intensive.

Upon researching, it was found that only half of the full-time employees at the Agency, who possessed the specialized skillsets needed for the COVID response, were utilized despite it being an all-hands-on-deck effort. It was also determined that there was not a clear path for people who had not previously participated in a responses to join if they were new to CDC or if they had never been a part of response efforts in the EOC in the past.

CDCReady Responder is a CDC-wide initiative that will change how the agency identifies and prepares staff ahead of public health emergencies. The key aims of the program are to do the following:

- Build and expand pools of pre-qualified, available responders
- Include staff not already connected to the response community
- Train staff to apply their talents to response work
- Create opportunities for staff to build new skills and professional connections

The goal is to create a diverse workforce of pre-qualified, trained, and available responders to establish and sustain an emergency response.

In structuring the program, historical data on positions most frequently needed during a response was utilized to identify roles that could be bucketed into cadres. Based on the historical data, fourteen or more cadres will be created. These are discipline-specific pools of individuals that can be enrolled into a cadre of responders who are ready to act when and where needed. To date, five have been launched. Staff is being enrolled into the following cadres: Response Communication, Response Operations Support, Response Leadership, Global Migration, and Health Equity. There were 624 enrollment notifications sent to staff and chief information officers across the Agency. Roughly 400 have been accepted and approved by their supervisor. They have also committed to upcoming training requirements that will be occur in the coming months.

DEO is set to accomplish all of its enrollment goals. The first was to enroll 300 responders by the end of January 2023. That was accomplished. The next milestone was to add 200 more responders by the end of March 2023. The Division is on course to achieve this goal as well, with more enrollment acceptances and supervisor approvals coming in over the course of this week. The goal is to have 1,000 staff at the agency enrolled by the end of the fiscal year. The target is to reach 5,000 staff members as soon as possible and DEO would like to see everyone at the agency enrolled in a cadre. There is a role for every person who supports response activities regardless of their skillset.

The list of future CDCReady Responder Cadres identified included the following:

- Behavioral Science
- Data & Application
- Environmental Health
- Epidemiology/Surveillance
- Infection Prevention and Control
- Jurisdictional Coordination
- Laboratory Science and Management
- Medical Care, Countermeasures, and Clinical Consultation
- Policy & Partnership
- Worker Safety & Health

The cadres will be launched over the course of the coming months. Senior staff is being ascertained amongst various chief information officers who have functional responsibilities for these areas. They are being engaged as cadre champions and will help DEO identify what it means to be qualified for the role of each of the cadres. Feedback from those champions will help shape the trainings, past work experiences, professional certifications and licensures needed to serve in the cadres identified. The goal is to have cadre managers in the EOC who will shepherd the day-to-day activities of staff enrollment and continued maintenance of qualifications needed for each of the cadres. They will also work with the cadre champions to make sure everyone who works within a cadre meets the qualifications. Those who do not fully meet the qualifications will be enrolled in developmental training. There will also be some cross

training across the cadres. Exercises, shadowing opportunities, and other experiential activities will be incorporated into this process as well.

Comments from the BSC:

- Keep in mind that even though an individual may perform well in their day-to-day work, they may not, however, be a good fit for the EOC. Individuals who come to the EOC must be able to thrive in what can sometimes be a chaotic environment. They must also be flexible and able to respond to the changing dynamics of emergencies.
- There are a lot of people in large state and local health departments that could be of assistance when they are not responding to a disaster in their state. This could also help them to develop their skills as well. Texas is putting together the Texas Epidemic Public Health Institute that will train individuals as a sort of National Guard for public health and it can be called upon during an emergency. There are also retired workforce from CDC and state agencies that are now working in academia and other areas that could also be considered for this work.
- The recommendations that came from the initial phase of the Moving Forward Initiative resulted in priority action teams. A lot of the discussion today regarding engaging with state and local health departments are being addressed across the Agency. Maybe in the next meeting, more details can be provided on the progress made so far. The recommendations are scheduled to be addressed by the end of 2023, so it would be interesting to hear about some of the other activities.
- Broaden the definition of behavioral science to social and behavioral sciences, particularly around issue of culture. That is critical. You need an anthropologist on the team.
- There was no discussion on evaluating the training, the deployment, etc.
- Rather than having to cajole people to work on response activities, consider making it an expectation included in the job description when people are hired so that they understand that this is part of their job responsibilities. If you are not reporting to the EOC, you will be filling in for those who are. Make it an obligation because they are employees of CDC.
- No matter how good the system is it can always be better, so consider the evaluation methods.
- Engage with state and local health officers to ensure that a feedback loop is in place so that you can assess their needs.
- Work with our schools of public health to make sure that our students have the basics of understanding. If you get to the level of badging and competency evaluation, we can better prepare graduates, so that they can hit the ground running when they come to the local and state health departments or CDC for career opportunities.
- Begin developing the business case for the investment that can be presented to Congress. It can help them to understand CDCReady Responder's actual impact on CDC's ongoing programs when people are trained cadre of responders and their impact on preparedness and response efforts.

- This is also about the pipeline and sharing best practices with state and local partners, as well as working cohesively with them; however, there is not a big pipeline in the U.S. So, how will we grapple with that in the future? We should also consider having a virtual network of experts that can be tapped into when needed.

BSC, CPR Liaison Updates

Michele Askenazi, MPH, CHES, National Association of County and City Health Officials (NACCHO)

NACCHO will be holding its annual 2023 Preparedness Summit, April 24-27, 2023. The summit provides an opportunity for those who work in emergency preparedness and response to come together and network. There are 2,400 attendees expected. In light of the de-escalation of COVID-19 response efforts, the all-hazards plans are being reexamined and refined. This moment ties nicely with the theme for the summit, which is Recover, Renew and Reprioritizing All Hazards Preparedness. It is expected that pressing issues will be revisited, resources and policies will be shared, as well as skills that can mitigate a variety of threats. Another subject of the summit will be how programs across local public health and in coordination with state and federal partners should support the new landscape and emerging threats.

On March 1, 2023, local public health leaders from across the country went to the Capitol as part of NACCHO's Local Public Health on the Hill Day. This was the first in-person Hill Day since February 2020. Leaders from NACCHO's Board of Directors, Our Big Cities Health Coalition, the State Associations of County and City Health Officials, and National Associations of Local Boards of Health met with 95 congressional officers representing thirty states. This provided an opportunity to speak with a collective voice for local public health and its importance. They encouraged congressional officers to meet with their local health departments to see their work, progress, and the differences they are making locally. Also discussed were ways that Congress could support public health efforts.

In 2023, NACCHO will continue to advocate on behalf of all aspects of public health activities including responding to emerging public health emergencies and confronting public health challenges based on the community and level. To ensure that federal policy is responsive to and in support of its members, NACCHO will advocate for meaningful inclusion of local health expertise in policy planning and implementation, as well as designated federal funding for local health departments. The agency will also continue to push for robust investment of core public health functions.

NACCHO was able to recognize eight local and regional health agencies for achieving Project Public Health Ready. Project Public Health Ready is a standard-based training and recognition program based on quality improvement models that recognize local public health agencies for demonstration of readiness to respond to all hazard events. The health departments that were represented were located in Florida, Texas, Michigan, North Carolina, Tennessee, Minnesota, and Colorado. These agencies will be celebrated at the 2023 Preparedness Summit in Atlanta.

NACCHO will continue to work closely with CDC to assure PPHR remains aligned and contributes to the mission and vision of an integrated and prepared public health system that is attentive to all of the public health accreditation board requirements.

World Public Health Emergency Preparedness is part of the PHEP 2.0. NACCHO launched a project to develop a set of public health preparedness capabilities specific to world health departments. This will increase world frontier area capacity to respond to, recover from, and build resiliency surrounding public health emergencies. This will be a capacity assessment that will utilize subject matter experts (SME) as part of a workgroup, as well as listening sessions with world health departments to gather and inform the creation of world specific PHEP capabilities.

The 2022 Preparedness Profile was launched in April 2022. This was a sample of 985 local public health agencies. There were over 375 responses received. NACCHO is finalizing the summary report that should be disseminated in early summer. It will cover a multitude of important topics to local preparedness.

NACCHO is finalizing two reports. These are qualitative studies that were collected in 2020 and 2021 regarding administrative preparedness as well as public health threats.

The Chemical Preparedness Project is working to support streamlining health department responses to chemical incidents. NACCHO is working with CDC and local public health departments to consider a guideline or framework that can be used off the shelf for local health departments to assess existing scientific literature, best practices, trainings, plans, and feedback from professionals in the field.

The Radiological Nuclear Preparedness Initiatives that started before COVID-19 are continuing. They aid in improving the capacity and capabilities of local health to prepare for, respond to and recover from radiation or nuclear disasters by sharing resources and tools, reviewing promising practices, and providing technical assistance and support to health departments.

NACCHO, with the support of CDC, launched Preparing for Water Sanitation and Hygiene or WASH-Related Emergencies among People Experiencing Homelessness. Five local health departments received $42,000 each to adopt preparedness plans to address the needs of people experiencing homelessness during WASH-related emergencies, to develop and implement an exercise to test their plans, and then to share their lessons learned and best practices and improvement plans. At the Preparedness Summit, a workshop will be held to hear from the five funded jurisdictions.

NACCHO and CDC completed the first cohort of the Wastewater Surveillance Mentorship Program. Two mentees implemented a wastewater surveillance program related to SARS CoV2 and seek to expand testing to include other pathogens. NACCHO is currently finalizing selections for the 2023 cohort.

Benjamin P. Chan, MD, MPH, Council of State and Territorial Epidemiologists (CSTE)

CSTE is currently engaged in reviewing its COVID 19 response efforts to help inform future emergencies and future responses. An after-action report will be created from CSTE'S perspective. The review encompasses a number of different areas. One is doing an internal debrief. There will be a survey with state and local public health agencies and state epidemiologists to gain feedback. CSTE has and continues to debrief with many of its national partner organizations and welcomes continued feedback regarding ways to improve the response moving forward.

With regards to partnerships, CSTE helped to stand up core group calls. These calls covered various topics such as epidemiology, diagnostics, and testing. The calls were successful and provided bidirectional discussion and feedback between the different participating organizations, and allowed for CSTE memberships to give feedback, as well as hear from other partner agencies, like CDC, on some of the challenges on the ground that could potentially inform national policy and implementation. CSTE is planning to utilize this structure and retool it for the next response.

Data modernization work will focus on both the systems and workforce aspects. Much work is needed at the state and local level to have interconnected systems that are able to talk with one another. Unfortunately, there is a lack of integrated data systems that are able to pull data and integrated it in a timely manner. This is an issue at all levels but is critical at the state and local level. This includes also having the workforce that has the experience and expertise to implement, manage and maintain these data systems. There is a need to expand the informatics workforce at a national and local level; therefore, CSTE is advocating for funding, not only for the systems but also for the workforce development and training.

Part of being prepared and responding to any new or emerging health threat involves data and data systems, but readiness and response expands beyond that into areas such as threat or disease specific areas. CSTE is turning its attention to issues like Ebola, for example, that continue to surface. They are coordinating ongoing and repeated responses to emergence of diseases like Ebola, as well as disease agnostic processes such as minimum data elements for case reporting. The goal is to have timely data and surveillance for making decisions and responding.

Epidemiology Readiness addresses workforce and funding. Much of the epidemiologist workforce is committed to different areas of work based on funding streams. However, it is often not flexible funding that allows the workforce to pivot. This is more pronounced at smaller state and local health agencies, where the epi workforce is not as diverse.

Alexia Harrist MD, PhD, Association of State and Territorial Health Officials (ASTHO)

ASTHO's Strategic Plan for 2022 through 2024 focuses on the following priority areas:

- Health & Racial Equity

- Workforce Development
- Sustainable Infrastructure Improvements
- Data Modernization and Interoperability
- Evidence-Based and Promising Public Health Practices

The agency is participating in the Collaborative Association Response Group, along with colleagues from NACCHO, CSTE and APHL to provide recommendations to CDC on how to best collaborate during public health responses.

ASTHO provided input on PHEP's readiness framework path forward, as well as initial parts of the hospital preparedness programs capabilities refresh. There was also the recent publication of an article in the Journal of Emergency Management, which analyzed public health emergency powers and legislative reforms to those powers that were made as a response to COVID and how those reforms might impact the ability to respond to future public health events.

To support evidence-based public health practices, ASTHO has developed technical packages relating to supporting healthy aging and older adult health, sustained management of COVID moving forward, and a package related to territorial support for COVID-19 health equity.

ASTHO will be hosting several trainings and meetings in the coming months. Last month, preparedness staff attended the Pacific Island's Preparedness and Emergency Response Summit in Guam and presented on radiation readiness. They also attended the National Alliance for Radiation Readiness Meeting, as well as the National Academies of Medicine workshop on strengthening capabilities and capacities of the nation's health emergency laboratory response systems. Below are a list of upcoming trainings and meetings.

- PIPER Summit/NARR Annual Meeting
- Health Equity Summit (April)
- TechXpo and Futures Forum (May)
- Elected Official Collaboration Meeting (TBD)
- Bridging Preparedness, Infectious Disease and MCH Roundtable (June)

A summary of activities was also provided to the BSC related to PAPHRA Reauthorization, Preparedness leadership, Bridging Preparedness, Infectious Disease and Maternal Health, Public Health Emergency Communication, and continued COVID response efforts. Below is a list of the activities related to each of the areas.

PAPHRA Reauthorization

- Ample and Sustained Flexible Funding for All-Hazards Preparedness and Response
    - PHEP and HPP
- Human health impacts of climate and extreme weather
- Increasing the impact and efficiency of state and local funding

- Improving the functionality and transparency of the SNS
- Reducing Airborne Threats and Strengthening the Power Supply
- Maintaining a robust antimicrobial posture
- Health literacy and the impact of mis, mal, and disinformation

Preparedness Leadership

- Resiliency Training
- Orientation and Mentorship Program
- PH-HERO Resource Center (Online Now!)

Bridging Preparedness, Infectious Disease and Maternal Health

- Encourage internal organizational connections between public health preparedness, infectious disease and maternal and child health and birth defects surveillance programs
- Considerations Report, Interviews and Manuscript
- June Partnership Meeting

Public Health Emergency Communications

- Public opinion surveys to support federal, state/territorial, and local public health with COVID-19 communication strategies
- Public Health Emergency Communications (PHEC) Learning Community that brings together state health department leadership and public information officers to turn data into action
- Member online resource repository that contains resources, products, and events from this project to support state and local public health agencies with actionable data to enhance communication efforts.

Continued COVID response

- Pulse check for the ending of the PHE
    - 10 anticipating the end of at least 1 response activity
        - Policies related to infection control in LTC facilities
        - Private insurance coverage of COVID-19 testing
    - 66% (n=12/18) do not anticipate a reduction in workforce
    - 77% (n=18) will continue to use hybrid telework for staff
    - 27% (n=5) planning to transition COVID responsibilities to a specific office/department after the PHE
        - Epidemiology (n=3)
        - Preparedness (n=2)
    - Support and Technical Assistance Needs
- Position Statement (forthcoming) on research and support for Long COVID patients

ASTHO is tracking some trending preparedness policy topics as many legislatures are in session across the country. These include crisis standards of care, in particular, ensuring equitable distribution of care to people with disabilities. Another trending topic is how to prepare and account for individuals with rare diseases during a public health emergency. Helping schools prepare for an active shooter is another important topic that will include planning and exercising with first responders. And lastly, how changes and challenges to public health authority might impact future responses to pandemics. Some other topics of interest include subjects related to climate change, consumer pricing, cybersecurity, and wildfires.

Emily Burke, EdD, MPH, CPH, Association of Schools and Programs of Public Health (ASPPH)

ASPPH provides the voice of academic public health. Its vision is to improve health and wellbeing for everyone, everywhere, and its mission is to advance academic public health by mobilizing the collective power of its members to drive excellence and innovation in education, research, and practice. The values of ASPPH provide the foundation for its work. Its Strategic Plan 2030 values are as follows:

- Diversity, equity, inclusion, and social justice
- Collaboration
- Excellence
- Innovation
- Agility
- Commitment to public health

By fostering a culture of awareness and inclusion, ASPPH will strengthen collaboration with academic public health institutions around the world. The association believes that a team that is comprised of diverse skill sets and unique perspectives will drive new methods of analysis, inspire new approaches to inquiry, and advance creative solutions.

ASPPH created a statement of commitment to diversity, equity, inclusion, and social justice with its members and a taskforce. It states that ASPPH strives to create an equitable and inclusive community that respects everyone, values differences, and stands up against acts of harassment or discrimination in all forms. As a complement, a second statement of Commitment to Zero Tolerance was created. This statement demonstrates ASPPH's commitment to eliminating harassment and discrimination in academic public health. It is essential to provide all students, staff, faculty, and community partners with respectful and safe learning and working environments. ASPPH opposes acts of harassment and discrimination in all forms, while it simultaneously works towards developing schools and programs that are directed by cultural competence and humility, inclusivity, and diversity.

The association is working with the Robert Wood Johnson Foundation on a project called Transforming Academia for Equity Collaboration. This project operationalizes the commitment and the framework that ASPPH has developed. The project will be used to disseminate promising practices for academic inclusive excellence. It will also create formal spaces for

schools and programs of public health to work together to advance anti-racism strategies. This work is connected with the ASPPH Framing the Future Initiative. This initiative aims to consider the world in 2030, with all of its contextual influences and future possibilities, to shape a plan that achieves ASPPH's vision. The goal is to advance education in an effort to develop a diverse and competent workforce.

Comments from the BSC:

- The National Academy of Sciences, Engineering, and Medicine is doing a number of initiatives around misinformation and disinformation.

Diversity, Equity & Inclusion and Health Equity Updates

During the November 2022 BSC, CPR meeting, a robust discussion occurred regarding health equity and the initiatives across CDC directed towards DEIA. It was determined that there was an opportunity for the BSC to support ORR in operationalizing this concept and helping to shape the structures, partnerships, and broader systems needed to have a significant impact. One of the tasks identified was to launch a workgroup to examine this area. The following presentations highlights some of the activities currently ongoing within ORR that should be considered as part of the discussion.

Diversity, Equity, Inclusion and Accessibility (DEIA)

Magon M. Saunders, DHSc, MS, RDN, LD; Senior Diversity, Equity, and Inclusion Consultant

There are five principles or priorities for the DEIA Action Plan. They are as follows:

1. Increase diversity
2. Improved retention and opportunity creation
3. Develop a climate of equity, inclusion, and accessibility
4. Leadership–driven Diversity, Equity, Inclusion, Accessibility, and Belonging (DEIAB) culture reform
5. Strengthened DEIAB insights through improved data.

To address principle one, a Minority Serving Organizations catalog is being developed along with outreach efforts to recruit individuals who are diverse. Since the last meeting, ORR has participated in the 2023 HBCU Legacy Bowl, reaching over 19 HBCUs and worked on a Dillard University Outreach in March. The Center also participated in a recent HRO Road Show and other Career Fairs. Lastly, ORR has offered six DEIAB office hours and educational opportunities.

Priority Area 2 looks at retention improvements as well as opportunity creation. CPR has hosted three speed mentoring sessions with over 30 mentors and mentees. Three DEIA musings conversations have also been implemented where over 80 participants attended. During musing conversations, individuals who have been a part of CDC for some time share their best practices, lessons learned, their career journey, and where they are on the career ladder.

Succession planning has begun at DSAT for the position of Division Director. ORR has also completed a workforce age analysis and the findings are being used to develop the next steps.

The third priority is to develop a climate of equity, inclusion, and accessibility. One of the tasks to achieve this goal is to create an advisory body of people with lived experience who can advise the director and senior staff on matters related to health equity. A logic model was developed for this priority area and outlined the creation of the ORR/DEIAB Advisory and Support Team (DEIAB-AST). Also, a cost-benefit framework for DEIAB is being created, as well as a proposal for direct leadership actions to change the ORR climate.

Priority four focus on leadership driven DEIAB Culture Reform. A communication plan and Hub for ORR is being developed. In addition, Special Emphasis Program Solidary Letters from the Director are developed each month. ORR has also hosted its first DEIAB Book Club. The first book for the club was *Breaking White Fragility: Let's Talk About Racism and How to Be Antiracist*. This event was well attended and very eye-opening for the participants. Lastly, several DEIAB and related pieces of training have been provided that will build competencies in leaders and future leaders.

Priority 5 speaks to the improvement of data in an effort to strengthen DEIAB insights. A logic model is being created for all of the priorities along with one overarching logic model. ORR is also reviewing the findings from the Federal Employee Viewpoint Survey (FEVS), and they are being socialized with senior leaders. An open session will occur with staff to share the findings, discuss next steps, and determine, from staff, ways to keep them engaged in FEVS. Also, a corrective action plan was developed for each Division and Office.

Since the last BSC meeting, several features and articles have been created. Below is a list of the recent DEIAB communications that have been created.

- "Building Trust in Drops Series" developed and published to chronicle the ORR DEIAB story
- DEIAB Annual Progress Report and Pictural developed
- Two abstracts were developed and submitted for the American Public Health Association (APHA) Annual Conference
- A DEIAB graphic element was developed and put into use at ORR
- A DEIAB Action Plan Tracker was implemented for monitoring and reporting progress.

There are some evaluation updates on the horizon. Performance metrics and data profiles are being developed for work in all of the priority areas. There will also be a DEIAB, health equity, and social determinants of health (SDOH) assessment for the Chief Information Officer (CIO). Lastly, the upcoming focus groups around microaggression and root cause analysis studies will gauge the workplace climate.

There have been some challenges identified that were highlighted.

1. Competing Priorities: Emergency responses and other competing demands on the staff within ORR
2. Staffing: Limited staffing infrastructure to support DEIAB
3. Funding: Limited resources to fund contracts and other processes needed to move DEIAB forward
4. Misperceptions of DEIAB: Lack of clear understanding of the connections between health equity and DEIAB
5. Silos: Siloed efforts across the agency, which increases duplication of effort and reduces synergy

Addressing Populations with Access and Functional Needs in Emergencies

Rebecca Hall, MPH; Office of Science and Public Health Practice

The Pandemic and All Hazards Preparedness Act (2006) and subsequent re-authorizing legislation provided the Department of Health and Human Services (DHHS) broad authority for improving federal leadership and coordination of preparedness and response activities, including specific provisions for addressing the medical and public health needs of people with access and functional needs and other at-risk populations.

People with access and functional needs (AFN) are those with and without disabilities, who may need additional assistance because of any condition (temporary or permanent) that may limit their ability to act in an emergency. Access needs require planning to ensure services are available during and after emergencies. Some examples of this includes social services, information, and transportation. Functional needs include restrictions or limitations that make a person require assistance during and/or after an emergency. Durable medical equipment and medications to maintain health are examples of functional needs.

The groundwork for these activities began with the West Africa Ebola response, where certain vulnerable populations were disproportionately impacted. An at-risk desk was created, along with a vulnerable populations officer. This action help to link the response with population-specific experts at CDC. After the Ebola response, these activities continued in ORR. Activities were expanded to include all-hazards and preparedness activities.

To ensure health equity is enacted in CDC's public health emergency preparedness and response (PHEPR) work, a framework is needed to help guarantee equitable outcomes in emergencies. In 2022, a landscape analysis was launched as the first step in creating a framework for incorporating health equity principles and business practices throughout the CDC PHEPR life cycle. The 2011 Common Ground Preparedness Framework is the model being used for the PHEPR life cycle. This was developed through a collaboration with state and local health departments to define business processes related to PHEPR. The framework was selected because it is comprehensive and specific and addresses pre-incident, incident, and post-incident activities and phases that allow for cross overlapping of functions across the three phases.

The objective of the landscape analysis is to identify key points in the life cycle where health equity considerations have been incorporated to improve equity in health outcomes in emergencies, and to identify gaps in preparedness planning and practice. The report of findings is expected by May 2023 and will provide a baseline framework for helping ensure equitable outcomes in emergencies. This report will also include a short list organizations or practitioners to follow up with for key informant interviews in the next phase. The next phase will engage stakeholders to validate the findings of the landscape analysis and to determine what steps are needed to fill the gaps in health equity planning and practice.

The Access and Functional Needs in Public Health Emergencies Community of Practice (AFN CoP) was founded in 2017 to improve internal CDC capacity to respond to the needs of populations at increased risk in emergencies. In 2022, two changes were made. The AFN CoP adopted its current name to be more inclusive and less stigmatizing for the population it serves, and a charter and steering committee were developed to increase member engagement. The AFN CoP also provides a forum to discuss and address population-specific issues that arise during responses, as well as share best practices. It also hosts quarterly webinars to educate and inform members on research and programs supporting AFN in emergencies.

Another Readiness in Action endeavor addresses nuclear and radiation preparedness. People with AFN have specific needs that should be planned for in nuclear/radiological emergencies. Therefore, a subset of SMEs from the AFN CoP participates year-round in nuclear and radiological preparedness activities such as tabletop, functional, and full-scale exercises. The SMEs also create and refine communication materials regarding population-specific preparedness and emergency guidance for populations, clinicians, and caregivers. In addition, they provide updates to the CDC's Nuclear/Radiological Incident Annex so they may refine their tasks and objectives for supporting populations with AFN.

Psychological trauma can be experienced by survivors of public health emergencies and responders. A trauma-informed approach can reduce the likelihood of re-traumatization. From 2017 to 2018, the Trauma Informed Care (TIC) training was piloted for CDC responders. This was completed in partnership with the Substance Abuse and Mental Health Service Administration (SAMHSA) and the National Association of State Mental Health Program Directors to adapt the trauma informed care curriculum to be more relevant to CDC responder. The pilot was conducted among a limited number of staff and a formal evaluation was conducted. The feedback was overwhelmingly positive. Several communication products were developed as a result of this effort. Future plans for 2023 is to update and offer the training to a wider CDC responder audience.

With regard to responses, the CDC Zika after-action report identified the need for a scientific task force to address populations at increased risk in emergencies. The At-Risk Taskforce was established in 2017 and were given the following aims or functions:

- Identify populations at increased risk in emergencies, including those with AFN

- Provide scientific expertise and technical assistance to State, Tribal, Local, and Territorial (STLT) health departments, other federal agencies, and response partners
- Create and disseminate communication materials for populations at increased risk, their caretakers, and clinicians

There have been other recent accomplishments and products as a result of response activities. During the first few months of the COVID-19 response, guidance and health messaging were developed on Stigma and Resilience, Stress and Coping, Sharing Facts About COVID-19, and Caring for Children while School's Out. During Hurricanes Ida and Nicholas in 2021, the Office responded to inquiries from response partners on topics such as a shortage of oxygen tanks in affected communities and power outages for people with disabilities. In response to Hurricane Ian in 2022, the Office shared accessible and bi-lingual resources (English and Spanish) with the Federal Disaster Behavioral Health Working group, including the videos from the 2017 hurricane response, the Coping after a Disaster and Flooding, and Mold Ready Wrigley books.

Comments from the BSC:

- There are probably a number of individuals working at CDC with AFN. There may be a role they could play in providing advice. And is there an intersection with the DEIA arena that you are dealing with where you could raise that voice internally?

Special Populations: People Experiencing Homelessness or Incarceration

Emily Mosites, PhD, MPH; Office of Readiness and Response

There are agencies that are responsible for the care and custody of people who are experiencing homelessness and incarceration, but public health is responsible for the health of these groups. Public health has a role to play when it comes to protecting the health of people experiencing homelessness while supporting the end of homelessness and to protecting the health of people who are incarcerated and improving the conditions of confinement. These serve as the underlying mission for the Special Populations Team.

The team is based in ORR and interfaces with Emergency Responses as SMEs. Members of the team were deployed through the entirety of COVID-19 and the mpox response. The team also serves as the SMEs across CDC for any issues related to the two populations it serves. In addition, The Special Populations Team engages with working groups within CDC. One of them is the AFN CoP, the newly formed CDC-wide Justice System Working Group, and the CDC-wide Homelessness and Public Health Working Group, which was established in 2019.

The Team focuses its work on populations that are aligned due to a shared setting or experience. The settings and experiences provide avenues for engagement with those populations. Identifying the organizations that are already engaged with these populations provides an entry point for the Special Populations Team.

In collaboration with community and organizational partners, listening sessions were conducted. Materials unique to specific populations were developed from information garnered. Outreach efforts provided information and encouraged feedback on the materials developed.

Outreach can vary depending on the population. For example, in correctional facilities, mpox transmission was not occurring easily so engagement was short. In contrast, sex work was complicated. Engagement was difficult. Trust did not exist, and the inroads to engage with this population were not readily available. The Team is still finalizing materials for those who engage in sex work.

There has been an ongoing issued with data related to homelessness and health. In both COVID-19 and mpox, data was not available for cases among this population. Therefore, CDC was unable to view the burden of disease for this group. To address this problem, a guide for defining homelessness in public health data collection is now on the CDC Homelessness website. A project is currently underway to collect primary data to validate a question to be asked in case interviews on homelessness, and the Team is working with the Center for Surveillance, Epidemiology and Laboratory Services (CSELS) to merge homeless management information systems with vaccine registry data. This is a passive way of identifying homelessness.

In collaboration with the CDC Foundation, three centers of excellence have been funded for public health and homelessness. This project was conducted in San Francisco, Seattle, and Minnesota and will close in June 2023. There is also online introductory training on homelessness available for public health professionals. Enrollment has been successful. Over 700 individuals have enrolled. Funding has also been allocated that will allow staff to work on homelessness and the COVID-19 response among ELC recipients. There is also an external peer to peer network for health department staff working on homelessness to connect them with each other and share best practices.

There have been some activities related to correction facilities. A CDC-wide Justice System and Health Working Group is currently undergoing the approval process and should launch in the coming months. This is an internally focused working group. The Team provides technical assistance to other CDC programs. Planning is also occurring that require cross-jurisdiction public health partnerships. One is for a peer-to-peer network among public health professionals working in correctional health. The other includes engagement with the CSTE and others on ways to connect state and local colleagues.

A significant amount of information was collected regard correction facilities during COVID-19. Correction facilities were far more impacted than homeless shelters. Formal interviews were conducted with twenty-one key partners including correctional facilities, jails, and prisons, Federal Bureau of Prisons, and state and local health departments to gather lessons learned that can be built into the CDC infrastructure going forward. It was acknowledged universally

that public health needs to be at the table when it comes to correctional health and the prevention of infectious disease spread within correctional settings.

The lessons learned during COVID-19 regarding correction facilities were applied during the mpox response. The Special Populations Team convened with public health and corrections partners to identify knowledge gaps. They also prepared data collection protocols to fill gaps. This was utilized immediately for a case in the Cook County Jail. The team also used the data to develop tailored public health considerations and communications materials that were published in a Morbidity and Mortality Weekly Report (MMWR) in October 2022.

Before concluding Dr. Mosites asked the BSC to assist the Team with the following question: How can we include special populations early in responses?

Comments from the BSC:

- When collaborating with partners around homelessness, consider asking your partner groups to bring one of their peer partners from their network or communities. This may provide some inroads.
- As the ORR framework is constructed, leverage all aspects of CDC, as you think about the health equity space or connections to community-based organizations. It is not just the responsibility of ORR, a center, or office to work on this front. If readiness and response is a priority for the Agency, how does senior leadership then use all of the agency's assets, including connections to community-based organizations? I see ORR and CDC moving towards utilizing all of the connections across the agency to engage with community-based organizations and to garner as much information as possible from those organizations on how we can do this work better.
- There is an opportunity here to think about the ability to do more diversion and provide an opportunity to get people into the care systems that they need thereby decreasing the burden. This will give us the rapid ability to shift during a response.
- Examine some of the work that is going on around substance use and incarceration. There are models that are occurring at the community level around diversion and embedding social workers with law enforcement and mental health teams that really have opportunities to be maximized more broadly.

Public Health Response Readiness Framework: Health Equity

Mark Green; Division of State and Local Readiness

A vital component to the Division of State and Local Readiness (DLSR)'s work is the program priorities that have been incorporated into its Public Health Response Readiness Framework.

There are three primary stakeholder groups whose outputs help anchor the key outputs needed to fully execute DSLR program priorities. The Non-Government Organization (NGO) Partners' outputs guide how DSLR and PHEP recipients should collaborate to execute each program priority. The STLT group's work help to inform the key elements and requirements for

the 2024 PHEP notice of funding opportunities (NOFO) and serve as foundation for PHEP evaluation strategy moving forward. The final stakeholder is the CDC/DSL group, and they examine DSLR's long-term strategy and how DSLR/CDC will be accountable for executing and tracking progress of program priorities moving forward. Each of these group produce key outputs related to activities for their area of focus, evaluation criteria, and recommendations related to its specific topic.

DSLR assembled the DSLR Health Equity Work Group. The purpose of the group is to incorporate health equity practices to enhance preparedness and response support for communities experiencing differences in health status due to structural barriers. The group's leaders are Mr. Green along with Dr. Magon Saunders. The work group members include the following individuals:

- DSLR: Jennifer Johnson, Caroline Ngure, Carolyn Tunstall, Dwayne Riley, Araceli Rey, Rupesh Naik, Michael Fanning, Brenda Zangwill, Terrance Jones, Ashton Dixon, Lily Balasuriya , Rod Lambert, Jamilla Green, Francisco Palomeque-Rodriguez, Tomi Ademokun
- ORR OD: Rebecca Hall

The workgroup has convened numerous meetings to discuss its work. The primary goals for health equity are being constructed. Work group members were asked to self-identify the areas their expertise could best fit. Group member's expertise were matched to subgroups related to NGO partners, STLTs and CDC/DSLR, and the sub workgroups recommended activities that they felt would be beneficial to advance health. There have been numerous recommendations and below are some that have been garnered.

NGO Partners:

- Solicit best practices from NGOs, including ASTHO's health equity workforce support.
- Include nontraditional partners (faith-based organizations and community health workers) in preparedness planning and after-action reviews (AARs) to ensure risk communication and information sharing tools, such as social media outlets, are relevant for underserved and at-risk communities.

STLTs:

- Revise jurisdictional risk assessment requirements to include health equity elements to help recipients identify populations or communities most often adversely affected by disasters and consider how social determinants of health affect health outcomes during emergencies or disasters.
- Monitor, evaluate progress in addressing health equity during the emergency preparedness planning and response activities and adjust as needed to meet needs of all populations.

CDC/DSLR:

- Conduct landscape assessment to better understand how states have adopted equity policies, specifically for PHEP topic areas.
- Assign individuals with expertise in equity issues (e.g., communications to the public) and public health disasters to Emergency Operations Center, Joint Information Center (EOC JIC).

DSLR has also onboarded Dr. Rob Lambert, who will serve as the new Health Equity Officer.

Comments from the BSC:

- Think about how we can create infrastructure to help us learn, pivot, and iterate quickly.
- Do not forget the network of public health preparedness and response centers. They are cross sector and, in addition to the PHEP investments in support of STLT activities, may be another way to translate science-based information into practice. Also involve businesses and others through a regional approach.
- As an office you have issues of science and issues of practice, and they have to be connected with translation that will influence science from an equity perspective. If the science is not equity-centric, then the practices are not likely to be equity-centric. This is not easy to do. Should you have a separate office for diversity, equity, inclusion, and accessibility or should it be infused in a way that it is not siloed?
- This is about cultural change and that cannot be done without engaging our own workforces and organizations in determining how that will look. We have to all look internally at ourselves, how we interact, and how society functions.
- This also requires asking uncomfortable questions and being comfortable with the uncomfortable questions.
- It is important to address the absence of data for the special populations. COVID-19 provided lessons that could be beneficial to address this because there were a number of local and regional efforts to compensate for the lack of national efforts devoted to these populations. Consider examining some of the data collection efforts that were started at the local level to see how they can be used to address the absence of data for special populations.
- Dissemination and sharing of communication materials is actually co-building especially when it comes to special populations. It is not a linear or one-way flow of information from the top to the bottom. The material has to be co-produced, co-built, and co-defined.
- What is CDC's role now and in the future? You have a research role. There is the data piece. You provide guidance, direction, and recommendations. There is the training piece and ultimately a system piece. Are we intentionally looking for where it's working? That is a good place to focus and gain understanding but it must be done from a systems point of view. What is it about those systems that are resulting in those outcomes? Can

we enhance our analyses to include understanding the dynamics of the system that are either perpetuating what we have currently or producing these positive results? You also have to have a goal or purpose related to a more preventative mindset. This makes you think about wellbeing and resilience. So, all of us need to think about what CDC's role going to be. It has to be a partnership and networking building role, which means there has to be robust feedback so that recommendations are supported by the input.

- We are never going to have a public health person at every table due to staffing constraints currently occurring in local and state public health workforces. How can CDC create a distributed public health capability that would allow everyone to see that CDC has a role in public health?
- Issue requirements for specific community asset planning and building.

Health Equity Work Group Discussion

Lovisa Romanoff, MS, MPH; Deputy Director, Management & Operations

The CPR Social Determinants of Health Action Plan (C-SAP) was launched in January 2021. The goal of the plan is to develop a 5-year action plan that incorporates SDOH and health equity considerations in ORR's existing programmatic efforts to promote primary preparedness and community resilience. This was done in collaboration with the Leavitt Partner Group because of their expertise in health care delivery, health care consulting and the launch of the National Alliance to Impact the Social Determinants of Health (NASDOH).

The action plan includes two key strategies that will undergo further feasibility testing and logistical planning. The first is a community of practice for PHEP recipients to discuss and share best practices related to health equity strategies. So far five key informant interviews have been conducted with internal and external SMEs. The interviews will contribute to a landscape analysis that will inform recommendations for both structure and operationalizing a community of practice for state and local partners.

The second project will further define the equity officer's role within CDC's Incident Management System's (IMS) structure for more strategic integration during emergencies. Preliminary evaluation work has been conducted through hot washes, interviews of former chief equity officers, and surveys. Evaluation data is currently being reviewed and will be compared and contrasted to the COVID response and the mpox response.

The BSC is being reengaged with the hopes of establishing a health equity workgroup. The Health Equity Workgroup (HEWG) will gather information and analyze best practices to assist the Board with developing advice and recommendations to inform a health equity agenda for readiness and response. Below is a list of initial activities that are being proposed.

1. Conducting an independent review and evaluation of ORR's health equity goals, strategies, and activities for gaps or areas of improvement in relation to emergency preparedness and response.

2. Developing a draft evaluation plan to measure progress made by ORR's health equity goals and strategies.
3. Providing expert input to the BSC, CPR for consideration and discussion regarding strategic planning for future health equity activities related to emergency preparedness and response.

Two BSC members would serve as co-chair of the workgroup and the group would consist of twelve members. Because of the scope of the health equity projects that are occurring in ORR, the areas of expertise must be vast. Proposed expertise are as follows:

- Health Equity/Social Determinants of Health
- Emergency response
- Incident management
- Data preparedness
- Community resilience
- Public Health
- Epidemiology
- Laboratory Science
- Special Populations

The plan is to establish the HEWG in today's meeting. The first meeting would occur in the spring of 2023, and then a progress report would be presented at the fall 2023 BSC meeting.

Comments from the BSC:

- The kind of expertise that needs to be a part of this work takes time to gather and there are some vacancies in the BSC membership. Therefore, I am concerned about proposing a spring meeting. It would be great to offer participation to incoming members and to also have a sufficiently robust process of finding outside expertise to onboard for the workgroup. Offering flexibility in the onboarding process and the timeline might serve to make this a more inclusive process.
- Recognize that there is a health equity workgroup with the Advisory Committee of the Director and this workgroup would be specific to readiness and response issues, but it would be important to be informed by their work.

After more discussion regarding the timeline and delaying the establishment of the workgroup until new BSC members are appointed. It was decided that there will be an interim update at the fall BSC meeting and then ongoing updates on the activities of the working group as needed.

Recommendation:

Dr. Vishwanath made the motion for the establishment of the HEWG, and it was seconded by Dr. Kathleen Tierney. The motion was unanimously approved. Drs. David Fleming and Marissa Levine will serve as the co-chairs for the workgroup. BSC members were encouraged to share their suggestions of individuals who should be extended an invitation to join the workgroup with Dr. Lochner and after her departure the incoming DFO.

Public Comment Period

Members of the public were given the opportunity to speak at the meeting.

Mr. John Muller, Ms. Karen Spencer, and Ms. Brenda Staudenmaier spoke on fluorination of water and Mr. Jester Jersey spoke on preventing the spread of vaccine-preventable diseases.

Closing Remarks

Cathy Slemp, MD, MPH; Chair, BSC CPR

Before adjourning, Dr. Slemp opened the floor for closing comments, thoughts, and reactions. The board members suggested topics for future meetings.

- Update on the train derailment response
- Include a presentation on the CDC DMI strategies and how they all fit together
- Priority action progress

Dr. Walke expressed his thanks to the BSC for their time and providing their direction to ORR. Dr. Lochner also recognized the members who will be retiring from the BSC. Dr. Slemp reflected on the progress that has been made over the years to address emergency preparedness and response, as well as the many unanticipated facets that have been discovered along the way. She also recognized the struggle to determine how to balance the efforts that focus on emergency preparedness versus recovery and then determining how to proceed into resilience. This work, she said, requires culture change and it is wonderful to have partners, like those in the BSC, to help.

With no further business to be covered, the meeting was adjourned at 2:50 PM EST.

CERTIFICATION

I hereby certify that to the best of my knowledge the foregoing minutes of March 30, 2023, hybrid meeting of the Board of Scientific Counselors, Center for Preparedness and Response are accurate and complete.

_____	_____/S/_____
Date	Catherine C. Slemp, MD, MPH
	Chair, BSC CPR

APPENDIX A: BSC CPR Membership Roster

DESIGNATED FEDERAL OFFICIAL

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

CHAIR

Catherine C. Slemp, MD, MPH
Public Health Policy and Practice, Consultant
Milton, West Virginia
Term: 2/08/2019 – 3/31/2023

MEMBERS

David Fleming, MD
Distinguished Fellow, Trust for America's Health (TFAH)
Bainbridge, Washington
Term: 11/07/2019 - 9/30/2023

Paul Halverson, DrPH
Founding Dean, Professor of Policy, and Management
Richard M. Fairbanks School of Public Health
Indiana University
Indianapolis, Indiana
Term: 6/08/2022 – 9/30/2025

Jennifer A. Horney, MPH, PhD
Professor, College of Health Sciences
STAR Health Sciences Complex
Newark, Delaware
Term: 5/13/2021 – 3/31/2023

David Leroy Lakey, MD
Vice Chancellor of Health Affairs and Chief Medical Officer
The University of Texas System
Austin, Texas
Term: 5/13/2021 – 9/30/2024

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

Brent Pawlecki, MD
Chief Health Officer
Wells Fargo
New York, New York
Term: 2/12/2019 - 3/31/2023

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 – 3/31/2023

EX OFFICIO MEMBERS

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

National Institutes of Health (NIH)
Paula Bryant, PhD
Director, Office of Biodefense, Research Resources, and Translational Research
Division of Microbiology and Infectious Diseases
National Institute of Allergy and Infectious Diseases
Rockville, Maryland

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

Alexia Harrist MD, PhD
Association of State and Territorial Health Officials (ASTHO)
State Epidemiologist and State Health Officer
Wyoming Department of Health
Cheyenne, Wyoming

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

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, Response, and Communicable Disease Surveillance
Tri-County Health Department
Greenwood Village, Colorado

A. J. Schall, Jr., BS
National Emergency Management Association (NEMA)
Director, Delaware Emergency Management Agency
Department of Safety & Homeland Security
Smyrna, Delaware

APPENDIX B: Attendees List

SGE Board Members

Julie Fischer
David Fleming
Paul Halverson
Jennifer Horney
David Lakey
Marissa Levine
Brent Pawlecki
Catherine Slemp
Kathleen Tierney
Kasisomayajula Vishwanath

Ex-Officio Board Members

Paula Bryant
Kristin DeBord
Michael Mair

Liaison Board Members

Michele Askenazi
Emily Burke
Benjamin Chan
Alexia Harrist

CDC Representatives

Oluwatomiloba Ademokun
Cresandra Anderson
Joanne Andreadis
Jana Austin
Rachel Avchen
Lily Balasuriya
Shimere Ballou
Briana Barnes
Lorenzo Barr
Coley Bean
Clinetta Bellamy
John Bermingham
Betty Billie
Eva Bodin
Mark Bracey
Chris Brown
Sherrie Bruce
Jay Butler
Jennifer Buzzell
Mona Byrkit
Lisa Caucci
Chad Chnich
Rachel Ciccarone
Thomas Cremer
Randolph Daley
Krutarth Dave
Lisa Davis
Christopher de la Motte Hurst
Yvette Diallo
Ayesha Don-Salu-Hewage
John Donohue
Stephanie Dopson
Marie Dubreus
Teresa Duff
Tambra Dunams
Olivia Edemba
Samuel Edwin
Ginny Emerson
Melissa Erkens
Federico Feldstein
Jie Feng
Lauren Finklea
Mark Frank
Meg Freedman
Katie Fullerton
Joanna Gaines
Shaw Gargis
Annette Gay
Marina Gibson
Johanna Gilstrap
Andrew Godoshian
Gerry Gomez
Brant Goode
Megan Gosch
LaRhonda Gray
Mark Green
James Guest
Rebecca Hall
Jeffery Hall
Tracy Harbour
Lia Haynes Smith
Mary Hill
Amber House
Emily Imboden
Larissa Joassaint
Jennifer Johnson
Gary Jones
Labrina Jones
Brandi Jordan
Robynne Jungerman
Jessica Kafor
David Kennedy
Emily Kirby
Barbara Kitchens
Christine Kosmos
Devaki Kumarhia
Alan Lam
Rod Lambert
Charles Lane
Modinat Lawal
Kimberly Leeks
Mary Leinhos
Les Lewis
Rosa Lira
Kimberly Lochner
Carolina Luna-Pinto
Brandy Maddox
Kawi Mailutha
Hugh Mainzer
Lauren Manning
Matt Mauldin
Amanda McWhorter
Shauna Mettee Zarecki
Cynthia Meyer

Leigh Ann Miller
Graylin Mitchell
Ven Ngulefac
Emily Nicholos
Kate Noelte
Adaora Okpa
Dometa Ouisley
Francisco Palomeque
Linde Parcels
Catherine Piper
Luis Poblano
Annika Pracher
Katie Pugh
Shoukat Qari
Ada Quinones-Hernandez
Shawnbria Ray
Tasha Raymond
Lovisa Romanoff
Laird Ruth
Kyle Ryff
Paramjit Sandhu
Magon Saunders
Susanna Schmink
Hannah Segaloff
Colin Shepard
Carlos Siordia
Gregory Smith
Ernest Smith
Robin Soler
Sandra Steiner
Bryan Taylor
Bianca Tenney
Denise Tevis
Tiandra Thornton
Linda Tierney
Carolyn Tunstall
Sara Vagi
Sarah Vaughn
Henry Walke
Quiana Washington
Keira Wickliffe
Berger Craig Wilkins
Ian Williams
Madeline Worsham

Public Attendees

Mica Astion
Barbara Bardenheier
Sara Bemisdarfer
Michelle Cantu
Chloe Chipman
Riad Elmor
Zarina Fershteyn
Rebecca Fink
Priscilla Golden
Janet Hamilton
Keith Hansen
Robert Hood-Cree
Sara Hoopchuk
Jester Jersey
Graydon Lord
Tangela Love
Oswaldo Lozoya
Pia MacDonald
Elandis Miller
Kerry Grace
Morrissey John
Mueller
Jim Nowicki
Rakhee Palekar
Lisa Peterson
Maggie Ritsick
Beth Slotman
Karen Spencer
Brenda Staudenmaier
Alexander Tin
Amy Walker
Tonya Walker
Brooke Zollinger

APPENDIX C: Acronyms

AFN	Access and Functional Needs
AFN CoP	Access and Functional Needs in Public Health Emergencies Community of Practice
APHA	American Public Health Association
ASPPH	Association of Schools and Programs of Public Health
ASPR	Office of the Assistant Secretary for Preparedness and Response
ASTHO	Association of State and Territorial Health Officials
ATSDR	Agency for Toxic Substances and Disease Registry
BSC	Board of Scientific Counselors
CDC	Centers for Disease Control and Prevention
CIO	Chief Information Officer
COVID	Coronavirus Disease
COVID-19	Coronavirus Disease 2019
CPR	Center for Preparedness and Response (CDC)
C-SAP	Social Determinants of Health Action Plan
CSELS	Center for Surveillance, Epidemiology and Laboratory Services
CSTE	Council of State and Territorial Epidemiologists
DEIA	Diversity, Equity, Inclusion, Accessibility
DEIAB	Diversity, Equity, Inclusion, Accessibility, and Belonging
DEIAB-AST	ORR/DEIAB Advisory and Support Team
DEO	Division of Emergency Operations
DFO	Designated Federal Official
DSLR	Division of State and Local Readiness
EOC	Emergency Operation Center
EOC JIC	Emergency Operations Center, Joint Information Center
EPA	Environmental Protection Agency
HEWG	Health Equity Workgroup
HHS	United States Department of Health and Human Services
IMS	Incident Management Systems
KAFA	Key annual focus areas
MMWR	Morbidity and Mortality Weekly Report
Mpox	Monkeypox
NACCHO	National Association of County and City Health Officials
NASDOH	National Alliance to Impact the Social Determinants of Health
NGO	Non-Government Organization
NOFO	Notice of Funding Opportunity
OPPE	Office of Policy, Planning, and Evaluation
ORR	Office of Readiness and Response
PHEP	Public Health Emergency Preparedness
PHEPR	Public Health Emergency Preparedness and Response
SDOH	Social Determinants of Health
SME	Subject Matter Expert
SGE	Special Government Employee
STLT	State, tribal, local, and territorial