Center for Preparedness and Response (CPR)
Board of Scientific Counselors (BSC) Meeting
Wednesday, June 1, 2022
Webinar

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CENTER FOR PREPAREDNESS AND RESPONSE (CPR)
BOARD OF SCIENTIFIC COUNSELORS (BSC) MEETING
WEDNESDAY, JUNE 1, 2022

WEBINAR

Roll Call, Welcome

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

The BSC meeting began with roll call by Dr. Kimberly Lochner to ensure quorum was established. Dr. Lochner monitored attendance and quorum was maintained throughout the meeting.

Dr. Lochner also 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.

Discussions were facilitated by Dr. Lochner.

BSC Members present:

Dr. David Fleming
Dr. Jennifer Horney
Dr. David Lakey
Dr. Marissa Levine
Dr. Brent Pawlecki
Dr. Catherine Slemp
Dr. Paula Bryant
Dr. Kristin DeBord
Ms. Michele Askenazi
Dr. Benjamin Chan
Dr. Christina Egan
Dr. Parham Jaberi

Dr. Lochner called the CPR BSC Webinar to order at 1:04 PM EST and welcomed those in attendance.

Welcome Remarks

Henry Walke, MD, MPH; Director, CPR, CDC

Dr. Walke gave an update on CDC's recent activities. Scientists continue to examine numerous clusters of monkeypox reported in several areas of the world including the United States. The National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) is supporting state investigations, as well as staffing and communication needs as they arise.

COVID remains one of CDC's top priorities. The agency monitors for the development of any new variants and will probably do so for many years to come, as they continue to study the virus. Currently, CDC is transitioning the functions of the COVID-19 Incident Management System (IMS) back to their respective centers. This will occur over the summer coordinated by the leadership at the agency level. Dr. Ian Williams, CPR Deputy Director, is now the Incident Manager of the CDC COVID-19 Response

CPR will manage the Increasing Community Access to Testing program, which provides equitable access to COVID testing for those who are uninsured or under-insured via pharmacies. This program is expected to continue until November 2022.

CPR remains focused on the strategic needs of preparedness and response activities. It continues to conduct emergency preparedness drills and exercises. In the last weeks, a four-day, nuclear, radiological, preparedness training and exercise program was conducted. The exercise is known as Cobalt Magnet 22 and is a national exercise intended to test the national response to a nuclear and radiological event. CDC stood up an incident management structure, which supported the United States Department of Energy (DOE), United States Environmental Protection Agency (EPA), and United States Department of Health and Human Services (HHS). The intent of the exercise was to ensure readiness to support jurisdictions and federal agencies by improving communication with federal partners and to assess CDC's ability to address health information needs and share them with multiple partners. It also tested laboratory capabilities during a nuclear radiological incident and improved all hazards and nuclear radiological incident plans.

CDC has also implemented the Diversity, Equity Inclusion and Accessibility Initiative (DEIA). This is a government-wide effort that ensures that agencies are appropriately prepared to address the health and emergency response needs of an increasingly diverse America. This program is part of Executive Order 14035, which mandates that all government agencies promote diversity, equity, inclusion, and accessibility in the federal workforce. For CPR, this will be a top-to-bottom process that will require the enhancement of its mechanisms of recruiting, hiring, recognizing, and compensating employees. The diverse experiences and backgrounds of employees can lead to different perspectives, ideas, products, services, solutions, and new collaborative opportunities in the workplace.

Lastly, CPR is working with HHS to fill the vacant positions on the board left after the recent retirement of Drs. Suzet McKinney and Dawn Wooley.

Board members were provided with updates from each of CPR's divisions prior to the webinar. Dr. Lochner open the floor for questions and comments regarding the updates as well as Dr. Walke's opening remarks. Below is a comment from the BSC.

- CDC should consider incorporating DEIA into its preparedness grants that go out to states and localities. Aligning the resources and expectations around those resources

with respect to DEIA are important to consider. This could be a topic that is revisited at a future meeting as DEIA efforts expand.

CPR Preparedness and Response Strategic Plan: Update

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

CPR is currently preparing its Strategic Plan for fiscal year 2023. It will build on the plan previously developed in 2021 and will reflect the vision of new center leadership, incorporate lessons learned from the COVID-19 and other recent responses, such as monkey pox, and focus on building capabilities to address the next public health emergency. Key principals in the plan include the following:

- Health equity
- Recognition of the need for continuous engagement with state, local, and community partners
- Timely, nimble, forward-looking, and relevant risk assessments

The Strategic Plan serves as a compass to direct CPR towards a clear and focused set of priority goals annually, while also demonstrating a measurable impact on national preparedness and response efforts. It also strengthens the CDC preparedness framework, promotes engagement with internal and external partners, aids in strategy development, and helps with authorization of legislation.

The 2021 Strategic Plan consisted of five strategies and eleven key CPR annual focus areas or KAFAs. KAFAs are actionable and tactical goals that further the strategies. They are measured to demonstrate CPR's impact on national preparedness and response. The 2021 Plan assisted in achieving goals, such as:

- Making community resilience and incident management priority research areas
- Drafting and revising procedures and public release policies for after-action reports
- Improving plans and the Corrective Action Program
- Developing the National Authority of Polio Containment Incident Response Plan, which was aligned with World Health Organization's (WHO) Global Action Plan III (GAP)

CPR's Strategic Plan was meant to be a living document. As the environment changes, priorities will evolve to address emerging needs. , In March 2022, an annual review of the Plan was conducted to ensure that strategies continue to align with CDC's overall direction and updated core capacities. The new Strategic Plan will have updated KAFAs as well as strategies and measures for fiscal year 2023 and beyond.

The mission, vision, values, CDC capabilities and CPR capabilities will remain evergreen; however, the revised strategies that support CPR capacities will span a three- to five-year time

horizon. Key focus areas will be evaluated and updated on an annual basis or accordingly to address emerging or evolving needs.

CPR's strategies now align with CDC's revised core capacities, which are diverse public health workforce; world-class data and analytics; state-of-the-art laboratories; rapid response to outbreaks at their source; and strong global capacity and domestic preparedness. A diverse public health workforce will be integrated into all of CPR's strategies as well the KAFAs. The new CPR strategies are as follows:

> *Strategy 1: Modernize and integrate data systems across multidisciplinary public health entities to support real-time information sharing, risk/situational awareness, effective decision making and to support emergency operations.*
>
> *Strategy 2: Enhance laboratories to detect and characterize threats and maintain the highest level of biosecurity and biosafety.*
>
> *Strategy 3: Support and advance CDC and* state, tribal, local, and territorial (*STLT) health departments' response capability and lead in ensuring effective federal response and interagency collaboration in public health responses.*
>
> *Strategy 4: Conduct continuous assessment of public health risks and prepare the Nation to address identified and emerging threats.*

The new strategic plan will be launched by September 2022. The plan will also be distributed to both internal and external stakeholders and partners on an ongoing basis. This evaluation cycle will occur annually.

Ms. Romanoff then reviewed the activities currently underway to achieve the CPR strategies. For Strategy 1, CPR is developing and implementing roadmaps to modernize, innovate, and advance the emergency operations, data preparedness, and response capabilities. It will also enhance the CPR emergency operation IT and data system. Priorities will include improving the CDC staff deployment system, readiness training, technical training, and capacity with federal, state, local, and non-governmental needs, as well as aligning the systems and training to address demands in the face of public health threats. CDC will continue to institutionalize the Graduated Response Framework (GRF) along with creating a common operating platform which will be accessible to all CDC programs, as well as federal and state partners at all levels of the GRF. CPR is also working closely with the new Center for Forecasting and Analytics to integrate forecasting functionalities into the response at the program, center, and agency-wide levels.

In response to Strategy 2, CPR continues to support and champion national, state, and local testing of chemical, biological and emerging threats through the Laboratory Response Network (LRN). The Center also oversees regulated select agent laboratories, while monitoring and improving biosafety practices of U.S. facilities retaining polio viruses. In 2023, CPR plans to engage with its partners over lessons learned from the COVID-19 pandemic that can be

leveraged to shape future response and partnership activities. It will also expand cross sector partnership to modernize and strengthen the national laboratory system and will examine ways in which the biosafety and biosecurity regulation and standards can be responsive to changing technology, while not unduly impacting research.

Under Strategy 3, there will be multi-directional engagement with state and local partners using lessons learned from the COVID-19 response, as well as exploration of innovative approaches to improve CDC's support to STLT jurisdictions through the PHEP and Crisis Cooperative Agreements. CPR will also look at supporting response operations through infrastructure workforce and operations in an effort to improve the effectiveness and efficiency of response activities. Moreover, it will conduct in-progress and after-action reviews of emergency operations. In 2023, the Center will expand and build health equity function into all of the CDC response efforts. CPR will explore ways to make this a core function of future responses. It will also enhance coordination across the Agency, as well as work with its federal partners and support field operations by creating health department liaisons at the regional level. Lastly, CPR will expand to a response-ready, multidisciplinary CDC cadre of responders that will always be ready to conduct responses.

For Strategy 4, CPR is evaluating and enhancing the STLT jurisdictional operational readiness to respond to public health threats and emergencies. It is also pondering a multiyear, scientific agenda that will inform investments in two to three preparedness and response research domain. In 2023, the Center will identify and focus on opportunities to support local public health through the PHEP programs. It will also leverage the CDC leadership, expertise, and planning for rapid deployment, stockpiling, distribution, evaluation, and monitoring of medical counter measures across multiple public health threats. Lastly, it will augment the public health, legal and regulatory framework work and improved risk mitigation, prevention, and response.

Comments from the BSC:

- It is essential to have diversity and inclusiveness to ensure that all voices are heard. What was not addressed in the presentation is communication. The Office of the Associate Director for Policy and Strategy has information on thinking in systems. Taking a systems view will be critical.
- The need for communication, both internally and externally, is one of the biggest lessons learned from the COVID response and is an ongoing challenge. CDC has communication experts scattered throughout the agency that could be utilized to help challenge its underlying beliefs, assumptions, and system-thinking in an effort to ensure the critical nature of all voices when communicating are a part of the strategic planning process.
- It is difficult to build core capabilities without sustainable funding. An element of the plan should acknowledge that given the resources available, here is what can be accomplished, and these are the remaining areas that are not a match with the

resources currently available across the CPR system. This can serve as a way of advocating for an increase in resources to address those unmet needs.

The Next Generation of Public Health Emergency Preparedness (PHEP)

Christine Kosmos, RN, BSN, MS; Director, Division of State and Local Readiness (DSLR)
Kate Noelte, MPH; Deputy Director, Division of State and Local Readiness

The COVID-19 pandemic challenged assumptions and tested the public health system, but it also reinforced the need for continuous improvement at the federal, state, local, tribal, and territorial levels. Catastrophic events, like COVID-19, afford the opportunity to discover weaknesses and gaps in the systems, and uncover the opportunities for improvement. This presentation covered some of the lessons learned and how they have been incorporated into the next generation of the PHEP.

The PHEP Cooperative Agreement Program supports preparedness and emergency response nationwide. Since 2002, CDC has provided more than $14 billion to 62 state, territorial and local public health departments to support preparedness and emergency responses nationwide. Impactful changes are made along the way as a result of lessons learned from public health responses. The response to the COVID-19 pandemic and other recent events have identified gaps in public health emergency preparedness, such as chronic underinvestment, limited resources, and trained personnel, and importantly an infrastructure not resourced to manage catastrophic and simultaneous public health emergencies. There is also a need to modernize the PHEP program to better position public health departments to respond to future threats and improve the community's health.

DSLR launched the Next Generation of PHEP initiative in 2020 to prepare the country for future public health emergencies. The initiative continues to be updated as new lessons are learned. It aims to achieve three goals:

1. Preserve the foundation: Support basic capacities and capabilities that accelerate and improve state, local, and territorial responses to emergencies.
2. Revolutionize for the future: Integrate knowledge learned and experience gained from recent events.
3. Provide agility in response: Formalize a change management process for modifying PHEP requirements and supporting local response efforts during an emergency.

In conjunction with stakeholders such as state, local, territorial, and internal CDC partners, as well as key affiliate agencies, strategic priorities were identified:

1. Modernize data collection, reporting, and use to strengthen preparedness and response and improve program accountability
2. Improve partnership coordination and collaboration at all levels and advance threat-specific planning and response

3. Expand and provide targeted support to local jurisdictions to increase their response readiness
4. Strengthen and apply DSLR's scientific expertise for translation into public health preparedness practice
5. Expand CDC preparedness field staff nationwide and support workforce development to improve response outcomes
6. Increase focus on populations at risk and health equity to ensure inclusion in preparedness planning and response
7. Enhance DSLR's support for CDC emergency response functions and improve jurisdictional response support

Each of the priorities have specific and tangible actions and activities. A few of the quick wins garnered thus far include the allocation of additional Cities Readiness Initiative (CRI) funding to support local capacity and capability, as well as the expansion of the Public Health Crisis Response Cooperative Agreement eligibility criteria, which enabled 24 more local jurisdictions to apply for funding directly. The initiative tackled state and local workforce gaps through expansion of the Career Epidemiology Field Officer Program (CEFO) by creating a national CEFO network. And lastly, it has awarded $2 billion in COVID-19 workforce development funding to 65 health departments nationwide.

This project has implications across all of DSLR's program. There may be revisions to the STLT preparedness and response capability standards, as a result of lessons learned from the COVID-19 response. Other outcomes include data-driven decisions and requirements as appropriate and enhanced coordination across stakeholder groups. There will be changes to the upcoming PHEP notice of funding opportunity (NOFO) and guidance requirements. And lastly, there will be changes to the workforce reflected in the next generation of PHEP.

Over the course of the COVID-19 response, DSLR has encountered some tough issues, which it has categorized as "wicked problems" and they are listed below.

- Misinformation: spread of inaccurate or conflict information resulting in:
    - Erosion of trust in public health officials
    - Erosion of trust in elected (and other) officials
        - How do we combat this and regain trust?
- Education and training related to public health emergency preparedness and response in undergraduate and graduate level education and continuing education including nursing, medicine, and other healthcare professions.
    - How can we best support coordinated education/training in this area?
- Sustainability of public health workforce – STLTs reporting exhaustion, challenges in retaining and hiring
    - How do we combat this? How can we best support our workforce?

DSLR requested the BSC discussion around the three questions listed below, and also invited the board to suggest other areas to consider.

- What successful strategies to actively or proactively address the spread of misinformation are you aware of?
- How can we best coordinate public health emergency preparedness and response education/training?
- How can we support a more sustainable public health workforce? What successes have you seen in this area?

Comments from the BSC:

- Determine if there are characteristics of health departments that can be used to gain insight into where misinformation is most likely to thrive. This is not suggesting political orientation, but are there other characteristics that could be leveraged or considered in terms of addressing misinformation concerns? For example, characteristics such as quality of pandemic preparedness plans, speed in implementing public health control measures, where the PHEP grant overseer and/or principal investigator resides within a state.
- One of the lessons learned during H1N1 is the need for uniformity across the federal government in messaging. Therefore, determine who is the credible spokesperson at the federal level in these events. This person needs to disseminate factual information and have access to the right experts to supplement their message.
- People do not necessarily want to hear a "talking head" provide the information. They really want to hear from their doctors, the faith community therefore, find ways to reach out at the local level to drive the messages effectively.
- There is a need for individuals who are social media savvy to assist in dissemination of factual information that aligns with CDC's message.
- Over time, the disconnect between public officials, PHEP leaders, and public health leaders has widened. In the past, more exercises were conducted with public officials and there was more specificity around training and communications. Determine if there are ways to work into the PHEP agreements, and other work, that public officials are well-informed about the resources and relationships already in place.
- Identity politics is real, and over the years, political polarization has increased. Figure out how that can be addressed. One possibility for solving this issue is the inclusion of more social scientists, political scientists, and workforce skills. The world is different and so it warrants having other arenas involved in the process.
- Build networks with community-based organizations because they are often more trusted by the community.
- Consider utilizing support systems, such as those provided by the Association of State and Territorial Health Officials' (ASTHO) and the National Association of County and City Health Officials' (NACCHO) alumni networks to facilitate conversations regarding work fatigue and other mental health issues.
- Disinformation, misinformation and mal-information is not a CPR or government issue but rather a whole of society concern; therefore some of the old principals of effective risk communication may no longer work. For example, source credibility has become

more complex and fraught than ever before. CDC's principals of effective risk communication were made to address traditional or normal circumstances. The world no longer resides within those circumstances. The discontinuity currently seen calls for a very larger and complex research agenda that examines how to do effective communication in the types of circumstances the world is facing now. There does not seem to be a holistic and valid handle on how to address this issue. Social and behavioral sciences are important but other fields such as crisis informatics, which focuses on the spread of miscommunication and misinformation via social media, are also crucial. There should be thought into convening groups of experts from CDC and other agencies, as well as the private and tech sector to determine ways to tackle these issues. The dynamics of misinformation and disinformation need to be understood as well as who is profiting from it. These issues can be linked to a sociocultural context, which includes mistrust of government and traditional authoritative information sources.

- Explore with grantees the potential of having a dedicated funding line mandated to training.
- Some of the funding for training should be used to tackle communication concerns. The existing workforce is aging and are not savvy at being a media messenger. These are skills that need to be ascertained in advance of the next crisis.
- Explore ways to increase coherence in messaging across states and local jurisdictions. The more the same message is heard from different sources the more likely people will adhere. As states and localities are thinking about media, social media, messenger, and message, they should also work to coordinate with one another so that their messages are in alignment with one another.
- Ensure the communication connects with people, as people are not just science and data. This underscores the need to employ experts like behavioral scientists in the planning process.
- On the positive side, wicked problems represent opportunities for public health. The science to gain insight requires not only examining the problem but also understanding the system in which the problems have emerged. It is important to have a better sense of system dynamics and structures in order to create a new model because the old model will not allow for progression.
- Masters-level public health students have expressed that they do not feel that there are opportunities available to them in the federal government. CDC is currently working on expanding the pipeline, but it is also important to ensure the salary amounts are attractive as well. There should also be a career educational ladders for those newly hired, in both permanent and temporary positions, so that they can envision an advancement track.
- The public health workforce like so many in the country have been traumatized; therefore, a trauma-informed perspective will be needed to address issues like employee shortages and burnout. There are also opportunities for leadership development at all levels and a rethinking of what leadership needs to be.

- The earlier crisis and emergencies risk communication principles said "to be first and to be right", but this has added to the environment of disinformation and misinformation because of issues such as communication departments being underfunded, and communication methods being antiquated. There should be more of a push nationally and at the state and local public health agencies to fund communications as well as adopt other methods of communication, such as social media. Local regulatory barriers can also cause a hinderance to communication efforts as well due to their rigorous review processes.
- Determine what the core missions are for health departments in emergencies. There are always new initiatives, but health departments have not sunset the old ones and may still be incorporating them in their processes.
- New threats are occurring, so evaluate if there needs to be new trainings added and a different focus.
- More emphasis should be put on doing after action reviews and funding the ability to conduct those at the state and local level. This also provides an opportunity for peer-to-peer networking and "venting," as well as uncover some of the mental health issues.

COVID-19 Response Update

Ian Williams, PhD, MS; Deputy Director, CPR; COVID-19 Incident Manager

Dr. Williams, who was recently appointed Deputy Director for the COVID-19 response, said CDC has crossed day 878 of the COVID-19 response and the IMS has been activated for 863 days. His presentation focused on how CDC is transitioning to the longer-term portion of the response.

As a review, in mid-January 2022 to early February 2022, the U.S. was seeing roughly 800,000 cases, 21,000 hospitalizations, and 2700 deaths daily. In the spring, the U.S. saw a decline, with the exception of northeastern region of the U.S. whose cases increased in March. However, overall, in the U.S., there was not a rapid rise in hospitalizations and numbers of deaths stayed flat. Currently, there are under 100,000 cases daily. Hospitalizations have stayed flat, with only a 1% decrease, and an average of 3500 people are admitted daily. Deaths are also flat and there are roughly 300 deaths per day.

One of the priorities of the response is to ensure rigorous monitoring for COVID-19 variants around the United States and across the world. CDC coordinates with international partners to gain knowledge and an understanding of what is happening in other parts of the world, as it relates to COVID-19, so that it can predict what may occur in the United States. Omicron is still the variant of concern in the United States. Roughly 99% of the virus circulating is omicron, and more precisely the BA.2.12.1 lineage that accounts for 62% of the cases in the U.S. It also accounts for more than 50% of the cases in almost all regions of the United States with only 40% in Pacific Northwest.

CDC is monitoring close the BA.4 and BA.5 variants in terms of their emergence. Currently, they account for less than 1% of the cases in the United States. If occurrence of these variants crosses the 1% threshold, they will be included in genomic surveillance. Vigorous genomic surveillance is instrumental in predicting what will happen in the United States.

The U.S. has come a long way in the last 29 months with regards to vaccination. More than 587 million doses of vaccine have been administered. More than 21 million people are fully vaccinated, and another 103 million have taken the first booster dose and 14.5 million the second booster dose. Approximately 22% of those over 50 years of age have received a second booster doses and individuals over 65 account for 28%. Vaccination and delivering additional booster doses continue to be a priority. Later in June 2022, the Advisory Committee on Immunization Practices will further consider providing vaccination to children under five years of age. If that should move forward, CDC will also work on that effort as well in the coming months.

CDC is now focusing on how to move to the "next normal" and determining ways to maintain strong communication across the various parts of the response while also ensuring coordination and collaboration with STLT partners. The incident management structure, currently, has eight taskforces with 30 to 40 teams within the taskforces. There is a layer of deputy managers within the Office of the Incident Manager and a series of other offices, such as the Chief Science Officer, Chief Medical Officer, Joint Information Center, Health Equity Office, Policy, and Partnerships, who are all a part of the response efforts. The goal is to render most of the functions long-term and make them sustainable parts of programs within CDC. Hopefully, the bulk of this effort will be completed in the coming weeks.

The overarching goal is to have a leaner version of the IMS structure that focuses on crosscutting activities. The structure will retain the STLT Taskforce to ensure that close contact is kept with state and local partners. Several functions will be maintained such as the Data Analytics and Visualization Taskforce, Joint Information Center, and the chief science officer position. There will also be a continued focus on areas like health equity and policy. This will take place around the end of June 2022.

With making the pivot towards long-term sustainability, CDC will need to reexamine some of its guidance materials to ensure that they are evergreen. For the moment, three areas are the focus. One is how to protect yourself and others, which will move away from the mantra of 6 feet and 15 minutes being the measures used to determine sensitivity to exposure. Another area will examine quarantine and isolation recommendations. The third area will assess guidance on what to do if one becomes sick, which will focus on screening and testing. Discussions are occurring on these areas with CDC partners and will continue over the next few weeks. The hope is having more sustainable guidance in the future.

Recommendations/Comments from the BSC:

- There has not been much mention from the federal government nor CDC on anticipatory messaging. This is something the states and locals are trying to do on a regular basis. There is the role of informing the public for the sake of preparedness but also for maintaining credibility and anticipatory messaging is one way to accomplish this task. For example, something can be said about how the federal and state governments are transitioning in the COVID-19 response and expectations of what may occur in the future, like new variants, surges in COVID and the ways the government is preparing for those surges.

Strategic Capacity Building and Innovation Program Review Working Group (SRWG): Update

David Fleming, MD; SRWG Co-Chair and BSC, CPR
David Lakey, MD; SRWG Co-Chair and BSC, CPR

The SRWG was created in December 2021. It is co-chaired by Drs. David Fleming and David Lakey and comprised of 12 members. Workgroup members have expertise in the following areas:

- Emergency Response
- Data Preparedness
- Laboratory Science
- Incident Management
- Non-Pharmaceutical Medical Countermeasures
- Epidemiology
- Public Health

CDC asked the BSC to suggest ways to enhance and improve its Strategic Capacity Building and Innovation Program (SCIP). The recommendation was made to create the SRWG to perform this task. The working group's charge is to support SCIP's responsibility in the oversight of CPR's preparedness portfolio and role in improving CDC's ability to respond to public health emergencies, CPR sought expert input from the BSC,CPR through the mechanism of a working group, SRWG, to conduct an objective, forward-looking, external program review.

Today, the SRWG is asking the BSC for its comments and suggestions regarding drafted recommendations, which will later be voted on in the Fall 2022 CPR BSC meeting. The first recommendation is to separate the long-term and short-term program elements of SCIP to disentangle, clarify, and simplify the assessment of funding needs. Currently, SCIP supports programs and activities using two distinct funding mechanisms differing in duration. One duration provides long-term preparedness support for non-CPR centers, institutes, and offices (CIOs) with no established end dates for funding support. The second enables preparedness innovation through short-term, time-limited activities to assess and evaluate new approaches

or provide additional exploration in ongoing programs. The needs and purposes of the two funding streams are quite different should be considered separately.

The second draft recommendation is to establish a process to determine, define, monitor, and update CDC's long-term preparedness and response programs for continuity and longevity. Under CPR leadership, CDC should establish a process to determine, define, monitor, and update an ongoing assessment of current, core, long-term CDC-wide preparedness capability needs. The process should be informed by health equity needs and lessons learned from COVID-19 pandemic and include a clear definition of the desired level of core preparedness and prioritized ranking of identified preparedness needs and gaps. CDC should consider both increased flexibility of CPR funding and other existing and additional funding sources to best meet these prioritized needs. Programs would continue to align to prioritized preparedness needs with CPR's approval over proposed budgets.

The third recommendation is to establish a process for creating a forward-looking approach to make short-term investments in enhancing capabilities for current and future preparedness needs. Under CPR leadership, CDC should create a process that includes external partners to identify and prioritize the most important short-term investments needed to enhance and improve preparedness capabilities and address emerging opportunities and challenges. The process should be informed by health equity needs and lessons learned from COVID-19 pandemic. Creating opportunities to leverage external partners in development and enhancement of critical preparedness functions will better position the agency in subsequent adaptation.

The fourth draft recommendation says to continue portfolio characterization to assist and inform the execution of the processes in draft recommendations 2 and 3.

The BSC members did not have any further recommendations to add.

BSC Discussion of Future Meeting Topics

This session was afforded to allow board members to suggest topics they would like to hear more about in the future. Below is a list of suggested subjects:

- Updates on DEIA aspects in CPR
- Ways to overcome communication disinformation, misinformation, and mal-information
- Anticipatory messaging
- Center for Forecasting and Analytics
- Update on the IMS transition process
- Data and surveillance modernization and how it complements the broader CDC efforts
- Sources for finding innovative ideas and processes that are most effective in shifting how CDC thinks and ways to stimulate more innovative thinking
- Outcome metrics for preparedness and response from a one-health perspective
- Preparedness and response as it relates to climate issues

- How best to incorporate and support mental health services in the preparedness and response activities
- BSC's perspective on the All-Hazards Approach: What level of preparedness is needed for the various types of public health events in light of finite staff?
- How to support emergency operation centers and response in general including leadership of responses in state and local health departments: How can CDC better assist and what capabilities are missing
- How to ensure the health and wellness of the workforce
- Define what base level competency is needed for all responses
- Training, education, or enablement of individuals and families in their own personal protection
- Analysis of the accreditation program for local and state health departments to ensure capabilities that are important to preparedness are baked into the assessment
- What's the intersection between CPR and gun violence in communities?
- What can individuals do to protect their loved ones during public health threats in general?

Public Comment Period

Dr. Sandra Steiner is the Scientific Clearance Official for CPR. Regarding the education and training challenge mentioned in the DSLR presentation, Dr. Steiner proposed allocation of funds or PHEP funding for a fellowship program. The program could onboard 10 to 15 fellows per year, who are hosted at CDC or state health departments, to become trainers, which will result in a cadre of trainers. Another recommendation was to increase the CEFO program even further to two or more fellows per state in an effort to put more boots on the ground and work at the community level. This could assist in building trust with the community and help combat misinformation.

Meeting Adjourn

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

The next BSC meeting will be in the fall of 2022. CPR is still determining if the meeting will be virtual, in person, or a hybrid of both.

Before closing Dr. Walke expressed his appreciation for the BSC and for its time, rich discussions, and recommendations. With no further comments, the meeting was adjourned 4:09 PM EST.

CERTIFICATION

I hereby certify that to the best of my knowledge, the foregoing minutes of June 1, 2022, meeting of the Center for Preparedness and Response (CPR) BSC are accurate and complete.

Date: 8/3/2022

_____/S/_____
Kimberley Lochner, ScD
Deputy Associate Director for Science, CPR and Designated Federal Official, CPR BSC

APPENDIX A: CPR BSC Membership Roster

DESIGNATED FEDERAL OFFICIAL

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CHAIR

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APPENDIX B: Acronyms

APHL	Association of Public Health Laboratories
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
BSC	Board of Scientific Counselors
CDC	Centers for Disease Control and Prevention
CEFO	Career Epidemiology Field Officer
CIO	Centers, institutes, and offices
COVID	Coronavirus Disease
COVID-19	Coronavirus Disease 2019
CPR	Center for Preparedness and Response (CDC)
CRI	Cities Readiness Initiative
CSTE	Council of State and Territorial Epidemiologist
DEIA	Diversity, Equity, Inclusion, Accessibility
DOE	United States Department of Energy
DSLR	Division of State and Local Readiness
EPA	United States Environmental Protection Agency
FDA	Food and Drug Administration
GAPIII	Global Action Plan III (GAPIII)
GRF	Graduated Response Framework
H1N1	Influenza Virus
HHS	United States Department of Health and Human Services
ICAP	Increasing Community Access to Testing Program
IMS	Incident Management Systems
KAFA	Key annual focus areas
LRN	Laboratory Response Network
MMWR	Morbidity and Mortality Weekly Report
NACCHO	National Association of County and City Health Officials
NCEZID	National Center for Emerging and Zoonotic Infectious Diseases
NEMA	National Emergency Management Association
NIH	National Institutes of Health
NOFO	Notice of funding opportunity
PHEP	Public Health Emergency Preparedness
SCIP	Strategic Capacity Building and Innovation Program
SGE	Special Government Employee
SRWG	SCIP Review Working Group
STLT	State, tribal, local, or territorial
TFAH	Trust for America's Health
WHO	World Health Organization