July 23, 2024, House Energy and Commerce Health Subcommittee Questions for the Record Responses

Dr. Daniel Jernigan, National Center for Emerging and Zoonotic Infectious Diseases

The Honorable Cathy McMorris Rodgers

1. **What is your Center's annual budget?**
   The National Center for Emerging and Zoonotic Infectious Diseases' (NCEZID) enacted program level in FY 2024 is $760.3 million.

   a. **How much of this funding supports grants, cooperative agreements, or other external activities and partners, versus supporting internal CDC work and activities?**

      Broadly, approximately 80% of CDC's domestically focused funding is spent in extramural activities – these resources are used in our communities to help protect health at the local level. Variability among centers depends on intramural costs, particularly support for laboratories and other core capabilities, which are resource intensive. For NCEZID, which runs multiple cutting-edge laboratory facilities including the High-Containment Lab, 55% – a majority – of the funding is used to support extramural activities. CDC's internal costs support additional valuable programmatic components including public health subject matter expertise, guidance development, technical assistance, and important coordination, implementation, and evaluation of evidence-based practices as essential components to the success of these programs.

      CDC continues to prioritize core public health capabilities of data, surveillance, lab, workforce, and domestic and global preparedness. These foundational components are necessary to protect health and improve lives; all of CDC's work and our support for jurisdictional partners – whether on influenza, cancer, injury prevention, or antimicrobial resistance – is strengthened when these core capabilities are strengthened.

2. **How many staff does your Center employ in total?**
   NCEZID has a total of 3,844 people in its workforce. This number of FTEs is larger than what is in the FY25 Congressional Justification, because the Division of Parasitic Disease and Malaria recently moved from CDC's Global Health Center to CDC's National Center for Emerging and Zoonotic Infectious Diseases.

   a. **How many of your staff could be immediately deployed in a crisis?**

      As a lesson learned from COVID, CDC created the CDCReady Responder program within CDC's Office of Readiness and Response, to enable our multidisciplinary workforce to train before a public health event and be ready to respond when and where needed. CDC staff with diverse expertise throughout the agency are enrolled in the program as responders with specific skill sets (e.g. epidemiology, data, communications) so they are ready to contribute to specific needs during a large response such as COVID 19, or to a new health threat that comes our way. So far, 2,750 staff from across the agency have

enrolled in the CDCReady Responder program. The ability to surge staff and to respond faster than ever before represents a significant improvement over how CDC operated prior to COVID and is a key example of how CDC is breaking down silos, effectively leveraging our public health workforce, and prioritizing readiness and response. In addition, as part of the President's Budget, CDC requested authority to waive some existing bureaucratic barriers to create additional flexibility to quickly assign or deploy people from across the agency to quickly respond to emerging public health challenges.

Responding to infectious disease outbreaks is central to NCEZID's mission and priorities for the center. All NCEZID staff are supporting infectious disease outbreak and control efforts as part of their normal, day-to-day duties. NCEZID has processes in place to ensure staff are ready and available to support responses, as needed. NCEZID staff have a responsibility and are expected to respond to public health outbreaks both in the field and at headquarters during an agency level emergency response to commensurate with their training and experience.

The Honorable Mariannette Miller-Meeks, M.D.

1. **The CDC does not have a mission or purpose defined in statute. If Congress were to go down the path of authorizing the CDC overall, we would also want to authorize each of your Centers and Offices. What would your mission be? Succinctly in 2-3 sentences, please.**

   CDC works 24/7 to protect America from health, safety and security threats, both foreign and in the U.S. Whether diseases start at home or abroad, are chronic or acute, curable or preventable, human error or deliberate attack, CDC fights disease, improves health and saves lives, and supports communities and citizens to do the same. The mission of NCEZID is to save lives and improve health through the prevention, early detection, and control of emerging and zoonotic infectious disease threats.

The Honorable Lisa Blunt Rochester

1. **With the support of CDC, my home state of Delaware recently launched a statewide, real- time hospital capacity monitoring system that could potentially save lives when every second counts. This system ensures that patients are transported efficiently and appropriately to hospitals that can best care for them in urgent situations. How has real- time data, such as this, worked to expand access to care and help patients, especially in rural and underserved communities?**

   Numerous studies, including those conducted by CDC and CMS, have shown that healthcare facility staffing levels are closely correlated with the quality of care that patients and nursing home residents receive, including improved health outcomes. This is even more important during emergencies and other healthcare surges that lead to increased bed use and limited capacity for new patients. Having sufficient staffing has also been shown to provide staff in healthcare facilities the support the need to safely care for patients and residents, help prevent staff burnout, and reduce staff turnover, which can lead to improved safety and quality for patients, residents, and staff. More

information is better when making potentially life-saving decisions in urgent situations, including healthcare staffing levels and bed capacity.

In particular, rural healthcare facilities face many workforce and resource challenges and issues related to increased use. For example, rural healthcare facilities often have difficulty hiring and retaining qualified staff, especially staff with expertise in specialty medical fields. Patient surges and other stressors (i.e., limited staffing and bed capacity) can negatively impact patient safety in rural healthcare facilities. Therefore, knowing real time bed capacity can be helpful for facilities and jurisdictions.

The National Healthcare Safety Network's (NHSN) real time bed capacity data allow health departments, other state agencies, and healthcare facilities and health systems to understand hospital capabilities. NHSN provides real-time data to help hospitals, including rural healthcare facilities, and the CDC better monitor, identify, and understand healthcare trends as well as help those facilities plan for these events. This can help increase patient safety and lower staff burnout. More accurate and timely tracking of hospitalizations allows for improved collaboration among decision-makers to optimize and mitigate resource constraints. During surges or other critical emergencies, every second and every decision matters. CDC continues to work with Delaware and other pilot participants on this program.

As the nation's leading healthcare-associated infection (HAI) tracking system, NHSN has long played a critical role in support of CDC's mission by providing data to identify problem areas and measure progress toward HAI prevention. Just as important as the real-time aspect of the data is the actual data collection itself. NHSN is used by over 38,000 healthcare facilities (nearly all hospitals, nursing homes, dialysis facilities, and ambulatory surgery centers). More than 160,000 users from healthcare facilities, health departments, and federal agencies rely on NHSN to inform rapid, tailored infection prevention, monitor healthcare system capacity, track vaccination uptake in healthcare settings, and stop the spread of emerging and enduring threats, such as COVID-19, HAIs, and antimicrobial-resistant infections. NHSN captures valuable information on hospitals that can inform future responses and system improvements, including adherence to CDC's antimicrobial stewardship and sepsis core elements, laboratory capabilities and practices, and infection control practices. NHSN data are critical to understanding the success of the prevention efforts and practices in healthcare, which subsequently determines the quality and safety of care being delivered in U.S. healthcare facilities.

The Honorable Dan Crenshaw

1. **Wastewater surveillance has proven to be an effective, noninvasive tool to detect infectious diseases in communities while safeguarding individual privacy. What is CDC doing to apply the lessons learned during the pandemic to strengthen our ability to use wastewater surveillance as an early warning system for ongoing threats, like avian influenza, RSV or the next pandemic?**

   CDC's wastewater surveillance program offers an efficient, nimble tool that supports core public health actions across the nation for addressing a wide array of infectious diseases. Wastewater

surveillance began with testing for SARS-CoV-2 and expanded to include mpox during the 2022 outbreak response. With the recent international 2024 mpox outbreak, CDC continues to use wastewater surveillance as one source of data to monitor mpox transmission in the United States.

Building on lessons learned from the pandemic, in 2023, CDC expanded wastewater surveillance to include RSV, and influenza A and B, and is using wastewater data to support the ongoing H5N1 highly pathogenic avian influenza response. Additionally, CDC has initiated efforts to pilot wastewater monitoring for other infectious disease threats like West Nile Virus and Dengue, to further assess novel approaches to surveillance that support early action to prevent outbreaks and death.

CDC has continued to make wastewater data more accessible and actionable. To provide greater visibility for respiratory virus levels in wastewater and enhance readiness efforts for respiratory virus season, CDC released new data dashboards for avian influenza A(H5) wastewater detections, and new wastewater viral activity level data for Respiratory Syncytial Virus (RSV) and Influenza A.

Through the Epidemiology and Laboratory Capacity for the Prevention and Control of Emerging Infectious Diseases (ELC) cooperative agreement, CDC supports six National Wastewater Surveillance System (NWSS)'s Centers of Excellence (CoEs) including a Center in Houston, Texas. These CoE's serve as regional leaders in wastewater surveillance implementation and coordination and lead efforts to advance wastewater monitoring, pilot new methods, and conduct field studies that inform and strengthen our national wastewater surveillance program.

CDC's wastewater surveillance program is currently supported solely through COVID supplemental funding. These activities have been pivotal in ensuring that our states and communities have the best possible data to inform public health action. For CDC to continue this critical capability, it will take additional resources from Congress. The Fiscal Year 2025 President's Budget requests $20 million for wastewater surveillance, which will allow the agency to retain a smaller program that could surge to support responses to future outbreaks. Without this additional investment, CDC will no longer be able to support this critical situational awareness tool once COVID resources are expended.