Dear Ranking Member Cassidy:

The Association of State and Territorial Health Officials (ASTHO) submits the following comments in response to your Sept. 26, 2023, request for information (RFI) to the Senate Health, Education, Labor, and Pensions (HELP) Committee concerning the modernization of the Centers for Disease Control and Prevention (CDC), particularly given our collective COVID response. ASTHO is a nonpartisan professional association representing the nation’s state, territorial, and freely associated state health officials and their leadership teams. ASTHO members—the chief health officials of these jurisdictions—are dedicated to formulating and influencing sound public health policy and to ensuring excellence in public health practice.

CDC is one of the most important partners of state and territorial health departments, providing both scientific expertise as well as program support for numerous categorial and cross-cutting public health programs. CDC has always depended upon close collaboration with state and territorial health leaders to protect the state of the nation’s current and future health. As part of our nation’s federalist system, states and territories are largely responsible for preventing, detecting, and controlling infectious diseases and other health responses in their jurisdictions through the work of public health agencies. Close collaboration, transparency, and consistency in public health policy between federal and state processes are essential but understandably challenging, particularly given that states and territories have autonomy in implementing certain non-federally mandated health policies.

It is our view that failures or inadequacies in the COVID response that are often attributed to CDC were most often attributable to multi-agency failures and generally the result of emerging, conflicting, and changing understandings of the SARS-CoV-2 virus, unclear or transient leadership, opaque or inconsistent collaboration between federal and state policy development processes, and differing implementation of public health policy in the states. In many ways, this is a natural and expected outcome of the U.S. federalist system in which federal agencies provide resources and guidance to states and territories. Numerous after-action reports from prior pandemics including H1N1, SARS, Ebola, Zika, and others have consistently indicated that communication and shared decision-making between state and federal agency leaders, as well as active collaboration with state health officials, is essential but elusive during large-scale national and international responses.¹

¹ US Government Accountability Office, Influenza Pandemic, Lessons from the H1N1 Pandemic Should Be Incorporated into Future Planning (2021)
ASTHO supports a whole-of-government evaluation of COVID-19 inclusive of all agencies and departments. It is our position that no single agency, department, or individual should be blamed for shortcomings or perceived failings in the COVID response. Such efforts detract from what should be the ultimate and far more productive oversight role we believe is required of Congress. That role should be to support an objective, forward-looking, comprehensive, and nonpartisan review of the federal and state COVID response and the public health system. This review should include all federal agencies involved in the response but and specifically the Department of Health and Human Services’ (HHS) operating and staff divisions, as well as the Federal Emergency Management Agency, the Department of Defense, and the White House.

To date there has been no comprehensive, nonpartisan review of the federal and state COVID response at the national level. We urge that one should be undertaken immediately to discuss and share lessons learned from COVID, including any missteps or errors, and then learn from them, while we work collaboratively to modernize and appropriately resource our local, state, and federal public health agencies to better protect the health of all Americans.

States, communities, and international partners rely on CDC for accurate information, direction, and resources to ensure they can prepare, respond, and recover from a crisis or disease outbreak. Years of underfunding of many CDC programs and modernization efforts have left our nation's public health in a vulnerable position. Adequate appropriations are needed to ensure our nation's response readiness, recovery, and future preparedness. Below are ASTHO’s comments on several of the specific questions included in the request for information that fall within our organizational purview.

**Making Data Work for Everyone**

1. **How can Congress improve the flow of public health data to CDC and back to states within the current system?**

   The landscape of public health data exchange is complex, with state laws often governing how and what kind of data can be shared between state, tribal, local, and territorial public health agencies, and federal agencies. Within the current ecosystem of data sharing between these entities, public health agencies need to modernize their data systems to enable more timely and complete data sharing for public health action. ASTHO is grateful to Congress for funding the [Data Modernization Initiative (DMI)](https://www.astho.org/dmi/), the multi-year, multi-billion dollar effort to modernize core data system capabilities across public health agencies. However, data modernization within health agencies is not a one-time effort; it needs to be sustained for decades as jurisdictions incorporate new data sources and tools into their workflow. As such, Congress should continue to provide sustained, flexible, disease-agnostic funding to support federal agencies and state, tribal, local, and territorial public health agencies in modernizing their data systems and building a workforce to support these systems.
To be clear, public health policy and data governance play a key role in data sharing. For example, the historical practice of collecting data use agreements from each jurisdiction has been cumbersome, yet it is critical to ensure compliance with state law. To mitigate this issue, CDC is currently collaborating with states to develop state-specific data use agreements that will streamline procedures used for data that states already share with CDC and will expedite the process for future CDC data needs. This critical work of improving the flow of data between states and CDC is dependent upon policy-making efforts of both Congress as well as state legislatures and general assemblies.

Congress can improve the flow of public health data by taking steps to expand and clarify eligibility requirements for common CDC public health datasets, particularly for residents of the U.S. territories and freely associated states (T/FAS). Territorial residents are U.S. citizens, and freely associated state citizens serve at high rates in the U.S. military and maintain a special and strategic relationship with the United States. The lack of island representation in key federal public health datasets obscures the pronounced health disparities and the need for programs and services throughout this region. For example, during COVID-19, only one of the eight U.S. Island areas was represented within the CDC/ATSDR Social Vulnerability Index, despite all T/FAS experiencing significant health disparities relative to the mainland. Without inclusion in this dataset, islands struggled to avail themselves of key resources designed for underserved communities. In a recent review of 25 common CDC public health datasets, only two included data from all eight island jurisdictions. Congress should take steps to expand and clarify T/FAS eligibility to participate in CDC and other federal agency public health datasets. As defined in a recent JAMA Health Forum publication, the health needs of these populations are not too small to count.

2. **How does electronic health record (EHR) data currently factor into CDC’s data modernization efforts? Are there instances in which partnerships with integrated healthcare organizations or EHR vendors could provide data directly to CDC to conduct sentinel surveillance and generate insights, rather than relying solely upon data collected through health departments?**

Sharing timely and complete data between clinical settings and public health agencies is critical for response to public health challenges and emerging threats. The Office of the National Coordinator for Health IT (ONC)’s Health IT Certification Program aims to modernize EHRs by requiring EHR vendors to abide by standards, specifications, and certification criteria adopted by the HHS Secretary. This must occur by promoting interoperability to ensure real-time, bidirectional data exchange between healthcare and laboratory systems. To accomplish this, public health agencies need to be sufficiently resourced to adopt data exchange and messaging standards, such as USCDI/USCDI+, HL7 V2, HL7 CDA, and HL7 FHIR standards. This will allow them to better exchange case, immunization, syndromic, and laboratory data. A recent study evaluating hospital reporting of EHR data to public health agencies found that having a certified EHR was associated with
increased public health reporting. As such, healthcare organizations’ uptake of certified EHR is a critical step towards ensuring the sharing of data with public health agencies.

Additionally, ONC’s Trusted Exchange Framework and Common Agreement (TEFCA) is a developing effort to establish a universal floor for interoperability across the country that will begin exchanging data within the next few years. TEFCA may play a significant role in the sharing of data between healthcare organizations and public health agencies. It is important to note that public health agencies must be resourced to participate in TEFCA, which includes having a sufficient workforce and foundational capabilities to implement and sustain data-sharing processes.

3. CDC’s Center for Forecasting and Outbreak Analytics intends to provide information to support timely decision-making and action. How can this approach be applied across CDC, and how can CDC’s data better inform the actions of other federal, state, and local decision-makers?

CDC’s Center for Forecasting and Outbreak Analytics (CFA) has consistently engaged with and sought input from state and territorial health leaders, public health associations, academic research institutions, private sector partners, and other subject matter experts. To better understand how emerging public health threats may impact our nation, regions, and states, CFA is utilizing available methods and technologies, as well as contributing to the field of disease forecasting and modeling. CFA works with other CDC programs that have historically conducted more routine forecasting and modeling (e.g., influenza) to learn the best strategies for working with and supporting public health responses at the national, state, territorial, tribal, and local levels.

CFA has sought considerable input from state, territorial, tribal, and local public health leaders (through needs assessments, focus groups, listening sessions, and regional meetings) to inform their development and work on health department capacity, disease forecasting and modeling, using data for decision-making, communications stemming from disease forecasting, partnering with researchers and the private sector, training, and technical assistance needs. CDC leadership and staff frequently engage with ASTHO staff, our members, and partners, including participating regularly in calls with all state and territorial health officials (S/THOs), exchanges with ASTHO’s emerging infectious disease and data modernization teams, written communications with ASTHO members and staff, participation in ASTHO conferences and meetings, and as guests on ASTHO’s Public Health Review Morning Edition newscasts. Further, CFA has committed to identifying methods to engage with state, territorial, tribal, and local public health leaders in advance of releasing CDC documents, scenarios, outlooks, and forecasts to receive feedback from the field and to allow for adequate preparation of messaging to health departments and their constituencies.

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2 The Office of the National Coordinator for Health IT, Progress and Ongoing Challenges to Electronic Public Health Reporting Among Non-Federal Acute Care Hospitals, 2023.
4. **How can the data and analyses that CDC generates be more accessible to and useful for the American people?**

CDC’s support of public health agencies’ data modernization efforts will result in the novel generation of data and analyses that are accessible and useful for the American public. An example is CDC’s North Star Architecture (NSA), which aims to reduce the burden and complexity of public health data collection, processing, linking, and sharing among public health agencies. Data that are shared in a more complete, timely manner—within and across jurisdictions, as well as with CDC—enable CDC to generate analyses that are useful to the American people in terms of disease prevention and mitigation of outbreaks and other health events.

Many Americans relied on public-facing dashboards during the pandemic to access COVID-19 data and analyses. Dashboards are a useful and easily understood mechanism to disseminate data and analyses, however, the limitations and nuances of forecasts, models, and scenarios can sometimes be challenging to communicate to a lay audience. Being clear about the findings and limitations of data and forecasts and the range of potential outcomes is vital for trusted communications. The public may not be as interested in the methodology with which forecasting and modeling are conducted, yet it is important to understand the limitations of the models and forecasts so that public health recommendations and mitigation measures are communicated in the context of the findings. Determining the best way to present forecasting information to the public, health department leaders and staff, and other partners is an important component of CFA’s mission. CDC should consider providing training and capacity-building assistance on crisis/risk communication, interpreting technical data to the public, and supporting health department programs to increase their capacity to conduct jurisdiction-specific forecasting and modeling.

5. **How can Congress and CDC better leverage both disease-specific and disease-agnostic data collection strategies? What are the benefits of both approaches, when should they be used, and how can we minimize potential silos between datasets?**

Public health agencies must strengthen their ability to exchange both disease-specific and disease-agnostic public health data via modernized data systems with improved data collection strategies. In support of NSA principles, CDC is working with health agencies to migrate legacy systems to an enterprise, cloud-based architecture that allows rapid scaling of public health data systems in response to both disease-specific and disease-agnostic data collection processes. The NSA will enable health agencies to reduce silos between data systems and ensure a scalable, response-ready system across health agencies and within CDC.

Additionally, electronic case reporting (eCR), the automated, real-time exchange of disease-agnostic case report data between EHRs and public health agencies, enables bidirectional data flow between the two entities. eCR facilitates exchanging timely and complete data as
compared to manual reporting, thereby reducing the burden of data sharing on the part of healthcare organizations and public health agencies. As of January 2020, fewer than 200 healthcare facilities were using eCR for five pilot conditions. The need for rapid data sharing during the COVID-19 pandemic facilitated the scale-up of eCR uptake to exchange COVID-19 data: CDC worked with national partners to onboard thousands of healthcare organizations across the country and by September 2023, more than 29,100 facilities in all 50 states were actively sending data to public health agencies using eCR. CDC continues to scale up eCR reporting for reportable conditions beyond COVID-19. Novel methods, such as eCR, enable more timely, complete sharing of public health data; public health agencies will continue to need resources—beyond one-time DMI funding—for the uptake and maintenance of these processes and technologies.

6. What types of data collection support CDC’s core mission, and what types of data collection or data elements are less necessary?

The mission of public health agencies across the nation is to address all health concerns facing the U.S. population. To accomplish this mission, public health agencies must track and analyze all threats to the public’s health, including infectious diseases, chronic diseases, and conditions that are also influenced by behavioral factors, injuries, and risk factor data associated with these outcomes (e.g., demographic, environmental, behavioral, and occupational health data). It is critical that public health agencies have modernized data systems that can receive, manage, and analyze all of these data sources. In modernizing data systems, public health agencies and CDC should develop consistent and clear methods for the de-identification of data that is shared with CDC.

7. How can CDC, and the Department of Health and Human Services more broadly, further improve data governance and data sharing to minimize burden on reporters and improve the utility of collected data?

First, CDC is currently developing state-specific data use agreements to streamline the process of sharing data with them now and in the future. Second, CDC is working with public health agencies to implement the NSA and eCR, which are two technological and process-oriented solutions to help modernize public health data systems and minimize burden on reporters. Third, improving interoperability to reduce reporting barriers relies on the adoption of data exchange and messaging standards, such as USCDI/USCDI+, HL7 V2, HL7 CDA, and HL7 FHIR. CDC is collaborating with public health agencies to increase the adoption of these standards, but flexible funding is needed.

8. Do you see any opportunities to improve CDC’s public health data modernization initiative and related efforts to implement public health data standards?

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While existing investments, such as Congress’s funding of CDC’s DMI, have enabled early work in data modernization, additional investments are critical for DMI to succeed in building a robust and response-ready public health data infrastructure. Congress should continue to provide sustained, flexible, disease-agnostic funding to support federal agencies (e.g., CDC, HRSA, CMS, SAMHSA, and IHS), and state, tribal, local, and territorial health agencies in building modern data systems and developing a world-class workforce to support these systems. This sustained funding will:

- increase informatics and advanced analytics capacity within health departments by investing in workforce and foundational capabilities.
- modernize core public health data systems to support timely, complete data sharing for public health action.
- strengthen and modernize public health governance structures and policies that facilitate bi-directional exchange and use of data between health agencies, CDC, healthcare systems, and other data partners.
- support the adoption of tools and systems that facilitate public access to data resources to help communities better understand their health.

Improving Upon What Works Well

1. **A key to CDC’s success to date has been its relationships with state and local health departments around the country. How can these relationships be better supported?**

   State and territorial health officials have a very strong relationship with CDC. These relationships can be supported through enhanced pre-decisional consultation between states and CDC in shared efforts to protect the health and safety of the American public and to foster an atmosphere of transparency, trust, and confidence between public health officials and their communities.

2. **How can CDC’s epidemiological, laboratory, and other core public health and scientific work be encouraged further?**

   CDC’s [Epidemiology and Laboratory Capacity (ELC) program](#) provides critical foundational support for public health agencies to fund epidemiology, observation, laboratory, and data science staff positions that provide the backbone for public health programs. The program is unique in its ability to address four public health programs that include cross-cutting projects focusing on leadership, integration, flexibility, and sustainability, as well as other disease-specific projects. It supports efforts across 50 states, six local health departments, and eight territories and it is unique as it is the only source of support for core epidemiology and labs specifically intended to respond to outbreaks across the spectrum of infectious diseases.

ASTHO, along with our affiliated partners at the Association of Public Health Laboratories and Council of State and Territorial Epidemiologists, recommends that Congress appropriate
at least $1.3 billion to CDC’s Center for Emerging and Zoonotic Infectious Diseases, which supports the ELC program. Increased funding will provide additional support that is necessary to reinforce our current infrastructure and capacity to respond to everyday infectious diseases and future disease outbreaks. Funding will continue efforts to build the epidemiology workforce and expand coordination among state, territorial, local, and tribal health agencies.

3. **What opportunities exist to improve or better support CDC’s global and domestic public health training programs, such as the Field Epidemiology Training Program and the Epidemic Intelligence Service?**

CDC programs referred to in the RFI, as well as other CDC training programs including the Laboratory Leadership Service, Public Health Associate Program, and Undergraduate Public Health Scholars Program, are necessary to ensure America’s strength in public health services and to build a pipeline/pathway program in professions currently facing or at risk for workforce shortages in multiple public health professions. CDC’s training programs provide the unique skills needed to accommodate the expanding and technological advancements of our nation’s public health system to serve all Americans. These public health workforce shortages are primarily due to non-competitive pay (as compared to private sector jobs), recruitment challenges in rural areas, some state legislatures capping the number of full time equivalent in state government jobs, and younger generations choosing other professions. While the Bureau of Labor Statistics (BLS) provides critical workforce data in other industries, non-clinical public health workforce data is not available at levels that allow for workforce planning, identification of workforce shortages, and other issues ultimately threatening national security. The COVID-19 pandemic highlighted the importance of understanding the size, composition, and compensation of the public health workforce. It is essential to better define, characterize, and count the public health workforce to improve and maintain workforce competency and effectiveness.

ASTHO requests that Congress appropriates the necessary funds to support the ongoing enumeration of the public health workforce as is provided by other industries. A partnership between CDC and BLS to move this forward with investment is an actionable step and national experts are ready to start this project immediately.

ASTHO recommends that Congress provide increased funding to CDC’s workforce training programs and that BLS include information on public health professions in the workforce data they provide for other industries. This inclusion is essential for national security and would allow for workforce and training program planning and support workforce shortage areas. A partnership between CDC and BLS is an actionable step that should be taken to support this work.
4. What other aspects of CDC’s work do you think are functioning well? How can Congress better support and preserve these activities?

CDC is the front-line federal public health emergency response agency that provides vital leadership for state, local, tribal, and territorial health departments. Their mission of protecting America from health, safety, and security threats that are both domestic and foreign has never wavered or been more important in mitigating the impact of chronic, acute, curable, and preventable diseases. The underfunding of CDC, which existed before the COVID-19 pandemic, has presented challenges to addressing the many health challenges that we continue to face as a nation. However, CDC’s work to coordinate communications and actions across state and local public health networks continues to keep our communities safe. Public health approaches led by CDC are the reason we understood the extent of the opioid crisis and other emerging threats. The same approaches that CDC uses to detect and respond to infectious disease—monitoring, early identification, and connection research to action—are needed to respond to the more than 100,000 deaths annually from drug overdoses. ASTHO strongly supports the need to ensure that CDC has the necessary funding for all of its programs and activities. We recommend that Congress provide at least $11.58 billion in the FY2024 Labor, Health, and Human Services, Education, and Related Agencies appropriations bill.

5. Is there any room for improvement in how CDC approached the Moving Forward Initiative, from a process perspective?

ASTHO maintains that CDC’s Moving Forward initiative has resulted in important changes that were made based on the feedback of our members, Board of Directors, and executive leadership during conversations with CDC staff and public health and state government groups. ASTHO engaged in several public discussions of the Moving Forward initiative including during our all-state and territorial health officials calls and during ASTHO Board of Directors meetings. We believed it was important to share our observations on how CDC could improve agency leadership. We believe the need for a more deliberative pre-decisional public health policy development and partnership with state health leaders was addressed during the agency’s reorganization.

6. How does CDC’s current structure either support or impede its ability to carry out its core functions?

States rely on CDC for scientific expertise, technical assistance, and guidance on a wide range of issues including disease observation, epidemiology, and disease control for infectious and noninfectious diseases and conditions. For example, CDC and its expertise in e-cigarettes were critical in identifying the cause and stopping the e-cigarette, or vaping, product use-associated lung injury crisis in the fall of 2019. Moreover, states rely on Overdose Data to Action funding from CDC to address the ongoing opioid epidemic. It is ASTHO’s opinion that CDC’s mission and purpose are clear to the field and there is no need
to authorize the agency further. It is important to note that, just last year, Congress included several new authorizations in the PREVENT Pandemics Act.

Mechanisms to Modernize

1. **What role, if any, could the CDC Foundation play in improving linkages between CDC staff and outside expertise and facilitating the exchange of ideas?** If, in your view, the CDC Foundation is not well suited for this type of work, what other entity (either within CDC or elsewhere) could serve this purpose?

   It is ASTHO’s opinion that the CDC Foundation is an important resource to CDC. We refer any discussion concerning its mission to its leadership.

2. **What other policies should Congress consider, aside from those that have already been enacted?**

   CDC staff are frequently deployed to assist jurisdictions with various response efforts. The response to COVID-19 was unlike anything that public health has experienced, therefore it is critical to acknowledge the vital role of FEMA, the National Guard, and other agencies in supporting the response effort. Congress should explore strategies to enhance state, territorial, local, and tribal health departments' ability to temporarily reassign federal personnel to support a public health emergency response. Ongoing administrative reviews of training and documentation are also necessary to ensure staff can be deployed at any given time. Additionally, Congress should explore how to support CDC in growing the number of "mission-ready and deployable packages" of varying size and specialized functions to support state and local responses when an emergent situation overwhelms their capability. For example, contact tracing, testing, and crisis communications expertise are in high demand and can quickly be deployed in a public health emergency response. However, this should not replace support for growing these capacities at the state, territorial, local, and tribal health department level, understanding that the partnership and support from all levels in large-scale responses are vital.

Thank you for the opportunity to submit comments on this RFI. If you have any questions, please contact Jeffrey Ekoma (jekoma@astho.org), senior director of government affairs.

Sincerely,

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