

JANUARY 2023

Building the CDC the Country Needs

AUTHORS

J. STEPHEN MORRISON
TOM INGLESBY

Final Report of the CSIS Commission
Working Group on the CDC

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INTERNATIONAL STUDIES



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Health Security

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About the CSIS Commission on Strengthening America's Health Security

The Covid-19 pandemic has exposed deep and diverse weaknesses in U.S. global health security policy and infrastructure and has triggered health, economic, and social crises. The CSIS Commission on Strengthening America's Health Security drives discourse and develops concrete, pragmatic action agendas for U.S. health security policy in the Covid-19 era. The commission brings together a distinguished and diverse group of senior leaders and is advised by a group of preeminent subject matter experts. Initiated in April 2018, the commission carried its efforts through to the end of 2022. Its successor, the CSIS Bipartisan Alliance for Global Health Security, will launch in the first quarter of 2023.

The commission is directed by J. Stephen Morrison, senior vice president and director of the CSIS Global Health Policy Center. More information on the commission can be found on its dedicated microsite at <https://healthsecurity.csis.org>.

Signatories

This report conveys a majority consensus of the signatories who have participated in the working group in their individual capacity, not as representatives of their respective organizations. No expert is expected to endorse every single point contained in the report. In becoming a signatory to the report, experts affirm their broad agreement with its findings and recommendations. Language included in this report does not imply institutional endorsement by the organizations that working group members represent.

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commissioner of the U.S. Food and Drug Administration (2009–2015); **Jennifer Kates**, senior vice president and director of global health and HIV policy at the Kaiser Family Foundation; **Christopher J.L. Murray**, institute director at the Institute for Health Metrics and Evaluation and chair and professor at the Department of Health Metrics Sciences, University of Washington; and **Anne Zink**, president of ASTHO and chief medical officer of the Alaska Department of Health and Social Services. These individuals bear no responsibility for the working group’s final analysis and recommendations.

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Executive Summary

Today, the U.S. Centers for Disease Control and Prevention (CDC) has entered a moment of peril. CDC, a long-heralded national public health asset, has suffered a sharp decline in popular trust and confidence, a signal of widespread concern over its performance in preventing and responding to dangerous outbreaks, at home and abroad. The United States needs a strong, effective, and more accountable national public health agency to protect the health of all Americans and ensure the stability of the broader world. It is an urgent matter of U.S. national security.

The CSIS Commission on Strengthening America's Health Security launched its working group on the CDC in August 2022 to conduct a rapid review of critical CDC capabilities related to epidemic preparedness and response. Throughout, the effort has been bipartisan, in recognition that a significant reset of CDC requires building consensus on actionable recommendations across branches of government and across party lines.

The power to shape CDC's future rests in part on CDC leadership, which is pursuing internal reforms under the banner of "Moving Forward." But realism is in order. The power to make major changes lies largely outside of CDC itself—at the White House, with the Secretary of the U.S. Department of Health and Human Services (HHS), and among key Senate and House leaders, of both parties. That is where the future of CDC will be decided.

CDC's chronic challenges must be acknowledged and systematically addressed—in its culture, data management, budget structure, talent base, communications, partnerships with state and local authorities, weak Washington presence, and global health security mission.

We know what needs to be done. This CSIS report enumerates the essential, concrete, near-term steps that will return CDC to a pathway of high performance: clarifying and better integrating CDC's core domestic and global missions; enhancing CDC's leadership and transparency by bolstering its communications and federal engagement capacities; creating a much stronger competency in Washington; and bolstering its operational and surge capabilities through updated frontline engagement, workforce development, data analysis, and budget flexibility. Across all reforms, greater attention to equity and accountability will be essential.

These measures can deliver results. If, however, they are not enacted, CDC will likely see further erosion of its standing and capacities, U.S. global leadership will falter, and Americans will remain unnecessarily vulnerable to dangerous biological threats. Such an outcome is antithetical to U.S. national interests.

When the space shuttle Challenger crashed in 1986 and Hurricane Katrina struck in 2005, the White House and leaders in Congress of both parties responded and successfully reinvented the National Aeronautics and Space Administration (NASA) and the Federal Emergency Management Agency (FEMA), respectively. The same is possible for CDC if leaders across the U.S. government commit to work together to drive a reset strategy through to its conclusion.

Introduction

Since the U.S. Centers for Disease Control and Prevention (CDC) was founded in Atlanta on July 1, 1946 (as the Communicable Disease Center), it has been lauded as the nation’s leading public health agency and has been profoundly important to the health, safety, and security of the nation. Over the decades, CDC has enjoyed exceptionally strong bipartisan and popular support—in the range of 90 percent—in recognition of CDC’s gold-standard science; its support of state, tribal, local, and territorial public health authorities (STLT, hereafter referenced simply as state and local authorities); and its quick action to respond to dangerous outbreaks, protecting Americans from all manner of health threats.¹

America requires a strong and effective national public health agency—it cannot afford to be without a high-performing CDC that can immediately, and without hesitation or political interference, rise to the challenges of preventing and responding to rapidly evolving and uncertain new outbreaks, epidemics, and pandemics and help reduce the illness and death that they cause at home and abroad. That is an indispensable capability for the nation’s security and the broader world in which Americans live. Without such a CDC, the country would suffer far more needless mortality, economic loss, and national disruption. A strong, reliable, and effective CDC, trusted by the full diversity of the American public, is in the shared interest of all Americans to ensure the health and stability of their families and communities, economic prosperity, the nation’s security, and the viability of a globalized world.

Today, CDC faces a moment of peril. Over the course of the pandemic, it has suffered a rapid, dramatic decline in public support across many demographics and groups. While the most striking is a 50 percent decline in support among those who identify as Republicans, support among independents and Democrats has also softened, with polls showing persistent skepticism among Black, Hispanic, and Indigenous communities as well.² Nationwide, just over half (54 percent) of Americans now say that CDC is doing a good job responding to Covid-19.³

Such an erosion in public trust and confidence, one of the coins of the realm for any national public health institution, is a sign of something deeper, namely serious and widespread concern about deficiencies in CDC's performance in fulfilling its scientific, public health, and federal responsibilities amid a pandemic that led to the loss of over 1.2 million lives in the United States. Some of these concerns may be exaggerated and based on unfair or inaccurate criticisms. Moreover, public trust in government and in science are at an all-time low, not just in the United States but around the world. Nonetheless, perceptions matter enormously, and these concerns arise at the very moment when it is clear that America's health security institutions urgently need to be far better prepared than they have been in the past to contend with future infectious disease threats.

Today, CDC faces a moment of peril. Over the course of the pandemic, it has suffered a rapid, dramatic decline in public support across many demographics and groups.

What is to be CDC's future? What is it now going to take to provide Americans with the CDC they need in order to be protected from the worst possible infectious disease threats? How are we to take account of the many continuing innovations and sustained contributions that CDC has made, and continues to make, at home and abroad to protect Americans?

This is a historic moment when the nation needs to rally, not fissure. When the space shuttle Challenger crashed in 1986, American leaders responded. The same was true with the Federal Emergency Management Agency (FEMA) following Hurricane Katrina in 2005. Today, the National Aeronautics and Space Administration (NASA) and FEMA have been successfully reinvented. The same is possible for CDC. We can be confident of that if we can reach a consensus on the core elements of a reset strategy, and if leadership—at the White House, the helm of the U.S. Department of Health and Human Services (HHS), among key Senate and House members, of both parties, and especially at CDC—can commit to see that comprehensive reset strategy through to its successful conclusion.

The CSIS Commission Working Group on the CDC

The CSIS Commission on Strengthening America’s Health Security launched the Working Group on the CDC in August 2022 to conduct a rapid, targeted review focused on select critical capabilities related to epidemic preparedness and response, including:

- Development of scientific guidance and communications;
- Management of large and complicated sets of health data;
- Budget structure;
- External partnerships with state and local entities and the private sector;
- Engagement within the executive branch ecosystem and with Capitol Hill; and
- CDC’s global health security mission.⁴

The working group’s membership comprises experts on CDC and its state and local partners, on pandemic preparedness and response (PPR) domestically and globally, and on the U.S. government interagency and congressional policymaking processes. The working group is intentionally bipartisan in nature, charged with generating concrete, actionable recommendations to strengthen CDC’s mission in ways that can be supported on both sides of the aisle. This final report is written on behalf of the working group and conveys a majority consensus among members, developed over the course of several months of study. Please see the full roster at the front of the report.

This rapid effort is not meant to be comprehensive. Rather, the working group seeks through this report to answer a few critical questions: What are the most important near-term steps that will drive a significant reset within CDC as the agency continues through a period of heightened pressure and scrutiny? What select, concrete measures could CDC and other stakeholders take to improve

performance and re-earn popular trust—across political divides? What steps could make the agency more flexible, fast-acting, and accountable as well as better equipped to respond to the uncertainties of future emerging and evolving infectious disease threats at home and abroad? What actions should CDC take to make these changes? What kind of actions will be needed in the organizations that oversee, fund, or partner with CDC?

Over the course of the fall of 2022, the working group met four times under the leadership of its cochairs: Tom Inglesby, director of the Johns Hopkins Center for Health Security at the Bloomberg School of Public Health, and J. Stephen Morrison, senior vice president and director of the CSIS Global Health Policy Center. The effort included engagement with senior CDC leaders. The working group incorporated several key subject matter experts into its sessions to advise. In addition, the cochairs consulted with current and former government officials at the White House, HHS, Congress, and statehouses, including a number of governors and their teams, state and local authorities, and independent pandemic experts, domestically and globally.

The CSIS study takes several prior reviews of CDC and its role in the wider U.S. response to Covid-19 into account, including reports from the Government Accountability Office, the Select Subcommittee on the Coronavirus Crisis, the Senate Committee on Homeland Security and Government Affairs, the Commonwealth Fund, the Council on Foreign Relations, and the National Academies of Sciences; legislation such as the PREVENT Pandemics Act, the Improving DATA in Public Health Act, and Senator Mitt Romney’s pitch for a new Center for Public Health Data; and other analyses and reflections on the U.S. pandemic response.⁵ It incorporates references to relevant aspects of the fiscal year (FY) 2023 omnibus spending bill, passed by Congress and signed into law by President Biden at the end of 2022.⁶

CDC in Peril

Today, CDC finds itself subject to tough criticism from multiple directions, including senior leaders in the Biden administration, Democrat and Republican party leadership, state and local leadership, and diverse media. Calls have been intensifying for a fundamental reset of the agency. Confusion exists over the extent of CDC's mission versus the responsibilities of other federal agencies. There is less confidence regarding CDC's unique role in protecting the nation. CDC director Dr. Rochelle Walensky, to her great credit, has called out a series of CDC mistakes during the pandemic and called for change through a new initiative, "Moving Forward" (see below), and actively seeks to deepen consultations on Capitol Hill with members of both parties.⁷ These changes will need to be significant, swift, and comprehensive to restore the trust in the agency that has been lost. As power shifts within Congress, pressures on CDC will intensify, through potential investigations, legislative changes, and proposed cuts to budgets. In this period, it will be critical for policymakers to proceed carefully and to be strategic, well informed, and long range in their thinking as they weigh the future of CDC, particularly to seize the opportunity to address the lessons of Covid-19. Reforms and higher levels of transparency and accountability are essential to any reset of CDC. But policy changes that further disrupt or weaken CDC are likely to significantly undermine the country's ability to respond to emerging health threats, including major epidemics and pandemics.

This moment obviously unfolds within America's contentious governing ecosystem, which has become highly polarized and divided along partisan lines but also retains its capacity to forge bipartisan solutions to problems that threaten U.S. national interests. While CDC leadership is responsible for devising and executing many areas of internal reform, the lion's share of decision power to enact solutions that would reset CDC and strengthen its performance lies outside of the agency itself. That power rests principally at the White House, with the secretary of HHS, and among key figures in the House and Senate from both parties.

The crisis that CDC faces has its roots in the failed early U.S. response to the Covid-19 pandemic, compounded by unprecedented political divisiveness and the corrosive impacts of the pandemic's unprecedented longevity—three years and still ongoing. These factors exposed and greatly aggravated CDC's infrastructure and cultural challenges, particularly surrounding speed, data, communications, and surge capacity. As the pandemic profoundly disrupted society—at work, school, travel, and home—CDC faced unprecedented demands. The pandemic exacerbated chronic societal inequities in the United States in access to healthcare and vulnerability to disease based on race, ethnicity, gender, geography, and disability.⁸ These inequities raised the question: Is CDC, and the public health system it leads, equipped to prepare for and respond to infectious disease threats in the full diversity of U.S. communities? The pandemic has posed perplexing challenges to CDC in its guidance process: During a national crisis, how is evolving science to be reconciled with large and powerful societal concerns (e.g., ensuring continuity in children's education, avoiding impoverishment and mass unemployment, or delaying the resumption of productivity) that also have costs to well-being? Is it the responsibility of CDC or other higher authorities to weigh the trade-offs of these different policies? Is CDC empowered to take on all the responsibilities it is now being expected to fulfill? And is CDC, and public health more broadly, adequately funded and staffed to protect Americans?

While CDC leadership is responsible for devising and executing many areas of internal reform, the lion's share of decision power to enact solutions that would reset CDC and strengthen its performance lies outside of the agency itself.

Frustration, anger, and controversy have mounted over CDC's performance at key moments, most notably the failure to rapidly develop accurate Covid-19 testing at the start of the pandemic; recurrent disputes over the speed, content, and practicality of CDC guidance, especially over guidance concerning masks, ventilation, and social distancing; lack of prompt and effective communication; and failure to transparently weigh the practical constraints and trade-offs to public health measures.

Often unacknowledged, from the acute phase of the Covid-19 pandemic up to the present post-acute phase, are the many quiet, sustained contributions, accomplishments, and important innovations that CDC has made, and continues to make, to protect Americans. Even in the worst stages of the pandemic, CDC provided scientifically grounded technical assistance and critical funding to state and local entities, schools, and congregate settings to confront the pandemic while also pursuing innovations to improve its response capabilities. Through a White House executive order, CDC leadership launched the CDC Center for Forecasting and Outbreak Analytics in 2021, an ambitious data-modeling initiative that proved its value early in elucidating the future impacts of the SARS-CoV-2 Omicron subvariant as it arrived on the scene in late 2021.⁹ Since 2021, CDC has expanded genomic sequencing and wastewater surveillance of SARS-CoV-2 across the country while pressing for the Data Modernization Initiative, funded at over \$1 billion, to deliver results more rapidly.¹⁰ In 2022, the agency introduced technical reports—fast, high-value sources of public information. Several recent technical reports on mpox have placed CDC at the forefront of the global response.¹¹ Thousands of

career CDC staff have worked valiantly—24/7 for extended stretches of time over the last three years—on the pandemic and other dangerous public health threats, at a considerable price to themselves, their families, and their normal work responsibilities. Approximately 2,500 staff were working at one time on multiple, simultaneous public health responses.

Such positive stories are an important dimension of CDC’s performance during the pandemic. They often, however, get lost in the larger debate over the agency’s shortcomings. They are stories which CDC needs to do a better job telling. And they are stories that should be incorporated into CDC’s broader reset vision for the future.

The FY 2023 omnibus spending bill—which Congress passed in late December 2022 and President Biden signed into law—affirmed the critical role CDC plays in pandemic preparedness and response in a shared, bipartisan spirit.¹² It raised CDC’s overall budget while increasing investments in public health infrastructure, funding the Center for Forecasting and Outbreak Analytics through the routine budget process and codifying its data mission using language from the PREVENT Pandemics Act, and increasing investment in cross-cutting areas such as data, the public health work force, laboratories, and genomic sequencing. The omnibus did not move forward on mandating the sharing of state and local data with CDC as a critical element of responding to emerging biological crises, a reflection of the continued acute political sensitivities and divergent views surrounding data. Much more work remains in that area. Based on the PREVENT Pandemics Act, the omnibus also requires Senate confirmation of the CDC director as of January 2025, along with greater reporting requirements. Both measures reflect the desire for greater accountability and transparency in CDC’s leadership and performance.

This moment of peril for CDC, of course, does not occur in a silo. It unfolds amid a broad attitudinal swing in America toward higher skepticism of science, the federal government, and U.S. health-centered institutions. A similar pattern has been seen in many other countries.¹³ It occurs as an important debate has broken out across America over whether public health interventions during a health crisis, in themselves, are harmful to personal liberties and societal freedom; whether greater accountability and transparency are needed in CDC’s future work (and that of other public health institutions); and how to reconcile individual liberties and economic productivity with community health, safety, and security.

The Core Challenges

At present, CDC is not equipped to be the highly effective and reliable force within the U.S. government, at home and abroad, that Americans need and rely upon for rapid disease detection and containment. CDC's budget is both insufficient and too inflexible for it to achieve its core mission. Several concrete dimensions to CDC's crisis, internal and external to the agency, must be addressed systematically if the agency is to reset successfully and get on a pathway of high performance, including extending its record of achievement to restore trust and confidence, better protecting the health and well-being of Americans, and contributing to strengthening the health security of the world at large. The most important challenges include clarifying and better integrating CDC's mission; strengthening its leadership, transparency, and accountability; and bolstering its operational and surge capabilities.

- **An Unclear Mission:** CDC's specific responsibilities for protecting the country from infectious disease threats are not sufficiently understood and clear compared to the roles and operations of other federal entities. Criticisms and controversies surrounding CDC have further confused and distorted these issues. The roles and responsibilities for outbreak response among it and its sister agencies—including the Administration for Strategic Preparedness and Response (ASPR), FEMA, the U.S. Agency for International Development (USAID), the U.S. Department of State, and the U.S. Department of Defense (DOD)—are not always clearly defined. This challenge is manifest in both its domestic and global operations. America needs a federal, whole-of-government pandemic response plan that clearly defines CDC's role and responsibilities.
- **An Underpowered Global Mission:** CDC's global mission directly protects Americans from health threats that could reach them at home. The global program comprises a quarter of its budget (if the \$2 billion transfer for the President's Emergency Plan for AIDS Relief, or PEPFAR, is included), with 1,800 employees (across all categories), a half century of success leading global smallpox

eradication, and a two-decade record of remarkable achievement in global HIV programs and, more recently, global health security. Geopolitically, CDC's contributions advance U.S. foreign policy in line with the new National Security Strategy, which elevates biodefense as a priority as the United States competes with China and Russia and seeks to create greater global stability against transnational threats.¹⁴

Nonetheless, the global mission is poorly understood and undervalued by policymakers in the executive branch and Congress, weakly represented in Washington, and not built to guarantee an attractive and reliable career path. Its funding is stretched across two congressional committees, and it is insufficiently resourced to build sustainable global health security capacities in surveillance, laboratories, and training. CDC's overseas presence has historically relied on disease-specific funding, most notably through a transfer from the PEPFAR program. This creates a silo—an obstacle to integrated global health security approaches unless more creative strategies are pursued to build broader health security capabilities. Like the rest of HHS, CDC faces great challenges in recruiting and maintaining overseas staff, and unlike the U.S. foreign service, it does not have formal pathways for the policy, language, cultural, or management skills that are needed for its critical overseas work.

- **A Diminished Independent Voice:** Over the course of the Covid-19 pandemic, CDC has lost a substantial share of its independent, trusted scientific authority in speaking to the nation. That needs to be rebuilt now as one of its highest priorities. At earlier moments of the pandemic, steps were taken to control or limit CDC's external communications. Later in the pandemic, steps were taken to integrate CDC's voice within White House and other federal agency messaging, often impelled by the urgency of the national emergency, the desire to control the message, and frustration over the pace of the response and perceived CDC missteps. Fitting CDC within White House communications during a national emergency is not surprising and makes a certain amount of sense, given the importance of science in those communications and the impact of the pandemic on so many facets of society. But overly close or prolonged identification with any political party in power can erode CDC's autonomous, trusted standing among the American people.

CDC's communications remain woefully underpowered for a world of 24/7 traditional media, social media, mis- and disinformation, and conspiracy theories. CDC does not yet have the capacity or resources to communicate effectively and directly with the American people, elected officials in Congress, state houses and city halls, state and local public health authorities, universities, and others. That includes telling the stories of its success and impacts, as well as current and future risks and requirements. At present, CDC struggles to convey the most essential, evolving public health messages during a crisis to audiences and communities across the country. Yet it needs the confidence and capability to do far more, for both routine health communications and while battling dangerous outbreaks at home and abroad.

- **Insufficient Presence and Leadership in Washington:** CDC has not been organized with rapid outbreak response and containment as a top priority at home and abroad. CDC's home base in Atlanta is a major disadvantage, its presence in Washington nominal. Further, CDC does not possess a cadre of decisionmakers who are comfortable and trained to work in international and national security decisionmaking with the White House and other departments and agencies. Such core staff will be essential if CDC is to become more rapid, nimble, and effective and aligned with broader federal agencies. It needs to be able to deploy multiple senior figures with the gravitas and senior policy experience and ability to represent it in key places, especially in

Washington, at the right moments. The time has arrived to more fully staff and focus CDC's Washington office around the goal of strengthening its performance and influence within the federal government and in its interactions with Congress.

Often absent are strong and continuously active two-way communications between CDC and state and local public health leaders. These arise when both parties consciously agree to pursue such a bidirectional relationship, aided by active outreach by CDC leadership. Amid biological crises, having robust, trusted mechanisms of communication already in place between CDC and state and local partners would be highly valuable in solving problems and answering questions in real time.

At present, CDC is not equipped to be the highly effective and reliable force within the U.S. government, at home and abroad, that Americans need and rely upon for rapid disease detection and containment.

- **A Lack of Fully Engaged External Champions:** Part of CDC's peril is the lack of strong support from external partners—it must have robust, dedicated champions to successfully make its case in the U.S. government interagency process. But CDC lacks such a coalition of prominent U.S. opinion leaders, such as the corporate sector, media, academia, philanthropy, and governors and mayors. Not only could these powerful external voices provide support for CDC's critical work, but they could also be a robust conduit for the agency's ongoing communication and engagement. Much greater CDC outreach and active partnership efforts will be essential to creating a larger external coalition of powerful proponents.

Historically, CDC has often kept private sector partners—including clinical laboratories, health care sector providers, and industry—at arm's length. Many in the private sector have called on CDC to be more transparent with regard to contracting needs, timelines, and gaps that may be better addressed by private sector entities. Those partners will be more motivated to support CDC's mission and budget—with a level of interest comparable to their advocacy for the Biomedical Advanced Research and Development Authority (BARDA), the National Institutes of Health (NIH), the DOD, and the Department of Homeland Security (DHS)—if they believe that CDC is committed to expanded, mutually beneficial public-private partnerships.

State and local public health authorities are key CDC constituencies and partners, but they often lack influence in their own local governments and have even less influence within Congress. Indeed, since the pandemic began, many of their members have been and often remain subjected to harassment or lack of political support. Recently, in response to controversy over pandemic interventions, more than half of U.S. states have taken steps to curb their public health authorities.¹⁵

CDC engages with and seeks input from the Association of State and Territorial Health Officials (ASTHO), the National Association of County and City Health Officials (NACCHO), the Big Cities Health Coalition (BCHC), the Council of State and Territorial Epidemiologists (CSTE), the Association of Public Health Laboratories (APHL), the American Public Health Association

(APHA), and the CDC Foundation. These organizations provide an important baseline of support upon which much more could potentially be done to intensify frontline engagement with communities and state and local public health partners across the nation. In addition to maintaining strong relationships with these organizations and state and local health authorities, CDC should seek to develop stronger connections with governors' offices nationwide. Governors have been pivotal decisionmakers and leaders during Covid-19 and will have similar roles in future pandemics; CDC should have pre-existing relationships with those offices in advance of future crises.

- **Difficulty Recruiting and Retaining Talent:** CDC's highly skilled personnel base and its scientific standing have eroded. Its senior career ranks are aging, retirement is accelerating, and recruitment of the next generation lags, partly because of antiquated hiring processes that take far too much time and do not allow the rapid onboarding of new talent or entrepreneurial changes to the organization. CDC staff are exhausted, and many are demoralized by the demands of the crisis and for being unfairly blamed for pandemic problems beyond CDC's control or responsibility. Conditions may improve, and there may be prospects for accelerated changes in internal processes and culture (as envisioned in "Moving Forward") if and when CDC employees return to in-person work in greater numbers. CDC continues to place great value on science and its scientists, and it will need to keep that scientific talent. But it will also need to be strategic in attracting and retaining the next generation of scientists. For example, CDC does not yet occupy a leadership position in fast-evolving areas such as data science and genomics. In fact, recruiting and retaining leaders in these and other cross-cutting sciences is extremely challenging under the agency's current budget structure. While CDC often continues to be recognized internationally for its scientific excellence, domestically its reputation for scientific excellence has slipped amid continuous criticisms over the course of the pandemic.

The mix of skills required to secure CDC's future leadership in science, in a much-changed world, has yet to be clearly defined. Whatever vision does emerge will need to include not only top-notch disease and pathogen scientists and epidemiologists but also experienced emergency managers, senior data science experts (many drawn from the private sector), behavioral scientists, economists, field operators, communicators, community engagement specialists, and policy experts.

- **An Imperative to Move at Far Greater Speed:** CDC was not nimble enough to respond rapidly to all of the demands that arose at the start of the Covid-19 pandemic. Its process of developing guidance has not moved fast enough to meet the needs of people consuming information within a radically more complicated and challenging media ecosystem. CDC's practice, at times, of waiting for evidence that is more certain or waiting for data to be published first in a peer-reviewed science journal or the *Morbidity and Mortality Weekly Report* (MMWR) is in conflict with the need to move rapidly in the face of uncertainty.¹⁶ Its ability to deploy people quickly to the field, nationally and internationally, is badly hampered by its human resources systems and lack of authorities as well as the reality that it operates within and serves a federalized, under-resourced, and antiquated system of 3,000 diverse state and local public health jurisdictions.
- **A Deficit in Essential Authorities and Capabilities:** CDC lacks several essential authorities, capabilities, and mechanisms to ensure fast and nimble responses to threats of the magnitude and duration of Covid-19. The most fundamental and vexing gaps surround data, a result of the United

States' federated system, a woefully antiquated data platform, and acute sensitivities surrounding privacy, quality, standardization, and predictable and timely access. CDC is expected to move decisively at the earliest possible moment when signs of a dangerous outbreak emerge—even before an emergency declaration has been made. It is expected to publicly report to the nation and its many diverse communities the latest information and trends in a fast-moving crisis at home and abroad. But at present, CDC encounters five choke points:

1. For every new disease, CDC has to develop individual data use agreements with each state and myriad private entities to facilitate the sharing of data. With Covid-19 and mpox, negotiating the details of these agreements has eaten up precious time and effort. Where declarations are not in place, data reporting from states is voluntary, which can also invite delays and incomplete reporting that significantly hinder CDC's ability to stay ahead of evolving threats.
2. CDC experiences challenges collecting new information from state and local entities because of the strictures of the Paperwork Reduction Act (PRA). The PRA requires CDC to seek public comment on proposed information collections and to obtain approval from the Office of Management and Budget (OMB) before collecting information from the public when it involves 10 or more respondents, including state respondents. This process also eats up precious time and effort and is conspicuously counterproductive and inconsistent with the speed that CDC needs to move in a crisis. While there are existing pathways for CDC to pursue a PRA waiver, the fact that a waiver is not allowed until after a public health emergency is declared can stymie the speed required early in an outbreak response. For example, it took three months to receive a waiver during the Covid-19 response.¹⁷ The bipartisan CARES Act provided NIH research activities exemption from PRA approval—if similar exemptions were provided to CDC, they could be quite useful.
3. CDC does not have the flexible contracting capability that other agencies have, called Other Transaction Authority (OTA) in agencies such as ASPR, BARDA, and the NIH or “notwithstanding authority” elsewhere, such as at USAID. This capability allows those federal agencies to use procurement instruments other than contracts, grants, or cooperative agreements in ways that are more flexible and rapid. OTA is a process for allowing more innovation and speed, particularly through enabling more collaboration with the private sector and an agile approach to developing novel technology. Given CDC's need for speed in a response to an epidemic, it is unclear why CDC is operating without this capability.
4. Budget inflexibility is an impediment. Other agencies in the federal government have a process for using money in an emergency. FEMA, for example, has the Disaster Relief Fund. While an account has been created for CDC to respond to emergencies—the Infectious Diseases Rapid Response Reserve Fund—it is not sufficient in size to meet the agency's needs.¹⁸ The structuring of the agency's budget into 13 treasury accounts and more than 160 individual budget lines limits CDC's ability, in an emergency situation, to move staff across budget lines to fill urgent requirements. Lastly, other agencies have transfer authority—the flexibility to move a small percentage of money across accounts to respond to crises—but CDC does not.
5. CDC's budget is simply inadequate for the demanding and expansive roles it is expected to play. It lacks the funds to support critical capacities at the local, city, and state levels, to field a modern workforce at all levels, to upgrade tools and capacities promptly, and to deploy resources rapidly and effectively when needed.

Moving Forward

CDC leadership has been stepping forward to launch important new initiatives, such as the Center for Forecasting and Outbreak Analytics, while also advancing the Data Modernization Initiative.¹⁹ More recently, Director Walensky has initiated a process of internal review and reform under the banner of “Moving Forward.”²⁰ This reform effort began in early August with a dramatic acknowledgment by Dr. Walensky that CDC made major mistakes during Covid-19.²¹ “Moving Forward” is centered around a scientific and programmatic review, based on a series of 120 interviews with CDC leadership, staff, and partners, and a parallel review of the agency’s core processes and structure. It also incorporates action taken under a pre-existing reorganization effort within the Office of the Director, which elevated several cross-cutting agency functions, including communications and equity.

CDC’s role has changed substantially in the past two decades, from increased attention to biodefense programming in the wake of the 2001 anthrax attacks to an accelerating rate of public health emergencies, from Ebola to Covid-19 to mpox. This increasing reliance on CDC’s operational capacities has resulted in burgeoning budgeting, staffing, and mission requirements, and the agency’s structure and capabilities have struggled to keep pace. The reviews that preceded “Moving Forward” surfaced several core challenges that impede CDC’s work—all of which came into high relief during the Covid-19 pandemic—including slow sharing of scientific data and guidance; poor translation of science into policy and public communications; inconsistent communication—perhaps limited by White House or HHS strictures—about the basis and trade-offs to public health measures; lack of understanding of practical constraints in making recommendations; insufficient collaboration and bidirectional accountability with external partners; and a culture that is at times too focused on public health research over implementation.

To date, Director Walensky has implemented some important changes, including reinstating an external advisory body (the Advisory Committee to the Director), expediting sharing of some select data related to new coronavirus variants and mpox, and accelerating efforts to modernize data capacities.²²

CDC has begun four lines of effort, including:

1. A reorganization plan to elevate core capacities and break down silos;
2. A series of internal process changes to improve accountability, collaboration, communication, and timeliness across CDC functions;
3. A policy framework to improve how CDC translates its science into guidance and communications, including improving the quality and transparency of consultations with external stakeholders; and
4. An outline of the key authorities, budget, and other flexibilities that are essential to acquire data in a timely fashion; hire, deploy, and fund staff; and strike rapid partnerships with private sector firms.

The results of these four lines of work should become evident starting in early 2023. The reorganization and internal process changes, largely under the discretionary authority of the CDC director, will require major work among CDC staff to implement. Changes in the policy framework for guidance and changes in authorities, flexibilities, and budgets will rest ultimately on consent from Congress and higher elements of the Biden administration.

How to Reset?

Building a consensus for a CDC reset across branches of government and across party lines is not impossible but will obviously be challenging. It will rest on a spirit of compromise and a shared bipartisan willingness to pause and reflect on what the agency has experienced: its accomplishments and critical significance to the health, safety, and security of Americans; its cultural and structural impediments to effective response to crises; its own failings that contributed to the decline in trust and confidence; and the support that will be needed to begin a major reset.

The place to start is a package of core reforms that directly answers problems that have visibly impaired CDC's performance, that holds the potential for drawing support across party lines, and that can and should be instituted rapidly. The following recommendations focus principally on mission, leadership and accountability, and operational capabilities.

Integrated Mission, at Home and Abroad

1. Clarify and reaffirm CDC's core mission.

CDC is the nation's lead public health agency, charged with protecting the health of everyone in America. It is the lead technical agency for assessing and recommending a scientific approach to public health threats and works 24/7 to protect Americans from those threats, whether they originate in the United States or globally, are infectious or non-infectious in character, or are natural or man-made. A foundational element is scientific excellence. Another is its "no-fail mission" to prevent, detect, and respond to dangerous outbreaks wherever they occur.

CDC has a dominant domestic responsibility to serve state and local public health partners, informing, guiding, and building their capacity. If CDC programs are degraded or cut, the agency will be forced to provide fewer funding resources and less technical assistance to state and local public health agencies.

Abroad, it has a critical role in building capacity in health security and battling specific disease threats—such as global HIV—in partner countries, especially but not limited to low- and middle-income countries. At the same time, CDC is not meant to address all operational challenges in a crisis; rather it is charged with combining its unique assets with other agencies with operational capacities, such as FEMA, HHS/ASPR, USAID, and the DOD. For example, CDC does not have the responsibility for developing new medicines or vaccines, stockpiling critical supplies, addressing supply chain issues, or distributing medical countermeasures or personal protective equipment across the country. In the United States, those responsibilities, at present, principally rest with ASPR and FEMA. More must be done to clarify roles and responsibilities among these institutions. One possible means for doing so is through congressional action in the upcoming reauthorization of the Pandemic All Hazards and Preparedness Act (PAHPA). Other opportunities might come from public communication from the HHS secretary making roles and responsibilities for the department clear to all, or the White House clearly delineating department and agency roles and responsibilities, globally and domestically, where applicable.

2. Strengthen and fully integrate CDC’s global mission.

CDC’s overseas work is an essential part of its mission to prepare, detect, and respond to epidemic threats. It encompasses global health security, immunizations, the Field Epidemiology Training Program, partnerships with the World Health Organization, and two decades as a lead implementer of PEPFAR, a highly successful signature program that has saved over 25 million lives and pioneered a model for an integrated, whole-of-government global health security effort. CDC’s global mission, however, is at risk without several changes to ensure it is better managed, more sustainably resourced and staffed, and secured as an essential complement to the domestic mission rather than a second-tier effort. The CDC initiative to establish core overseas offices and staff for health security and response work, not reliant on disease-specific funding, is a step in the right direction and should be supported and expanded.

CDC’s global capabilities are enabled by the in-person expertise of its staff and the peer-to-peer relationships they form through their collaborative operational day-to-day work with partners, especially in but not limited to low- and middle-income countries. But sustaining those relationships requires a dedicated professional pathway to recruit, retain, and support career international staff—one which does not currently exist.

Long-term planning and funding for overseas staff—as opposed to the five-year contracts and annual PEPFAR transfer that supports many positions—would reduce the frequency of vacancies, promote career progression, and allow the development of staff with both technical and diplomatic expertise.

CDC’s international staff are often a first line of defense in emerging outbreaks, a globally deployed biodefense force. They should be explicitly empowered to play that leadership role in their interactions with ministries of health, ambassadors (including the U.S. Department of State), and other agency departments and missions, such as USAID and the DOD.

Taking lessons from the foreign service, CDC global staff should receive training in language, cultural, policy, and management skills as well as additional support essential to overseas postings, such as family orientation.

The global program needs higher-level leadership and more consistent branding as a national security asset (as well as a public health asset) to compete for budget support for its capacity building with partner governments in surveillance, laboratory, health budgeting and communications, and workforce training. These are the domains of established CDC comparative expertise, yet they are currently underfunded, mainly through disease-specific programs. To correct that, CDC should build a much larger cadre of senior Washington-based staff who can speak to the global mission in their interactions both with appropriators in Congress and counterparts within the interagency and who play an integral role in the policy development and management of global CDC programs. For instance, the CDC FY 2023 omnibus appropriations bill increases the direct appropriation for global health protection—which covers most traditional health security capabilities—to \$293 million, a \$40 million increase from the previous year.²³ But this falls significantly short of the administration’s request for CDC health security activities and remains far below the level of what other agencies receive for global health security activities. USAID, by contrast, received \$900 million in the FY 2023 appropriations to build country capacity and resilience against future epidemic threats, which exceeds the administration’s original \$745 million request for the agency.²⁴

Additional dedicated resources will be required to support unplanned overseas CDC requirements and flexibilities for outbreak situations, including quickly surging staff who are “borrowed” from other departments; implementing large, unplanned emergency supplemental budgets and cooperative grants; and supporting hazard pay or expensive emergency human resources needs, such as medical evacuations.

Leadership and Accountability

3. Launch a high-level executive-congressional dialogue on CDC’s future, implementing immediate reforms and consolidating long-term plans.

The power to shape CDC’s future rests to an important degree in the hands of CDC’s leadership, which is indeed systematically pursuing internal reforms through “Moving Forward.”

But the lion’s share of power to make important changes lies outside of CDC itself—at the White House, HHS, and Congress. It is that executive-congressional axis that is essential to actively drive forward the reform measures detailed in this section if a true reset of CDC is to commence in the spirit of common bipartisan purpose, accountability, and oversight. Over the long term, that axis will be no less essential to drive additional concrete steps that extend beyond the writ of this study.

Any rise in trust and confidence in CDC among Americans will be tied to performance. Many of the measures laid out in this section, once they begin to be implemented, will themselves change the discussion about CDC, as they will result in higher levels of routine consultations and higher-quality, timelier, and more transparent performance during crises. Changes under way during the preparation and issuance of guidance is one obvious example.

Congressional hearings and reporting requirements will be central to judging progress and advancing a dialogue around reform of CDC. Early action by CDC leadership to engage appropriate committee and party leadership will help shape the agenda for the next Congress.

But given the magnitude of the challenges CDC now faces, a new high-level dialogue on the agency’s future will be critical both to driving forward the immediate reforms needed and setting the long-term

agenda. The dialogue should comprise the White House, the office of the secretary of HHS, the CDC director, and the appropriate senior figures from both parties in both the Senate and House. It should consider what additional decisions or actions should be taken beyond those already underway through the “Moving Forward” agenda and those outlined in this report. It should consider what kinds of changes were most useful in other agencies’ resets when facing major challenges and assess whether they have relevance to CDC in the time ahead.

The dialogue should also plan for the long term. It should do so by deciding what type of enlarged external advisory group would be most valuable, with what composition and what agenda: weighing options for streamlining CDC’s budget, authorities, and accountabilities to improve coherence and performance; deliberating over what level of CDC executive presence is warranted in Washington; and advising and assisting in the creation of an enlarged coalition of champions that encompasses the corporate sector, philanthropies, governors and mayors, traditional and social media, community leaders, and prominent opinion leaders.

The dialogue may be assisted by the creation of the White House Office of Pandemic Preparedness and Response, as required in the FY 2023 omnibus spending bill passed by Congress and signed into law by President Biden in late December 2022.²⁵ Its director, appointed by the president, with a staff of up to 25, will serve on both the Domestic Policy Council and the National Security Council. Its mandate is to advise the president on pandemic preparedness and biothreats, coordinate the response across the entire federal government, and evaluate readiness.

4. Reform the guidance development process.

In a crisis, CDC guidance development needs to move quickly to advise the public on steps it can take to protect against disease risks. But CDC also needs critical external input into this process. The agency should establish a transparent and brisk process for sharing draft guidance during emergencies in close cooperation with representatives of state and local public health agencies, the major public health partners with whom it closely works, and other elements of the federal government. Prompt and appropriate input from HHS and the White House should not delay or derail rapid consultation and release of appropriate guidance. In addition to public health partners, CDC should use a standing advisory process for engaging community leaders, educators, and key representatives of the private sector and governors’ offices as a source of input and information in developing guidance. These changes can increase transparency and build trust and buy-in to the guidance process while exploring at this early phase scientific questions and the practical challenges of implementation.

CDC should commit to a strategy of intensified outreach to state and local partners to create ongoing and continuous two-way communications. CDC’s mission is accomplished through partners on the ground and the public’s willingness to engage with and act on its recommendations—critical partners in health departments across the country should not be surprised by guidance changes. This active relationship building will prove especially valuable during biological crises in permitting pragmatic problem solving, ensuring clear and reliable communications, and building distributed networks of trust across communities. CDC should maintain and expand the network of partners and surrogate voices it has built over the course of the Covid-19 pandemic to extend its credibility, ensure its ability to reach disparate American communities, and sustain a mechanism for engaging and cocreating solutions with affected communities in future crises. This will involve active engagement with experts in anthropology, behavioral science, social media, and business.

Given that CDC communicates directly to the public, it should ensure its guidance is understandable by the public and simple enough to follow. CDC should also be as explicit as possible that guidance is based on the best available information, that more information is likely to become available, and that there is an unavoidable need for guidance to adapt and self-correct as more evidence and data is gathered in a crisis. The need to change guidance during the pandemic led to major criticisms of CDC, though the need to change guidance in light of new evidence will always be important. It is critical that CDC conveys that reality effectively.

5. Upgrade CDC’s federal engagement through an expanded leadership presence in the federal interagency policymaking process and through intensified communications and engagement with Congress.

CDC’s location in Atlanta puts it at a disadvantage in the normal interagency policymaking process with HHS and the White House. In addition, compared to other agencies, it is allowed to bring in fewer new staff when a new CDC director starts. CDC should have the capacity to bring in more senior leaders in new administrations so that they can represent the views of the director and senior CDC team in the Washington policymaking process. CDC must be seen as an agency that is serious about its policy role in the U.S. government interagency, and as part of this, more CDC leadership should be assigned to be in Washington full time. In addition, the agency should cross-train more staff on leadership tracks in national security, crisis decisionmaking, and disaster response and resilience, and it should recruit individuals with backgrounds in these areas to leadership positions, especially for serving in Washington.

CDC also needs more capability to engage with Congress, particularly during rapid crisis response. The agency’s congressional affairs effort is not large or high-profile enough to address the needs of Congress. Given that public health in normal times and in crisis touches so many facets of American life, congressional leaders will continue to be intently interested in the work of CDC and want to be informed prior to major developments being announced in public. A larger and more powerful CDC congressional affairs team should be built up in Washington and be well versed in not only public health and congressional affairs but also national security, outbreak response, and resilience. Before CDC announces guidance that broadly affects American public health and influences health recommendations, without delaying release and wherever possible, the agency should proactively engage and inform congressional leaders and staff.

Operational Capabilities

6. Strengthen partnerships that create greater coherence and predictability, quickly move CDC far closer to the front lines, and improve the agency’s service to all Americans.

CDC should create a high-functioning external partnerships office that can handle a high volume of communication and operational coordination between CDC leadership and external partners in calm and in crisis. It should serve as a single, efficient, and reliable portal for laboratories and other private sector entities.

A priority should be to accelerate the deployment of CDC staff to the field to assist state, tribal, local, territorial, and global efforts for rapid investigation. Using models that are in place at USAID and FEMA, Congress should permit CDC to change hiring practices to allow faster hires in crisis and more

flexibility to move people in the field, including through noncompetitive hiring of temporary staff during an outbreak response. This should also include seamless ways to onboard these staff to CDC as each response winds down in order to increase the number of people at the agency with experience successfully responding to outbreaks. CDC will also require more flexible funding to allow rapid mobilization of people to the field. Initiatives in this area may be linked to the U.S. Public Health Service reserves.

CDC should join with its partner organizations (e.g., ASTHO, NACCHO, BCHC, CSTE, APHL, APHA, and the CDC Foundation) to launch a rapid front-line engagement campaign with state and local public health partners. Such an outreach and consultation effort can (1) reset the understanding of the priorities and realities of those on the frontlines, including how to improve the equity of service delivery to populations which have been neglected (or remain skeptical or distant) due to political outlook, race, ethnicity, geography, economic status, and disability; (2) encourage follow-up and accountability regarding how \$3.2 billion in funding for local capacity building, mostly from the American Rescue Plan, is being invested and where staffing and infrastructure gaps remain; and (3) gather concrete ideas on how to accelerate action to share data bidirectionally.²⁶

CDC should substantially expand its programs and fellowships that embed professional hires into state and local agencies for extended rotations. For example, CDC should increase the size of the Public Health Associates Program from its peak of 200 per year to 1,000 per year. This could yield great positive impact at the local level, embedding hundreds of staff in service-learning programs in informatics, communications, community engagement, data analysis, data presentation, and other fields. Administrative procedures will need to be in place for these staff to seamlessly become regular CDC employees.

Too many CDC employees have little or no practical experience working in the field practicing day-to-day public health in a community. Increasing the workforce's experience in local and state entities will improve CDC's understanding of day-to-day workflow, challenges, and opportunities in disease response efforts. It will build long-term foundational relationships between CDC and leadership in the offices of governors and state health commissioners. These staff will fill urgently needed roles, particularly at the entry level. Rotating these staff back to CDC after a few years in the field will yield a workforce that approaches public health from a practical, action-oriented perspective. And, as opposed to the current reality where just a fraction of CDC leaders has state or local experience, these rotations would generate a new generation of CDC leaders who are more reflective of and aware of America's diversity and better equipped to serve its many constituencies.

The costs could be substantial and require additional administrative capacity, but the many benefits to CDC and its state and local partners would far exceed those costs. If communicated skillfully, such an initiative could win strong support from many governors and state and local health directors.

CDC should also enhance its ability to surge to the front lines of its global efforts, working in partnership with other countries and multilateral institutions to achieve U.S. goals. The agency is the pivotal U.S. health organization in these relationships, and its experts are in high demand from major bilateral and multinational partners. Clearer mechanisms and more robust budgets are needed to enable these interactions that are so essential to building health security capacity and, in crises, to providing situational awareness around local conditions.

7. Change the career incentive system to reward operational excellence, experience, and speed.

CDC's system for hiring, advancement, and promotion narrowly depends on accomplishments that are most fitting for academic or university systems, most pointedly on academic publication. This outsized premium on publication, while important for scientific achievement, can stymie speed, create barriers to releasing data quickly, and prevent information movement and rapid collaboration in the organization. The hiring system also makes it unnecessarily difficult to bring in senior people from industry or disaster response-oriented roles.

CDC is in the early stages of creating a system that rewards operational excellence in outbreak response that does not only require academic or publishing accomplishments, and Congress should acknowledge and endorse the successful and expedited completion of that transition. That does not mean that the agency should abandon the rewards and pathway to promotion for academic and scientific excellence as one route for moving forward in the agency. However, it needs new, equally strong pathways for advancement that reward operational speed, experience, and accomplishment alongside subject matter expertise. CDC should also change its process for deploying its people to respond to infectious disease emergencies so that all its potential crisis leaders and staff are more prepared and trained for the work they will do, and so that CDC does not have to rely primarily on internal volunteers to be part of its emergency response. Deployments should be expected and rewarded across the agency.

CDC should also invest in pandemic decisionmakers who are cross-trained in national security and public health. These people are invaluable in crises and in making the agency the most effective in interagency and White House decisionmaking efforts. This could be accomplished through dedicated recruitment, personnel exchanges with national security agencies, and a much larger Washington-based presence and staff.

The establishment of a small cadre of fully funded global epidemic response leaders, closely networked with similar teams in countries around the world, should be a priority both to strengthen the U.S. response and to ensure it is more tightly synchronized with the response by other countries in a future pandemic. CDC should play a leadership role globally in supporting the network of such interconnected leaders, including through regular drilling and engagement with regional partners.

8. Improve the speed and quality of data collection and reporting, particularly during a crisis.

Congress should provide CDC with the data authorities needed to fulfill its public health mission. In the absence of data authorities, data use agreements should be established between CDC and states that accelerate information movement at the first sign that a dangerous outbreak may be happening, even before the official declaration of an emergency. These data collection, reporting, and situational awareness capabilities are core responsibilities of CDC under the October 2022 National Biodefense Strategy and Implementation Plan.²⁷ The agency should prioritize the establishment of mechanisms to collect data along racial, ethnic, demographic, economic, and geographic dimensions. Improvements along these lines will be foundational to improving equity of access to services during future biological crises.

CDC needs far greater flexibility with respect to the PRA requirements when there is a crisis, including the ability to pursue a waiver even before a public health emergency is declared, when there are early indicators that a crisis is looming. In those instances, Congress should release the OMB from enforcing those restrictions.

CDC should work to integrate the many siloed surveillance systems to enable rapid visibility and confirmation of emerging pathogens, analysis of new threats, and the generation of concrete, actionable scenarios and options for policymakers. This will require accelerating efforts to digitize and increase the interoperability of data from different jurisdictions, including integration across public health, primary and clinical care, and clinical laboratory entities; efforts to improve wastewater surveillance; and investments in genomic sequencing and epidemiology, domestically and globally. Through the Data Modernization Initiative, CDC should work to make data sharing and standardization easy for states.

9. Ensure budget flexibility in the response to an infectious disease crisis.

At the start of a new response to an epidemic or pandemic, CDC struggles to find funding because it operates through a highly restrictive web of more than 160 program- or disease-specific funding lines under 13 treasury accounts, making it difficult and time consuming to redirect resources and people in a response. It needs flexibility to be able to move quickly in a response and deal with emerging challenges and problems. In the congressional budget process, there are two paths for addressing this issue that should both be addressed. The first is the commitment of sufficient funds to cover the main costs of the early phase of CDC's emergency response efforts, perhaps through the expansion of the Infectious Diseases Rapid Response Reserve Fund.²⁸ The second is the authority for CDC to redirect a small percentage of funds from other accounts to be used only in the event of a crisis—perhaps 3 to 5 percent of an existing account should be allowed to be used for crisis response, provided there is a clear accounting to Congress of what the funds are being used for. Reducing the number of treasury accounts would also make the budget process more efficient. Crucially, Congress should provide sufficient resources to the new CDC Cross-Cutting Public Health Infrastructure budget line so that state and local public health entities can build core disease-fighting capacities across disciplines with disease-agnostic funding.

Another useful tool for more flexibility in funding is OTA, which would equip CDC with the capability to use procurement instruments other than contracts, grants, or cooperative agreements in ways that are more flexible and enhance speed and innovation in partnerships with the private sector. OTA is essential for CDC to be able to bring in talent and to prototype and pressure test the new technology it will need to function effectively in an emergency.

Congress should forge a new annual funding mechanism for programs essential to public health defense that would transition away from emergency supplementals to sustainable and predictable public health preparedness. Such a change is essential to escape the cycle of crisis and neglect that plagues the field of health security. One option would be a Health Defense Operations budget designation that would exempt congressionally designated health security programs from the annual 302(a) spending allocation limits and future sequestration. Any such mechanism would require rigorous safeguards and accountability measures to ensure strong oversight by congressional appropriators and guard against budget reductions that offset new allocations.

As part of this budget transition, Congress should request that CDC submits a Professional Judgment Budget directly to Congress without the need for OMB engagement or approval, as the NIH does for several programs, which would allow the agency to clearly spell out what it forecasts, in the opinion of its scientific experts, as true requirements for PPR.

The CDC That America Needs

The country needs a high-performing CDC that can immediately rise to the challenges of new epidemics and pandemics and reduce the illness and mortality that they cause. The country needs a reset CDC that again leads domestically and globally in science and recognizes the importance of policy and diplomatic leadership. U.S. government leaders must clearly articulate these elements of CDC's role—failure to meet these challenges will impose untenably high costs. If CDC is left to struggle with a confused mission and inadequate capabilities, the nation as a whole—and Americans of all stripes—will unnecessarily suffer from preventable illness and death and disruption to family life, workplaces, schools, the national economy, and national security.

A foundational premise of the CSIS Commission's Working Group on the CDC is that Americans have ample reason to be quite worried. CDC, long a heralded asset, is at risk of decline and of becoming stigmatized and isolated, vulnerable to erosion of its standing and efficacy. Trust and confidence are at a low point, a sign of lack of confidence that CDC can fulfill its public health and federal responsibilities.

Americans need to pause and recognize that the peril that CDC faces puts the health and safety of the nation at risk. America needs a strong national public health agency to promote biodefense and protect the population from health threats. Policymakers need to carefully weigh what key actions are most needed, urgently and over the long term, to reset CDC so that it can truly protect the health of all Americans.

Fortunately, it is clear what needs to be done, in the immediate and long term, to reset CDC, and implementing the core elements of change is within reach. While change will not happen overnight, there is little time to spare. There is no choice but to urgently strengthen the requisite capacities that will protect Americans from infectious disease threats and help rebuild trust among the federal, state, and local partners—as well as the general public—to achieve the goals that are laid out in this paper.

CDC needs a strong and clearly understood mission that bridges domestic and global needs. It needs a major shift in incentives and culture that elevates speed, capability, and closer engagement with policymakers and frontline responders. The agency needs a guaranteed future talent base and essential capabilities that ensure the access and quality of data, that allow it to surge to meet rapidly scaling outbreaks, that ensure its ability to hire and deploy in emergencies, and that tap the innovative power of the private sector. It needs a far greater presence and integration in Washington decisionmaking that will more effectively represent its perspective in executive chambers and on Capitol Hill, as well as build national security prowess at CDC and among its staff. The agency also needs to become less centralized and distant from its state and local partners by intensifying front-line engagement and by embedding young CDC talent routinely into state and local public health structures on a much larger scale.

Fortunately, it is clear what needs to be done, in the immediate and long term, to reset CDC, and implementing the core elements of change is within reach.

This is a historic challenge that appeals to America's better angels. It is a challenge that can reach beyond partisanship to concentrate on finding pragmatic solutions that bridge political differences. That has been the national habit over many decades of policy toward Americans' health security and CDC. It can again be the habit. It was the national, commonsense choice in responding to the Challenger tragedy of 1986 and the successful restoration of NASA. It was the national, bipartisan response that brought FEMA back to high performance following the Hurricane Katrina debacle of 2005. For CDC today, it is a question of leadership and of whether there can be a determined and sustained effort to reset CDC that convenes leadership from the White House, HHS, and CDC with key figures from the House and Senate, of both parties, around a sound and focused reset strategy.

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