



U.S. SENATE COMMITTEE ON

HEALTH, EDUCATION,
LABOR & PENSIONS

RICHARD BURR, NORTH CAROLINA - RANKING MEMBER

Modernizing CDC: Ensuring a Strategic Approach and Improving Accountability

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POLICY BRIEF

Background: The Centers for Disease Control and Prevention (CDC) is responsible for protecting Americans from public health threats. As an international leader in advancing public health, in particular tracking and responding to emerging infectious diseases, public health officials and health care professionals turn to CDC for expertise when met with unique public health challenges. CDC's partnerships with international, state, and local public health officials and relationships with academic institutions provide the agency with the insight needed to serve as our nation's early warning system for emerging threats. Addressing the threats that Americans and people around the world currently face, as well as adapting to the continuously evolving public health threat landscape, requires the leadership, culture, and capabilities of CDC to remain flexible and innovative.

Vision for the Future

The COVID-19 pandemic is the most significant public health emergency in the last century. It has challenged the agency and our nation's public health and medical preparedness and response capabilities in ways not previously predicted or tested. Limitations of the country's response have revealed the gaps that must be urgently addressed. In preparing for the next public health threat, we need to take stock of the significant lessons learned from this response.

As Congress, federal and state health officials, and public health and medical emergency response experts think about how to improve preparedness, we must learn from the decisions that have been made during this response to determine how the United States' preparedness and response framework can be improved and strengthened.

Structural and cultural reforms at CDC are needed to ensure the organization is modern, nimble, mission-focused, and able to leverage cutting-edge science so that the United States is better prepared for the next threat that will come our way. CDC needs strong leadership, greater accountability, and a strategic approach to fulfill its public health mission and ensure that the United States is better prepared for future public health threats.

Strong, Accountable Leadership

Over the course of the COVID-19 response, mistakes were made by CDC that can be traced back to the organizational culture and sprawling structure of the agency.

The CDC is responsible for providing clear, concise information to the American people on public health threats like emerging infectious diseases. This information is only as effective as its messengers and its leaders. Throughout the pandemic response and across two administrations, CDC has provided delayed, conflicting, and confusing guidance on the ways in which Americans understand, respond to, and protect their families from the effects of COVID-19. The events below exemplify the disconnect between the leadership needed by, and the direction provided to, the American people during the COVID-19 pandemic:

- February 2020 – February 2020 – CDC begins regular media briefings on the status of the outbreak, only to significantly scale back these briefings within weeks¹
- February-March 2020 – CDC provides conflicting guidance on the circumstances under which Americans should be tested for COVID-19.² When testing supplies were limited, CDC even refused requests to test individuals who did not have relevant travel history.³
- March 2020 – Evidence from China emerged early on that, unlike SARS-CoV-1, this virus could be transmitted by individuals who were asymptomatic or pre-symptomatic.⁴ Asymptomatic spread was not accounted for in CDC’s limited testing guidance, which included lower respiratory tract symptoms and fever as criteria for a Patient Under Investigation (PUI).
- March 2020 – CDC provides conflicting information on the number of COVID-19 tests completed in the United States.⁵ The number of completed COVID-19 tests on CDC’s website only accounted for those run in public health laboratories and did not include tests conducted in clinical or commercial laboratory settings.⁶
- February-April 2020 – During February and March, CDC did not recommend that the general public wear face masks unless they were in direct contact with an individual with COVID-19.⁷ At the time, other public health experts were arguing that mask wearing could be beneficial and data coming out of China indicated that wearing masks was critical in preventing spread of COVID-19.⁸ On April 3, CDC recommended that Americans wear masks after new data emerged about COVID-19 spread by asymptomatic individuals.⁹
- February-March 2021 – Despite the World Health Organization recommendation for three feet of physical distancing inside the classroom, CDC released a phased mitigation operational strategy for K-12 schools on February 12, which recommended masking for all students, teachers, and staff and at least six feet of physical distancing between students.¹⁰ On March 19, CDC updated the physical distancing requirements in the K-12 guidance to allow for at least three feet between students in classrooms, but continued to recommend six feet between adults in schools and between adults and students.¹¹

¹ <https://www.cdc.gov/media/releases/2020/archives.html>.

² https://emergency.cdc.gov/han/2020/han00429.asp?deliveryName=USCDC_511-DM22015

³ <https://www.nytimes.com/2020/06/03/us/cdc-coronavirus.html?action=click&module=Top%20Stories&pgtype=Homepage>

⁴ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7088568/>

⁵ <https://www.help.senate.gov/hearings/an-emerging-disease-threat-how-the-us-is-responding-to-covid-19-the-novel-coronavirus> (01:15:00)

⁶ <https://www.cnn.com/2020/03/10/politics/alex-azar-americans-tested-for-coronavirus-cnntv/index.html>

⁷ <https://www.cdc.gov/media/releases/2020/t0212-cdc-telebriefing-transcript.html>

⁸ <https://www.sciencemag.org/news/2020/03/not-wearing-masks-protect-against-coronavirus-big-mistake-top-chinese-scientist-says>

⁹ <https://www.usnews.com/news/national-news/articles/2020-04-03/cdc-advises-all-americans-to-wear-cloth-masks-in-public>

¹⁰ <https://www.who.int/news-room/q-a-detail/coronavirus-disease-covid-19-schools>; <https://www.cdc.gov/media/releases/2021/t0212-cdc-update-covid-19.html>

¹¹ <https://www.cdc.gov/media/releases/2021/p0319-new-evidence-classroom-physical-distance.html#:~:text=CDC%20continues%20to%20recommend%20at,worm%2C%20such%20as%20when%20eating>

- March-May 2021 – On March 8, nearly three months after the first COVID-19 vaccine was authorized by the FDA, CDC started releasing guidance for vaccinated individuals. The March guidance stated that fully vaccinated people can visit with other fully vaccinated people, unvaccinated people who are not high-risk due to underlying health conditions, and do not have to quarantine or be tested following exposure to COVID-19 if asymptomatic.¹² On April 27, CDC updated its guidance to say that fully vaccinated individuals no longer need to wear a mask outdoors unless at a crowded venue.¹³ On May 13, the agency announced that fully vaccinated people no longer need to wear a mask or physically distance in any setting, indoor or outdoor, except where required by federal, state, or local law.¹⁴

Over the course of 2020, our scientific understanding of COVID-19 and the appropriate public health interventions to prevent spread of the virus evolved rapidly and continues to change in 2021. However, public health agencies must still provide clear guidance that is transparent in its explanation of the science and the reason for the change in recommendations so that the American people continue to trust in and rely on public health officials at the federal, state, and local level. The examples listed above outline the importance of building on the lessons learned from this public health emergency to improve communication, transparency, and public health leadership for the next threat.

Just as our country learned lessons from the Ebola epidemic in 2014-2016, we must also learn from the COVID-19 pandemic and rethink our response to novel pathogens. The Ebola epidemic in West Africa caught the global public health community off guard by its speed and size, and it also resulted in new knowledge of Ebola transmission and how the virus affects people beyond the initial period of infection.

The COVID-19 pandemic provides insight into some of the communication challenges between CDC and states and localities in the early days of the pandemic, a time when accurate and transparent communication was critical. These communication challenges between the agency and states, localities, and the general public have persisted throughout the response.

Similar challenges have also been noted with other federal entities during COVID-19 and documented during previous response after action reports, including the Crimson Contagion Functional Exercise conducted in 2019, which indicates that these are systemic issues.¹⁵ CDC should lead in our public health response activities by prioritizing the communication of transparent, accurate, and timely information based on the most up-to-date scientific information, while demonstrating openness to new information as it becomes available, either from the United States or other countries.

RECOMMENDATIONS:

- CDC needs ***strong, effective leadership*** to lead cultural change at the agency, ensuring its scientific integrity and relationship with the public as a trusted source for public health information are preserved. A key aspect of ensuring this type of leadership is ***accountability to Congress***. While Congress engages with and oversees the agency through authorizations and appropriations for its specific programs and hearings, more should be done to strengthen this relationship and enhance the accountability of CDC and its leaders.

¹²<https://www.cdc.gov/media/releases/2021/p0308-vaccinated-guidelines.html>

¹³<https://www.washingtonpost.com/health/2021/04/27/cdc-guidance-masks-outdoors/>

¹⁴<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html>

¹⁵ “Crimson Contagion Functional Exercise After-Action Report,” Office of the Assistant Secretary for Preparedness and Response, U.S. Department of Health and Human Services, January 2020.

Strategic Planning

CDC's specific activities are determined by a diverse set of directives from Congress through a patchwork of authorizing and appropriations laws with varying degrees of specificity, as well as an evolving interpretation of the scope of public health and CDC's role. Like many other agencies at the Department of Health and Human Services with a broad mission, strategic planning is a necessary activity to provide a mechanism for systematically reviewing and prioritizing programmatic activities to ensure alignment between the work of the agency and its stated strategic goals.

The publicly available version of CDC's Strategic Framework and Priorities (Framework) is a high-level summary and does not provide information about how the Framework is to be implemented within CDC. As a result, the degree to which CDC relies upon the Framework to prioritize its activities and measure progress toward goals is unclear.

CDC's website also indicates the Framework is not a comprehensive document by stating, "this strategy highlights and reinforces major efforts and goals and is not inclusive of all our important work."¹⁶ It appears in practice that the broad mission and structure of CDC allows each program to set its own priorities, which may not align with the agency's priorities.

This approach of allowing priorities to be driven at the program level without consideration of how such actions meet agency goals can be found in multiple types of CDC activities, such as the use of data collection, development of scientific recommendations, and programmatic overlap internally and with other agencies.

RECOMMENDATIONS:

- CDC needs a *strategic plan* to guide and prioritize the agency's work to align with strategically set goals and include accompanying performance measures. Such a plan must consider statutory requirements, overall mission, and how each program fits within the larger agency mission. By having a clear, focused strategy and performance measures in place, Americans can be assured that CDC's mission is well-defined and the actions being taken by the agency align with this mission.

Partnerships and Scientific Collaboration

In the early days of the pandemic, CDC sought to develop its own polymerase chain reaction (PCR) test to diagnose COVID-19 in respiratory samples. This is standard practice for CDC

The CDC-developed test included an additional component intended to improve the utility of the test. Other tests developed by international public health authorities early in the response and used successfully in other countries, such as South Korea, did not include this additional component.

Within days of the Food and Drug Administration (FDA) granting emergency use authorization to the CDC test, some states found a major problem with one of the testing components when they began trial runs of the testing kit in their laboratories. It was discovered that when CDC scaled up manufacturing to provide test kits to state public health laboratories, the lab conditions were not up to standard and likely resulted in contamination which led to issues with the tests.¹⁷ Tests developed by other international public health authorities did not experience similar issues when deployed for use.

¹⁶<https://www.cdc.gov/about/organization/strategic-framework/>

¹⁷https://www.washingtonpost.com/investigations/cdc-covid/2020/12/25/c2b418ae-4206-11eb-8db8-395dedaaa036_story.html

As demand continued to increase for COVID-19 tests in the United States, the FDA clarified its policy to allow more private companies and academic institutions to begin developing tests. Following this action and other steps taken by the Department of Health and Human Services to make more tests and related supplies available, access to testing began increasing dramatically, but it was too late. The delays related to the original CDC-developed test put our country days, if not weeks, behind in our ability to test for and track the spread of the novel coronavirus within the United States.

RECOMMENDATION:

- CDC must keep pace with scientific advancement and better fulfill its mission to protect the public health during future responses by developing more frequent and effective partnerships with private industry and academic institutions. Effective partnerships with non-governmental actors will help CDC leverage their capacities and capabilities, especially regarding the need for new technology and information systems. CDC should evaluate areas in which strategic partnerships could advance its public health preparedness mission for the future and encourage the establishment and success of these partnerships.