World Report



US CDC begins agency-wide changes after pandemic failures

An independent review made several recommendations for improving the public health agency. Susan Jaffe reports from Washington, DC

For the **report** see https://www. cdc.gov/about/organization/cdcmoving-forward-summaryreport.html The US Centers for Disease Control and Prevention (CDC) is on a mission to reorganise and modernise itself, so that its mistakes during the pandemic will not happen again. The aim is to make the nation's leading disease detective more nimble and accountable, and fortify its role as public health protector. But although some changes have been made, progress will be limited without support from the US Congress.

Panel: Key findings and recommendations from the CDC review

It takes too long for the CDC to publish its data and science for decision making

- Create an online mechanism for pre-publication delivery of science
- Expedite the review or approval process for scientific publications and data (including laboratory data) to match the needs of the emergency

The agency's turnover of staff during the COVID-19 response created gaps and other challenges for partners

- Increase the number of CDC leaders trained and ready to deploy to a response
- Require a minimum of 6-month rotation for leadership positions on the response; build a redundancy model of emergency staffing (ie, backup or co-lead staff in all key positions) to prevent response burnout and assure continuity in operations

The agency's guidance documents are confusing and overwhelming, and the website is not easy to navigate

- Produce plain-language, easy-to-understand implementation guidance documents that apply over multiple settings; reduce the number and length of guidance documents; include a brief scientific rationale or background in the implementation guidance with a referenced or accompanying Morbidity and Mortality Weekly Report, Science Brief, as necessary
- Restructure the agency web site and digital communication platforms to eliminate unnecessary content and focus on key target audiences with a primary emphasis on the public

${\rm COVID\text{-}19}$ uncovered the need for flexibilities that do not exist today at the CDC

Establish new authorities that will allow the CDC to be more nimble and work faster, such as public health and regulatory authorities mandating data collection from local jurisdictions, and human resource authorities with authority to hire faster, and ensure competitive salaries to recruit and retain for hardto-fill positions like data scientists

The CDC's Director, Rochelle Walensky. an infectious disease physician and research scientist appointed by President Joe Biden in January, 2021, commissioned an independent review of the CDC's pandemic record in April, conducted by James McCrae, Associate Administrator for Primary Health Care in the Department of Health and Human Services' Health Resources and Services Administration. "To be frank, we are responsible for some pretty dramatic, pretty public mistakes, from testing to data to communications", Walensky told her roughly 11000 staff when she unveiled a summary of the review's findings in August (panel).

Walensky has appointed Mary Wakefield, a former deputy secretary of the Department of Health and Human Services, to oversee implementation of its recommendations. Wakefield has so far avoided public scrutiny, working mostly behind the scenes until last week. She appeared at a virtual meeting of the newly reconstituted Advisory Committee to the Director, a group of outside experts that was dormant during the Trump Administration. She described strike teams that are identifying improvements in laboratory science, communications, public-health data, and the workforce, among other issues.

"We are on target to meet those goals", Walensky told *The Lancet* in an exclusive interview. Some changes are already in place and others should be completed by the end of the year. "One of the things that we heard from the initial report from Jim McCrae is that it was important for us to think about how we develop and deliver our science", said Walensky. The CDC's new Center for Forecasting and Outbreak Analytics "has been instrumental during monkeypox and helped us put forward four different technical

briefs", detailing the available data and forecasts, Walensky said. "At the same time, we recognise that in our own scientific clearance process, we needed to streamline, we needed to do things faster", she continued. "We are providing data faster, especially in outbreak situations like monkeypox." She mentioned posting data online before they were published about COVID-19 vaccine performance, as well as data on behavioural changes among populations at high risk of contracting monkeypox.

To improve laboratory quality, the CDC created an Infectious Disease Test Review Board earlier this year. The panel "reviews laboratory tests that are developed within the CDC before we share them outside the CDC to be sure that the test meets our quality standards and is suitable for their intended purpose", said Walensky. The Review Board recently approved tests used for the monkeypox and Sudan Ebola viruses.

The McCrae report also criticised the CDC's public guidance documents as "often long and overly complex". Walensky noted that the agency's Communications Director position was recently filled after it was vacant during the Trump years. Funding for the CDC communications infrastructure has not increased for at least a decade, she said, even though its challenges now include responding to public health "myths and disinformation" proliferating on social media. "I've always said we were going to lead with science", Walensky said. "Maybe I thought it didn't need to be said—but should have been—that science will change. Science will evolve, data will emerge."

The CDC is facing a new challenge from "the toxic combination of profound polarisation in society and the tools to spread misinformation at a grand scale", said Joshua Sharfstein, Vice Dean for Public Health Practice and Community Engagement at Johns Hopkins Bloomberg School of Public Health, and a member of the Advisory Committee to the Director. He said the CDC is planning to invest in communications, including studying which messages are most helpful. "Our audience now may not only be the public health community, but the American people at large", said Walensky.

In addition to conveying clear information more quickly, the CDC reorganisation is also focused on training "a response ready" workforce, Walensky said. "If there is another pandemic that affects hundreds of millions of Americans, can we—even in a heartbeat—scale up a response to 2500 people, which is where our COVID response was at any given time, so that we're trained and ready to qo?"

Whether the CDC is making the right changes depends on how its problems are defined. "You have to ask what's the diagnosis before you get to the treatment", said Tom Frieden, former CDC Director during the Obama Administration. He suggested one more priority for the CDC: "It's particularly important that CDC strengthen its independent voice and is not seen as part of any administration, Democratic or Republican."

Beyond the CDC's control

"There are things that CDC needs to do itself, and in fact, it's making a lot of progress, which isn't being widely recognised", Frieden continued. In response to the monkeypox outbreak, the CDC provided "superb data" and published a Morbidity and Mortality Weekly Report about the virus in "real time", said Frieden, who is now President and Chief Executive Officer of Resolve to Save Lives, a global health advocacy group. "But there are things beyond [the CDC's] control", he said, that only Congress can change. For example, he said the CDC budget contains more than 150 different spending categories and the Director cannot move money between them "so it's very difficult to respond to an emergency".

Another hurdle the CDC faces is the decentralised public health system in the USA. "We have over 3000 health departments in this country, all of which operate independently", said David Fleming, Clinical Associate Professor at the University of Washington School of Public Health, Seattle, WA, USA, and chair of the Advisory Committee to the Director. Multiple layers of bureaucracy can hinder the quick response to a public health emergency, as the pandemic demonstrated, said Fleming. The nation's public health system also needs updated data collection and surveillance capacities, added Fleming. "Because of insufficient funds, we still have 20th century data systems."

Walensky noted that the CDC can request health data from states and local governments, "but we can't compel or mandate data from those jurisdictions. That is shocking to many people". When the CDC finalised a JYNNEOS [monkeypox] vaccine strategy in June, 2022, it took 2 months to complete data use agreements with 61 jurisdictions, "so that we could finally see the data on who was getting vaccinated. For 2 months, we were making decisions about how we were distributing and allocating vaccine without any information necessarily on how that vaccine was being used."

Depending on Congress

The proposed 2023 federal budget has allocated a total of US\$10.5 billion to the CDC, an increase of \$2 billion. Half the increased budget would be dedicated to a range of public health activities including \$750 million to strengthen public health infrastructure at the local level, \$735 million for public health emergency preparedness cooperative agreements, and \$250 million to modernise public health data surveillance and analytics.

Walensky said the CDC is "actively engaged" in working with Congress to expand its influence "in order to be more nimble". Some of the expanded authority that the agency seeks is related to data collection, workforce hiring and pay, and contracts with state and local entities. "People have often said, well, you'll get the authorities when there's a public health emergency", said Walensky. "But we want to prevent the genie from getting out of the bottle. If it's emergency, the genie's already out of the bottle."

Instead of new authority, critics argue that the CDC needs guardrails to ensure that the agency adheres to what they say is its core mission tracking disease outbreaks, collecting health data, and supporting local public health operations. "Trust in public health [agencies] has been broken by the Biden administration's authoritarian actions to mandate vaccines [and] force masks on children...There is a lot of work to do to restore this trust, and I'm glad the CDC is recognising this need for change", said Cathy McMorris Rodgers, the senior Republican on the US House Energy and Commerce Committee's health subcommittee.

Democratic Representative Rosa DeLauro, who chairs the House Committee on Appropriations, praised Walensky for "conducting an agency-wide review that will position CDC to better respond to emerging public health threats, collect data, and keep Americans better informed and healthy". The House spending bill supports the review's key recommendations.

Whether the House funds are part of the final spending agreement due in December depends on negotiations underway on Capitol Hill in Washington, DC. In a statement, a US House of Representatives Democratic aide offered only a modest prediction, "We are confident we can meet the December 16 deadline."

Susan Jaffe