**Questions for Henry Walke, M.D., M.P.H.**

**Director – Office of Readiness and Response – Centers for Disease Control & Prevention**

November 14, 2024, Hearing: "Preparing for the Next Pandemic: Lessons Learned and The Path Forward"

**Questions from Rep. Miller-Meeks**

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Dr. Walke, I appreciate your efforts to ensure the CDC is prepared for the next pandemic. I know it is a matter of time until we face another disease outbreak, but hopefully we can focus on lessons learned from the past several years to improve our ability to catch infectious diseases early and quickly understand their transmission paths. One bright spot from the pandemic was the start of the National Wastewater Surveillance System, which the CDC runs. It began early on under the Trump administration and remains today. Can you speak to the importance of wastewater surveillance in terms of CDC's readiness and response efforts?

- Do you believe this program should be a permanent part of CDC's infectious disease and public health efforts?
- What type of information can the CDC glean from wastewater samples?
- How is this helpful for infectious disease and public health?

**Response:**
Wastewater is an important component of an enhanced national infectious disease surveillance system, providing additional community-level data that complements clinical and syndromic surveillance systems. Monitoring wastewater can provide an early warning signal for the introduction of new pathogens and for changes in infectious disease trends in a community. Wastewater monitoring data for infectious diseases helps local public health agencies identify outbreak trends early, direct prevention efforts to where they are most needed, and provide additional insight into disease spread that complements other public health surveillance data. Data from wastewater surveillance can inform public health action at the community level and empower individuals to take steps to protect themselves and their families. While the use of wastewater surveillance is not new, its use on a national scale is novel and CDC expects that the value and utility of this data will continue to grow as we expand its use to monitor for new and emerging infectious disease pathogens.

In 2020, CDC established the National Wastewater Surveillance System (NWSS) as an innovative and highly adaptable approach to community-level disease surveillance for COVID-19 to complement existing surveillance data and inform public health actions and decision making. Over the last four years, CDC has invested funding in every state, seven localities, certain tribal nations and tribe-serving organizations, and some territories to conduct wastewater monitoring for COVID-19. Jurisdictions actively use wastewater surveillance data to monitor for the presence and/or levels of virus circulating in their community and inform public health action. CDC and many jurisdictions publish wastewater monitoring information for infectious diseases on public-facing dashboards accessible by individuals and public health leaders at the state and local level. During the pandemic, wastewater surveillance was used to assess national level COVID-19 trends and track the emergence and spread of COVID-19 variants at

the community level. For example, Utah used wastewater variant monitoring to confirm the presence of Omicron (B.1.1.529) in Utah up to 10 days before it was detected through clinical sequencing.[1]

CDC wastewater surveillance expanded to include mpox during the 2022 outbreak response. About 380 wastewater sites in the United States are currently conducting mpox wastewater surveillance. In 2023, CDC further expanded wastewater surveillance to include RSV and influenza A and B, and is using wastewater data to support the ongoing H5N1 highly pathogenic avian influenza response. This data has been integrated into CDC's Respiratory Illness Data Channel and on CDC's National Wastewater Surveillance (NWSS) pages. With support from CDC, some jurisdictional partners have also been able to use wastewater surveillance in unique ways to take action. For example, the Oklahoma Department of Health used wastewater monitoring to confirm a 2024 outbreak of norovirus in a school when the cause of the outbreak could not be identified through other routine surveillance. Similarly, the CDC-supported Houston Wastewater Center of Excellence utilized respiratory viral wastewater data to inform local K-12 schools and families about current trends and plan voluntary vaccination clinics at schools, which also offered opportunities for families to catch up on other missed vaccinations.

CDC's wastewater surveillance program is currently supported solely through COVID supplemental funding. These activities have been pivotal in ensuring that our states and communities have the best possible data to inform public health action. For CDC to continue this critical capability for fiscal year 2025, it will take additional resources from Congress. The Fiscal Year 2025 President's Budget requests $20 million for wastewater surveillance, which will allow the agency to retain a smaller program that could surge to support responses to future outbreaks. Without this additional investment, CDC will not be able to support this critical situational awareness tool once supplemental funds are exhausted.

[1] Wastewater Genomic Surveillance Captures Early Detection of Omicron in Utah - PMC