

Fund the **National Wastewater Surveillance System** to support state and local governments protecting public health

March 2025



Wastewater surveillance is an efficient tool to track disease transmission in communities. The Centers for Disease Control and Prevention (CDC) established the National Wastewater Surveillance System (NWSS) to connect independent, local wastewater efforts to form a robust, sustainable national system. Since its inception in September 2020, NWSS has expanded to include data for multiple pathogen targets across more than 1,500 testing sites throughout the U.S. and its territories, covering 45% of the U.S. population.

CDC currently funds wastewater surveillance activities through supplemental funding, with planned support through September 2025. To help the U.S. effectively respond to existing and emerging infectious disease threats, we recommend that Congress appropriate \$130 million per year to CDC to fund NWSS.

How does wastewater surveillance help protect public health in the U.S.?

By detecting pathogen remnants shed into sewage, and excluding any human genomic markers to protect privacy, wastewater surveillance serves as an early-warning public health tool with several notable features:



Adaptable ~ Applicable to many pathogens, including viruses, bacteria, and fungi, and other health targets



Cost-effective ~ Helps to provide infection and other health trends when clinical testing is not available or financially feasible



Universal ~ Can provide information on disease trends in all sewered communities without requiring access to healthcare or testing



Comprehensive ~ Detects infection at all stages, including asymptomatic and symptomatic cases, for anyone connected to a sewer



Non-invasive ~ Doesn't require testing individuals and no human DNA is identified



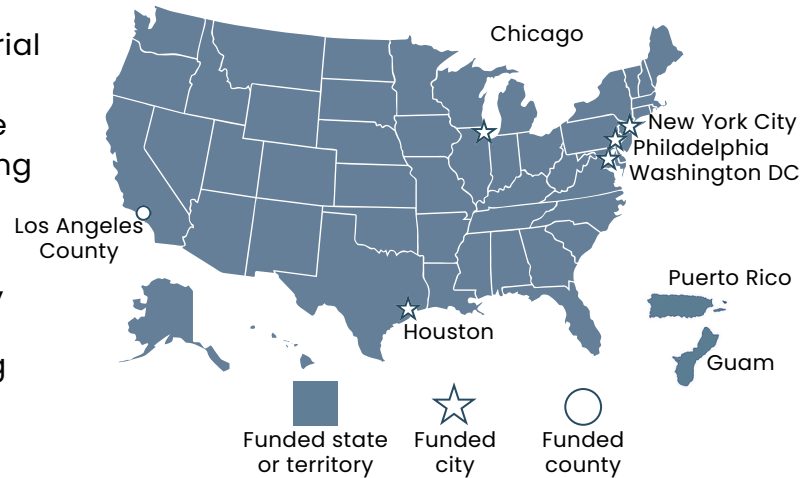
Timely ~ Enables early detection of new outbreaks or changes in community transmission trends

How has NWSS been successful so far?

In the past 4 years, the NWSS program has:

- Funded 50 state, 1 county, 5 city, and 2 territorial health departments for NWSS activities
- Established 6 Centers of Excellence to provide technical assistance and improve data sharing
- Expanded its scope from COVID-19 to provide data for other pathogens including influenza A, avian influenza A(H5), influenza B, respiratory syncytial virus, and mpox
- Established a public wastewater data sharing portal on cdc.gov/nwss
- Contracted with a commercial lab to provide testing at up to 400 sites nationally in areas that benefit from extra support for wastewater surveillance, such as in rural parts of America
- Supported the wastewater infrastructure sector by providing autosamplers and flow meters to small utilities to enable their participation in NWSS activities

CDC Funds Jurisdictions to Support Wastewater Surveillance



With funding and support from CDC, state and local health departments across the U.S. have used the NWSS wastewater information to:

Fill in clinical case data gaps and confirm trends in other public health surveillance data

Target deployment of testing and vaccine services

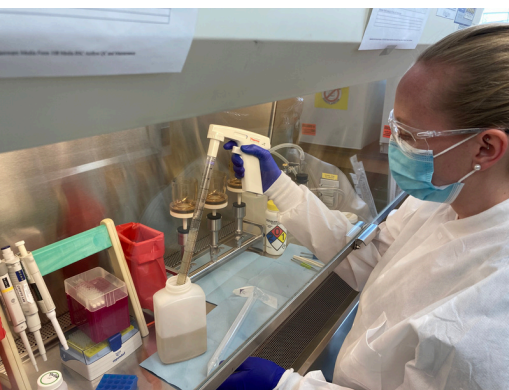
Alert healthcare providers about expected increases in COVID-19, flu, and RSV cases

Communicate with the public about respiratory virus trends, often through online dashboards

Thanks to their growing familiarity with wastewater data, these health departments are now exploring how to use wastewater information generated by NWSS for other pathogen targets in the future. These future targets may include **norovirus**, **Shiga toxin-producing *E. coli***, ***Candida auris***, **antibiotic resistance genes** and others.

What is needed to ensure the continued success and expansion of NWSS?

To protect the tremendous progress made in establishing this efficient public health surveillance system, we recommend that Congress appropriate \$130 million per year to CDC to fund NWSS.



This level of appropriations will enable CDC to:

- Maintain current national coverage and ensure capacity for routine wastewater surveillance and response needs;
- Expand surveillance to identify emerging public health threats, such as *Candida auris* and antibiotic resistance;
- Support state and local public health agencies in generating timely public health data needed for efficient decision-making; and
- Provide resources to the wastewater sector to enable their participation in NWSS.