



National Wastewater Surveillance System (NWSS)

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About CDC's National Wastewater Surveillance System (NWSS)

Wastewater monitoring is a valuable, efficient, and robust tool that public health officials can use to guide public health decision making across the nation.



**NATIONAL
WASTEWATER
SURVEILLANCE
SYSTEM**

CDC's National Wastewater Surveillance System (NWSS) provides the public health infrastructure to monitor infectious diseases through wastewater across the country. Wastewater monitoring data can help 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. Health departments, community leaders, and individuals can use wastewater monitoring data to make decisions about how best to protect their community.

**Number of Sites Reporting to
NWSS in the last two months**

1,239

**Estimated U.S. Population
Covered by NWSS**

129,000,000
(38.0%)

Explore Wastewater Data



Value of Wastewater Monitoring



Wastewater monitoring provides early detection of increasing cases.

Wastewater data can show changes in disease trends before trends are seen in clinical cases. This information can be used to prepare health care providers and hospital systems for upcoming increases in visits and hospitalizations and can inform other public health prevention efforts.



Wastewater monitoring is independent from medical systems.

Wastewater can detect infection in a community whether or not people have symptoms. Unlike other types of public health reporting, wastewater surveillance (monitoring) does not depend on people having access to healthcare, visiting a doctor when sick or availability of testing for an infection.



Wastewater monitoring is fast and efficient.

From toilet flush to results only takes about five to seven days. Wastewater testing at a single treatment plant can provide information on community-level disease trends for hundreds, thousands, even millions of people.



Wastewater monitoring has national coverage.

Wastewater monitoring is implemented in all 50 states, 3 territories, and 5 tribal organizations. Wastewater monitoring can be implemented in any community that is served by municipal wastewater collection systems.



Wastewater monitoring can be used to track emerging health threats.

Wastewater monitoring can be rapidly adaptable to track emerging health threats. Wastewater surveillance has been used to monitor changes in COVID-19 and mpox cases in communities across the United States. CDC is working to better understand how wastewater surveillance can also be used to detect and respond to other infectious disease threats like antibiotic resistance and foodborne diseases.



Wastewater monitoring can be used to track variants.

Wastewater surveillance can provide information on the variants that are present in a community. When new variants of concern arise, wastewater surveillance can provide an early warning that these variants may be spreading in communities.



Wastewater monitoring is complementary to other public health surveillance data

Wastewater surveillance data are most useful when used with other surveillance data. When reviewed together, wastewater and other surveillance data can provide a more complete picture of disease spread within a community.

Wastewater Data

- › [COVID-19 Wastewater Data](#)
- › [Mpox Wastewater Data](#)
- › [CDC's Wastewater \(NWSS\) Program](#)
- › [How Wastewater Monitoring Works](#)
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Partner Resources

- › [Sampling Strategy](#)
- › [Testing Methods](#)
- › [Data Reporting and Analytics](#)
- › [Interpretation and Use](#)
- › [Communication Resources](#)