The overall goal of the network is to rapidly detect SARS-CoV-2, the virus that causes COVID-19 disease, in specific communities via wastewater testing.

How Does Wastewater Testing Work?

1 Wastewater samples are collected from sewers and wastewater treatment plants, which represent all the people in that area.

2 The samples are processed and analyzed by a laboratory to check for the presence and amount of the SARS-CoV-2 virus.

3 Results help determine if the level of virus is increasing, decreasing or staying the same within this community.

4 Increased positive detections can help public health officials target prevention interventions in the community, which could include:
- Increased messaging and public awareness.
- Targeted clinical testing.
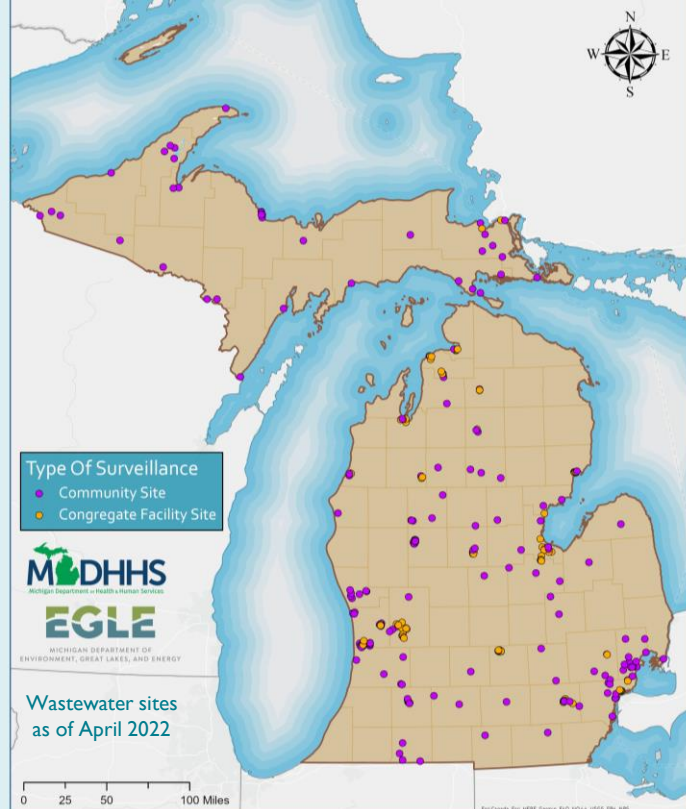- Increased vaccination efforts.

Contact

Michigan Department of Health and Human Services

Emerging and Zoonotic Infectious Diseases Section

MDHHS-SEWERNetwork@michigan.gov

Michigan.gov/COVIDWastewater

MDHHS
Michigan Department of Health & Human Services

EMERGING & ZOONOTIC INFECTIOUS DISEASE

SARS-COV-2 WASTEWATER TESTING

STATE OF MICHIGAN SARS-COV-2 EPIDEMIOLOGY WASTEWATER EVALUATION AND REPORTING NETWORK

Type Of Surveillance
- Community Site
- Congregate Facility Site

MDHHS
Michigan Department of Health & Human Services

EGLE
MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Wastewater sites
as of April 2022

0   25   50   100 Miles

Why are we testing wastewater for SARS-CoV-2?

Monitoring wastewater for SARS-CoV-2 can provide an early indicator for presence of disease in the community and can be used to track trends over time. This can be especially important as clinical testing rates can change over time. The virus is shed in human feces for several weeks, including before people become ill and in individuals who are infected but not showing symptoms. An increase in virus detected in wastewater can alert public health agencies of a potential surge in cases in a specific community and allow additional precautions to be put in place to prevent the spread of the virus.

The State of Michigan SARS-CoV-2 Epidemiology – Wastewater Evaluation and Reporting Network uses locally coordinated projects to test wastewater for SARS-CoV-2 virus shed into Michigan's public sewer systems. Since nearly 70 percent of Michigan residents rely on public wastewater systems, monitoring those systems can provide data on COVID-19 transmission in a large proportion of Michigan's population. Reviewing wastewater data, in addition to other types of COVID-19 data, can allow community officials to make more informed decisions.

By the Numbers

19 local projects include:

18 Public, private and academic laboratories

36 Local health departments and **5** tribal nations

434 Wastewater sample sites

At least one site in **58** Michigan counties plus the City of Detroit
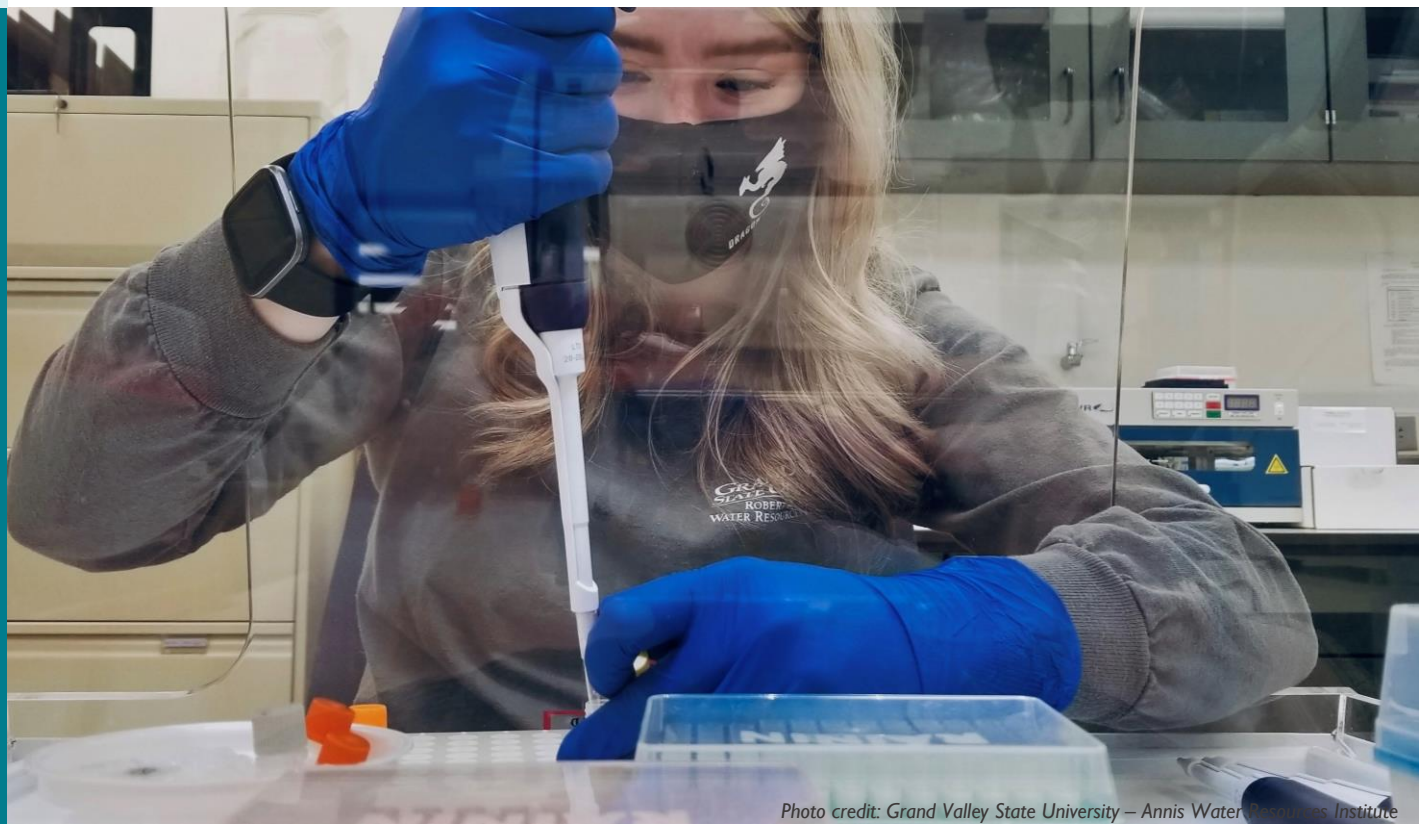

Photo credit: Grand Valley State University – Annis Water Resources Institute