

Wastewater monitoring updates to add new capabilities beyond COVID-19 and Twin Cities

Minnesota is updating and centralizing its COVID-19 wastewater reporting system. The updates will combine testing done in the metro area with a statewide monitoring system capable of detecting a variety of viruses in the general population, including COVID-19.

Wastewater surveillance of COVID-19 has become an important tool for monitoring trends with the virus, especially as the use of at-home tests has increased. These at-home test results are not generally reported to public health departments.

Beginning Sept. 1, Metropolitan Council, working as partners with the University of Minnesota Genomics Center (UMGC), will no longer be testing samples for SARS-CoV-2 (the virus that causes COVID-19). Testing will shift to the University of Minnesota Medical School and the Minnesota Department of Health (MDH) Public Health Laboratory.

For the last few years, the Metropolitan Council has worked with the UMGc to analyze and report weekly on the prevalence of the SARS-CoV-2 in wastewater entering the Metro Plant in Saint Paul. The University of Minnesota has also been monitoring 37 wastewater treatment plants across the state, including the Metro, with a public dashboard that is updated weekly called the [Wastewater SARS-CoV-2 Surveillance Study](#). That dashboard will continue to be updated.

This new approach is designed to be more sustainable and integrates early viral detection systems for Greater Minnesota. The MDH Public Health Laboratory will also implement a new assay to monitor for SARS-CoV-2 variants from wastewater. The changes fit with the [Center for Disease Control's national wastewater monitoring approach](#).

"As we address the long-term management of COVID-19 in our communities, we are updating how wastewater surveillance is done in the state," said Minnesota Commissioner of Health Dr. Brooke Cunningham. "The new approach will provide better statewide data for COVID-19 as well as future monitoring for other viruses."

"Going forward, the synergy between MDH and UMN will be a force multiplying effort that serves as an early warning system for pathogens that impact public health," said Mark Osborn, study lead and an assistant professor at the U of M Medical School.

"The work of analyzing and reporting on the prevalence of the SARS CoV-2 virus in the region's wastewater has been important and rewarding," said the Council's Environmental Services Division Director Leisa Thompson. "We've learned so much about how wastewater surveillance can and will contribute to public health. The Council will continue to participate in this vital partnership, by continuing to provide samples from an abundance of wastewater that we collect and treat."

The University is working with the MDH Public Health Laboratory to verify methods that will allow them to eventually add RSV, influenza A and influenza B to wastewater monitoring. State health experts are hopeful the expansion to monitoring other viruses will provide useful signals that combined with other disease surveillance can help officials respond more effectively to disease threats.