Wastewater Testing 101



What happens to the water after we flush the toilet, wash dishes, or take a shower? This used water, called wastewater, travels through pipes from our homes, schools, and workplaces to a treatment plant.



Viruses and bacteria are in our stool and urine, along with other things we consume, like medicine. When we use the bathroom, all of this enters the wastewater.



Before the wastewater is cleaned at a treatment plant, scientists can collect a sample and test it for chemicals, viruses, and bacteria in a community.



Scientists can learn a lot about a community's health by looking at what viruses or bacteria are in the wastewater, as well as how much. Public health and healthcare workers can use the information to help those communities.



For example, if a community's wastewater has high levels of the flu virus, local hospitals can take steps to prepare for more sick patients. Public health workers can encourage individuals in that community to get the flu vaccine.

Some communities already use wastewater testing on a regular basis to help respond to flu and COVID-19 outbreaks. In the future, wastewater testing may be used regularly to look for other diseases like measles or tuberculosis.

Those responsible for wastewater testing must be thoughtful in how they collect, study, and share information to ensure the protection of the public's interests. When done responsibly, wastewater testing can help understand and support a community's health.



