FOR IMMEDIATE RELEASE
March 31, 2022
Contact: Breeanne Agett
(716) 753-4590

Health Department Reports of Wastewater Surveillance Program

COVID-19 Levels Low in Jamestown and Dunkirk Wastewater

MAYVILLE, N.Y.: - The Chautauqua County Health Department reports that wastewater samples collected weekly since March 8, 2022, from the City of Dunkirk and City of Jamestown Wastewater Treatment Plants detected low levels of SARS-CoV-2, the virus that causes COVID-19.

Persons infected with COVID-19, whether or not they have symptoms, shed the virus in fecal matter. Wastewater testing is a nonintrusive and anonymous method to detect basic levels of COVID-19 in a community without relying on ill individuals to seek out testing.

“The wastewater surveillance program is an early warning system for managing COVID-19 as we transition to an endemic phase,” said Public Health Director Christine Schuyler. “Ongoing global surveillance gives us a better sense of how to respond to outbreaks of this disease because we can’t play catch up. We have to be prepared – not to isolate and quarantine people - but to mobilize staff and resources such as testing availability, PPE, the healthcare and long-term care systems, vaccination efforts, and first responders. A wastewater surveillance program is an important epidemiological tool in the communicable disease prevention toolbox.”

Raw (untreated) wastewater is collected weekly at the Jamestown Board of Public Utilities Wastewater Treatment Plant and the City of Dunkirk Wastewater Treatment Plant. Samples taken at the Jamestown plant represent waste from the entire City of Jamestown and the Village of Falconer. Samples taken at the Dunkirk plant represent waste from the entire City of Dunkirk. Samples are taken over a 24-hour period, then sent to the University at Buffalo Department of Civil, Structural & Environmental Engineering (UB) for analysis using Digital PCR technology.

“With rapid tests being widely used in the community, it is difficult for our department to monitor COVID-19 levels in the general community,” said Public Health Director Christine Schuyler. “This technology allows us to monitor COVID-19 trends and share the information with community members and health care providers.”

The PCR technology detects the number of SARS-CoV-2 RNA copies present in wastewater. During the three weeks of testing, levels were less than 800 copies per liter at both the Jamestown and Dunkirk wastewater treatment plants. According to researchers at UB, the number of copies per Liter is generally in the tens of thousands or hundreds of thousands range when COVID-19 cases start to increase.

“We are encouraged to learn that the findings from wastewater testing reflect the current CDC COVID-19 Community level of ‘low,’” added Schuyler. “We urge residents to continue to take steps to protect their health and the health of their families, depending on their individual risk factors.”
The COVID-19 Wastewater Monitoring program is being developed in partnership with the City of Dunkirk, City of Jamestown, UB, the New York State Department of Health, and the National Association of City and County Health Officials. Local data will be shared as a component of the Health Department’s weekly COVID-19 reports, and will also be included in the New York State Wastewater Surveillance Network Dashboard (https://mbcoli.shinyapps.io/SARS2EWSP/#) in the coming weeks.

The goals of “public health surveillance” are to describe the current burden and epidemiology of disease, to monitor trends, and to identify outbreaks and new pathogens.

**COVID-19 Wastewater Monitoring Data**

Dunkirk: COVID-19 Levels are **LOW**

![Dunkirk WWTP Graph](image1)

Jamestown and Falconer: COVID-19 Levels are **LOW**

![Jamestown WWTP Graph](image2)
As reported on Chautauqua County’s COVID-19 Data Dashboard, the current CDC COVID-19 Community Level is low, 1.6% of lab-confirmed COVID-19 tests were positive over the prior seven days, and 3 persons were hospitalized locally due to COVID-19 or COVID-19 complications.

Vaccination rates in various age groups continue to increase at a relatively slow pace.

### Chautauqua County Residents Vaccinated for COVID-19

<table>
<thead>
<tr>
<th>People Vaccinated</th>
<th>At Least One Dose</th>
<th>Fully Vaccinated (Completed Primary Series)</th>
<th>Percent of Fully Vaccinated Population with a Booster Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total County Population</td>
<td>65.8%</td>
<td>58.9%</td>
<td>52.8%</td>
</tr>
<tr>
<td>Population ≥ 5 Years of Age</td>
<td>69.5%</td>
<td>62.3%</td>
<td>N/A</td>
</tr>
<tr>
<td>Population ≥ 12 Years of Age</td>
<td>73.2%</td>
<td>65.6%</td>
<td>54.5%</td>
</tr>
<tr>
<td>Population ≥ 18 Years of Age</td>
<td>75.0%</td>
<td>67.0%</td>
<td>56.5%</td>
</tr>
<tr>
<td>Population ≥ 65 Years of Age</td>
<td>95.0%</td>
<td>83.2%</td>
<td>72.1%</td>
</tr>
</tbody>
</table>

Source: https://covid.cdc.gov/covid-data-tracker/#county-view
Data as of March 29, 2022

For more information on COVID-19, please visit [https://chqgov.com](https://chqgov.com).

###