NC WASTEWATER MONITORING NETWORK QUARTERLY NEWSLETTER | MAY 2025

STATEWIDE WASTEWATER SURVEILLANCE

Wastewater Viral Activity Level (WVAL) 30 for Core Pathogens COVID-19 20 FLUA WVAL RSV 10 25 24 24 24 24 22 25 24 24 2 24 2 2 3 32 Sep 14, 2 Sep 21, 5 Sep 28, 2 Oct 5, 1 Oct 12, 0 Oct 19, 0 Oct 26, 0 Nov 2, 0 Nov 2, 0 Nov 2, 0 Nov 23, 0 Nov 23, 0 Nov 30, 2 Dec 7, 2 Dec 14, 2 Dec 21, 2 Dec 28, 2 Jun 8, Jul 20, Jul 27, Jul 27, Jul 27, Aug 3, Aug 17, Aug 17, Aug 24, Aug 21, Sep 7, S Jun 15, Jun 22, lun 29, Jul 6, Jul 13, Jul 20, Jul 27, Jan 4, Jan 11, Jan 18, Feb 1, Feb 8, Feb 15, Mar 1, Mar 8, Mar 15, Mar 22, 25, 29 12, ceb 2 Apr Aar un lan pr

WVAL Levels COVID-19: Up to 1.5 - Very Low; greater than 1.5 and up to 3 - Low; Greater than 3 and up to 4.5 - Moderate; Greater than 4.5 and up to 8 - High; Greater than 8 - Very High WVAL Levels for FLUA: Up to 1.6 - Very Low; Greater than 1.6 and up to 4.5 - Low; Greater than 4.5 and up to 12.2 - Moderate; Greater than 1.2 and up to 20.1 - High; Greater than 20.1 - Very High WVAL Levels for FSV*: Up to 1.2-Very Low; Greater than 1.2 and up to 2.4 - Low; Greater than 2.4 and up to 4.0 - Moderate; Greater than 4.0 and up to 6.6 - High; Greater than 6.6 - Very High *Values are modified from those on the CDC website.

Trends in core pathogens over the last quarter

- **COVID-19** WVAL peaked in February (high) and has been low since mid April.
- Flu A levels peaked in late January through mid-February and have been declining since.
- Flu B detections started appearing in January and increased in March.
- **RSV** levels peaked in early January and have been declining since.

Mpox clade I detections

- Detections were found in samples collected on March 25, March 28, and April 8 from a treatment plant in Greenville, NC. No clade I clinical cases have been reported to date.
- See the <u>NCDHHS Press Release</u> from April 22, 2025 for more details.

ANNOUNCEMENTS FROM THE NCWMN TEAM

PLEASE TAKE A FEW MINUTES TO FILL OUT OUR FEEDBACK SURVEY

Thank you to those who have already responded!

NEW TARGETS OPTIMIZED

Academic partners at the UNC Institute of Marine Sciences have optimized the assays for **West Nile** and **measles**.

UPCOMING EVENTS

- WEF's <u>Wastewater Disease Surveillance Summit</u> will be held June 3 & 4, 2025 in Los Angeles & online
- WEF's <u>Southeast Regional Wastewater</u> <u>Surveillance Workshop</u> will be held August 5 & 6 in Houston (in person only)

SEEKING VOLUNTEERS FOR CENTER OF EXCELLENCE ADVISORY BOARD

We are assembling an advisory committee to guide the direction and prioritize activities and research of the NCWMN CoE. We are seeking **3 wastewater utility** representatives, **5 local and state health department** representatives, **4 academic** partners, and **2 other** key partners. If interested, please contact Ariel.Christensen@dhhs.nc.gov.

WASTEWATER TREATMENT PLANT PARTNER SPOTLIGHT

WIL LAWSON FROM OWASA



Director of Wastewater Management for OWASA, Wil holds an Earth and Environmental Science Degree with a certificate in Waste Management from NC A&T State University. He also holds several NC Wastewater related certifications.

How are you involved in wastewater-based epidemiology efforts within NC? Our plant has been providing samples for a couple years now in this monitoring effort.

What are you most excited about for the future wastewater-based epidemiology? Just continuing to build awareness of what is going on in our community behind the scenes to a certain degree.

What's something about you, personally or professionally, that people might be surprised to know? Workaholic, but enjoys spending time with my 4 kids.

VOICES FROM THE COMMUNITY

NC RESIDENT SHARES HOW WASTEWATER SURVEILLANCE HAS IMPROVED THEIR LIFE

"As an immunocompromised woman, current wastewater surveillance data is crucial for me ... The NC Wastewater Monitoring Dashboard has been a **trusted bright light** in NC public health the past several years. It is a gem that is not available in every state and I do not take it for granted ... My family uses NC's wastewater surveillance data to **choose when to schedule non-urgent doctor and dentist appointments [and] to decide whether we attend group activities or not.** Knowing the level of community infections is the difference between going blind into a Covid surge or **being armed with correct and current information** to increase measures to stay safe and healthy."

- Anonymous dashboard user

STATE OF THE SCIENCE

<u>ASTHO Report: Framework for Addressing Ethical Considerations in Infectious Diseases</u> Public Health Wastewater Surveillance

This framework focuses on ethical values and concerns related to wastewater surveillance and provides questions to guide practitioners in ethical analysis of a program or decision.

<u>MMWR Notes from the Fleld: Detection of Vaccine-Derived Poliovirus Type 2 in Wastewater -</u> <u>Five European Countries, September - December 2024</u>

Wastewater detections and sequencing identified the importation and source of vaccinederived poliovirus type 2. No human cases were found in association with these detections, highlighting the usefulness of wastewater to supplement other surveillance methods.

<u>MMWR Notes from the Fleld: Genomic and Wastewater Surveillance Data to Guide a Hepatitis</u> <u>A Outbreak Response - Los Angeles County, March 2024-June 2024</u>

Wastewater concentrations of hepatitis A virus suggested that additional cases may be present in the community that were not detected through clinical surveillance. This prompted additional outbreak response and case-finding measures.