

REVISED GUIDANCE ON WASTEWATER SURVEILLANCE FOR POLIOVIRUS

The [Water Environment Federation](#) (WEF) strongly supports utility participation in wastewater surveillance when the data generated can be used to support public health decision-making. The recent poliovirus (PV) wastewater testing in a few US locations has highlighted the unique challenges that PV presents to utilities. WEF offers the following guidance on this issue, which supersedes our September 27, 2022 guidance:

1. The detection of PV serves as a reminder that influent wastewater contains various infectious agents. WEF, therefore, recommends that workers in contact with wastewater continue to take appropriate safety precautions, such as using personal protective equipment, following hygiene practices, and completing job safety assessments. *WEF also recommends that workers ensure they are vaccinated for poliovirus and other relevant pathogens.* Wastewater staff should speak with their healthcare providers if they have any questions about their vaccination status.
2. Community vaccination rates for poliovirus are generally high, with [more than 90% of children being fully vaccinated against polio by two years of age](#), so widespread polio transmission is not expected in the U.S. Wastewater surveillance for poliovirus in areas with high vaccination rates may provide limited useful information to public health officials and may even cause confusion due to detection of poliovirus from international travelers who recently received the oral PV vaccine. *Utilities should only initiate a PV wastewater testing campaign in coordination with their state and/or local health department* to ensure that the PV wastewater data will be used appropriately for public health action.
3. As part of the global PV eradication effort, the [National Authority for the Containment of Poliovirus](#) (NAC) at the [U.S. Centers for Disease Control and Prevention](#) (CDC) is tasked with developing guidance to prevent the spread of polio in the U.S. In November 2022, NAC released their [Interim Guidance for Non-Laboratory Facilities that Collect, Handle, Store, and Transport Potentially Infectious Materials in Areas Where Ongoing Poliovirus Positive Samples are Being Detected](#) (Interim Non-Lab Guidance). The Interim Non-Lab Guidance outlines reporting requirements and recommended risk mitigation strategies that apply to any water resource recovery facilities (WRRFs) in a “vaccine-derived PV potentially infectious material (VDPV PIM) geographic area”, as defined in the guidance. While the vast majority of WRRFs in the US are not currently in a VDPV PIM geographic area, the status could change if VDPV is detected in either local clinical or wastewater samples. Therefore, *utilities should be prepared to follow the Non-Lab Guidance.* CDC’s National Wastewater Surveillance System team will coordinate with health departments and WEF to communicate with WRRFs about future changes in their VDPV PIM geographic area designation, if any.

For more information on safety precautions in wastewater, please see [Safety, Health, and Security Standards for Water Resource Recovery](#) or the free [Key Safety Information for COVID-19 and other Biohazards](#).

HOW THIS GUIDANCE DIFFERS FROM THE PREVIOUS VERSION

WEF now conditionally supports wastewater surveillance for poliovirus, where appropriate, if utilities:

- coordinate closely with their health department partner, and
- are familiar with the [relevant poliovirus containment guidance](#) developed by the National Authority for the Containment of Poliovirus.

HOW THIS GUIDANCE IS THE SAME AS THE PREVIOUS VERSION

WEF continues to recommend that workers exposed to wastewater are vaccinated for poliovirus.

Please accept our appreciation for all the work utilities do to keep our communities healthy and thriving. Email Anna Mehrotra, Director of WEF’s Wastewater Surveillance Program, with any questions at nwbe@wef.org.