Water Environment Federation
the water quality people®

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GUIDANCE ON WASTEWATER SURVEILLANCE FOR POLIOVIRUS

The Water Environment Federation (WEF) strongly supports wastewater surveillance for monkeypox virus and SARS-CoV-2 to support public health decision-making. Although the recent detection of poliovirus (PV) in wastewater samples from areas in New York state provides further evidence of the potential value of wastewater surveillance, PV presents several unique challenges. WEF offers the following guidance on this issue:

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. Public health concerns—and the value of wastewater surveillance for PV—are likely limited to communities with low vaccination rates.
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 is tasked with developing guidance to prevent the spread of polio in the U.S. NAC's guidance for handling infectious material was developed primarily for research and clinical laboratories. ***Implementation of NAC guidance at wastewater utilities may have unintended consequences for routine sampling and analysis for permit compliance and process control***. Efforts are now underway to clarify the applicability of the guidance to wastewater utilities, but there is still uncertainty at the moment.

KEY MESSAGES

WEF continues to support wastewater surveillance for SARS-CoV-2 and monkeypox.

WEF's recommendations to utilities for poliovirus are as follows:

- **Delay surveillance of poliovirus until further clarity on poliovirus containment guidance is developed to avoid potential complications and confusion.**
- **Ensure workers exposed to wastewater are vaccinated for poliovirus.**
- **Continue collecting samples for monkeypox and SARS-CoV-2 surveillance.**

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.

WEF is aware that utilities are being approached to provide samples for wastewater surveillance of PV. ***At this time, WEF recommends that wastewater utilities delay surveillance of poliovirus until further wastewater-specific NAC guidance can be developed.*** Importantly, WEF fully supports wastewater surveillance and encourages continued surveillance of SARS-CoV-2 and monkeypox virus.

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.