

## Polio Virus Infection Detection and Prevention

<b>DATE:</b>	9/28/2022
<b>TO:</b>	Health Alert Network
<b>FROM:</b>	Denise A. Johnson, M.D., FACOG, FACHE, Acting Secretary of Health
<b>SUBJECT:</b>	Polio Virus Infection Detection and Prevention
<b>DISTRIBUTION:</b>	Statewide
<b>LOCATION:</b>	n/a
<b>STREET ADDRESS:</b>	n/a
<b>COUNTY:</b>	n/a
<b>MUNICIPALITY:</b>	n/a
<b>ZIP CODE:</b>	n/a

This transmission is a "Health Advisory," and provides important information for a specific incident or situation; may not require immediate action.

**HOSPITALS:** PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; **EMS COUNCILS:** PLEASE DISTRIBUTE AS APPROPRIATE; **FQHCs:** PLEASE DISTRIBUTE AS APPROPRIATE **LOCAL HEALTH JURISDICTIONS:** PLEASE DISTRIBUTE AS APPROPRIATE; **PROFESSIONAL ORGANIZATIONS:** PLEASE DISTRIBUTE TO YOUR MEMBERSHIP; **LONG-TERM CARE FACILITIES:** PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL, AND NURSING STAFF IN YOUR FACILITY

### **SUMMARY**

- The Pennsylvania Department of Health (DOH) is alerting healthcare providers, laboratories, infection control specialists, and local health departments about an unvaccinated adult with poliovirus infection and acute flaccid paralysis along with wastewater detection in adjacent counties reported [July 2022 in Rockland County, New York](#).
- DOH urges healthcare providers to consider polio as a possible cause of sudden onset of limb, facial, oropharyngeal, or respiratory muscle weakness. Especially in persons who are not vaccinated or who are under-vaccinated for polio and have traveled to areas with higher risk of polio or who have had contact with such persons.
- If providers have a clinical suspicion for a case of polio after they have evaluated a patient, they are to contact their local or state health department to discuss the case and to determine testing.
- Healthcare providers should immediately identify and schedule appointments for patients in your practice who are not up to date on poliovirus vaccine.
- If you have any questions, please call PA DOH at 1-877-PA-HEALTH (1-877-724-3258) or your local health department.

### **Background**

On July 18, 2022, a case of vaccine derived, not travel related poliovirus with acute flaccid paralysis was confirmed in an [unvaccinated adult in Rockland County, New York](#). This was the first case of vaccine derived poliovirus in the United States since 2013. [Results](#) of wastewater testing of treatment plants in Rockland and surrounding counties also detected poliovirus that was genetically related to the patient's stool sample. A case of vaccine derived polio in an unvaccinated person along with related poliovirus detected in wastewater from surrounding counties indicates that there is circulating poliovirus in the community and there is a risk that

others may become ill. It is important for providers to quickly identify possible cases of polio and most importantly, to make sure that all patients are up to date with polio vaccine.

### Clinical presentation of Polio

- Infections with poliovirus occur in patients who have not been vaccinated or who are under vaccinated. Most people are infected with poliovirus will not have any visible symptoms. One out of four people with a poliovirus infection will have flu-like symptoms. These mild symptoms usually last 2 to 5 days and then completely resolve.
- The following are indications on a physical exam that there is the possibility of rare but serious complications to a polio infection:
  - Acute flaccid limb weakness, often asymmetric
  - Proximal muscles affected more than distal muscles
  - Low muscle tone decreased or absent reflexes
  - Difficulty speaking or swallowing
  - Respiratory distress

### Laboratory Testing for Polio

- The Gold standard test for poliovirus is two whole stool and two oropharyngeal/nasopharyngeal (OP/NP) swabs each taken at least 24 hours apart during the first 14 days of symptoms
- Diagnostic MRI can be helpful in identifying polio lesions

Providers who have a patient with a suspected case of polio should call their local health department or the PA DOH at 717-787-3350 to discuss the case and determine testing

### Vaccination to Prevent Polio

- The CDC [recommends](#) that all children receive at least 4 doses of the Inactivated Polio Vaccine (IPV). Those doses occur at age 2 months, 4 months, 6-18 months, and 4-6 years. Infants and children should complete the routine poliovirus vaccination series before traveling to areas where the risk of acquiring polio is elevated.
- All adults should be fully vaccinated against polio. All unvaccinated adults should receive a 3-dose series with 4 weeks between doses one and two and 6 months between doses two and three.
  - The CDC [recommends](#) a single lifetime booster dose of IPV for adults who were previously vaccinated and who are at a higher risk of exposure to polio virus include:
    - Laboratory and health care personnel who handle specimens that might contain polioviruses or who are treating patients who could have polio
    - Traveling to places where polio is endemic or epidemic
- Keeping patients up to date on their polio vaccination is the most important way providers can prevent polio.

If you have any questions, please call PA DOH at 1-877-PA-HEALTH (1-877-724-3258) or your local health department.

Categories of Health Alert messages:

**Health Alert:** conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory:** provides important information for a specific incident or situation; may not require immediate action.

**Health Update:** provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of September 28, 2022 but may be modified in the future.