



NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE
Ashwin Vasani, MD, PhD
Commissioner

2022 Health Alert #20: Update on Poliovirus in New York City

- An unvaccinated adult with poliovirus infection and acute flaccid paralysis was reported in Rockland County, New York, highlighting the critical importance of being up to date with recommended immunizations.
- Testing of sewersheds in New York City indicate likely circulation of poliovirus in the city.
- Immediately identify and schedule appointments for children in your practice who are behind on poliovirus and other routine immunizations.
- Report all Acute Flaccid Myelitis to the NYC Department of Health and Mental Hygiene's Provider Access Line at 866-692-3641. If you suspect paralytic polio, report the case immediately.

August 12, 2022

Dear Colleague,

On July 18, 2022, a case of poliovirus with acute flaccid paralysis was confirmed in an unvaccinated adult in Rockland County, New York. The infection was not travel-related. Paralytic cases are an indicator of likely underlying poliovirus transmission in a community.

Poliovirus is an enterovirus spread by the fecal-oral route and less commonly by respiratory droplet transmission. Infection can lead to aseptic meningitis, paralysis, permanent disability, and death. Most people with infection will not have symptoms but can still transmit the virus. One in four people will have flu-like symptoms, one in twenty-five will have aseptic meningitis, and one in two hundred will develop symptoms of paralysis. An infected person may transmit the virus to others before and up to 2 weeks after symptom onset. The virus can persist in an infected person's feces for many weeks. People who are exposed to poliovirus are at risk for infection 3 to 6 days after exposure; paralysis typically occurs 7 to 21 days after exposure.

The Rockland County case is a case of [vaccine-derived poliovirus](#), the first in the U.S. since 2013. Vaccine-derived poliovirus is a strain of the weakened poliovirus that was included in oral polio vaccine and that has continued to replicate and change over time so it behaves more like the wild or naturally occurring virus. Vaccine-derived poliovirus emerges in populations with low vaccination coverage and affects people who are unvaccinated. Although no cases of polio have been reported in New York City (NYC), testing of sewersheds in NYC indicate presence of polioviruses in the city.

Pediatric vaccinations have not returned to pre-pandemic levels, leaving many children at risk of vaccine preventable diseases. **We urge you to immediately identify and schedule**

appointments for children in your practice who are behind on polio, varicella, and other routine immunizations.

The U.S. uses the inactivated poliovirus vaccine (IPV) only, an inactivated vaccine that cannot cause polio or paralysis. In NYC, IPV coverage for children ages 0 to 59 months with at least one dose is 93.3%, and 86.2% of children 6 to 59 months have three or more doses. Coverage with three doses of IPV among children ages 6 to 59 months varies by neighborhood and there are areas where coverage is low (see [map](#) here), for example: 56.3% in 11206, 58.0% in 10280, 58.4% in 11233, 62.5% in 11205, and 65.4% in 11211. It is critical that all, unvaccinated children receive IPV vaccine immediately to decrease their risk of polio.

IPV is the best way for New Yorkers to protect themselves and their children against poliovirus. IPV is a required vaccine for daycare and school attendance. The four-dose IPV series should be administered at ages 2 months, 4 months, 6 to 18 months, and 4 to 6 years (this last dose is required for kindergarten entry). Additional information on intervals and catch-up schedules can be found [here](#). IPV can be given at the same time as other vaccines.

Most adults do not need polio vaccine because they were already vaccinated as children. Vaccine has been available in the U.S. since 1955. Adults born before then are also likely to be protected from having been exposed to poliovirus before vaccine was available. Adults who know that they were not vaccinated as children should receive a [series of three doses of IPV](#). Infants and children should complete the routine poliovirus vaccination series before traveling to [areas where the risk of acquiring polio is elevated](#). Detailed guidance on vaccination for children and adults traveling to areas of elevated risk can be found [here](#). Adults who were previously vaccinated and are at [higher risk of exposure to poliovirus](#), including laboratory and healthcare workers who handle specimens that might contain polioviruses and healthcare workers treating patients who could have polio can get one lifetime booster dose of IPV.

There are tools in the [NYC Online Registry](#) to help you identify your unvaccinated patients and send text messages, print letters for mailing or generate a line listing of patients with phone numbers to call. You may contact cir@health.nyc.gov and the Health Department will assist your practice, as needed. Practices participating in the Vaccines for Children program can order additional IPV for their eligible patient population.

Consider polio in people who had a known exposure to poliovirus, or had recent travel to Rockland County or country where the risk of polio is elevated, particularly if the person is unvaccinated, who present with:

- Meningitis, without other known cause, especially if enterovirus testing is positive; or
- Acute flaccid myelitis (AFM), an acute onset of limb weakness and loss of muscle tone and reflexes with lesions in gray matter of the spinal cord and may include cranial nerve abnormalities with facial or eyelid droop and difficulty swallowing or speaking, which can be caused by several viruses and non-infectious causes

Report all AFM and suspected polio infections to the NYC Department of Health and Mental Hygiene's Provider Access Line at **866-692-3641**. If you suspect paralytic polio, report the case immediately. The Health Department will provide guidance on specimen collection, also listed [here](#), for testing at [NYS Wadsworth Center](#). Testing for other routine pathogens, including enteroviruses, should be performed by the treating facility, as indicated. If poliovirus infection is suspected, promptly implement contact and standard isolation precautions and instruct household members to remain home while waiting for test result. See [here](#) for additional clinical and diagnostic information about poliovirus infection.

Thank you for promoting and protecting the health of New Yorkers.

Sincerely,

Jane R. Zucker, MD, MSc
Assistant Commissioner
Bureau of Immunization
Division of Disease Control