



Information Regarding Evidence of Immunity for Poliovirus

Date: January 8, 2025

Public Health Message Type: ☐ Alert ☐ Advisory ☐ Update ☒ Information

Intended Audience: ☒ All public health partners ☒ Healthcare providers ☒ Infection preventionists
☒ Local health departments ☒ Schools/childcare centers ☐ ACOs
☐ Animal health professionals ☐ Other:

Key Points

- The New Jersey Department of Health (NJDOH) has noted an increase in serologic testing to assess poliovirus immunity. Serology is **not recommended** because of increasingly limited availability of antibody testing against type 2 poliovirus.
- [Vaccination](#) is the best way to prevent poliovirus infection.
- Healthcare providers are encouraged to ensure that anyone unvaccinated, incompletely vaccinated, or with an unknown polio vaccination status complete the routine polio vaccine series, especially before travel to destinations considered at increased risk for polio.
- At this time, the NJDOH has NOT been notified of any suspect polio cases among New Jersey residents.

Background

The New Jersey Department of Health (NJDOH) would like to remind providers about the importance of staying up to date on immunizations, following best practices for polio immunizations, and maintaining vigilance for the re-emergence of vaccine-preventable diseases not routinely identified in the United States, such as polio. At this time, the NJDOH has NOT been notified of any suspect polio cases among New Jersey residents. However, international destinations have circulating poliovirus and, in June 2022, symptomatic [poliovirus transmission was confirmed](#) in an unvaccinated immunocompetent adult resident of New York.

[Poliovirus](#) is very contagious, occurring person-to-person via the fecal-oral or oral-oral routes. Persons infected with poliovirus are most infectious in the days immediately before and after the onset of symptoms, but poliovirus may remain present in the stool for up to 6 weeks. Approximately 25% have mild signs and symptoms compatible with other acute viral illnesses, e.g., sore throat, fever, tiredness, nausea, headache, stomach pain. Symptoms can take up to 30 days to appear, during which time an infected individual can be shedding virus to others. Approximately 75% of poliovirus infections are asymptomatic, however, asymptomatic individuals can still transmit to others. Though rare, some polio cases can result in paralysis or death.

[Vaccination](#) is the best way to prevent poliovirus infection. [Inactivated poliovirus \(IPV\) vaccine](#) was licensed for use in 1955 and was used extensively from that time until the early 1960s. IPV vaccine is highly effective in producing immunity to poliovirus and protection from paralytic poliomyelitis. Ninety percent or more of vaccine recipients develop protective antibody to all three poliovirus types after 2 doses, and at least 99% are immune following 3 doses.

Healthcare providers are encouraged to ensure that anyone unvaccinated, incompletely vaccinated, or with an unknown polio vaccination status complete the routine polio vaccine series, especially before travel to destinations considered at increased risk for polio. The Centers for Disease Control and Prevention (CDC) [Travel Alerts](#) regarding polio have been issued for specific countries within [Africa and Asia](#).

While serology can sometimes be helpful when immunization records are not available (e.g., people evacuated due to natural disasters), providers should review the ACIP/CDC recommendations for serology testing and ensure they are ordering the appropriate tests (e.g., it is never appropriate to order an IgM to assess vaccine-induced immunity). As a reminder, serology test should only be performed if the tests are FDA-approved and CLIA certified. For example, **the use of serology to assess immunity for people with no or questionable documentation of poliovirus vaccination is not recommended** because of increasingly limited availability of antibody testing against type 2 poliovirus. If an individual at risk believes they are unimmunized, and records cannot be easily and quickly obtained, they should receive a 3-dose IPV series.

Polio Vaccination Recommendations:

All individuals – children and adults – who are unvaccinated or incompletely vaccinated against polio should be vaccinated according to the [ACIP routine and catch-up schedules](#).

Children:

- Four doses of IPV, one dose at each of the following ages:
 - 2 months old
 - 4 months old
 - 6 through 18 months old
 - 4 through 6 years old

Adults (≥18 years):

- Most adults have likely already been vaccinated against poliovirus during childhood.
 - Healthcare providers, schools, colleges, prior employers, or the military (if enlisted) may have records of immunization history. [Tips for patients on finding immunization records](#)
 - An individual may also be included in their state's immunization registry such as the New Jersey Immunization Information System ([NJIIS](#)). Providers who administer vaccines to patients are strongly encouraged to become NJIIS users and submit administration data. NJIIS immunization records will then also be accessible to the patient through the Docket app (available for free download via [Apple App Store](#) or on [Google Play](#)).
- However, adults who know or suspect that they are unvaccinated or incompletely vaccinated against polio should complete their polio vaccination series with IPV:
 - Two doses separated by 1 to 2 months, and

- A third dose 6 to 12 months after the second dose.
- Individuals with one or two doses of polio vaccine in the past should get the remaining one or two doses.
- Individuals who are fully vaccinated and are at increased risk of poliovirus exposure, including planning to travel to countries where there is an increased risk, may receive a single lifetime booster dose of IPV.

Children and Adults Vaccinated Outside the U.S.

CDC recommends that children and adults who may have received poliovirus vaccination outside the United States meet the U.S. recommendation for poliovirus vaccination that includes protection against all three poliovirus types. OPV doses administered after April 1, 2016, should not be counted as trivalent unless written documentation specifies that the dose was trivalent. Please review the guidance available on the [CDC website](#) for people who received OPV and people who received fractional IPV doses.

Resources:

NJDOH:

- September 7, 2023, NJLINCS Message: Polio Vaccine Documentation (please see message in full following this message)
- [Polio website](#)
- [Polio Provider Information Document](#)
- NJLINCS Health Alert Network – sign up for messages: <https://phm.njlincs.net/>

Immunize.org [Polio Fact Sheet](#)

CDC:

- [Polio website](#)
- Manual for the Surveillance of Vaccine-Preventable Diseases: Chapter 12: [Poliomyelitis](#)
- Epidemiology and Prevention of Vaccine-Preventable Diseases, The Pink Book (14th Edition): Chapter 18 [Poliomyelitis](#)
- MMWRs:
 - [Guidance for Assessment of Poliovirus Vaccination Status and Vaccination of Children Who Have Received Poliovirus Vaccine Outside of the United States](#)
 - [Use of Inactivated Polio Vaccine Among U.S. Adults: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2023](#)



Polio Vaccine Documentation

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☐ Animal health professionals ☒ Other: Parents

The New Jersey Department of Health has been receiving inquiries regarding the validity of documented doses of Oral Polio Vaccine (OPV) for children coming from out-of-country.

As a reminder, the World Health Organization (WHO) recommended a change to the polio vaccination strategy, prioritizing the use of Inactivated Polio Vaccine (IPV) over OPV in routine immunization programs. Cases of vaccine-derived wild poliovirus type 2 led to the global switch from trivalent OPV to bivalent OPV in April 2016. This change was part of the global effort to eliminate all forms of polio, including vaccine-derived strains.

According to the WHO only the trivalent OPV vaccine administered prior to April 1, 2016, are acceptable. Any bivalent or unknown OPV doses administered after this date should not be counted as a valid dose and should be repeated. Serology tests are no longer available for poliovirus type 2 therefore they cannot serve as proof of immunity. The Centers for Disease Control and Prevention (CDC)/Advisory Committee on Immunization Practices (ACIP) recommends the age-appropriate U.S. IPV schedule which protects against poliovirus types 1, 2, and 3. All children and adults who are unvaccinated or incompletely vaccinated against polio should be vaccinated with IPV according to the [ACIP routine and catch-up schedules](#) (revised June 2023).

Please see below for additional resources and references.

RESOURCES AND REFERENCES

- New Jersey Department of Health - Polio, nj.gov/health/cd/topics/polio.shtml
- CDC Vaccines and Immunizations, cdc.gov/vaccines/
- CDC Vaccine Recommendations and Guidelines of the ACIP, cdc.gov/vaccines/hcp/acip-recs/index.html
- New Jersey Department of Health Vaccine Preventable Disease Program, Immunization Requirements, nj.gov/health/cd/imm_requirements/

CONTACT information

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