This message is intended for all healthcare providers in Los Angeles County. Please distribute as appropriate.

**Key Messages**

- A case of acute flaccid paralysis caused by Vaccine-derived poliovirus type 2 (VDPV) was reported in an unvaccinated immunocompetent individual from Rockland County, New York in July 2022.
- VDPV has been detected in wastewater samples in NY State, Israel, and the United Kingdom, suggestive of community circulation.
- To prevent the re-emergence of this disease in our community, identify and schedule appointments for children and adults in your practice who are behind on poliovirus and other routine immunizations. There is no treatment once infected other than supportive care.
- Consider polio in symptomatic patients who recently traveled to an area where there is a risk of polio, especially if they are unvaccinated.
- Report all polio, suspect polio, and Acute flaccid myelitis to Los Angeles County DPH by phone within 24 hours.

**Situation**

Poliovirus and its related diseases have been eliminated in the United States due to high vaccine uptake. However, on July 18, 2022, poliovirus was confirmed in an unvaccinated immunocompetent adult resident of New York hospitalized with flaccid lower limb weakness. Vaccine-derived poliovirus type 2 (VDPV) was isolated from the patient and identified from wastewater samples in 2 counties in New York State. The infection was not travel-related. It is the first case of VDPV in the U.S. since 2013. See [MMWR](https://www.cdc.gov/mmwr).

**Background**

Poliovirus is an enterovirus spread by the fecal-oral route and less commonly by respiratory droplets. Humans are the only natural reservoir for poliovirus. An infected person may transmit the virus to others before and up to 2 weeks after symptom onset. Asymptomatic people can be contagious, and the virus can persist in feces for many weeks. Most people infected with poliovirus never get symptoms. One in four have flu-like symptoms which usually last 2 to 5 days, then resolve spontaneously. 1-5% will have aseptic meningitis; fewer than 1% will develop weakness or paralysis in their arms, legs, or both which can lead to permanent disability and death. The incubation period for non-paralytic symptoms is 3 to 6 days. The onset of paralysis typically occurs 7 to 21 days after exposure.

VDPV is a strain related to the weakened live poliovirus that is included in oral polio vaccine (OPV). If allowed to circulate in under- or unimmunized populations for long enough, or replicate in an immunodeficient individual, the weakened virus can revert to a form that causes illness and paralysis. VDPV emerges in populations with low vaccination coverage and affects people who are unvaccinated. OPV has not been used in the US since 2000. We believe that LA County is currently at low risk for circulation of polio, but it is important that vaccinations remain up to date to ensure that it cannot emerge.
Vaccination

Vaccination with inactivated poliovirus vaccine (IPV) is the best way to protect patients against poliovirus. IPV can be given at the same time as other vaccines.

Children

Pediatric vaccination rates have not returned to pre-pandemic levels, leaving many children at risk of vaccine preventable diseases. IPV is required 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. IPV vaccination is required for school entry in California unless there is a documented medical exemption. Additional information on intervals and catch-up schedules for Children and Adolescents can be found here.

Adults

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 1955 are also likely to be protected from having been exposed to poliovirus. However, adults who know that they were not vaccinated as children should receive a series of three doses of IPV.

Adults who are at higher risk of exposure to poliovirus, including laboratory and healthcare workers who handle specimens that might contain polioviruses and/or treat patients who could have polio, who were previously vaccinated can get one lifetime booster dose of IPV. Those who were incompletely vaccinated should complete the 3-dose series. Visit the CDC webpage Polio Vaccination Recommendations for Specific Groups to see a list of those who are at higher risk of exposure and other details, including accelerated vaccination schedules.

Adults and children who plan to travel to areas of elevated risk

Infants and children should complete the routine IPV series before traveling to areas where the risk of acquiring polio is elevated. Adults who are unvaccinated, incompletely vaccinated, or whose vaccination status is unknown, should be vaccinated. Adults who completed the polio vaccine series as children should receive a one-time booster dose. Detailed guidance for travelers, including accelerated schedules, can be found here.

Actions Requested of Providers

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

- Use the California Immunization Registry (CAIR) tools to help identify your unvaccinated child and adult patients and generate a list of their phone numbers or print letters or cards for mailing. See CAIR Reminder/Recall User Guide for instructions. If you need help, contact CAIRHelpdesk@cdph.ca.gov. If you are not enrolled in CAIR, we strongly urge you to enroll - see How to Enroll in CAIR2.
- Explain the importance of unvaccinated or under vaccinated children being vaccinated as soon as possible to decrease their risk of polio. Reassure concerned patients that IPV is an inactivated vaccine that cannot cause polio or paralysis.
- If you participate in the Vaccines for Children (VFC) program, you can order additional IPV vaccine if needed when submitting your next order.

Consider polio in people who had a known exposure to poliovirus, or who recently traveled to Rockland County, New York or a country where the risk of polio is elevated.

Consider the diagnosis especially if the person is unvaccinated and presents with:

- Meningitis, without other known cause, especially if enterovirus testing is positive; or
- Acute flaccid myelitis (AFM) - acute onset of flaccid limb weakness without a known cause, with loss of muscle tone and reflexes with lesions in gray matter of the spinal cord. AFM may include cranial nerve abnormalities with facial or eyelid droop, difficulty swallowing or speaking, and a hoarse or weak cry. Additional symptoms, and clinical and diagnostic information are on the Poliomyelitis and How to Recognize AFM CDC webpages for healthcare providers.
Testing

As other causes of AFM are far more likely, the treating facility should test for other routine pathogens, including enteroviruses, as indicated. If polio is suspected, submit specimens to the Public Health Laboratory who will process them and send to CDC. DPH will provide guidance on specimen collection. If polio is suspected because patients have traveled to a region where it is circulating, this should be mentioned when cases are reported in order to expedite polio testing at CDC.

Isolation precautions

If poliovirus infection is suspected, promptly implement contact and standard precautions within the healthcare setting. Instruct household members to remain home while waiting for test results.

Reporting

Los Angeles County DPH Acute Communicable Disease Control:
Report all polio, suspect polio, and AFM within 24 hours by phone
• Weekdays 8:30am–5:00pm: call 213-240-7941.
• After-hours: call 213-974-1234 and ask for the physician on call.

Long Beach Health and Human Services:
• Weekdays 8:00 am-5:00 pm: call 562-570-4302.
• After hours: call the duty officer at 562-500-5537.

Pasadena Public Health Department:
• Weekdays 8:00 am-5:00 pm: call 626-744-6089.
• After hours: call 626-744-6043.

Additional Polio Resources

• CDC Poliomyelitis for Healthcare Providers: Webpage
• CDC Polio Vaccine Recommendations for: Providers | Public | Travel
• California Immunization Registry: Webpage | Reminder/Recall User Guide

This communication was sent by Sharon Balter, MD, Director, Division of Communicable Disease Control and Prevention, Los Angeles County Department of Public Health.

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