Health Advisory: Polio Vaccination

September 1, 2022

Situational Update

CDC recently reported the diagnosis in July 2022 of paralytic poliomyelitis in an unvaccinated, immunocompetent adult living in a suburb of New York City, along with detection of poliovirus type 2 in wastewater in 2 counties in the New York City region, both of which have low polio immunization rates (59-60%) among young children. New York City has also recently identified poliovirus in its wastewater, suggesting likely local circulation of the virus, and is urging all its residents to stay up to date with polio vaccination.

No cases of polio have been reported in San Francisco or California. Despite the COVID-19 pandemic, the proportion of San Francisco children entering Kindergarten with at least 3 doses of polio vaccine has remained high (97.7% for 2019-20 and 96.3% for 2021-22). Nonetheless continued vigilance and attention to routine vaccination remains important since any gaps in vaccine protection resulting from missed or incomplete vaccinations could become more consequential should poliovirus begin circulating again locally.

Background

Most polio infections are mild or asymptomatic. As a result, poliovirus can spread silently in a population without detection for months or years. Sporadic serious illness can result in paralysis and death, especially in unvaccinated children. Children who contract polio and appear to fully recover can develop pain, weakness and paralysis as adults decades later, called post-polio syndrome.

Inactivated polio vaccine (IPV) is highly immunogenic and effective in preventing polio disease and is the only type of polio vaccine currently licensed in the USA. It is available as a monovalent vaccine (IPOL) or as a component of several combination childhood vaccines. The oral polio vaccine (OPV), a live-attenuated vaccine product, is no longer available in the USA but is still used in other countries and is often present in the vaccination history of persons born in the USA or abroad. Routine childhood vaccination schedules provide excellent lifelong protection. Widespread public health campaigns led to the near eradication of polio in the last century, but in some parts of the world with incomplete vaccine coverage, polio has persisted.

CDC has recently published comprehensive information on polio vaccination schedules for children and adults residing in the United States.
• Children are routinely recommended to receive 4 doses of polio vaccine, with the final dose on or after age 4 years and at least 6 months after the previous dose. Those who have not yet started or are delayed on their polio vaccinations should follow the CDC recommended catch-up schedule.

• Adults who are unvaccinated or lack any documentation of previous polio vaccination need 3 doses of IPV. Those who are incompletely vaccinated should complete their remaining polio vaccinations for a total of 3 doses. Adults who have completed 3 doses of polio vaccine and who are at higher risk of exposure to poliovirus can get 1 lifetime booster of IPV; however this booster is not necessary for local SF residents at this time unless they meet criteria for higher risk situations, for example adults traveling to countries with epidemic or endemic polio.

Actions Requested of SF Clinicians

1. Ensure that all children, adolescents, and adult patients are up to date with polio vaccination as described above.

2. Consider polio in the differential diagnosis of patients with sudden onset of limb weakness with history of fever and/or gastrointestinal illness, especially in incompletely vaccinated persons or those with recent international travel.

3. Immediately report any suspected or confirmed case of polio to SFDPH Communicable Disease Control at (415) 554-2830.

Additional Resources

• ACIP recommendations Updated August 2009

• Guidance for Assessment of Poliovirus Vaccination Status and Vaccination of Children Who Have Received Poliovirus Vaccine Outside the United States, MMWR January 13, 2017

To view or sign up for SFDPH Health Alerts, Advisories, and Updates visit www.sfcdcp.org/healthalerts