

Health Alert

Measles Outbreaks and Measles-Mumps-Rubella (MMR) Vaccination

May 9, 2019

According to the Centers for Disease Control and Prevention (CDC), there have been 764 reported cases of measles in 2019, the greatest number of cases since measles was eliminated in 2000. The majority of measles cases are in New York City and New York state, which are primarily among [unvaccinated people in Orthodox Jewish communities](#) and associated with travelers who brought measles back from Israel. Globally, there are >112,000 reported cases across 170 countries. There have not yet been any cases in Philadelphia, but cases have been reported in Pittsburgh. Given frequent travel between Philadelphia and affected locations, there may be opportunities for measles to spread to our community. MMR vaccination is the most important strategy to prevent ongoing transmission and reduce the likelihood of an outbreak in Philadelphia.

SUMMARY POINTS

- There are multiple measles outbreaks across the U.S. and worldwide.
- Two MMR doses are needed to prevent and control measles outbreaks.
- Area healthcare providers should ensure all patients are up-to-date on MMR vaccine.
- Providers can give a 2nd MMR dose to persons who have received one MMR vaccine dose.
- Notify PDPH (business hours: (215) 685-6742, after hours: (215) 686-4514) of any patient with confirmed or suspected measles.

Measles Prevention

Measles is a highly contagious viral respiratory illness characterized by a prodromal phase with high fever, malaise, the three “C”s (cough coryza and conjunctivitis) and Koplik spots, followed by a descending maculopapular rash. Symptoms usually develop 8 -12 days after exposure (range: 7–21 days). Infected persons can spread measles 4 days before until 4 days after the rash appears. Illness is often self-limited but serious complications can occur including, pneumonia, encephalitis (1/1,000 cases) and death (1-2/1,000 cases). There is no treatment for measles but it is prevented by MMR vaccine. The effectiveness of one MMR dose is high (95%), but 2 MMR doses are needed to prevent and control measles outbreaks. Providers should:

- Ensure all patients are [up-to-date on MMR vaccine](#). All children without a medical contraindication should receive one MMR dose at age 12-15 months and a second MMR dose at 4-6 years.
- Children ages 1-4 years and adults who have received one MMR vaccine dose can receive a second dose (at least 28 days after the first dose), especially if there is planned international travel, domestic travel to outbreak affected areas or potential exposure to individuals from outbreak-affected communities.
- Infants 6 -11 months of age should receive a dose of MMR vaccine prior to international travel or travelling to U.S. locations affected by current outbreaks.
- PDPH Vaccines for Children (VFC) and Vaccines for Adults at Risk (VFAAR) providers should order MMR needed for your patients through the PhilaVax inventory module. If you have questions about ordering vaccine, contact Jillian Brown at Jillian.Brown@phila.gov.
- Review [resources](#) for information about where insured and uninsured persons can receive MMR in Philadelphia, including area pharmacies who provide immunizations.

Because case identification is imperative for measles control, providers should also:

- Consider measles in patients presenting with febrile rash illness and clinically compatible measles symptoms (cough, runny nose, and conjunctivitis).
- Ask about recent domestic and international travel and history of measles exposures in their communities.
- Notify PDPH of any patient with suspected or confirmed measles infection for case investigation and to obtain approval for PCR testing at the PA Public Health Laboratory. To report, call (215) 685-6742 during business hours or (215) 686-4514 (after hours, ask for Division of Disease Control on-call staff).

Resources

- CDC Measles Information for Healthcare Providers: <https://www.cdc.gov/measles/hcp/index.html>