



Measles Guidance for Health Care Providers

May 2019

When to suspect measles: criteria to consider

Signs/symptoms:

- temperature of 101°F (38.3°C) or higher
- cough, coryza and/or conjunctivitis
- Koplik's spots, which may or may not appear on the buccal mucosa within 2-3 days
- Maculopapular rash, which usually starts on the face day 3-5 after symptom onset and spreads to trunk and extremities, duration of rash \geq 3 days. Immunocompromised patients may not exhibit rash or may exhibit an atypical rash
- Other symptoms may include malaise, anorexia, lymphadenopathy and diarrhea (especially in infants)
- Complications include otitis media, pneumonia, febrile seizures and encephalitis

Exposure: contact with a measles case or travel to an endemic area within the past 3 weeks

Vaccination history: most susceptible include infants too young to have been vaccinated (< 1 year), children with only one dose MMR, adults born after 1957 who have not had an MMR vaccine or documented disease, adults who only had inactivated vaccine (given in 1963-1967), and those with compromised immune systems

If you suspect measles

- Call ACHD (412-687-2243) if you suspect measles in an Allegheny County residents or 877-PA HEALTH for residents of neighboring counties
- Should a suspected case present for care, place a mask on patient and isolate immediately
- Arrange for exam in isolated area. The exam room should not be used for at least 2 hours after patient departs
- Ask ACHD or PADOH for approval to test at the state health department laboratory. If approved:
 - Collect specimens:
 - Throat swab or nasopharyngeal swab for rRT-PCR testing - send specimen in viral or universal transport media (VTM/UTM)
 - Urine for rRT-PCR testing – collect minimum of 50 mL in sterile container
 - Serum for measles IgM & IgG testing (minimum of 5 mL in red-top or serum-separator tube)
 - Label all specimens with name and DOB and store in refrigerator

- Complete PA BOL lab forms if available
- Ask hospital to send specimens to PA BOL or ask health department to pick up and ship using cold packs
- Ask patient to wear mask to house and stay home for 5 days after rash onset or until test results are available

Presumptive Evidence of Immunity

- Born in the US before 1957
- Documentation of receipt of one MMR for children aged 12 months to 4-6 years
- Two doses of MMR for children 4-6 to 18 years
- At least one dose of MMR or another live measles vaccine for healthy adults except post-secondary students and health care workers (see below) who require two doses
- Documentation of a positive measles IgG titer
- Lab evidence of measles disease

Evidence of Immunity for Health Care Workers

Please ensure your staff, including health care providers and any employees working in a clinical area such a clerical, cleaning and maintenance staff, are full protected. If staff are exposed and do not have evidence of immunity, they will be furloughed on days 5 through 21 after exposure.

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- Documentation of a positive measles IgG titer
- Lab evidence of measles disease

Who Should Be Vaccinated?

- Children aged 12-15 months who have not received the first dose of MMR
- Children aged 4-6 years who have not received a second dose
- Adults who have not yet been vaccinated
- Post-secondary students who have not received 2 doses

MMR Recommendations for international travel or visiting a community with an on-going measles outbreak

- Children between 6 months and 1 year of age should receive one dose. This dose will not count toward the primary series and two additional doses after one year of age will still be required.
- Children >1 year who have received a first dose should get a second dose if >28 days since the first dose have elapsed
- Adults born in or after 1957 with one prior dose should get a second dose before travel; those with no prior doses should get their first. Those with 2 prior doses do not need additional vaccine.
- Adults born before 1957 do not need vaccine.

Post Exposure Prophylaxis for Those with Known Exposure to a Measles Case

- None needed if exposed person has presumptive evidence of immunity
- MMR given to **nonimmune** individuals within 72 hours of exposure can prevent measles disease:
 - For infants between 6 and 11 months of age, a dose of MMR can be given but will not count as part of the primary series
 - Children >1 year who have received a first dose can get a second dose if >28 days since the first dose have elapsed
 - Adults born after 1957 without any doses should get a dose
- Immune globulin (0.50 mL/kg, max 15 mL) given within 6 days of exposure for high risk, nonimmune exposed individuals can reduce the likelihood of measles disease and complications:
 - For infants under 6 months of age, IM
 - For nonimmune pregnant women and severely immunocompromised individuals, IVIG is recommended