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 > 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 as clerical, cleaning and maintenance staff, are fully 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