Alaska Public Health Alert
Measles Confirmed in Fairbanks – What Alaska Providers Should Know

AKPHAN
June 9, 2015

All suspected or confirmed measles cases must be reported immediately to the Alaska Section of Epidemiology at (907) 269-8000 or 800-478-0084 (after-hours)

Case Report
On June 9, a measles case was confirmed in Fairbanks. Alaska health officials believe there is potential for wider community exposure, putting non-immune persons at risk for infection.

An adult with recent travel to central Asia developed a rash several days after arriving in Fairbanks, Alaska on May 31. Polymerase chain reaction (PCR) testing for measles RNA virus was positive. Non-immune persons who were in close proximity to the infected person may be at risk of developing measles. This person might have been infectious while in several locations in Fairbanks, May 31 through June 7; see press release for specific locations and dates (available on the Section of Epidemiology Measles webpage at: http://www.epi.alaska.gov/id/measles).

Federal officials will be contacting persons who may have been exposed on airlines outside of Alaska. The patient was on a flight to Fairbanks that originated in Seattle and did not transit in Anchorage.

Measles Basics
Measles is a highly infectious viral respiratory disease that spreads via the airborne route and through direct contact with respiratory secretions. Measles starts with a fever, runny nose, cough, red eyes, and sore throat, and is followed by a rash that typically starts on the face and descends to involve the trunk and limbs. About 30% of people who get measles will develop one or more complications including pneumonia, ear infections, or diarrhea. More serious complications, including death, can occur. Complications are more common in adults and young children.

**Incubation period:** Symptoms typically start to appear 8-12 days (range: 7-21 days) after exposure, with rash onset typically occurring at 14 days

**Infectious period:** 4 days before rash onset through 4 days after rash onset

- Clinicians should advise adult patients or the parents of child patients to call ahead before visiting a clinic for care, to avoid exposing others in waiting areas.
- Clinicians should ensure that adults, or the parents of children, with suspected measles should avoid exposing other people during the entire infectious period.
Laboratory Diagnosis

- **Contact SOE immediately to facilitate testing:** 907-269-8000, or 800-478-0084 afterhours
- Obtain a throat or nasopharyngeal swab; use a viral culturette and place into viral transport media (other media types can inhibit viral growth).
- Draw 7-10 ml of blood in a red-top or serum separator tube; spin down serum if possible. NOTE: capillary blood (approximately 3 capillary tubes to yield 100 μl of serum) may be collected in situations where venipuncture is not preferred (e.g., in children aged <1 year).
- Collect 50-100 ml of urine in a sterile centrifuge tube or urine specimen container.
- (See Alaska Section of Laboratories Test Directory, Rubeola (Measles) on page 45: http://dhss.alaska.gov/dph/Labs/Documents/LaboratoryTests.pdf.)

Vaccination Recommendations

- CDC recommends routine vaccination with a 2-dose series of MMR, the first dose at 12-15 months and the second dose at 4-6 years.  
  - One dose of MMR vaccine is approximately 93% effective; two doses are approximately 97% effective.
- Accepted presumptive evidence of immunity against measles includes one of the following:
  - Written documentation of adequate vaccination
  - One or more valid doses of a measles-containing vaccine for pre-school age children and adults not at high risk;
  - Two valid doses of measles-containing vaccine for school-age children and adults at high risk, including college students, healthcare personnel, and international travelers; or
  - Laboratory confirmation of measles; or
  - Laboratory evidence of immunity*; or
  - Birth in the United States before 1957  
  ▪ Adults born during or after 1957 who do not have evidence of immunity against measles should get at least one dose of MMR vaccine.

*Serologic testing for immunity to measles is not necessary for persons documented to be appropriately vaccinated or who have other acceptable evidence of prior infection (see CDC Pink Book: http://www.cdc.gov/vaccines/pubs/pinkbook/meas.html#diagnosis).

Surveillance and Reporting

- **Healthcare providers should report suspected measles cases immediately by calling the State of Alaska, Section of Epidemiology at (907) 269-8000 or (800) 478-0084 after hours.**
- Suspected cases should be promptly isolated.

Resources

- Section of Epidemiology Measles page, http://www.epi.alaska.gov/id/measles