

**Alaska Public Health Alert**  
**Measles Confirmed on the Kenai Peninsula –**  
**What Alaska Providers Should Know**

*July 16, 2019*

**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 July 16, 2019, a measles case was confirmed in a resident of the Alaska Kenai Peninsula. Public health officials believe there is potential for wider community exposure, putting nonimmune persons at risk for infection.

An unvaccinated teenager with travel to Arizona developed signs and symptoms of measles more than 10 days after arriving back in Alaska in early July. Polymerase chain reaction (PCR) testing at the Alaska State Virology Laboratory for measles RNA virus was positive. Nonimmune 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 public locations in Soldotna during July 8–14. Specific locations and dates are listed on the Alaska Section of Epidemiology (SOE) Measles webpage available at:

<http://dhss.alaska.gov/dph/Epi/id/Pages/measles/default.aspx>.

**Measles Basics**

Measles is a highly infectious viral respiratory disease that spreads via the airborne route and through direct contact with respiratory secretions. Measles typically starts with a fever, runny nose, cough, red eyes, and sore throat, and is followed by a rash that most frequently 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 children **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 avoid exposing other people during the entire infectious period.

## Specimen Collection for Laboratory Diagnosis

- Contact SOE immediately to facilitate testing: 907-269-8000, or 800-478-0084 after hours
- Obtain a throat or nasopharyngeal swab; use a viral culturette and place into viral transport media (other media types can inhibit viral growth). **This is the preferred specimen.**
- Collect 50–100 ml of urine in a sterile centrifuge tube or urine specimen container.
- 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).
- See Alaska Section of Laboratories Test Directory, Measles (Rubeola) on page 42: <http://dhss.alaska.gov/dph/Labs/Documents/LaboratoryTests.pdf>.

## Surveillance, Reporting, and Isolation

- 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 until 4 days after rash onset.**

## Post-Exposure Prophylaxis

- Susceptible persons >6 months of age with 1 or no documented doses of MMR may receive MMR vaccine **<72 hours after last exposure** to measles, if not contraindicated.
- IG may be given to exposed susceptible people (and severely immunocompromised persons regardless of immune status) **≤6 days of last exposure** to prevent infection.
- More details about dosing and indications are available on-line at: <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Immunization/Measles-IGPEPQuicksheet.pdf>

## Evidence of Immunity

- 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>).

### **Vaccination Recommendations**

- CDC recommends routine vaccination with a 2-dose series of MMR (measles-mumps-rubella) vaccine, 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.
- A summary of Measles Vaccine Recommendations is also available at:  
<http://dhss.alaska.gov/dph/Epi/iz/Documents/MeaslesRecs.pdf>

### **Vaccine Availability**

- Check the Alaska SOE measles webpage for information about locations where MMR vaccine may be available: <http://dhss.alaska.gov/dph/Epi/id/Pages/measles/default.aspx>.

### **Resources**

- CDC Measles-Healthcare Professionals, <http://www.cdc.gov/measles/hcp/index.html>
- IAC Ask the Experts-MMR, [http://www.immunize.org/askexperts/experts\\_mmr.asp](http://www.immunize.org/askexperts/experts_mmr.asp)
- MMWR, Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps, 2013, <http://www.cdc.gov/mmwr/pdf/rr/rr6204.pdf>
- Section of Epidemiology Measles page, <http://dhss.alaska.gov/dph/Epi/id/Pages/measles/default.aspx>