IMMUNIZATIONS

1. **General Fairbanks public who may or may not have been at locations where the confirmed case spent time (except as described in #2):** Individuals should check their vaccine records. Vaccinate anyone who doesn’t have acceptable presumptive evidence of immunity against measles including one of the following:
   a. Written documentation of adequate vaccination:
      i. 1 or more doses of a MMR vaccine administered on or after the first birthday for preschool-aged children and adults not at high risk
      ii. 2 doses of MMR for school-aged children and adults at high risk, including post-high school students, healthcare personnel, and international travelers
   b. Laboratory evidence of immunity
   c. Laboratory confirmation of measles
   d. Birth before 1957

2. **Fairbanks residents with possible measles exposure ONLY in the following concentrated settings 1) on the same flight (AS 0133 from SEA arriving in FAI 12:30 AM May 31, 2015) sitting two rows ahead or two rows behind the confirmed case; or 2) in the Fairbanks Memorial Hospital Emergency Department from 1-8 PM on June 6, 2015:**
   a. School-aged children should have 2 doses of MMR vaccine separated by at least 28 days, or laboratory evidence of immunity or laboratory confirmation of disease.
   b. Preschool-aged children and adults born during or after 1957 should have 1 dose of MMR, *(but a second dose can be offered to these children and adults due to the close contact setting of their exposure)*, or laboratory evidence of immunity or laboratory confirmation of disease.
   c. Note that these individuals are being contacted directly by public health authorities.
3. **Health Care Personnel**
   a. Healthcare providers need written documentation of presumptive evidence of immunity. For additional details, see Table 3 in *Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps, 2013: Summary Recommendations of the Advisory Committee on Immunization Practices (ACIP)*
   b. Healthcare personnel born during or after 1957 should have 2 doses of MMR or laboratory evidence of immunity or laboratory confirmation of disease.
   c. In an outbreak setting, healthcare personnel born before 1957 should have 2 doses of MMR or laboratory evidence of immunity or laboratory confirmation of disease.

4. **Household contacts and direct contacts to confirmed case (Post-Exposure Prophylaxis)**
   a. Persons exposed to measles without documentation of evidence of immunity from measles should be offered post-exposure prophylaxis (PEP) or be excluded from school, hospital, or daycare.
   b. MMR vaccine
      i. MMR should be offered within 72 hours as PEP to infants 6-11 months old, individuals 12 months of age and older without 2 doses of vaccine and adults born before 1957 without 1 dose of MMR or evidence of immunity.
      ii. If administered within 72 hours of initial measles exposure might provide some protection or modify the clinical course.
      iii. MMR vaccine should still be offered at any interval following exposure to the disease in order to offer protection from future exposures.
   c. Immune Globulin (IG) intramuscular (IM) (0.5 ml/kg, maximum dose 15 ml) can be given within the first 6 days of exposure.
      i. Persons at risk for severe illness/complications should receive IG (infants <6 months old, infants 6-11 months after 72 hours post exposure.
      ii. IG can be given to other people who do not have evidence of immunity against measles, but priority should be given to people exposed in settings with intense, prolonged, close contact, such as a household, daycare, or classroom where the risk of transmission is highest.
      iii. Healthcare provider without evidence of immunity who is exposed to measles should receive MMR within 72 hours or IG within 6 days. Exclude from duty from day 5 to day 21 regardless of PEP.
   d. Immune Globulin (IG) intravenous (IV) (400 mg/kg)
Pregnant women without evidence of measles immunity or severely immunocompromised persons should receive intravenous immune globulin (IGIV).

**MMR VACCINE CONTRAINDICATIONS**
Severely immunocompromised persons (consult your provider), pregnant women, prior severe allergic reaction to MMR vaccine or vaccine component.

**MEASLES TITERS**
Measles titers to demonstrate evidence of immunity are not recommended for the general public during an outbreak. Titers may be considered for health care personnel without evidence of immunity only if the results will be available before the next scheduled work time.

**ISOLATION AND QUARANTINE**
- Persons suspected to have measles should be isolated for 4 days after they develop a rash.
- People without evidence of immunity who do not receive appropriate PEP should be excluded from public settings from 7 to 21 days after their last potential exposure.
- A helpful Table with recommendations for specific populations is available at [http://epi.alaska.gov/id/measles/CDPHMeaslesInvestigationQuicksheet.pdf](http://epi.alaska.gov/id/measles/CDPHMeaslesInvestigationQuicksheet.pdf).

**INFECTION CONTROL**
- Healthcare providers should follow respiratory etiquette and airborne precautions in healthcare settings.
- Regardless of presumptive immunity status, all healthcare staff entering the room should use respiratory protection consistent with airborne infection control precautions (use of an N95 respirator or a respirator with similar effectiveness in preventing airborne transmission).
- Because of the possibility, albeit low, of MMR vaccine failure in healthcare providers exposed to infected patients, they should all observe airborne precautions in caring for patients with measles.
- The preferred placement for patients who require airborne precautions is in a single-patient airborne infection isolation room (AIIR).

**REFERENCES**
CDC. Measles for Health Care Professionals: [http://www.cdc.gov/measles/hcp](http://www.cdc.gov/measles/hcp)