PUBLIC HEALTH ADVISORY

February 19, 2014

Measles Update - Bay Area BART Exposure

A student infected with measles from the University of California, Berkeley attended classes and rode the BART (Bay Area Rapid Transit) public transit system last week, potentially exposing thousands to measles.

The student had not been vaccinated, and likely contracted the disease while studying abroad in Asia. The student traveled between El Cerrito del Norte and Downtown Berkeley stations from the 4th through the 7th of February 2014 between 8:00 am to 10:00 am, as well as during the afternoon and evening commute hours.

Although we in Marin County are not directly serviced by BART, the possibility of exposure to this index case and secondary (or subsequent tertiary) cases remains throughout the Bay Area.

We are now in the incubation period for secondary cases.

Please increase your surveillance for rash-like illness, triage and isolate patients accordingly, and consider Measles in your differential diagnosis-especially for those born after 1957 who may be unimmunized or under-immunized (less than 2 doses of measles containing vaccines).

Measles spreads through infected droplets that are passed in the air when an infected person coughs or sneezes. Virus can remain viable in air spaces for up to 90 minutes after the infected person leaves. Authorities have warned passengers to seek medical attention if they develop symptoms.

Identification
Measles is an acute, highly communicable viral disease with prodromal fever, conjunctivitis, coryza, cough, and small spots with white or bluish-white centers on an erythematous base on the buccal mucosa (Koplik spots). A characteristic red blotchy rash appears on the third to seventh day; the rash begins on the face, then becomes generalized, lasts 4-7 days, and sometimes ends in brawny desquamation. Leukopenia is common. The disease is more severe in infants and adults than in children. Complications may result from viral replication or bacterial superinfection, and include otitis
media, pneumonia, laryngotracheobronchitis (croup), diarrhea, and encephalitis.

**Infectious Period**
From 4 days before rash onset to 4 days after rash onset (day of rash onset is day 0)

**Exposure**
Sharing the same airspace with an infectious person.

**Incubation Period**
Prodromal symptoms typically begin 8-12 days after exposure with rash onset typically 14 days (range 7-21 days) after exposure.

**Clinical Case Definition**
- Generalized rash lasting ≥ 3 days and
- Temperature ≥ 101°F and
- Cough, coryza, or conjunctivitis

**Laboratory Criteria for Diagnosis**
- Serum IgM Antibody positive
- Rise in serum measles IgG between acute and convalescent titres
- Detection of viral RNA by reverse transcriptase PCR

**Post Exposure Prophylaxis**
- Susceptible contacts may be given MMR vaccine within 72 hours of exposure or immune globulin (IG) within 6 days of exposure to protect against infection.
- Infants < 12 months of age may receive 0.5 ml/kg body weight of Intramuscular IG (IGIM) to maximum dose of 15ml
- Pregnant women without evidence of measles immunity should receive 400 mg/kg of intravenous IG (IGIV)

Notify Marin County HHS at 473-4163 if you need to access supplies of vaccine or IG.

**Additional Information**
For additional guidance please refer to California Department of Public Health – August 2013

**Measles Quicksheet**

**CDPH Measles Laboratory Testing**
Immediately report suspect, probable, and confirmed measles cases by phone, 415-473-7805, or fax, 415-473-6002, Monday through Friday 8:30 a.m. to 5:00 p.m. After 5:00 p.m. on Monday through Friday, on weekends or holidays, report measles cases by phone, 415-499-9464 and ask for the on-call Public Health Officer.

The CDPH measles case report form found at: