



UPDATED PUBLIC HEALTH ADVISORY MEASLES CASES IN ALAMEDA COUNTY AND CALIFORNIA

February 20, 2015

SITUATION: As of February 20, Alameda County Public Health Department (ACPHD) has confirmed 6 cases of measles in 2015 and is investigating other suspect cases, and California has confirmed 123 cases.

BACKGROUND: Measles cases from an ongoing outbreak have been identified throughout California and the United States. Measles is very infectious, and airborne transmission can occur in crowded settings. Measles transmission is possible within Alameda County, although local reports of secondary cases have been limited to date.

CLINICAL SYNDROME: Measles should be suspected in patients with a rash and fever. The fever typically exceeds 101°F, precedes rash onset and persists during the rash. The rash is typically erythematous, maculopapular, and blotchy or confluent. In almost all cases it involves the face or head and spreads downward to include the trunk and extremities. The rash is often preceded by a prodrome of cough, coryza (runny nose) and/or conjunctivitis. Vaccinated individuals may have modified disease with a lower fever and less severe rash. Measles can also cause otitis media, diarrhea, pneumonia, encephalitis and even death, especially in very young or immune compromised patients. A mild vaccine reaction with rash and low grade fever may occur in children within two weeks after receiving the first MMR dose.

ACTIONS REQUESTED OF CLINICIANS:

1. **SUSPECT** measles in a patient with rash and fever $\geq 101^{\circ}\text{F}$ (38.3°C). Ask about measles vaccination and exposure to known measles cases, international travel, or international visitors (including theme parks or other tourist attractions) in the 3 weeks prior to illness; **consider the diagnosis regardless of exposure history.**
2. **IMPLEMENT AIRBORNE PRECAUTIONS** immediately for suspected cases. **Mask** and **isolate** patient in an airborne isolation room if possible. Do not use a regular exam room for at least one hour after a suspected measles patient has left the room. **Notify your facility's Infection Control Professional immediately.**
3. **REPORT** suspect measles cases **immediately** to ACPHD by phone at (510) 267-3250; after hours, call (925) 422-7595 and ask for the Public Health On-Call Duty Officer. **CALL, DO NOT FAX.**
4. **TEST** suspected measles cases. Collect both urine and a throat or NP swab. **HOLD** specimens for testing by Public Health. Call ACPHD for approval. **Proper specimen collection is very important.** Follow specimen collection and storage instructions below and at: [CDPH Measles Lab Testing April 2014](#).
5. **ADVISE** patients with suspected measles to stay home with **no visitors** until at least 4 days after rash onset and/or until cleared by ACPHD to resume usual activities.
6. **VACCINATE** children and non-immune adult patients for measles, unless contraindicated, according to national guidelines.
7. **CONFIRM STAFF IMMUNITY** now to avoid lost work and staff time. Health care providers who are exposed to a measles case may not go to work until they provide ACPHD with written documentation that they have received at least two doses of MMR or a serologic test showing measles immunity.

INFECTION CONTROL: Patients with suspected measles should be placed in an Airborne Infection Isolation Room immediately, if possible. Healthcare workers who enter the room of a suspected measles patient should have documented immunity (2 doses MMR or laboratory evidence of immunity by measles IgG) and should use a N95 respirator or higher level of protection. Limit movement of the patient for tests; if essential, mask the patient



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and notify receiving location of the patient's suspected diagnosis. Note the times and locations where the patient was present, and obtain the names of all staff, patients, and visitors who were in those locations during the time the suspect measles patient was in the facility and for one hour after the patient left. For additional guidance, see: <http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPHHCFacilityICRecsforSuspectMeaslesPatients.pdf>.

MEASLES TESTING: The Alameda County Public Health Laboratory will perform measles PCR testing on respiratory swabs and urine with approval from the ACPHD Acute Communicable Disease Unit. If suspected measles patients have had rash for more than 7 days, collect blood as well. Do not use commercial laboratories. Respiratory swabs and urine may be refrigerated and stored for up to 72 hours.

1. Respiratory swab for PCR: a throat swab is preferred (nasopharyngeal swab is acceptable), collected on a synthetic (e.g., Dacron) swab only and placed in 2-3 ml of Viral Transport Media (VTM) or Viral Culture Media (VCM). Use a tongue depressor to minimize salivary contamination. **Do not** use bacterial culture media. Store and ship at 2°- 8°C.
2. Urine for PCR: collect 50-100 ml (10 ml is minimum acceptable) from the first part of the urine stream in a sterile cup. Store and ship the entire sample at 2°- 8°C. Alternatively, centrifuge at 2500 x g for 15 minutes at 4°C. Re-suspend the pellet in 1-2 ml of VTM and then store and ship at -70°C or colder.
3. Blood for serology: collect 5 to 10 ml of blood in a red top or serum-separator tube.

HOME ISOLATION: Measles patients are infectious for 9 days, from 4 days before rash onset until 4 days after rash onset and should stay at home with **no visitors** during this period. Provide patient with a supply of surgical masks (not N95 respirators). Patients should return home by car, not public transportation, and be accompanied only by someone immune to measles. ACPHD will contact the patient to advise them when they can be released from isolation.

VACCINATION: The current measles outbreak is considered to be statewide. ACPHD has not observed sufficient cases linked by time and space within Alameda County to recommend local changes to national MMR pediatric immunization guidelines: a dose at 12-15 months and a second at 4-6 years. Providers may administer the second MMR dose earlier than age 4 years based on clinical judgment, as long as 28 days have elapsed since the first dose. Children ages 6-12 months who are traveling internationally should receive one dose of MMR prior to travel. However, MMR doses given before 12 months of age do not count towards the recommended course or the doses required for child care and school admission. National guidelines recommend two doses of MMR for adults who are health care personnel, traveling internationally, or attending college; other adults should receive at least one MMR dose. For more information on measles vaccination, see:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm>.

Additional Resources:

Alameda County Public Health Department: <http://www.acphd.org/measles.aspx>

California Department of Public Health: <http://www.cdph.ca.gov/HealthInfo/discond/Pages/Measles.aspx>

California Department of Public Health Advisory- February 20, 2015:

<http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPH-MeaslesHealthAdvisory2-20-2015.pdf>

For additional Health Care Provider measles questions not addressed on our webpage, please email alcomeasles@acgov.org [Subject line: Measles Inquiry Facility/Agency- Date].

Health ALERT: conveys the highest level of importance; warrants immediate action or attention.

Health ADVISORY: provides important information for a specific incident or situation; may not require immediate action.

Health UPDATE: provides updated information regarding an incident or situation; unlikely to require immediate action.