



## PUBLIC HEALTH ADVISORY MEASLES CASES IN ALAMEDA COUNTY AND CALIFORNIA

January 16, 2015

**SITUATION:** As of January 16, Alameda County Public Health Department (ACPHD) has confirmed 4 cases of measles in 2015 and is investigating other suspect cases. The State of California has confirmed 33 recent cases. An outbreak of measles from exposures associated with visits to Disney theme parks in December 17-20th, 2014 has resulted in 28 cases throughout California, including in Alameda County. Five additional cases have no identified common exposures with the outbreak. Cases involve both children and adults, ages 7 months to 59 years old, including 15 unimmunized individuals. A small number of cases were previously immunized. Measles is very infectious, and airborne transmission can occur in crowded settings. Outbreaks in California typically involve infected international visitors or unimmunized persons traveling overseas in areas where large measles outbreaks are occurring, followed by local spread. All Alameda County residents should ensure they are immune or have been vaccinated against measles.

### ACTIONS REQUESTED OF CLINICIANS:

1. **SUSPECT** measles in a patient with fever and rash. Ask about measles immunization history, international travel, exposure to international travelers (including theme parks or other international tourist attractions), or other known exposure to measles cases in the 3 weeks prior to illness; consider the diagnosis regardless of travel history.
2. **IMPLEMENT AIRBORNE PRECAUTIONS** immediately for suspected cases. **Mask** and **isolate** patient in an airborne infection 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 to speak to the Public Health On-Call Duty Officer. **CALL, DO NOT FAX.**
4. **TEST** suspected cases. Collect a throat or NP swab, urine, and blood and **HOLD** for testing by the Public Health Laboratory (PHL). Call ACPHD for approval and coordination of measles testing. **For details on specimen collection see:** [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** adult patients born after 1956 who have not received 2 documented doses of MMR, unless contraindicated.
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.

Refer to Health Alerts: [Measles Cases in Alameda County and California for additional information and updates.](#)

### Clinical Presentation

Measles prodromal symptoms occur 8 to 12 days after exposure, beginning with a mild to moderate fever accompanied by cough, coryza, and conjunctivitis. Two to three days later, Koplik spots, tiny bluish-white lesions on a red center on the buccal mucosa, may appear. Fever may spike to >104°F. An erythematous, blotchy maculopapular rash appears around the same time, usually first on the face, along the hairline and behind the ears. This slightly itchy rash rapidly spreads downward to the chest and back, and, finally, to the thighs and feet. In approximately one week, the rash fades in the same sequence that it appeared.



### **Infection Control**

Mask and isolate patients with suspected measles immediately in an airborne infection isolation room if available; otherwise, place in a private room with the door closed. Do not use a regular exam room for at least 1 hour after the suspected case has left the room. Healthcare workers who enter the room should have documented immunity (2 doses MMR or laboratory evidence of immunity by measles IgG); regardless of immune status, they should use a N95 respirator or higher level of protection. Limit movement and transport of the patient for tests; if essential, mask the patient and notify receiving location of the patient's suspected diagnosis. Note the names of all staff, patients, and others who were in area during the time the suspect measles patient was in the facility and for one hour after the patient left. For additional details: [CDPH Health Care Measles Infection Control](#).

### **Report and Test Suspected Cases**

Call ACPHD at (510) 267-3250 (after business hours, 925-422-7595) immediately to report suspected cases. Do not wait for laboratory confirmation. Collect specimens as soon as possible for expedited testing by the Public Health Laboratory (PHL) rather than a commercial laboratory. **Call ACPHD at (510) 267-3250 for prior approval** for PHL testing. Obtain **all** of the following:

1. Respiratory swab for viral culture and 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). Do not use Amies or other bacterial media.
2. Urine for viral PCR: collect 50-100 ml in a sterile centrifuge tube or urine specimen container
3. Blood for serology: collect 7-10 ml of blood in a red top or serum-separator tube

For additional details including storage and shipping, see [CDPH Measles Lab Testing April 2014](#)

### **Isolate Suspected Cases at Home**

Provide patient with a supply of surgical masks. They should return home by private car, not public transportation, and accompanied only by someone with immunity to measles. Measles patients are infectious from 4 days before rash onset until 4 days after rash onset and should stay at home with no visitors during this time. ACPHD will contact the patient to advise them when they can be released from home isolation. ACPHD will also identify contacts to confirmed cases to evaluate their measles immunity status and if needed, intervene with post-exposure prophylaxis with MMR vaccine (or Immune Globulin) and home quarantine. ACPHD may request information from clinicians about exposed health care employees and the measles patient's family or friends.

### **Vaccinate Susceptible Patients**

All patients born after 1956 should be vaccinated with 2 doses of MMR unless they have laboratory evidence of immunity. Groups that are at increased risk for measles include health care workers, international travelers, women of childbearing age, and students in college or trade school. Measles circulates in most regions of the world outside of North and South America. Californians with measles in recent years have reported travel to the Philippines, Germany, France, England, India, and China, among other destinations. MMR vaccine is routinely given at 12 months of age and 4-6 years of age, but a second dose may be given one month or more after the first dose. Un- or under-immunized persons traveling to countries where measles is circulating should also receive MMR vaccine before they go, and infants traveling to endemic countries can be vaccinated as early as 6 months of age. For more information, see: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm>

### **Additional Information**

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>

**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.