



# San Mateo County Health System

Main number 650 573-2346 After hours 650 363-4981 Fax 650 573-2919

## PUBLIC HEALTH ADVISORY – February 21, 2014

### FEVER AND A RASH? CONSIDER MEASLES AND PROTECT PATIENTS AND STAFF FROM THIS HIGHLY INFECTIOUS DISEASE

A case of measles was identified this week in a San Mateo county resident who had recently traveled internationally. Fourteen cases of measles had already been reported this year to the California Department of Public Health. Many of the 2014 cases have occurred among returning international travelers and their contacts and over half have occurred in unvaccinated individuals. Measles cases from recent years have reported travel to the Philippines, Germany, France, England, India and China among other destinations.

#### Actions requested of clinicians:

- 1) **Suspect measles in a patient with fever and a rash.** Ask about measles immunization history and international travel or exposure to returning international travelers (including transit through an international airport or other international tourist attractions) in the 3 weeks prior to illness. Consider the diagnosis regardless of travel history.
- 2) **Implement airborne precautions immediately.** Mask and isolate the patient in an airborne infection isolation room. Immediately notify your Infection Control Professional. Safeguard other facilities and ensure airborne infection control precautions are in place before referring patients.
- 3) **Report suspected cases immediately to San Mateo County Communicable Disease Control Program** by phone at 650-573-2346. After hours, call 650-363-4981 and ask to speak to the on-call Health Officer.
- 4) **Test suspected cases.** Collect blood, a throat or NP swab and urine and HOLD for rapid testing by the Public Health Laboratory network (PHL). Use of commercial laboratories may delay diagnosis.
- 5) **Advise patients** with suspected measles to stay home until at least 4 days after rash onset and/or until cleared by the San Mateo County Communicable Disease Control Program to resume usual activities.

**Consider measles in any patient presenting with a fever and a rash:** 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 in the buccal mucosa, may appear. **Fever** may spike to  $>104^{\circ}\text{F}$ . 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 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.

**Implement appropriate Infection Control measures.** **Mask and isolate** the patient in an airborne infection isolation room, if one is available. If such a room is not available, place the patient in a private room with the door closed. Do not use the examination room for at least 2 hours after a suspected measles patient has left the

room. Healthcare workers who enter the room should have documented immunity (2 doses of MMR or laboratory evidence of immunity by measles IgG). Regardless of immune status, staff entering the patient's room 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 the receiving location of the patient's suspected diagnosis. If possible, schedule suspect measles patients at the end of the day. Make note of the staff and other patients who were in the area during the time the suspect measles patient was in the facility and for one hour after the suspect case left. If measles is diagnosed in the suspect case, exposed people will need to be assessed for measles immunity. Complete infection control guidance can be found at

<http://www.cdph.ca.gov/programs/immunize/Documents/CDPHHCFacilityICRecsforSuspectMeaslesPatients.pdf>

**Test suspected cases immediately.** Draw 1-2 ml of blood in a red-top tube and spin down the serum if possible. Capillary blood (3 capillary tubes) may be collected in situations where venipuncture is not preferred, such as for children younger than 1 year of age. **Obtain a throat or a nasopharyngeal swab.** Use a viral culturette and place into viral transport media (VTM). **Collect 10-40 ml of urine** in a sterile 50 ml centrifuge tube or urine specimen container. For all questions regarding specimen collection and processing, please call the San Mateo County Public Health Laboratory at 650-573-2500. Measles testing should be performed at a Public Health Laboratory. Use of commercial laboratories may delay diagnosis. Additional guidance on laboratory testing for measles can be found at

<http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPHMeaslesLabTesting2011-01.pdf>

**Isolate suspected cases at home.** Provide the patient with a supply of surgical masks. The patient should not use public transportation to return home and should only be accompanied 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. The San Mateo County Communicable Disease Control program will let the patient know when he/she is released from home isolation. It will also identify contacts to confirmed cases to evaluate their immunity status and recommend post-exposure prophylaxis (PEP) and home quarantine, as needed. **PEP can be administered to contacts within 72 hours of exposure (MMR vaccine) or up to 6 days after exposure (immune globulin).** For more information on PEP, please refer to guidelines set forth on page 2 of the California Department of Public Health (CDPH) Quicksheet, found at

<http://www.cdph.ca.gov/programs/immunize/Documents/CDPHMeaslesInvestigationQuicksheet.pdf>

**Vaccinate susceptible patients.** All patients born after 1956 should be vaccinated with 2 doses of MMR unless they have laboratory evidence of immunity by measles IgG. Groups that are at increased risk of measles include health care workers, international travelers, women of childbearing age and college students. **Unvaccinated Californians who are traveling to countries where measles is circulating should receive MMR vaccine before they go. Infants traveling to these countries can be vaccinated as young as 6 months of age.**

**Additional information:**

**California Department of Public Health:**

Measles Quicksheet

<http://www.cdph.ca.gov/programs/immunize/Documents/CDPHMeaslesInvestigationQuicksheet.pdf>

Other measles information for providers

<http://www.cdph.ca.gov/HealthInfo/discond/Pages/Measles.aspx>