HEALTH UPDATE: BAY AREA MEASLES CASE, POTENTIAL BART EXPOSURE
FEBRUARY 14, 2014

The San Francisco Dept. of Public Health (SFDPH) provides this guidance based on current information. Recommendations may change, and SF recommendations may differ from those issued by the Centers for Disease Control and Prevention (CDC) and the California Department of Public Health (CDPH).

SITUATIONAL UPDATE

A Contra Costa County resident with measles rode BART between Contra Costa County and Berkeley on 2/4/14-2/7/14 and attended classes at UC Berkeley during his/her infectious period. We believe the risk of individuals contracting measles as a result of this exposure is very low, but the situation has received significant media attention. The purpose of this update is to provide guidance for clinicians who may be responding to inquiries from concerned patients, and to remind clinicians of proper infection control and testing procedures if a patient presents with symptoms that may be consistent with measles.

Suspected measles cases should be reported immediately to the SFDPH Communicable Disease Control 24-hour line: 415-554-2830. If calling after hours, follow the prompts to page the on-call physician.

Treatment of measles is supportive. The most important preventive strategy for measles is immunization; the measles vaccine is safe and effective. Patients who have been vaccinated against measles or who have a history of measles disease are considered immune. Medical providers should work with their patients to make sure that their measles immunization status is up to date.

If a patient presents to a medical facility with a fever and a maculopapular or morbiliform rash, he or she should be immediately masked, and placed in an isolation room or a private exam room as soon as possible. Patients with rash who request advice over the telephone and who are advised to present for evaluation should be instructed to travel to the medical facility in a private vehicle if possible and to request a mask upon arrival.

Although measles is no longer endemic in the United States, imported cases and resulting secondary cases do occur. Measles should be a consideration in patients with fever and rash, especially those with a recent travel history. Measles epidemics overseas resulted in imported cases in California in 2013 and early 2014. Individuals who are planning travel outside the United States should be up to date on their measles immunizations, and early administration of measles vaccine to infants 6-12 months of age who are traveling outside the United States is recommended. For detailed recommendations concerning measles vaccination for travelers, please see http://wwwn.cdc.gov/travel/yellowbook/2014/chapter-3-infectious-diseases-related-to-travel/measles-rubeola

For general information about measles, please see the SFDPH Communicable Disease Control website http://www.sfcdep.org/measles.html

Please see attached “Quick Guide for Clinicians: Measles” for detailed information concerning measles reporting and diagnostic testing.

Categories of urgency levels
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
RESPONSE TO COMMUNICABLE DISEASES
A QUICK GUIDE FOR SAN FRANCISCO CLINICIANS

Measles (Rubeola)

SITUATION
This guide is pertinent if measles (Rubeola) is a suspected etiology of your patient’s presentation. A classic presentation includes fever, malaise, cough, coryza, conjunctivitis preceding the rash. The rash is usually erythematous and maculopapular, begins on the face and upper neck, and progresses downward and outward. Pathognomonic oral lesions, Koplik spots (tiny white lesions on a red center usually on buccal mucosa) ([www.cmaj.ca/content.180/5/583](http://www.cmaj.ca/content.180/5/583)) may be visible prior to rash onset.

Consider measles in patients with: fever and maculopapular rash, especially if unvaccinated (but cases in vaccinated persons have also occurred) known exposure to a case of measles, recent international travel (including Europe), or exposure to a visitor from abroad. For a photograph of a measles-like rash, see below or [http://www.sfcdcp.org/measles.html](http://www.sfcdcp.org/measles.html)

1. IMMEDIATELY REPORT THE SUSPECT CASE TO:
San Francisco Dept of Public Health Communicable Disease Control Unit (CDCU)
24/7 telephone: 415-554-2830 (After hours, follow the prompts to page the on-call MD)
AND Your Infection Control Professional (ICP—check your institution’s directory).
* Clinicians are requested by CDCU to immediately report all suspect cases of measles.
* Immediate action will be taken by CDCU and ICPs to prevent additional cases.

2. IMPLEMENT APPROPRIATE INFECTION CONTROL PRECAUTIONS
* Patients are infectious 4 days before rash onset through 4 days after rash onset.
* Use airborne precautions immediately for all patients with fever and measles-like (maculopapular or morbilliform) rash.
* Isolate and provide a face mask for the patient to wear
  * Put the patient in a private negative air pressure room; if not possible, mask patient and place in a private room with the door closed. Do not use any regular exam room for at least 2 hours after a suspected measles case has left the room. Routine room cleaning recommended.
  * Anybody entering the patient’s room should wear a N95 respirator regardless of prior immunity.
  * Limit movement and transport of the patient; patients should not go to other areas of the facility for blood draws or other tests. If transport is essential, mask the patient.
  * Airborne precautions should be used for any patient with a fever and a measles-like or vesicular rash. Vesicular rash can be indicative of chickenpox or smallpox, both of which require airborne precautions.
* Work with your ICP (check your institution’s directory) to implement precautions. Consult with CDCU for guidance.

3. COORDINATE DIAGNOSTIC TESTING WITH THE CDCU
* Pursue testing for all suspect cases as soon as possible via Public Health Lab System (not a commercial lab).
* Measles can be diagnosed by serology (a positive IgM [collected 2-28 days after rash] or a significant rise in IgG), and by isolation and/or nucleic acid amplification testing from nasopharyngeal or urine specimens
* Obtain ALL of the following: (1) serum in a serum separator tube, (2) a nasopharyngeal swab on a Dacron-tipped swab placed in UNIVERSAL VIRAL TRANSPORT MEDIA and (3) a urine sample in a sterile cup
  NOTE: DO NOT USE Stuarts/Amies/other bacterial transport media
* After consultation with CDCU, send specimens to the Public Health Lab. The laboratory form can be downloaded at: [http://www.sfcdcp.org/diseasereporting.html](http://www.sfcdcp.org/diseasereporting.html) (write in request for measles testing).

4. HOME ISOLATE SUSPECTED CASES
* In suspect measles cases, isolate at home until they are non-infectious (4 days after rash onset).

5. HELP IDENTIFY EXPOSED SUSCEPTIBLE CONTACTS
* Clinicians may have knowledge of staff members and patient’s family and friends who may be at risk, and may have their contact information. Clinicians should provide this information to CDCU and their ICPs.
* CDCU and ICPs are responsible for identifying and managing contacts and for determining who should receive post-exposure prophylaxis (PEP) with MMR vaccine or Immune Globulin and who should be in home quarantine.
* Clinicians may be asked to provide PEP if their patient is identified as an exposed susceptible contact, or provide laboratory testing for measles immunity if their patient is a contact unable to provide proof of immunity to measles, or who can’t document receipt of 2 doses of measles vaccine.