



**Public Health Department**

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## Health Advisory

To: Healthcare Providers

From: Andy Miller, M.D. (signed original on file)

Date: April 18, 2019

Re: Measles Update

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### Situation Update

As of April 18, 2019, 1 new case has been confirmed, bringing the total to 7 confirmed, epidemiologically-linked, measles cases in Butte County and (4) confirmed cases in residents of Tehama and Placer counties who are part of the Butte County measles outbreak.

### Report Immediately by Telephone

Suspected measles cases must be reported immediately by telephone, 24/7, to Butte County Public Health Department (BCPHD) Communicable Diseases (CD) at **530-552-3929 during business hours**. To report suspect cases **after hours, call 530-332-2462**. *Under Title 17, California Code of Regulations (CCR), failure to report is a misdemeanor (Health and Safety Code § 120295) and is a citable offense under the Medical Board of California's Citation and Fine Program (Title 16, CCR, § 1364).*

### Infection Control

See **Resources** section below for link to complete measles infection control guidance.

- **Ask patients to call ahead first if they have fever and rash.**
- Post signage directing patients with fever and rash to notify staff **before entering the building** (see <http://eziz.org/resources/measles>).
- Confirm measles immunity of all healthcare staff. Document either a positive IgG test or 2 doses of MMR vaccine (see more detailed info below). Confirming staff immunity now avoids having to exclude staff from work in the event of an exposure.
- If suspect measles patients are being evaluated in a clinic or urgent care setting, schedule them at the end of the day when other patients will not be present.
- Mask suspect measles patients immediately. If a surgical mask cannot be tolerated, other practical means of source containment should be implemented (e.g., place a blanket loosely over the heads of infants and young children suspected to have measles when they are being transported through the waiting room or other common areas).
- Do not allow suspect measles patients to remain in the waiting area or other common areas; isolate them immediately in an airborne isolation room if one is available. If such a room is not

available, place patient in a private room with door closed and evaluate the patient as soon as possible. Do not re-use exam room for at least one hour after the patient has left the room.

- For patients who are not admitted to a medical facility, suspect measles cases should be instructed to remain in isolation at home until they are no longer infectious, or measles is ruled out.

### **Collect Urine and Throat Swabs for Laboratory Testing**

If, after consideration of symptoms and risk factors (see below), you suspect measles, please contact BCPHD CD immediately by phone at 530-552-3929. Collecting diagnostic specimens while the patient is at your facility will prevent delays in confirmation of the diagnosis and limit the potential for additional healthcare visits/exposures. Once specimens are collected, please hold them at your facility and contact BCPHD CD for instructions on next steps.

**Polymerase chain reaction (PCR) is the preferred testing method for acute cases of measles and is performed in public health laboratories.** BCPHD CD will help coordinate specimen routing to our Public Health Lab in Chico.

Always collect both of the following specimens for PCR testing:

- Throat (oropharyngeal) swab using a Dacron-tipped swab and place in **liquid** viral or universal transport media (nasopharyngeal swab is acceptable but throat swab is preferred over NP swab), AND
- Urine sample (10-50 ml) in a sterile container (first void preferred)
- Store all specimens at 2°- 8° C until arrangements can be made to transport to BCPHD Public Health Lab. **Complete the BCPHD Lab submittal form and include with specimens.**

A serum measles IgM is not the preferred method of testing for acute cases of measles but may also be recommended depending on timing of presentation for testing. If serum is also to be collected, draw 7-10 ml of blood in a red top or serum separator tube. Capillary blood (finger or heel stick, at least 3-5 tubes) can be used for pediatric patients.

### **Symptoms and Risk Factors**

Consider measles in patients of any age who have a fever AND a rash

- In measles cases there must be some fever, even subjective fever, and the rash must start on the head or neck.
- Patients with measles usually have at least 1 or 2 of the “3 Cs” – cough, coryza and conjunctivitis.

Risk factors that increase likelihood of a measles diagnosis:

- In the prior 3 weeks: travel outside of the USA, transit through US international airports, or interaction with foreign visitors, including at a US tourist attraction
- Exposure to confirmed cases in our community
- Exposure to public locations within the estimated time period in which a person may have been exposed to measles. See BCPHD website for list of public locations: <http://www.buttecounty.net/ph/measles>)
- Never been immunized with measles vaccine and born in 1957 or later

Fever and rash occur in about 5 % of MMR vaccine recipients, typically 6-12 days after immunization. However, this reflects exposure to measles vaccine virus rather than the wild virus, and such patients are not infectious for measles. *Please consult BCPHD CD at 530-332-5929 with any questions.*

### **Post exposure prophylaxis (PEP) and vaccination recommendations**

The administration of MMR vaccine or IG depends primarily upon time of exposure, age of the contact, and risk status of the contact (pregnant or immunocompromised). Consult with BCPHD CD for PEP recommendations for persons who have been exposed to measles.

- At this time, BCPHD is not recommending early vaccination of infants, except if used as PEP within 72 hours of exposure. IGIM is preferred for PEP in infants. Infants who have been exposed to measles should be excluded from high risk settings for 21 days from their last exposure.
- Children who have already received one dose of MMR at 12-15 months may receive their second dose of MMR as long as a minimum of 28 days have passed since their first dose. The second dose will fulfill the school entry requirement for 2 doses of MMR prior to kindergarten entry.
- Early immunization with MMR vaccine is recommended for infants aged 6-11 months prior to international travel. At this time, early MMR is not recommended for Butte County infants aged 6-11 months for infants who are not travelling internationally. Infants who receive a dose of MMR before age 12 months still require two additional doses of MMR, and should receive the first of the 2-dose series beginning at age 12-15 months.

### **Public questions or inquiries about measles**

Refer general calls from the public regarding measles to the BCPHD Measles Page at: <http://www.buttecounty.net/ph/measles>, or refer callers to Butte County 211 by calling 2-1-1 or the toll free number 1-866-916-3566.

### **Resources**

- CDC measles clinical guidance: <https://www.cdc.gov/measles/hcp/index.html>
- CDC infection control information: <https://www.cdc.gov/infectioncontrol/pdf/guidelines/isolation-guidelines-H.pdf>
- CDPH infection control guidance: <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Immunization/Measles-HCFacilityICRecs.pdf>
- CDPH diagnostic testing information: <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Measles-Testing-InformationVRDL.pdf>
- CDPH Measles Investigation Quicksheet (2019): <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Immunization/Measles-Quicksheet.pdf>