



COUNTY OF YOLO

Health and Human Services Agency

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HEALTH ADVISORY

To: All Healthcare Providers

From: Ron Chapman, MD, MPH
Health Officer, Yolo County

Date: May 1, 2019

Subject: Measles Advisory

Identification and Testing of Suspect Measles Cases

Situation Update

Measles continues to circulate in much of the world, including Europe, Asia and Africa. International travel, domestic travel through international airports, and contact with international visitors can pose a risk for exposure to measles. When measles is imported into the United States, additional transmission can occur locally.

While providers should consider measles in patients with fever and a descending rash, measles is unlikely in the absence of confirmed measles cases in your community or a history of travel or exposure to travelers. This guidance discusses which patients should be prioritized for measles testing.

Report Immediately by Telephone

Suspected measles cases must be reported immediately by telephone, 24/7, to Yolo County Health and Human Services Communicable Diseases (CD) at **530-666-8670 during business hours**. To report suspect cases **after hours**, call **530-321-3620**.

Testing

Testing for measles can be based on:

A) Measles symptoms

- *Fever*, including subjective fever (see page 2 for a more detailed description).
- *Rash that starts on the head and descends*
- Usually 1 or 2 of the “3 Cs” – *cough, coryza and conjunctivitis*.

B) Risk factors increasing the likelihood of a measles diagnosis

Davis
600 A Street
Davis, CA 95616
Mental Health (530) 757-5530

West Sacramento
500 Jefferson Boulevard
West Sacramento, CA 95605
Service Center (916) 375-6200
Mental Health (916) 375-6350
Public Health (916) 375-6380

Winters
111 East Grant Avenue
Winters, CA 95694
Service Center (530) 406-4444

Woodland
25 & 137 N. Cottonwood Street
Woodland, CA 95695
Service Center (530) 661-2750
Mental Health (530) 666-8630
Public Health (530) 666-8645

- In the prior 3 weeks: travel outside of North America, transit through U.S. international airports, or interaction with foreign visitors, including at a U.S. tourist attraction.
- Confirmed measles cases in your community.
- Never immunized with measles vaccine and born in 1957 or later.

Recent MMR vaccine recipients

Fever and rash occur in ~5% of MMR vaccine recipients, typically 6-12 days after immunization. Such reactions can be clinically identical to measles infection, and result in positive laboratory testing for measles. However, this reflects exposure to measles vaccine virus rather than the wild virus, and such patients are not infectious for measles. If a recently vaccinated patient has fever and rash but none of the risk factors for measles described above, measles is extremely unlikely and testing is usually unnecessary.

Polymerase chain reaction (PCR) is the preferred testing method for measles, and can only be performed in public health laboratories. Measles IgM testing is frequently falsely positive and is not preferred. See below for more specific testing guidance.

Symptoms

FEVER typically

- Precedes the rash;
 - Is high;
 - Persists after the rash erupts; and
 - Peaks on day 2 or 3 after rash onset, but can persist with secondary infection.

The RASH typically

- Starts on the forehead at the hairline and behind the ears and then spreads downwards to the rest of the body; in vaccinated people the rash may be less intense and not spread to the entire body.
- Is erythematous and maculopapular, progressing to confluence in the same order as the spread of the rash. Confluence is most prominent on the face.
- Clears on the third or fourth day in the same order it appeared; duration is usually 6-7 days, but sometimes less in vaccinated people.
- Is initially red and blanches with pressure, then fades to a coppery appearance, and finally to a brownish discoloration that does not blanch with pressure.
- Not itchy until at least the fourth day after onset.
- Consider taking a photo of the rash to share with the local public health department.

Other symptoms may include

- At least one of the prodromal 3 Cs- cough, coryza and conjunctivitis.
- White (Koplik) spots in the mouth early in illness.
- Feeling miserable; especially for children.
- In previously vaccinated persons, symptoms may be milder and all 3 Cs may not be present.

Laboratory testing for suspect measles patients

(see: <http://tinyurl.com/ydhh9u85>)

- If you suspect measles, please immediately contact Yolo County HHS Communicable Disease per California reporting laws.
- PCR is the preferred testing method for measles, and can only be performed at public health laboratories. Serologic testing for measles infection can result in falsely positive IgM test results, and serologic testing performed at commercial laboratories may not provide timely results.

Specimen collection for measles testing

- For patients presenting <7 days of rash onset:
 - PCR testing, rather than serologic testing, is recommended
 - Obtain a Dacron throat swab (rather than NP swab) and place in viral transport media.
 - Collect 10-50 ml of urine in a sterile container.
- For patient presenting >7 days after rash onset:
 - Obtain a Dacron throat swab (rather than NP swab) and place in viral transport media.
 - Collect 50-100 ml of urine for PCR testing in a sterile centrifuge tube or urine specimen container.
 - Serology: Draw 7-10 ml blood in a red-top or serum separator tube; spin down if possible. **Note:** capillary blood (approximately 3 capillary tubes to yield 100 µl of serum) may be collected in situations where venipuncture is not preferred, such as children <1 year of age.

Isolation of suspect measles patients

If measles is suspected, please isolate the patient according to public health guidance. See complete infection control guidance at: <http://tinyurl.com/yxes3amk>.

Resources

Clinic posters available in English, Spanish, Russian, Ukrainian and Tagalog.

<http://eziz.org/resources/measles/>

