



To: CAHAN San Diego Participants

Date: February 20, 2015

Measles Update #3

This CAHAN updates information on local, state and national measles cases and provides recommendations for local caregivers on the diagnosis, management and prevention of measles.

Background

California is currently experiencing a large measles outbreak. The outbreak began when at least 42 people who visited or worked at the Disneyland theme park in Orange County in mid-December 2014 contracted measles. The outbreak has spread to seven other states, Canada, and Mexico and now totals at least 125 cases. Updated case counts are available on the Centers for Disease Control and Prevention (CDC) [measles outbreak website](#) and the California Department of Public Health (CDPH) [measles webpage](#).

Thirteen measles cases associated with this outbreak have been confirmed in San Diego residents. Only one of the San Diego cases was vaccinated. The San Diego cases have all recovered from illness. It has been over three weeks since the most recent infectious case. **No cases have been identified from community exposures in San Diego County.** However, measles has been recently detected in Orange County and other parts of California, and therefore it continues to be important to obtain a travel history in assessing possible measles cases.

Measles symptoms usually begin 10-12 days (up to 21 days) after exposure with a prodrome of fever as high as 105°F (40.5°C), malaise, cough, runny nose, and conjunctivitis. Three to five days following onset of the prodrome, a maculopapular rash develops. The rash usually begins around the ears and hairline and then spreads down to cover the face, trunk, arms, and legs. More information for providers may be found at the CDC [measles website](#) and the [CDPH health advisory on measles](#) attached to this CAHAN. Other useful resources are a recent webinar with continuing medical education credit on measles conducted by the Los Angeles Department of Public Health archived [here](#) and a differential diagnosis poster from Kaiser Permanente accompanying this CAHAN.

Recommendations for Health care providers

- **Consider the diagnosis of measles in patients with an appropriate clinical presentation.** The sequence of symptom presentation, vaccination and travel histories, and medication use are critical in [distinguishing measles from other causes](#) of maculopapular rash and fever. It is unlikely to be measles if there is no rash on the face, if there is no fever at rash onset, or if rash appears less than two days or greater than 7 days after symptom onset. Clinicians who have never seen a measles case are encouraged to consult their institutional resources (experienced pediatricians, infectious disease physicians, etc.) to help evaluate patients with fever and rash.
- **Immediately mask and isolate any patient suspected of having measles and move them to a negative pressure room when available.** Providers seeing patients in an office or clinic setting should consider options such as having the patients call ahead when measles symptoms are present and arranging to see suspect measles cases after all other patients have left the office, or assessing patients outside of the building to avoid having a potentially infectious patient enter the office. CDPH guidance on healthcare facility infection control recommendations for suspect measles patients may be found [here](#).

- **Notify the County Epidemiology and Immunization Services Branch (EISB) immediately about any suspect cases** during office hours by calling (866) 358-2966 (press 5 at the prompt) Monday-Friday 8 a.m.- 5 p.m. and (858) 565-5255 after hours and on weekends. This will facilitate time-sensitive public health actions and assistance with clinical decision making.
- **DO NOT wait for laboratory confirmation before reporting a suspect case.** County EISB staff can assist with facilitating testing. Polymerase chain reaction (PCR) testing for measles is now available at the San Diego Public Health Laboratory (SDPHL). A throat swab is preferred over a nasopharyngeal swab for measles PCR testing and the specimen should be placed in viral transport media. A urine specimen of at least 50cc can also be tested for measles using PCR. PCR testing is not available at commercial laboratories, however most can provide measles IgM and IgG quantitative or qualitative tests. Serologic testing for measles may be challenging to interpret because of the frequency of both false negative and false positive results.
- **Collect appropriate specimens in your office when possible. DO NOT send potentially infectious suspect measles patients to a reference laboratory for specimen collection.** If you must send patients to another location for specimen collection call ahead and make arrangements for appropriate isolation precautions to be taken. Measles virus is sensitive to heat and desiccation and viability decreases when samples are not kept cold. Transport samples with cold packs as soon as possible following collection. If samples cannot be transported immediately, they can be held at 4°C for 72 hours before shipping.
- **DO NOT send specimens directly to the SDPHL or to the CDPH laboratory without consulting County EISB staff.** More information about laboratory testing for measles may be found [here](#).
- **Ensure that patients are up-to-date with all immunizations.** Two doses of measles-containing vaccine ([MMR or MMRV vaccine](#)) are more than 99% effective in preventing measles. Measles vaccines have been available in the United States since 1963, and two doses have been recommended since 1989. The first dose is given at 12-15 months of age, with the second dose usually between ages 4-6 years. Before [international travel](#), those between 6 and 12 months of age should receive one MMR dose and those over 12 months of age should receive two MMR doses at least 28 days apart. Doses given prior to 12 months of age do NOT count toward meeting the recommended two doses of MMR vaccine.
- **Ensure all medical staff members have two documented doses of MMR or serologic evidence of measles immunity.** Providers who have serology testing from a commercial laboratory that indicates a "non-immune" status (that is, immunoglobulin G for measles is not detected or is equivocal), and who have two documented doses of MMR vaccination or measles disease documented in their medical records, may contact the County Immunization Program to facilitate obtaining more sensitive serologic testing to document immune status. Please contact the Immunization Program during normal working hours only at (866) 358-2966 (press 5 at the prompt).

Provide post-exposure prophylaxis when indicated. Updated guidance from CDPH on measles post-exposure prophylaxis may be found [here](#). Detailed guidance on immunoglobulin administration may be found [here](#).

Thank you for your continued participation.

CAHAN San Diego

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