

HEALTH ADVISORY – February 19, 2014

14 Measles Cases in the State of California in 2014 Look for Signs of this Highly Contagious Disease

Fourteen cases of measles with onset in 2014 have been reported to California Department of Public Health. Among the California cases, four case-patients had traveled outside of North and South America, with three traveling to the Philippines. Nationally, an increase has been noted in the proportion of measles cases with travel to the Philippines. Measles cases from recent years have reported travel to Germany, France, England, India, and China, among other destinations.

Of the 2014 California case-patients without international travel, three had contact with known measles cases, two had contact with international travelers and five are under investigation to identify potential sources.

Of the 12 cases with known measles vaccination status, 8 were unvaccinated (7 were intentionally unvaccinated and 1 was too young to be vaccinated).

The last large outbreak of measles in the U.S. occurred during 1989-1991, with 17,000 cases of measles and 70 deaths in California. This outbreak was associated with children being unable to access immunization services. To ensure that all children could receive vaccines, the federal Vaccines for Children (VFC) Program was established. Efforts to increase immunization rates in the 1990s were successful and endemic transmission of measles in the U.S. was eliminated in 2000. In 2013-2014, a large measles outbreak in the Philippines has resulted in over 1700 cases and 21 deaths. This outbreak has led to measles importations to Australia, Canada, the UK, and in many U.S. states. Additionally, measles is currently circulating in most regions of the world outside of North and South America.

Immunize them before they go

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 six months of age (though they should also have the two standard doses of MMR vaccine after their first birthday).

Remember the diagnosis

The recent cases in California highlight the need for healthcare professionals to be vigilant about measles. ***Your expert eye, diagnostic skills, and prompt reporting of suspect measles cases to public health can make a difference in stopping the spread of this highly contagious disease in your community:***

- Consider measles in patients of any age who have ***a fever AND a rash*** regardless of their travel history. Fever can spike as high as 105°F. Measles rashes are red, blotchy and maculopapular and typically start on the hairline and face and then spread downwards to the rest of the body.
- Obtain a thorough history on such patients, including:
 - Travel outside of North or South America or contact with international travelers (including transit through an international airport and or other international tourist attractions) in the prior three weeks. However, since measles importations have occurred throughout California undetected community transmission cannot be ruled out; and
 - Prior immunization for measles.

- If you suspect your patient may have measles, isolate the patient immediately (see below) and alert your local health department as soon as possible. The risk of measles transmission to others and large contact investigations can be reduced if control measures are implemented immediately.
 - Post-exposure prophylaxis can be administered to contacts within 72 hours of exposure (MMR vaccine) or up to 6 days after exposure (Immune globulin - intramuscular). Please consult with your local health jurisdiction regarding appropriate administration.
- Collect specimens for measles testing:
 - Draw 1-2 ml blood in a red-top tube; spin down serum 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 for children <1 year of age.
 - Obtain a throat or nasopharyngeal swab; use a viral culturette and place into viral transport media.
 - Collect 10-40 ml of urine in a sterile 50 ml centrifuge tube or urine specimen container.
 - Please arrange for measles testing at a public health laboratory.

If measles is suspected

1. 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 in the waiting room or other common areas).
2. Do not allow suspect measles patients to remain in the waiting area or other common areas; isolate them immediately in an airborne infection isolation room if one is available. If such a room is not available, place patient in a private room with the door closed. For additional infection control information, please see the CDC "Guideline for Isolation Precautions" at: <http://www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html>
3. If possible, allow only healthcare personnel with documentation of 2 doses of live measles vaccine or laboratory evidence of immunity (measles IgG positive) to enter the patient's room.
4. Regardless of immune status, all healthcare personnel entering the patient room should use respiratory protection at least as effective as an N95 respirator.
5. If possible, do not allow susceptible visitors in the patient room.
6. Do not use the examination room for at least two hours after the possibly infectious patient leaves.
7. If possible, schedule suspect measles patients at the end of the day.
8. Notify any location where the patient is being referred for additional clinical evaluation or laboratory testing about the patient's suspect measles status and do not refer suspect measles patients to other locations unless appropriate infection control measures can be implemented at those locations.
9. Instruct suspect measles patients and exposed persons to inform all healthcare providers of the possibility of measles prior to entering a healthcare facility so that appropriate infection control precautions can be implemented.
10. 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 confirmed in the suspect case, exposed people will need to be assessed for measles immunity.

Complete infection control guidance can be found here:

<http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPHHCFacilityICRecsforSuspectMeaslesPatients.pdf>