HEALTH ADVISORY - April 4, 2014

Measles Update: 49 Measles Cases in the State of California in 2014

Look for Signs of this Highly Contagious Disease

Measles activity continues to be high in California this year. As of March 27, 2014, 49 confirmed measles cases with onset in 2014 had been reported to California Department of Public Health. In 2013, four measles cases had been reported by this date. Among the 2014 cases, 11 patients had traveled outside of North and South America with travel to the Philippines (n=8), India (n=2), or Vietnam (n=1). Of the patients without international travel, 30 had contact with known measles cases, 3 had contact with international travelers and 5 are under investigation to identify potential sources. Measles cases have occurred in both Northern and Southern California; however, the majority of cases are in Southern California (40/49). Several large contact investigations are ongoing.

Cases range in age from 5 months to 60 years. Of the 29 measles cases for whom vaccination records are available: 22 were unvaccinated (16 were intentionally unvaccinated, 3 were too young to be vaccinated, 3 were not vaccinated for unknown reasons), and seven had received appropriate vaccination. Immunization data collection is ongoing and vaccination status is preliminary. Transmission has occurred in the following settings: households, urgent care clinics, physician offices, hospitals, churches and schools.

There are 10 independent measles transmission chains. Four originated from imported cases (Philippines, n=4), two from cases who had contact with international travelers and four from cases with unknown source. A large measles outbreak is ongoing in the Philippines with over 15,000 cases in 2014, but measles is also circulating in many other countries outside of North and South America.

Updated measles case numbers are posted each Friday on the CDPH website at:
http://www.cdph.ca.gov/HealthInfo/discond/Pages/Measles.aspx

To prevent additional measles cases, California healthcare providers are recommended to:

> Immunize them before they go

Un- or under-vaccinated 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 patients can make a difference in stopping the spread of this highly contagious disease.

Promptly report suspect cases to the Santa Cruz County Communicable Disease Unit, 831-454-4114.

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. Go to the following link for a picture: http://eziz.org/assets/docs/IMM-908.pdf

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.
- Please note that although documentation of receipt of two doses of MMR vaccine or a prior positive measles IgG test result makes the diagnosis of measles less likely, measles can still occur in such persons.
- 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 7-10 ml blood in a red-top or serum separator 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 50-100 ml of urine in a sterile centrifuge tube or urine specimen container.
    - In addition to any commercial laboratory testing that you may do, we ask that you also submit the above specimens to our Public Health laboratory. Please call 831-454-4114 to arrange for this testing.

If measles is suspected (complete infection control guidance at: http://tinyurl.com/lfpk3yn)

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 per CalOSHA requirements.
5. If possible, do not allow susceptible visitors in the patient room.

6. Depending on the number of air changes per hour (see information in link above), do not use the examination room for up to one hour 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 measles patient left. If measles is confirmed in the suspect measles patient, exposed people will need to be assessed for measles immunity.

**Post flyers in your clinic**

- Visiting another Country Flyer English: http://eziz.org/assets/docs/IMM-1046.pdf
- Visiting another Country Flyer Tagalog: http://tinyurl.com/lq5ts3c
- Measles Alert flyer for providers: http://eziz.org/assets/docs/IMM-908.pdf