January 23, 2015

LACDPH Health Update:
Measles Outbreak in Los Angeles County Associated with Disneyland Parks

This message is intended for primary care, urgent care, emergency, pediatric, and internal medicine, infectious disease, and laboratory providers. Please distribute as appropriate.

Key messages
- There is a large measles outbreak in California and neighboring states associated with Disneyland Parks.
- Health care providers should consider the diagnosis of measles among persons presenting with a febrile rash illness.

Situation
The California Department of Public Health reports that as of 1/21/15, measles has been confirmed in 59 California residents since late December 20141. Related cases have occurred in multiple states and in Mexico. In Los Angeles County (LAC) currently, there are 10 confirmed measles cases and 4 suspect cases with nearly 800 contact investigations ongoing.

Actions requested of providers
- Consider measles when evaluating any patient who has an acute rash illness with fever
- IMMEDIATELY institute respiratory and airborne precautions for all persons with a measles like rash and fever.
- Reduce exposures: schedule patients for end of the day and have them enter via a separate entrance. Do not send to the ED unless they require hospitalization and contact the ED first.
- Obtain specimens for confirmation of diagnosis: blood for serology, and urine +/- nasopharyngeal (NP)/throat swabs for PCR.
- IMMEDIATELY report suspect cases to the Morbidity Central Reporting Unit at 888-397-3993 (after 5 pm or on weekends call: 213-974-1234). Do not wait for laboratory confirmation. For Long Beach or Pasadena cases see reporting section below.
- Offer immunoglobulin to all high risk immunocompromised within 6 days. Protect immunocompetent non-immune persons by vaccinating within 72 hours following exposure.
- Provide a list of exposed staff and patients to the public health department.

Measles Clinical Presentation
Measles symptoms usually begin 10-12 days (up to 21 days) after exposure with a prodrome of fever (up to 105°F), malaise, cough, coryza, and conjunctivitis. Two to 4 days later, a maculopapular rash develops around the hairline or ears and spreads downward to the face, trunk, and extremities. Severe illness can occur including pneumonia, encephalitis, and death.

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1 California DPH Measles Health Advisory (1-21-15)
Specimen Collection
At presentation, collect blood for both measles IgM and IgG antibodies. Draw 7-10 mL of blood in a red top or serum separator tube; spin down serum if possible. NOTE: capillary blood (approximately 3 capillary tubes to yield 100 uL of serum) may be collected if venipuncture is not preferred.

In addition to blood specimen:
If within 4 days of rash onset, collect both a NP swab (throat swab acceptable) and a urine specimen for culture/PCR. Swabs are to be collected using a viral culturette and placed into viral transport media. If within 10 days of rash onset, collect a urine specimen only. Collect 50-100 mL of urine in a sterile centrifuge tube or urine specimen container.

Transmission and Infection Control
Measles is highly infectious and is transmitted by airborne spread of respiratory droplets. Typically, measles patients are contagious from 4 days before to 4 days after rash onset. Suspect measles cases should not be allowed in patient waiting areas. They should be masked and placed immediately in an examination room, with the door closed. Patients with suspect measles should be seen at the end of the day and use a separate entrance. The examination room should not be used for two hours.

Prevention
Routine vaccination with two doses of measles-containing vaccine is the safest and most effective way to prevent disease. It is routinely recommended for all children and is a requirement for school attendance. Non-immune immunocompromised persons, infants ≤ 12 months, and others at high risk of complications from measles can be protected with immune globulin ≤ 6 days after exposure. Non-immune immunocompetent individuals can receive the MMR vaccine ≤ 72 hours after exposure.

Reporting
Measles cases must be reported by telephone immediately to the local health department (Title 17, California Code of Regulations, § 2500).

Reporting suspect cases in Los Angeles County:
- Weekdays 7:30 am-5:00 pm call 888-397-3993
- Non-business hours (before 7:30 am, after 5:00 pm, or weekends) call 213-974-1234

Reporting suspect cases in the cities of Long Beach or Pasadena, contact the local health department:
- Long Beach Health and Human Services: 562-570-4302
- Pasadena Health Department: 626-744-6403.

Additional Resources
- Technical assistance: LAC DPH Immunization Program’s Surveillance Unit at 213 351-7800.
- Additional LAC DPH information about measles: http://publichealth.lacounty.gov/ip/DiseaseSpecific/Measles.htm

This Health Update was sent by Dr. A. Nelson El Amin, Medical Director, Immunization Program, Los Angeles County Department of Public Health