



**LAC DPH Health Advisory:
Measles Outbreaks in Israel,
New York City and Surrounding Areas**

November 20, 2018



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

Key Messages

- **There is an ongoing outbreak of measles in Israel and New York City as well as several surrounding communities in New York and New Jersey.**
- **Consider the diagnosis of measles among persons presenting with a febrile rash illness, particularly if there has been recent travel to Israel or exposure to other communities where there is an outbreak.**
- **Report all patients with suspected measles immediately to the Health Department. *Do not wait for laboratory confirmation.* See “Actions Requested” below.**
- **Screen for rash with fever at the point of entry to a healthcare facility and immediately institute airborne precautions to prevent healthcare-associated exposures.**

Situation

Currently there is an outbreak of measles in Israel with over 1,500 cases diagnosed. Outbreaks of measles are now occurring in Orthodox Jewish communities in New York City and several surrounding communities in New York and New Jersey. Some of these cases had recent travel to Israel. There are no confirmed cases in Los Angeles County presently. Providers should suspect measles in any patient with fever and rash, especially if they had recent travel to Israel, New York City, or any surrounding communities in New York or New Jersey.

Actions Requested of Providers

- Screen for acute rash illness with fever at entry to any clinic or healthcare facility.
- If you suspect measles:
 - IMMEDIATELY institute respiratory and airborne precautions for all persons with a measles-like rash and fever.
 - IMMEDIATELY report to Los Angeles County Department of Public Health (LAC DPH). Do not wait for laboratory confirmation.
- Reduce exposures: schedule patients for end of the day and have them enter via a separate entrance if possible. Do not send suspect measles cases to the Emergency Department (ED) unless they require hospitalization. Be sure to notify the ED first.
- Obtain specimens for confirmation of diagnosis: blood for serology, +/- urine and nasopharyngeal/throat swabs for PCR. Do not send suspect measles cases to a

commercial laboratory for specimen collection. If you cannot collect specimens on site, call LAC DPH for assistance. All specimens should be sent to the Public Health Laboratory after consultation with LAC DPH.

- Provide a list of exposed staff and patients (those exposed to the patient 4 days prior to, or 4 days after rash onset) to LAC DPH.
- Refer to the LAC DPH measles clinician toolkit guidance documents: http://publichealth.lacounty.gov/ip/providers_resources.htm

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 four 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.

Specimen Collection

- Contact LAC DPH for approvals and instructions prior to collecting specimens.
- Collect blood for both measles IgM and IgG antibodies. Draw 8-10 ml of blood in a gold top serum separator tube (SST). Spin down serum if possible. With prior approval from LAC DPH, capillary blood may be collected for pediatric patients if venipuncture is not preferred.
 - NOTE - measles serology results collected earlier than 72 hours after rash onset may result in a false negative result so may need to be repeated.
- In addition, if within 14 days of rash onset:
 - Collect a throat swab for culture/PCR. Collect the specimen with a synthetic swab and place it into viral or universal transport media (bacterial media **cannot** be used), **and**
 - Collect a urine specimen. Collect 10-50 ml of urine in a sterile urine cup for PCR (urine specimens do not have to be processed by the submitting lab).
 - Store both specimens in the refrigerator at 4-8°C and transport on cold pack(s) to the LAC Public Health Lab as soon as possible.

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 if possible. The examination room should not be used for at least two hours after the patient has left.

Suspected measles patients should not be referred to commercial labs or other departments/facilities for testing or other services. Coordinate specimen collection with LAC DPH if appropriate media is not available or additional guidance is needed.

Prevention

Routine vaccination with two doses of measles-containing vaccine is the safest and most effective way to prevent disease. High population-level immunity can help limit transmission of measles during any outbreak. MMR vaccine is 90% to 95% effective in preventing measles. The best way to protect patients from measles and to meet school immunization requirements is to ensure that children receive their first dose of MMR routinely at age 12 months and their second dose at age 4 to 6 years. Ask about travel plans. Infants traveling internationally should be protected against measles by receiving a first dose between age 6 to 11 months, but will require two additional doses at 1 year and between 4 to 6 years.

Exposed asymptomatic adult patients without documentation of prior measles vaccination or immunity to measles should have measles IgG and IgM titers drawn prior to receiving post exposure prophylaxis (PEP). It is important to know the susceptibility status of contacts before PEP administration so that we can identify those individuals truly at risk of acquiring measles or developing symptoms.

Exposed non-immune immunocompetent individuals should receive the MMR vaccine ≤ 72 hours after first exposure as an immediate prevention measure (PEP). If MMR vaccine is not administered within 72 hours of exposure it should still be offered to provide protection from future exposures.

Exposed 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. Clinicians may consider administering immune globulin to any suspected contact in accordance with California Department of Public Health recommendations.

<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Immuni zation/IMM-MeaslesIGPEPQuicksheet.pdf>

Reporting

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

Los Angeles County DPH Morbidity Central Reporting Unit:

- Weekdays 8:30 AM – 5 PM: call 888-397-3993.
- After-hours: call 213-974-1234 and ask for the physician on call.

Long Beach Health and Human Services:

- Weekdays 8 AM – 5 PM: call 562-570-4302.
- After-hours: call 562-500-5537 and ask for the duty officer.

Pasadena Public Health Department:

- Weekdays 8 AM – 5 PM (closed every other Friday): call 626-744-6089.
- After-hours: call 626-744-6043.

Additional Resources

- **Technical assistance:**
LAC DPH Vaccine Preventable Disease Control Program Surveillance Unit at 213-351-7800
- **Information for clinicians:**
http://publichealth.lacounty.gov/ip/providers_resources.htm
- **Clinician reference for ordering tests from LAC DPH:**
http://publichealth.lacounty.gov/ip/VPDspecimen_collection.htm
- **Laboratory test guidance from the California Department of Public Health:**
<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Measles-Testing-InformationVRDL.pdf>
- **Information and FAQs for parents and patients:**
<http://publichealth.lacounty.gov/media/measles/index.htm>

This Health Advisory was sent by Dr. Franklin Pratt,
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please visit <http://publichealth.lacounty.gov/lahan>