



**LAC DPH Health Alert:
Measles Outbreak in
LA County**

February 7, 2020



*This message is intended for primary care, urgent care, emergency, pediatric, family medicine, obstetrics/gynecology, internal medicine, infectious disease, and travel medicine providers
Please distribute as appropriate.*

Key Messages

- There is a local outbreak of measles in Los Angeles County with a large number of [potential public exposure sites](#).
- All health care facilities should:
 - Post signs at entrances advising patients with fever, rash, or cough to immediately notify facility staff.
 - Screen for fever, rash, and/or cough at intake and if symptoms are present, immediately mask patients and isolate them using airborne precautions
 - Assure that all staff have documented proof of immunity to measles.
- Providers are reminded to report all patients with suspect measles immediately to Public Health without waiting for laboratory confirmation (see *Reporting* below).

Situation

Los Angeles County Department of Public Health (LAC DPH) has recently confirmed 5 measles cases. This includes four county residents who were exposed to an unimmunized, international traveler. LAC DPH is currently conducting outreach to identify and perform contact investigations for hundreds of exposures. Some of these contacts are staff in healthcare facilities.

This health alert summarizes immediate steps to take when evaluating a person with possible measles with an emphasis on protecting spread in health care facilities.

Health care providers are encouraged to view the LAC DPH measles [toolkit](#) which includes a step-by-step guide for evaluating patients suspected to have measles, a measles factsheet, and FAQs for patients.

Actions Requested of Providers

- **Display [posters](#)** at facility entrances advising patients with fever, rash, or cough to immediately notify facility staff immediately.
- **Immediately identify patients with fever and rash at intake when possible.** All health care facilities should have signage outside of or at entryway(s) advising

patients with fever, cough, and/or rash to immediately notify facility staff at the very beginning of intake or clinical encounter. Healthcare facility front-line staff must immediately screen for fever, cough, and/or rash when the patient presents for care and, if these symptoms are present, immediately mask the patient and isolate the patient with airborne precautions.

- **Assess if the patient has measles-like symptoms.** A suspect measles case will have both a fever and rash. Presentations may vary based on vaccination status and immunocompetence, but all cases should have both a fever and a rash. See *Measles Clinical Presentation* below.
- **Ask about exposure risk-factors for measles.** In LA County and California, there are certain epidemiologic risk factors that significantly increase the probability that a patient with an acute febrile rash has measles. Determine if the patient had in the past 4 weeks:
 - contact with a known measles case*
 - contact with an international visitor who was ill
 - traveled outside the U.S., Canada, or Mexico
 - traveled through an international airport (even if they traveled domestically)
 - lived in or visited a U.S. community where there is an [outbreak](#)

* LAC DPH has released a [list](#) of the locations and times where someone may have been exposed. If a symptomatic patient is unsure of exposure, it may be helpful for them to review the full list to determine if they may have been exposed

- **Review measles immunization status and/or serology.** Patients with 2 documented MMR doses administered in the U.S. at ≥ 12 months of age are probably immune to measles. Immunocompetent patients with a documented positive IgG are usually considered immune to measles.
- **Report by phone immediately all patients with rash and fever plus an exposure risk-factor for measles, regardless of immunization history.** DPH will work with the reporting clinician to determine the likelihood of measles, review any specimen collection recommendations, ensure appropriate isolation precautions are in place for four days after rash onset, and determine if any additional disease control actions are warranted.

Measles Clinical Presentation

Unvaccinated, immunocompetent patients usually have a classic presentation of measles. Symptoms typically begin with a mild to moderate fever with the 3 C's of cough, coryza, and conjunctivitis. Two to three days later, Koplik's spots, an uncommon but characteristic sign of measles, may appear in the mouth. The fever then spikes, often to $>104^{\circ}\text{F}$ and a red, blotchy, maculopapular rash appears, usually first on the face, along the hairline, and behind the ears. This rash then spreads downward to the

trunk, and then to the arms and legs. In approximately one week, the rash fades in the same sequence that it appeared.

It is useful to note that measles in unvaccinated children follows the typical clinical presentation and that these children are very ill. Consider other etiologies if the unvaccinated child appears well or lacks the classic rash progression accompanied by a high fever.

Symptoms of fever and rash can vary in presentation and timing if the patient has been immunized or is immunocompromised. Measles in immunocompromised patients can be severe with a prolonged course and may lack the typical rash.

Measles in vaccinated patients with partial immunity has a wide variety of presentations including classic disease as well as milder disease and modified symptoms. The fever may be milder and the rash may present differently (such as starting on trunk and arms). “Atypical measles” is associated with killed vaccine used from 1963-1967. The illness is characterized by fever, pneumonia, pleural effusions, and edema. The rash is usually maculopapular or petechial, but may have urticarial, purpuric, or vesicular components. It appears first on the wrists or ankles. See CDC’s Pink Book – [measles chapter](#) for more information on these presentations.

Measles Specimen Collection and Testing

When contacted about a possible measles case, DPH will make recommendations regarding specimen collection and will advise whether Public Health Laboratory (PHL) testing is indicated.

If DPH considers the case suspicious for measles, DPH will ask that the following three specimens be collected and stored for measles testing by PHL:

- Throat swab for PCR: Use sterile synthetic swab and place into liquid viral/universal transport media
- Urine for PCR: 10 – 50 ml midstream, clean-catch
- Serum for IgM/IgG: 7 - 10 ml in gold top serum separator tube. (For pediatric patients, capillary blood, finger or heel stick, can be used. At least 3-5 capillary tubes are needed.)

For laboratory forms and details on specimen labeling, storage and transport, view the specimen collection [website](#) and [poster](#).

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 the Duty Officer at 562-500-5537.

Pasadena Public Health Department:

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

Resources

- **Possible Measles Exposure Locations:**
publichealth.lacounty.gov/media/measles/exposureLocations.htm
- **U.S. cases and locations (CDC):** www.cdc.gov/measles/cases-outbreaks.html
- **Technical assistance:** LAC DPH Vaccine Preventable Disease Control Program Surveillance Unit 213-351-7800
- **Consider measles poster** for clinicians:
publichealth.lacounty.gov/media/docs/MeaslesHealthCareProviderConsider.pdf
- **Measles toolkit** for clinicians: publichealth.lacounty.gov/ip/providers_resources.htm
- **Laboratory forms** and details on specimen labeling, storage and transport:
publichealth.lacounty.gov/ip/VPDspecimen_collection.htm
- **Poster for specimen collection** for common vaccine preventable diseases:
publichealth.lacounty.gov/media/docs/SpecimenCollectionPoster.pdf
- **CDC Pink Book** measles chapter:
www.cdc.gov/vaccines/pubs/pinkbook/meas.html#complications
- **Posters** for entrance to facility
publichealth.lacounty.gov/media/docs/MeaslesSTOPPosters.pdf



- **Information and FAQs for parents and patients:**
publichealth.lacounty.gov/media/measles/index.htm

This Health Alert was sent by Dr. Franklin Pratt, Medical Director, Vaccine Preventable Disease Control Program, Los Angeles County Department of Public Health

To view this and other communications or to sign-up to receive LAHANs, please visit <http://publichealth.lacounty.gov/lahan>