



Measles Testing Guidance

Consider measles in patients who **have fever ≥ 101 F, plus at least one of the 3 “Cs”** (cough, coryza or conjunctivitis) **and a rash*** who:

- Are unvaccinated; OR
- Do not meet eligibility criteria for presumptive immunity** for measles; OR
- Have at least one epidemiologic risk factor in the past 21 days:
 - Known contact with a measles case or an ill person with fever and a rash
 - Contact with an international visitor who arrived in the U.S. within the past 21 days
 - Travel outside the U.S., Canada or Mexico
 - Travel through an international airport
 - Visited a U.S. venue popular with international visitors such as a large theme park
 - Visited or lives in a U.S. community where measles exposures have known to occur (e.g., Asbury University Feb 17-20)

*The rash typically starts on the face within 4 days of illness onset and descends the body.

**Per CDC, people have presumptive immunity from measles if they have written documentation of at least one of the following:

- 2 doses of measles-containing vaccine in school-aged child (grades K-12), college or university student, healthcare personnel, international traveler, or in a setting that poses a high risk for measles transmission.
- 1 dose of measles-containing vaccine in a preschool-aged child or will not be in a high-risk settings for measles transmission
- Laboratory-confirmed measles infection
- Laboratory-confirmed immunity to measles
- Born before 1957

Measles is low risk, however testing may be considered in patients with fever and characteristic rash who have presumptive evidence of immunity for measles and no epidemiologic risk factors.

Do not test asymptomatic people for measles infection. Routine IgG testing of asymptomatic people to determine immunity is not recommended unless it is needed for workplace clearance, to be cleared from quarantine, or other specific surveillance needs.

For highly suspicious measles patients, viral testing at [KDPH DLS](#) is preferred [RNA by reverse transcription polymerase chain reaction (RT-PCR)]

- Collect nasopharyngeal (NP) or oropharyngeal (OP) swabs (synthetic preferred over cotton) and place in 2 mL viral transport medium (VTM). Samples should be maintained at 4°C and shipped on cold packs <24 hours of collection. If longer storage is required, store at -70°C and ship on dry ice. Sample should be labeled with two unique identifiers and shipped with [Lab 275 form](#). Contact LHD or KDPH if testing is requested.
- RT-PCR for measles virus testing may be available at commercial laboratories but may have longer turnaround times.
- Detection of measles-specific IgM antibodies in serum specimens collected within the first few days of rash onset can provide presumptive evidence of a current or recent measles virus infection and may be available at commercial laboratories. However results may take several days and false positive measles IgM results can occur.