

When to Suspect and Test for Measles

Screen for measles

Suspect measles in patients who have:

- A Febrile rash illness **AND**
- A prodrome with one or more of the “three C’s”: Cough, coryza, (rhinitis) or conjunctivitis.

Measles usually begins with a high fever and a patient who appears noticeably ill or toxic. The fever typically continues without a break before the rash appears, although this pattern may not always be easy to confirm. The maculopapular rash usually begins on the head and neck, then spreads downward and may later become confluent or desquamate. Conjunctivitis is often associated with excessive tearing. During the prodrome, Koplik spots may be seen on the buccal mucosa appearing as ‘grains of salt on an erythematous base’.

For more guidance, including clinical presentation, diagnostic considerations, and epidemiologic context, visit [Measles Clinical Information \(www.health.state.mn.us/diseases/measles/hcp/clinical.html\)](http://www.health.state.mn.us/diseases/measles/hcp/clinical.html).

Assess risk

Increase suspicion if a patient has a risk factor:

- Unvaccinated (due to age under 12-15 months of age or vaccine refusal, hesitancy, or medical exemption)*.
- Contact with a confirmed measles case or person reporting measles symptoms.
- International travel or contact with an international visitor.
- Lives in or visited a U.S. community where there are measles cases.
- Domestic travel through an international airport.
- Resides in a community or attends a childcare or school setting with low measles vaccination rates.

* While measles can occur in vaccinated people, suspicion should be higher in unvaccinated or nonimmune patients.

Report and test

Report suspect cases to the Minnesota Department of Health (MDH) immediately.

- Call 651-201-5414 or 1-877-676-5414 at time of testing.
- Collect throat swab for measles PCR testing at the Minnesota Public Health Laboratory (if on day six to nine of rash, also send urine measles PCR)
- For detailed instructions, refer to [Lab Testing at the Minnesota Public Health Laboratory \(www.health.state.mn.us/diseases/measles/hcp/labtesting.html\)](http://www.health.state.mn.us/diseases/measles/hcp/labtesting.html).
- Measles is infectious four days prior to and four days after rash onset.
- Airborne precautions are recommended; notify your infection preventionist.
- Patient should be sent home and isolated until measles is ruled out, and exam room should be closed for two hours after patient has left.
- Follow steps to [Minimize Measles Transmission in Healthcare Settings \(www.health.state.mn.us/diseases/measles/hcp/minimize.html\)](http://www.health.state.mn.us/diseases/measles/hcp/minimize.html).

For information on measles cases and outbreaks:

- [Measles Disease Statistics \(www.health.mn.gov/diseases/measles/stats.html\)](http://www.health.mn.gov/diseases/measles/stats.html)
Measles cases in Minnesota.
- [CDC: Measles Cases and Outbreaks \(www.cdc.gov/measles/data-research/index.html\)](http://www.cdc.gov/measles/data-research/index.html)
Measles outbreaks nationally.
- [CDC: Travelers' Health \(https://wwwnc.cdc.gov/travel/\)](https://wwwnc.cdc.gov/travel/)
Global travel health notices.

Minnesota Department of Health
PO Box 64975, St. Paul, MN 55164-0975
651-201-5414 | www.health.state.mn.us/immunize

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To obtain this information in a different format, call: 651-201-5414.