

Should I Test for Measles?

A guide for Tennessee healthcare providers



Updated May 6, 2019 due to confirmed cases in TN

Only send patients to ED if medically necessary!

Notify ED and mask patient **BEFORE** sending!



Patient presents with fever and cough (with or without a rash)

MASK IMMEDIATELY!

Does patient have generalized maculopapular rash beginning on face, preceded by cough, fever $\geq 101^\circ$, conjunctivitis or coryza¹?

Yes

Isolate²
Call³
Collect⁴

Documented Immunity⁵

Out of an abundance of caution:
Isolate²
Masked, closed door, negative pressure if possible
AND
Call PH for consult³
615-741-7247

No rash, but cough, fever, conjunctivitis or coryza¹

Has history of:

- potential exposure to measles 7-21 days before illness⁶
AND
- absence of a more likely diagnosis

Yes

Unimmunized/
Unknown Immunity⁵

Isolate²
Masked, closed door, negative pressure if possible
Verify immunity status⁵
Call PH for consult³
615-741-7247
Collect⁴

For clinical in-text references see the reverse side of this document

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1. Clinical case definition:

Acutely ill patient with generalized, maculopapular rash beginning on the face; temperature $\geq 101^{\circ}\text{F}$ or 38.3°C ; and cough, coryza, or conjunctivitis. **Prodrome** definition: acute fever plus cough, runny nose or conjunctivitis but without rash. In classic measles, fever begins 3-7 days before rash. Rash starts on face and moves downward.

2. Isolate in the healthcare setting:

Airborne precautions in a healthcare setting, preferably an airborne infection isolation room at negative pressure. If unavailable, keep patient in a room with a closed door (but not a positive pressure room) and do not use room for 2 hours after the patient leaves. Patient is to remain masked in the isolation room, if possible. All staff attending to patient wear N95 masks and need 2 documented doses of MMR or proof of immunity (or risk furlough).

DO NOT TRANSFER PATIENT UNLESS MEDICALLY NECESSARY!

3. Call for Public Health consult

Call your local health department. <https://www.tn.gov/health/health-program-areas/localdepartments.html> or the state CEDEP on-call phone (available 24/7) **615-741-7247**.

4. Collect

Collect nasopharyngeal or pharyngeal specimen. Use synthetic (non-cotton) swabs and place in liquid viral transport media. Brands of synthetic swabs include Dacron and Copan. This is the same type of swab and media used for influenza PCR testing. Refrigerate specimens after collection, and transport on ice. Blood for serologic testing is collected by venipuncture or by finger/heel stick. Use tubes without additives—either a plain, red-top tube or a serum separator tube. The preferred volume for rubeola IgM and IgG testing at CDC is 0.5–1 ml of serum to allow for re-testing; however, testing may be done with as little as 0.1 ml (100 ul), if necessary.

5. Determining immunity:

- Individuals born **BEFORE 1957 OR** with documentation of a **positive rubeola IgG OR** documentation of **one dose of MMR vaccine after 1967 and after the first birthday** are presumed to have immunity to measles.
- **Exception! Work requirement for healthcare workers** who have been exposed to measles: must have TWO doses of MMR vaccine after 1967 and after the first birthday **OR** a positive rubeola IgG in order to return to work. Birth prior to 1957 is NOT acceptable proof of immunity in healthcare workers. Exposed healthcare workers who are unable to demonstrate immunity will be furloughed for a minimum of 21 days from the time of last exposure.
- Previously unvaccinated or immunocompromised persons who receive MMR or immune globulin after contact with a case should be evaluated as susceptible if presenting with prodromal symptoms.

6. Determining potential exposure to measles: Taking a thorough history of the patient's movements in the 7-21 days before their illness will assist public health staff in determining whether the patient had known exposure, possible exposure, or no specific exposure:

- Known exposure to a case: close contact of a confirmed case or at a known exposure site (location/time) where an infectious case had been within 7-21 days of the onset of illness.
- No specific exposure risk: Patient did not visit a known area of public exposure in the 7-21 days before illness, no standard risk factors, including no international travel or contact with an ill person with recent international travel.