

MEASLES

MDHHS Measles Outbreak Guidance: Screening and Specimen Collection

Clinicians should be vigilant for the possibility of additional measles cases in Southeast Michigan and are advised to take the following steps in assessing patients with possible measles.

Clinical Features of Measles:

- The measles prodrome starts 3-4 days before the rash. The prodrome is characterized by a fever (>101°F) and by the “3 C’s”: cough, coryza (runny nose), and conjunctivitis. Towards the end of the prodrome, tiny white (Koplik) spots may appear inside the cheeks. Photophobia is common.
- Following the prodrome, a maculopapular rash typically begins on the forehead or hairline and spreads downward to the neck, trunk, and upper and lower extremities (palms and soles rarely involved). The rash usually appears about 14 days after a person is exposed.
- Please note that immunocompromised patients may not develop a rash and those with a previous history of measles infection or vaccination may have a modified disease presentation characterized by milder symptoms and a longer incubation period (17-21 days).



If you suspect that a patient has measles, ACT QUICKLY!

Promptly **ISOLATE** the patient to avoid transmission:

- Immediately provide a surgical mask to patient and support person(s).
- For additional control measures, please see page 2 for guidance.

Immediately **REPORT** the suspected measles case to your Local Health Department (LHD):

- Measles is highly contagious. Health Care Providers (HCP) should **immediately** report any possible case of measles to the LHD of the patient’s residence. For LHD contact information, visit: www.malph.org/resources/directory.

OBTAIN LAB SPECIMENS for testing:

- **PLEASE DO NOT SEND PATIENTS TO LABORATORY OUTREACH LOCATIONS FOR SPECIMEN COLLECTION. THIS PUTS OTHERS AT RISK!**
 - For measles specimen collection instructions, including transport, please see attachment.
- Collect throat swab for PCR.
 - Place swab in viral transport media (see page 2 for example).
 - Keep cold or frozen.
- **Only if your staff can collect blood:**
 - Collect 2-3mL of whole blood (1 red top or red/black serum separator tube).
 - Spin down and separate serum if possible.
- Specimens **WILL NOT be tested unless they have been approved**. Call your LHD for testing approval. To find your LHD, visit: www.malph.org/resources/directory.

- At this time (during the outbreak), please do not submit urine specimens for testing.
- **Labeling Specimens:**
 - Label specimen tubes with patient name, unique identifier, date of collection.
 - Fill out test requisition (www.michigan.gov/documents/DCH-0583TEST_REQUEST_7587_7.pdf)
 - **NOTE:** Patient name and unique identifier on test requisition **must exactly match** patient name and unique identifier on specimen.

Control Measures:

- Do not allow suspect measles patients to remain in waiting area or other common areas.
- Place patient in a negative pressure (airborne isolation) room. If a negative pressure room is not available, put in a private room with the door closed and keep the patient masked.
- Support person(s) should continue wearing a surgical mask.
- All staff entering the room, should use an N-95 respirator (regardless of immunity status) for best protection. If an N-95 respirator is not available, and staff choose to wear a facemask (surgical, isolation, dental, or medical), please note that although facemasks provide some protection, they do not filter or block very small particles in the air and do not prevent leakage around the edge of the mask.
- Close examination room for at least 2 hours after the suspected measles patient leaves.
- Regardless of setting, immediately review evidence of measles immunity in all exposed staff.

Example of BD Universal Viral Transport System:



Attachments:

“Measles Specimen Collection Instructions”

“Measles Specimen Collection Checklist”

Resources:

MDHHS, “Key Facts about Measles,”

www.michigan.gov/documents/mdch/KeyFacts_Measles_392862_7.pdf

MDHHS, “Measles Investigation Guidelines,”

www.michigan.gov/documents/mdch/Measles_388976_7.pdf

MDHHS, “2019 Michigan Measles Outbreak Information,”

www.michigan.gov/measlesoutbreak

CDC and the Healthcare Infection Control Practices Advisory Committee, 2007, “Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings”

www.cdc.gov/infectioncontrol/guidelines/isolation/index.html

IAC, “Measles: Questions and Answers Information About the Disease and Vaccines,”

www.immunize.org/catg.d/p4209.pdf