

MLS Laboratory Advisory: Travel Associated Measles Case

FEBRUARY 7, 2024

Purpose of this Message:

Inform clinical laboratory partners of a recent measles case in the metro area and provide instructions on acceptable specimens, transport media and shipping conditions for testing at MDH-PHL.

Action Item:

Please review the information below and share with your clinical laboratory partners.

Laboratory Testing Information:

The MDH Public Health Laboratory (MDH-PHL) offers a real-time reverse transcriptase PCR assay for measles testing. Requests received at MDH-PHL for measles IgM serology are sent to CDC. Real-time PCR is the preferred diagnostic assay due to cross-reactivity with the serology test. It is important to collect specimens as soon as possible after the onset of the rash. Considering day 0 as the rash onset date, collect specimens as outlined below:

- Day 0 5 of rash: throat swab
- Day 6 9 of rash: throat swab and urine

Acceptable specimens:

- Throat swab (preferred), nasal/nasopharyngeal swab or nasal washing submitted in a viral transport media [VTM, universal transport medium (UTM), M5, M4, Minimum Essential Medium (MEM), saline, balanced salt solution (BSS), Sterile isotonic solutions, Phosphate buffered saline (PBS), Liquid Stuart's Medium].
- Urine (10 40 mL) should be collected and shipped in a sterile urine container.

Transport:

Store and ship specimens at refrigeration temperature (2 - 8°C) in an insulated container and on ice packs. Further information on collection, transport media and shipping can be found on the MDH Measles Lab Testing web page

(https://www.health.state.mn.us/diseases/measles/hcp/labtesting.html).

Background:

A laboratory-confirmed measles case has been identified in a hospitalized 16-month-old resident of Dakota County who recently returned to the U.S. after international travel. The child had not received any doses of MMR vaccine. The case was not infectious during travel.

Measles was laboratory confirmed by PCR at the Minnesota Department of Health's Public Health Laboratory (MDH-PHL) on February 6, 2024. Exposures primarily occurred within the family and at one health care facility in Hennepin County. Exposed individuals are being notified and given information about how to obtain post-exposure prophylaxis (PEP), if indicated. Susceptible persons who did not get PEP will be asked to exclude themselves from high-risk settings for 21 days following exposure.

A total of 58 measles cases were reported throughout the United States in 2023, with an additional nine cases reported already in 2024. For more information see Stay Alert for Measles Cases: CDC Clinician Outreach and Communication Activity (COCA) (https://emergency.cdc.gov/newsletters/coca/2024/012524.html).

National and international trends, coupled with the decreasing rates of MMR vaccine in MN, put us at risk for an outbreak of measles. This recently occurred in 2022 when there were 22 international travel related cases of measles in MN, all unvaccinated, with 10 individuals requiring hospitalization.

It is important to assess MMR vaccine at every clinic visit and to recall those who have previously refused MMR vaccine for their child. The current measles situation is an opportunity to restart conversations with patients about the importance of vaccination. Many parents just need reassurance that the MMR vaccine is safe and will protect their child. For parents or patients who decline MMR for themselves or their children, counsel them that they could be excluded from childcare/school/work for 21 days or longer if exposed to measles.

This information was shared with clinicians and infection preventionists through the Health Alert issued by MDH Health Alert Network (https://www.health.state.mn.us/han).

Questions: Please contact: Scott Cunningham, Virology Unit Supervisor; 651-201-5032, Scott.Cunningham@state.mn.us.

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PLEASE FORWARD THIS TO ALL APPROPRIATE PERSONNEL WITHIN YOUR INSTITUTION AND HEALTH SYSTEM

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To obtain this information in a different format, call: 651-201-5200.