

# MLS Laboratory Update: Recent Measles Cases in Minnesota

DECEMBER 21, 2022

## Purpose of this Message:

To remind MLS laboratories of specimen transport criteria for measles, mumps and rubella (MMR) specimens, and to encourage consideration of influenza and other viral respiratory pathogen testing in immunocompetent, MMR-vaccinated patients with measles- or mumps-like symptoms.

## Action Item:

None.

## Background:

We are continuing to receive requests for MMR testing at the Minnesota Department of Health Public Health Laboratory. We would also like to highlight that several viral respiratory pathogens, including influenza A and B viruses, can mimic characteristic symptoms in measles (maculopapular rash) and mumps (parotitis). Due to the high levels of viral respiratory disease around the state, influenza and other viral respiratory pathogens should be considered in the differential diagnosis when encountering immunocompetent patients with measles- and mumps-like symptoms who are vaccinated against MMR.

## Additional Information:

If MMR testing is requested by a provider, obtain specimens for PCR or serology per MDH lab instructions and send to MDH Public Health Laboratory (MDH-PHL). For additional information see Measles Virus in the Infectious Disease Lab's [Guide to Services \(https://www.health.state.mn.us/diseases/idlab/gts/testsm.html\)](https://www.health.state.mn.us/diseases/idlab/gts/testsm.html).

- A throat swab collected with Dacron swab tip is preferred if collected within the first four days after symptom onset. Swab should be placed in viral transport medium or similar and shipped at refrigeration temperature.
- Nasal/nasopharyngeal swabs or washes also acceptable specimen types
- Urine and throat swab should be sent if collected between days 5 and 9 of symptom onset.
- Respiratory sources: Viral transport media, VTM, UTM, M5, M4, Saline, PBS, Liquid Stuarts

- Urine and CSF in sterile container: 3 mL preferred/140 uL minimum.
- Store and ship at refrigerated temperature within 7 days of collection. Alternatively, ship frozen.
- Copan ESwab™ transport systems are not acceptable for MMR testing

Serology test should be forwarded to your institution's preferred reference lab. Serum samples received at MDH PHL will be forwarded to the CDC for testing.

For more information regarding respiratory viruses causing rash or parotitis symptoms, see the following articles:

[Maculopapular Rash in Cases of Influenza A](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2826479/pdf/182e146.pdf)

(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2826479/pdf/182e146.pdf>)

[Non-mumps Viral Parotitis](https://academic.oup.com/cid/article/67/4/493/4957004) (<https://academic.oup.com/cid/article/67/4/493/4957004>)

#### **Questions:**

For specimen or assay-specific questions, please contact:

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Thank you for your partnership and continued vaccine preventable disease surveillance efforts in Minnesota.

Scott Cunningham

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