

Measles (Rubeola)

Specimen collection and testing guidance



March 10, 2025

Due to recent inquiries and an increase in suspected **measles (Rubeola) cases**, use this document as guidance on the specimen collection and testing protocol of specimens for suspected **measles** cases.

Transmission:

- Measles is a highly contagious airborne viral disease transmitted via respiratory droplets and aerosols. Patients are infectious 4 days before and 4 days after rash onset.

Testing Immune Status versus Suspected Acute Infection:

- Testing for Immune Status (Prior infection or vaccination): This is typically assessed by ordering the **Measles Screen, IgG** test to determine if a patient has immunity due to past infection or vaccination.
- Testing for Suspected Acute Infection: For diagnosing an acute measles infection, order **Unlisted Procedures** for both **Measles PCR** and **Measles IgM + IgG** serology.
- Submit specimens to the lab.

Specimen Collection:

Test Type	Specimen	Collection Details	Transport
Measles Screen, IgG	Blood (serum)	-Draw 5 mL of blood in a red-top or serum separator tube (SST) .	Refrigerate 2-8°C or frozen
Measles PCR	Throat swab or urine	- Throat swab using synthetic swabs (e.g., Dacron, nylon) in viral transport medium (VTM) . - Collect 10-50 mL urine in a sterile container , preferably within 14 days of rash onset .	Refrigerate 2-8°C
Measles IgG/IgM Serology	Blood (serum)	-Draw 5 mL of blood in a red-top or serum separator tube (SST) .	Refrigerate 2-8°C or frozen

- For patients with known exposures (eg: travel to Gaines County, Texas or contact with a known measles case), testing may be sent to your local public health lab with prior approval. Notify the appropriate Public Health Department before testing suspected measles cases.
 - Douglas County Health Department (Methodist, Methodist Women's, or MPC)
 - (402) 444-7214/ After hours (402) 444-7000
 - Three Rivers Health Department (Methodist Fremont)
 - (402) 727-5396/After hours (402)727-5396
 - Iowa Dep. Public Health Center for Acute Disease Epidemiology (Jennie Edmundson)
 - (515) 242-5935/After hours (515)323-4360
- Coordinate with Infection Control (IC) & Infectious Diseases (ID) teams to ensure adherence to safety protocols.
- Specimens that do not have prior approval will be sent to our Commercial Reference lab for testing.

Please direct any questions to:

Reddy Cheemarla, Clinical Microbiology Director (402)354-4560

Methodist Pathology Client Services (402)354-4541

Jennie Edmundson Laboratory (712)396-6311

Methodist Fremont Laboratory (402)727-3849