

Montana Public Health Laboratory Guidance: Measles Testing



Specimen Criteria

Collect the following specimens to test for measles infection:

- Respiratory Specimen* (Throat, NP, Nasal Swab)
- Urine
- Serum - tests will only be performed for IgG and IgM if the PCR result is not definitive

** If only one specimen is obtained, the respiratory specimen in viral transport media is the most important.*

Specimen Collection for PCR Testing:

Collect specimens as soon as possible after appearance of rash, and ideally within 3 days of rash onset. Detection can be possible up to day 7 following onset of rash. Collection of urine increases the likelihood of detecting the virus.

- *Respiratory Specimen*: Throat, Nasopharyngeal, or Nasal Dacron swabs in viral transport media.
- *Urine*: 10 – 50 ml of urine collected in a sterile container, processed by centrifuging at 500 x g for 15 minutes at 4°C. Resuspend the sediment in 2 – 3 ml of viral transport medium.

Consult with Public Health authorities regarding PCR testing prior to rash development of individuals who may have had a recent exposure to measles.

Specimen Collection for IgG and IgM Testing:

For IgM testing, specimens must be collected >48 hours post rash onset.

- *Serum*: 1 – 2 ml of serum. Can be sent in a spun serum separator tube, or can be poured off into a transport tube.

Transport Conditions:

- Keep *PCR specimens* cold, and transport with cold packs as soon as possible following specimen collection. Avoid repeat freeze-thaw cycles or freezing at -20°C. If specimen transport is going to be delayed, freeze the sample at -70°C and ship on dry ice. If -70°C is not available, it is better to maintain the specimen at 4°C.
- *Serum* specimens can be shipped cold (preferable) or at room temperature.

Submission Reminders:

Complete a blue MTPHL laboratory requisition, and be sure to include the date of rash onset, along with the collection date and two patient identifiers (Name and DOB or medical record #)

Specimens can be transported by courier (if available), UPS or FedEx to:

Montana Public Health Laboratory
1400 Broadway, Room B126
Helena, MT 59601

OR

Montana Public Health Laboratory
PO Box 4369
Helena, MT 59601

Please contact the Montana Public Health Laboratory at 1-800-821-7284 for more information and remember to report any suspect measles to your local health department.