

Montana Public Health Laboratory Guidance: Measles Testing



State communicable disease reporting rules require health care providers suspecting measles to report suspected cases to local public health authorities **immediately**. Public health authorities may implement immediate control measures to prevent transmission and/or arrange immediate transport of the specimen when warranted.

Specimen Criteria

Collect the following specimens to test for measles infection:

- Respiratory Specimen (Throat, NP, Nasal Swab)
- Serum

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. *Respiratory Specimen*: Throat, Nasopharyngeal, or Nasal Dacron swabs in viral transport media.

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 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 *Respiratory specimens* cold, and transport with cold packs as soon as possible following specimen collection. Avoid repeat freeze-thaw cycles. If specimen transport is going to be delayed >24 hours, freeze the sample at -70°C and ship on dry ice.
- *Serum* specimens can be shipped cold (refrigerated) or frozen (preferable for IgM testing).

Submission Reminders:

*Please be sure to include the collection date and at least two patient identifiers (Name and DOB or medical record #) on the sample container.

*Use the [Montana Public Health Laboratory online portal](#) to order. *For respiratory specimens, order Measles PCR. *For serology specimens, order Rubeola IgM Serology (ND). *Be sure to select the appropriate specimen source when ordering. *For the Onset Date, enter the date of rash onset.

*Print the Requisition form, verify patient identifiers match the sample, and place the paperwork in the side pouch of the specimen bag. *Place the two specimens in separate specimen bags with the correct paperwork in each pouch. *Finally, create a manifest for all samples being shipped and place the manifest separately in the shipping container.

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

Montana Public Health Laboratory
1400 Broadway, Room B126
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.