Suspect measles cases must be reported immediately to the local health department. All suspect measles cases and specimens submitted for testing must be coordinated with and approved by an Oregon State Acute and Communicable Disease Epidemiologist at 971-673-1111. Specimens for measles testing should be sent to the Oregon State Public Health Laboratory (OSPL). Specimens will be forwarded to the Washington State Public Health Laboratory (WSPHL) for testing.

Persons suspected to have measles should have serum drawn and specimens collected for virus isolation and PCR at the time of the first health care provider visit.

Instructions for submitting specimens are below:

**SPECIMENS FOR SEROLOGY:**
IgM testing requires one serum specimen collected as close to rash onset date as possible. If a negative result is obtained from a specimen drawn less than 72 hours after rash onset, another specimen will be required.

IgG testing for acute measles requires two serum specimens, the first (acute) specimen should be drawn as soon after rash onset as possible and the second (convalescent) should be drawn 10 to 30 days after rash onset.

**Serum collection:**
Draw at least 1cc of serum (or about 3ml blood in a red top or red/gray top serum separator tube) for each collection date.

**SPECIMENS FOR VIRUS ISOLATION & PCR:**
Samples are best collected 1-3 days post rash but can be collected up to 10 days following onset of rash. Preferred specimens are nasal, throat and NP swabs (use a Dacron™ or rayon swab). If feasible, a urine specimen should also be submitted.

DO NOT use calcium alginate, cotton or wooden shafted swabs as they inactivate viruses and inhibit PCR reactions and the specimen will be considered UNSATISFACTORY.

**Nasal Swab collection:**
Vigorously rotate 2 swabs against the nasal turbinate bilaterally. Remove swab, snap off the end at the scored breakpoint and insert in a tube containing 2-3 ml of cold viral transport medium.

**Urine collection:**
Collect 10 - 50 ml of clean voided urine in a sterile container.

**SPECIMEN SUBMISSION:**
All clinical specimens must have two patient identifiers, a name and a second identifier (e.g., date of birth) both on the specimen label and on the completed OSPHL Virology/Immunology Test Request Form. Along with the patient and submitter names, be sure to include the specimen source, date of collection, date of rash onset, and immunization history (if known) on the form.


Before transport ensure that the caps on all tubes are tightly secured and do not leak. Store specimens at 4°C and arrange for same day/overnight transportation with cold packs. If specimens cannot be received at the OSPHL within 72 hours of collection, freeze at -70°C and ship on dry ice.

Specimens must be received by the OSPHL by Friday at 4:30pm. Submitting facilities may use their own courier services. To arrange OSPHL courier, call the OSPHL at 503-693-4100.

**Oregon Contacts:**
For collection supplies, contact John Powell at 503-693-4114.
For specimen shipping and transport information refer to: http://public.health.oregon.gov/LaboratoryServices/SubmittingSamples/Pages/ShippingTransport.aspx
For disease reporting and general information go to: https://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/ReportingCommunicableDisease/ReportingGuidelines/Documents/measles.pdf