

# Suspect Measles Case Specimen Submission Instructions

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 an Oregon State Acute and Communicable Disease Epidemiologist at 971-673-1111. Specimens for measles testing should be sent directly to the **Washington State Public Health Laboratory (WSPHL)** for testing.

Persons suspected to have measles should have serum drawn and specimens collected for viral 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 tube) for each collection date.

## **SPECIMENS FOR VIRUS ISOLATION:**

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.

## **Oropharyngeal (throat) Swab collection:**

Use a single Dacron® swab to collect secretions from the posterior pharynx and tonsillar areas, avoiding the tongue and teeth. Remove swab, snap off the end at the scored breakpoint and insert in a tube containing 2-3 ml of cold viral transport medium.

## **Nasopharyngeal Swab collection:**

Insert a flexible nasopharyngeal swab through the nostril and into the nasopharynx until slight resistance is met (about half the length from the ear to corner of the nose). Gently rotate swab 10 - 15 seconds in order to collect adequate epithelial cells. Remove the swab, snap off the end at the scored breakpoint and place into 2-3 ml 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 **WSPHL virology 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.

<http://www.doh.wa.gov/Portals/1/Documents/5230/302-017-SerVirHIV.pdf>.

For more information on Measles testing at Washington State Public Health Laboratories, refer to

<http://www.doh.wa.gov/Portals/1/Documents/5100/420-063-Guideline-Measles.pdf>

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 WSPHL within 72 hours of collection, freeze at -70°C and ship on dry ice.

Specimens must be shipped by Thursday or else special arrangements made with WSPHL for Saturday deliveries.

### **Send Specimens to:**

**Washington State Department of Health,  
Public Health Laboratories,  
1610 NE 150<sup>th</sup> St.; Shoreline, WA 98155-9701  
Phone (206) 418-5400**

## **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>