

Measles

Specimen Collection and Shipment

North Carolina State Laboratory of Public Health

The Communicable Disease Branch must approve testing for Measles at the North Carolina State Laboratory of Public Health (NCSLPH) prior to specimen collection. All Measles specimens submitted to the NCSLPH must meet the testing criteria. This Measles guidance applies only to testing at the NCSLPH. Contact the NCDHHS Communicable Disease Branch (919-733-3419, available 24/7) immediately if Measles is suspected. Contact NCSLPH (919-733-3937) for testing guidance prior to specimen collection.

Specimen Collection

- ◆ **Real Time PCR (RT-PCR) Detection of Measles**
Detection is most successful ≤ 3 days of rash onset and may be successful up to 10-14 days after onset.

Nasopharyngeal (NP) Swab (Preferred) or Oropharyngeal (OP) Swab Collection

- Collect in Viral Transport Media (VTM) or Universal Transport Media (UTM)
- Use a synthetic tipped, sterile swab of appropriate size with a plastic or metal shaft
(Do not use calcium alginate or wood shaft swabs)

Urine

- Collect 10 mL of urine in a sterile container
- Pair with swab specimen

- ◆ **Serologic Testing**

If RT-PCR is negative or not done, a serum specimen collected 3-10 days after symptom onset is recommended.

Serum Collection

- Collect 2-3 mL of serum in a plastic, screw-capped vial
Samples that are hyper-lipemic, hemolyzed or bacterially contaminated will be rejected

- ◆ **Label the Specimen Vial Completely**

Specimen Type
Patient Name
Date of Birth
Date of Collection

- ◆ **Store Specimens Properly Until Shipment**

- Refrigerate at 2-8° C for shipment within 24 hours
- Freeze $\leq -70^{\circ}$ C for storage longer than 72 hours

- ◆ **Completely Fill Out the Correct Forms**

- RT-PCR Swab/Urine: [Virology submission form](#)
- Serum: [Special Serology form](#) & [CDC DASH form](#)

Specimen Shipment

- ◆ **Specimen collection supplies and packaging and shipping supplies can be ordered online from**
[NCSLPH Online Supply Ordering System](#)
- ◆ **All specimens shipped via commercial courier must meet**
[Category B, UN3373 requirements](#)
- ◆ **Call NCSLPH Molecular Virology Lab to coordinate sample shipment at 919-733-3937**
- ◆ **Specimens MUST be received cold/frozen**
 - Specimens received <72 hours after collection must be shipped on frozen ice packs and received cold (2-8°C).
 - Specimens received >72 hours after collection must be shipped and received frozen on dry ice.
- ◆ **Label the package completely:**

Attention: Virology/Serology Unit
North Carolina State Laboratory of Public Health
4312 District Drive
Raleigh, NC 27607-5490

- ◆ **Only NP VTM will be tested at NCSLPH**
UTM and alternate specimen types are sent out to other reference laboratories.

Result Reporting

Results are posted electronically to the NCSLPH [Clinical and Environmental Lab Results](#) website associated with the submitter's EIN number. Visit the [NCSLPH website](#) for account setup and tutorials.

