

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**
ALL swab specimens for testing at NCSLPH must be collected in Viral Transport Media (VTM).

RT-PCR Specimens for Patients with Symptoms

Preferred Specimens (Paired)

- 1) *Nasopharyngeal (NP) swab in VTM
 - 2) Urine (15-50mLs) in a sterile cup
- *Swabs must be synthetic tipped, sterile
swab of appropriate size with aluminum or plastic shaft

- ◆ **Measles-specific IgM Serologic Testing**
A serum specimen can be collected with paired NP and Urine.

Serologic Specimens for Patients with Symptoms

Preferred Specimen

- 1) 2-3mLs of serum in plastic screw-capped vial
- Note:** Detection of measles-specific IgM serology is optimal
>3 days from rash onset.

- ◆ **Specimen Labeling**
Label specimens completely: Specimen Type
Patient Name
Date of Birth
Date of Collection

- ◆ **Specimen Storage Until Shipment**
Refrigerate at 2-8° C for shipment within 24hrs
Freeze ≤ -20° C for storage longer than 72hrs

- ◆ **Specimen Submission Forms**
Please fill out completely
[Virology submission form](#) (Swabs/Urine)
[Special Serology form](#) & [CDC DASH form](#) (Serum)

Specimen Shipment

- ◆ **Specimen collection, packaging, and shipment supplies can be ordered online at:** [NCSLPH Online Supply Ordering System](#)
- ◆ **Specimens shipped via commercial courier must meet [Category B, UN3373 requirements](#).** Local Health Departments can use the NCDOA Medical Courier for specimen shipment.
- ◆ **Call NCSLPH Customer Service at 919-733-3937 for any questions related to specimen collection, storage, and shipment. After business hours, please contact the BTEP duty phone at 919-807-8600.**
- ◆ **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

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.

