



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**
Division of Public Health

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SCOTT M. SHONE, PhD, HCLD (ABB) • Laboratory Director, State
Laboratory of Public Health

Memo

To: Submitters to the North Carolina State Laboratory of Public Health

From: Scott M. Shone, PhD, HCLD (ABB), Director, State Laboratory of Public Health

Date: June 27, 2025

Re: Specimen Collection Guidance for Individuals Approved for Measles Testing at NCSLPH

This memo provides specimen collection guidance for individuals approved for measles testing at the North Carolina State Laboratory of Public Health (NCSLPH) to supplement information shared in the [Provider Memo - First 2025 Measles Case in North Carolina](#), dated June 26, 2025.

The following guidance is provided for general reference. **Prior approval for measles testing at the NCSLPH is required.** Clinicians should contact the Epidemiologist on Call at 919-733-3419 to discuss a specific patient displaying clinically compatible symptoms with measles.

Specimen submission [guidance](#) has been updated to reflect collection, storage, and transport of specimens for real-time PCR detection of measles virus and measles-specific IgM serologic testing. All swab specimens submitted to NCSLPH must be collected in **Viral Transport Media (VTM)** for measles testing.

- **Real-Time PCR Detection of Measles**
 - Nasopharyngeal (NP) swab in VTM
 - Use a synthetic tipped, sterile swab of appropriate size with a plastic or metal shaft. Do not use a cotton swab, calcium alginate swab, or swab with a wood shaft.
 - Urine (15 – 50mLs) in a sterile cup
- **Measles-specific IgM Serologic Testing**
 - Serum (2-3mLs) in plastic screw-capped vial
 - Detection of measles-specific IgM serology is optimal >3 days from rash onset.
 - Serum can be collected with paired NP and Urine specimens.

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH • STATE LABORATORY OF PUBLIC HEALTH

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www.ncdhhs.gov • <http://publichealth.nc.gov> • <https://slph.dph.ncdhhs.gov/> • TEL: 919-733-7834 • FAX: 919-733-8695

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

- **Label all specimen containers 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 ≤-20° C for storage longer than 72 hours.

- **Completely fill out the required forms:**
 - Real-Time PCR Detection of Measles: [Virology submission form](#).
 - Measles-specific IgM Serologic Testing: [Special Serology form](#) and [CDC DASH form](#)

- **Ship specimens appropriately:**
 - 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.

If specimens are submitted to NCSLPH using a commercial courier (DASH, FedEx, UPS), specimens must be packaged to meet [UN3373 Category B packaging requirements](#). Local Health Departments can also ship specimens to NCSLPH using the NC DOA Medical Courier. Specimen collection and shipping supplies may be ordered from the [NCSLPH Online Supply Ordering System](#).

Please contact NCSLPH Customer Service with any questions 919-733-3937.

Commercial Testing

Measles virus testing is also available at some commercial laboratories. Providers should contact individual commercial laboratories for more information or with questions about specimen collection and handling requirements. Turnaround times vary for commercial laboratories.