

# NYSDOH Wadsworth Center Measles Virus Testing Collection, Packaging and Shipping Instructions<sup>1</sup>



Department  
of Health

- **Suspected measles cases must be reported immediately to the local health department (LHD) of the patient's residence\*.**
- The LHD can assist in arranging rapid testing at the Wadsworth Center Laboratory as the public health laboratories are the only laboratories that provide molecular testing for measles and the use of commercial laboratories for measles serologic testing may take up to a week to obtain results.
- Once LHD approves, discuss transport or shipment with LHD, and arrange for specimens to arrive at lab within 24-hours of collection, when feasible.
- Estimated turnaround time for suspect measles test results from specimen arrival at the Wadsworth Center is 1-2 business days.

## SPECIMEN COLLECTION

- Collection kits are available from the NYSDOH Order Desk<sup>2</sup>.
- Collect nasopharyngeal (NP) or oropharyngeal (OP) swab, urine, **AND** blood as soon as possible after rash onset. Ideally collect specimens within 3 days of rash onset, however, specimens can be obtained up to 7 days, but not more than 10 days, after rash onset.
  - If greater than 10 days after rash onset, blood for serology (IgM and IgG) should be collected.
- All tubes must be labeled with patient first and last name, DOB, and date of collection.
  - What is labeled on the tube must match the paperwork.
- Ensure sample containers are leakproof, with caps tightly secured.

### NP swab:

- NP swab is the preferred respiratory specimen type for reverse transcriptase polymerase chain reaction (RT-PCR). OP swab is acceptable if NP swab cannot be collected.
- Flocked swabs are preferred as they provide better specimen recovery. Sterile dacron or rayon swabs with plastic or flexible metal handles may also be used. These are the same types of swabs and media used for influenza PCR testing. Do NOT use cotton or calcium alginate swabs or swabs with wooden sticks as they contain substances that inactivate some viruses and inhibit PCR. After swabbing, place swabs in LIQUID viral transport or universal transport media.
- Dry swabs not in media or other transport media are NOT acceptable for virus testing.

### Urine:

- Collect 5-10 ml of urine in a sterile container. Urine does not need to be obtained via sterile methods, should not include preservatives, and should not be added to viral transport medium.

### Serologic testing (serum for IgM and IgG):

- Collect 7-10 ml of blood in a red top or serum separator tube (red-speckled or gold topped tubes).
- Centrifuge blood and transfer serum to a separate tube before shipping, whenever possible.

\*If suspect case temporarily resides in a location such as a school or camp then report immediately to that county LHD.

<sup>1</sup>Please note: this document refers only to measles samples being sent to the Wadsworth Center, Laboratory of Viral Diseases. These instructions do not apply to Blood Borne Pathogen (i.e. HIV or HCV) or microbiology testing. While these other Wadsworth laboratories are located in the same building, specimens for testing in these other laboratories should be packaged and shipped separately.

<sup>2</sup>To order measles collection kits – call the **NYSDOH Wadsworth Center Order Desk**: (518) 474-4175, and Order #DOH-1963, (includes swab outfit with viral transport media (VTM), Urine collection containers, Serum Separator Tube, absorbent material, plastic bag, bubble wrap, specimen bag, and NYSDOH Wadsworth Infectious Disease Requisition (IDR) forms. The IDR forms can also be printed at: [https://www.wadsworth.org/sites/default/files/WebDoc/infectious\\_diseases\\_requisition\\_DOH\\_4463.pdf](https://www.wadsworth.org/sites/default/files/WebDoc/infectious_diseases_requisition_DOH_4463.pdf)

## STORAGE, HANDLING, AND PACKAGING

- Note, the packaging **MUST** comply with all Category B shipping requirements, including package labeling (refer to IATA training course instructions).
- Place specimens in a watertight secondary container (e.g. plastic biohazard bag) with absorbent material.
- Place secondary container in shipping box.
- Use a sturdy cardboard box, with a Styrofoam insert, to ensure cold temperature is maintained.
- Ship specimens for arrival at lab within 24-hours of collection, when feasible. If 24-hour shipping is not available, for example on Friday – Sunday, specimens should be shipped within 3 days from collection:
  - Storage: Until shipped, the **swab, urine, and blood should be kept** cold (4°C) and shipped as soon as possible using cold packs.
  - Packaging: Pack the box with 2-3 **frozen** gel packs; samples must remain cold during entire duration of shipment. **Do NOT use wet ice or dry ice.**
- When non-urgent and shipment within 3 days from specimen collection is not feasible (less ideal):
  - Storage: Until shipped, the swab, urine and serum should be stored at -70°C. Never freeze uncentrifuged blood. Until shipped uncentrifuged blood should be stored at 4°C.
  - Packaging: Pack frozen specimens with sufficient dry ice to remain frozen during entire duration of shipment. Uncentrifuged blood should be shipped separately using cold packs.
  - Avoid freeze-thaw cycles.
- Fill out a Wadsworth Center Infectious Disease Requisition (IDR) form (See Resources and Training section)
  - One form can be used for multiple samples on the same patient, provided all samples are collected on the same day. IDR must be included and **NOT** come in contact with the specimen.
- Alternatively, electronic remote order entry is available. Contact the NYSDOH Wadsworth Center Laboratory of Viral Diseases for further details<sup>3</sup>.

## SHIPPING

- Routine virology specimens are classified as Category B Infectious Substances.
- Ship box **OVERNIGHT** using the carrier of your choice – i.e. FedEx, UPS, USPS.
  - Samples must arrive in the laboratory the following day.
  - Record shipment tracking number.
- All packages should be addressed to the following:

**Laboratory of Viral Diseases**  
David Axelrod Institute, Wadsworth  
120 New Scotland Ave  
Albany, NY 12208
- Only ship packages Monday – Thursday for delivery Tuesday – Friday. The NYSDOH can arrange special accommodations for weekend and holiday transport under certain circumstances. **Do not delay public health notification of measles cases due to weekends or holidays.**
  - **Provider:** Alert local health department of all samples collected.
  - **Local Health Department:** Notify the NYSDOH Bureau of Immunization, 518-473-4437, M-F 8am to 5pm, or after hours at (866) 881-2809.

## RESOURCES AND TRAINING

- All persons involved in packaging and shipping human clinical specimens for testing must receive training. Please refer to the following CDC reference or participate in another certified training program.  
[www.cdc.gov/labtraining/training-courses/packing-shipping-division-6.2-materials.html](http://www.cdc.gov/labtraining/training-courses/packing-shipping-division-6.2-materials.html)

<sup>3</sup>The NYSDOH Wadsworth Center Laboratory of Viral Diseases: (518) 474-4177. Fax: (518) 473-4336 [www.wadsworth.org/programs/id/virology](http://www.wadsworth.org/programs/id/virology)