



Instructions for Submission of Serum and Urine Specimens for Zika Virus Testing for NYC Residents

SPECIAL-REQUEST ZIKA VIRUS TESTING AT THE NYC PUBLIC HEALTH LAB

- **Providers should use commercial laboratories for routine Zika testing, including testing of pregnant women and normal-appearing infants potentially exposed to Zika virus.**
- **However, providers should request Zika testing through the NYC PHL in the following situations:**
 - Infants with findings concerning for congenital Zika virus infection and a mother who was exposed, even if the mother was never tested or tested negative for Zika virus.
 - A person with Guillain-Barré syndrome or another neurologic manifestation and exposure to Zika virus.
 - Any potential unusual mode of transmission (e.g., transfusion, organ transplantation).
 - When a patient lacks insurance to cover indicated Zika testing.

Call the Provider Access Line at 866-692-3641 Monday to Friday 9am to 5pm to request Zika testing.

- ✓ Several commercial laboratories are permitted by New York State to perform Zika virus testing, including both serology and nucleic acid amplification testing of serum and urine. For a list of these laboratories, see nyc.gov/zika/provider under “Where to Obtain Testing.”
- ✓ Zika virus testing by the DOHMH Public Health Laboratory (PHL) for special situations requires pre-approval by calling the **NYC Provider Access Line at 866-692-3641**. Specimens submitted to PHL without pre-approval from DOHMH will NOT be tested.

This document provides current guidance on submission of serum and urine specimens for Zika virus testing by PHL. When you call the Provider Access Line to arrange Zika virus testing, you will be advised to collect either serum alone or both serum and urine based on the patient’s history. **Do not send urine if you were not advised by DOHMH personnel to collect urine for Zika virus testing.** The guidance below is limited to serum and urine collection; guidance on submission of all other specimen types (such as placenta) may be further discussed with a DOHMH physician by calling the Provider Access Line.

1. Specimen collection

Serum: Collect 1 or 2 tubes of serum (depending on how you were advised by DOHMH personnel). For each tube:

- Collect at least 6 milliliters (ml) of blood in a blood tube (red top, serum separator tube, tiger top, speckle top, gold top). Do **NOT** use blood tubes that contain anti-coagulants such as green top, yellow top or purple top.
- Centrifuge the blood tube within 6 hours of collection. (See instructions in Section 2, Option 3 if facility does not have a centrifuge.) Using sterile technique, transfer the serum to a separate, labeled sterile tube (at least 3 ml serum required) and discard the clot. Seal the sterile serum tubes with paraffin film.
- Specimens that leak will not be tested.

Urine: Collect 1 sterile container (if you were advised to do so by DOHMH personnel).

- Collect urine in a sterile screw-top cup.
- Collect a minimum volume of 5 ml, maximum of 20 ml.
- Close the lid tightly and seal with paraffin film.
- Place the sealed urine container in a specimen transport bag; seal the bag. Then place the sealed transport bag into a second specimen transport bag **with the same patient’s serum specimens**. Seal the second (outer) bag containing both urine and serum specimens. Place the 2 requisition forms (for the urine and serum) in the sleeve

- of the outer bag.
- Specimens that leak will not be tested.

Label ALL specimens: Failure to properly label a specimen will result in rejection and the specimen will not be tested. Specimens **must** be labeled with:

- Patient's first and last name
- Patient's date of birth
- Date and time of collection
- Specimen type (e.g., serum, urine)

Include the completed PHL "Laboratory Test Request" form(s) that will be provided to you after you complete the call with the Provider Access Line: The PHL form(s) should be placed into the outer document pocket of the specimen bag. If you are sending just serum, then you will only send 1 form back to PHL; if you are sending serum and urine, there will be 2 separate forms (1 for serum and 1 for urine). All information on the specimen labels must **exactly** match the information on these forms, including the spelling of the patient's first and last names and date and time of collection. Specimens received with discrepant information on the labels and requisition forms will not be tested. If you notice errors on the form that you have received, please call the Provider Access Line to correct the errors.

2. Specimen handling

Blood specimens must be centrifuged **within 6 hours**. Specimens that are not centrifuged immediately should be refrigerated immediately.

Options for specimen handling:

OPTION 1: Facility has a centrifuge, a -70°C freezer, and dry ice:

Centrifuge the blood tube. Using sterile technique, transfer the serum to a separate, labeled sterile tube (at least 3 ml serum required) and discard the clot that remains in the blood tube. Freeze centrifuged serum and urine at -70°C within 6 hours of collection. Ship to PHL on dry ice. **Specimens can be batched for shipping**, and can be received at PHL after business hours and on weekends and holidays. **Label the outer packaging:** "Store at -70°C upon arrival".

OPTION 2: Facility has a centrifuge and refrigerator, but no -70°C freezer or dry ice.

Centrifuge the blood tube. Using sterile technique, transfer the serum to a separate, labeled sterile tube (at least 3 ml serum required) and discard the clot that remains in the blood tube. Refrigerate centrifuged serum and urine at 2-8°C immediately after collection. Ship to PHL with cold packs for **arrival at the PHL within 72 hours of collection**. Specimens can arrive at PHL after business hours and on weekends and holidays (but must arrive within 24 hours of specimen collection). **Label the outer packaging:** "Store at -70°C upon arrival".

OPTION 3: Facility has no centrifuge.

Specimens **MUST** be collected by 11 am on weekdays only – collection should not be done on weekend or holidays. Hold specimens in a refrigerator (2-8°C) or on cold packs. Ship to PHL on cold packs.

Specimens must arrive at PHL by 2 PM AND within 6 hours of collection on a weekday (non-holiday).

Label the outer packaging: "STAT specimen – process immediately". Specimens received at PHL after 2 PM on weekdays or on weekends/holidays cannot be appropriately processed or tested and these specimens will be REJECTED. Even with STAT specimen handling, these specimens are at a high risk of hemolysis and providers are encouraged to refer patients to centers that have centrifuge capability.

3. Transport of specimens to NYC PHL

Transportation arrangements can be made by Provider Access Line staff members. A separate, fully-completed PHL "Laboratory Request Form" form(s) must accompany each specimen being submitted.

Follow shipping regulations for UN 3373 Biological Substance, Category B and UN 1875, Class 9 for dry ice (if applicable).

For facilities/providers that do not arrange transport through the Provider Access Line, **specimens must be prepared and labeled for transport as noted under “Specimen handling”** and shipped to:

NYC Public Health Laboratory
455 First Ave., Room 136 New York, NY 10016

4. Laboratory Results

Zika virus laboratory results will be delivered via secure fax to the provider or facility indicated as the **SUBMITTER** on the PHL form. Nucleic acid amplification test results are usually reported within 3 days of specimen receipt. Serology results can take 1 week or more from specimen receipt.

Questions about testing and specimen requirements?

**Call the NYC Public Health Laboratory: 212-447-2864
or the Provider Access Line: 866-692-3641**

**For non-NYC Residents call:
888-364-4723**