Reference Center for Arboviral Disease Testing

Frequently Asked Questions • September 2026

The Reference Center for Arboviral Disease Testing (Arbovirus Reference Center) provides high-quality clinically validated arbovirus testing to US public health laboratories (PHLs). The New York State Department of Health's Wadsworth Center serves as the testing laboratory. Listed below are commonly asked questions pertaining to this testing. This document will be updated as new questions are received.

Test Availability

Q: What testing is currently available at the Reference Center for Arboviral Disease Testing?

A: Test availability for the Reference Center as well as CDC is available here. While there is some overlap between the testing offered by the two laboratories, the goal is to not split specimens. Therefore, the following specimens should likely be sent to CDC for testing:

- Specimens which are IgM positive and for which only a PRNT will be requested/is needed.
- If no testing has been performed, send specimens for IgM testing for **endemic arboviruses** (e.g. West Nile virus (WNV), Saint Louis encephalitis virus (SLEV), Eastern equine encephalitis virus (EEEV), La Crosse encephalitis virus (LACV), Jamestown Canyon virus (JCV), Powassan virus (POWV)), **Zika virus** and **Yellow fever virus**
- Specimens for molecular testing for Colorado Tick Fever Virus

Specimens for all other test requests should be sent to Reference Center for Arboviral Disease testing. If you have questions about the best place to send your specimen for testing, you may contact the CDC's Division of Vector-borne Diseases-Arboviral Diseases Branch Epidemiologists at: adbclinicalteam@cdc.gov

Specimen Submission and Shipping

Q: What if we do not have the minimum volume required by the Arbovirus Reference Center as stated in the Shipping and Submission Instructions?

A: Some testing may be able to be performed depending on the exact volume of specimen available and the tests requested. Please email arbovirusnys@health.ny.gov with any questions.

Q: Where should I ship my specimens?

A: Information pertaining to specimen collection and shipping to the Arbovirus Reference Center is located here. Information pertaining to specimen collection and shipping to CDC is available at the CDC Test Directory.

Q: Is there any patient information beyond what is required that I should include with the test request for specimens being shipped to the Arbovirus Reference Center?

A: Yes. Please include previous test history and results, travel history and symptom onset dates if they are available. This information is helpful in determining the appropriate tests to perform. This information should be included in the comment field of the electronic test request.

Test Methods

Q: Can PRNT be performed on a single specimen, or can it only be performed on paired specimens?

A: PRNT is best performed on paired acute and convalescent sera. A four-fold rise in titer between acute and convalescent specimens tested on the same run is required to confirm a recent or current infection. Titers should not be compared between runs.

Q: What confirmatory testing is performed as part of the Arbovirus Reference Center? Will my specimen be automatically reflexed to PRNT?

A: Specimens which are IgM positive and for which only a PRNT will be requested should be sent to CDC.

Specimens received at the Arbovirus Reference Center with an IgM result from a test performed at a commercial laboratory without any additional results (i.e. testing performed at a public health laboratory) will have a repeat IgM performed. Specimens which are IgM positive from a test performed at a public health laboratory will have a PRNT performed without any additional IgM testing performed.

Test Results and Reporting

Q: The result for my submitted sample says "flavivirus reactive." What does that mean?

A: The Arbovirus Reference Center performs two different Luminex microsphere immunoassays (MIAs); one which can detect both Powassan virus (POWV) and West Nile virus (WNV) and a second which will detect Zika virus and dengue virus. Each assay contains virus specific NS1 antigens and virus specific envelope (Env) antigen; however, the envelope proteins of related viruses are known to cross-react. Therefore, if virus specific Env is detected in the absence of a virus specific NS1 the result is "Flavivirus Reactive" because something in the serum is reacting, but a specific virus cannot be attributed.

Example of Possible Outcomes on the POWV/WNV MIA:

- Powassan Positive: POWV NS1 detected, POWV Env detected
- WNV Positive: WNV NS1 detected, WNV Env detected
- Flavivirus reactive (FR): Env detected (POWV or WNV), corresponding NS1 not detected
- Indeterminate: NS1 detected, ENV not detected

Q: What is the turnaround time for results from the Arbovirus Reference Center?

A: Turnaround time for molecular and serology test results are not expected to exceed an average of ≤1 week, PRNT results are not expected to exceed an average of ≤15 days. For more information refer to the Shipping and Submission Instructions.