



West Nile Fever and Neuroinvasive Disease – Clinical Sample Submission Guidelines

The Department of Health (DOH) Bureau of Public Health Laboratories (BPHL) provides testing services for patients with clinical signs of arboviral disease. Due to the cross-reactivity between West Nile virus (WNV) and other closely related flaviviruses, positive private laboratory test results for antibodies to WNV or other arboviruses should be confirmed by BPHL (i.e., specimens testing positive at private laboratories should be forwarded to the state laboratory for confirmation). Health care providers should submit serum and cerebrospinal fluid (CSF) samples to either BPHL-Tampa or BPHL -Jacksonville state laboratories. Even though a very early acute serum may be negative it is recommended that it be collected and submitted without waiting for the convalescent specimen. The convalescent specimen (drawn 2 weeks later) should be routinely sent to confirm negative and positive results. The local County Health Department should approve the sample submission to BPHL.

Specimen Collection

When virus isolation/detection is attempted, blood serum, CSF and tissue samples are placed on dry ice immediately after collection and kept frozen on dry ice while in transit to the laboratory. Fluids are kept in standard sterile airtight tubes, and tissue in an airtight sterile container. Each specimen must be labeled with the patient's name. Hold serum in a refrigerator until shipped. When serum is to be examined only for antibody, it can be shipped at ambient temperature (do not freeze) provided it has been collected and handled aseptically. At least 2ml of serum or CSF are required for antibody testing.

NOTE: Unseparated, whole blood is an unsatisfactory specimen and therefore, should not be shipped to the laboratory.

Shipping Specimens

Clinical sera are sent immediately to the assigned DOH laboratory for testing (Jacksonville or Tampa, addresses below). Ship serology specimens to either BPHL. Molecular testing (PCR) is currently only available in Tampa. Follow packaging and shipping guidelines for diagnostic specimens (Biological Substance, Category B, UN3373). If viral isolation/detection is desired, sera must be shipped frozen on dry ice to the BPHL in Tampa. A completed Florida DOH Clinical Laboratory Submission Form DH1847 form should accompany all specimens: http://www.floridahealth.gov/programs-and-services/public-health-laboratories/forms-publications/_documents/DH1847--rev-5-13.pdf. The name of the contact at the County Health Department who approved sample submission to BPHL should be included on the submission form. For acute samples, indicate Arbovirus PCR and Arbovirus Antibody. For convalescent samples, indicate only Arbovirus Antibody. In both cases, the following steps should be completed:

- Write West Nile virus infection in the comments section on the bottom of the form
- Fill in date of onset, travel history and clinical symptoms in the mandatory arbovirus section.
- Include date of specimen collection at the top of the form.
- Fill in Health Care Provider Information box with the name, address, and contact phone of the person to whose attention the final laboratory report is to be sent.

To expedite receipt of specimens at the laboratory, overnight or 2-day express shipment is suggested. If sera are shipped on Friday, the package must be clearly marked for "Saturday Morning Delivery." The following must appear on the shipping label:

DOH Bureau of Public Health
Laboratories - Virology
1217 Pearl Street
Jacksonville, FL 32202
Phone (904) 791-1539, 791-1540

OR

DOH Bureau of Public Health
Laboratories - Virology
3602 Spectrum Boulevard
Tampa, FL 33612
Phone (813) 974-8000