

**New Jersey Department of Health and Senior Services**  
**SUBMISSION PROTOCOL FOR TESTING OF HUMAN SERA**  
**AND CEREBROSPINAL FLUID SPECIMENS**

West Nile Virus 2004: Form C

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Instructions for **SENDING HUMAN SPECIMENS** to the Public Health and Environmental Lab (PHEL) of the New Jersey Department of Health and Senior Services (NJDHSS) for West Nile Virus (WNV) Serologic and Cerebrospinal Fluid (CSF) Testing

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**SUBMISSION FORM:**

Please complete a **Viral Serology form (VIR-1)** for each specimen. **PLEASE INCLUDE DATE OF SPECIMEN COLLECTION. INCOMPLETE FORMS WILL RESULT IN TESTING DELAYS.**

**SHIPPING CONTAINER:**

Please put specimens in a sturdy outer container (e.g., styrofoam cooler). Wrap your specimen in absorbent material (cotton/paper towels) and pack into two (2) different plastic containers to ensure that leakage is contained. Specimens must be maintained at 2-4°C and shipped on **ICE** using gel ice packs, **not regular ice**. There is no need to keep specimens frozen. Specimens should be sent to PHEL with the completed VIR-1 form.

**SPECIMEN TYPES AND DELIVERY:**

Testing for WNV is done on serum and CSF specimens. Please send at least **2.0 ml of serum** and **1.0 ml of CSF** for proper testing to proceed. For serum samples, whole blood should be collected from the patient by venipuncture into standard red top or serum separator tubes. **Do not use whole blood collection tubes containing anticoagulants.** After allowing for clot formation, these sample tubes should be centrifuged and the serum fraction withdrawn. Store serum in externally threaded plastic tubes.

Acute and convalescent specimens should be sent together whenever available. If one of these specimens is unavailable, we will accept single specimens for testing.

**NOTE: Specimens must be approved for testing by the NJDHSS, Infectious & Zoonotic Disease Program (609-588-3121) before shipment. Please refer to “Approval Protocol for WNV Human Specimen Testing”, Form A, before sending specimens to avoid any delay or denial of testing.**

## **IDEAL TIMING OF SPECIMENS IS AS FOLLOWS:**

- Acute specimens should be collected at least eight (8) days **after the onset** of symptoms.\*
- Convalescent specimens should be taken two (2) – three (3) weeks after the acute sample was collected.

**\*NOTE:** If the acute sample is taken prior to eight (8) days before symptom onset, antibodies may not have had time to develop and a false negative result may be obtained. We will then need **convalescent samples** on patients whose acute samples are drawn prior to eight (8) days after the onset of symptoms to ascertain the true West Nile Virus status of the patient.

## **TESTS PERFORMED:**

Initial testing will be performed using IgM capture Enzyme Linked Immunosorbent Assay (ELISA) and IgG ELISA. Specimens with positive ELISA results may be sent to CDC for confirmation by plaque reduction neutralization testing (PRNT).

### **SHIPPING ADDRESS:**

**New Jersey Department of Health and Senior Services  
Specimen Receiving Laboratory  
P.O. Box 361  
Market & Warren Streets  
John Fitch Plaza  
Health & Agriculture Building  
Trenton, NJ 08625**

## **QUESTIONS:**

Additional WNV surveillance and submission forms can be found online at <http://www.state.nj.us/health/cd/westnile/enceph.htm>. For questions about WNV human surveillance, please contact Shereen Brynildsen at the NJDHSS Infectious & Zoonotic Disease Program at (609) 588-3121 or [shereen.brynildsen@doh.state.nj.us](mailto:shereen.brynildsen@doh.state.nj.us).