West Nile Virus
SUBMISSION PROTOCOL FOR TESTING OF HUMAN SERA AND CEREBROSPINAL (CSF) FLUID SPECIMENS

REQUISITION FORM:
Please take the time to fill out the form in its entirety. Lack of required fields may delay testing.

SHIPPING CONTAINER:
Shipping containers will be provided by the WPHL upon request. Please put specimens a biohazard bag with absorbent paper. Specimens must be maintained at 2-4°C and shipped in a cooler using two (2) cold packs, not regular ice. Multiple specimens may be sent per shipment but each specimen should be placed in its individual biohazard bag. There is no need to keep specimens frozen. The requisition form(s) should be placed on the outside of the cooler to keep paperwork dry.

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 After allowing 30 minutes for clot formation, these sample tubes should be centrifuged and the serum fraction withdrawn. Store serum in externally threaded plastic tubes.

IDEAL TIMING OF SPECIMEN COLLECTION IS CRITICAL TO INTERPRETATION

CSF should be collected between 2 and 8 days post onset of illness.

Acute serum samples should be collected at least 8 days after onset of illness.

Convalescent serum samples should be taken two (2) – three (3) weeks after the acute sample was collected.

NOTE: If the acute serum sample is taken prior to eight (8) days post-symptom onset, antibodies may not have had time to develop and a false negative result may be obtained. Convalescent samples will be needed on patients whose acute samples are drawn prior to 8 days post-symptom onset, to ascertain the true West Nile Virus status of the patient

TESTS PERFORMED:
Specimens will be tested using the CDC IgM capture ELISA. Borderline and indeterminate results may require convalescent samples. Specimen results that are repeat borderline or indeterminate may need to be confirmed by Plaque Reduction Neutralization Test. For those tests where IgM is negative, borderline, or indeterminate and the specimen was collected more than 60 days post onset of symptoms, the specimen will automatically be referred to IgG testing. IgG tests will be batched-reflexed and turnaround time for test results may be increased

SHIPPING ADDRESS:
Wyoming Public Health Laboratory
Microbiology Section
208 South College Drive
Cheyenne, Wyoming 82007