

Pennsylvania Department of Health

Instructions for collection and shipping of specimens and test result notification

Testing of blood and cerebrospinal fluid from Pennsylvania patients for West Nile Virus (WNV) will be performed at the Department of Health Laboratory in Lionville. Specimens that are positive early in the season or have indeterminate results will be sent to the Centers for Disease Control and Prevention (CDC) for confirmation.

Submission Form (enclosed):

Please include a submission form for each patient. Fill out the form as completely as possible. Testing will not be initiated without inclusion of the date of onset of symptoms, date the specimen was collected, and any pertinent travel history. Due to cross reactivity of WNV with related flaviviruses, documentation of vaccination for yellow fever or Japanese encephalitis, or a previous history of yellow fever or Japanese encephalitis or dengue fever is needed for accurate test interpretation.

Shipping container:

Please put your specimen in a substantial container. Wrap specimen in absorbent material and pack in 2 different crush-proof plastic containers to insure that any leakage is contained. If you are requesting serology, the specimen should be kept cool but there is no need to keep it frozen. "Cool packs" can be used for this purpose. If you are hand-carrying the specimen, please observe the packing instructions above to secure the specimens in transit. Label specimens as "Diagnostic Specimen."

Specimen types and amounts:

Acute and convalescent specimens should be sent together whenever available. If one of these specimens is unavailable, single specimens will be accepted. Ideal timing of specimens is as follows: a) acute specimens should be taken 10 days after onset of symptoms, b) convalescent specimens should be collected 2-3 weeks after the acute sample. Keep in mind, if the acute sample is taken prior to 10 days post-onset of symptoms, antibodies may not have had time to develop and a false negative test may result. Testing for serology is done on serum and cerebrospinal fluid (CSF) specimens. Please send at least 1.0 ml of serum and at least 1.0 ml of CSF for proper testing to proceed. **DO NOT send whole blood.**

Reporting of test results:

Test results will normally be available 10 to 14 days after receipt of specimen. During periods of heavy submission, turn-around times may be longer. Receipt of a hard copy of the results may take 2 weeks after completion of testing. Initial serologic testing will be performed using IgM capture ELISA. If the initial results are positive, further confirmatory tests may delay the reporting of final results.

Result Notification:

Pennsylvania Department of Health (DOH) Bureau of Laboratories (BOL) will notify the submitting laboratory by fax or telephone of all **positive test results** as soon as they are received. A printed copy of the test result with interpretation will be mailed to the submitting laboratory by the DOH Laboratory. The DOH laboratory will perform ELISA testing on serum and/or CSF. Serology results will be reported as positive or negative for the detection of WNV antibody. Confirmation by serum neutralization testing will be done at CDC by special request only. If the physician requests PCR, serum neutralization testing or culture, please call the Bureau of Epidemiology at 717-787-3350 for approval and instructions.

For any patient who has a positive test for WNV, DOH will notify the local health officer providing service in the patient's county/city of residence. Together with the local health department, DOH will administer a risk factor surveillance questionnaire to the patient or patient's family.

Physicians will be advised of modifications to this protocol through regular notices sent to local health officers and the Chief Executive Officers, Emergency Room Directors, and Infection Control Practitioners of all Pennsylvania acute care hospitals.

Revised 3/2004

PENNSYLVANIA DEPARTMENT OF HEALTH

PHYSICIAN INITIAL CASE AND LABORATORY SUBMISSION REPORT FOR VIRAL ENCEPHALITIS/MENINGITIS/FEVER – WNV/OTHER

CSF PCR and culture will only be performed with the approval of Epidemiology. Please call 717-787-3350 for instructions.

1. IDENTIFYING PATIENT INFORMATION Date of Report: ____/____/____
Date of onset of symptoms(must be completed): ____/____/____

Last name	First Name	MI
DOB / /	Sex: Male Female	
Street Address	Apt .	
City:	State	Zip County Tel. H () -

2. REPORTED/SUBMITTED BY: Last name First name

Work address	City	State	Zip Code
Telephone () -	Pager () -		

3. CLINICAL INFORMATION

Current diagnosis: Encephalitis Meningitis Other (Specify _____)

Hospitalized? Yes No Hospital Name _____

Submitting Laboratory Name _____

Address: _____

Hospital Lab Phone # _____ Hospital Lab Fax # _____

Fever (≥38C or 100F)	Yes	No	Unknown	Altered Mental Status	Yes	No	Unknown
Muscle Weakness	Yes	No	Unknown	Stiff neck/Meningeal signs	Yes	No	Unknown
Headache	Yes	No	Unknown	Seizures	Yes	No	Unknown
Rash	Yes	No	Unknown	Muscle Pain	Yes	No	Unknown
Joint Pain	Yes	No	Unknown	Other Neurological signs	Yes	No	Unknown

Outcome: Recovered Still with symptoms/deficits Died (date of death ____/____/____)
 Unknown

Discharge Diagnosis _____

Did patient travel outside PA in the 3 weeks before onset? Yes No If yes, where? _____

Did patient have a blood transfusion, organs or blood products in the last 3 months? Yes No

If yes, Facility Name _____ When _____

Did patient donate blood in the previous 2 weeks? Yes No

4. SPECIMENS BEING SUBMITTED TO PA BOL FOR WEST NILE TESTING

CSF should be kept cold; sera 5-10 ml in red top tube should be kept cold; ship with ice packs; use overnight delivery service

Specimen No.	Type: Specify CSF or Serum	DATE OF COLLECTION *****Required*****	FOR BOL USE ONLY BOL Accession No.

Submit specimens directly to: PENNSYLVANIA DEPT. OF HEALTH, BUREAU OF LABORATORIES, 110 PICKERING WAY, LIONVILLE, PA 19353. Call the Laboratory at **610-280-3464** if you have any questions about testing and shipping of specimens. Report cases of meningitis or encephalitis using PA NEDSS (National Electronic Disease Surveillance System) or call the DIVISION OF COMMUNICABLE DISEASE EPIDEMIOLOGY at **717-787-3350** if you have questions or for assistance. Revised 3/04