Louisiana Office of Public Health Laboratories	
Test Name	Arbovirus Panel (standard)
PHL Location	Office of Public Health Laboratory Baton Rouge
CPT Code	MIA, 86788, 86653 PCR, 87798
Synonyms	WNV, SLE, EEE, Flavivirus, Mosquito borne encephalitis, Viral encephalitis
Brief Description of Test	**Prior notification to Infectious Disease Epidemiology required:** **Email: christine.scott-waldron@la.gov** **Phone: 504-568-8301** **24 hour cell: 800-256-2748** **Arbovirus panel includes.** Samples received, collected within 7 days of symptom onset get WNV PCR and WNV/SLE IgM and EEE IgM Samples received, collected > 7 days of symptom onset get WNV/SLE IgM and EEE IgM **WNV PCR currently being performed for Epidemiology use only.**
Possible Results	**WNV/SLE IgM MIA** Preliminary Result • Nonspecific results for West Nile Virus IgM or St. Louis Encephalitis IgM– Sent to CDC for additional testing o Nonspecific indicates either that the results could not be differentiated or that background reactions on the negative antigen inhibited interpretation Final Result • Negative for West Nile Virus and St. Louis Encephalitis IgM • Positive for West Nile Virus IgM • Positive for St. Louis Encephalitis IgM o Send to CDC for Confirmation • Negative for St. Louis Encephalitis IgM • Negative for West Nile Virus IgM **EEE IgM MIA** • Negative for Eastern Equine Encephalitis IgM • Positive for Eastern Equine Encephalitis IgM o Send to CDC for Confirmation **WNV PCR**

	• Positive for West Nile Virus • Negative for West Nile Virus • Inconclusive
Reference Range	Negative
Specimen Type	Serum or CSF
Specimen Container(s):	Serum Separator Tubes (SST) or Screw Cap Aliquot
Minimum volume accepted:	1 mL of serum or CSF
Collection Instructions	Label specimen with Patient Name and a 2nd unique identifier such as a chart number or medical record number. DOB is not considered unique. Complete a Lab Form 96 to accompany the serum or CSF sample. Lab submission form must be thoroughly completed with patient's first and last name, 2nd patient identifier, gender, date of birth, date of collection, time of collection, test requested, and submitter's name, address, and contact number. **For this assay, date of symptom onset is requested.** The same two unique identifiers **MUST** be recorded on the tube **AND** the Lab 96 form.
Storage and Transport Instructions	WNV/SLE IgM and EEE IgM MIA – can be transported 2-8°C for up to 30 days or ≤ -20°C for up to 30 days. West Nile Virus PCR – can be transported 2-8°C for up to 1 day or < -20°C for up to 30 days.
Causes for Rejection	• Unspun • Hemolyzed, lipemic or icteric • Short Draw/Overfill • Received outside acceptable transport conditions • Incorrect source • Expired collection tubes • Not Approved by Epidemiology
Limitations of the Procedure	**WNV/SLE IgM MIA** Results from West Nile/SLE Duplex MIA test should be considered in the context of all available clinical and laboratory data. Specimens resulting as nonspecific or as SLE specific need to be forwarded to CDC for PRNT. Flaviviruses exhibit significant cross-reactivity with one another and therefore may cause false positive or nonspecific results. **EEE IgM MIA** Results from EEE IgM MIA test should be considered in the context of all available clinical and laboratory data.

	Specimens resulting as EEE need to be forwarded to CDC for PRNT. Flaviviruses exhibit significant cross-reactivity with one another and therefore may cause false positive results. **WNV PCR** West Nile viremia peaks at about the time of symptom onset and rapidly fades to undetectable levels.
Interfering Substances	Grossly hemolyzed, lipemic, or icteric specimens
References	Duplex Microsphere-Based Immunoassay for Detection of Anti-West Nile Virus and Anti-St. Louis Encephalitis Virus Immunoglobulin M Antibodies", Clinical and Diagnostic Laboratory Immunology, May 2005, p. 566-574 Validation of a Microsphere-Based Immunoassay for Detection of Anti-West Nile Virus and Anti-St. Louis Encephalitis Virus Immunoglobulin M Antibodies", Clinical and Diagnostic Laboratory Immunology, September 2007, p. 1084-1093 Lanciotti et al. 2000. Rapid Detection of West Nile Virus from Human Clinical Specimens, Field-Collected Mosquitoes, and Avian Samples by a TaqMan Reverse Transcriptase-PCR Assay. Journal or Clinical Microbiology. 4066-4071
Additional Information	Specimens that are West Nile nonspecific, SLE nonspecific, SLE specific or EEE are sent to CDC for plaque reduction neutralization test (PRNT). These assays are not FDA approved. Primer/Probe sequences were developed by Lanciotti et al. Assay performance characteristics were developed by Louisiana Office of Public Health Lab.
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