

Mosquito-borne Disease Laboratory Testing

Clinical suspicion of a mosquito-borne disease (MBD) based on the following: Symptoms including, but not limited to: Fever Headache Meningitis Encephalitis Meningoencephalitis Time of year (eg, during active mosquito seasons) Exposure history (refer to the following for potential exposure guidance): https://www.cdc.gov/mosquitoes/php/arbonet/ https://wwwnc.cdc.gov/travel/destinations/list Testing should be tailored based on clinical presentation, exposure history, and known endemic mosquito-borne pathogens Filarial infection suspected Arbovirus infection suspected Malaria suspected If Powassan or Heartland virus is suspected see Acute Tick-Borne Disease Testing Algorithm. If any of the following are Refer to the Malaria Order: suspected, contact your local ■ FII / Filaria, Blood Laboratory Testing public heath department or the Algorithm for information If FIL is negative, consider: Specimen collected Specimen collected CDC for testing options: ■ FFAG4 / Filaria, IgG4 <7 days after >7 days after Bourbon virus Antibody, ELISA symptom onset symptom onset Jamestown Canyon virus

- Real-time reverse transcription polymerae chain reaction (PCR) and serologic testing are recommended
- Serologic testing of spinal fluid (CSF) should be performed concurrently with or following serologic testing of serum

If mosquito exposure occurred within the United States (US), consider the following tests:

- ARBOP / Arbovirus Antibody Panel, IgG and IgM, Serum
- ABOPC / Arbovirus Antibody Panel, IgG and IgM, Spinal Fluid
- CAVPC / California Virus (La Crosse) Encephalitis Antibody Panel, IgG and IgM, Spinal Fluid
- CAVP / California Virus (La Crosse) IgG and IgM, Serum
- EEPC / Eastern Equine Encephalitis Antibody Panel, IgG and IgM, Spinal Fluid
- EEEP / Eastern Equine Encephalitis Antibody, IgG and IgM, Serum
- STLPC / St. Louis Encephalitis Antibody Panel, IgG and IgM, Spinal Fluid
- STLP / St. Louis Encephalitis Antibody, IgG and IgM, Serum
- WEEPC / Western Equine Encephalitis Antibody Panel, IgG and IgM, Spinal Fluid
- WEEP / Western Equine Encephalitis Antibody, IgG and IgM, Serum

If mosquito exposure occurred outside of the US, consider the following tests:

- CHIKV / Chikungunya IgM and IgG Antibody, Serum
- CHIKS / Chikungunya Virus, PCR, Molecular Detection, Serum
- CHIKC / Chikungunya Virus, PCR, Molecular Detection, Spinal Fluid
- DENGM / Dengue Virus Antibody, IgG and IgM, Serum
- DENVP / Dengue Virus Antibody/Antigen Panel, Serum
- DNSAG / Dengue Virus NS1 Antigen, Serum
- DENGS / Dengue Virus, Molecular Detection, PCR, Serum
- DENGC / Dengue Virus, Molecular Detection, PCR, Spinal Fluid
- VZIKM / Zika Virus, IgM Antibody Capture ELISA, Serum
- VZIKU / Zika Virus, PCR, Molecular Detection, Random, Urine
- VZIKS / Zika Virus, PCR, Molecular Detection, Serum

If mosquito exposure occurred in any region, consider the following tests:

- WNS / West Nile Virus Antibody, IgG and IgM, Serum
- WNC / West Nile Virus Antibody, IgG and IgM, Spinal Fluid
- WNVBL / West Nile Virus, RNA, PCR, Molecular Detection, Blood
- WNVUR / West Nile Virus, RNA, PCR, Molecular Detection, Random, Urine
- WNVS / West Nile Virus, RNA, PCR, Molecular Detection, Serum
- WNCSF / West Nile Virus, RNA, PCR, Molecular Detection, Spinal Fluid

- Serologic testing is recommended If mosquito exposure occurred within the United States (US), consider the following tests:
- ARBOP / Arbovirus Antibody Panel, IgG and IgM, Serum
- ABOPC / Arbovirus Antibody Panel, IgG and IgM, Spinal Fluid
- CAVPC / California Virus (La Crosse) Encephalitis Antibody Panel, IgG and IgM, Spinal Fluid
- CAVP / California Virus (La Crosse) IgG and IgM, Serum
- EEPC / Eastern Equine Encephalitis Antibody Panel, IgG and IgM, Spinal Fluid
- EEEP / Eastern Equine Encephalitis Antibody, IgG and IgM, Serum
- STLPC / St. Louis Encephalitis Antibody Panel, IgG and IgM, Spinal Fluid
- STLP / St. Louis Encephalitis Antibody, IgG and IgM, Serum
- WEEPC / Western Equine Encephalitis Antibody Panel, IgG and IgM, Spinal Fluid
- WEEP / Western Equine Encephalitis Antibody, IgG and IgM,

If mosquito exposure occurred **outside** of the US, consider the following tests:

- CHIKV / Chikungunya IgM and IgG Antibody, Serum
- DENGM / Dengue Virus Antibody, IgG and IgM, Serum
- DENVP / Dengue Virus Antibody/Antigen Panel, Serum
- DNSAG / Dengue Virus NS1 Antigen, Serum
- VZIKM / Zika Virus, IgM Antibody Capture ELISA, Serum

If mosquito exposure occurred in **any region**, consider the following tests:

- WNS / West Nile Virus Antibody, IgG and IgM, Serum
- WNC / West Nile Virus Antibody, IgG and IgM, Spinal Fluid