# **Arboviral Testing in Maine**

It is arboviral season in Maine. Keep these points in mind when considering arboviral testing.

# When to consider arboviral testing:

Endemic arboviruses in Maine include:

- Eastern Equine Encephalitis (EEE)
- Jamestown Canyon virus (JCV)
- Powassan virus (POW)
- West Nile virus (WNV)

Consider arboviruses in any patient with

- Febrile or acute neurologic illness
- Recent likely exposure to ticks or mosquitoes
- · Cases of encephalitis and aseptic meningitis
- Recent history of travel to areas where non-endemic arboviruses circulate

Consult an infectious disease physician as early as possible to optimize diagnostic testing. Viral loads decrease quickly.

#### Specimen collection for selected tests at HETL:

Recommended specimen collection volumes:

- CSF Panel by PCR: Collect a minimum of 1.5 mL CSF.
  - If negative for enterovirus, HSV1, HSV2, VZV, and Neisseria miningitidis, will reflex to run Arboviral Panel.
- Arboviral Panel: Collect a minimum of 0.5 mL CSF, along with a paired serum sample.
- Arboviral Panel AND POW RT-PCR: Collect a minimum of 1.0 mL CSF.



## Sign up for the Health Alert Network:

Maine CDC shares updates about cases of arboviral illness and testing through the Maine Health Alert Network (HAN). Sign up to receive HANs at <a href="https://www.mainehan.org/">https://www.mainehan.org/</a>.







#### Interpreting results:

Assays for the detection of IgM and IgG antibodies (ELISA, MIA, IFA) provide a presumptive diagnosis and should be followed by confirmatory testing.

Confirmatory testing by Plaque Reduction Neutralization Test (PRNT)
conducted at US CDC Fort Collins. This test requires at least 14 days before
a result is available.

In geographic areas where two or more closely-related arboviruses occur, testing for more than one virus may be needed to determine the specific causative virus.

 For example, such testing might be needed to distinguish antibodies resulting from infections with flaviviruses such as West Nile virus and Powassan virus.

### Share this information with your lab:

Clearly label each specimen with:

- Patient name
- · Specimen type
- Patient date of birth
- Specimen collection date

For specimen packaging, storage, and shipping information, refer to the <u>Laboratory</u> <u>Submission Information Sheets (LSIS)</u>.



Each sample must be submitted with the following forms. Fill out all forms completely (including symptom onset date on each form):

- A HETL Clinical Requisition Form
- If requesting Arboviral Panel, submit with the Arboviral Submission Form
- Find links to these forms here.

A Maine CDC epidemiologist may call to collect additional information if specimens need to be sent to US CDC Fort Collins for further testing.



For more information: Call Maine CDC at 1-800-821-5821 or email <u>disease.reporting@maine.gov</u>

