



# ARBOVIRUS SURVEILLANCE TESTING NEEDS ASSESSMENT

This testing needs assessment is designed to assist public health laboratories in evaluating arbovirus testing and surveillance activity needs within your jurisdiction, including endemic/exotic arboviruses, potential arthropod vectors and animal hosts. We recommend reviewing your current testing menu in consultation with your epidemiology partners to identify gaps and ensure alignment of your testing menu with identified needs.

*Please note that this is an initial version of the needs assessment tool, which may be revised when the final Essential Capabilities document is published.*

**1. Are there probable and/or confirmed cases of infections with the following arboviruses in your jurisdiction?**

- |  |     |    |   |     |    |
|--|-----|----|---|-----|----|
| a. West Nile virus.....                    | Yes | No | e. St. Louis encephalitis virus .....     | Yes | No |
| b. Eastern equine encephalitis virus ..... | Yes | No | f. Western equine encephalitis virus .... | Yes | No |
| c. La Crosse virus .....                   | Yes | No | g. Powassan virus.....                    | Yes | No |
| d. Jamestown Canyon virus .....            | Yes | No |   |     |    |

**2. Are there probable and/or confirmed cases of travel-associated or locally transmitted infections with the following arboviruses in your jurisdiction?**

- |                           |     |    |                                     |     |    |
|---------------------------|-----|----|-------------------------------------|-----|----|
| a. Zika virus.....        | Yes | No | d. Yellow fever virus .....         | Yes | No |
| b. Dengue virus.....      | Yes | No | e. Japanese encephalitis virus..... | Yes | No |
| c. Chikungunya virus..... | Yes | No |                                     |     |    |

**3. Does your public health laboratory currently perform serological diagnostic testing for the following arboviruses?**

- |  |     |      |                                     |     |      |
|--|-----|------|-------------------------------------|-----|------|
| a. West Nile virus.....                    | IgM | PRNT | g. Powassan virus.....              | IgM | PRNT |
| b. Eastern equine encephalitis virus ..... | IgM | PRNT | h. Zika virus.....                  | IgM | PRNT |
| c. Lacrosse virus.....                     | IgM | PRNT | i. Dengue virus.....                | IgM | PRNT |
| d. Jamestown Canyon virus .....            | IgM | PRNT | j. Chikungunya virus .....          | IgM | PRNT |
| e. St. Louis encephalitis virus .....      | IgM | PRNT | k. Yellow fever virus .....         | IgM | PRNT |
| f. Western equine encephalitis virus ..... | IgM | PRNT | l. Japanese encephalitis virus..... | IgM | PRNT |

**4. Does your public health laboratory currently perform real-time PCR diagnostic testing for the following arboviruses?**

- |  |     |    |                                     |     |    |
|--|-----|----|-------------------------------------|-----|----|
| a. West Nile virus.....                    | Yes | No | g. Powassan virus.....              | Yes | No |
| b. Eastern equine encephalitis virus ..... | Yes | No | h. Zika virus.....                  | Yes | No |
| c. Lacrosse virus.....                     | Yes | No | i. Dengue virus.....                | Yes | No |
| d. Jamestown Canyon virus .....            | Yes | No | j. Chikungunya virus .....          | Yes | No |
| e. St. Louis encephalitis virus .....      | Yes | No | k. Yellow fever virus .....         | Yes | No |
| f. Western equine encephalitis virus ..... | Yes | No | l. Japanese encephalitis virus..... | Yes | No |



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5. Is active environmental surveillance testing performed in your jurisdiction for the following vectors and/or animals?

- |                                  |     |    |                            |     |    |
|----------------------------------|-----|----|----------------------------|-----|----|
| a. Mosquitoes .....              | Yes | No | b. Sentinel Chickens ..... | Yes | No |
| i. <i>Aedes albopictus</i> ..... | Yes | No | c. Birds .....             | Yes | No |
| ii. <i>Aedes aegypti</i> .....   | Yes | No | d. Horses .....            | Yes | No |
| iii. <i>Culex</i> spp.....       | Yes | No |                            |     |    |

6. If “yes” to question #5, what testing method(s) is employed?

- |                                  |     |    |                            |     |    |
|----------------------------------|-----|----|----------------------------|-----|----|
| a. Mosquitoes .....              | Yes | No | b. Sentinel Chickens ..... | Yes | No |
| i. <i>Aedes albopictus</i> ..... | Yes | No | c. Birds .....             | Yes | No |
| ii. <i>Aedes aegypti</i> .....   | Yes | No | d. Horses .....            | Yes | No |
| iii. <i>Culex</i> spp.....       | Yes | No |                            |     |    |

7. Is there significant disease prevalence of the following arboviruses in neighboring states?

- |  |     |    |                                     |     |    |
|--|-----|----|-------------------------------------|-----|----|
| a. West Nile virus.....                    | Yes | No | g. Powassan virus.....              | Yes | No |
| b. Eastern equine encephalitis virus ..... | Yes | No | h. Zika virus.....                  | Yes | No |
| c. Lacrosse virus.....                     | Yes | No | i. Dengue virus.....                | Yes | No |
| d. Jamestown Canyon virus .....            | Yes | No | j. Chikungunya virus.....           | Yes | No |
| e. St. Louis encephalitis virus .....      | Yes | No | k. Yellow fever virus.....          | Yes | No |
| f. Western equine encephalitis virus ..... | Yes | No | l. Japanese encephalitis virus..... | Yes | No |

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