ESSENTIAL LABORATORY CAPABILITIES FOR ARBOVIRUS DISEASE TESTING IN THE US

Responding to outbreaks of newly emerging arboviruses while maintaining broad testing is a persistent challenge for public health laboratories, given the frequent emergence and re-emergence of a great diversity of arboviruses.

Some of the strategies to solve those challenges rely on building and sustaining laboratory testing capacity, as well as maintaining a skilled workforce—all while being able to evaluate new testing technologies and respond to public health emergencies. Achieving this level of capacity on potentially low-incidence pathogens ensures that the laboratory is prepared and ready to respond promptly to an outbreak.

ARBOVIRUS SURVEILLANCE TESTING NEEDS ASSESSMENT

Given the potential for new or re-emerging arboviruses and vectors to arise, public health laboratories should routinely perform a needs assessment to determine the current arbovirus-related testing/surveillance priorities in their jurisdiction. Assessment findings allow laboratories to adjust what testing services they provide for which arboviruses, based on what is most needed in their community.

Download and complete a testing needs assessment to evaluate your laboratory’s current testing capacities and needs.

ESSENTIAL CAPABILITIES

There are five essential laboratory capabilities for arbovirus testing and surveillance that are recommended to support baseline and enhanced preparedness through informed resource allocation:

1. Build and sustain testing of clinical, animal and vector populations using broad platforms.

2. Develop and retain adequately skilled personnel to perform routine testing and respond to outbreaks.

3. Develop testing strategies that consider endemic, emerging and travel acquired arboviruses.

4. Develop, evaluate and implement new tests and technologies and share findings to update recommendations and standard practices.

5. Establish and sustain the infrastructure used to share data among essential stakeholders.