

## **Florida's Response Plan for Mosquito-Borne Diseases**

Mosquito-borne disease cycles are complex and often involve insects and several vertebrate host species including humans. Virus transmission can be very focal. The response plan for mosquito-borne diseases is intended for use by county health departments. The plan can also be used regionally for several counties with similar ecology but is not a response plan for the state as a whole. The plan includes the following levels:

### **No activity**

Describes the absence of cycling dengue virus, Venezuelan equine encephalitis virus, yellow fever virus, malaria and other foreign mosquito-borne diseases in Florida.

### **Background activity**

Describes time periods when the activity of native mosquito-borne viruses such as eastern equine encephalomyelitis virus, St Louis encephalitis virus, West Nile virus and Highlands J virus does not exceed average historical levels.

Response:

Surveillance (animal sentinel surveillance, mosquito-borne disease surveillance)

### **Mosquito-Borne Illness Advisory**

Mosquito-Borne Illness Advisories are declared when animal surveillance data indicate a rise in virus transmission activity and an increased potential for human infections.<sup>a</sup>

Response: (in addition to the response to background activity)

- a. Public information
- b. Health care provider advisories

Mosquito-Borne Illness Advisories are lifted when activity has returned to background levels.

### **Mosquito-Borne Illness Alert**

Mosquito-Borne Illness Alerts are declared when human cases have been confirmed or when evidence of intense virus transmission activity has been detected in animal surveillance systems.<sup>b, c</sup>

Response: (in addition to responses to background activity and advisories)

Local assessments of the need to increase mosquito control activities

Mosquito-Borne Illness Alerts are lifted after a significant decrease in animal surveillance activity and 6 weeks or more after the onset of the last human case.

- a. Mosquito-Borne Disease Advisories may be declared in geographic areas where the surveillance data over a two-week period indicate:
  1. A 10% increase in sentinel chicken seroconversions  
OR
  2. A 10% increase in corvid mortality  
OR
  3. A 10% increase in the minimal infection rate (MIR) of vector mosquitoes  
OR
  4. Two or more confirmed horse cases
  
- b. Mosquito-Borne Disease Alerts may be declared in geographic areas where there has been:
  1. A confirmed human case  
OR
  2. Elevated arbovirus antibody detection in sentinel chickens (from background):
    - a. A 50% increase in sentinel chicken seroconversions in the county OR
    - b. A 50% increase in sentinel chicken seroconversions in a single flock  
OR
  3. A 50% increase in corvid mortality (from background)
  
- c. When there is a potential for a widespread distribution of large numbers of human cases, the State Health Officer may declare a Mosquito-Borne Illness Threat