Georgia Department of Public Health

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WNV Surveillance and Response Recommendations

Basic surveillance for increases in mosquito populations provides good evidence of increased human risk and helps target mosquito control efforts and risk messages. Unfortunately, budget cuts have eliminated the State arboviral testing program. However, education of the public should be a priority.

RECOMMENDATIONS

- DEAD BIRD SURVEILLANCE
  - **Monitor and map dead bird calls** (and educate people who call in).
  - BIRDS CAN NO LONGER BE TESTED unless your county has a contract with SCWDS.

- MOSQUITO SURVEILLANCE
  - Mosquito testing is no longer supported by the State, so **UNLESS YOUR COUNTY HAS AN INDEPENDENT CONTRACT WITH SCWDS FOR TESTING** no mosquito pools will be tested in 2014.
  - **Mosquito populations can still be monitored to determine if risk is increasing. Set gravid traps** where there have been human cases, where positive horse, birds, or mosquito pools have been found previously, where mosquito complaints occur, where at-risk populations live, or where public use areas are located; use map data to avoid clustering trap sites too closely.
    - For WNV, **monitor** mosquito populations to determine when the **number of *Culex* spp** are rising starting in April or May in North Georgia and as soon as evening temperatures are consistently above 50° in South Georgia.
    - In EEE endemic areas, **monitor** *Culiseta melanura* populations starting as soon as temperatures begin to rise.
  - Where possible, set light traps at the same sites to monitor overall mosquito populations, especially where EEE is a problem.
    - If you are using light traps and are sending mosquitoes for testing, do not send in nulliparous mosquitoes; they have never had a blood meal and will not be positive.
    - Wait to collect at least a week after a large emergence before shipping mosquitoes for testing.
  - Begin determining the best locations for fixed trap sites – for control purposes, **don't keep moving traps** after a positive pool is found; changes in mosquito populations can only be determined where historic data are available.
  - **ALL** mosquito traps sites need GPS coordinates in decimal degree format
  - Graph weekly *Culex* spp population data at each trap site and combine like sites to create larger surveillance/control areas. Action points for reducing vector-borne disease risk occur when mosquito populations are higher than average in a specified control area.
  - If you have no resources to do mosquito surveillance and see a need for some localized surveillance, please do not hesitate to call (404-408-1207). I will come out to do some surveillance as soon as possible, although I also have no funding for testing so cannot test the mosquitoes for arboviruses.

- OTHER
  - Strengthening relationships with local veterinarians will provide better information on horse cases locally.
  - **Map** positive horse sites and provide education for horse owners.

RESPONSE TO SURVEILLANCE (actions)

- Larviciding should start as early in the year as is possible after water temperatures begin to rise; use a formulation appropriate to the scheduling of control. Check the Georgia Mosquito Control Association site (www.GAmosquito.org) for information on mosquito control industry representatives working in Georgia.

- NEED TO PERSONALIZE RISK - personal contact has been found to be more effective than media reports for getting the personal protection risk reduction messages to the public (National WNV conference 2004).

- Increasing numbers of *vector species* may be used to trigger a public health message and/or mosquito control efforts locally (Example: INCREASING NUMBERS OF *CULEX* SPP INDICATE THAT HUMAN RISK FOR WNV MAY BE RISING). Levels of risk can be used when talking to the public (see http://www.cdc.gov/westnile/resources/pdfs/wnvGuidelines.pdf, p. 43).

- Positive horses or other animals are an indication of high local human risk and should be acted upon ASAP.

- **Education should occur whenever anyone talks to a member of the public**, whether answering the phone, larviciding, or setting out mosquito traps. It is important to do as many of these activities simultaneously as is possible to use worker time more efficiently.