

Florida Arbovirus Surveillance Week 19: May 08 – May 14, 2011

Arbovirus surveillance in Florida includes endemic mosquito-borne viruses such as West Nile virus (WNV), Eastern equine encephalitis virus (EEEV), St. Louis encephalitis virus (SLEV), and Highlands J virus (HJV) and exotic viruses such as Dengue virus (DENV) and California encephalitis group viruses (CEV). Malaria, a non-viral mosquito-borne disease is also included. During the period May 08 – May 14, 2011, the following arboviral activity was recorded in Florida:

DENV activity: No new cases of dengue associated with Key West were reported this week.

EEEV activity: One blue jay in Okaloosa County tested positive for antibodies to EEEV.

WNV activity: No WNV activity was reported this week.

SLEV activity: No SLEV activity was reported this week.

HJV activity: One sentinel chicken in Walton County tested positive for antibodies to HJV.

Advisories/Alerts: Miami-Dade County is under mosquito-borne illness advisory.

Year to Date Human Case Summary

Dengue Acquired in Florida: In 2011, one case of locally acquired dengue has been reported in Miami-Dade County.

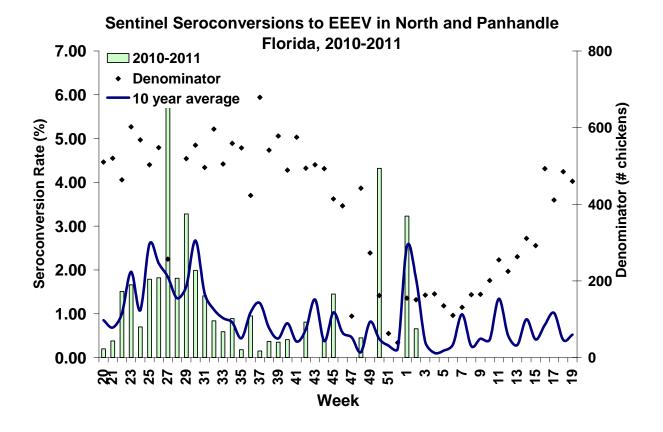
Imported Dengue: Five cases of dengue with onset in 2011 have been reported in individuals with travel history to a dengue endemic country in the two weeks prior to onset. Countries of origin were Colombia, India, Nicaragua, Turks and Caicos Islands and Venezuela. Counties reporting cases were Miami-Dade (3), Pasco and Pinellas.

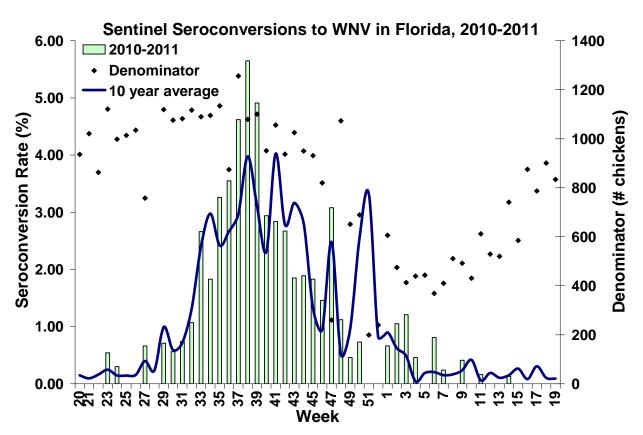
Imported Malaria: Thirty imported cases of malaria with onset in 2011 have been reported. Countries of origin were: Cameroon, Ethiopia (2), Eritrea, Guyana, Haiti (13), India (5), Liberia (2), Mali, Nigeria, Peru, Rwanda and Uganda. Counties reporting cases were: Alachua, Brevard, Broward (3), Collier (2), Duval (3), Hillsborough, Indian River, Lee (3), Miami-Dade (7), Manatee, Orange, Palm Beach (3) Pinellas, Seminole and St. Lucie.

Sentinel Chickens

One sentinel chicken in Walton County tested positive for antibodies to HJV.

| County | Collection | Seroconversion Rates (%) | | | County | Totals | | |
|----------------|------------|--------------------------|-----|------|--------|--------|-------|--|
| | Date | SLEV | WNV | EEEV | HJV | Week | YTD | |
| Walton (South) | 04/18/11 | | | | 1.61 | 1 HJV | 1 HJV | |





Live Wild Birds

Out of 32 live wild birds collected from three counties on April 25 –May 05, 2011, one blue jay in Okaloosa County tested positive for antibodies to EEEV.

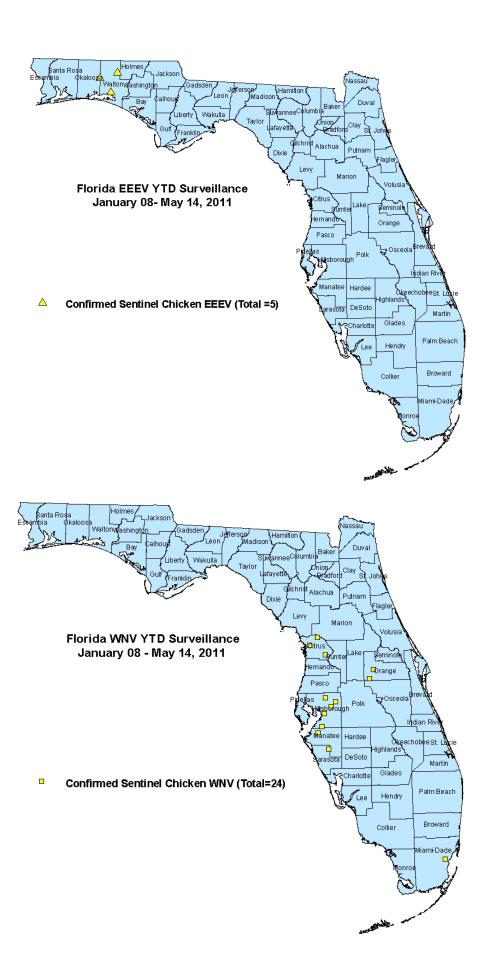
| County | Collection Date | EEEV | Flavi | Species | EEEV Rate | Flavi Rate | County YTD |
|----------|--------------------|------|-------|----------|--------------|---------------|---------------|
| Okaloosa | 4/25/11 | 1 | | Blue jay | 1 out of 3 | N/A | 6 EEEV |

Dead Birds

The Fish and Wildlife Conservation Commission (FWC) collects reports of dead birds, which can be an indication of arbovirus circulation in an area. This week, 4 reports representing 4 dead birds were received from 4 counties. One bird was identified as raptor; none were identified as crows or jays. In 2011, one hundred and twenty nine reports representing a total of 430 dead birds (10 crows, 28 jays, 35 raptors, 357 others) were received from 37 of Florida's 67 counties. Please note that FWC collects reports of birds that have died from a variety of causes, not only arboviruses. Dead birds should be reported to www.myfwc.com/bird/

Maps





YTD Arbovirus Activity by County

| County | Arbovirus Activity | | | |
|--------------|---|--|--|--|
| Citrus | WNV: 3 sentinels (1/3, 1/11) | | | |
| Dade | WNV: 1 sentinel (1/18) | | | |
| Hillsborough | WNV: 13 sentinels (1/4, 1/11, 1/18, 1/25, 2/9, 3/1) | | | |
| Manatee | WNV: 1 sentinel (4/4) | | | |
| Okaloosa | EEE: 6 live wild birds (3 blue jays 1/10, 4/11, 4/25; 1 cardinal 1/11 and 2 brown thrashers 2/21, 4/20) | | | |
| Orange | WNV: 3 sentinels (1/3, 1/18, 1/24) | | | |
| _ | HJV: 1 sentinel (2/24) | | | |
| Santa Rosa | EEE: 5 live wild birds (1 house sparrow 1/05 and 4 blue jays 3/1, 2/1, 4/12) | | | |
| Sarasota | WNV: 3 sentinels (1/4, 2/14, 3/14) | | | |
| Walton | EEE: 5 sentinels (1/6); 2 live wild birds (2 cardinals 1/14, 1/21) | | | |
| | HJV: 2 sentinel (1/14, 4/18) | | | |

Acknowledgements and Data Sources

Contributors: Leena Anil, Ph.D., Danielle Stanek, DVM, and Carina Blackmore, DVM, Ph.D., DOH Bureau of Environmental Public Health Medicine; Lillian Stark, Ph.D. and Valerie Mock, DOH Bureau of Laboratories.

For more surveillance information, please see the DOH website at: http://www.doh.state.fl.us/Environment/medicine/arboviral/index.html

Data is provided by county health departments, Department of Health Laboratories, Department of Agriculture and Consumer Services, mosquito control agencies, Florida Fish and Wildlife Conservation Commission, medical providers and veterinarians. Equine cases are determined by the Department of Agriculture and Consumer Services. Wild captured bird information is provided by the John A. Mulrennan Public Health Entomology Research and Education Center.