

Florida Arbovirus Surveillance Week 4: January 23 - 29, 2011

Arbovirus surveillance in Florida includes endemic mosquito-borne viruses 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 January 23 -January 29, 2011, the following arboviral activity was recorded in Florida:

DENV activity: One case of dengue associated with Key West with onset date in October, 2010 was reported this week. In 2010, there have been 65 locally-acquired cases in Key West, one in Broward County, and one in Miami-Dade County.

EEEV activity: Five sentinel chickens in Walton County tested positive for antibodies to EEEV.

WNV activity: Five sentinel chickens in Citrus, Hillsborough, Orange and Sarasota counties tested positive for antibodies to WNV.

SLEV activity: No SLEV activity was reported this week.

HJV activity: No HJV activity was reported this week.

Advisories/Alerts: Brevard, Hillsborough, and Monroe counties are under mosquito-borne illness alerts. Clay, Duval, Highlands, Indian River, Jackson, Leon, Miami-Dade, Putnam, Wakulla, and Washington counties are under mosquito-borne illness advisories.

Year to Date Human Case Summary

Imported Malaria: Two cases of malaria with onset in 2011 were reported in this week. Eight imported cases of malaria with onset in 2011 have been reported. Countries of origin were: Guyana Haiti (5) India and Mexico. Counties reporting cases were: Broward (2), Indian River, Miami-Dade, Orange, Palm Beach (2) and Pinellas.

Sentinel Chickens

Five sentinel chickens in Citrus, Hillsborough, Orange and Sarasota counties tested positive for antibodies to WNV. Five sentinel chicken in Walton County tested positive for antibodies to EEEV. Seroconversion rates are calculated by week and include previously reported results.

County	Collection Date	Seroconversion Rates (%) SLEV WNV EEEV HJV	County Totals Week YTD
Citrus	01/03/11	1.89	1WNV 1WNV
Hillsborough	01/04/11	0.60	1WNV 1WNV
Orange	01/03/11	2.17	1WNV
Orange	01/18/11	2.27	1WNV 2WNV
Sarasota	01/04/11	1.89	1WNV 1WNV
Walton (North)	01/06/11	29.41	5EEEV 5 EEEV





Out of 101 live wild birds collected from four counties in January 2011, one blue jay and one cardinal from Okaloosa County, one house sparrow from Santa Rosa County and two cardinals from North Walton County tested positive for antibodies to EEEV.

County	Collection Date	EEEV	Flavi	Species	EEEV Rate	Flavi Rate	County YTD
Okaloosa	1/10/11	1		Cardinal	1 out of 1	N/A	
Okaloosa	1/11/11	1		Blue jay	1 out of 9	N/A	2 EEEV
Santa Rosa	1/05/11	1		House sparrow	1 out of 4	N/A	1 EEEV
N Walton	1/14/11	1		Cardinal	1 out of 12	N/A	
N Walton	1/21/11	1		Cardinal	1 out of 12	N/A	2 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, 7 reports representing 27 dead birds were received from seven counties. One bird was identified as raptor; none were identified as crows or jays. In 2011, thirty-nine reports representing a total of 149 dead birds (0 crows, 0 jays, 25 raptors, 124 others) were received from 20 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/.



YTD Arbovirus Activity by County

County	Arbovirus Activity
Citrus	WNV: 1 sentinel (1/3)
Hillsborough	WNV : 1 sentinel (1/4)
Okaloosa	EEE : 2 live wild birds (1 blue jays 1/10 and 1cardinal 1/ 11)
Orange	WNV : 2 sentinels (1/3, 1/18)
Santa Rosa	EEE: 1 live wild bird (1 house sparrow 1/05)
Sarasota	WNV: 1 sentinel (1/4)
Walton	EEE : 5 sentinels (1/6) ; 2 live wild birds (2 cardinals 1/14, 1/21)

Acknowledgements and Data Sources

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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.