

Florida Arbovirus Surveillance Week 3: January 16 - January 22, 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 16 -January 22, 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.

EEEV activity: No EEEV activity was reported this week.

WNV activity: Two sentinel chickens (sampled in November and December 2010) in St Lucie and Orange counties tested positive for antibodies to WNV.

SLEV activity: No SLEV activity was reported this week.

HJV activity: One sentinel chicken (sampled in December 2010) in Walton county tested positive antibodies to HJV.

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

Year to Date Human Case Summary

Imported Malaria: Three cases of malaria with onset in 2011 were reported in this week. Six imported cases of malaria with onset in 2011 have been reported. Countries of origin were: Guyana Haiti (4) and India. Counties reporting cases were: Broward (2), Indian River, Miami-Dade, Orange and Pinellas.

Sentinel Chickens

Sentinel chickens sampled in December and November 2010 tested positive for arboviruses. Two sentinel chickens (sampled in November and December 2010) in St Lucie and Orange counties tested positive for antibodies to WNV. One sentinel chicken (sampled in December 2010) in Walton county tested positive antibodies to HJV. These chickens will be included in 2010 data. Seroconversion rates are calculated by week and include previously reported results.

County	Collection	Seroconversion Rates (%)	County Totals
	Date	SLEV WNV EEEV HJV	Week YTD - 2010
St. Lucie	11/19/10	4.35	1 WNV 9 WNV
Orange	12/13/10	4.44	2 WNV 45 WNV, 23 EEEV, 23 HJV
Walton (North)	12/14/10	3.45	1 HJV 51 WNV, 41 EEEV, 19 HJV



Live Wild Birds

Out of 55 live wild birds collected from three counties in January 2011, one blue jay and one cardinal from Okaloosa County tested positive for antibodies to EEEV and one house sparrow from Santa Rosa County tested positive for antibodies to EEEV.

County	Collection	EEEV	Flavi	Species	EEEV	Flavi	County
	Date				Rate	Rate	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

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, 10 reports representing 40 dead birds were received from eight counties. Eighteen birds were identified as raptors; none were identified as crows or jays. In 2011, Thirty-two reports representing a total of 122 dead birds (0 crows, 0 jays, 24 raptors, 98 others) were received from 17 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/.



Acknowledgements and Data Sources

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

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.