

## Florida Arbovirus Surveillance Week 21: May 20-26, 2012

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 of May 20-26, 2012, the following arboviral activity was recorded in Florida:

**DENV activity:** No new cases of locally acquired dengue were reported this week.

**EEEV activity:** Two equine cases of EEE were reported in Union and Santa Rosa counties. In 2012, positive samples from five equines and 12 sentinel chickens have been received from seven counties.

**WNV** activity: Five sentinel chickens in St. Johns County tested positive for antibodies to WNV. In 2012, positive samples from 35 sentinel chickens have been received from eight counties.

**SLEV activity:** No SLEV activity was reported this week. In 2012, positive samples from four sentinel chickens have been received from two counties

**HJV activity:** One sentinel chicken in St. Johns County tested positive for antibodies to HJV. In 2012, positive samples from two sentinel chickens have been received from two counties.

**Advisories/Alerts:** St. Johns County issued a mosquito-borne illness advisory in response to positive sentinels. No other counties are currently under mosquito-borne illness advisory or alert.

## Year to Date Human Case Summary \*

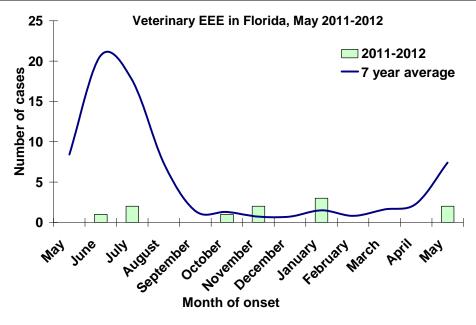
**Imported Dengue:** Fourteen cases of dengue with onset in 2012 have been reported in individuals with travel history to a dengue endemic country in the two weeks prior to onset. Countries of origin were Colombia, Cuba, Dominican Republic, Ecuador, Ghana, Guyana, Haiti (4), Jamaica, Mexico, Suriname, and Turks & Caicos. Counties reporting cases were Brevard, Broward (5), Lee, Miami-Dade (4), Orange, Palm Beach, and Sarasota. Three of the cases were reported in non-Florida residents.

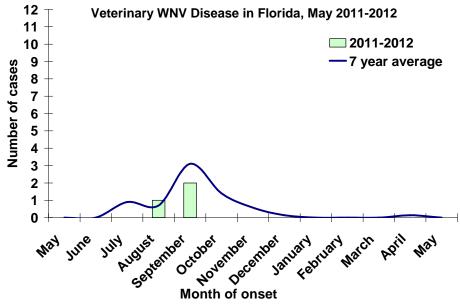
Imported Malaria: Twenty-three imported cases of malaria with onset in 2012 have been reported. Countries of origin were: Afghanistan, Colombia, Ghana (3), Guyana, Haiti (8), Honduras, India, Ivory Coast, Nigeria (2), Sierra Leone, South Africa, Sub Saharan Africa, and Togo. Counties reporting cases were: Alachua, Broward (5), Charlotte, Duval (2), Hillsborough, Lake, Marion, Miami-Dade (5), Orange (2), Palm Beach, and Pinellas (3). Three of the cases were reported in non-Florida residents.

## **Veterinary Cases**

Two horses in Union and Santa Rosa counties tested positive for EEEV this week.

County	Onset Date	Species	Virus	Status	County YTD
Union	05/12/2012	Equine	EEEV	Euthanized	1 EEEV
Santa Rosa	05/11/2012	Equine	EEEV	Euthanized	1 EEEV

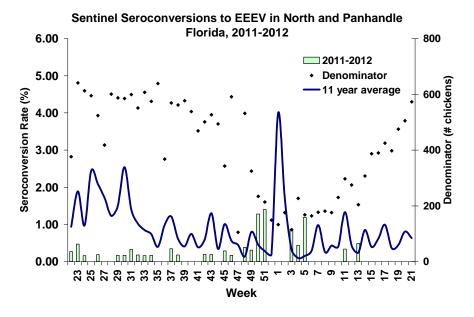


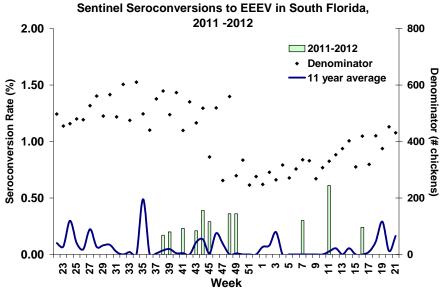


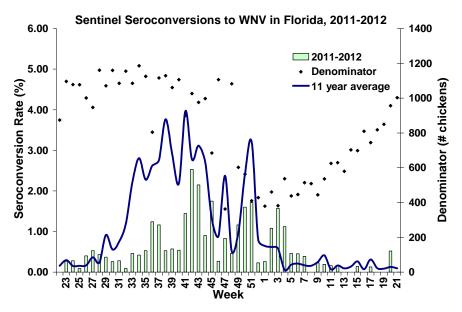
# **Sentinel Chickens**

Five sentinel chickens in St. Johns County tested positive for antibodies to WNV and one sentinel chicken in St. Johns County tested positive for antibodies to HJV. Seroconversion rates are calculated by week and include previously reported results.

County	Collection	Seroconvers	ion Rates (%)	Coui	County Totals	
-	Date	SLEV WNV	EEEV HJV	Week	YTD	
St. Johns	05/14/2012	8.3		5 WNV	5 WNV, 1 HJV	
	04/30/2012		1.9	1 HJV		



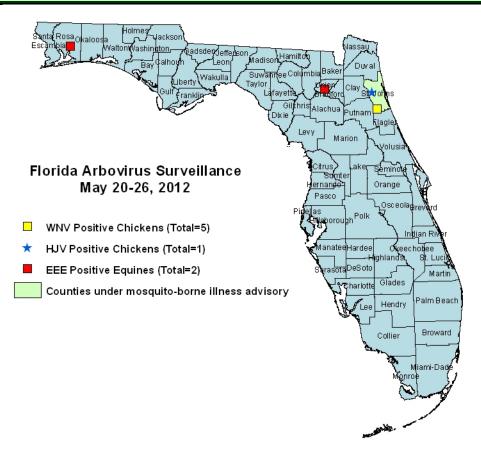


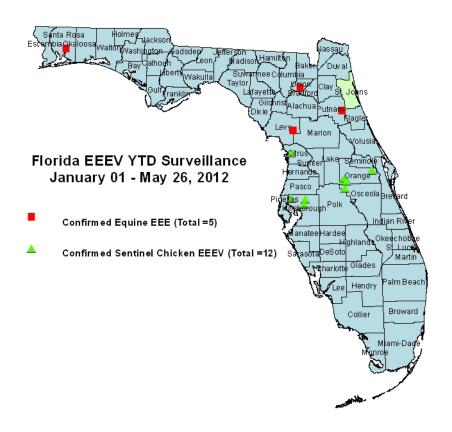


#### **Dead Birds**

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, ten reports representing 17 dead birds were received from eight counties. Five were identified as crows and one as a jay; none were identified as raptors. In 2012, 176 reports representing a total of 523 dead birds (24 crows, 8 jays, 25 raptors) were received from 41 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







#### **Arbovirus Activity by County**

County	Arbovirus Activity
Citrus	EEEV: 1 sentinel (1/30)
	HJV: 1 sentinel (1/3)
Hernando	WNV: 1 sentinel (1/23)
Hillsborough	EEEV: 4 sentinels (2/14, 3/13, 4/17)
	SLEV: 3 sentinels (1/3)
	WNV: 11 sentinels (1/3, 1/17, 1/24, 1/31, 2/14, 3/6)
Lee	SLEV: 1 sentinel (3/7)
	WNV: 1 sentinel (1/24)
Levy	EEEV: 2 horses (1/2)
Manatee	WNV: 2 sentinels (2/1, 3/14)
Orange	EEEV: 7 sentinels (1/5, 1/9, 1/19, 1/23, 2/6, 3/15, 3/29)
	WNV: 9 sentinels (1/9,1/12, 1/19, 1/25, 3/1)
Putnam	EEEV: 1 horse (1/1)
Santa Rosa	EEEV : 1 horse (5/11)
Sarasota	WNV: 4 sentinels (1/9, 2/6, 3/19)
St. Johns	WNV: 5 sentinels (5/14)
	HJV: 1 sentinel (4/30)
Union	EEEV : 1 horse (5/12)
Walton	WNV: 2 sentinels (4/9, 4/23)

#### **Acknowledgements and Data Sources**

Contributors: Elizabeth Radke, MPH, Shaiasia Itwaru-Womack, Danielle Stanek, DVM, and Carina Blackmore, DVM, Ph.D., DOH Bureau of Environmental Public Health Medicine; Lillian Stark, Ph.D., Holly Hughes, Ph.D. and Valerie Mock, DOH Bureau of Laboratories.

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

\*Case tallies included in the weekly Florida arbovirus surveillance report include confirmed and probable cases for EEE, WNV infection, SLE, dengue, and malaria. In addition, dengue and malaria tallies may also include suspect cases. Case definitions being used in Florida are consistent with national criteria provided by the Council of State and Territorial Epidemiologists (CSTE) and may be viewed at: <a href="http://www.doh.state.fl.us/Disease\_ctrl/epi/surv/CaseDefinitions/2012CaseDef\_FINAL.pdf">http://www.doh.state.fl.us/Disease\_ctrl/epi/surv/CaseDefinitions/2012CaseDef\_FINAL.pdf</a>
Case tallies reported by CDC do not include suspect cases and cases are reported by patient state of residence rather than where the exposure occurred.

Counties included in the EEE graph for north Florida and the Panhandle are: Alachua, Bay, Citrus, Duval, Escambia, Flagler, Gulf, Hernando, Jackson, Jefferson, Leon, Madison, Marion, Nassau, Orange, Pasco, Putnam, Seminole, St. Johns, Suwannee, Volusia, Walton (North and South), and Washington.

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.