

## Florida Mosquito-Borne Disease Summary for the Week of October 25-31, 2009

Elizabeth Radke, MPH, Kristina Weis, Ph.D., Danielle Stanek, D.V.M, Carina Blackmore, D.V.M, Ph.D.

During the period October 25-31, 2009, the following arboviral activity (St. Louis encephalitis virus [SLEV], Eastern equine encephalitis virus [EEEV], Highlands J virus [HJV], West Nile virus [WNV], California encephalitis group viruses [CEV]), Dengue virus (DENV) was recorded in Florida:

**EEEV activity:** There were three seroconversions to EEEV in sentinel chickens from Hernando and Leon (2) counties. Three live wild birds from Santa Rosa, Okaloosa, and Walton counties tested positive for antibodies to EEEV.

**WNV/SLEV activity:** A WNV-confirmed positive horse was reported from Duval County. There were thirteen seroconversions to WNV in sentinel chickens from Alachua (2), Duval (2), Gulf, Hillsborough (3), Leon (3), and Seminole (2) counties. One live wild bird from Okaloosa County tested positive for antibodies to a flavivirus

**HJV activity:** There was one seroconversion to HJV in a sentinel chicken from Leon County.

**CEV activity:** None this week.

**DENV activity:** Six locally-acquired cases of dengue fever were reported this week in Key West. The total number of confirmed locally-acquired cases is nine, including one New York resident

**Advisories/Alerts:**

Monroe County issued a mosquito-borne illness alert in response to the new cases of locally-acquired dengue. Lee, Miami-Dade, Volusia, Columbia, Suwannee, Leon, Clay, Union, Walton, St. Johns, Seminole, Flagler, and Madison counties are under mosquito-borne illness advisories.

**Veterinary Cases:**

One horse tested positive for WNV this week in Duval County, bringing the state's total for WNV to 5 for 2009.

County	Onset Date	Species	SLE	WNV	EEE	Status
Duval	10/18/2009	Equine		1		Euthanized

**Sentinel Chickens:**

There were three seroconversions to EEEV in sentinel chickens from Hernando and Leon (2) counties, thirteen to WNV in Alachua (2), Duval (2), Gulf, Hillsborough (3), Leon (3), and Seminole (2) counties, and one to HJV in Leon County. Seroconversion rates are calculated by week and include previously reported results.

County	Collection Date	Seroconversion Rates (%)				By County, Week and Virus
		SLEV	WNV	EEEV	HJV	
Hillsborough	10/21/09		4.0			3 WN
Leon	10/19/09		7.9	5.3		3 WN, 2 EEE
Gulf	10/19/09		7.7			1 WN
Alachua	10/19/09		2.0			1 WN
Hernando	10/19/09			3.4		1 EEE
Seminole	10/13/09		8.3			2 WN
Alachua	10/13/09		2.0			1 WN
Leon	10/12/09			2.4	2.4	1 EEE, 1 HJ
Duval	10/5/09		5.0			1 WN
Duval	10/1/09		4.3			1 WN

**Live Wild Birds:**

Out of 20 live wild birds collected from three counties on October 19-22, three cardinals tested positive for antibodies to EEEV and one cardinal tested positive for antibodies to a flavivirus.

County	Collection Date	EEEV	EEEV-Flavi	Flavi	Species	EEEV Rate	Flavi Rate
Walton	10/22/09	1			1 Cardinal	1 out of 7	N/A
Okaloosa	10/19, 10/21	1		1	2 Cardinals	1 out of 7	1 out of 7
Santa Rosa	10/20/09	1			1 Cardinal	1 out of 6	N/A

**Dead Bird Reports:**

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, eight reports representing ten dead birds were received from four counties. Four were identified as crows; none were identified as jays or raptors. 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/](http://www.myfwc.com/bird/). See the web page for more information: <http://www.doh.state.fl.us/Environment/medicine/arboviral/index.html>