

Florida Mosquito-Borne Disease Summary for the Week of September 13-19, 2009

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

During the period September 13-19, 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 five seroconversions to EEEV in sentinel chickens from Orange (2), Seminole (2), and Walton counties. Two mosquito pools (*Culiseta melanura* and *Ps. ferox*) from Walton County tested positive for EEEV.

WNV/SLEV activity: There were five seroconversions to WNV in sentinel chickens from Hillsborough (2), Leon (2), and Nassau counties.

HJV activity: There were three seroconversions to HJV in sentinel chickens from Leon (2) and Brevard counties.

CEV activity: None this week.

DENV activity: A New York resident was diagnosed with dengue virus infection acquired in Key West, FL, onset date 8/10/09. CDC confirmed infection with serotype DENV-1. Monroe County Health Department has also identified a Key West resident with no travel history with commercial laboratory results positive for anti-dengue IgM antibodies, onset date 8/25/09. CDC confirmation is pending. Two additional patients with symptoms consistent with dengue are being tested for recent infection.

Advisories/Alerts:

Monroe, Volusia, Columbia, Suwannee, Leon, Clay, Union, Walton, St. Johns, and Madison counties are under mosquito-borne illness advisories. No other counties are currently under mosquito-borne illness alert or advisory.

Sentinel Chickens:

There were five seroconversions to EEEV in sentinel chickens from Orange (2), Seminole (2), and Walton counties, five to WNV in Hillsborough (2), Leon (2), and Nassau counties, and three to HJV in Leon (2) and Brevard counties. 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	
Leon	9/8/09		4.8			2 WN
Hillsborough	9/8/09		2.7			2 WN
Orange	9/8/09			0.9		1 EEE
Nassau	9/7/09		3.2			1 WN
Orange	9/3/09			1.1		1 EEE
Walton (North)	9/1/09			4.0		1 EEE
Leon	8/31/09		2.4		4.9	1 WN, 2 HJ
Brevard	8/26/09				1.6	1 HJ
Seminole	8/25/09			8.3		2 EEE

Mosquito Pools:

EEEV was isolated from two pools (*Culiseta melanur* and *Ps. ferox*) collected in Walton County.

County	Collection Date	Result	Species
Walton	6/18/09	EEEV	<i>Cs. melanura</i>
Walton	6/24/09	EEEV	<i>Ps. ferox</i>

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, three reports representing six dead birds were received from two 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/. See the web page for more information: <http://www.doh.state.fl.us/Environment/medicine/arboviral/index.html>