

## Florida Arbovirus Surveillance Week 21: May 23-29, 2010

Arbovirus surveillance in Florida includes endemic 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). During the period May 23-29, 2010, the following arboviral activity was recorded in Florida:

- **DENV activity:** No locally-acquired cases of dengue were reported this week. In 2010, there has been one locally-acquired case reported from Key West (Monroe County).
- **EEEV activity:** One EEEV-confirmed positive horse was reported in Osceola County. Two sentinel chickens from Flagler and Orange counties and three live wild birds from Santa Rosa County tested positive for antibodies to EEEV. In 2010, positive samples from four horses, 15 sentinel chickens, 13 live wild birds, and one mosquito pool have been received from 11 of Florida's 67 counties.
- **WNV activity:** Two sentinel chickens from Walton County tested positive for antibodies to WNV. In 2010, positive samples from 37 sentinel chickens have been received from five counties.
- **HJV activity:** No HJV activity was reported this week. In 2010, positive samples from five sentinel chickens have been received from three counties.

Advisories/Alerts: Monroe County is currently under a mosquito-borne disease advisory. No other counties are currently under mosquito-borne disease advisory or alert.

## Veterinary Cases

One horse in Osceola County tested positive for EEEV this week. In 2010, four EEEV-positive horses have been reported from four counties.

County	Onset Date	Species	Virus	Status	County YTD
Osceola	05/15/2010	Donkey	EEEV	Euthanized	1



There were two seroconversions to EEEV in sentinel chickens from Flagler and Orange counties and two to WNV in Walton County. Seroconversion rates are calculated by week and include previously reported results.

County	Collection	Seroconversion Rates (%)			s (%)	County T	otals
-	Date	SLEV	WNV	EEEV	HJV	Week	YTD
Orange	05/17/2010			0.9		1 EEE	3 EEE
Flagler	04/26/2010			8.3		1 EEE	3 EEE
Walton (North)	04/30/2010		2.9			1 WNV	18 WNV, 4 EEE, 2 HJV
	04/23/2010		2.9			1 WNV	



Out of 36 live wild birds collected from three counties on May 11-20, 2010, three blue jays from Santa Rosa County tested positive for antibodies to EEEV.

County	Collection Date	EEEV	Flavi	Species	EEEV Rate	Flavi Rate	County YTD
Santa Rosa	05/18/2010	1		Blue jay	1 out of 9	N/A	8 EEE
	05/11/2010	2		Blue jay	2 out of 8	N/A	

## **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, six reports representing eight dead birds were received from six counties. One was identified as a jay and two as raptors; none were identified as crows. In 2010, 124 reports representing a total of 380 dead birds (2 crows, 9 jays, 22 raptors, 347 others) have been received from 39 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

lolme lacks Nassau Jeffersop Madison Gadsden Hamiltor alho Duva Bake Wakulla Taylor Clay Lafayett Gilchrist Alachua Putnam Divie Flagle Levy Marion Florida Arbovirus Surveillance Volus Citrus May 23-29, 2010 mino ernandd Counties under mosquito-borne illness advisory Orange Pasco EEE Positive Equine Osceok Polk sborouah  $\triangle$ 1 - 2 EEE Positive Chickens Indian Ri 1 - 2 WNV Positive Chickens Manatee Hardee Okeechol e St. ighland DeSoto asota Martin Glades Charlotte Palm Beach Hendry Lee Broward Collier mi-Dade



## YTD Arbovirus Activity by County

County	Arbovirus Activity					
Flagler	EEE : 3 sentinels (3/22, 4/26, 5/3) ; 1 mosquito pool ( <i>Culiseta melanura</i> 4/27)					
Hillsborough	WNV : 12 sentinels (1/12, 1/19, 2/22, 3/9, 3/22, 4/20)					
-	EEE: 1 sentinel (5/4)					
Lee	WNV: 2 sentinels (3/30, 4/20)					
Marion	EEE: 1 horse (5/7)					
Monroe	DENV: 1 human (4/5)					
Okaloosa	EEE : 6 live wild birds (1 house sparrow 1/4, 5 blue jay 1/27, 4/19, 4/21, 4/26)					
Orange	EEE : 3 sentinels (1/7, 5/3, 5/17)					
Osceola	EEE: 1 donkey (5/15)					
Palm Beach	WNV: 1 sentinel (3/15)					
Pinellas	HJV: 1 sentinel (4/26)					
Polk	EEE: 1 horse (4/28)					
St. Johns	HJV: 2 sentinels (4/26, 5/3)					
Santa Rosa	EEE: 8 live wild birds (8 blue jays 2/2, 3/22, 4/13, 4/19, 5/11, 5/18)					
Sarasota	EEE: 2 sentinels (1/5, 1/11)					
	WNV : 1 sentinel (1/8)					
Volusia	EEE : 1 horse (5/7)					
Walton	EEE : 6 sentinels (1/19, 3/22, 5/3)					
	WNV : 21 sentinels (1/14, 2/4, 3/8, 3/12, 3/22, 4/7, 4/8, 4/23, 4/30)					
	HJV : 2 sentinels (3/22)					

**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.