

#### Florida Arbovirus Surveillance Week 28: July 10 – July 16, 2011

Arbovirus surveillance in Florida includes endemic mosquito-borne viruses such as 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 July 10 - July 16, 2011, the following arboviral activity was recorded in Florida:

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

**EEEV activity:** One equine case of EEEV was reported in Holmes County. In 2011, positive samples from two equines, 13 sentinel chickens and 19 live wild birds have been received from ten counties.

**WNV activity:** Five sentinel chickens in Charlotte and Lee Counties tested positive for antibodies to WNV. In 2011, positive samples from 36 sentinel chickens and one live wild bird (flavivirus positive) have been received from 12 counties.

SLEV activity: No SLEV activity has been reported in 2011.

**HJV activity:** No HJV activity was reported this week. In 2011, positive samples from five sentinel chickens have been received from three counties.

Advisories/Alerts: Seminole County is under mosquito-borne illness advisory.

# Year to Date Human Case Summary

**Dengue Acquired in Florida:** In 2011, one case of locally acquired dengue has been reported in Miami-Dade County.

**Imported Dengue:** Nine cases of dengue with onset in 2011 have been reported in individuals with travel history to a dengue endemic country in the two weeks prior to onset. Countries of origin were Aruba, Brazil, Colombia, Guyana, Haiti, India, Nicaragua, Turks and Caicos Islands and Venezuela. Counties reporting cases were Broward (2), Hendry, Miami-Dade (4), Pasco and Pinellas.

**Imported Malaria:** Forty-seven imported cases of malaria with onset in 2011 have been reported. Countries of origin were: Afghanistan (2), Cameroon, East Timor, Ethiopia (2), Eritrea (2), Gabon, Ghana (3), Guinea Conakry, Guyana, Haiti (14), Honduras (2), India (6), Liberia (2), Mali, Nigeria (3), Peru, Rwanda, Uganda (2) and Venezuela. Counties reporting cases were: Alachua, Brevard (2), Broward (4), Citrus, Collier (2), Duval (5), Escambia, Hillsborough (3), Indian River, Lee (4), Leon, Miami-Dade (10), Manatee, Okaloosa, Orange (3), Palm Beach (3), Pasco, Pinellas, Seminole and St. Lucie.

# **Veterinary Cases**

One horse in Holmes County tested positive for EEEV this week.

County	Onset Date	Species	Virus	Status	County YTD
Holmes	07/03/11	Equine	EEEV	Dead	1 EEEV



## **Sentinel Chickens**

Five sentinel chickens in Charlotte and Lee Counties tested positive for antibodies to WNV. Seroconversion rates are calculated by week and include previously reported results.

County	Collection Date	Seroconversion Rates	<b>(%) County Totals</b> HJV Week YTD	
Charlotte	07/01/11	4.17	1 WNV 1	WNV
Lee	06/27/11	1.20	1 WNV	
Lee	06/13/11	4.23	3 WNV 4	WNV



Sentinel Seroconversions to EEEV in North and Panhandle



Live Wild Birds

No positive live wild birds were reported this week.

#### **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, four reports representing six dead birds were received from four counties. Two were identified as raptors and one as crow. None were identified as jays. In 2011, one hundred and sixty-six reports representing a total of 546 dead birds (19 crows, 36 jays, 43 raptors, 448 others) were received from 42 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





# YTD Arbovirus Activity by County

County	Arbovirus Activity
Brevard	EEEV: 2 sentinels (5/20, 5/27)
Citrus	WNV: 3 sentinels (1/3, 1/11)
Charlotte	WNV: 1 sentinel (7/1)
Dade	WNV: 1 sentinel (1/18)
Duval	EEEV: 1 sentinel (6/11)
Hernando	EEEV: 1 sentinel (6/6)
Hillsborough	WNV: 13 sentinels (1/4, 1/11, 1/18, 1/25, 2/9, 3/1)
Holmes	EEEV: 1 horse (7/3)
Indian River	WNV: 1 sentinel (4/28)
Lee	WNV: 4 sentinels (6/27, 6/13)
Manatee	WNV: 1 sentinel (4/4)
Marion	EEEV: 1 horse (6/21)
Nassau	HJV: 1 sentinel (5/23)
Okaloosa	WNV: 1 live wild bird (flavivirus positive, 1 blue jay 5/31)
	EEEV: 10 live wild birds (7 blue jays 1/10, 4/11, 4/25, 5/16, 5/19, 6/6, 6/8; 1 cardinal
	1/ 11 and 2 brown thrashers 2/21, 4/20)
Orange	WNV: 3 sentinels (1/3, 1/18, 1/24)
	EEEV: 3 sentinels (6/2, 6/9, 6/27)
	HJV: 1 sentinel (2/24)

Santa Rosa	EEEV: 7 live wild birds (1 house sparrow 1/05 and 6 blue jays 3/1, 2/1, 4/12, 5/10, 5/18)
Sarasota	WNV: 5 sentinels (1/4, 2/14, 3/14, 4/25, 5/2)
Seminole	WNV: 3 sentinels(6/7)
St. Johns	EEEV: 1 sentinel (6/13)
Walton	EEEV: 5 sentinels (1/6) ; 2 live wild birds (2 cardinals 1/14, 1/21) WNV: 1 sentinel (5/24)
	HJV: 3 sentinels (1/14, 4/18,5/2)

## Acknowledgements and Data Sources

Contributors: Leena Anil, Ph.D., Danielle Stanek, DVM, and Carina Blackmore, DVM, Ph.D., DOH Bureau of Environmental Public Health Medicine; Lillian Stark, Ph.D. and Valerie Mock, DOH Bureau of Laboratories.

# 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.