

# Florida Arbovirus Surveillance Week 34: August 21 – August 27, 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 August 21 - August 27, 2011, the following arboviral activity was recorded in Florida:

**DENV activity:** No new cases of locally acquired dengue were reported this week. In 2011, there have been two locally acquired cases reported in Miami-Dade and Martin counties.

**EEEV activity:** Two sentinel chickens in Walton and Citrus counties tested positive for antibodies to EEEV. In 2011, positive samples from three equines, 19 sentinel chickens and 19 live wild birds have been received from 11 counties.

**WNV activity:** One new cases of locally acquired WNV infection was reported this week. One equine case of WNV was reported in Sarasota County. One sentinel chicken in Orange County tested positive for antibodies to WNV. In 2011, positive samples from 11 humans, 60 sentinel chickens, one equine and one live wild bird (flavivirus positive) have been received from 15 counties.

**SLEV activity:** No SLEV activity was reported this week. In 2011, positive sample from one sentinel chicken has been received from one county.

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

Advisories/Alerts: Duval County is under mosquito-borne illness alert. Martin and Holmes Counties are under mosquito-borne illness advisory.

Year to Date Human Case Summary

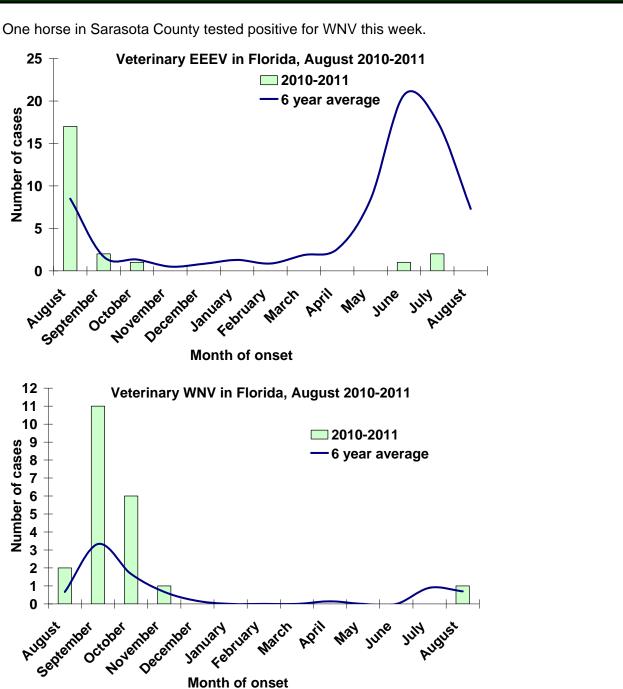
West Nile Virus Infection Acquired in Florida: Nine human cases of WNV infection have been reported in 2011 in Duval County with onset in June (1), July (7) and Aug (1). Two positive asymptomatic blood donors were reported in Duval County.

**Dengue Acquired in Florida:** In 2011, two cases of locally acquired dengue have been reported in Miami-Dade and Martin Counties

**Imported Dengue:** Seventeen 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, Bahamas (3), Bangladesh, Brazil, Colombia, Guyana, Haiti, India, Nicaragua, Puerto Rico (2), St Lucia, Trinidad, Turks and Caicos Islands and Venezuela. Counties reporting cases were Broward (3), Hendry, Marion, Martin, Miami-Dade (4), Orange, Palm Beach (3), Pasco, Pinellas and St. Johns.

Imported Malaria: Sixty-five imported cases of malaria with onset in 2011 have been reported. Countries of origin were: Afghanistan (3), Brazil, Cameroon, East Timor, Ethiopia (2), Eritrea (2), Gabon, Ghana (3), Guinea Conakry, Guyana, Haiti (17), Honduras (2), India (13), Kenya, Liberia (2), Libya, Mali (2), Nigeria (5), Pakistan, Peru, Rwanda, Uganda (2) and Venezuela. Counties reporting cases were: Alachua (2), Brevard (4), Broward (8), Citrus, Collier (2), Duval (6), Escambia, Hillsborough (5), Indian River, Lee (3), Leon (2), Miami-Dade (12), Manatee (3), Okaloosa, Orange (3), Palm Beach (5), Pasco, Pinellas, Seminole, St. Johns and St. Lucie (2).

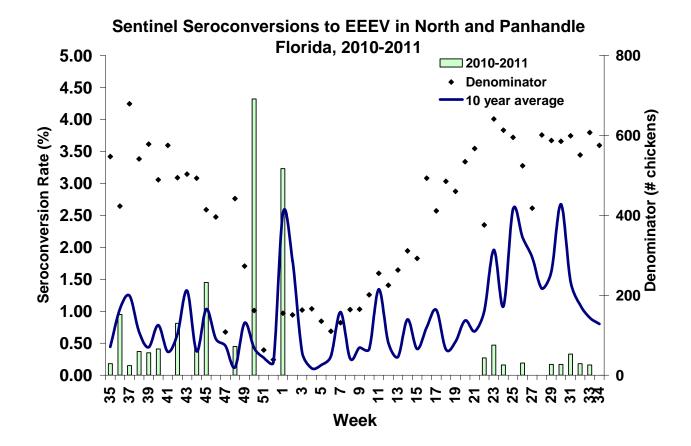
**Veterinary Cases** 

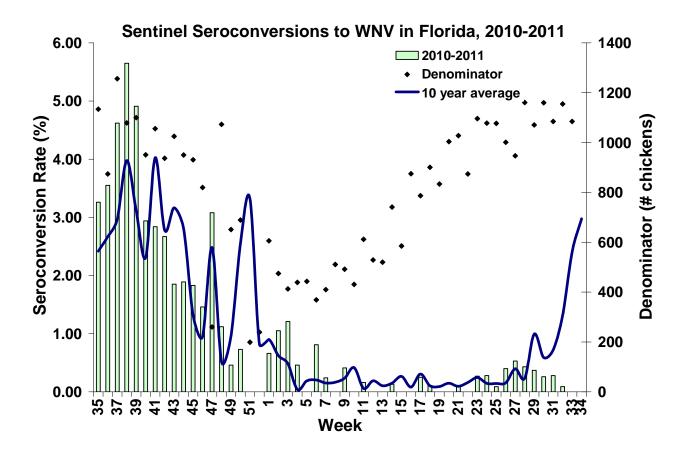


# **Sentinel Chickens**

One sentinel chicken in Orange County tested positive for antibodies to WNV. Two sentinel chickens in Walton and Citrus counties tested positive for antibodies to EEEV. Seroconversion rates are calculated by week and include previously reported results.

County	Collection Date	Seroconversi SLEV WNV	ion Rates (%) EEEV HJV	Week	County Totals YTD
Citrus	08/15/11		1.39	1 EEEV	1 EEEV, 3 WNV
Orange/Reedy	08/11/11	2.50		1 WNV	3 EEEV, 2 HJV, 7 WNV
Walton (North)	08/08/11		2.17	1 EEEV	9 EEEV, 1 WNV, 1HJV





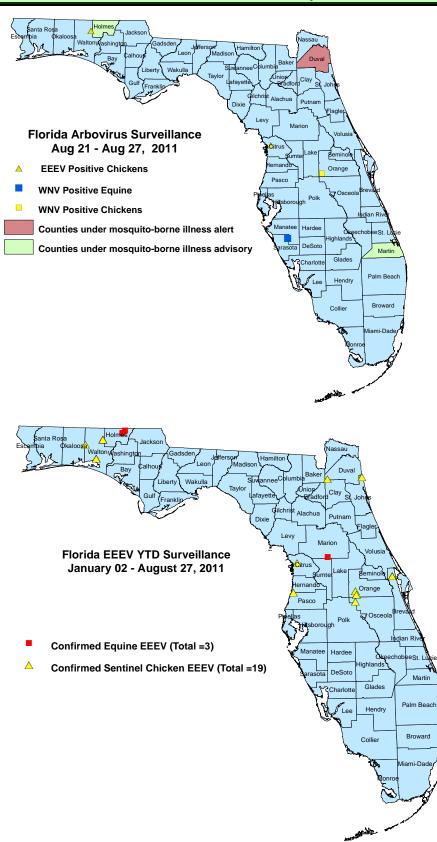
**Live Wild Birds** 

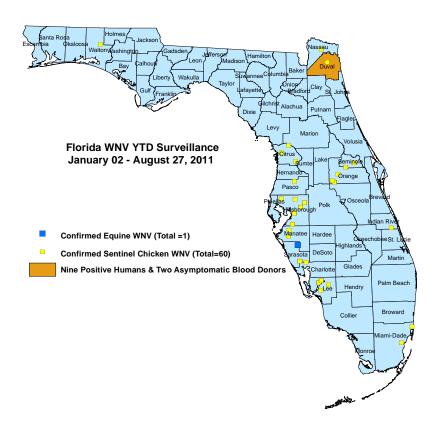
No positive live wild birds were reported this week.

#### **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, 11 reports representing 35 dead birds were received from six counties. Two were identified as crows and one as a jay. None were reported as raptors. In 2011, two hundred and nineteen reports representing a total of 681 dead birds (30 crows, 37 jays, 48 raptors, 566 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)		
Citius	EEEV: 1 sentinel (8/15)		
Charlette			
Charlotte	WNV: 1 sentinel (7/1)		
Dade	WNV: 2 sentinels (1/18, 6/22)		
Duval	EEEV: 1 sentinel (6/11)		
	WNV: 11humans (1June, 7July, 1Aug, 2 positive blood donors); 1 sentinel (7/15)		
Hernando	WNV : 1 sentinel (8/1)		
	EEEV: 1 sentinel (6/6)		
Hillsborough	WNV: 14 sentinels (1/4, 1/11, 1/18, 1/25, 2/9, 3/1, 7/19)		
Holmes	EEEV: 2 horses (7/3, 7/6)		
Indian River	WNV: 1 sentinel (4/28),		
	SLEV: 1 sentinel (6/23)		
Lee	WNV: 10 sentinels (6/13, 6/27, 7/11, 7/25)		
Manatee	WNV: 3 sentinels (4/4, 7/20)		
Marion	EEEV: 1 horse (6/21)		
Nassau	WNV: 1 sentinel (8/1)		
	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: 11 sentinels (1/3, 1/18, 1/24, 7/7, 7/14, 7/ 28, 8/1, 8/11)			
-	EEEV: 4 sentinels (6/2, 6/9, 6/27, 7/28)			
	HJV: 2 sentinels (2/24, 7/7)			
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: 8 sentinels (1/4, 2/14, 3/14, 4/25, 5/2, 6/27, 7/5, 7/18); 1 horse (8/12)			
Seminole	WNV: 3 sentinels(6/7)			
St. Johns	EEEV: 1 sentinel (6/13)			
Walton	EEEV: 9 sentinels (1/6, 7/18, 8/1, 8/8); 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

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### For more surveillance information, please see the DOH website at: http://www.doh.state.fl.us/Environment/medicine/arboviral/index.html

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.