



Florida Arbovirus Surveillance Week 32: August 07 – August 13, 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 07 - August 13, 2011, the following arboviral activity was recorded in Florida:

DENV activity: One case of locally-acquired dengue in Martin County with onset date in July, 2011 was reported this week.

EEEV activity: Two sentinel chickens in Orange and Walton Counties tested positive for antibodies to EEEV. In 2011, positive samples from three equines, 15 sentinel chickens and 19 live wild birds have been received from ten counties.

WNV activity: No new cases of locally acquired WNV infection were reported this week. One asymptomatic blood donor was reported from Duval County. Four sentinel chickens in Hernando, Nassau and Orange Counties tested positive for antibodies to WNV. In 2011, positive samples from nine humans, 58 sentinel chickens and one live wild bird (flavivirus positive) have been received from 14 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: One sentinel chicken in Orange County tested positive for antibodies to HJV. 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: Eight human cases of WNV infection have been reported in 2011 in Duval County with onset in June (1) and July (7). One positive asymptomatic blood donor was reported in Duval County.

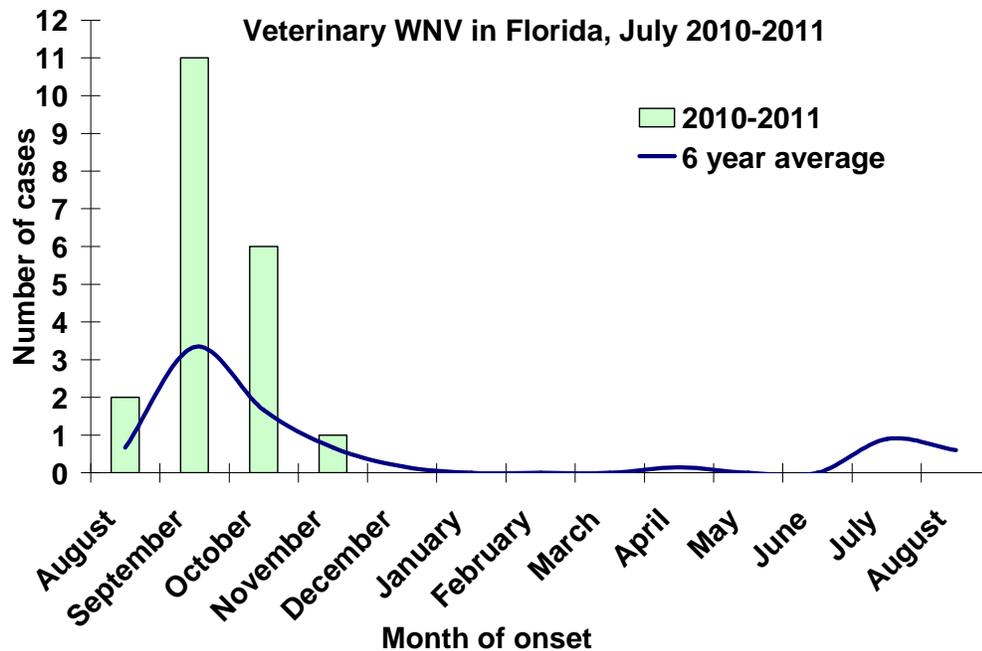
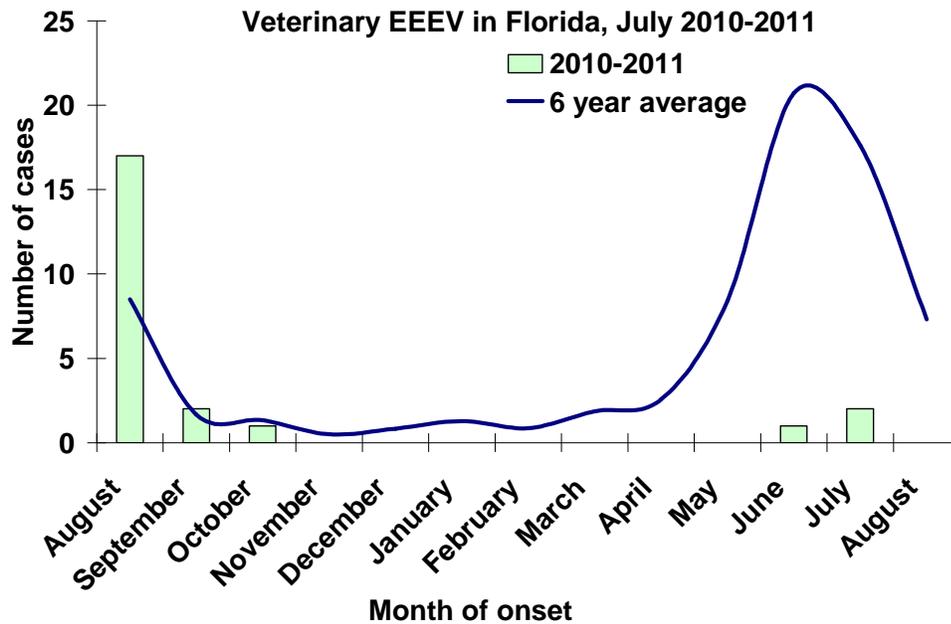
Dengue Acquired in Florida: In 2011, two cases of locally acquired dengue have been reported in Miami-Dade and Martin Counties

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

Imported Malaria: Fifty-seven imported cases of malaria with onset in 2011 have been reported. Countries of origin were: Afghanistan (3), Cameroon, East Timor, Ethiopia (2), Eritrea (2), Gabon, Ghana (3), Guinea Conakry, Guyana, Haiti (15), Honduras (2), India (11), Liberia (2), Mali (2), Nigeria (4), Pakistan, Peru, Rwanda, Uganda (2) and Venezuela. Counties reporting cases were: Alachua (2), Brevard (4), Broward (5), Citrus, Collier (2), Duval (5), Escambia, Hillsborough (5), Indian River, Lee (3), Leon (2), Miami-Dade (11), Manatee (3), Okaloosa, Orange (3), Palm Beach (3), Pasco, Pinellas, Seminole and St. Lucie (2).

Veterinary Cases

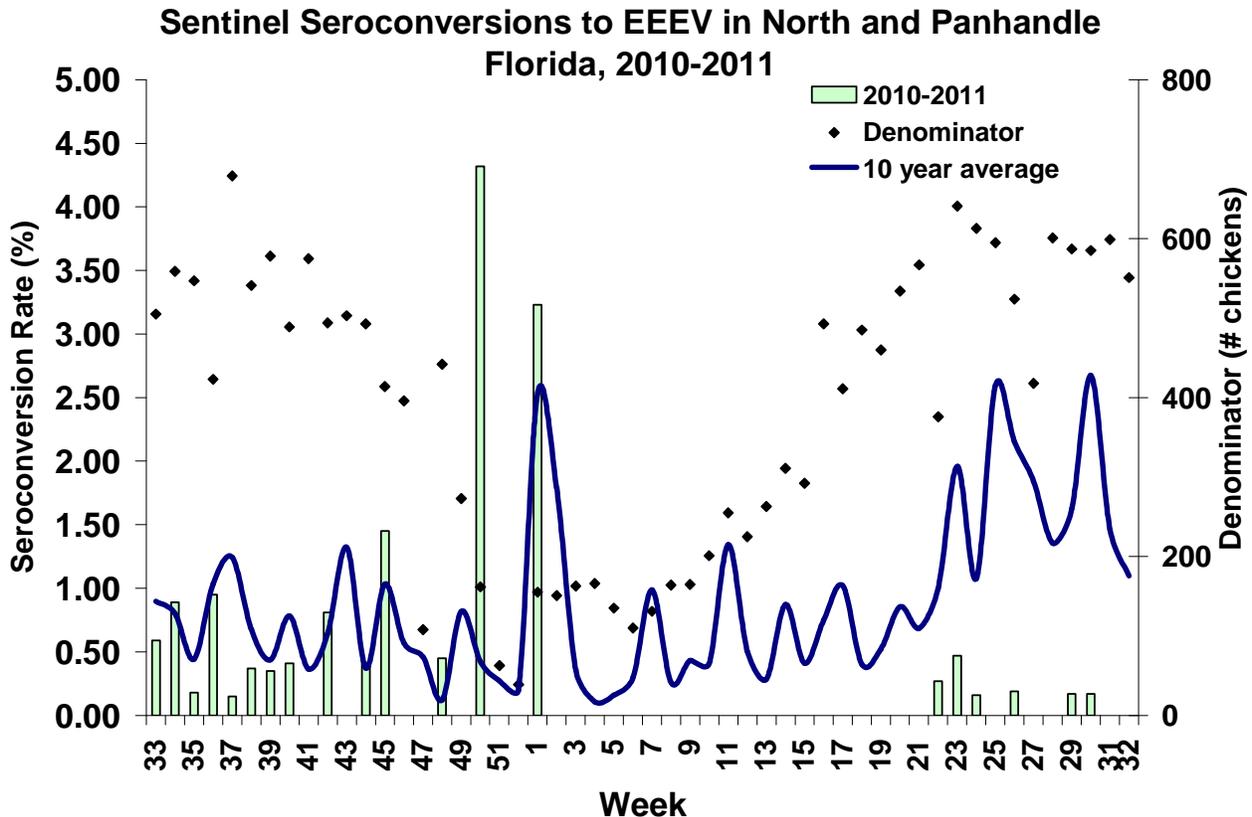
No positive horses were reported this week.

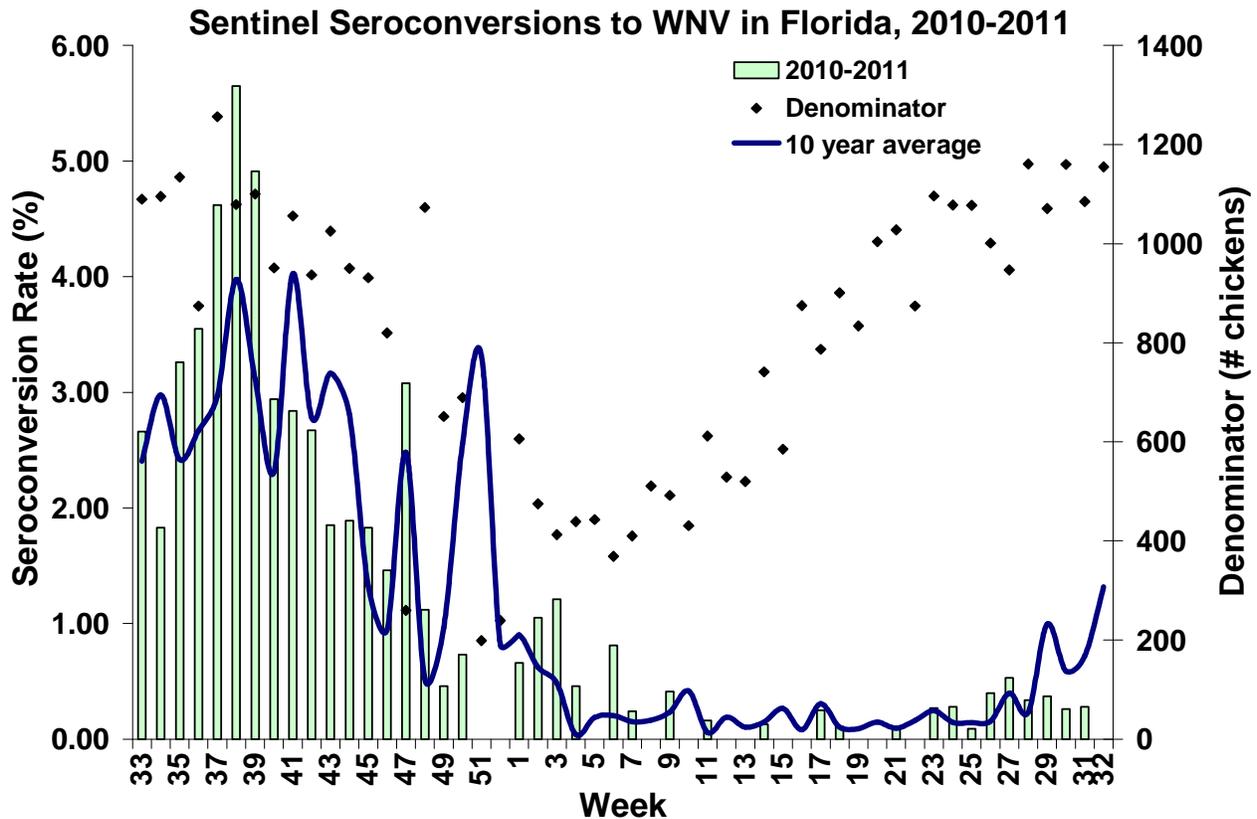


Sentinel Chickens

Four sentinel chickens in Hernando, Nassau and Orange Counties tested positive for antibodies to WNV. Two sentinel chickens in Orange and Walton Counties tested positive for antibodies to EEEV. One sentinel chicken in Orange County tested positive for antibodies to HJV. Seroconversion rates are calculated by week and include previously reported results.

County	Collection Date	Seroconversion Rates (%)				Week	County Totals	
		SLEV	WN V	EEE V	HJV		YTD	
Hernando	08/01/11		3.33			1 WNV	1 WNV, 1 EEEV	
Nassau	08/01/11		2.78			1 WNV	1 WNV, 1 HJV	
Orange	08/01/11		1.47			1 WNV	1 EEEV, 4 WNV	
Orange/Reedy	07/07/11				2.38	1 HJV		
Orange/Reedy	07/28/11		2.78					
Orange/Reedy	07/28/11			2.70		1 WNV, 1 EEEV	3 EEE, 2 HJV, 6 WNV	
Walton (North)	07/18/11			1.12		1 EEEV	6 EEE, 1 WNV, 1 HJ	





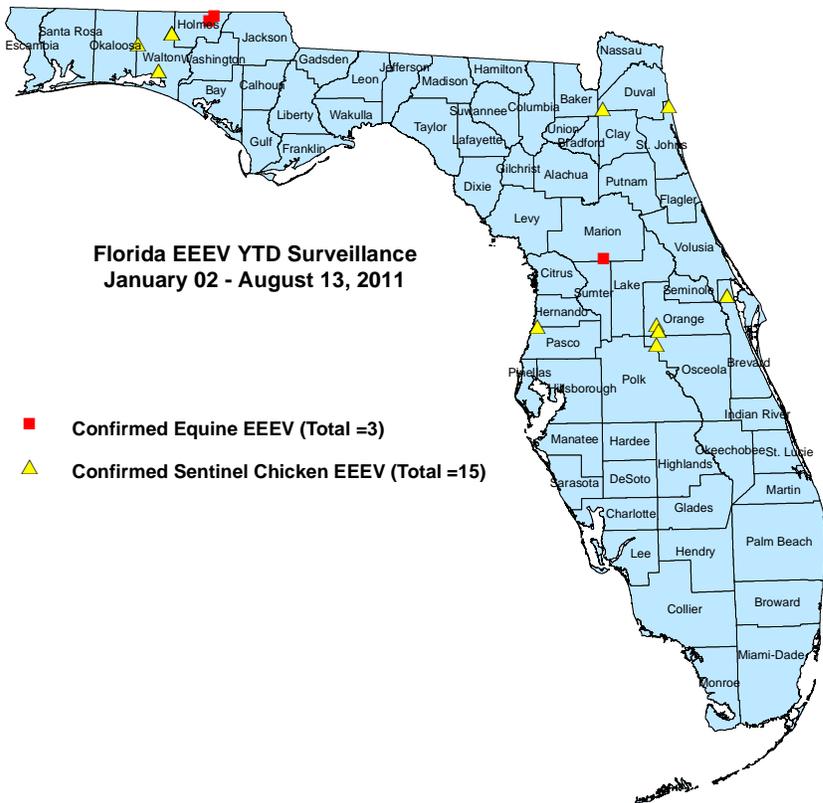
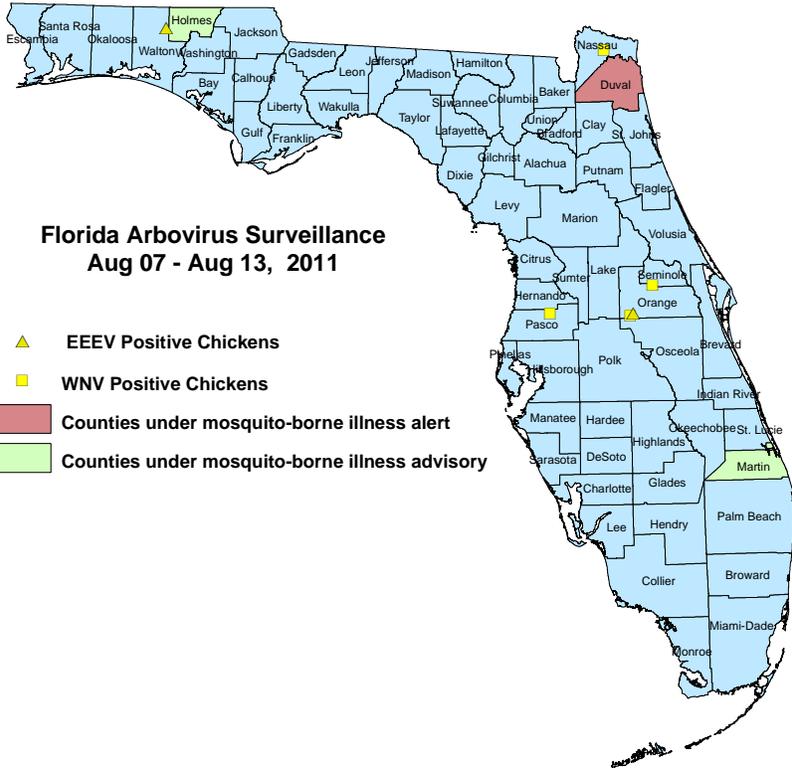
Live Wild Birds

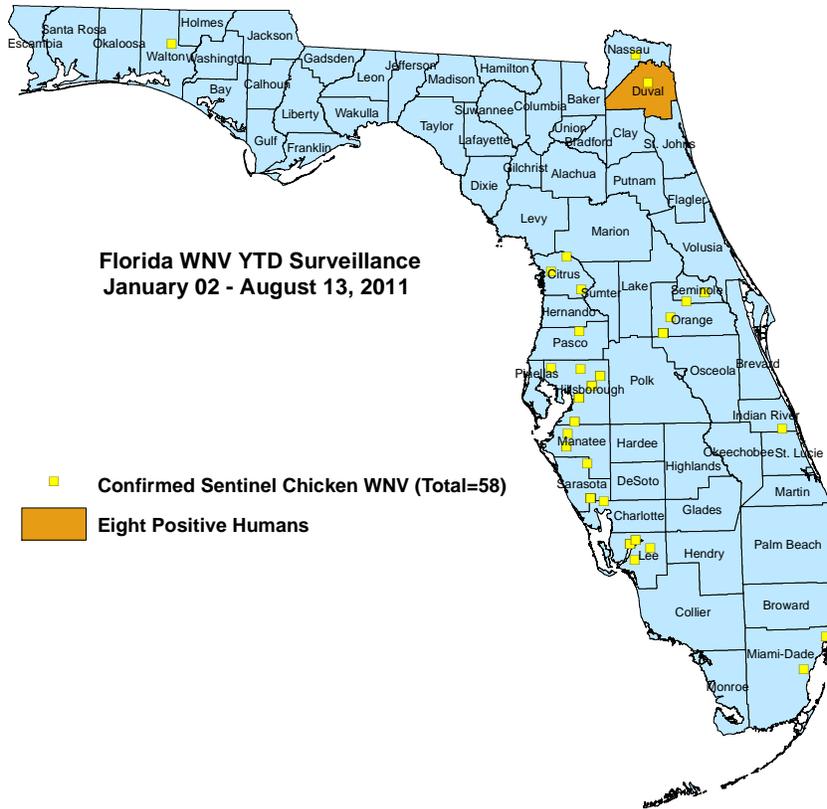
No positive live wild birds were reported this week.

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 48 dead birds were received from four counties. None were identified as crows, jays or raptors. In 2011, two hundred and one reports representing a total of 636 dead birds (28 crows, 36 jays, 48 raptors, 524 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: 2 sentinels (1/18, 6/22)
Duval	EEEV: 1 sentinel (6/11) WNV: 9 humans (1 June, 7 July, 1 positive blood donor) ; 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: 9 sentinels (6/13, 6/27, 7/11, 7/25)
Manatee	WNV: 3 sentinel (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: 10 sentinels (1/3, 1/18, 1/24, 7/7, 7/14, 7/ 28, 8/1) 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)
Seminole	WNV: 3 sentinels(6/7)
St. Johns	EEEV: 1 sentinel (6/13)
Walton	EEEV: 6 sentinels (1/6, 7/18) ; 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:
<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.