

Florida Arbovirus Surveillance

Week 20: May 16-22, 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 16-22, 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: Two EEEV-confirmed positive horses were reported in Volusia and Marion counties. Four sentinel chickens from Flagler, Hillsborough, Orange, and Walton counties tested positive for antibodies to EEEV. In 2010, positive samples from three horses, 13 sentinel chickens, 10 live wild birds, and one mosquito pool have been received from 10 of Florida's 67 counties.

WNV activity: No WNV activity was reported this week. In 2010, positive samples from 35 sentinel chickens have been received from five counties.

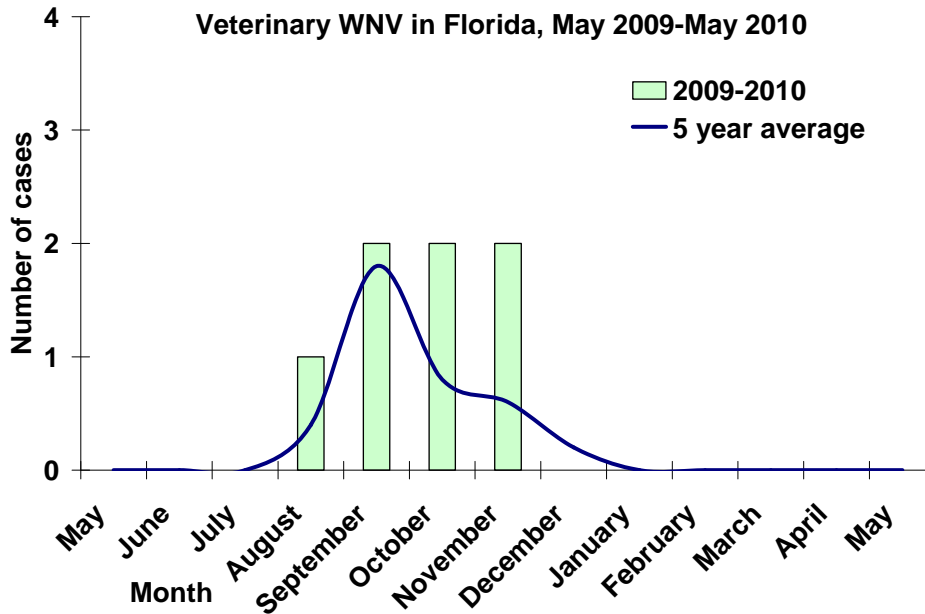
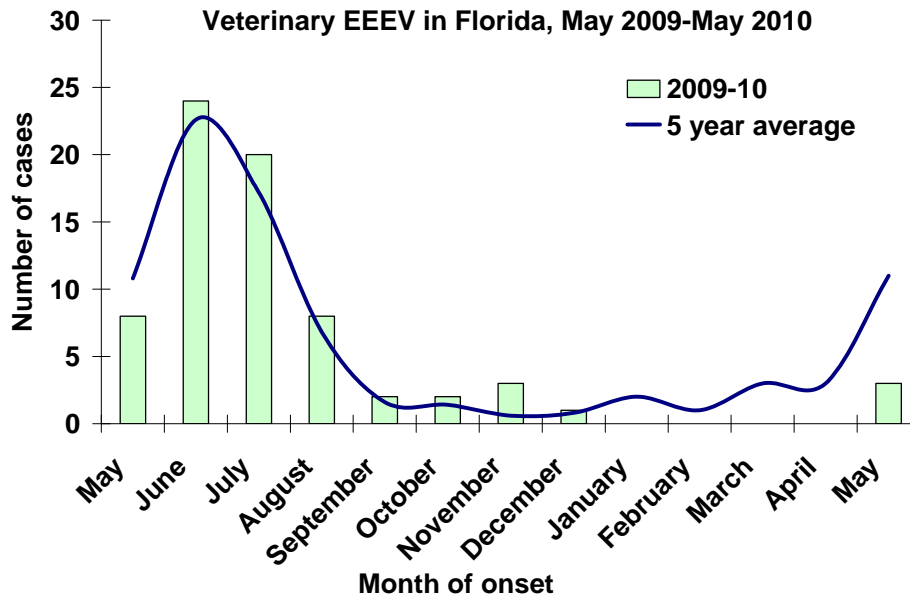
HJV activity: One sentinel chicken from St. Johns County tested positive for antibodies to HJV. In 2010, positive samples from five sentinel chickens have been received from three counties.

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

Two horses in Volusia and Marion counties tested positive for EEEV this week. In 2010, three EEEV-positive horses have been reported from three counties.

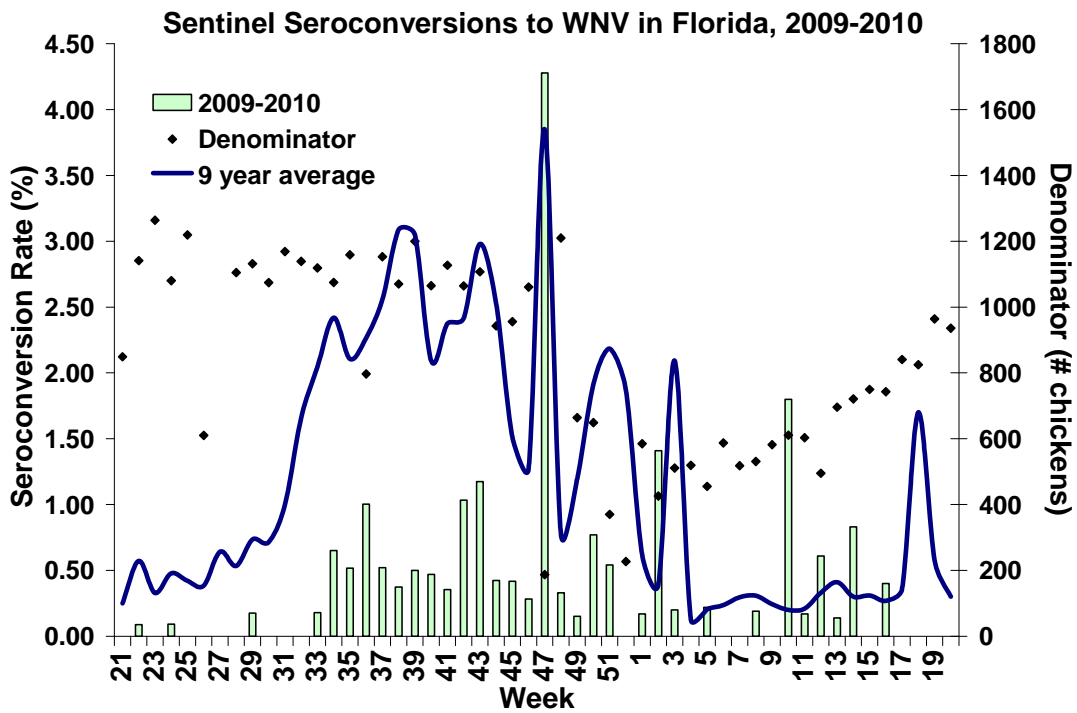
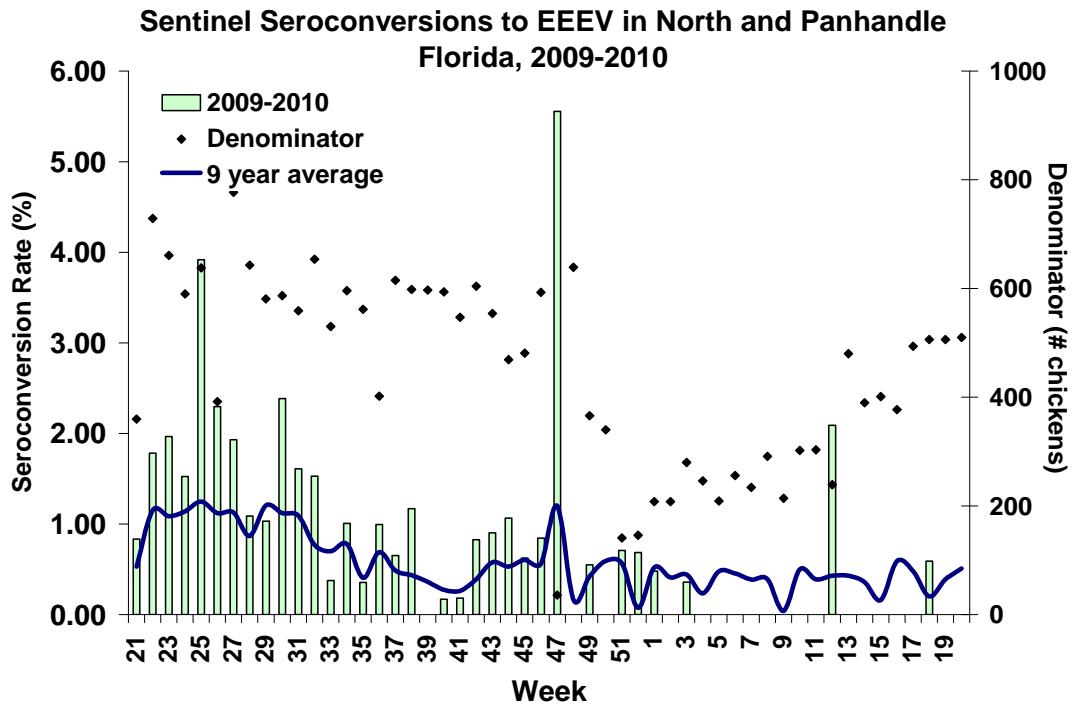
County	Onset Date	Species	Virus	Status	County YTD
Volusia	05/07/2010	Equine	EEEV	Euthanized	1
Marion	05/07/2010	Equine	EEEV	Euthanized	1



Sentinel Chickens

There were four seroconversions to EEEV in sentinel chickens from Flagler, Hillsborough, Orange, and Walton counties and one to HJV in St. Johns County. Seroconversion rates are calculated by week and include previously reported results.

County	Collection Date	Seroconversion Rates (%)				County Totals	
		SLEV	WNV	EEEV	HJV	Week	YTD
Hillsborough	05/04/2010			1.3		1 EEE	12 WNV, 1 EEE
Flagler	05/03/2010			7.7		1 EEE	2 EEE
Walton (South)	05/03/2010			1.2		1 EEE	3 WNV, 2 EEE
Orange	05/03/2010			0.9		1 EEE	2 EEE
St. Johns	05/03/2010				1.7	1 HJV	2 HJV



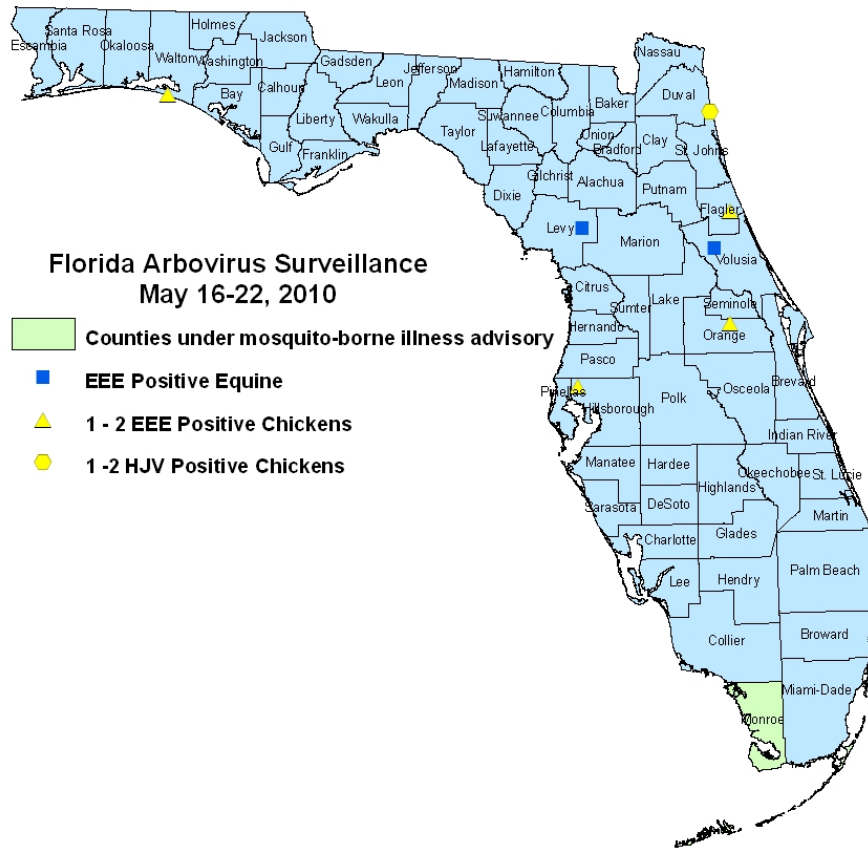
Live Wild Birds

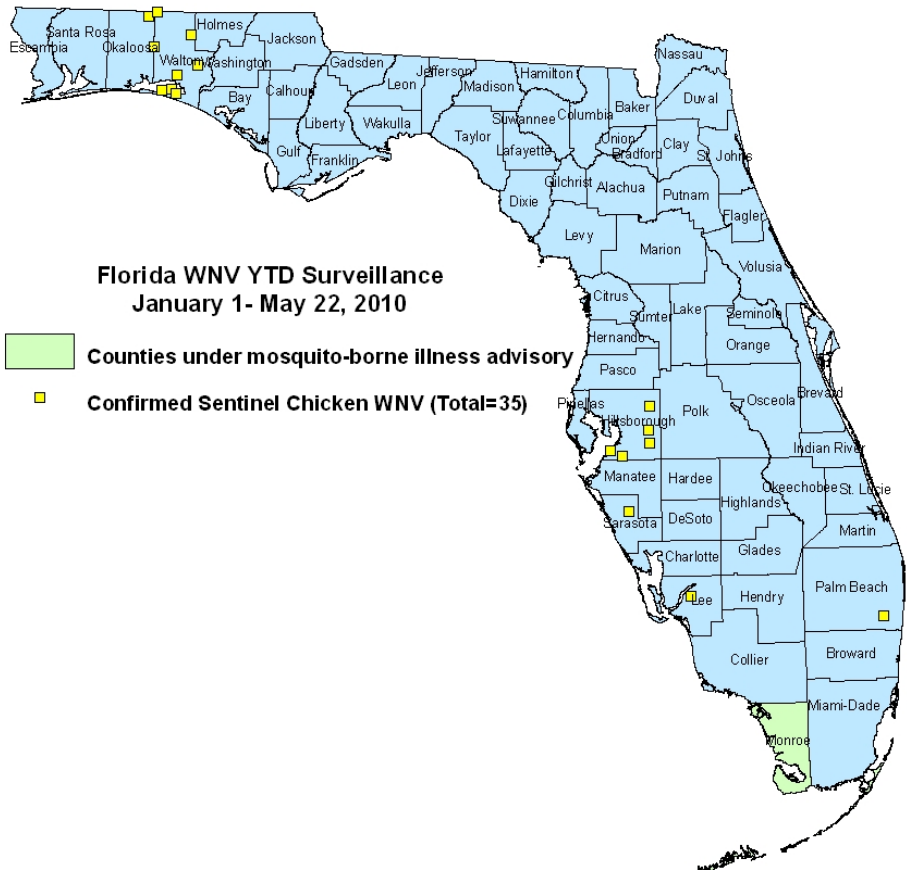
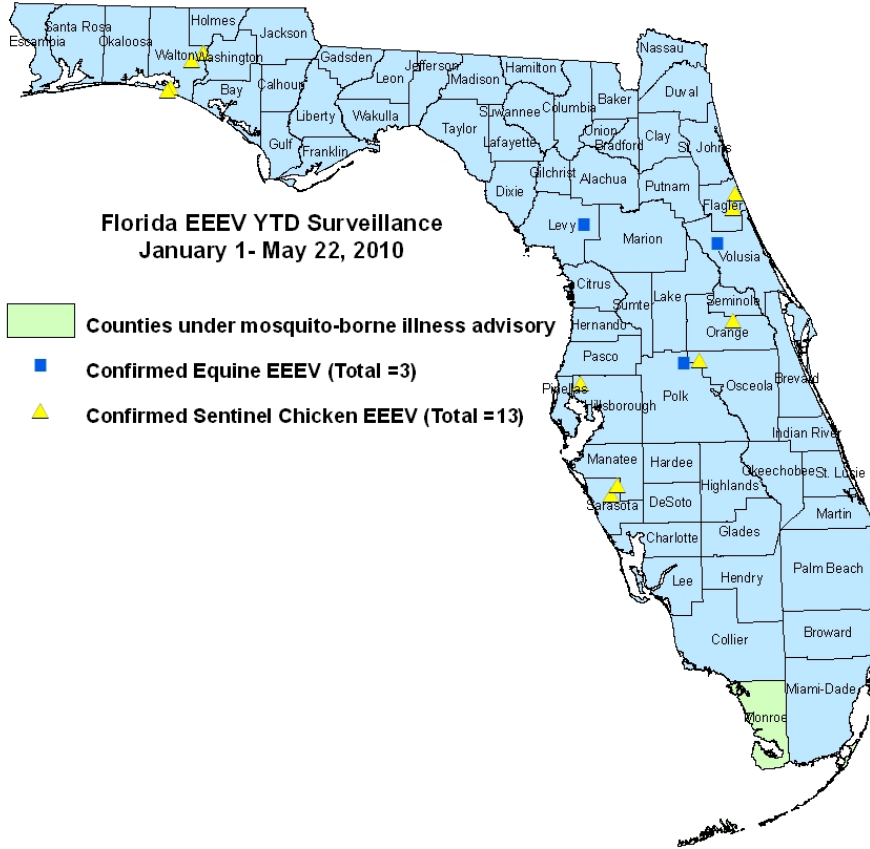
No positive live wild birds were reported this week.

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, five reports representing seven dead birds were received from five counties. One was identified as a crow and two as raptors; none were identified as jays. In 2010, 118 reports representing a total of 372 dead birds (2 crows, 8 jays, 20 raptors, 343 others) have been received from 38 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
Flagler	EEE : 2 sentinels (3/22, 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 : 2 sentinels (1/7, 5/3)
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: 5 live wild birds (5 blue jays 2/2, 3/22, 4/13, 4/19)
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 : 19 sentinels (1/14, 2/4, 3/8, 3/12, 3/22, 4/7, 4/8) HJV : 2 sentinels (3/22)

Acknowledgements and Data Sources

Contributors: Elizabeth Radke, MPH, Danielle Stanek, DVM, and Carina Blackmore, DVM, PhD.

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.