

Florida Arbovirus Surveillance

Week 22: May 30-June 5, 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 30-June 5, 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 Lake and Hillsborough counties. Three sentinel chickens from Hillsborough and Pinellas tested positive for antibodies to EEEV. In 2010, positive samples from six horses, 18 sentinel chickens, 13 live wild birds, and one mosquito pool have been received from 13 of Florida's 67 counties.

WNV activity: Three sentinel chickens from Walton and Hillsborough counties tested positive for antibodies to WNV. In 2010, positive samples from 40 sentinel chickens have been received from five counties.

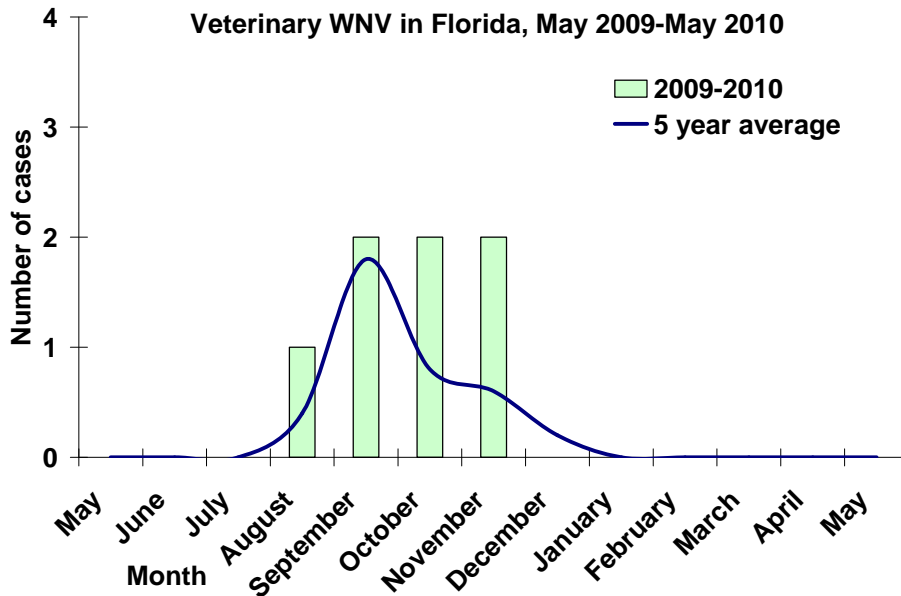
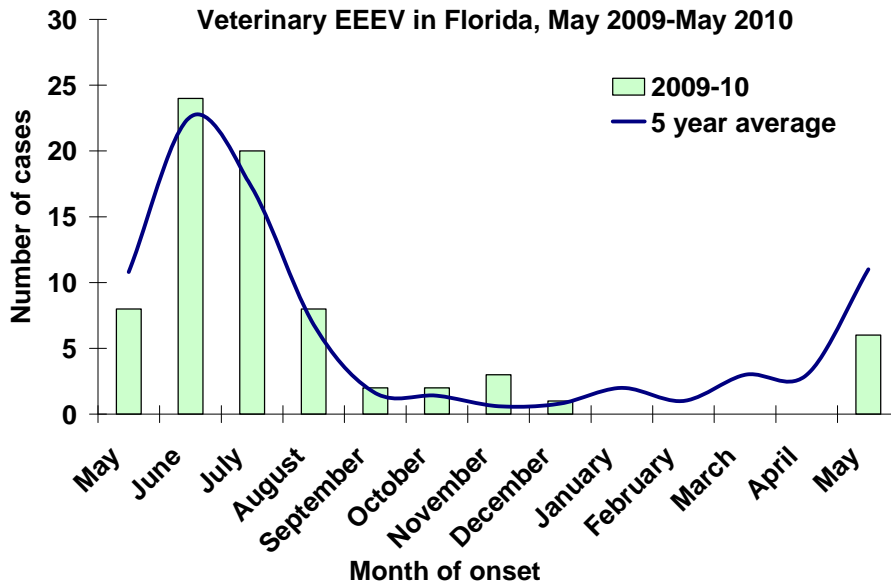
HJV activity: Five sentinel chickens from Citrus, Orange, Putnam, Volusia, and Walton counties tested positive for antibodies to HJV. In 2010, positive samples from ten sentinel chickens have been received from seven counties.

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 Lake and Hillsborough counties tested positive for EEEV this week. In 2010, six EEEV-positive horses have been reported from six counties.

County	Onset Date	Species	Virus	Status	County YTD
Lake	05/20/2010	Equine	EEEV	Euthanized	1
Hillsborough	05/29/2010	Equine	EEEV	Dead	1

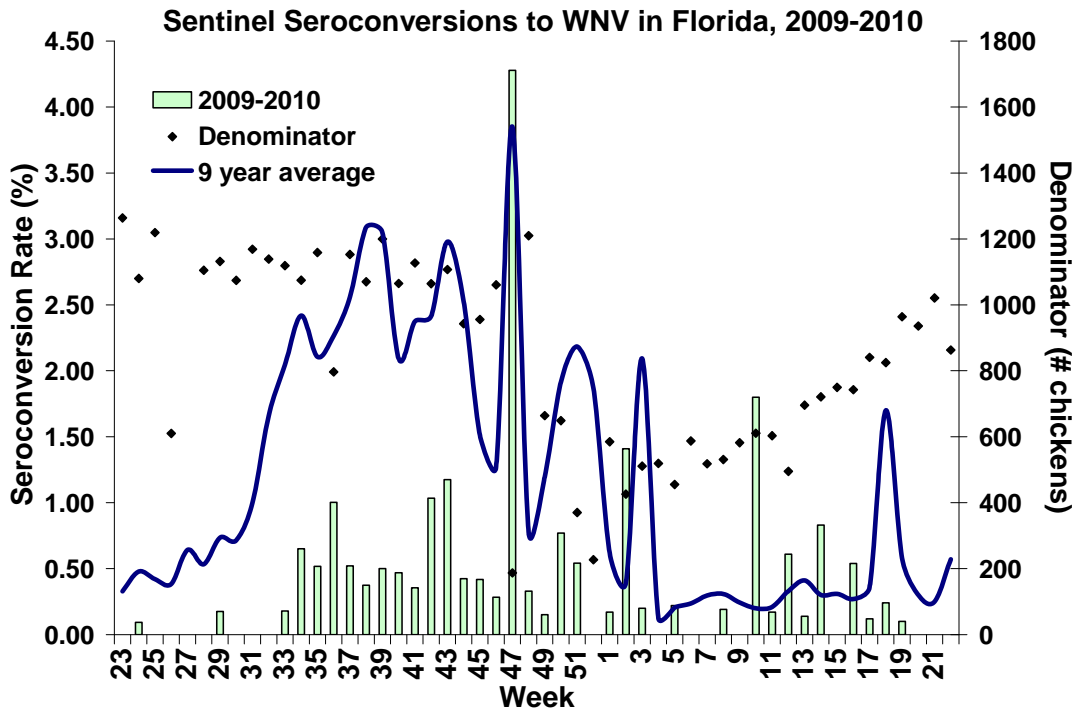
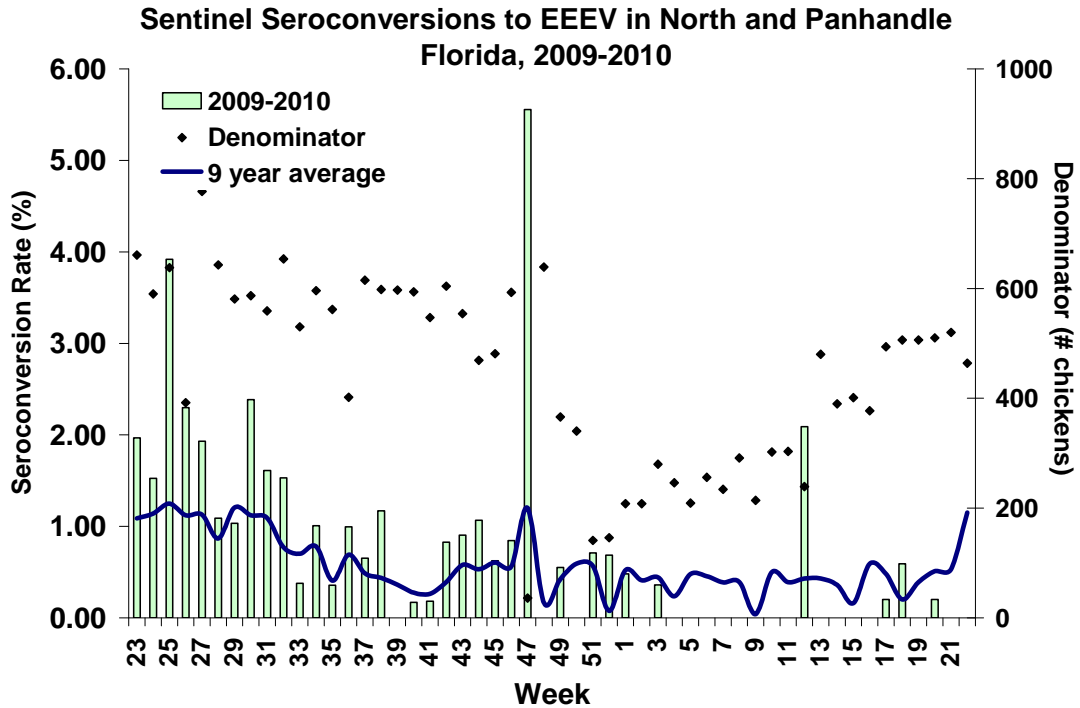


Sentinel Chickens

There were three seroconversions to EEEV in sentinel chickens from Hillsborough and Pinellas counties, three to WNV in Walton and Hillsborough counties, and five to HJV in Citrus, Orange, Putnam, Volusia, and Walton counties. Seroconversion rates are calculated by week and include previously reported results.

County	Collection Date	Seroconversion Rates (%)				County Totals	
		SLEV	WNV	EEEV	HJV	Week	YTD
Pinellas	05/24/2010			3.6		2 EEE	2 EEE, 1 HJV
Hillsborough	05/18/2010			1.3		1 EEE	13 WNV, 2 EEE
	05/11/2010		1.2			1 WNV	
Orange	05/17/2010			0.9	0.9	1 EEE, 1 HJV	3 EEE, 1 HJV
Citrus	05/17/2010				1.5	1 HJV	1 HJV

County	Collection Date	Seroconversion Rates (%)				County Totals	
		SLEV	WNV	EEEV	HJV	Week	YTD
Volusia	05/17/2010				5.0	1 HJV	1 HJV
Walton (South)	05/17/2010				1.2	1 HJV	3 WNV, 2 EEE, 1 HJV
Putnam	05/14/2010				5.0	1 HJV	1 HJV
Walton (North)	05/05/2010		5.4			2 WNV	20 WNV, 4 EEE



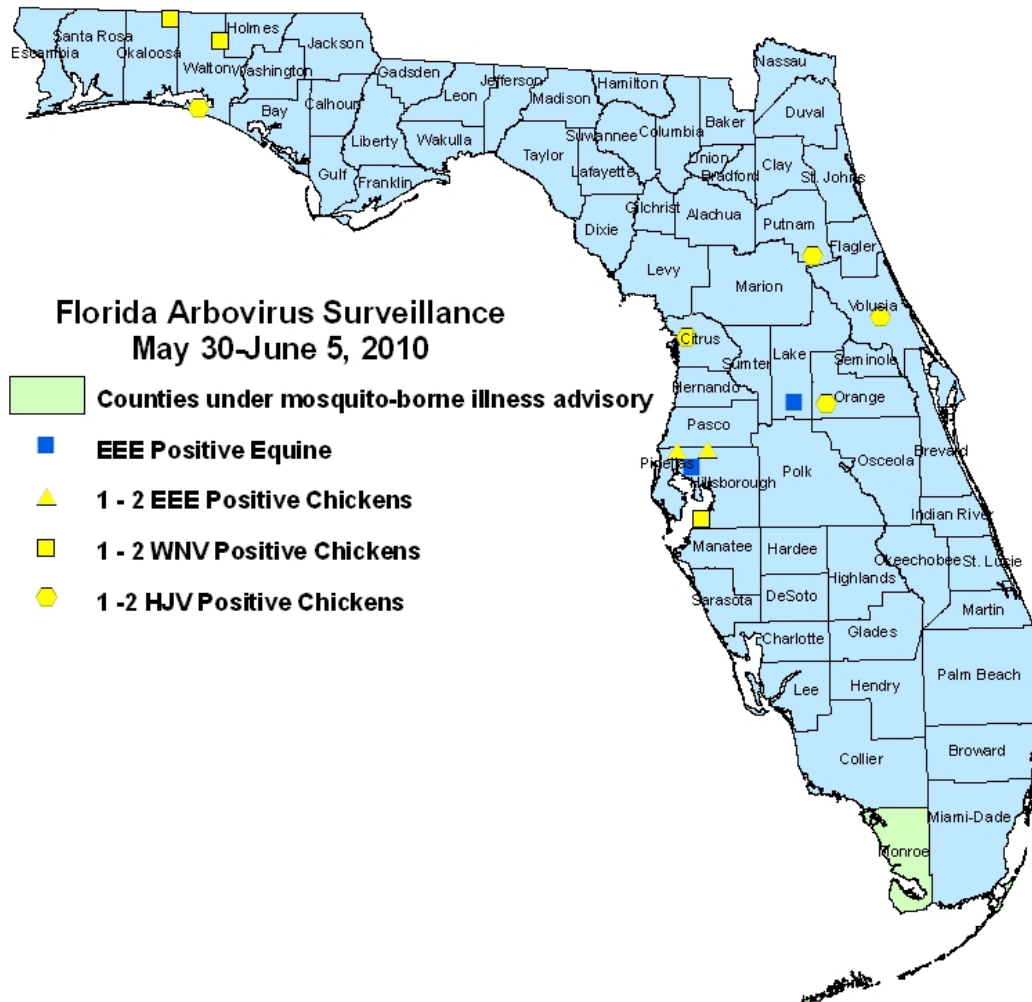
Live Wild Birds

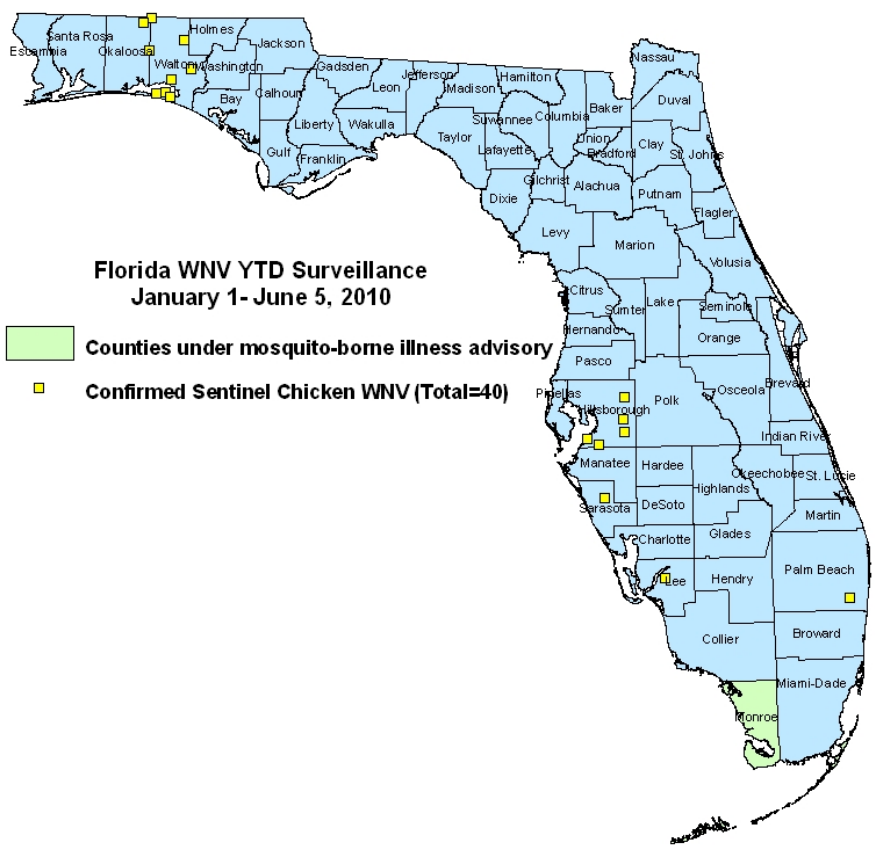
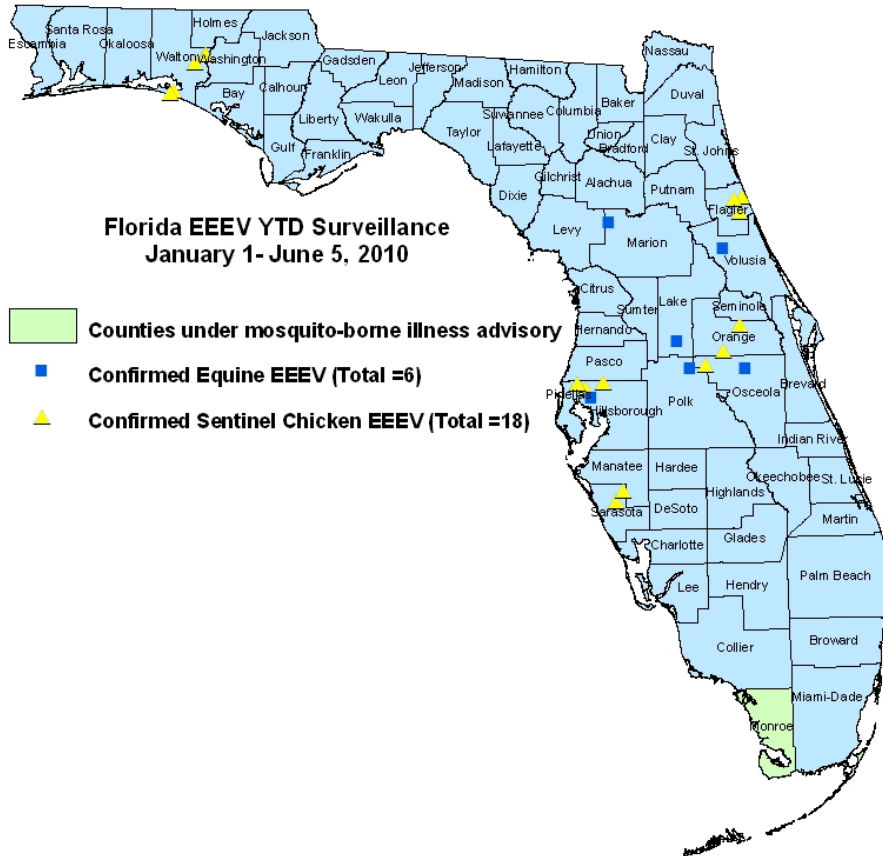
No positive live wild birds were reported this week.

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 29 dead birds were received from five counties. Ten were identified as crows; none were identified as jays or raptors. In 2010, 129 reports representing a total of 409 dead birds (12 crows, 9 jays, 22 raptors, 366 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





YTD Arbovirus Activity by County

County	Arbovirus Activity
Citrus	HJV: 1 sentinel (5/17)
Flagler	EEE : 3 sentinels (3/22, 4/26, 5/3) ; 1 mosquito pool (<i>Culiseta melanura</i> 4/27)
Hillsborough	WNV : 13 sentinels (1/12, 1/19, 2/22, 3/9, 3/22, 4/20, 5/11) EEE: 1 horse (5/29); 2 sentinels (5/4, 5/18)
Lake	EEE: 1 horse (5/20)
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) HJV : 1 sentinel (5/17)
Osceola	EEE: 1 donkey (5/15)
Palm Beach	WNV: 1 sentinel (3/15)
Pinellas	EEE: 2 sentinels (5/24) HJV: 1 sentinel (4/26)
Polk	EEE: 1 horse (4/28)
Putnam	HJV: 1 sentinel (5/14)
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) HJV : 1 sentinel (5/17)
Walton	EEE : 6 sentinels (1/19, 3/22, 5/3) WNV : 23 sentinels (1/14, 2/4, 3/8, 3/12, 3/22, 4/7, 4/8, 4/23, 4/30, 5/5) HJV : 3 sentinels (3/22, 5/17)

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.