

Florida Arbovirus Surveillance

Week 18: May 2-8, 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 2-8, 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: One EEEV-confirmed horse was reported in Polk County. Six live wild birds in Santa Rosa and Okaloosa counties tested positive for antibodies to EEEV and two mosquito pools in Flagler County tested positive for EEEV. In 2010, positive samples from one horse, nine sentinel chickens, ten live wild birds, and two mosquito pools have been received from seven of Florida's 67 counties.

WNV activity: One sentinel chicken from Walton County tested positive for antibodies to WNV. In 2010, positive samples from 29 sentinel chickens have been received from five counties.

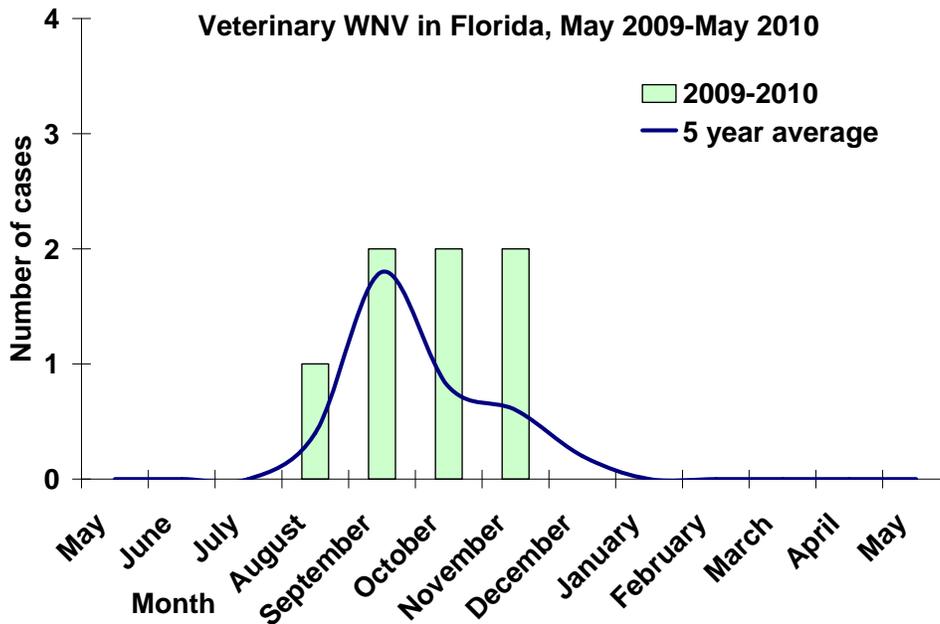
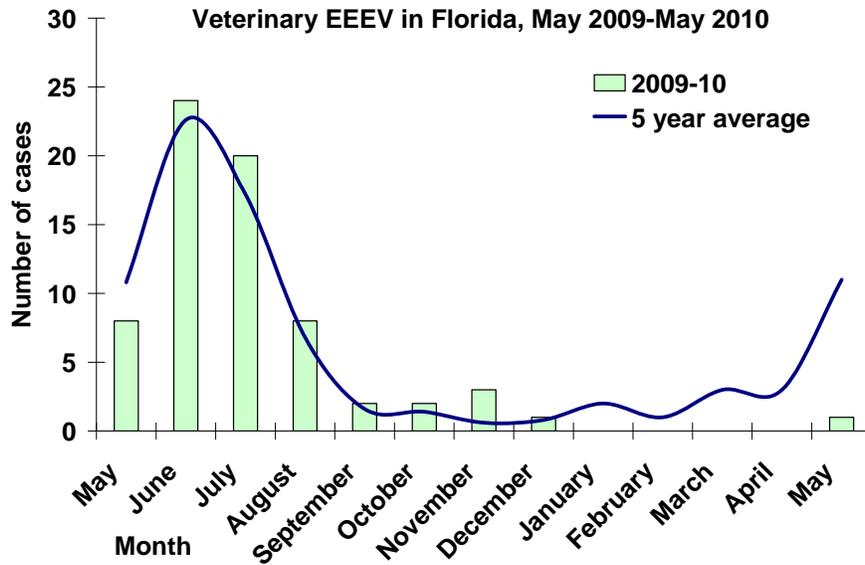
HJV activity: No HJV activity was reported this week. In 2010, positive samples from two sentinel chickens have been received from one county.

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

One horse in Polk County tested positive for EEEV this week. This is the first positive horse with onset in 2010

County	Onset Date	Species	Virus	Status	County YTD
Polk	04/28/10	Equine	EEEV	Euthanized	1

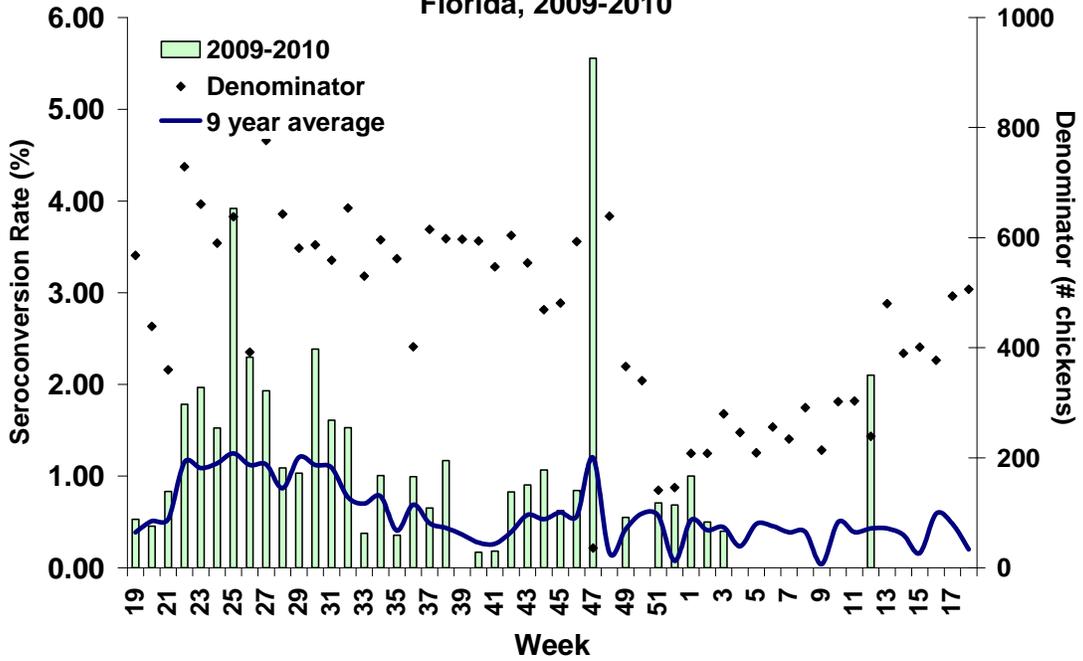


Sentinel Chickens

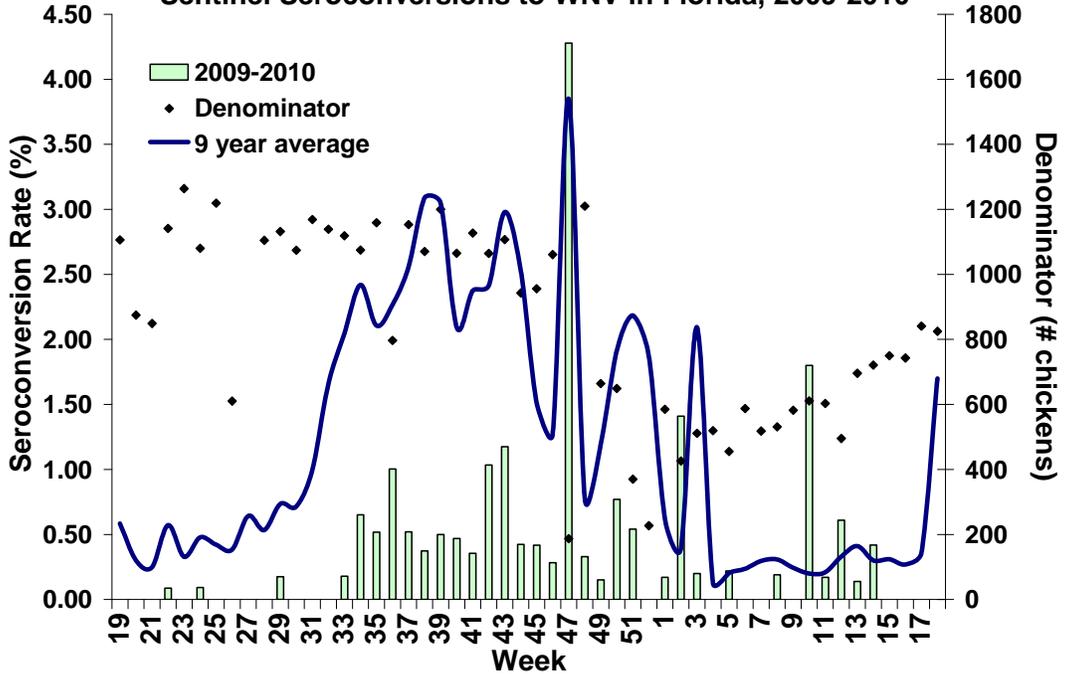
There was one seroconversion to WNV in a sentinel chicken from Walton County. Seroconversion rates are calculated by week and include previously reported results.

County	Collection Date	Seroconversion Rates (%)				County Totals	
		SLEV	WNV	EEEV	HJV	Week	YTD
Walton (North)	04/07/2010		7.1			3 WNV	16 WNV, 5 EEE, 2 HJV

Sentinel Seroconversions to EEEV in North and Panhandle Florida, 2009-2010



Sentinel Seroconversions to WNV in Florida, 2009-2010



Live Wild Birds

Out of 38 live wild birds collected from three counties on April 19-30, 2010, six blue jays from Santa Rosa and Okaloosa counties tested positive for antibodies to EEEV.

County	Collection Date	EEEV	Flavi	Species	EEEV Rate	Flavi Rate	County YTD
Santa Rosa	04/19/2010	2		2 blue jays	2 out of 10	N/A	5 EEE
Okaloosa	04/19/2010, 04/21/2010 04/26/10	2		2 blue jays	2 out of 5	N/A	6 EEE
		2		2 blue jays	2 out of 7	N/A	

Mosquito Pools

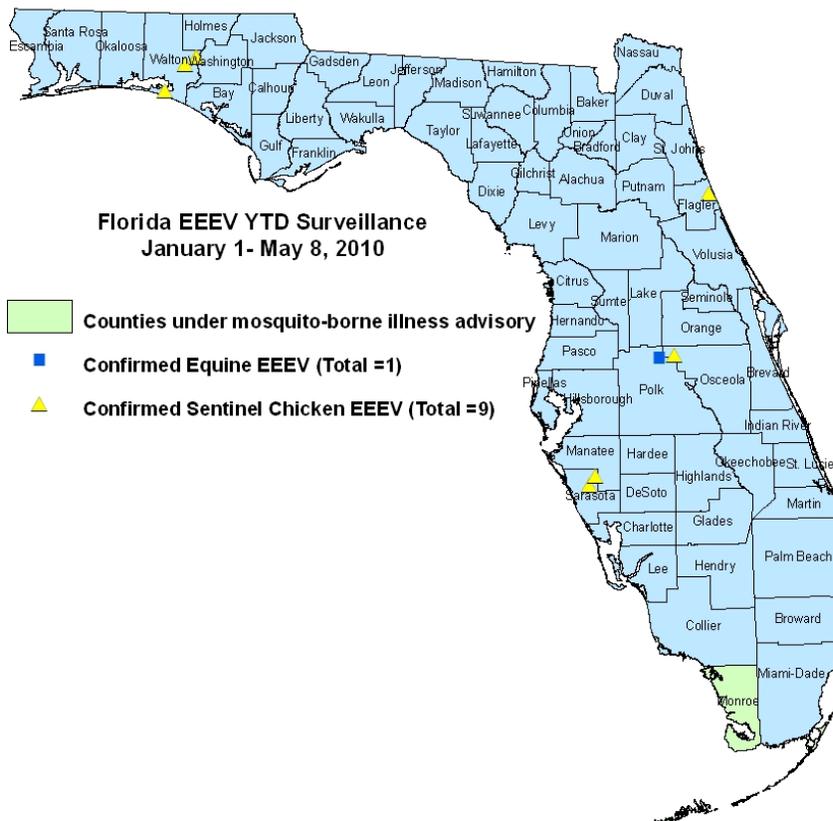
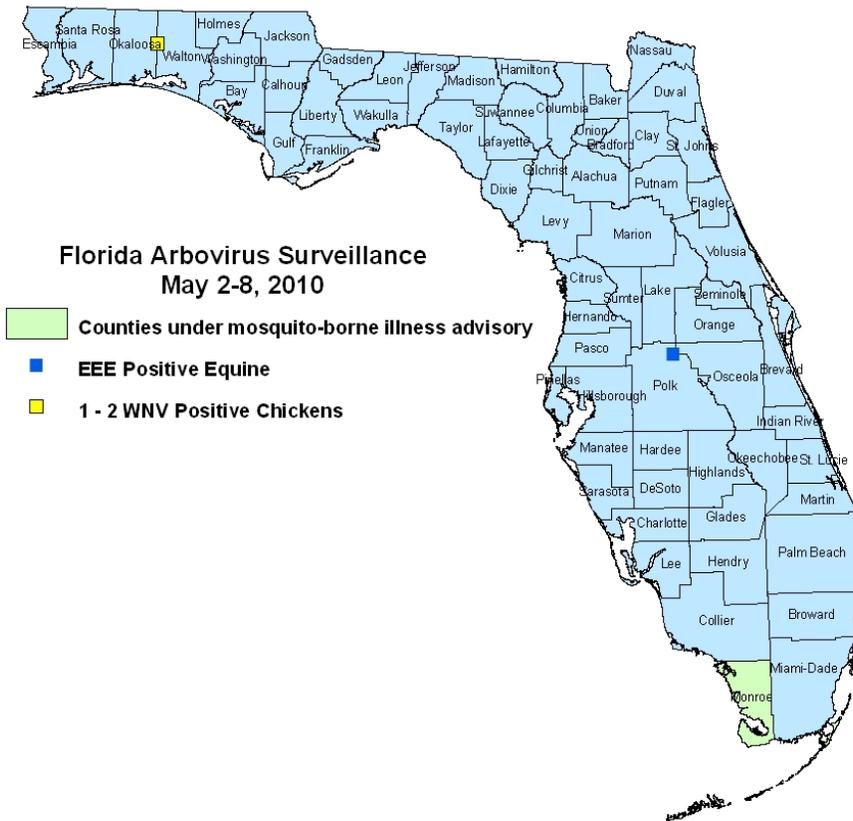
EEEV was isolated from two pools (*Culiseta melanura*) collected on in Flagler County.

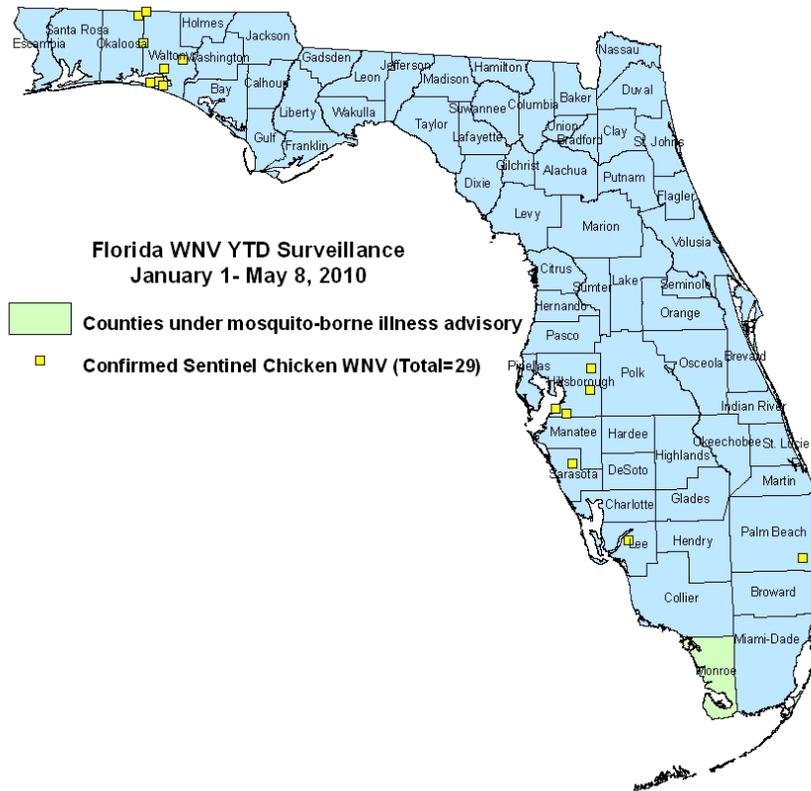
County	Collection Date	Result	Species
Flagler	04/27/2010	EEEV	<i>Culiseta melanura</i>

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, six reports representing eight dead birds were received from five counties. One was identified as a jay and one as a raptor, none were identified as crows. In 2010, 109 reports representing a total of 361 dead birds (1 crow, 8 jays, 18 raptors, 334 others) have been received from 36 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 : 1 sentinel (3/22) ; 2 mosquito pools (<i>Culiseta melanura</i> 4/27)
Hillsborough	WNV : 10 sentinels (1/12, 1/19, 2/22, 3/9, 3/22)
Lee	WNV: 1 sentinel (3/30)
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 : 1 sentinel (1/7)
Palm Beach	WNV: 1 sentinel (3/15)
Polk	EEE: 1 horse (4/28)
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)
Walton	EEE : 5 sentinels (1/19, 3/22) WNV : 16 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.