



Florida Arbovirus Surveillance Week 28: July 8-14, 2012

Arbovirus surveillance in Florida includes endemic mosquito-borne 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). Malaria, a non-viral mosquito-borne disease is also included. During the period of July 8-14, 2012, the following arboviral activity was recorded in Florida:

DENV activity: No new cases of locally acquired dengue were reported this week.

EEEV activity: One human case of EEE was reported in a Holmes County resident who also spent time in Washington County. One equine case of EEE was reported in Glades County. Five sentinel chickens in Nassau and Walton counties tested positive for antibodies to EEEV. In 2012, positive samples from 1 human, 11 equines and 25 sentinel chickens have been received from 14 counties.

WNV activity: One sentinel chicken in Walton County tested positive for antibodies to WNV. In 2012, positive samples from 51 sentinel chickens have been received from twelve counties.

SLEV activity: One sentinel chicken in Sarasota County tested positive for antibodies to SLEV. In 2012, positive samples from five sentinel chickens have been received from three counties

HJV activity: Two sentinel chickens from Walton County tested positive for antibodies to HJV. In 2012, positive samples from six sentinel chickens have been received from four counties.

Advisories/Alerts: Holmes, Walton, and Washington counties issued mosquito-borne illness advisories this week in response to EEEV activity. St. Johns County is under a mosquito-borne illness advisory. No other counties are currently under mosquito-borne illness advisory or alert.

Year to Date Human Case Summary*

EEEV Infection Acquired in Florida: One human case of EEEV with onset in June has been reported in 2012 in a Holmes County who also spent time in Washington County.

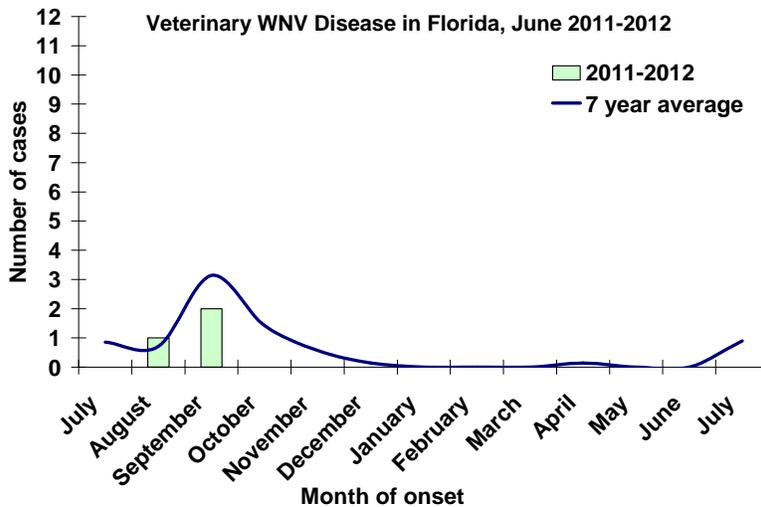
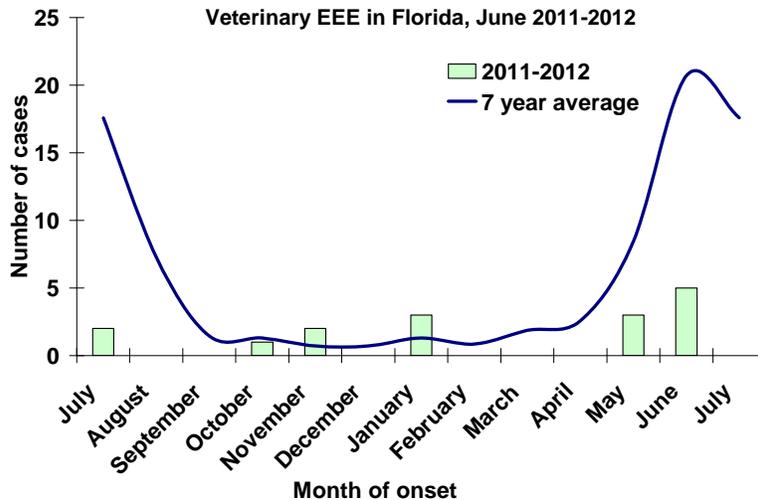
Imported Dengue: Nineteen cases of dengue with onset in 2012 have been reported in individuals with travel history to a dengue endemic country in the two weeks prior to onset. Countries of origin were Colombia, Cuba (2), Dominican Republic (2), Ecuador (2), Ghana, Guyana, Haiti (4), Jamaica (2), Mexico, Puerto Rico, Suriname, and Turks & Caicos. Counties reporting cases were Brevard, Broward (6), Lee, Miami-Dade (6), Orange (2), Palm Beach, Sarasota, and Seminole. Three of the cases were reported in non-Florida residents.

Imported Malaria: Thirty-six imported cases of malaria with onset in 2012 have been reported. Countries of origin were: Afghanistan, Cameroon, Central African Republic, Colombia, Ethiopia, Ghana (4), Guyana (2), Haiti (8), Honduras (2), India, Ivory Coast (2), Nigeria (4), Uganda, Sierra Leone (2), South Africa, Sub Saharan Africa, Togo, Zambia, and Liberia/Ghana/Monrovia. Counties reporting cases were: Alachua, Brevard, Broward (6), Charlotte, Duval (3), Hillsborough (3), Lake (2), Leon, Marion, Miami-Dade (6), Orange (3), Osceola, Palm Beach (3), Pinellas (3), and Seminole. Three of the cases were reported in non-Florida residents.

Veterinary Cases

One horse in Glades County tested positive for EEEV this week.

County	Onset Date	Species	Virus	Status	County YTD
Glades	06/25/12	Equine	EEEV	Euthanized	1 EEEV

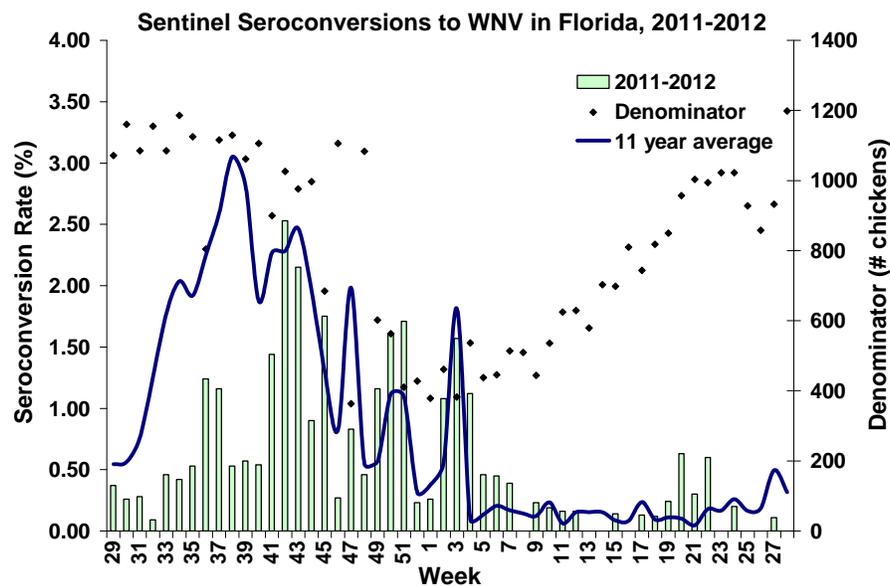
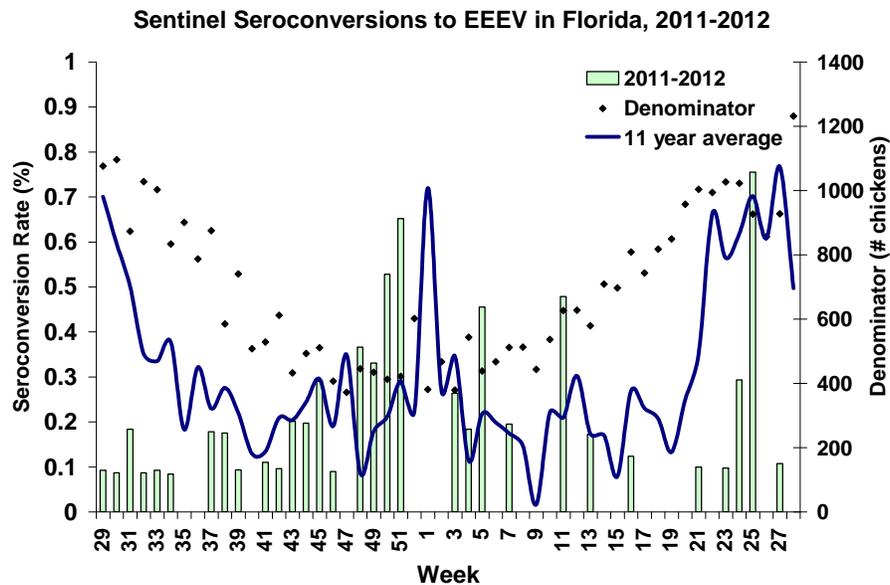


Sentinel Chickens

Five sentinels in Nassau and Walton counties tested positive for antibodies to EEEV, one in Walton County for antibodies to WNV, one in Sarasota County for antibodies to SLEV, and two in Walton County for antibodies to HJV. 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	07/02/12		0.9	0.9		1 WNV, 1 EEEV	
	06/18/12			5.3	0.9	6 EEEV, 1 HJV	
	06/11/12				1.4	1 HJV	4 WNV, 8 EEEV, 3 HJV

County	Collection Date	Seroconversion Rates (%)				County Totals	
		SLEV	WNV	EEEV	HJV	Week	YTD
Sarasota	07/02/12	1.3				1 SLEV	7 WNV, 1 SLEV
Nassau	06/23/12			2.8		1 EEEV	3 EEEV



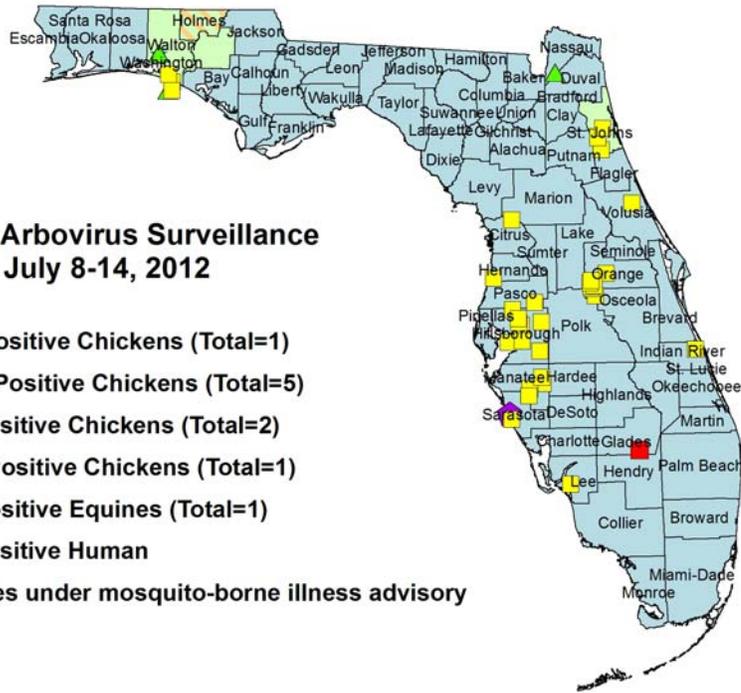
Dead Birds

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, seven reports representing seven dead birds were received from seven counties. One was identified as a crow, one as a jay, and one as a raptor. In 2012, 255 reports representing a total of 854 dead birds (28 crows, 9 jays, 45 raptors) were received from 49 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

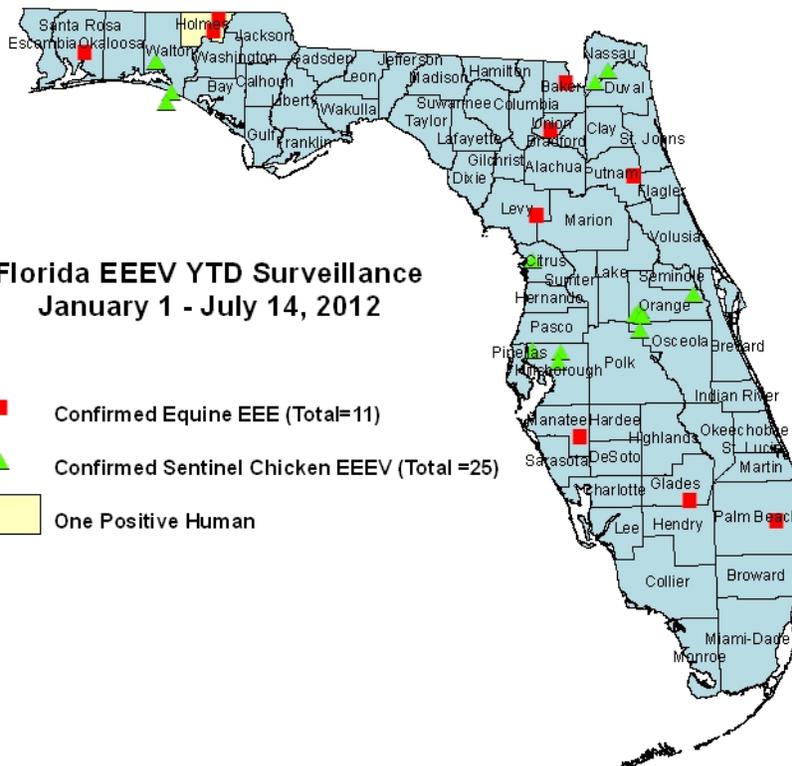
Florida Arbovirus Surveillance July 8-14, 2012

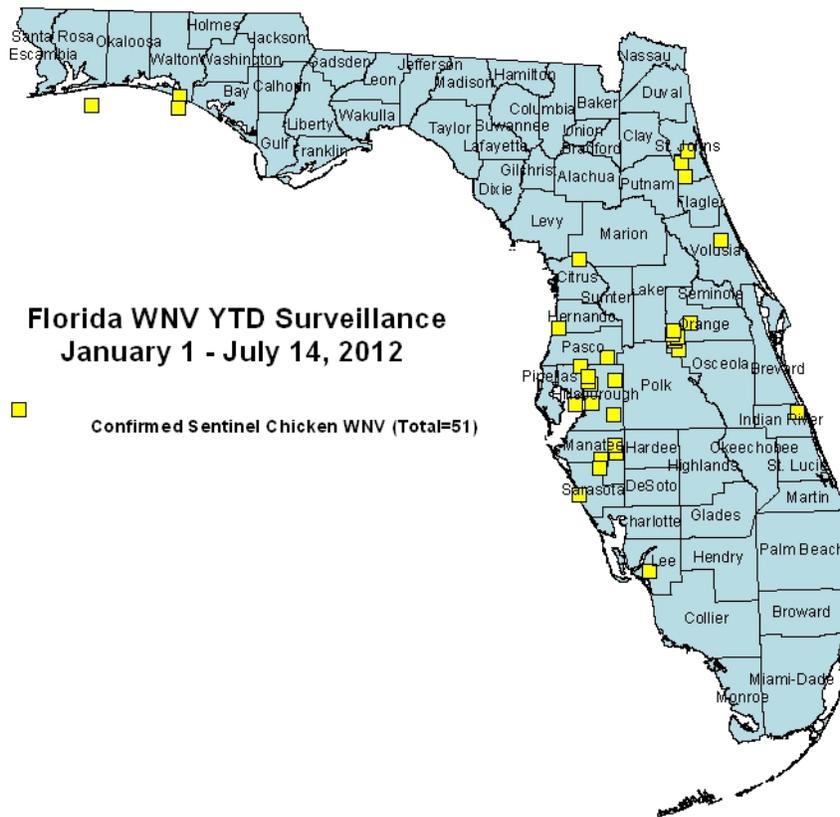
- WNV Positive Chickens (Total=1)
- ▲ EEEV Positive Chickens (Total=5)
- ★ HJV Positive Chickens (Total=2)
- ◆ SLEV Positive Chickens (Total=1)
- EEE Positive Equines (Total=1)
- One Positive Human
- Counties under mosquito-borne illness advisory



Florida EEEV YTD Surveillance January 1 - July 14, 2012

- Confirmed Equine EEE (Total=11)
- ▲ Confirmed Sentinel Chicken EEEV (Total =25)
- One Positive Human





Arbovirus Activity by County

County	Arbovirus Activity
Bay	HJV : 1 sentinel (5/29)
Baker	EEEV : 1 horse (6/21)
Citrus	EEEV : 1 sentinel (1/30) WNV: 1 sentinel (5/29) HJV: 1 sentinel (1/3)
Glades	EEEV: 1 horse (6/25)
Hernando	WNV: 1 sentinel (1/23)
Hillsborough	EEEV : 4 sentinels (2/14, 3/13, 4/17) WNV: 13 sentinels (1/3, 1/17, 1/24, 1/31, 2/14, 3/6, 6/12) SLEV: 3 sentinels (1/3)
Holmes	EEEV : 1 human (June); 2 horses (5/21, 6/25)
Indian River	WNV: 1 sentinel (5/24)
Lee	WNV: 1 sentinel (1/24) SLEV: 1 sentinel (3/7)
Levy	EEEV: 2 horses (1/2)
Manatee	WNV: 3 sentinels (2/1, 3/14, 5/30) EEEV: 1 horse (6/14)
Nassau	EEEV : 3 sentinels (6/16, 6/23)
Orange	EEEV : 9 sentinels (1/5, 1/9, 1/19, 1/23, 2/6, 3/15, 3/29, 5/21, 6/14) WNV: 9 sentinels (1/9, 1/12, 1/19, 1/25, 3/1)
Palm Beach	EEEV : 1 horse (6/20)
Pasco	WNV : 1 sentinel (5/29)
Putnam	EEEV: 1 horse (1/1)
Santa Rosa	EEEV : 1 horse (5/11)
Sarasota	WNV: 7 sentinels (1/9, 2/6, 3/19, 5/7, 5/14) SLEV: 1 sentinel (7/2)

County	Arbovirus Activity
St. Johns	WNV : 9 sentinels (5/14, 5/22, 5/29) HJV : 1 sentinel (4/30)
Union	EEEV : 1 horse (5/12)
Volusia	WNV : 1 sentinel (5/29)
Walton	WNV : 4 sentinels (4/9, 4/23, 4/30, 7/2) EEEV : 8 sentinels (6/4, 6/18, 7/2) HJV : 3 sentinels (5/14, 6/11, 6/18)

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>

*Case tallies included in the weekly Florida arbovirus surveillance report include confirmed and probable cases for EEE, WNV infection, SLE, dengue, and malaria. In addition, dengue and malaria tallies may also include suspect cases. Case definitions being used in Florida are consistent with national criteria provided by the Council of State and Territorial Epidemiologists (CSTE) and may be viewed at:

http://www.doh.state.fl.us/Disease_ctrl/epi/surv/CaseDefinitions/2012CaseDef_FINAL.pdf

Case tallies reported by CDC do not include suspect cases and cases are reported by patient state of residence rather than where the exposure occurred.

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 provided by the Department of Agriculture and Consumer Services.