



## Florida Arbovirus Surveillance Week 30: July 22-28, 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 22-28, 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 equine case of EEE was reported in Glades County. Four sentinel chickens in Orange and Walton counties tested positive for antibodies to EEEV. In 2012, positive samples from 1 human, 13 equines and 31 sentinel chickens have been received from 17 counties.

**WNV activity:** One human case of WNV infection was reported in Duval County. Three sentinel chickens in Walton County tested positive for antibodies to WNV. In 2012, positive samples from 1 human and 60 sentinel chickens have been received from 13 counties.

**SLEV activity:** No SLEV activity was reported this week. In 2012, positive samples from five sentinel chickens have been received from three counties

**HJV activity:** One sentinel chicken in St. Johns County tested positive for antibodies to HJV. In 2012, positive samples from seven sentinel chickens have been received from four counties.

**Advisories/Alerts:** Duval County issued a mosquito-borne illness advisory this week. Holmes, St. Johns, Walton, and Washington counties are under mosquito-borne illness advisories. 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 infection with onset in June was reported in 2012 in a Holmes County resident who also spent time in Washington County.

**WNV Infection Acquired in Florida:** One human case of WNV infection with onset in July was reported in 2012 in Duval County.

**Imported Dengue:** Thirty-one 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 Brazil, Colombia, Cuba (4), Dominican Republic (5), Ecuador (3), Ghana, Guyana, Haiti (5), Jamaica (2), Mexico, Puerto Rico (3), Sri Lanka, Suriname, Trinidad, and Turks & Caicos. Counties reporting cases were Brevard, Broward (6), Duval, Hillsborough, Lake, Lee, Miami-Dade (10), Orange (4), Palm Beach, Polk, Sarasota (2), and Seminole (2). Five of the cases were reported in non-Florida residents.

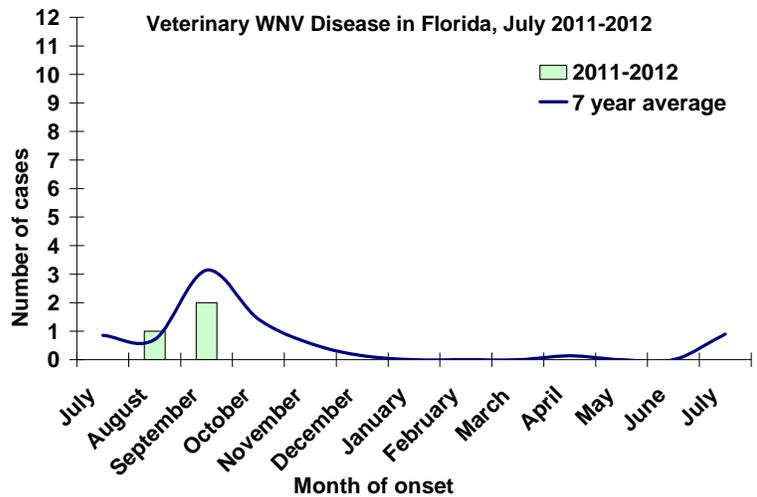
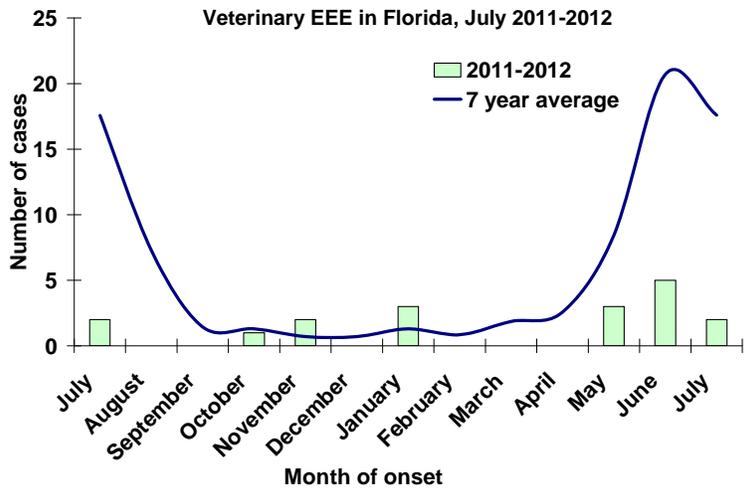
**Imported Malaria:** Thirty-seven imported cases of malaria with onset in 2012 have been reported. Countries of origin were: Afghanistan, Cameroon, Central African Republic, Colombia, Ethiopia, Ghana (4), Guyana (2), Haiti (8), Honduras (2), India, Ivory Coast (2), Nigeria (4), Uganda, Sierra Leone (2), South Africa, Sub Saharan Africa, Togo, Zambia, and multiple African countries (2).

Counties reporting cases were: Alachua, Brevard, Broward (6), Charlotte, Duval (4), 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	07/14/12	Equine	EEEV	Euthanized	2 EEEV



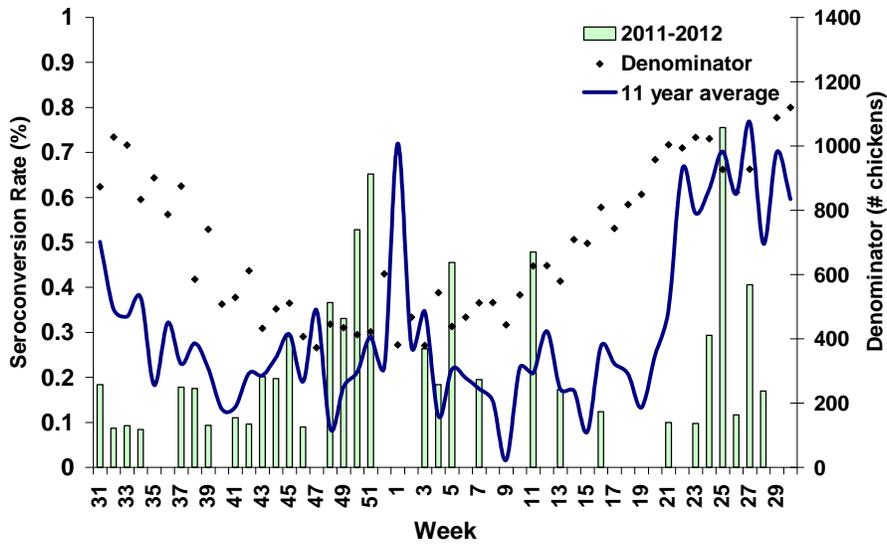
### Sentinel Chickens

Four sentinels in Orange and Walton counties tested positive for antibodies to EEEV, three in Walton tested positive for antibodies to WNV, and one in St. Johns tested positive for antibodies to HJV. Seroconversion rates are calculated by week and include previously reported results.

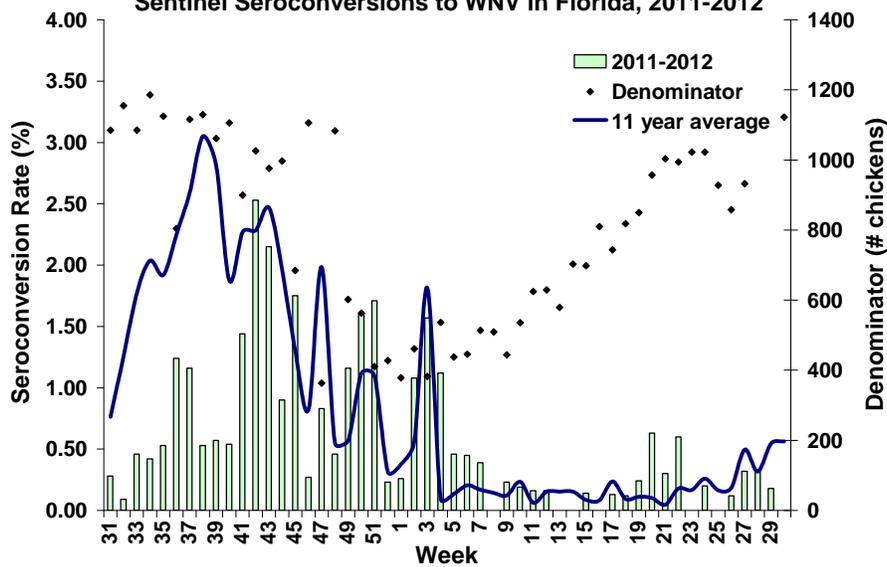
County	Collection Date	Seroconversion Rates (%)				County Totals	
		SLEV	WNV	EEEV	HJV	Week	YTD
Orange	07/02/12			0.9		1 EEEV	9 WNV, 10 EEEV

County	Collection Date	Seroconversion Rates (%)				County Totals	
		SLEV	WNV	EEEV	HJV	Week	YTD
Walton	07/16/12		1.8			2 WNV	11 WNV, 11 EEEV, 3 HJV
	07/10/12		2.63			3 WNV	
	07/02/12		2.68	0.9		3 WNV, 3 EEEV	
	06/25/12			1.5		1 EEEV	
St. Johns	07/03/12				1.7	1 HJV	9 WNV, 2 HJV

Sentinel Seroconversions to EEEV in Florida, 2011-2012



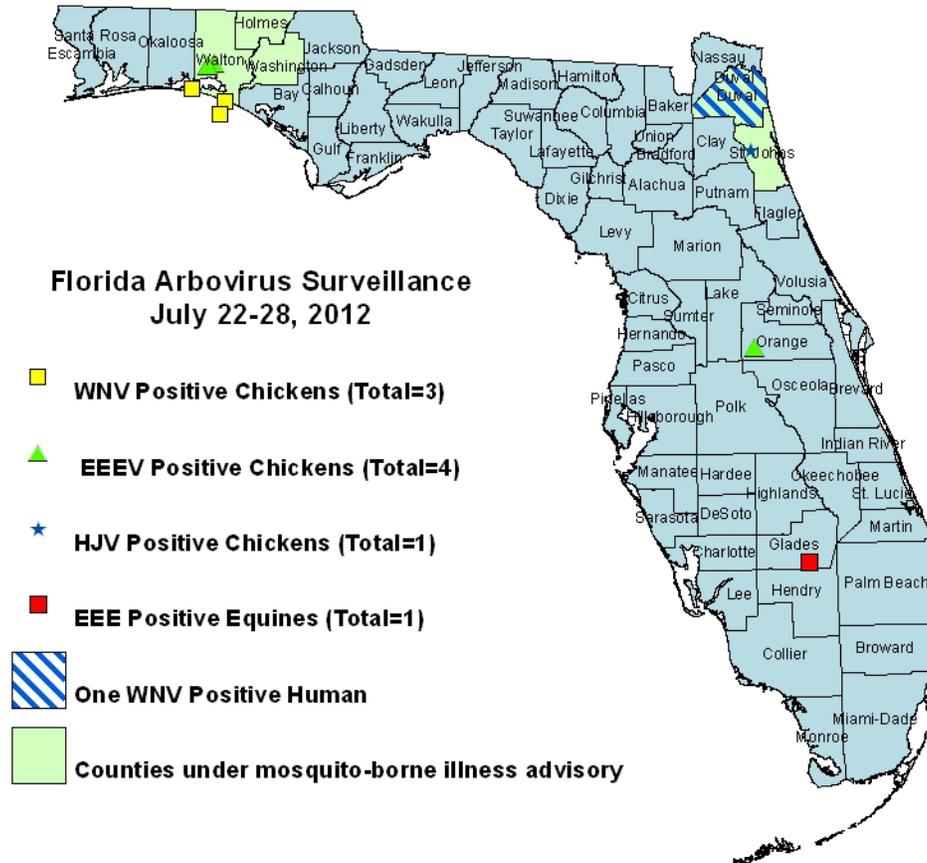
Sentinel Seroconversions to WNV in Florida, 2011-2012

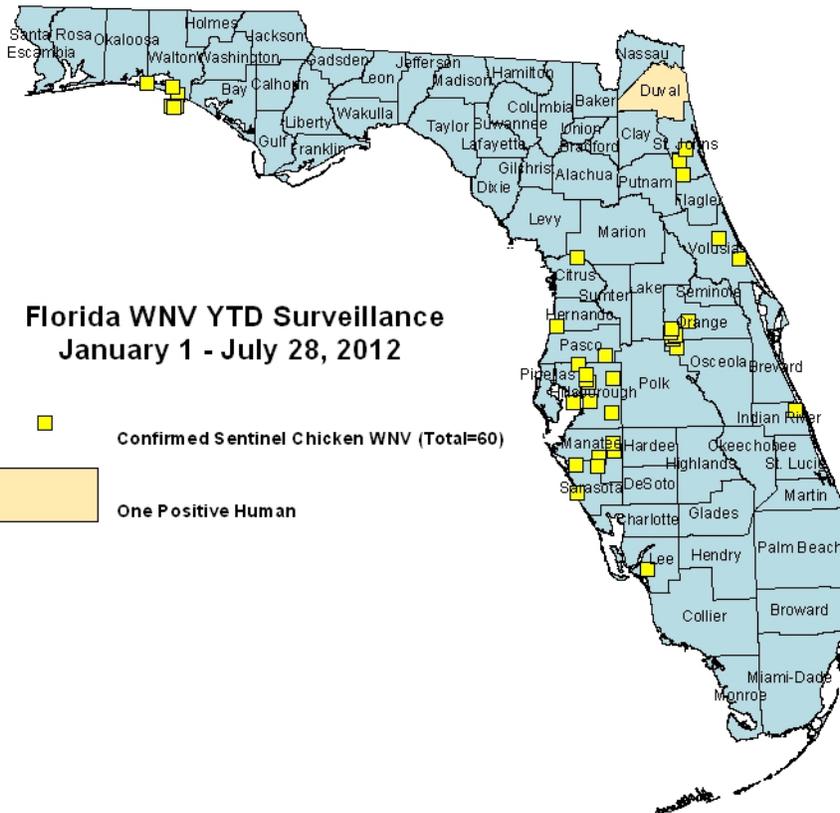
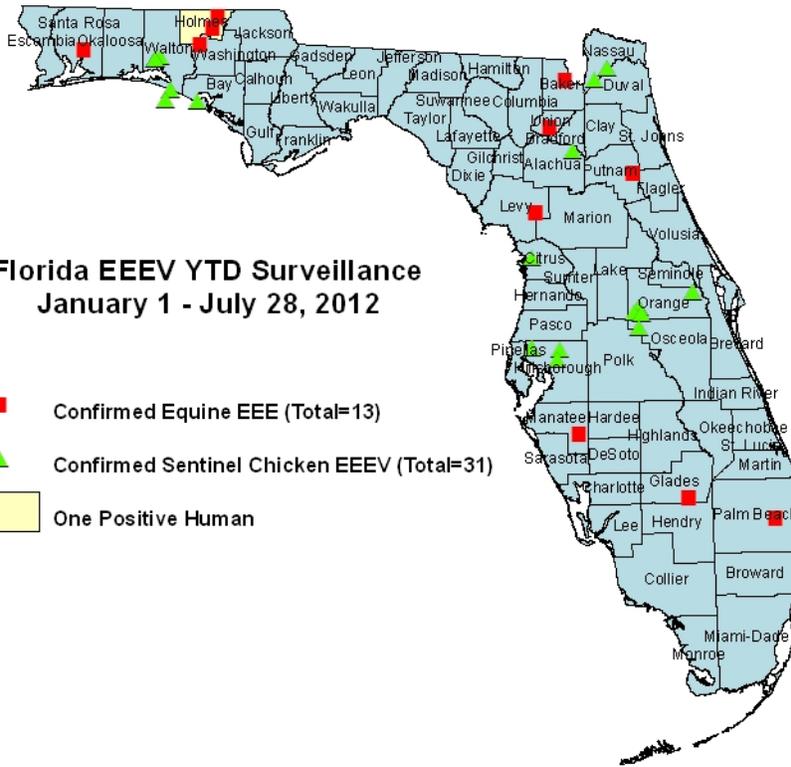


## Dead Birds

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, 13 reports representing 35 dead birds were received from 10 counties. One was identified as a crow and one as a raptor. None were identified as jays. In 2012, 272 reports representing a total of 895 dead birds (30 crows, 9 jays, 47 raptors) were received from 50 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/](http://www.myfwc.com/bird/)

## Maps





## Arbovirus Activity by County

County	Arbovirus Activity
Alachua	EEEV : 1 sentinel (7/9)
Bay	EEEV : 1 sentinel (7/10) 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)
Duval	WNV: 1 human (July)
Glades	EEEV: 2 horses (6/25, 7/14)
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 : 10 sentinels (1/5, 1/9, 1/19, 1/23, 2/6, 3/15, 3/29, 5/21, 6/14, 7/2) 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: 8 sentinels (1/9, 2/6, 3/19, 5/7, 5/14, 7/9) SLEV: 1 sentinel (7/2)
St. Johns	WNV : 9 sentinels (5/14, 5/22, 5/29) HJV : 2 sentinels (4/30, 7/3)
Union	EEEV : 1 horse (5/12)
Volusia	WNV : 2 sentinels (5/29, 6/25)
Walton	WNV : 11 sentinels (4/9, 4/23, 4/30, 7/2, 7/3, 7/9, 7/10, 7/16) EEEV : 11 sentinels (6/4, 6/18, 6/25, 7/2) HJV : 3 sentinels (5/14, 6/11, 6/18)
Washington	EEEV : 1 horse (7/1)

## Acknowledgements and Data Sources

Contributors: Elizabeth Radke, MPH, Shaiasia Itwaru-Womack, Danielle Stanek, DVM, and Carina Blackmore, DVM, Ph.D., DOH Bureau of Environmental Public Health Medicine; Lillian Stark, Ph.D., Holly Hughes, 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>

\*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](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.