



Florida Arbovirus Surveillance Week 36: September 04 – September 10, 2011

Arbovirus surveillance in Florida includes endemic mosquito-borne viruses such as 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 September 04 – September 10, 2011, the following arboviral activity was recorded in Florida:

DENV activity: No new cases of locally acquired dengue were reported this week. In 2011, there have been two locally acquired cases reported in Miami-Dade and Martin counties.

EEEV activity: No EEEV activity was reported this week. In 2011, positive samples from three equines, 19 sentinel chickens and 19 live wild birds have been received from 11 counties.

WNV activity: One new case of locally acquired WNV infection was reported this week. Three sentinel chickens in Leon, Manatee and Nassau counties tested positive for antibodies to WNV. In 2011, positive samples from 15 humans, 71 sentinel chickens, one equine and one live wild bird (flavivirus positive) have been received from 16 counties.

SLEV activity: One sentinel chicken in Pinellas County tested positive for antibodies to SLEV. In 2011, positive samples from six sentinel chickens have been received from two counties.

HJV activity: No HJV activity was reported this week. In 2011, positive samples from six sentinel chickens have been received from three counties.

Advisories/Alerts: Duval and Pinellas counties are under mosquito-borne illness alert. Martin and Holmes Counties are under mosquito-borne illness advisory.

Year to Date Human Case Summary

West Nile Virus Infection Acquired in Florida: Twelve human cases of WNV infection have been reported in 2011 in Duval County with onset in June (1), July (8) and Aug (3). Three positive asymptomatic blood donors were reported in Duval County.

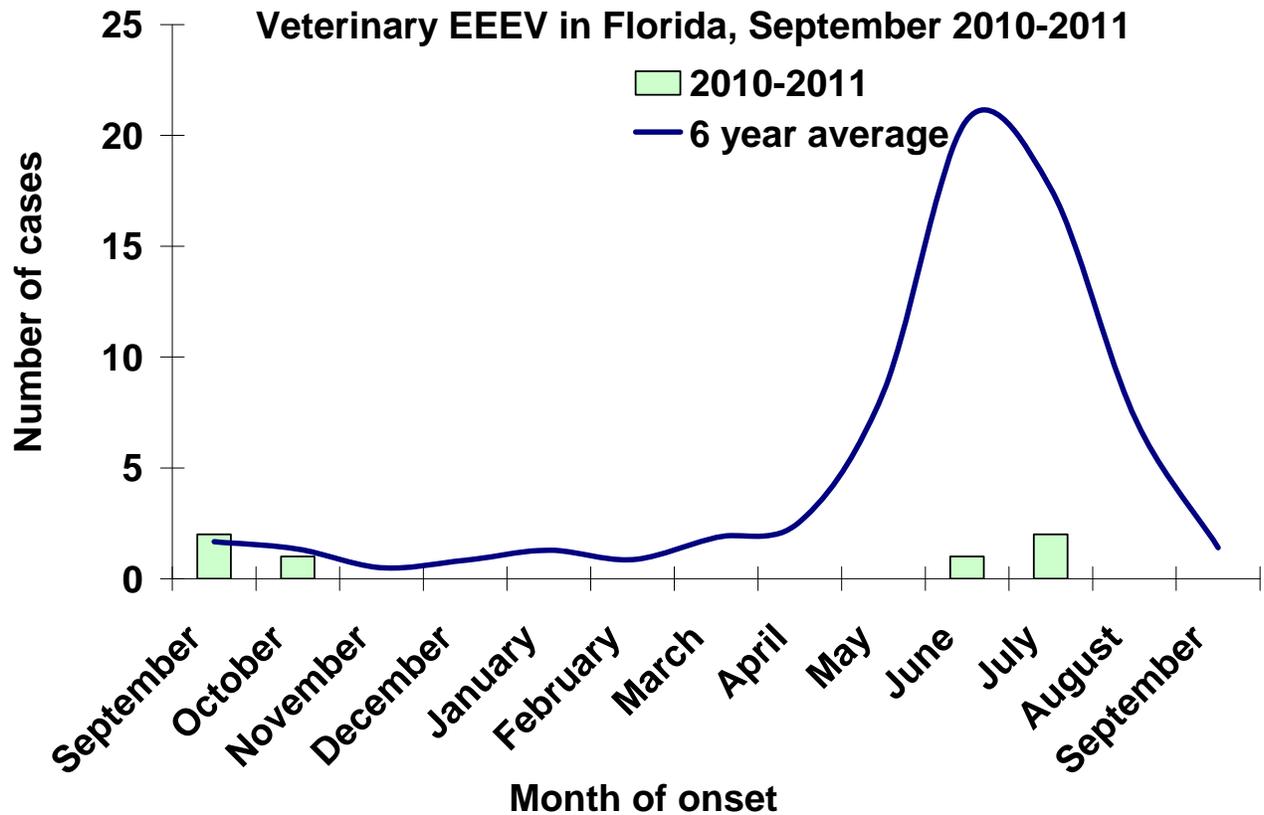
Dengue Acquired in Florida: In 2011, two cases of locally acquired dengue have been reported in Miami-Dade and Martin counties.

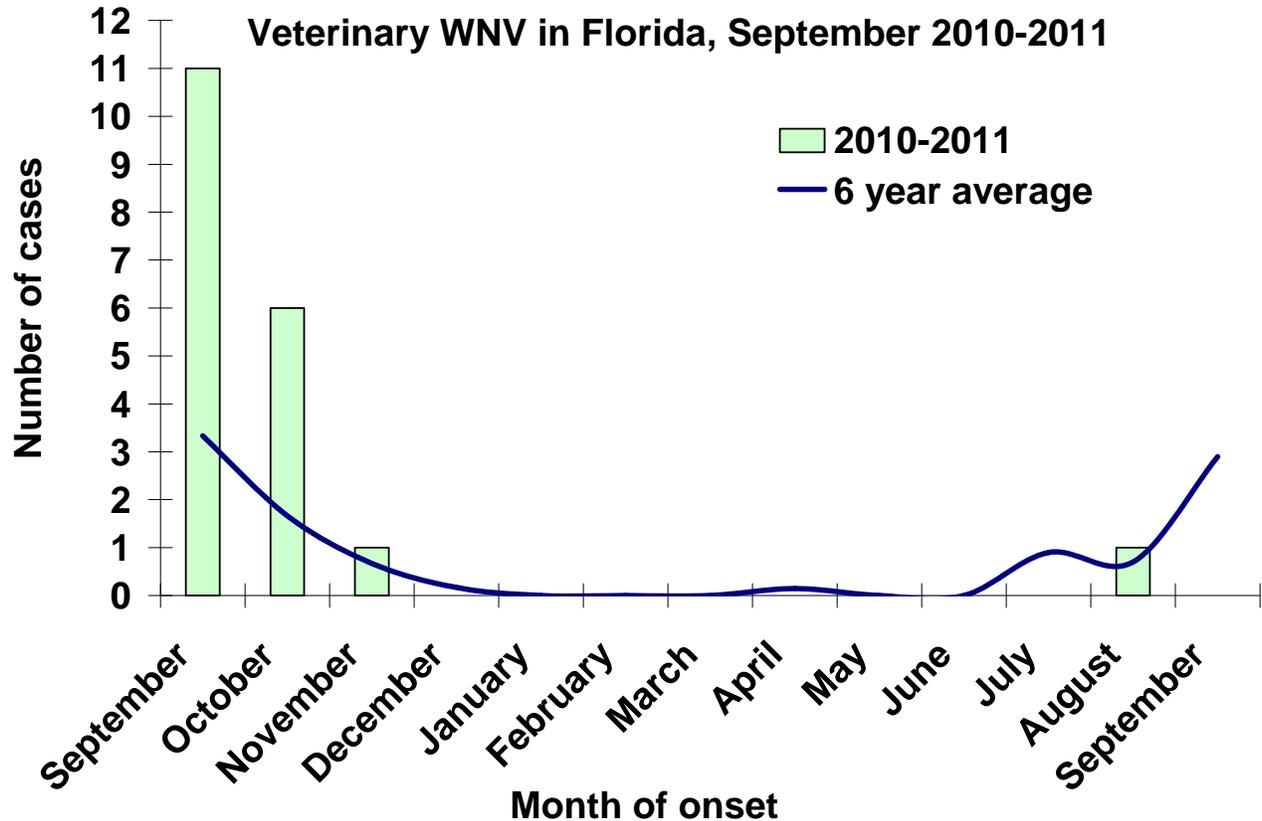
Imported Dengue: Twenty-four cases of dengue with onset in 2011 have been reported in individuals with travel history to a dengue endemic country in the two weeks prior to onset. Countries of origin were Aruba, Bahamas (3), Bangladesh (2), Brazil (2), Colombia, Guyana, Haiti, India, Nicaragua, Panama, Puerto Rico (6), St Lucia, Trinidad, Turks and Caicos Islands and Venezuela. Counties reporting cases were Broward (3), Gulf, Hendry, Hillsborough, Marion, Martin, Miami-Dade (5), Orange, Palm Beach (6), Pasco, Pinellas, St. Johns and Washington.

Imported Malaria: Seventy imported cases of malaria with onset in 2011 have been reported. Countries of origin were: Afghanistan (3), Brazil, Cameroon, East Timor, Ethiopia (2), Eritrea (2), Gabon, Ghana (4), Guinea Conakry, Guyana, Haiti (18), Honduras (3), India (13), Kenya, Liberia (2), Libya, Mali (2), Nigeria (6), Pakistan, Peru, Rwanda, Uganda (3) and Venezuela. Counties reporting cases were: Alachua (2), Brevard (4), Broward (8), Citrus, Collier (2), Duval (6), Escambia, Hillsborough (6), Indian River, Lee (3), Leon (2), Miami-Dade (15), Manatee (3), Okaloosa, Orange (4), Palm Beach (5), Pasco, Pinellas, Seminole, St. Johns and St. Lucie (2).

Veterinary Cases

No positive horses were reported this week.



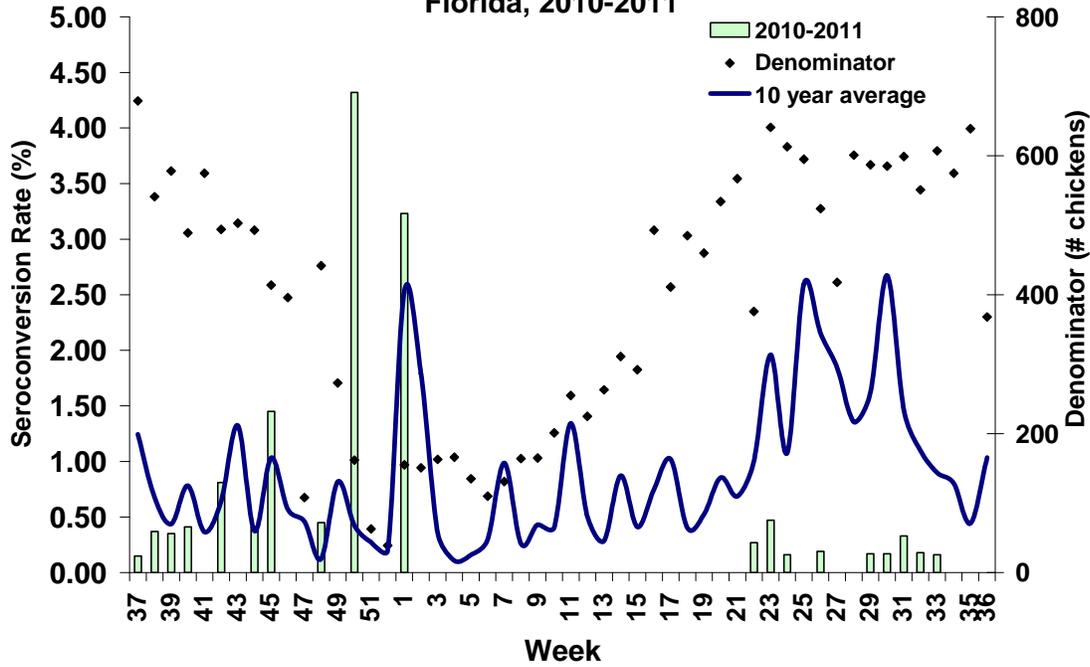


Sentinel Chickens

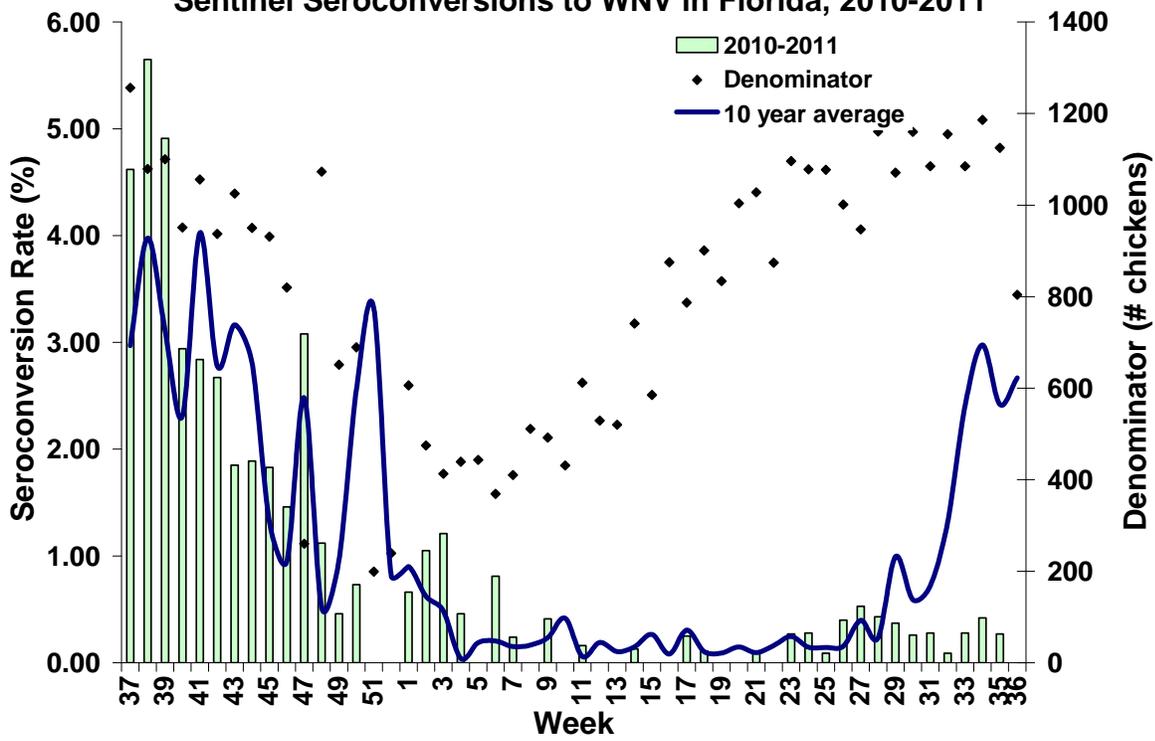
Three sentinel chickens in Leon, Manatee and Nassau counties tested positive for antibodies to WNV. One sentinel chicken in Pinellas County tested positive for antibodies to SLEV. Seroconversion rates are calculated by week and include previously reported results.

County	Collection Date	Seroconversion Rates (%)				Week	County Totals	
		SLEV	WNV	EEEV	HJV		YTD	
Leon	08/30/11		2.63			1 WNV	5 WNV	
Manatee	08/31/11		1.27			1 WNV	3 WNV	
Nassau	08/29/11		2.78			1 WNV	2 WNV, 1 HJV	
Pinellas	08/08/11	1.79				1 SLEV	5 SLEV	

Sentinel Seroconversions to EEEV in North and Panhandle Florida, 2010-2011



Sentinel Seroconversions to WNV in Florida, 2010-2011



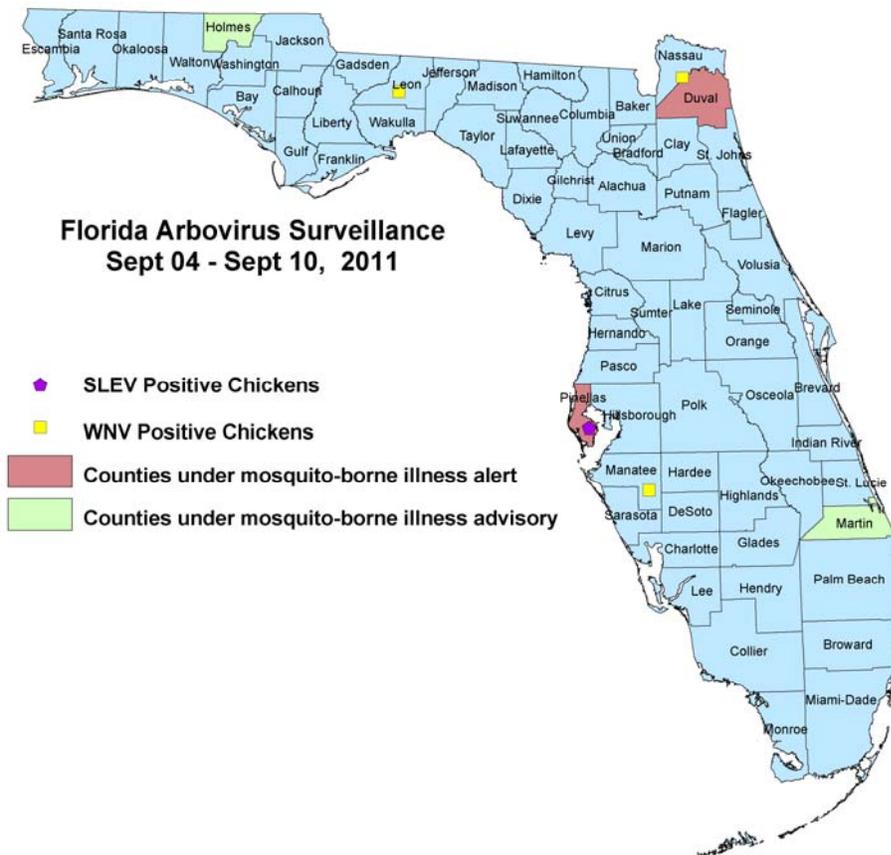
Live Wild Birds

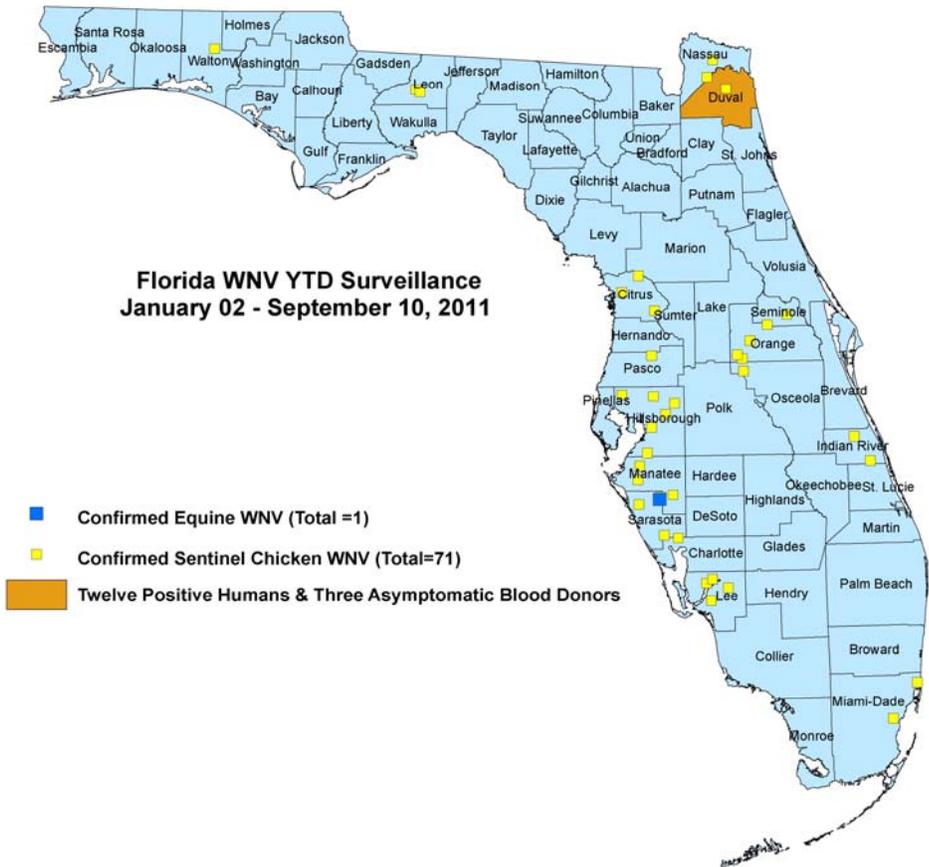
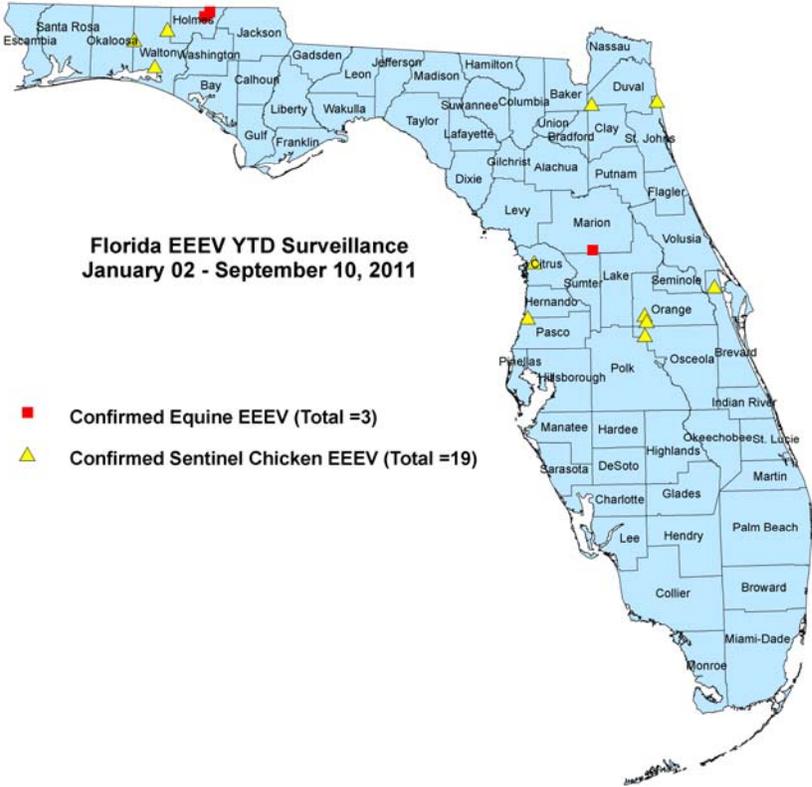
No positive live wild birds were reported this week.

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, nine reports representing 18 dead birds were received from two counties. One bird was identified as jay; none were identified as crows or raptors. In 2011, two hundred and thirty-one reports representing a total of 702 dead birds (30 crows, 38 jays, 49 raptors, 585 others) were received from 42 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
Brevard	EEEV: 2 sentinels (5/20, 5/27)
Citrus	WNV: 3 sentinels (1/3, 1/11) EEEV: 1 sentinel (8/15)
Charlotte	WNV: 1 sentinel (7/1)
Dade	WNV: 2 sentinels (1/18, 6/22)
Duval	EEEV: 1 sentinel (6/11) WNV: 15 humans (1 June, 8 July, 3 Aug, 3 positive blood donors); 1 sentinel (7/15)
Hernando	WNV : 1 sentinel (8/1) EEEV: 1 sentinel (6/6)
Hillsborough	WNV: 14 sentinels (1/4, 1/11, 1/18, 1/25, 2/9, 3/1, 7/19)
Holmes	EEEV: 2 horses (7/3, 7/6)
Indian River	WNV: 2 sentinels (4/28, 8/18), SLEV: 1 sentinel (6/23)
Lee	WNV: 10 sentinels (6/13, 6/27, 7/11, 7/25)
Leon	WNV: 5 sentinels (8/23, 8/30)
Manatee	WNV: 4 sentinels (4/4, 7/20, 8/31)
Marion	EEEV: 1 horse (6/21)
Nassau	WNV: 2 sentinel (8/1, 8/29) HJV: 1 sentinel (5/23)
Okaloosa	WNV: 1 live wild bird (flavivirus positive, 1 blue jay 5/31) EEEV: 10 live wild birds (7 blue jays 1/10, 4/11, 4/25, 5/16, 5/19, 6/6, 6/8; 1 cardinal 1/ 11 and 2 brown thrashers 2/21, 4/20)
Orange	WNV: 13 sentinels (1/3, 1/18, 1/24, 7/7, 7/14, 7/ 28, 8/1, 8/11, 8/18) EEEV: 4 sentinels (6/2, 6/9, 6/27, 7/28) HJV: 2 sentinels (2/24, 7/7)
Pinellas	SLEV: 5 sentinels (7/18, 8/8, 8/22)
Santa Rosa	EEEV: 7 live wild birds (1 house sparrow 1/05 and 6 blue jays 3/1, 2/1, 4/12, 5/10, 5/18)
Sarasota	WNV: 9 sentinels (1/4, 2/14, 3/14, 4/25, 5/2, 6/27, 7/5, 7/18, 8/22); 1 horse (8/12)
Seminole	WNV: 3 sentinels(6/7)
St. Johns	EEEV: 1 sentinel (6/13)
Walton	EEEV: 9 sentinels (1/6, 7/18, 8/1, 8/8) ; 2 live wild birds (2 cardinals 1/14, 1/21) WNV: 1 sentinel (5/24) HJV: 3 sentinels (1/14, 4/18, 5/2)

Acknowledgements and Data Sources

Contributors: Leena Anil, Ph.D., Danielle Stanek, DVM, and Carina Blackmore, DVM, Ph.D., DOH Bureau of Environmental Public Health Medicine; Lillian Stark, 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>

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.