



Florida Arbovirus Surveillance Week 37: September 11 – September 17, 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 11 – September 17, 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: Two new cases of Florida acquired WNV infections were reported this week. One case was a New Jersey resident with exposure in Duval County. Two sentinel chickens in Lee County tested positive for antibodies to WNV. In 2011, positive samples from 17 humans, 73 sentinel chickens, one equine and one live wild bird (flavivirus positive) have been received from 16 counties.

SLEV activity: Eight sentinel chickens in Pinellas and Hillsborough counties tested positive for antibodies to SLEV. In 2011, positive samples from 14 sentinel chickens have been received from three 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 County is under mosquito-borne illness alert. Martin, Holmes and Pinellas counties are under mosquito-borne illness advisory.

Year to Date Human Case Summary

West Nile Virus Infection Acquired in Florida: Fourteen human cases of WNV infection have been acquired in Duval County in 2011 with onset in June (1), July (8) and Aug (5). Fourteen of these cases were in Duval County residents and one case was reported in a New Jersey resident with exposure in Duval County (onset in August). Three positive asymptomatic blood donors were also reported in Duval County.

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

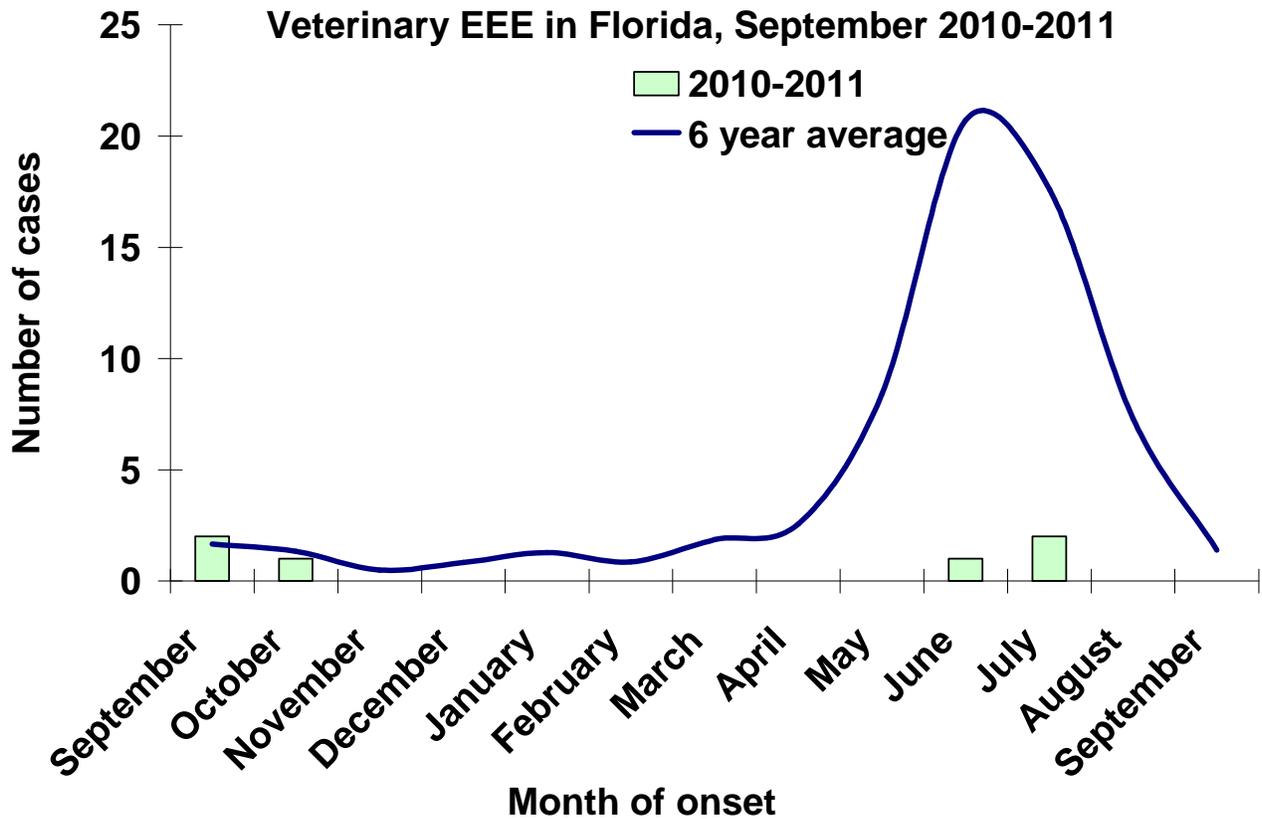
Imported Dengue: Twenty-six cases of dengue with onset in 2011 have been reported in individuals with travel history to a dengue endemic country in the two weeks prior to onset. Countries of origin were Aruba, Bahamas (4), Bangladesh (2), Brazil (2), Colombia, Guyana, Haiti, India, Nicaragua, Panama, Puerto Rico (6), St Lucia, Trinidad (2), Turks and Caicos Islands and

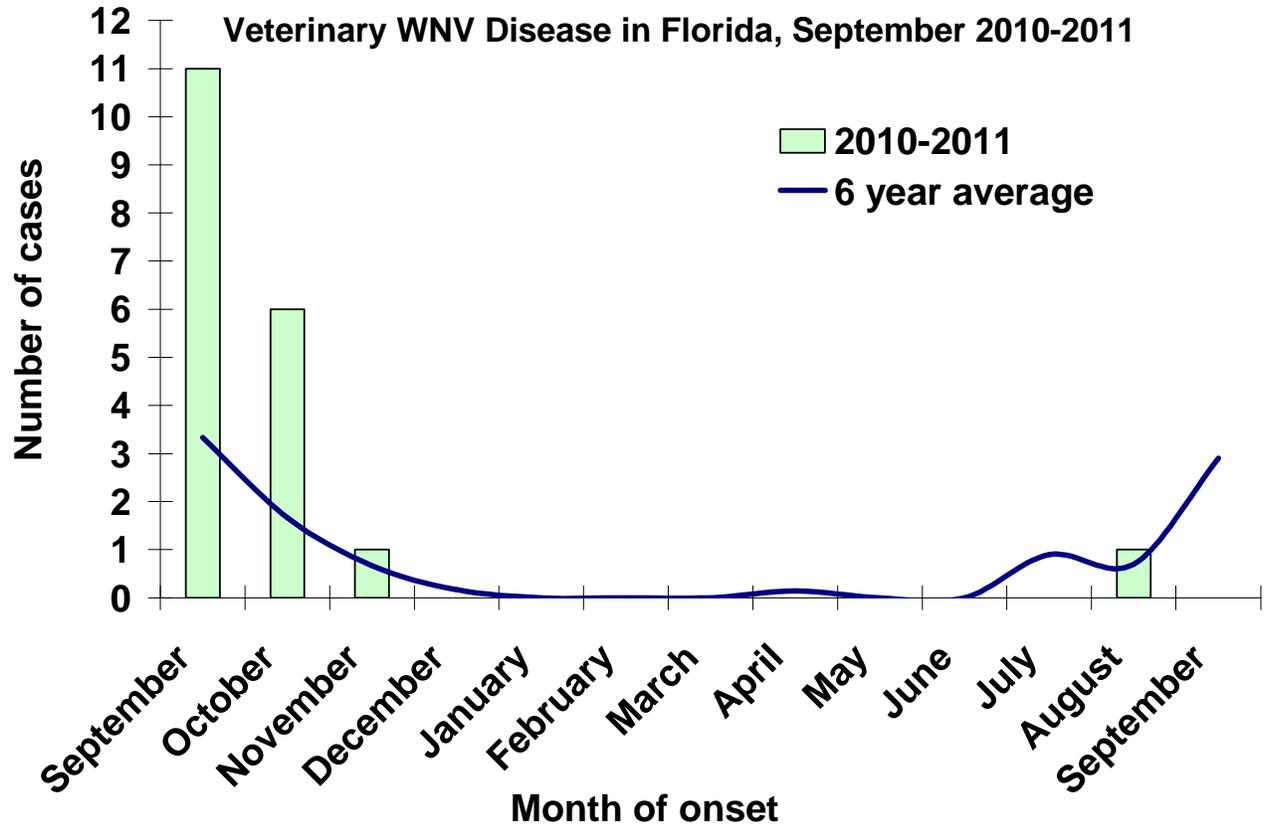
Venezuela. Counties reporting cases were Broward (3), Gulf, Hendry, Hillsborough, Marion, Martin, Miami-Dade (5), Orange (3), Palm Beach (6), Pasco, Pinellas, St. Johns and Washington.

Imported Malaria: Seventy-one 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), New Guinea, Pakistan, Peru, Rwanda, Uganda (3) and Venezuela. Counties reporting cases were: Alachua (2), Brevard (4), Broward (9), 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.



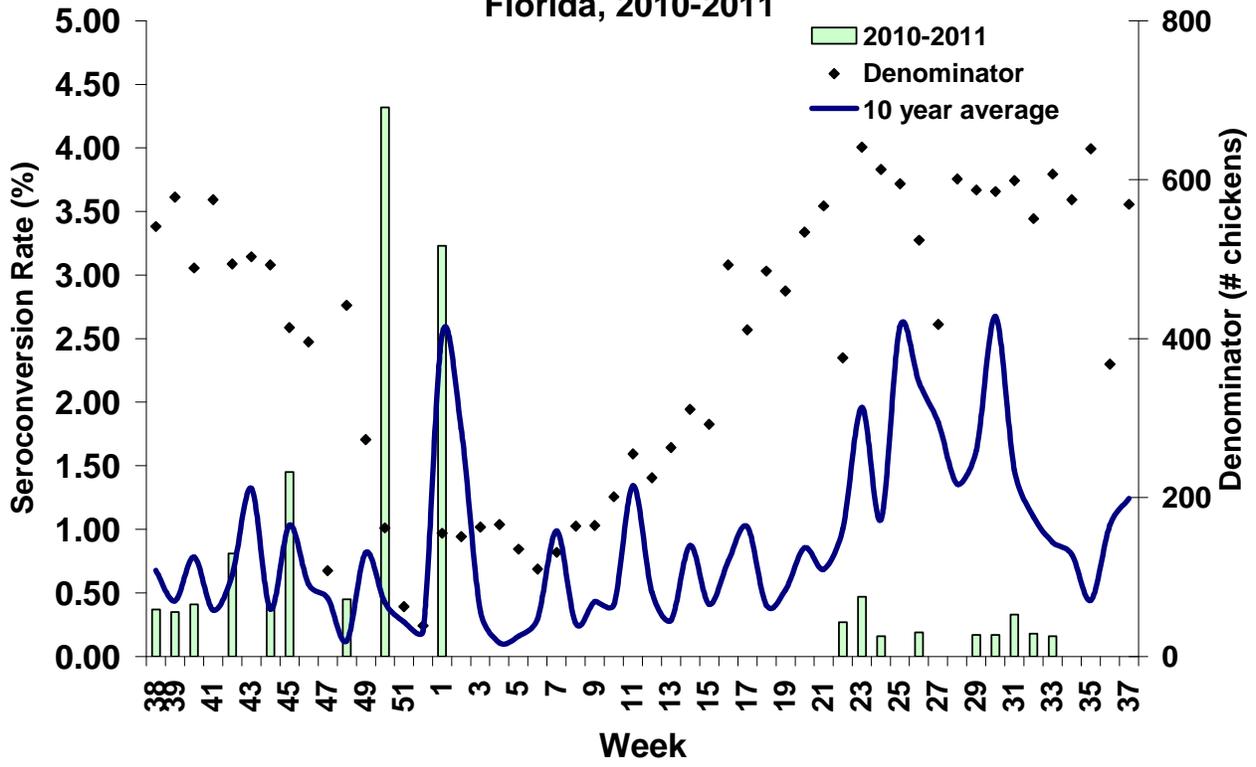


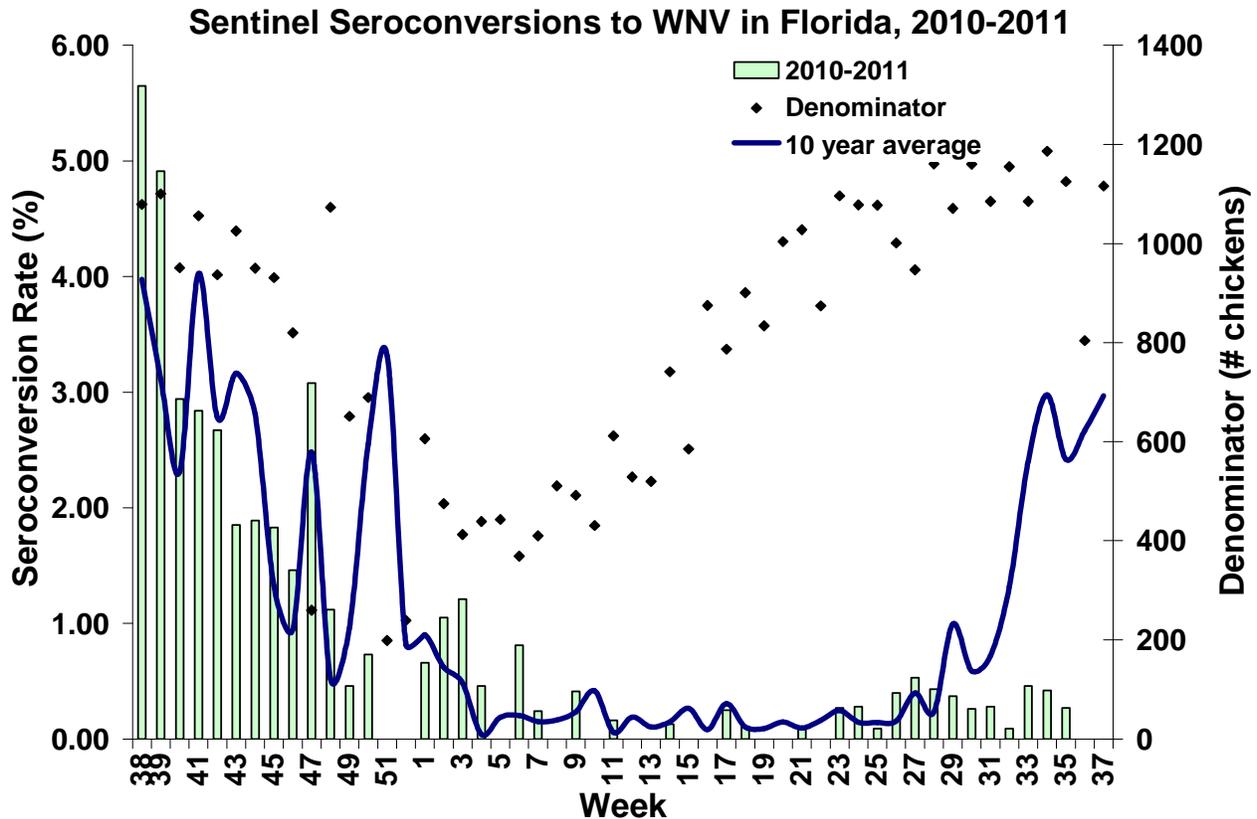
Sentinel Chickens

Two sentinel chickens in Lee County tested positive for antibodies to WNV. Eight sentinel chickens in Pinellas and Hillsborough counties 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
Hillsborough	08/23/11	5.63				4 SLEV	14 WNV, 4 SLEV
Lee	08/20/11		2.99			2 WNV	12 WNV
Pinellas	08/29/11	3.85				2 SLEV	
Pinellas	09/06/11	3.77				2 SLEV	9 SLEV

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





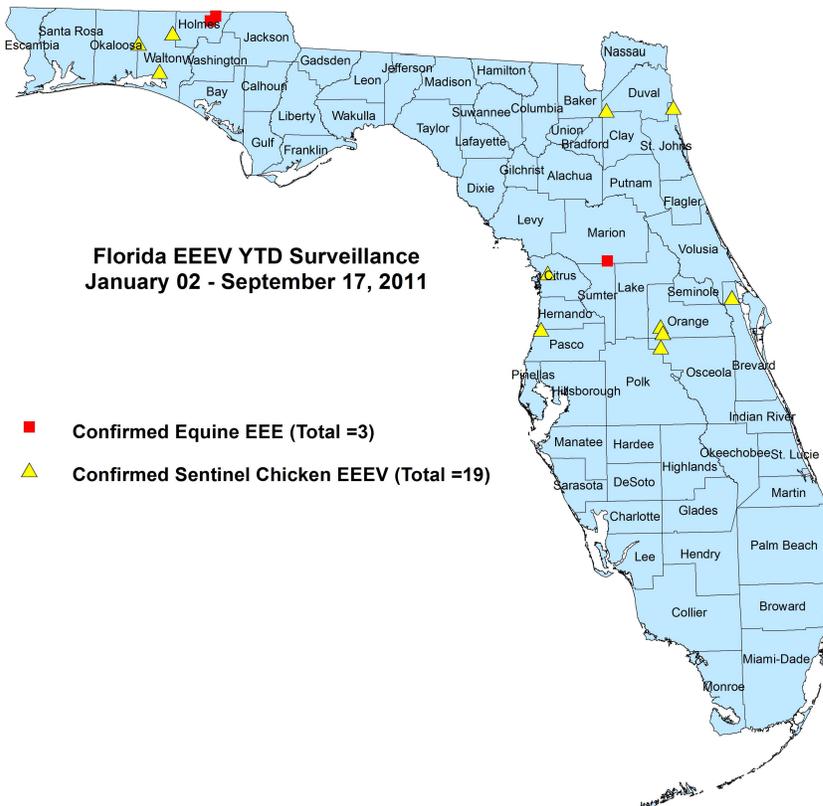
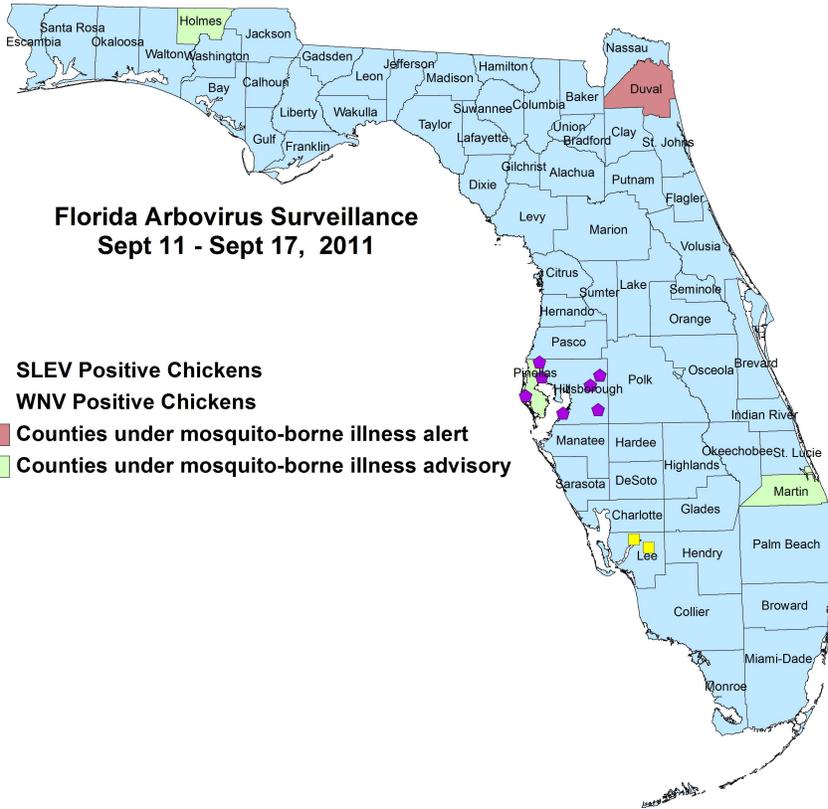
Live Wild Birds

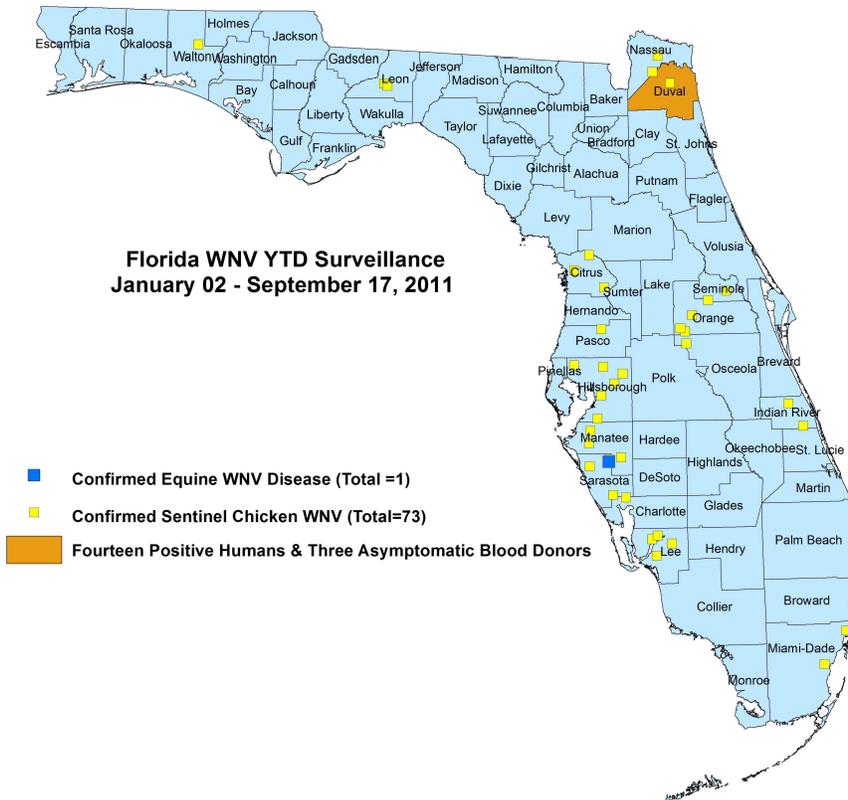
No positive live wild birds were reported this week.

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, four reports representing 7 dead birds were received from four counties. One was identified as a jay and another as a raptor. None were identified as crows. In 2011, two hundred and thirty-five reports representing a total of 706 dead birds (30 crows, 39 jays, 50 raptors, 587 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	DENV: 1 human (acquired in Miami; January) WNV: 2 sentinels (1/18, 6/22)
Duval	EEEV: 1 sentinel (6/11) WNV: 17 humans including 3 positive blood donors and a NJ traveler [June (1), July (9), Aug (5)]; 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) SLEV: 4 sentinels (8/23)
Holmes	EEEV: 2 horses (7/3, 7/6)
Indian River	WNV: 2 sentinels (4/28, 8/18), SLEV: 1 sentinel (6/23)
Lee	WNV: 12 sentinels (6/13, 6/27, 7/11, 7/25, 8/20)
Leon	WNV: 5 sentinels (8/23, 8/30)
Manatee	WNV: 4 sentinels (4/4, 7/20, 8/31)
Marion	EEEV: 1 horse (6/21)
Martin	DENV: 1 human (acquired in Martin County; July)
Nassau	WNV: 2 sentinels (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: 9 sentinels (7/18, 8/8, 8/22, 8/29, 9/6)
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

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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>

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.