



Florida Arbovirus Surveillance Week 5: January 28-February 3, 2018

Arbovirus surveillance in Florida includes endemic mosquito-borne viruses such as West Nile virus (WNV), Eastern equine encephalitis virus (EEEV), and St. Louis encephalitis virus (SLEV), as well as exotic viruses such as dengue virus (DENV), chikungunya virus (CHIKV) and California encephalitis group viruses (CEV). Malaria, a parasitic mosquito-borne disease is also included. During the period of January 28-February 3, 2018, the following arboviral activity was recorded in Florida.

WNV activity: No human cases of WNV infection were reported this week. No horses with WNV infection were reported this week. Three sentinel chickens tested positive for antibodies to WNV this week in Hillsborough and Sarasota counties. In 2018, positive samples from ten sentinel chickens have been reported from five counties.

SLEV activity: No human cases of SLEV infection were reported this week. No sentinel chickens tested positive for antibodies to SLEV this week. In 2018, there have been no positive samples reported.

EEEV activity: No human cases of EEEV infection were reported this week. No horses with EEEV infection were reported this week. No sentinel chickens tested positive for antibodies to EEEV this week. In 2018, positive samples from one horse and one sentinel chicken have been reported from two counties.

International Travel-Associated Dengue Fever Cases: No cases of dengue fever were reported this week in persons that had international travel. In 2018, no travel-associated cases have been reported.

Dengue Fever Cases Acquired in Florida: No cases of locally acquired dengue fever were reported this week. In 2018, no cases of locally acquired dengue fever have been reported.

International Travel-Associated Chikungunya Fever Cases: No cases of chikungunya fever were reported this week in persons that had international travel. In 2018, no travel-associated cases have been reported.

Chikungunya Fever Cases Acquired in Florida: No cases of locally acquired chikungunya fever were reported this week. In 2018, no cases of locally acquired chikungunya fever have been reported.

International Travel-Associated Zika Fever Cases: Three cases of Zika fever were reported this week in persons that had international travel. In 2018, four cases have been reported.

Zika Fever Cases Acquired in Florida: No cases of locally acquired Zika fever were reported this week. In 2018, no cases of locally acquired have been reported.

Advisories/Alerts: No counties are currently under mosquito-borne illness advisory or alert.

There are no areas of ongoing, active Zika transmission in Florida. For additional information on current CDC recommendations, please visit <https://www.cdc.gov/zika/intheus/florida-update.html>. For additional information on Zika virus cases from 2016 or 2017, including up-to-date numbers, please visit <https://zikafreefl.org/>.

There is a Level 2 (Alert) Travel Health Notice from the CDC for multiple countries in the Caribbean, Central and South America, Mexico, Cape Verde, Southeast Asia, and Pacific Islands related to Zika virus transmission and an association with poor pregnancy outcomes. Pregnant women should consider postponing travel to these areas. There is also a Level 2 Travel Health Notice for Brazil and a Level 1 Travel Health Notice in Nigeria related to the transmission of yellow fever virus. There is also a Level 1 Travel Health Notice for Sri Lanka related to the transmission of dengue virus. Additional information on travel health notices can be found

at the following link: <http://wwwnc.cdc.gov/travel/notices>. For a map of arboviral disease activity in the United States, please visit the following link: https://wwwn.cdc.gov/arbovet/maps/ADB_Diseases_Map/index.html.

2018 Human Case Summary*

International Travel-Associated Zika Fever Cases: In 2018, four cases of Zika fever have been reported in individuals with travel history to a country or area experiencing Zika virus activity. Countries of origin were: Cuba (3) and Venezuela. Counties reporting cases were: Hernando and Miami-Dade (3). Florida is monitoring a total of two pregnant women in 2018.

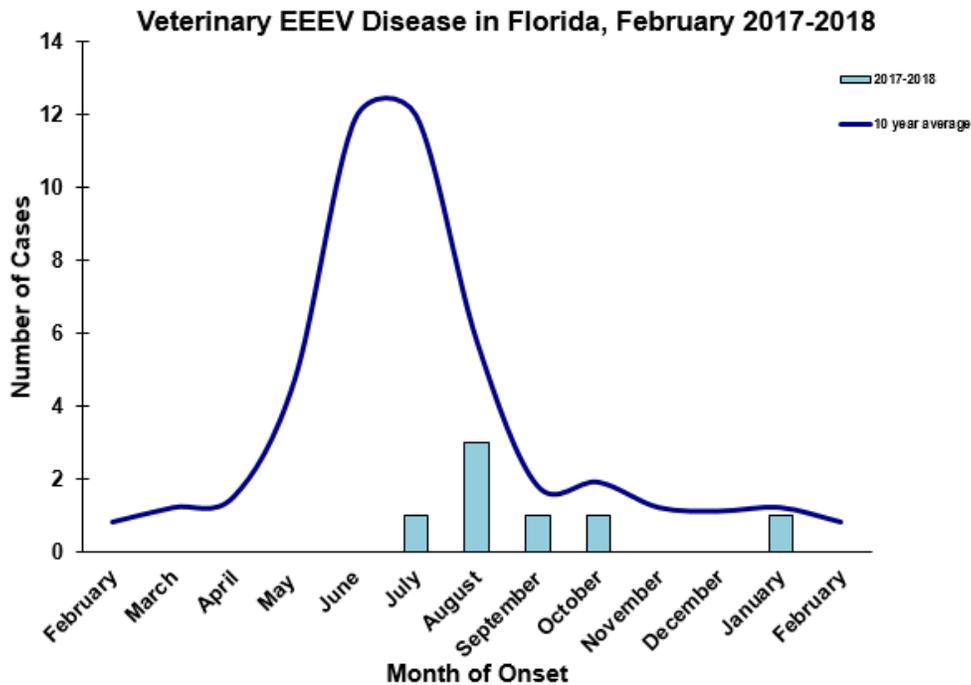
International Travel-Associated Malaria Cases: Three cases of malaria with onset in 2018 have been reported. Countries of origin were: Haiti, India, and Kenya. Counties reporting cases were: Miami-Dade (3).

Two cases (67%) were diagnosed with *Plasmodium falciparum*. One case (33%) was diagnosed with *Plasmodium vivax*.

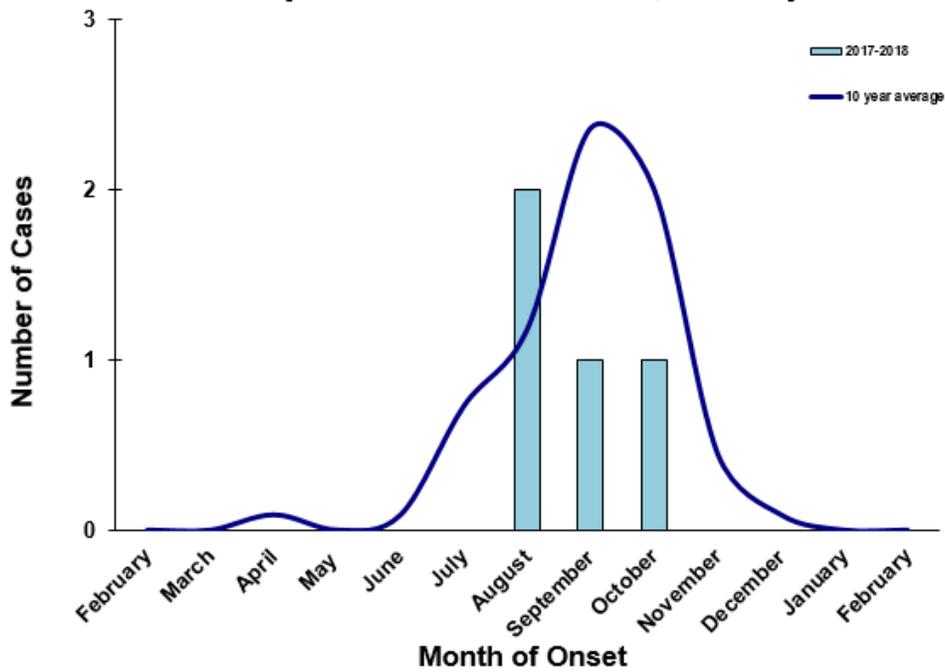
Veterinary Cases*

*Veterinary cases are reported by date of onset

No horses with EEEV or WNV infection were reported this week.



Veterinary WNV Disease in Florida, February 2017-2018



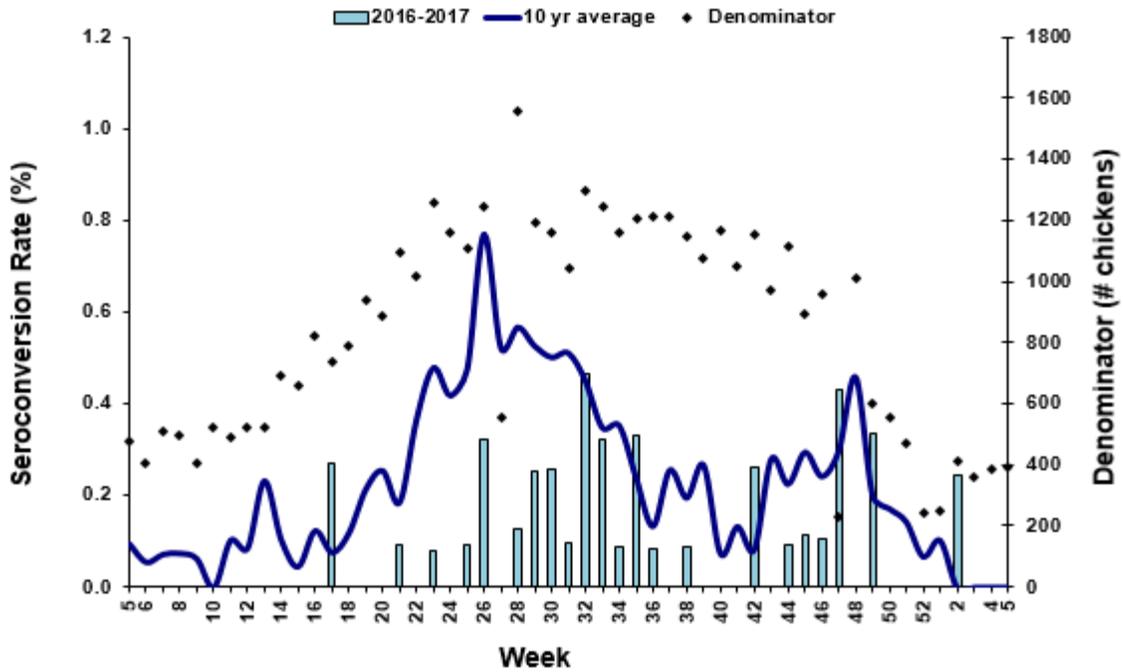
Sentinel Chickens*

The table below is for the reporting of confirmatory laboratory results from this week. Some of the samples were collected at earlier dates. The date of collection is recorded for samples collected on that day along with the total number of positives and the corresponding seroconversion rate for the week the sample was collected.

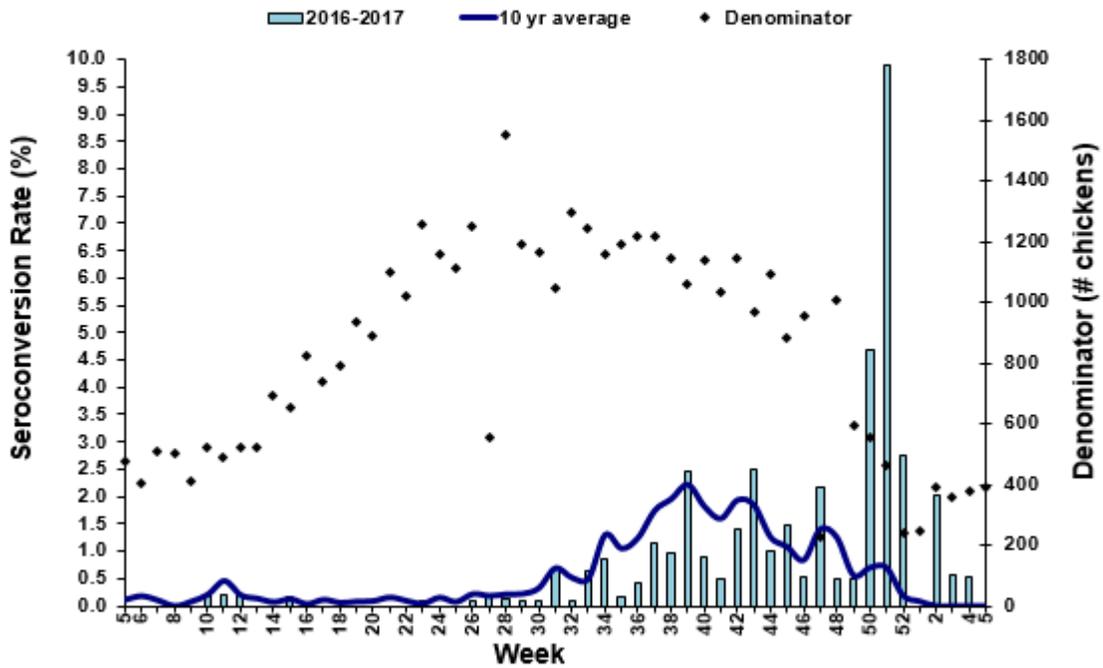
Three sentinel chickens tested positive for antibodies to WNV this week in Hillsborough and Sarasota counties.

County	Collection Date	Seroconversion Rates (%)					County Totals		
		Flavi	SLEV	WNV	Alpha	EEEV	HJV	Collection Week	YTD
Hillsborough	1/16/18	4.44		4.44				2 WNV	3 WNV
Sarasota	1/12/18	1.61		1.61				1 WNV	1 WNV

Sentinel Seroconversions to EEEV in Florida, 2017-2018



Sentinel Seroconversions to WNV in Florida, 2017-2018



* Please note that a change in testing procedure starting on week 50 of 2017 resulted in an artificial spike in positive test results that cannot be directly compared with past results.

Mosquito Pools

No mosquito pools tested positive for EEEV, WNV, or Zika this week.

County	Collection Week	Result	Species	County YTD

Dead Birds

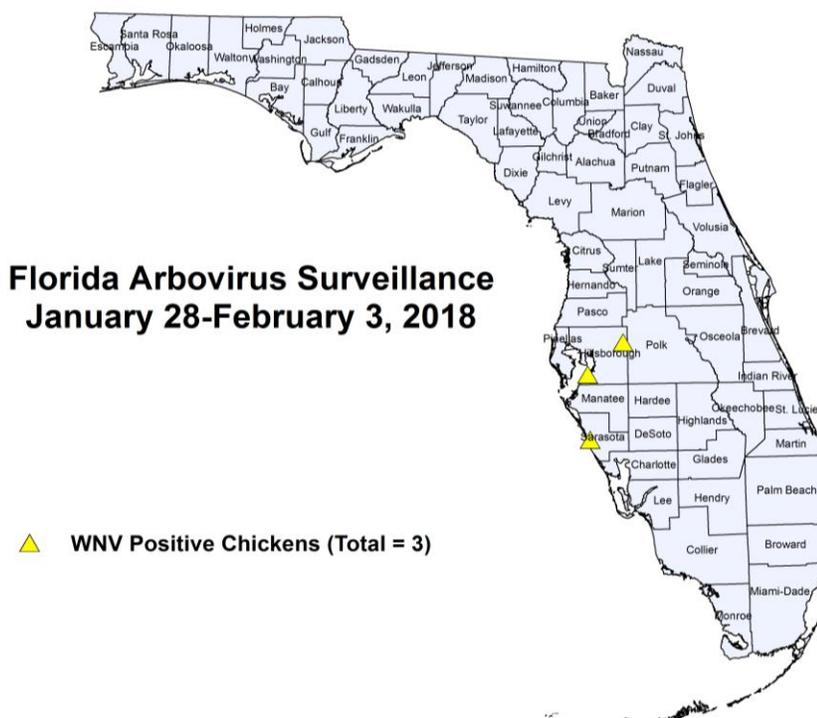
The Fish and Wildlife Conservation Commission (FWC) collects reports of dead birds, which can be an indication of arbovirus circulation in an area. This week, seven reports representing a total of 13 dead birds, including four jays and two raptors, were received from seven counties.

In 2018, 46 reports representing a total of 140 dead birds (4 jays, 11 raptors, 2 doves) were received from 23 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/.

2018

County	Total Dead Birds	Crows	Jays	Raptors	Dove
Dade	1	0	0	0	0
Duval	4	0	0	0	0
Escambia	1	0	0	1	0
Flagler	4	0	4	0	0
Hernando	1	0	0	0	0
Hillsborough	1	0	0	1	0
Okaloosa	1	0	0	0	0

Maps





Florida Arbovirus Surveillance January 1-February 3, 2018

- Confirmed Equine EEE (Total = 1)
- ▲ Sentinel Chickens Tested Positive for Antibodies to EEEV (Total = 1)
- ▲ Sentinel Chickens Tested Positive for Antibodies to WNV (Total = 10)

2018 Arbovirus Activity by County	
County	Arbovirus Activity
Citrus	EEEV: 1 sentinel (1/8)
Hillsborough	WNV: 3 sentinels (1/10, 1/16)
Manatee	WNV: 1 sentinel (1/9)
Orange	WNV: 1 sentinel (1/10)
Sarasota	WNV: 1 sentinel (1/12)
St. Johns	EEEV: 1 horse (1/9)
Walton	WNV: 4 sentinels (1/9)

Acknowledgements and Data Sources

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For more surveillance information, please see the DOH website at: <http://www.floridahealth.gov/diseases-and-conditions/mosquito-borne-diseases/surveillance.html>

For arbovirus surveillance information for the United States, please see the Centers for Disease Control and Prevention website at: <http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm>

Case tallies included in the weekly Florida arbovirus surveillance report include confirmed and probable cases for EEE, WNV infection, SLE, dengue, chikungunya, and malaria by date of onset. Suspect cases are not included. Activity is mapped by county of exposure rather than county of residence. 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.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/index.html>. 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 Bureau of Public 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.