

## Florida Arbovirus Surveillance

### Week 25: June 20-26, 2010

Arbovirus surveillance in Florida includes endemic 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). During the period June 20-26, 2010, the following arboviral activity was recorded in Florida:

**DENV activity:** Three locally-acquired cases of dengue were reported this week in Key West residents. In 2010, there have been nine locally-acquired cases associated with Key West (Monroe County), seven of which were in Key West residents.

**EEEV activity:** Nine EEEV-confirmed positive horses were reported in Clay, Collier, Jackson, Osceola, Hillsborough, Pasco, and Glades counties. Five sentinel chickens from Orange, Flagler, and Volusia counties tested positive for antibodies to EEEV, and one mosquito pool from Flagler County tested positive for EEEV. In 2010, positive samples from 17 equines, 41 sentinel chickens, 13 live wild birds, and three mosquito pools have been received from 25 of Florida's 67 counties.

**WNV activity:** Two sentinel chickens from Orange County tested positive for antibodies to WNV. In 2010, positive samples from 47 sentinel chickens have been received from five counties.

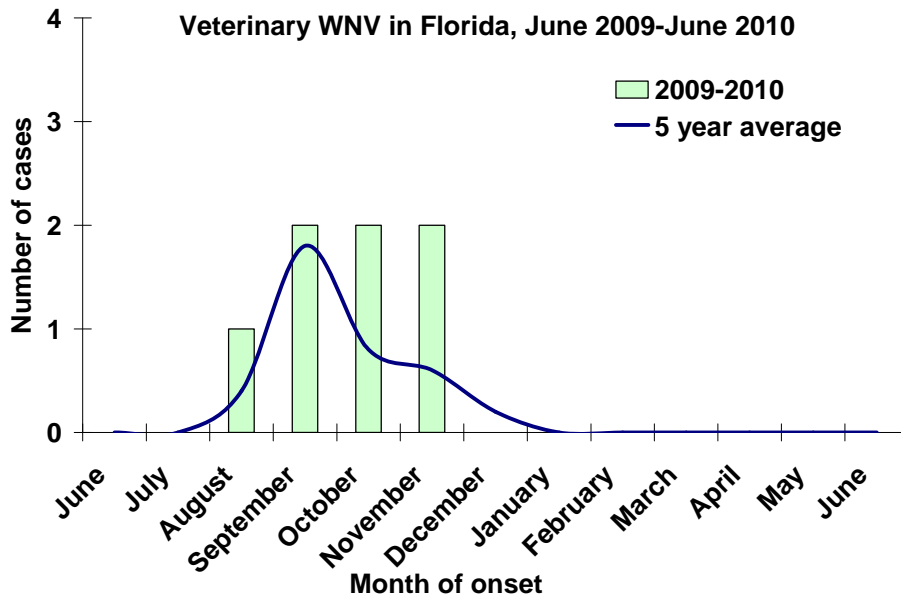
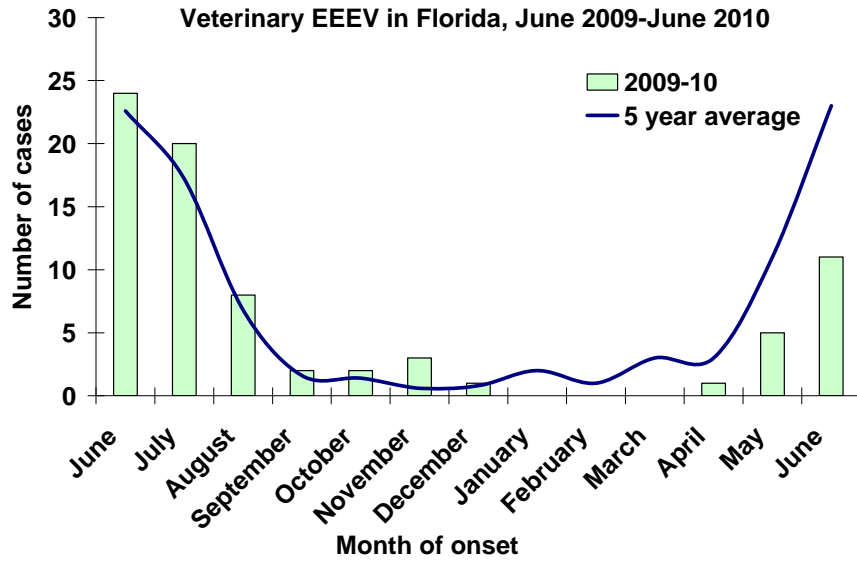
**HJV activity:** Four sentinel chickens from Orange County tested positive for antibodies to HJV. In 2010, positive samples from 14 sentinel chickens have been received from seven counties.

**Advisories/Alerts:** Monroe County is currently under a mosquito-borne disease alert. Clay, Hillsborough, and Osceola counties issued mosquito-borne illness advisories this week in response to EEEV positive horses. Walton and Volusia counties are also currently under mosquito-borne illness advisories.

### Veterinary Cases

Nine horses in Clay, Collier, Jackson, Osceola, Hillsborough, Pasco, and Glades counties tested positive for EEEV this week. In 2010, 17 EEEV-positive horses have been reported from 12 counties.

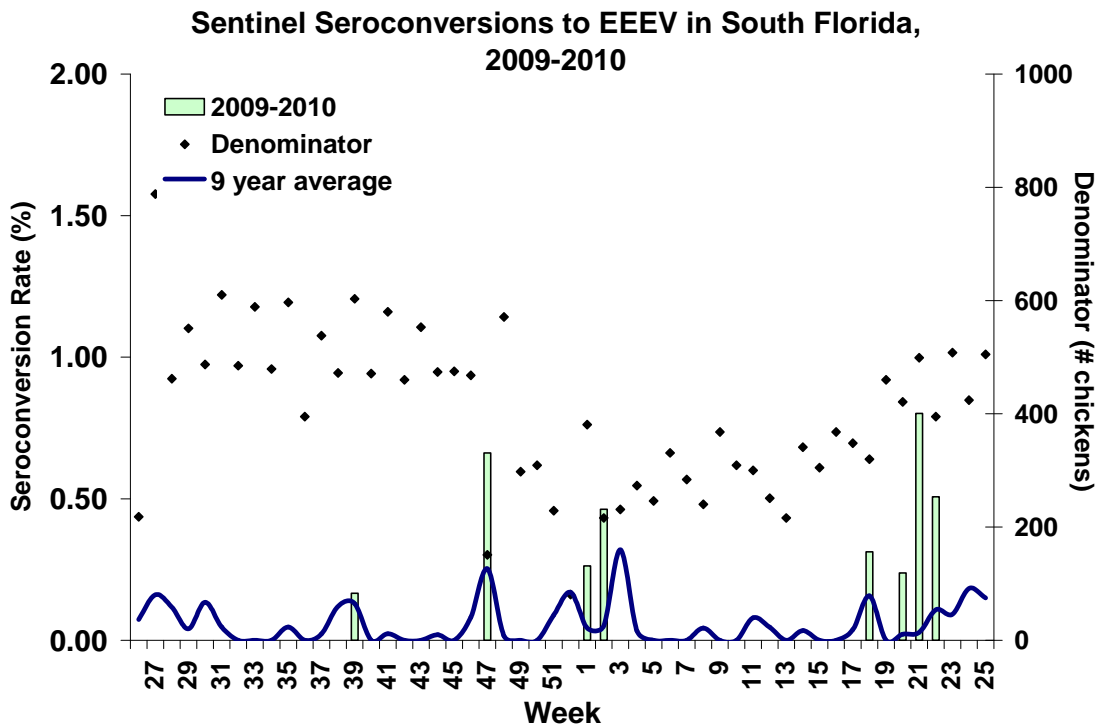
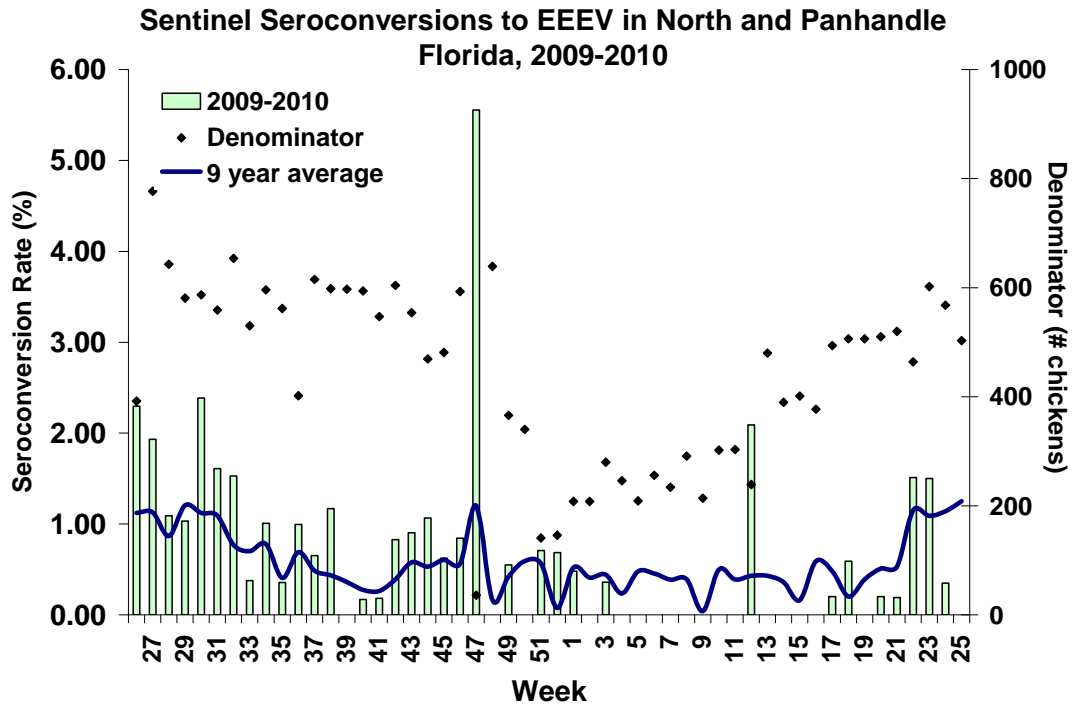
County	Onset Date	Species	Virus	Status	County YTD
Glades	06/20/2010	Equine	EEEV	Euthanized	1
Clay	06/16/2010	Equine	EEEV	Euthanized	2
	06/05/2010	Equine	EEEV	Euthanized	
Jackson	06/14/2010	Equine	EEEV	Euthanized	1
Osceola	06/13/2010	Equine	EEEV	Euthanized	4
	06/10/2010	Equine	EEEV	Alive	
Hillsborough	06/11/2010	Equine	EEEV	Euthanized	2
Pasco	06/11/2010	Equine	EEEV	Euthanized	1
Collier	06/09/2010	Equine	EEEV	Euthanized	1

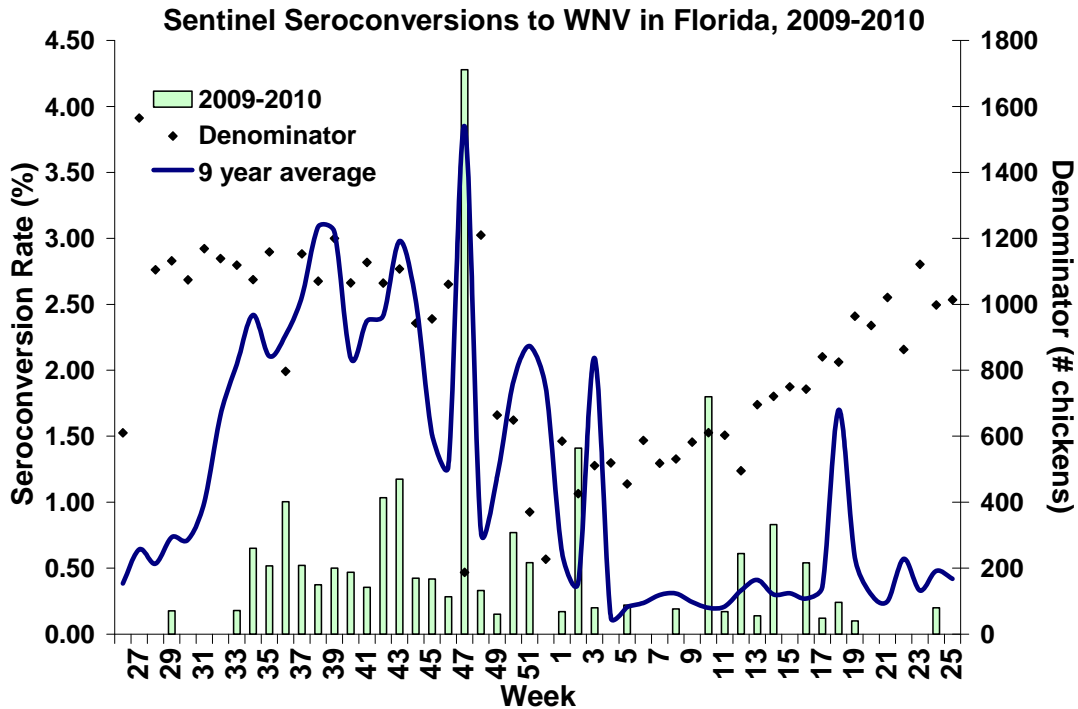


**Sentinel Chickens**

There were five seroconversions to EEEV in sentinel chickens from Orange, Flagler, and Volusia counties, and two to WNV and four to HJV in sentinels from Orange County. 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	06/14/2010		1.8	0.9		2 WN	7 EEE, 2 WNV, 4 HJV
	06/07,			2.8	3.7	3 EEE,	
	06/10/2010					4 HJV	
Volusia	06/14/2010			3.7		1 EEE	7 EE, 1 HJV
Flagler	06/07/2010			7.7		1 EEE	7 EEE





**Live Wild Birds**

No positive live wild birds were reported this week.

**Mosquito Pools**

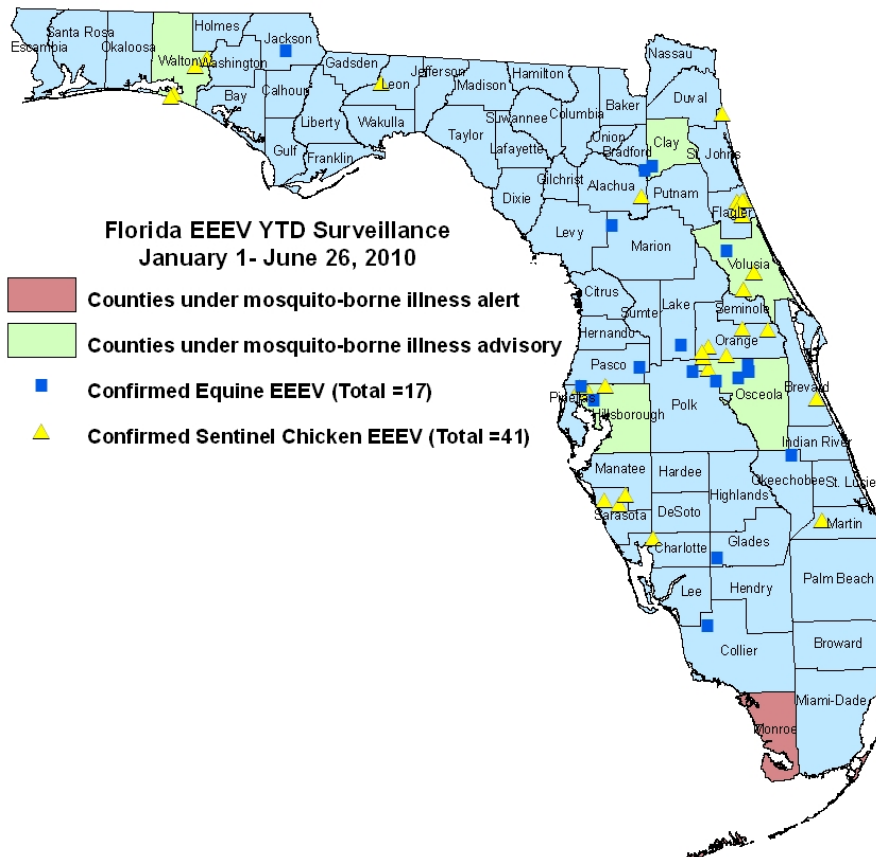
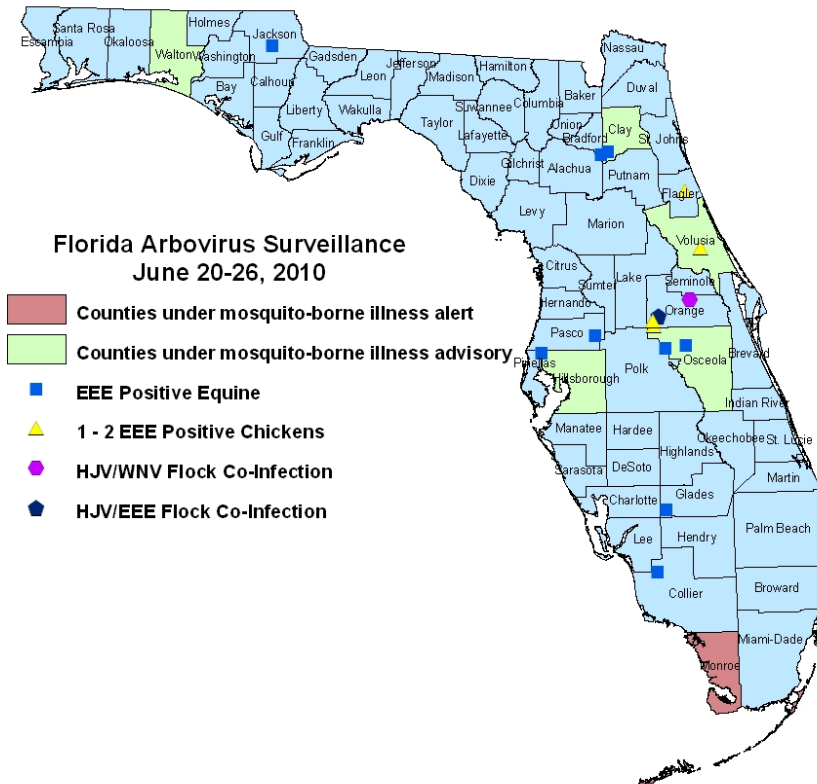
EEEV was isolated from one mosquito pool (*Culiseta melanura*) collected in Flagler County.

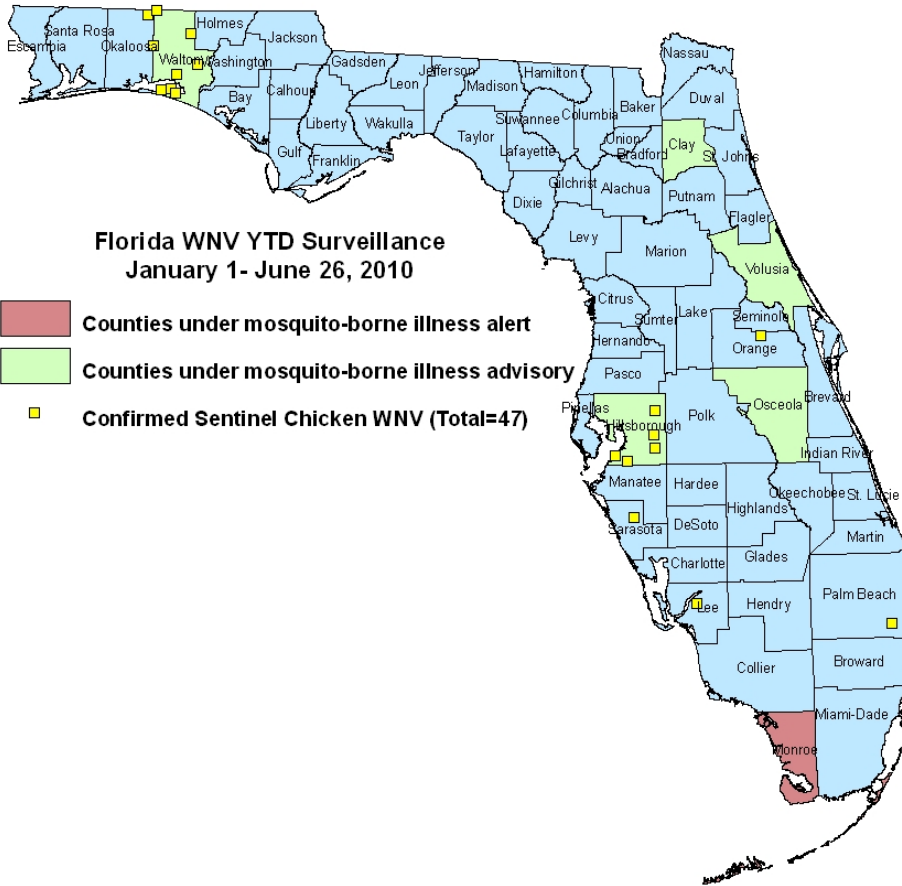
County	Collection Date	Result	Species	County YTD
Flagler	06/15/2010	EEEV	<i>Culiseta melanura</i>	3 EEE

**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, 9 reports representing 15 dead birds were received from eight counties. One was identified as a raptor; none were identified as crows or jays. In 2010, 154 reports representing a total of 449 dead birds (13 crows, 9 jays, 30 raptors, 397 others) have been received from 41 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





### YTD Arbovirus Activity by County

County	Arbovirus Activity
Brevard	EEE: 1 sentinel (6/2)
Citrus	EEE: 1 sentinel (6/7) HJV: 1 sentinel (5/17)
Clay	EEE: 2 horses (6/5, 6/16)
Collier	EEE: 1 horse (6/9)
Flagler	EEE : 7 sentinels (3/22, 4/26, 5/3, 6/7, 6/7) ; 3 mosquito pool ( <i>Culiseta melanura</i> 4/27, 5/11, 6/15)
Glades	EEE : 1 horse (6/20)
Hillsborough	WNV : 13 sentinels (1/12, 1/19, 2/22, 3/9, 3/22, 4/20, 5/11) EEE: 2 horses (5/29, 6/11); 2 sentinels (5/4, 5/18)
Jackson	EEE: 1 horse (6/14)
Lake	EEE: 1 horse (5/20)
Lee	WNV: 2 sentinels (3/30, 4/20)
Leon	DENV: 2 humans (acquired in Key West, May) EEE: 1 sentinel (6/1)
Marion	EEE: 1 horse (5/7)
Martin	EEE: 1 sentinel (5/28)
Monroe	DENV: 7 humans (1 April, 3 May, 3 June)
Okaloosa	EEE : 6 live wild birds (1 house sparrow 1/4, 5 blue jay 1/27, 4/19, 4/21, 4/26)
Okeechobee	EEE : 1 horse (6/14)
Orange	EEE : 7 sentinels (1/7, 5/3, 5/17, 6/7, 6/10, 6/14) HJV : 5 sentinels (5/17, 6/7)
Osceola	EEE: 3 horses (6/8, 6/10, 6/13), 1 donkey (5/15)
Palm Beach	WNV: 1 sentinel (3/15)
Pasco	EEE: 1 horse (6/11)
Pinellas	EEE: 2 sentinels (5/24)

	HJV: 1 sentinel (4/26)
<b>Polk</b>	EEE: 1 horse (4/28)
<b>Putnam</b>	EEE: 1 sentinel (6/4) HJV: 1 sentinel (5/14)
<b>St. Johns</b>	EEE: 1 sentinel (6/1) HJV: 2 sentinels (4/26, 5/3)
<b>Santa Rosa</b>	EEE: 8 live wild birds (8 blue jays 2/2, 3/22, 4/13, 4/19, 5/11, 5/18)
<b>Sarasota</b>	EEE: 3 sentinels (1/5, 1/11, 6/1) WNV : 1 sentinel (1/8)
<b>Volusia</b>	EEE : 1 horse (5/7) ; 7 sentinels (5/24, 6/1, 6/7, 6/14) HJV : 1 sentinel (5/17)
<b>Walton</b>	EEE : 6 sentinels (1/19, 3/22, 5/3) WNV : 28 sentinels (1/14, 2/4, 3/8, 3/12, 3/22, 4/7, 4/8, 4/23, 4/30, 5/5, 5/20) HJV : 3 sentinels (3/22, 5/17)

### Acknowledgements and Data Sources

Contributors: Elizabeth Radke, MPH, Danielle Stanek, DVM, and Carina Blackmore, DVM, PhD.

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.