



Florida Arbovirus Surveillance Week 8: February 18-24, 2024

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), Zika virus (ZIKV) and California encephalitis group viruses (CEV). Malaria, a parasitic mosquito-borne disease is also included. During the period of February 18-24, 2024, the following arboviral activity was recorded in Florida.

This report contains information for 2024 only. Please visit the following website for up-to-date 2023 numbers as final data cleaning occurs: [FloridaHealth.gov/diseases-and-conditions/mosquito-borne-diseases/surveillance.html](https://www.floridahealth.gov/diseases-and-conditions/mosquito-borne-diseases/surveillance.html).

WNV activity: No human cases of WNV infection were reported this week. No horses with WNV infection were reported this week. No sentinel chickens tested positive for antibodies to WNV this week. No mosquito pools tested positive for WNV this week. In 2024, positive samples from five sentinel chickens have been reported from two 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 2024, no cases of SLEV have been 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 2024, positive samples from three sentinel chickens, one horse, and one emu have been reported from three counties.

International Travel-Associated Dengue: Seven cases of dengue were reported this week in persons that had international travel. In 2024, 46 travel-associated dengue cases have been reported.

Dengue Cases Acquired in Florida: Two cases of locally acquired dengue were reported this week. In 2024, four cases of locally acquired dengue have been reported from two counties.

International Travel-Associated Chikungunya Fever Cases: No cases of chikungunya fever were reported this week in persons that had international travel. In 2024, no cases of travel-associated chikungunya fever have been reported.

Chikungunya Fever Cases Acquired in Florida: No cases of locally acquired chikungunya fever were reported this week. In 2024, no cases of locally acquired chikungunya fever have been reported.

International Travel-Associated Zika Fever Cases: No cases of Zika fever were reported this week in persons that had international travel. In 2024, no travel-associated Zika fever cases have been reported.

Zika Fever Cases Acquired in Florida: No cases of locally acquired Zika fever were reported this week. In 2024, no cases of locally acquired Zika fever have been reported.

Advisories/Alerts: Palm Beach and Pasco counties are currently under a mosquito-borne illness advisory. Broward, Escambia, Hardee, and Miami-Dade counties are currently under a mosquito-borne illness alert. No other counties are currently under a mosquito-borne illness advisory or alert.

There are currently multiple travel health notices from the Centers for Disease Control and Prevention related to mosquito-borne diseases.

Dengue			Western Equine Encephalitis	Oropouche	Chikungunya	Yellow Fever
Africa and the Middle East	Americas	Asia and the Pacific Islands	South America	South America	Asia	Africa
Burkina Faso	Brazil	Bangladesh	Argentina	Brazil	Timor-Leste	Nigeria
Cape Verde	Colombia	Cambodia				
Côte d'Ivoire	Costa Rica	Malaysia				
Ethiopia	French Guiana	Sri Lanka				
Mali	Guadeloupe					
Mauritius	Guatemala					
Senegal	Haiti					
Sudan	Jamaica					
	Martinique					
	Mexico					
	Nicaragua					
	Panama					
	Paraguay					
	Saint Barthélemy					
	Saint Martin					
	Turks and Caicos					

Level 1 Travel Health Notice, [Level 2 Travel Health Alert: wwwnc.cdc.gov/travel/notices](https://wwwnc.cdc.gov/travel/notices).

For a map of arboviral disease activity in the United States visit: <https://www.cdc.gov/fight-the-bite/at-risk/index.html>.

2024 Human Case Summary

2024 International Travel-Associated Dengue Cases: Forty-six cases with onset in 2024 have been reported in individuals with travel history to a dengue-endemic area in the two weeks prior to onset. Counties reporting cases were: Brevard, Broward (2), Collier, Duval, Escambia, Lee (3), Miami-Dade (33), Orange, Pasco, Polk, and Volusia. Two cases were reported in non-Florida residents. One case met the criteria for severe dengue. In 2024, 35 cases of dengue reported in Florida have been serotyped by PCR. Please see the table below for a breakdown of cases by country of origin and serotype.

Country of Exposure	DENV-1	DENV-2	DENV-3	DENV-4	DENV-2/DENV-3	Unknown	Total
Barbados						1	1
Brazil	2						2
Colombia			2				2
Costa Rica			1				1
Cuba			16	2	1	3	22
Dominican Republic			4			2	6
Jamaica		1					1
Mexico	2	1	2				5
Paraguay		2					2
Puerto Rico		1					1
Saint Barthélemy		2				1	3
Total	4	7	25	2	1	7	46

2024 Dengue Cases Acquired in Florida: In 2024, four cases of locally acquired dengue have been reported in Miami-Dade (3) and Pasco counties with onset in January (3) and February. Four cases have been serotyped by PCR. Please see the table below for a breakdown of cases by county and serotype.

County of Exposure	DENV-3	Total
Miami-Dade	3	3
Pasco	1	1
Total	4	4

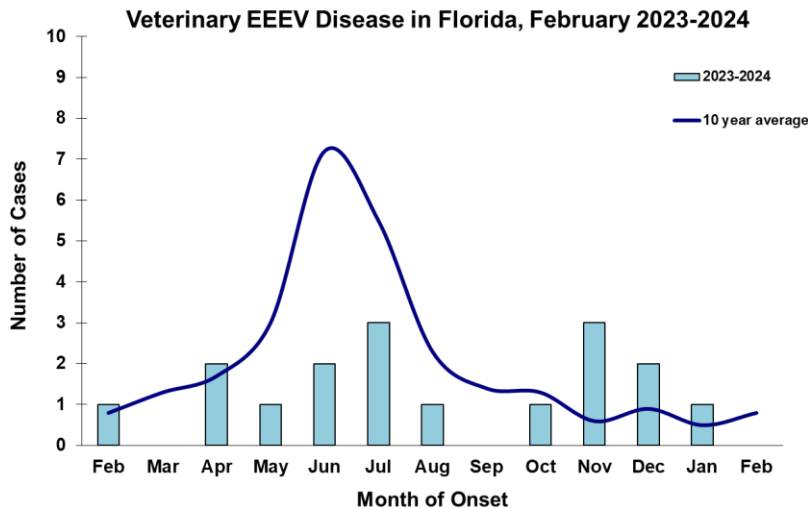
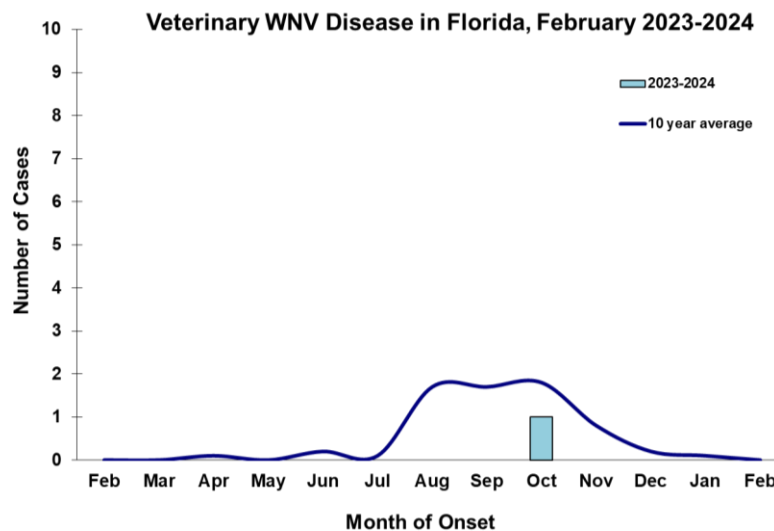
2024 International Travel-Associated Malaria Cases: Twelve cases of malaria with onset in 2024 have been reported in individuals with a travel history to a malaria-endemic area. Counties reporting cases were: Broward (2), Collier, Lee, Miami-Dade (2), Orange (3), Osceola, Palm Beach, and Pinellas. One case was reported in a non-Florida resident. Please see the table below for a breakdown of cases by country of origin and *Plasmodium* species.

Country of Exposure	<i>Plasmodium falciparum</i>	<i>Plasmodium vivax</i>	Total
Angola	1		1
Cameroon	1		1
Gabon	1		1
Ghana	1		1
Mexico		1	1
Nigeria	3		3
Central/South America			
Uganda/Rwanda	1	3	4
Total	8	4	12

Veterinary Cases**

**Veterinary cases are reported by date of onset. Only mammalian veterinary cases are included in the graphs.

No veterinary cases were reported this week.



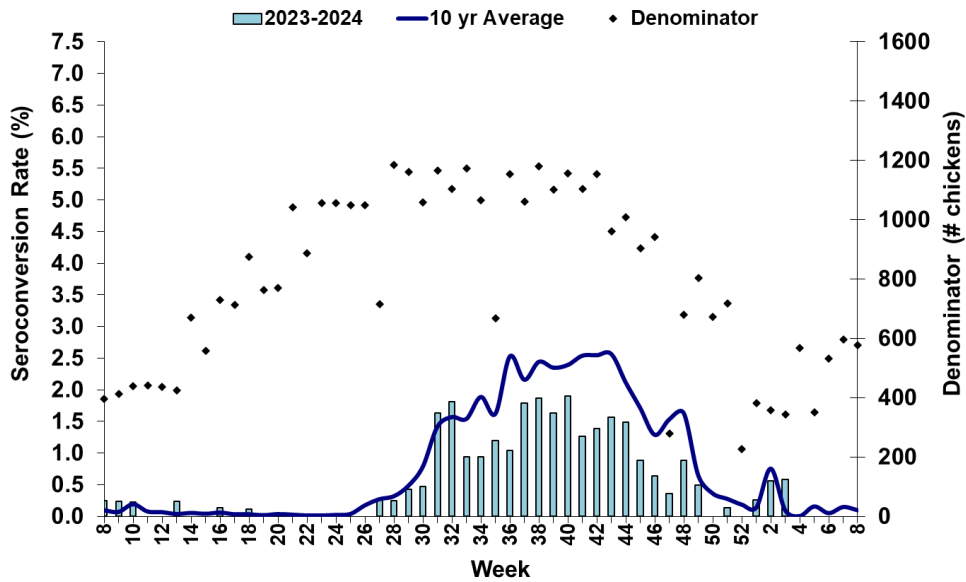
Sentinel Chickens

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.

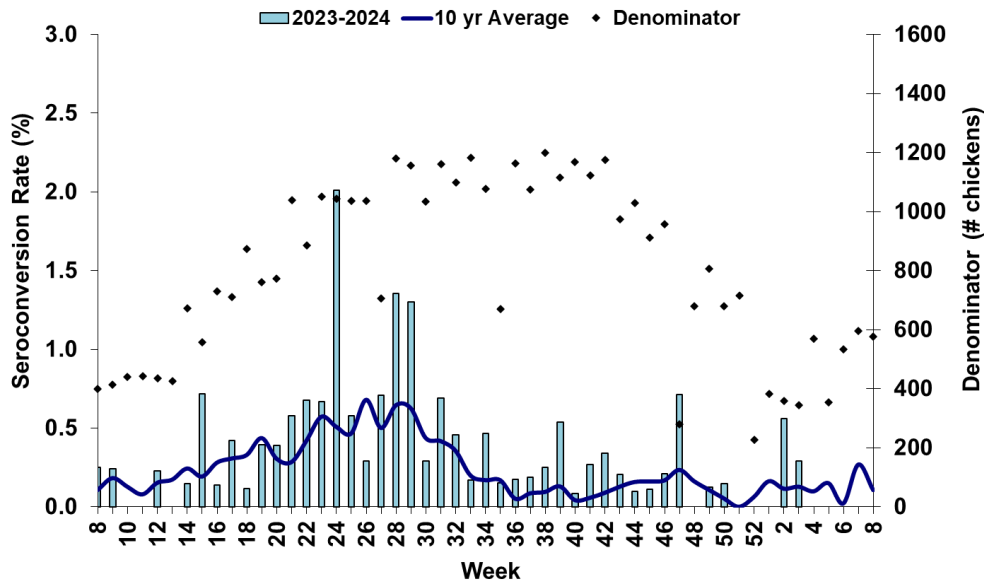
No sentinel chickens tested positive for antibodies to SLEV, WNV, EEEV or HJV this week.

County	Collection Date	Seroconversion Rates (%)						County Totals	
		Flavi	SLEV	WNV	Alpha	EEEV	HJV	Collection Week	YTD

Sentinel Seroconversions to WNV in Florida, 2023–2024



Sentinel Seroconversions to EEEV in Florida, 2023–2024



Mosquito Pools

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

County	Collection Date	Result	Species	County YTD

Dead Birds

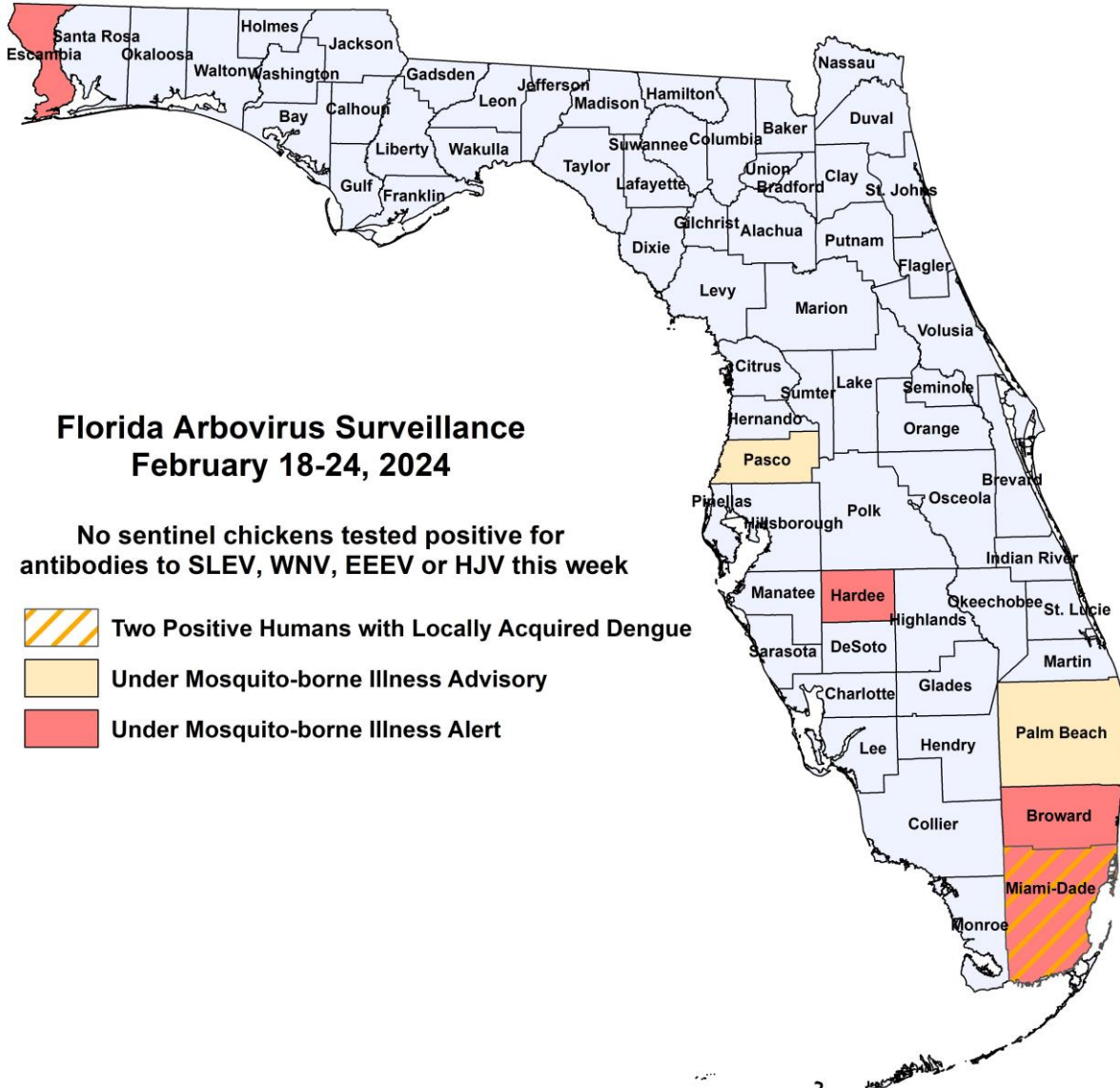
The Fish and Wildlife Conservation Commission (FWC) collects reports of dead birds, which can be an indication of arbovirus circulation in an area. This week, 35 reports representing a total of 70 dead birds, including two raptors, were received from 13 counties.

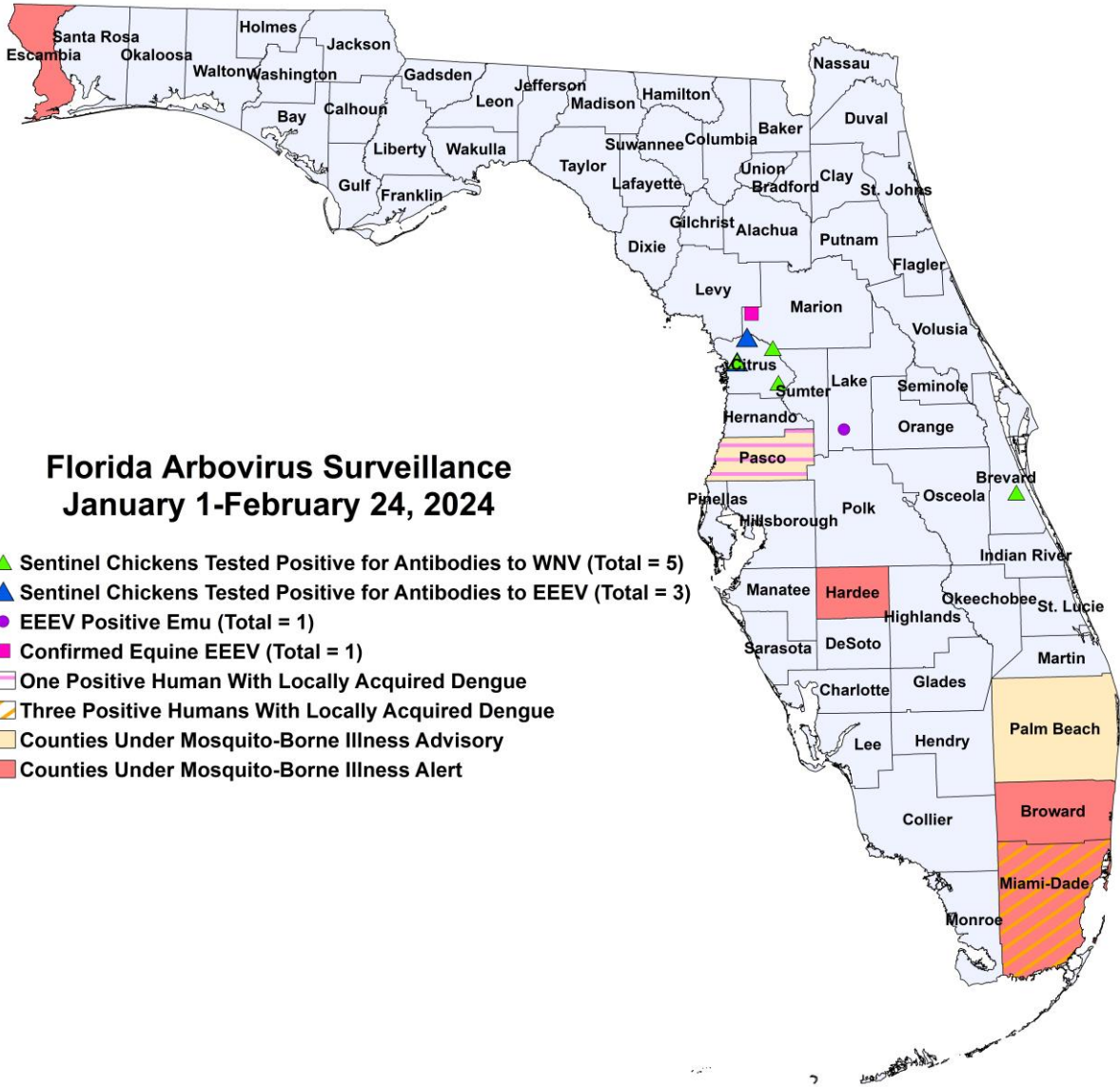
In 2024, 227 reports representing a total of 514 dead birds (13 crows, 0 jays, 25 raptors, 1 dove) were received from 41 of Florida's 67 counties.

2024

County	Total Dead Birds	Crows	Jays	Raptors	Doves
Brevard	39	0	0	0	0
Citrus	1	0	0	0	0
Duval	2	0	0	0	0
Lake	1	0	0	1	0
Lee	2	0	0	0	0
Okaloosa	2	0	0	0	0
Osceola	2	0	0	0	0
Palm Beach	7	0	0	0	0
Pinellas	7	0	0	0	0
Polk	1	0	0	0	0
Sarasota	1	0	0	0	0
St. Johns	4	0	0	1	0
Volusia	1	0	0	0	0

Maps





Florida Arbovirus Surveillance January 1-February 24, 2024

- ▲ Sentinel Chickens Tested Positive for Antibodies to WNV (Total = 5)
- ▲ Sentinel Chickens Tested Positive for Antibodies to EEEV (Total = 3)
- EEEV Positive Emu (Total = 1)
- Confirmed Equine EEEV (Total = 1)
- ▭ One Positive Human With Locally Acquired Dengue
- ▨ Three Positive Humans With Locally Acquired Dengue
- ▭ Counties Under Mosquito-Borne Illness Advisory
- ▭ Counties Under Mosquito-Borne Illness Alert

2024 Mosquito-Borne Disease Activity by County

County	Humans	Equines	Sentinel Chickens	Other
Brevard			1 WNV (1/3)	
Citrus			4 WNV (1/9, 1/15) 3 EEEV (1/9, 1/15)	
Lake				1 EEEV emu (2/6)
Marion		1 EEEV (1/31)		
Miami-Dade	3 dengue (January (2), February)			
Pasco	1 dengue (January)			

Acknowledgements and Data Sources

Contributors: Andrea Morrison, PhD, MSPH, Rebecca Zimler, PhD, MPH, and Danielle Stanek, DVM, DOH Bureau of Epidemiology; Lea Heberlein, DrPH; Alexis LaCrue, PhD, MS; Maribel Castaneda, and Amanda Davis, BS; DOH Bureau of Public Health Laboratories; Carina Blackmore, DVM, PhD, DOH Division of Disease Control and Health Protection.

For more surveillance information, please see the DOH website at: 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: 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: 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.