



Florida Arbovirus Surveillance Week 42: October 13-19, 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 October 13-19, 2024, the following arboviral activity was recorded in Florida.

WNV activity: Two human cases of WNV infection were reported this week in Bay and Martin counties. No horses with WNV infection were reported this week. Seventy-three sentinel chickens tested positive for antibodies to WNV this week in Alachua, Brevard, Citrus, Duval, Hillsborough, Hernando, Lee, Manatee, Martin, Nassau, Orange, Palm Beach, Pasco, Pinellas, Polk, Seminole, St. Johns, Sumter, Volusia, and Walton. Two mosquito pools tested positive for WNV this week in Walton County. In 2024, positive samples from seven humans, six asymptomatic blood donors, six horses, one goose, three mosquito pools, and 534 sentinel chickens have been reported from 28 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, 29 sentinel chickens have been reported from 13 counties.

EEEV activity: No human cases of EEEV infection were reported this week. No horses with EEEV infection were reported this week. Four sentinel chickens tested positive for antibodies to EEEV this week in Nassau, Pasco, and Walton counties. In 2024, positive samples from 55 sentinel chickens, 21 horses, two emus, one emu flock, and one deer have been reported from 26 counties.

International Travel-Associated Dengue: Fifty-three cases of dengue were reported this week in persons that had international travel. In 2024, 648 travel-associated dengue cases have been reported.

Dengue Cases Acquired in Florida: Three cases of locally acquired dengue were reported this week. In 2024, 50 cases of locally acquired dengue have been reported from eight counties.

International Travel-Associated Chikungunya Fever Cases: No cases of chikungunya fever were reported this week in persons that had international travel. In 2024, nine 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 Oropouche Fever cases: One case of Oropouche fever was reported this week in a person that had international travel. In 2024, 87 travel-associated Oropouche fever cases 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: Alachua, Broward, Citrus, Holmes, Madison, Manatee, Martin, Nassau, Orange, Pinellas, Putnam, Sarasota, Sumter, and Volusia counties are currently under a mosquito-borne illness advisory. Bay, Duval, Hillsborough, Marion, Miami-Dade, Monroe, Palm Beach, Pasco, and Walton 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			Oropouche	Yellow Fever	Zika
Africa and the Middle East	Americas	Asia and the Pacific Islands	Americas	Africa	Asia
Afghanistan	Colombia	French Polynesia	Bolivia	Nigeria	India
Iran	Costa Rica	India	Brazil		
Burkina Faso	Cuba		Colombia		
Cape Verde	Dominican Republic		Cuba		
Central African Republic	Ecuador		Dominican Republic		
Ethiopia	El Salvador		Guyana		
Ghana	Grenada		Peru		
Mali	Guatemala				
Pakistan	Guyana				
Sudan	Honduras				
Togo	Mexico				
	Panama				
	Saint Lucia				
	Trinidad and Tobago				

Level 1 Travel Health Notice, Level 2 Travel Health Alert: 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

West Nile Virus Illnesses Acquired in Florida: In 2024, seven human cases of WNV illness acquired in Florida have been reported in Bay (August, September), Duval (July, September), Marion (July), Martin (September), and Walton (July) counties. Six asymptomatic positive blood donors were reported from Duval (August), Manatee (August), Marion (July), Orange (September), and Walton (July, August) counties.

2024 International Travel-Associated Chikungunya Cases: Nine cases with onset in 2024 have been reported in individuals with travel history to a chikungunya-endemic area in the two weeks prior to onset. Counties reporting cases were: Broward (2), Manatee, Miami-Dade, Orange (2), Pinellas, Hillsborough, and Pasco. Countries of origin were: Brazil (5) and India (4). Two cases were reported in non-Florida residents.

2024 International Travel-Associated Oropouche Cases: Eighty-seven cases with onset in 2024 have been reported in individuals with travel history to an Oropouche-endemic area in the two weeks prior to onset. Counties reporting cases were: Broward (3), Collier, Duval, Hillsborough (11), Lee (5), Marion, Miami-Dade (51), Orange (3), Palm Beach (2), Pasco (3), Polk (4), Sarasota, and St. Lucie. Country of origin was Cuba (87).

2024 International Travel-Associated Dengue Cases: Six hundred forty-eight 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: Alachua (2), Brevard (6), Broward (77), Charlotte (2), Collier (9), Columbia, Duval (7), Escambia (3), Flagler, Hendry, Hernando, Hillsborough (46), Indian River, Lake (4), Lee (19), Levy (2), Manatee, Marion (5), Martin (2), Miami-Dade (307), Monroe (4), Okaloosa, Okeechobee (3), Orange (37), Osceola (17), Palm Beach (38), Pasco (7), Pinellas (6), Polk (13), Santa Rosa (2), Sarasota (4), Seminole (5), St. Lucie (10), and Volusia (4). Fifty cases were reported in non-Florida residents. Six cases met the criteria for severe dengue (dengue shock syndrome [DSS] or dengue hemorrhagic fever [DHF]). Those at greater risk for DSS and DHF include persons with previous dengue infection, pregnant women, infants, the elderly, and those with co-morbidities. However, severe illness can also occur in those without any of these risk factors. In 2024, 532 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
Argentina	3	4				7	14
Barbados	1	1				2	4
Barbados/Trinidad and Tobago		1					1
Brazil	36	12	1			12	61
Brazil/Paraguay		1					1
Colombia	5	10	7	1		7	30
Colombia/Panama						1	1
Costa Rica			5	2			7
Cuba		1	156	100	1	38	296
Dominican Republic			12			4	16
El Salvador	2		10			1	13
El Salvador/Honduras	1						1
Grenada		1					1
Guatemala			14			4	18
Guyana			3				3
Honduras			32		1	7	40
India	2	1				1	4
Indonesia		1				2	3
Jamaica		1				1	2
Maldives		1					1
Mexico	3	2	16	1		2	24
Netherlands Antilles		1					1
Nicaragua	1		1	1		4	7
Panama			1				1
Paraguay		3					3
Peru	2	2	1				5
Philippines				1		2	3
Puerto Rico	7	8	14			6	35
Puerto Rico/US Virgin Islands			1				1
Saint Barthélemy		2				1	3
Saint Lucia			1				1
Surinam		1					1
Thailand/Vietnam		1					1
Trinidad and Tobago		2	20			8	30
US Virgin Islands		4				2	6
Venezuela			5			4	9
Total	63	61	300	106	2	116	648

2024 Dengue Cases Acquired in Florida: In 2024, 50 cases of locally acquired dengue have been reported in Broward (2), Hillsborough (3), Manatee, Miami-Dade (30), Monroe (3), Orange (2), Palm Beach (3), and Pasco (6) counties with onset in January (3), February, March (2), April, June (11), July (8), August (14), and September (10). Three cases were reported in non-Florida residents. Forty-one cases have been serotyped by PCR. Please see the table below for a breakdown of cases by county and serotype.

County of Exposure	DENV-1	DENV-3	Unknown	Total
Broward		1	1	2
Hillsborough	2	1		3
Manatee		1		1
Miami-Dade		27	3	30
Monroe	2		1	3
Orange		2		2
Palm Beach		1	2	3
Pasco		4	2	6
Total	4	37	9	50

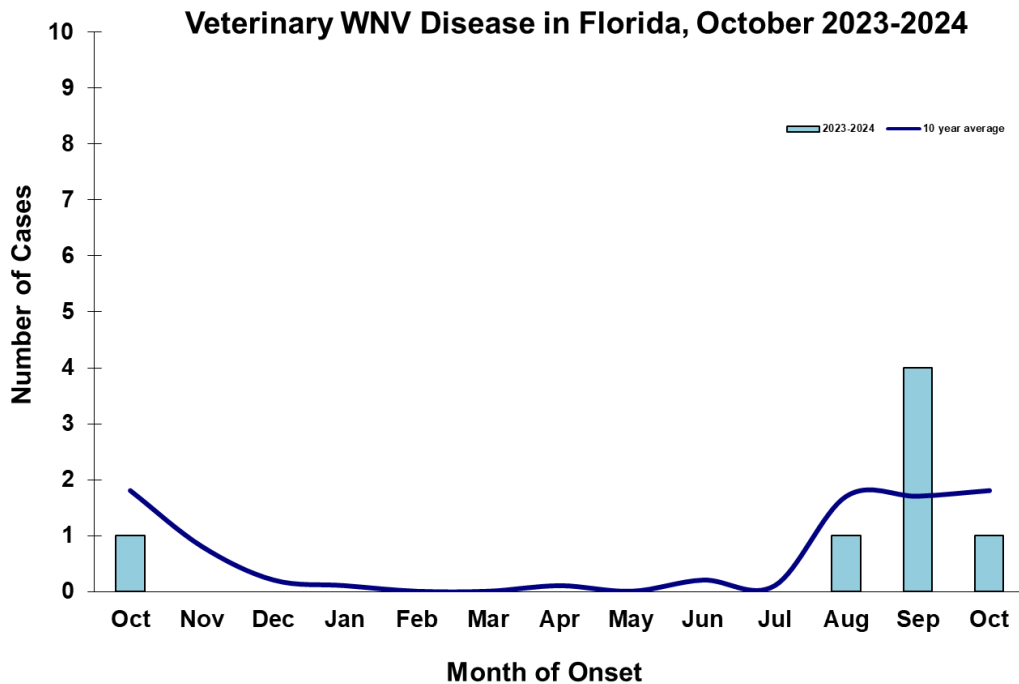
2024 International Travel-Associated Malaria Cases: Sixty cases of malaria with onset in 2024 have been reported in individuals with a travel history to a malaria-endemic area. Counties reporting cases were: Alachua (2), Brevard (2), Broward (7), Clay, Collier, Duval (6), Escambia, Hillsborough (6), Indian River, Lee (2), Leon (2), Marion, Miami-Dade (3), Monroe, Okaloosa, Orange (8), Osceola (2), Palm Beach (2), Pasco (2), Pinellas

(5), Polk, Sarasota, Seminole, and Volusia. Nine cases were reported in non-Florida residents. Please see the table below for a breakdown of cases by country of origin and *Plasmodium* species.

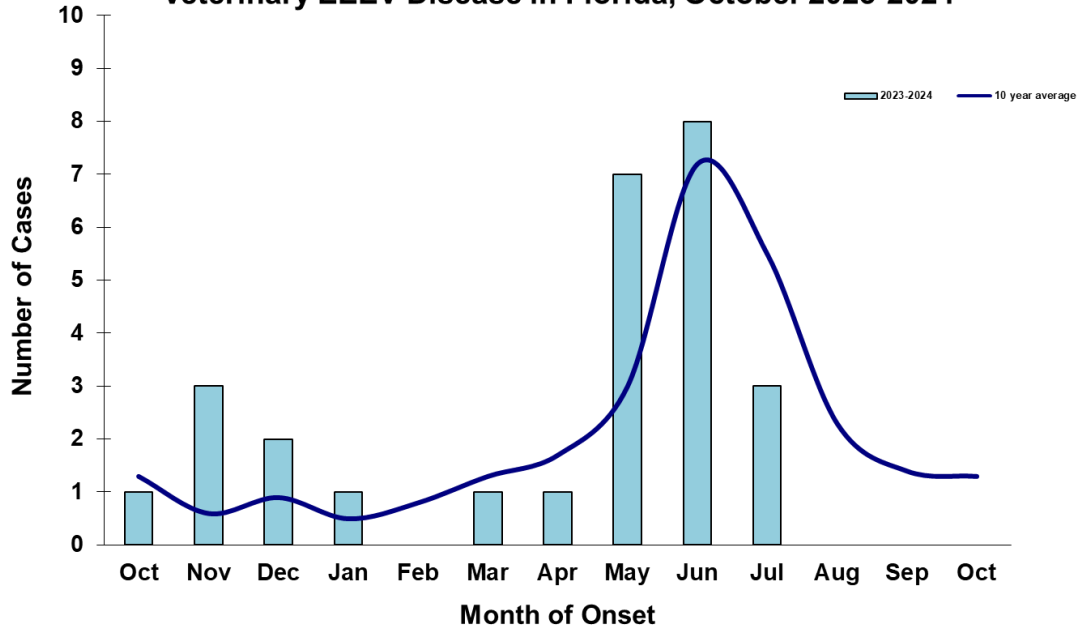
Country of Exposure	<i>Plasmodium falciparum</i>	<i>Plasmodium ovale</i>	<i>Plasmodium vivax</i>	Total
Africa	1			1
Angola	1			1
Benin	1			1
Cameroon	2			2
Central/South America			9	9
Chad	2			2
Côte D'Ivoire	2			2
Ecuador			1	1
Ethiopia	1		2	3
Gabon	1		1	2
Ghana	3			3
Honduras			1	1
India			1	1
Kenya	1			1
Malawi	2			2
Mexico			2	2
Nicaragua			1	1
Nigeria	16			16
Republic of the Congo		1		1
Sierra Leone	2			2
Solomon Islands			1	1
Sudan	1			1
Tanzania	2			2
Togo	1			1
Uganda/Rwanda	1			1
Total	40	1	19	60

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.



Veterinary EEEV Disease in Florida, October 2023-2024



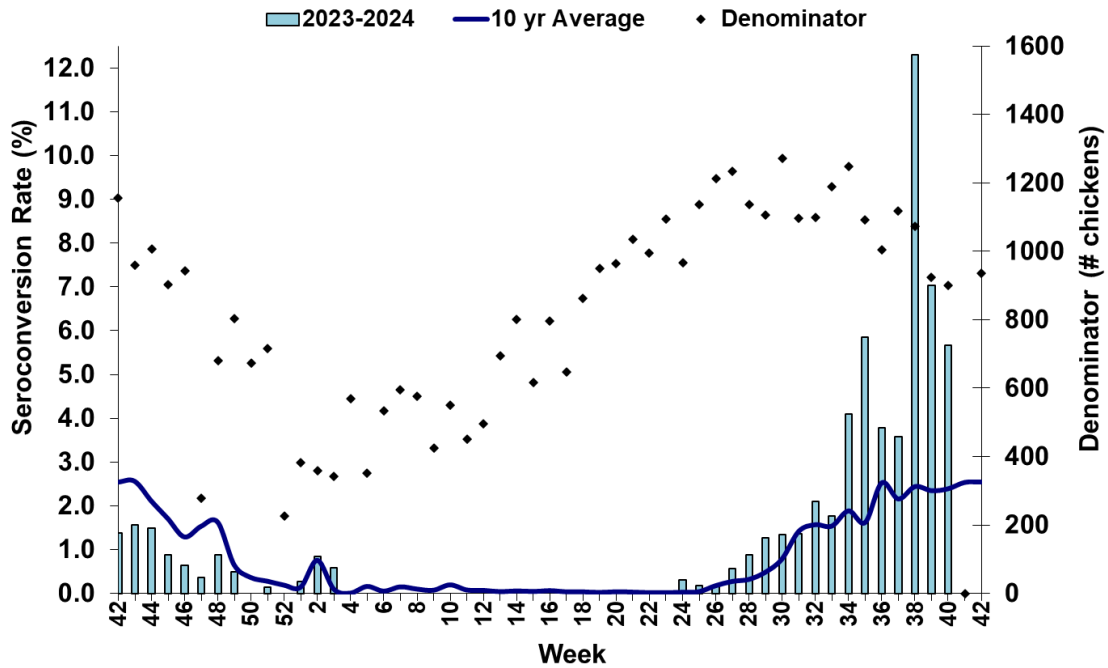
Sentinel Chickens

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.

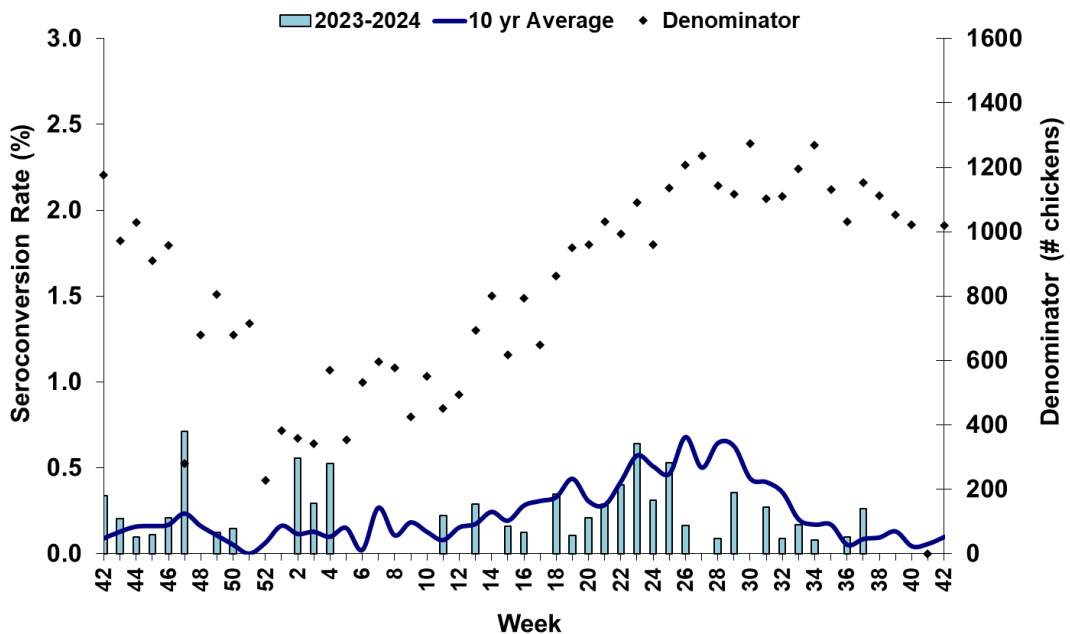
County	Collection Date	Seroconversion Rates (%)						County Totals	
		Flavi	SLEV	WNV	Alpha	EEEV	HJV	Collection Week	YTD
Alachua	9/26/2024	8.00		8.00				2 WNV	18 WNV, 5 SLEV
Brevard	9/5/2024	1.54						1 WNV	20 WNV, 2 SLEV
	9/27/2024	1.82		1.82				1 WNV	
Citrus	9/9/2024	1.52		1.52				1 WNV	32 WNV, 6 EEEV, 1 Alphavirus, 1 SLEV
	9/30/2024	15.25		15.25				9 WNV	
Duval	9/23/2024	4.35		4.35				1 WNV	16 WNV
	9/30/2024	10.53		10.53				2 WNV	
Hernando	9/30/2024	11.54		11.54				3 WNV	12 WNV
Hillsborough	9/9/2024	8.70		8.70				1 WNV	1 EEEV, 20 WNV
	10/2/2024	21.05		21.05				4 WNV	
Lee	9/30-10/1/2024	1.87		1.87				2 WNV	1 SLEV, 5 WNV
Manatee	10/1/2024	3.92		3.92				2 WNV	12 WNV
Martin	9/26/2024	2.38		2.38				1 WNV	1 WNV
Nassau	9/7/2024	3.57		3.57				1 WNV	6 EEEV, 5 Flavivirus, 34 WNV, 2 SLEV
	9/12/2024				5.56	5.56		2 EEEV	
	9/28/2024	12.50		12.50				2 WNV	
Orange	9/30/2024	3.16		3.16				3 WNV	9 EEEV, 42 WNV, 2 SLEV
Palm Beach	9/30/2024	3.23		3.23				1 WNV	5 WNV
Pasco	9/3/2024				1.85	1.85		1 EEEV	2 EEEV, 5 SLEV, 40 WNV
	9/30/2024	16.00		16.00				4 WNV	
Pinellas	9/9/2024	2.70		2.70				1 WNV	2 EEEV, 41 WNV, 1 SLEV
	9/30/2024	21.62		21.62				8 WNV	
Polk	9/30/2024	8.33		8.33				3 WNV	1 EEEV, 21 WNV, 1 SLEV
Seminole	9/30/2024	5.13		5.13				2 WNV	3 WNV
St. Johns	9/9/2024	2.22		2.22				1 WNV	2 EEEV, 6 WNV, 1 SLEV

Sumter	9/9/2024	4.17	4.17		1 WNV	18 WNV
	9/30/2024	11.76	11.76		2 WNV	
Volusia	9/9/2024	7.84	7.84		4 WNV	2 EEEV, 41 WNV
	9/30/2024	2.38	2.38		1 WNV	
Walton	7/9/2024			2.38	2.38	1 EEE
	9/3/2024	3.03	3.03			1 WNV
	9/9/2024	1.35	1.35			1 WNV
	9/24/2024	2.86	2.86			2 WNV
	9/30/2024	8.77	8.77			5 WNV

Sentinel Seroconversions to WNV in Florida, 2023–2024



Sentinel Seroconversions to EEEV in Florida, 2023–2024



Mosquito Pools

Two mosquito pools tested positive for WNV this week in Walton County.

County	Collection Date	Result	Species	County YTD
Walton	8/27/2024	1 WNV	<i>Cx. quinquefasciatus</i>	2 WNV
	9/10/2024	1 WNV	Mixed <i>Culex</i> spp.	

Dead Birds

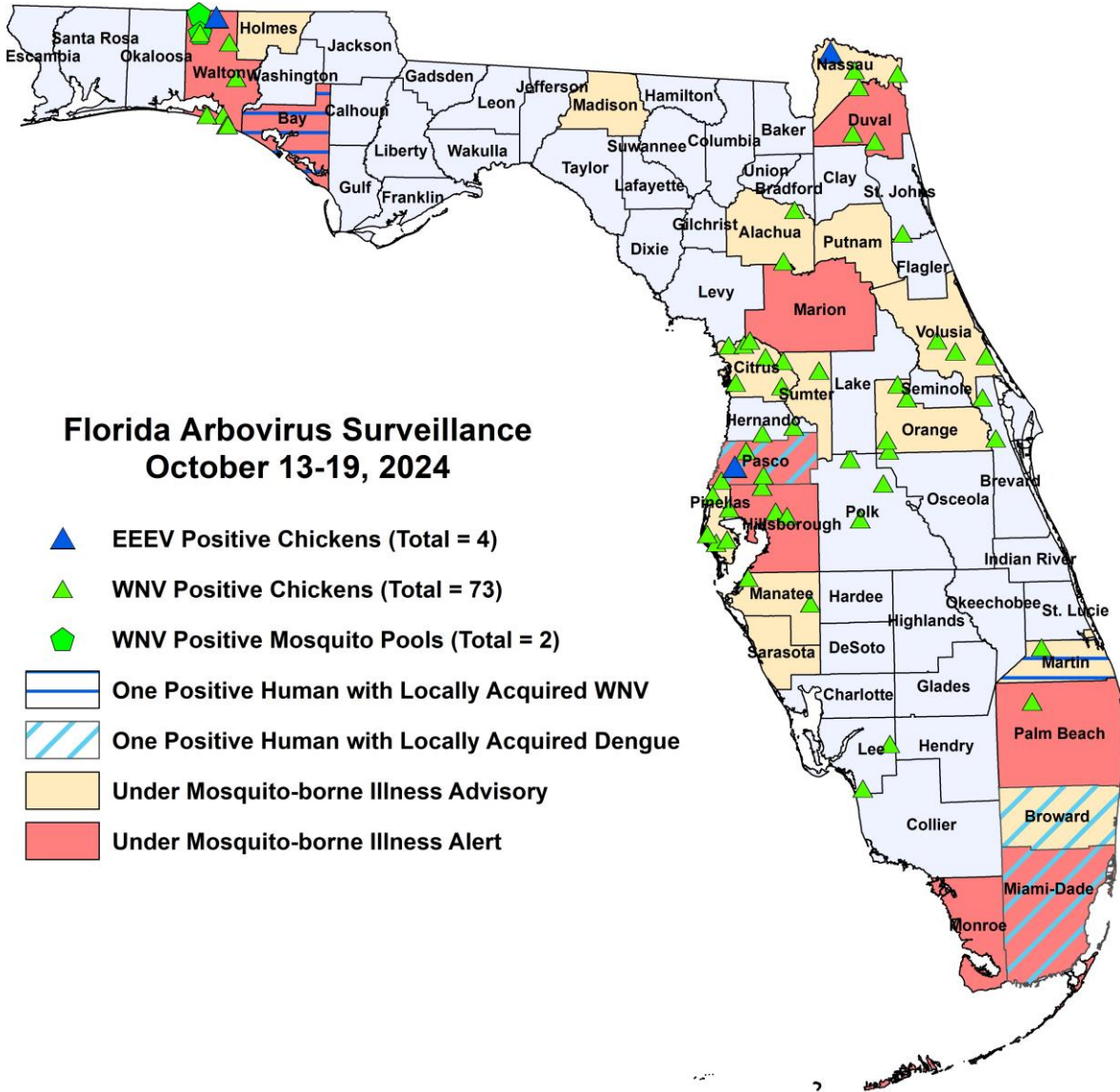
The Fish and Wildlife Conservation Commission (FWC) collects reports of dead birds, which can be an indication of arbovirus circulation in an area. This week, 16 reports representing a total of 25 dead birds, including two crows and three raptors, were received from 15 counties.

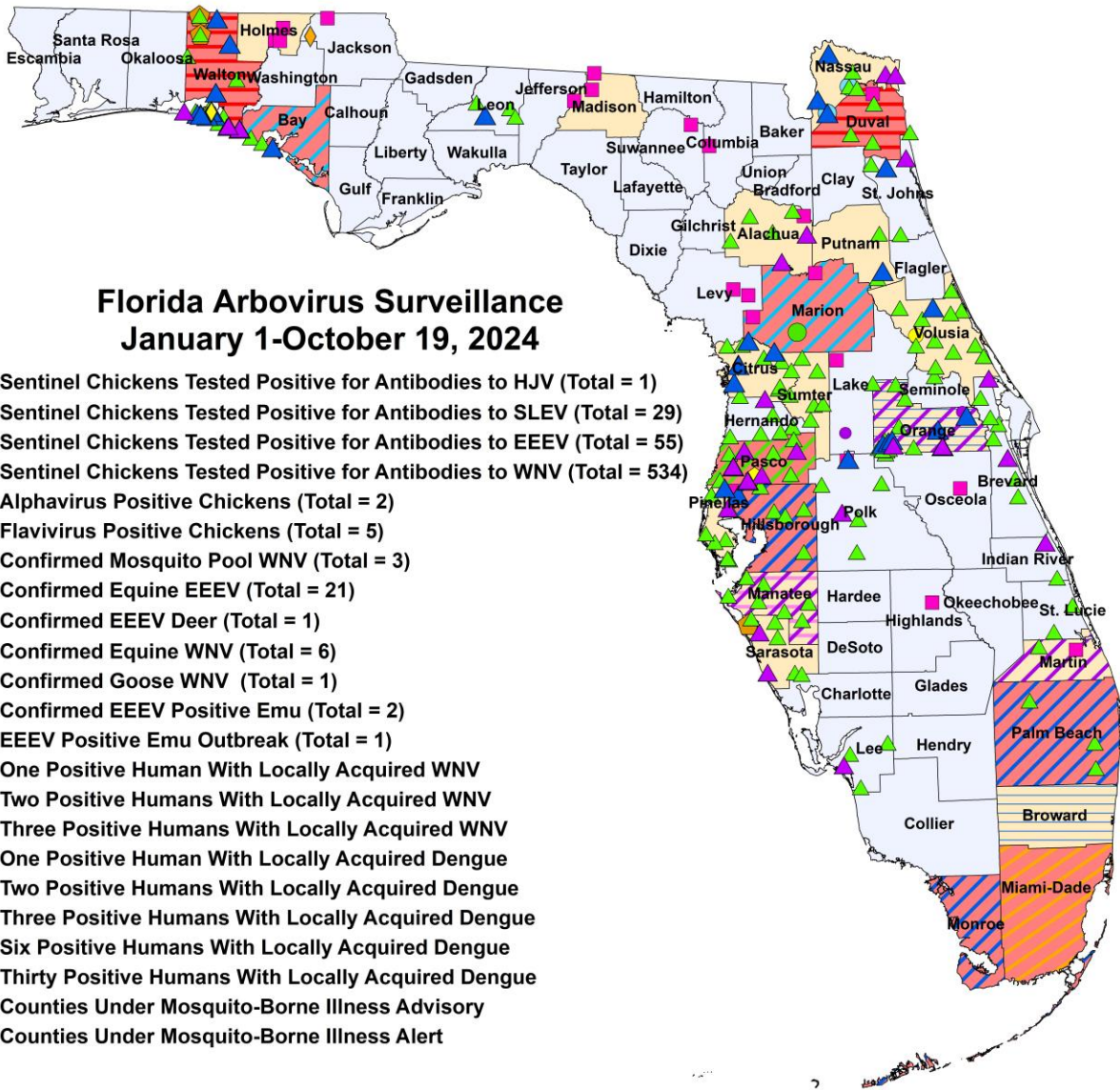
In 2024, 877 reports representing a total of 1926 dead birds (64 crows, 21 jays, 145 raptors, 90 doves) were received from 50 of Florida's 67 counties.

2024

County	Total Dead Birds	Crows	Jays	Raptors	Doves
Alachua	1	0	0	0	0
Bay	1	0	0	0	0
Brevard	1	0	0	1	0
Duval	1	0	0	1	0
Escambia	1	0	0	1	0
Hillsborough	1	0	0	0	0
Lee	2	0	0	0	0
Marion	2	2	0	0	0
Martin	1	0	0	0	0
Okaloosa	6	0	0	0	0
Orange	1	0	0	0	0
Pasco	1	0	0	0	0
Pinellas	1	0	0	0	0
Santa Rosa	4	0	0	0	0
St. Johns	1	0	0	0	0

Maps





Florida Arbovirus Surveillance January 1-October 19, 2024

- ◆ Sentinel Chickens Tested Positive for Antibodies to HJV (Total = 1)
- ▲ Sentinel Chickens Tested Positive for Antibodies to SLEV (Total = 29)
- ▲ Sentinel Chickens Tested Positive for Antibodies to EEEV (Total = 55)
- ▲ Sentinel Chickens Tested Positive for Antibodies to WNV (Total = 534)
- ◆ Alphavirus Positive Chickens (Total = 2)
- Flavivirus Positive Chickens (Total = 5)
- ◆ Confirmed Mosquito Pool WNV (Total = 3)
- ◆ Confirmed Equine EEEV (Total = 21)
- ◆ Confirmed EEEV Deer (Total = 1)
- Confirmed Equine WNV (Total = 6)
- Confirmed Goose WNV (Total = 1)
- Confirmed EEEV Positive Emu (Total = 2)
- ◆ EEEV Positive Emu Outbreak (Total = 1)
- ▨ One Positive Human With Locally Acquired WNV
- ▨ Two Positive Humans With Locally Acquired WNV
- ▨ Three Positive Humans With Locally Acquired WNV
- ▨ One Positive Human With Locally Acquired Dengue
- ▨ Two Positive Humans With Locally Acquired Dengue
- ▨ Three Positive Humans With Locally Acquired Dengue
- ▨ Six Positive Humans With Locally Acquired Dengue
- ▨ Thirty 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
Alachua		1 EEEV (6/21)	18 WNV (7/2, 7/24, 8/2, 8/19, 9/13, 9/18, 9/26) 5 SLEV (8/15, 8/30)	
Bay	2 WNV (August, September)		2 EEEV (5/28, 6/10) 19 WNV (7/22, 8/5, 8/12, 8/19, 8/26, 9/14, 9/17, 9/23)	
Brevard		1 WNV (9/11)	20 WNV (1/3, 7/19, 7/26, 8/13, 8/14, 8/15, 8/22, 8/28, 8/29, 8/30, 9/5, 9/12, 9/13, 9/19, 9/20, 9/27) 2 SLEV (8/23, 9/19)	
Broward	2 dengue (August, September)			
Charlotte			2 WNV (8/30)	

County	Humans	Equines	Sentinel Chickens	Other
Citrus			32 WNV (1/9, 1/15, 6/25, 7/8, 8/19, 9/3, 9/9, 9/16, 9/23, 9/30) 6 EEEV (1/9, 1/15, 2/26, 3/11, 5/20) 1 Alphavirus (5/20) 1 SLEV (8/19)	
Columbia		1 EEEV (6/16)		
Duval	2 WNV (July, September) 1 asymptomatic WNV blood donor (August)	1 EEEV (5/25)	16 WNV (7/8, 7/15, 8/19, 8/26, 9/16, 9/23, 9/30)	
Hernando			12 WNV (8/26, 9/9, 9/16, 9/23, 9/30)	
Highlands		1 EEEV (5/25)		
Hillsborough	3 dengue (June (2), August)	1 EEEV (5/26)	1 EEEV (6/3) 20 WNV (6/10, 8/19, 8/26, 9/3, 9/9, 9/12, 9/23, 10/2)	
Holmes		3 EEEV (6/16, 6/19)		
Indian River			1 SLEV (7/18) 1 WNV (9/13)	
Jackson		1 EEEV (5/30)		1 EEEV deer (7/16)
Lake		1 EEEV (7/31)		1 EEEV emu (2/6)
Lee			1 SLEV (8/5) 5 WNV (8/12, 8/26, 9/24, 9/30, 10/1)	
Leon			1 EEEV (6/18) 6 WNV (8/19, 8/27, 9/16)	
Levy		2 EEEV (5/21, 7/4)		
Madison		3 EEEV (6/20, 6/29, 7/24)		
Mantatee	1 dengue (July) 1 WNV (August)		12 WNV (8/7, 8/20, 8/27, 9/4, 9/17, 9/24, 10/1)	
Marion	1 asymptomatic WNV blood donor (July) 1 WNV (July)	2 EEEV (1/31, 3/29) 5 WNV (8/14, 9/9, 9/21, 9/27, 10/2)		
Martin	1 WNV (September)	1 EEEV (5/27)	1 WNV (9/26)	
Miami-Dade	30 dengue (January (2), February, March (2), April, June (6), July (7), August (6), September (5))			
Monroe	3 dengue (June (3))			
Nassau			6 EEEV (5/3, 9/12) 5 Flavivirus (5/3, 5/18, 5/23) 34 WNV (8/9, 8/17, 8/23, 8/29, 9/7, 9/12, 9/21, 9/28) 2 SLEV (8/23)	
Orange	2 dengue (August) 1 asymptomatic WNV blood donor (September)		9 EEEV (2/26, 3/25, 5/6, 5/28, 6/3, 7/15, 7/29, 8/5, 8/19) 42 WNV (8/5, 8/6, 8/12, 8/19, 8/26, 9/3, 9/9, 9/16, 9/23, 9/30) 2 SLEV (8/19, 9/9)	1 EEEV emu (3/16)
Osceola		1 EEEV (5/2)		
Palm Beach	3 dengue (August (2), September)		5 WNV (3/18, 9/3, 9/30)	

County	Humans	Equines	Sentinel Chickens	Other
Pasco	6 dengue (January, August (2), September (3))		2 EEEV (5/13, 9/3) 5 SLEV (6/10, 8/13, 8/19, 9/23) 40 WNV (8/19, 8/26, 9/3, 9/9, 9/16, 9/23, 9/30)	1 EEEV emu flock outbreak (4/22 for first emu)
Pinellas			2 EEEV (5/20, 5/28) 41 WNV (7/29, 8/5, 8/12, 8/19, 8/26, 9/3, 9/23, 9/30) 1 SLEV (9/16)	
Polk		1 EEEV (4/9)	1 EEEV (6/10) 21 WNV (6/10, 7/22, 7/29, 8/6, 8/19, 8/26, 9/3, 9/16, 9/23, 9/30) 1 SLEV (9/3)	
Putnam			1 EEEV (7/15) 5 WNV (8/26, 9/23)	
Sarasota			14 WNV (7/12, 7/26, 8/20, 8/27, 9/2, 9/13, 9/17, 9/18, 9/20) 2 SLEV (8/20, 9/6)	1 WNV mosquito pool (Cx. quinquefasciatus 9/11)
Seminole			3 WNV (8/19, 9/30)	
St. Johns			2 EEEV (6/3, 6/10) 6 WNV (8/19, 9/3, 9/9, 9/17, 9/23) 1 SLEV (9/17)	
St. Lucie			2 WNV (7/2, 9/11)	
Sumter			18 WNV (9/9, 9/16, 9/30)	
Suwannee		1 EEEV (6/3)		
Volusia			2 EEEV (1/22, 4/8) 41 WNV (7/8, 7/22, 7/29, 8/12, 8/19, 8/26, 9/3, 9/9, 9/16, 9/24, 9/30)	1 WNV goose (8/14)
Walton	2 asymptomatic WNV blood donors (July, August) 1 WNV (July)		20 EEEV (3/25, 4/15, 5/13, 5/28, 6/3, 6/4, 6/17, 6/24, 7/9, 7/15, 7/16, 7/30, 8/13) 5 SLEV (4/1, 7/29, 8/12, 8/19, 9/23) 1 Alphavirus (6/3) 97 WNV (6/17, 7/1, 7/8, 7/15, 7/16, 7/22, 7/29, 7/30, 8/5, 8/6, 8/12, 8/19, 8/20, 8/26, 9/3, 9/9, 9/16, 9/17, 9/23, 9/24, 9/30) 1 HJV (8/12)	2 WNV mosquito pools (Cx. quinquefasciatus 8/27, mixed Culex spp. 9/10)

Acknowledgements and Data Sources

Contributors: Andrea Morrison, PhD, MSPH, Rebecca Zimler, PhD, MPH, and Danielle Stanek, DVM, DOH Bureau of Epidemiology; Lea Heberlein, DrPH; Peter Dumoulin, PhD, 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.