



Florida Arbovirus Surveillance

Week 1: January 1 - January 7, 2012

Arbovirus surveillance in Florida includes endemic mosquito-borne 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). Malaria, a non-viral mosquito-borne disease is also included. During the period January 1 - January 7, 2012, the following arboviral activity was recorded in Florida:

DENV activity: No new cases of locally acquired dengue were reported this week.

EEEV activity: One sentinel chicken collected in December 2011 from Pasco County tested positive for antibodies to EEEV.

WNV activity: Eight sentinel chickens collected in December and November 2011 from Hillsborough and Sarasota counties tested positive for antibodies to WNV.

SLEV activity: No SLEV activity was reported this week.

HJV activity: No HJV activity was reported this week.

Advisories/Alerts: Hillsborough County is under mosquito-borne illness advisory. The Bahamas has also issued an alert due to high dengue activity:
<http://wwwnc.cdc.gov/travel/notices/outbreak-notice/dengue-bahamas.htm>

Year to Date Human Case Summary

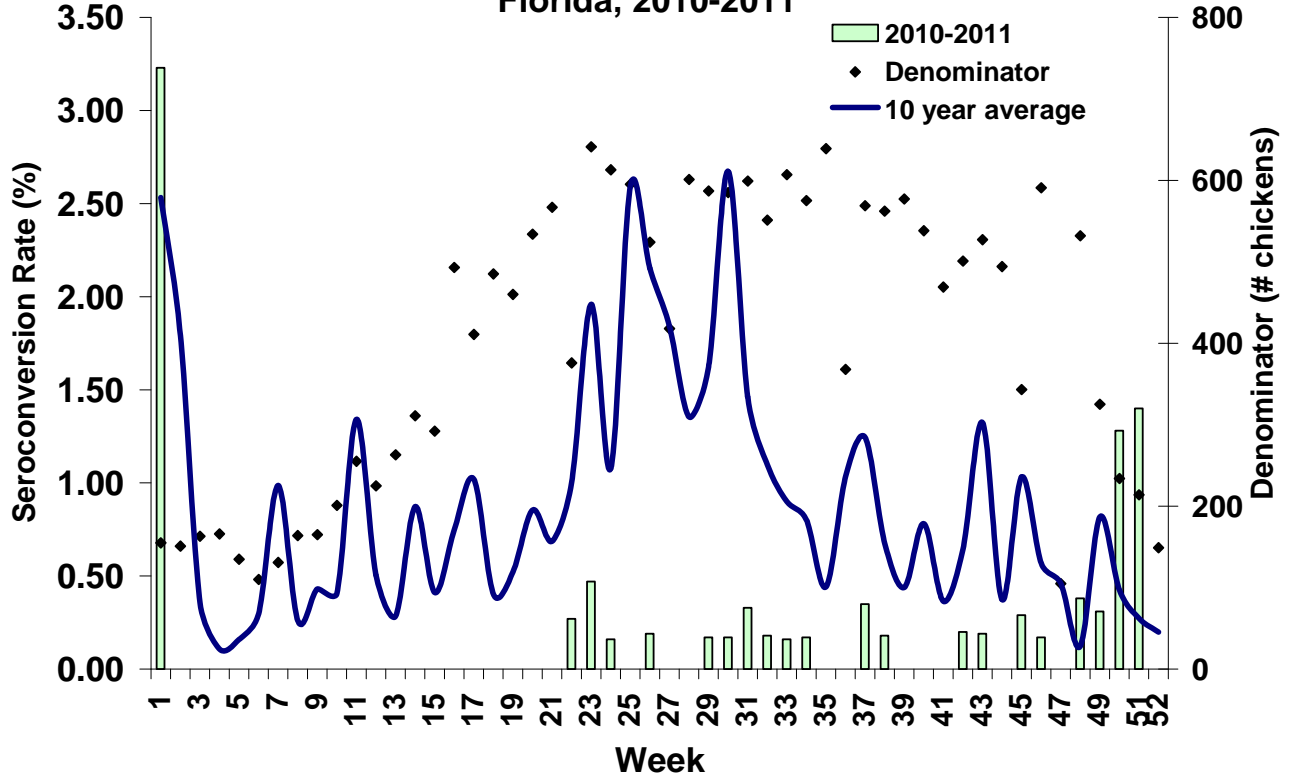
Imported Malaria: Two imported cases of malaria with onset in 2011 have been reported this week. Countries of origin were: Haiti and Uganda. Counties reporting cases were: Leon and Duval.

Sentinel Chickens

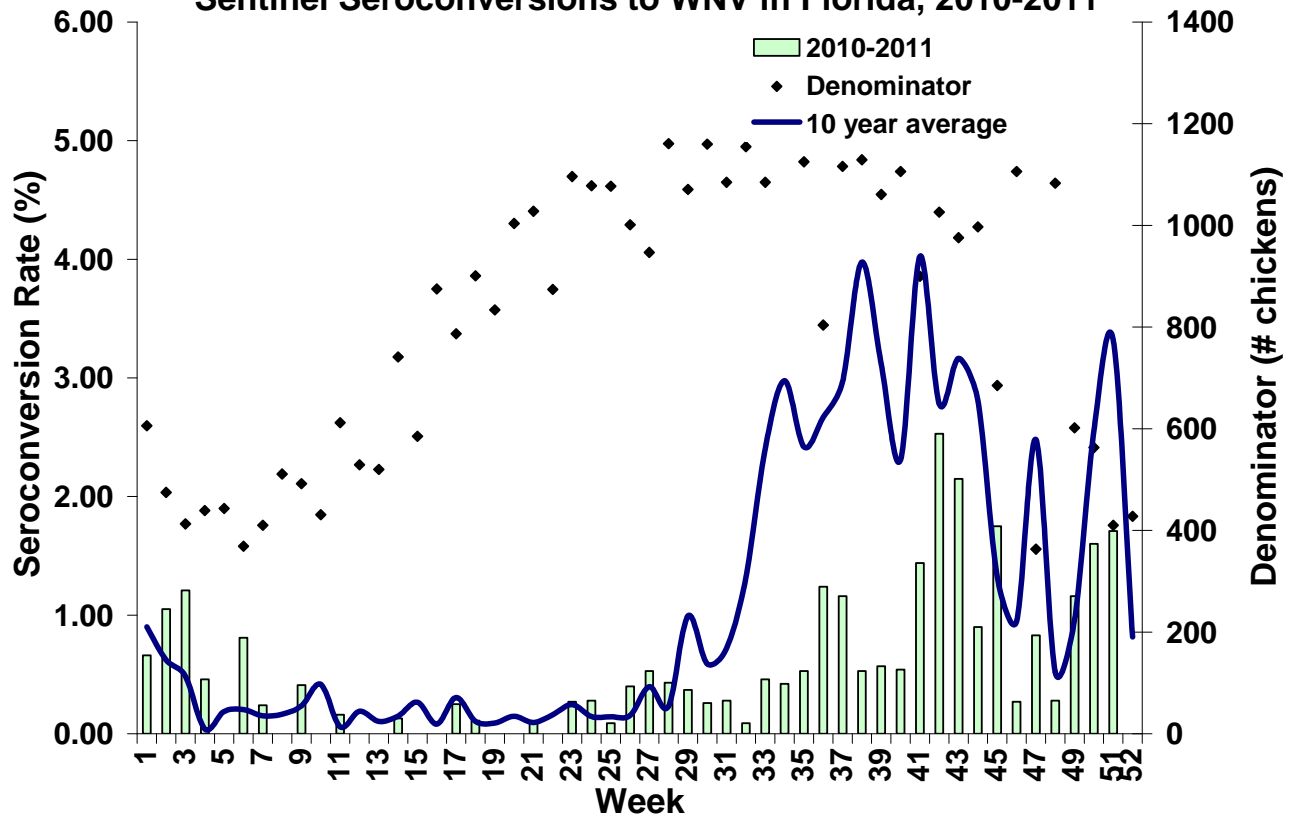
Sentinel chickens collected in December and November 2011 were tested positive for arboviruses. Eight sentinel chickens collected in December and November 2011 from Hillsborough and Sarasota counties tested positive for antibodies to WNV. One sentinel chicken collected in December 2011 from Pasco County tested positive for antibodies to EEEV. These chickens will be included in 2011 data. Seroconversion rates are calculated by week and include previously reported results.

County	Collection Date	Seroconversion Rates (%)				County Totals Week	YTD - 2011
		SLEV	WNV	EEEV	HJV		
Hillsborough	11/28&11/29/11	2.17	1.09			1WNV, 2 SLEV	
Hillsborough	12/19&12/21/11		12.07			7 WNV	70 WNV, 16 SLEV, 4EEEV
Pasco	12/19/11			3.33		1EEEV	1 WNV, 1 SLEV, 3EEEV
Sarasota	12/13/11		1.69			1WNV	30 WNV, 1 EEEV

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



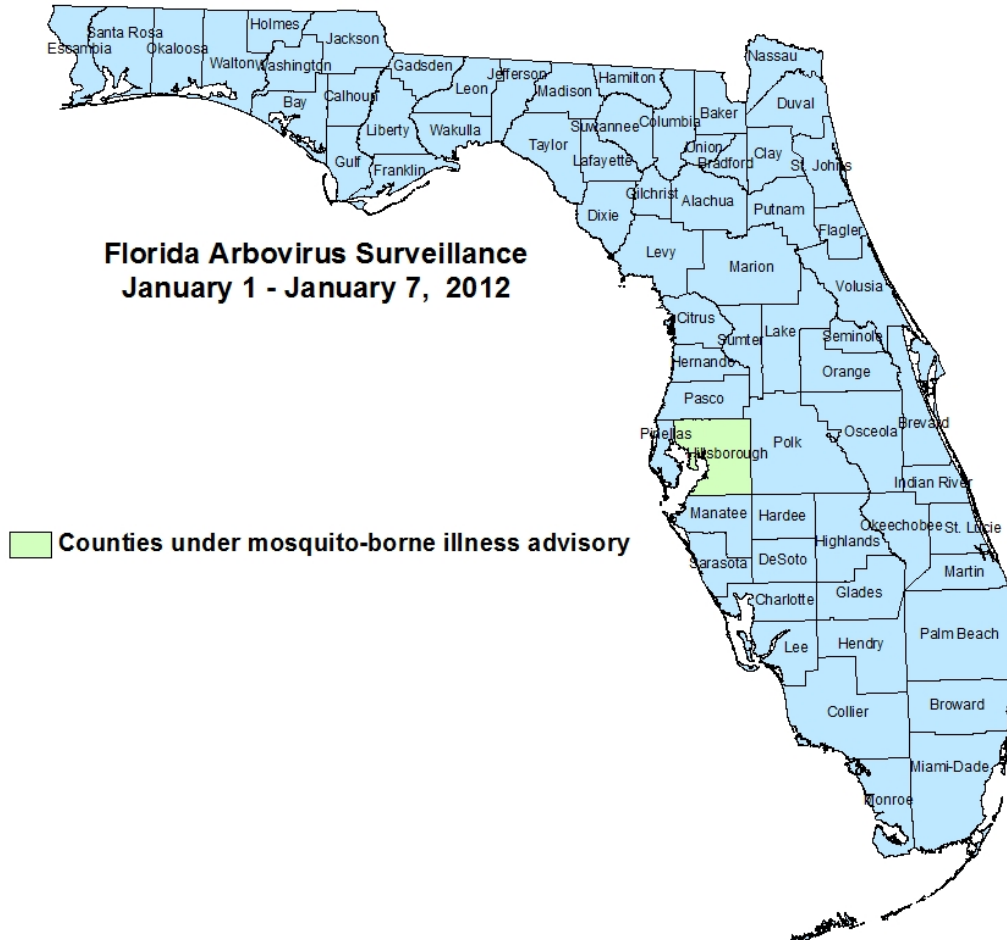
Sentinel Seroconversions to WNV in Florida, 2010-2011



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, six reports representing 10 dead birds were received from five counties. Three birds were identified as raptors; none were identified as crows or jays. In 2012, six reports representing a total of 10 dead birds (0 crows, 0 jays, 3 raptors, 7 others) were received from five 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



2011- Arbovirus Activity by County

County	Arbovirus Activity
Brevard	WNV: 1 sentinel (10/12) EEEV: 2 sentinels (5/20, 5/27)
Citrus	WNV: 4 sentinels (1/3, 1/11, 10/24) EEEV: 8 sentinels (8/15, 9/12, 9/19, 10/24, 11/7, 11/28, 12/19) HJV: 5 sentinels (9/12, 9/19, 9/27, 10/17)
Charlotte	WNV: 7 sentinels (7/1, 9/9, 10/14, 10/28)
Clay	WNV: 1 human (September),

Dade	DENV: 3 humans (acquired in Miami; January, August and September) WNV: 1 human (acquired in Miami; August), 2 sentinels (1/18, 6/22)
Duval	WNV: 23 humans including 3 asymptomatic blood donors [June (1), July (8), Aug (6), Sept (4), Oct (1)]; 5 sentinels (7/15, 9/16, 10/20); 1 horse (9/21) EEEV: 1 sentinel (6/11)
Flagler	CEV : 1 mosquito pool (<i>Ochlerotatus infirmatus</i> , 11/16)
Hernando	WNV : 2 sentinels (8/1, 10/17) EEEV: 1 sentinel (6/6)
Hillsborough	DENV : 1 human (acquired in Hillsborough County, September) WNV: 70 sentinels (1/4, 1/11, 1/18, 1/25, 2/9, 3/1, 7/19, 8/30, 9/13, 9/27, 10/5, 10/11, 10/18, 10/25, 10/18, 11/01, 11/8,11/9, 11/15 11/21,11/28, 12/7,12/13, 12/19, 12/21) EEEV: 4 sentinel (11/01, 11/22, 12/7) SLEV: 16 sentinels (8/23, 9/13, 9/20,10/5, 10/11, 10/25, 11/8, 11/15, 11/21, 11/29, 12/7)
Holmes	EEEV: 2 horses (7/3, 7/6)
Indian River	WNV: 3 sentinels (4/28, 8/18, 10/20) SLEV: 1 sentinel (6/23)
Lake	EEEV: 2 horses (11/27)
Lee	WNV: 23 sentinels (6/13, 6/27, 7/11, 7/25, 8/20, 10/17, 10/24, 10/31)
Leon	WNV: 1 human (August), 23 sentinels (8/23, 8/30, 9/6,9/12, 9/19,9/26, 10/4, 10/17, 10/24); 1 horse (9/11)
Manatee	WNV: 14 sentinels (4/4, 7/20, 8/31, 10/11, 10/19, 10/26, 11/02, 12/7) SLEV: 7 sentinels (9/14,9/28 10/19, 10/26, 11/02) EEEV: 2 sentinels (10/26, 11/8)
Marion	EEEV: 1 horse (6/21)
Martin	DENV: 1 human (acquired in Martin County; July)
Nassau	WNV: 4 sentinels (8/1,8/29, 9/19) 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: 21 sentinels (1/3, 1/18, 1/24, 7/7, 7/14, 7/ 28, 8/1, 8/11, 8/18,9/8,9/15, 10/6, 11/3, 11/10, 12/5) EEEV: 7 sentinels (6/2, 6/9, 6/27, 7/28, 11/28, 12/15) HJV: 3 sentinels (2/24, 7/7, 10/6)
Palm Beach	DENV : 2 humans (acquired in Palm Beach County, September) WNV: 1 human (acquired in Palm Beach; October),
Pasco	WNV: 1 sentinel (10/24) SLEV: 1 sentinel (9/26) EEEV: 3 sentinels (12/5, 12/12, 12/19)
Pinellas	WNV: 7 sentinels (8/29, 9/12, 9/6, 10/10, 11/28) SLEV: 39 sentinels (7/18, 8/8, 8/22, 8/29, 9/6,9/12, 9/26, 10/3, 10/10, 10/17, 10/24, 11/7)
Putnam	WNV : 1 sentinel (10/14) EEEV: 1 horse (10/14)
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: 30 sentinels (1/4, 2/14, 3/14, 4/25, 5/2, 6/27, 7/5, 7/18, 8/22, 9/12,9/19, 9/30, 10/11, 10/17, 10/21, 10/28, 11/4, 11/10, 11/18, 11/28, 12/06, 12/13); 1 horse (8/12) EEEV: 1 sentinel (10/28)
Seminole	WNV: 4 sentinels (6/7, 9/19)

St. Johns	WNV: 2 sentinels (9/12, 10/3) EEEV: 2 sentinels (6/13, 9/12)
St. Lucie	WNV: 1 sentinel (9/9)
Volusia	EEEV: 1 sentinel (11/14)
Walton	WNV: 2 sentinels (5/24, 12/05) EEEV: 14 sentinels (1/6, 7/18, 8/1, 8/8, 8/22, 9/19, 9/26, 10/10, 10/17) ; 2 live wild birds (2 cardinals 1/14, 1/21) HJV: 4 sentinels (1/14, 4/18, 5/2, 10/24)

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.