



Florida Arbovirus Surveillance Week 23: June 3-9, 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 of June 3-9, 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 in Orange County tested positive for antibodies to EEEV. In 2012, positive samples from six equines and 13 sentinel chickens have been received from seven counties.

WNV activity: Eight sentinel chickens in Citrus, Indian River, Manatee, Pasco, Sarasota, St. Johns, and Volusia counties tested positive for antibodies to WNV. In 2012, positive samples from 48 sentinel chickens have been received from twelve counties.

SLEV activity: No SLEV activity was reported this week. In 2012, positive samples from four sentinel chickens have been received from two counties

HJV activity: No HJV activity was reported this week. In 2012, positive samples from two sentinel chickens have been received from two counties.

Advisories/Alerts: St. Johns County is under a mosquito-borne illness advisory. No other counties are currently under mosquito-borne illness advisory or alert.

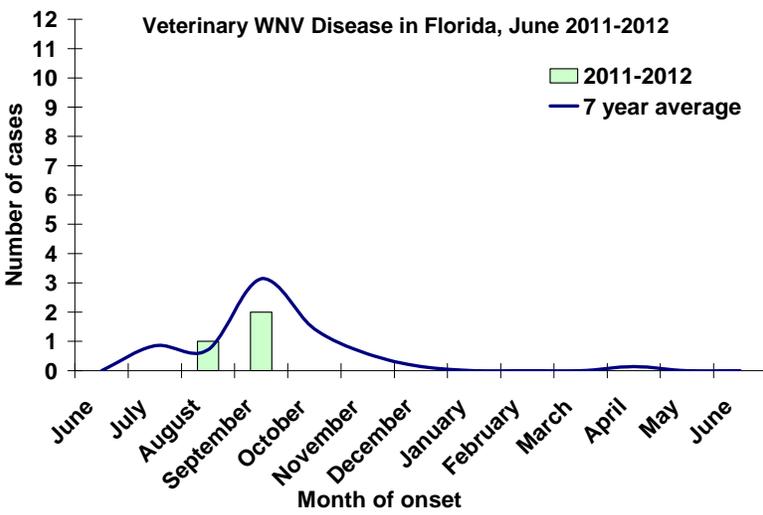
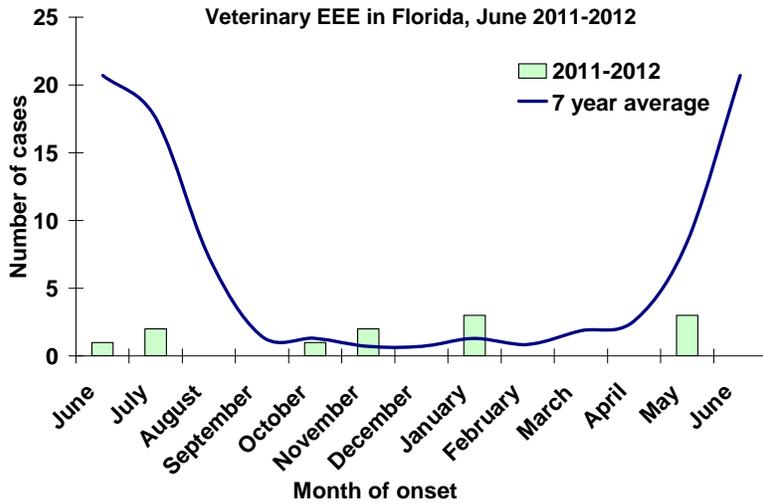
Year to Date Human Case Summary*

Imported Dengue: Fourteen cases of dengue with onset in 2012 have been reported in individuals with travel history to a dengue endemic country in the two weeks prior to onset. Countries of origin were Colombia, Cuba, Dominican Republic, Ecuador, Ghana, Guyana, Haiti (4), Jamaica, Mexico, Suriname, and Turks & Caicos. Counties reporting cases were Brevard, Broward (5), Lee, Miami-Dade (4), Orange, Palm Beach, and Sarasota. Three of the cases were reported in non-Florida residents.

Imported Malaria: Twenty-six imported cases of malaria with onset in 2012 have been reported. Countries of origin were: Afghanistan, Colombia, Ghana (3), Guyana (2), Haiti (8), Honduras (2), India, Ivory Coast, Nigeria (2), Uganda, Sierra Leone, South Africa, Sub Saharan Africa, and Togo. Counties reporting cases were: Alachua, Broward (5), Charlotte, Duval (2), Hillsborough, Lake, Marion, Miami-Dade (5), Orange (3), Palm Beach (3), and Pinellas (3). Three of the cases were reported in non-Florida residents.

Veterinary Cases

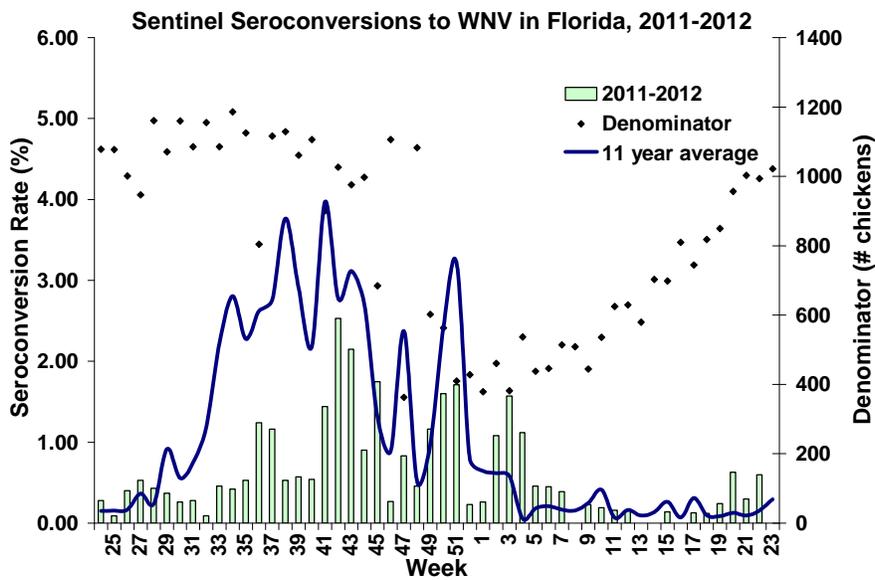
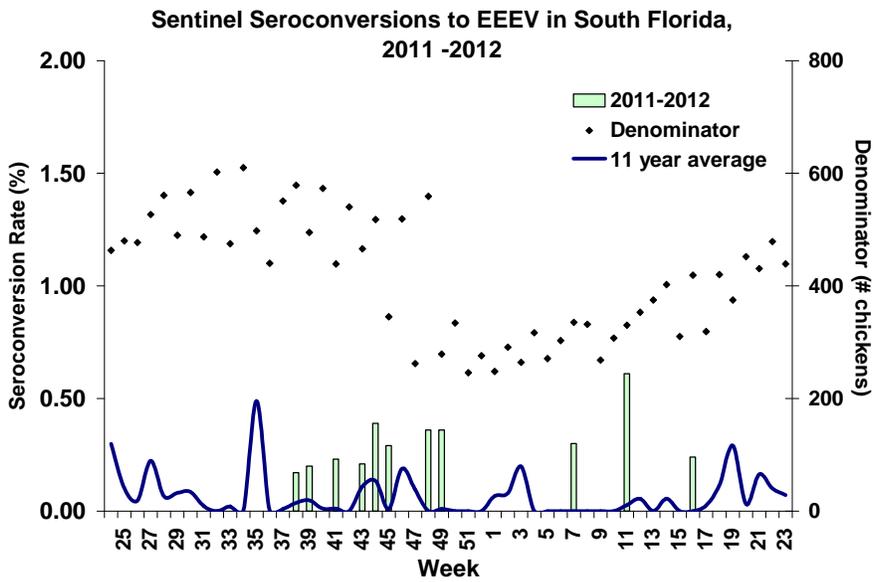
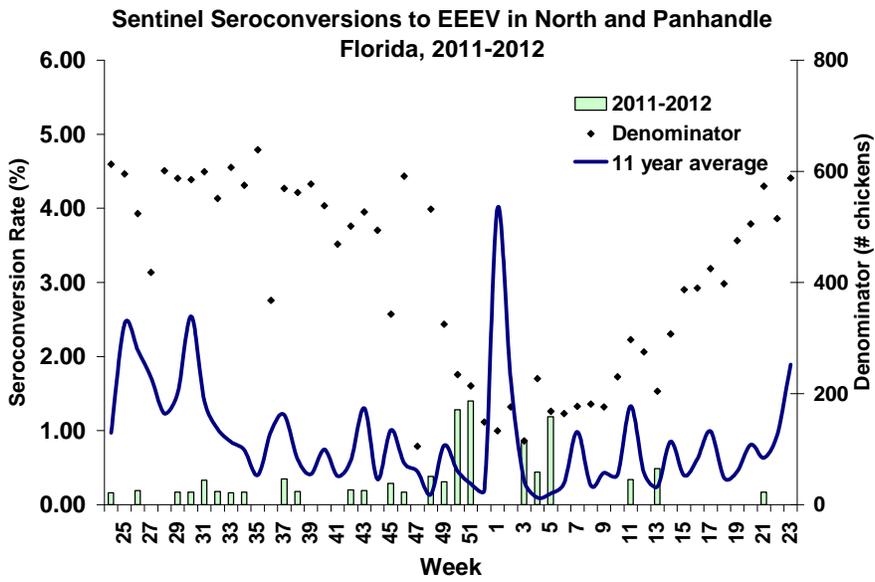
No positive horses were reported this week.



Sentinel Chickens

Eight sentinels in Citrus, Indian River, Manatee, Pasco, Sarasota, St. Johns, and Volusia counties tested positive for antibodies to WNV and one in Orange County tested positive for antibodies to EEEV. Seroconversion rates are calculated by week and include previously reported results.

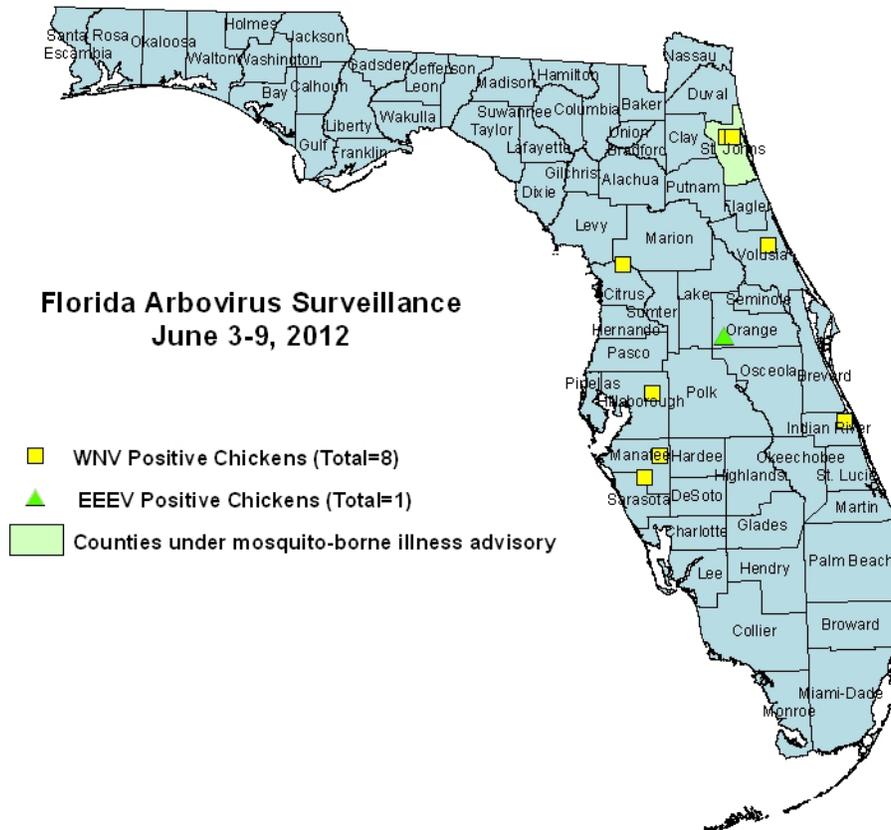
| County | Collection Date | Seroconversion Rates (%) | | | | County Totals | |
|--------------|-----------------|--------------------------|-----|------|-----|---------------|----------------------|
| | | SLEV | WNV | EEEV | HJV | Week | YTD |
| Citrus | 05/29/2012 | | 1.4 | | | 1 WNV | 1 WNV, 1 EEEV, 1 HJV |
| Indian River | 05/24/2012 | | 2.3 | | | 1 WNV | 1 WNV |
| Manatee | 05/30/2012 | | 1.5 | | | 1 WNV | 3 WNV |
| Pasco | 05/29/2012 | | 5.6 | | | 1 WNV | 1 WNV |
| Sarasota | 05/14/2012 | | 1.5 | | | 1 WNV | 7 WNV |
| St. Johns | 05/29/2012 | | 3.3 | | | 2 WNV | 9 WNV, 1 HJV |
| Volusia | 05/29/2012 | | 4.8 | | | 1 WNV | 1 WNV |
| Orange | 05/21/2012 | | | 0.9 | | 1 EEEV | 9 WNV, 8 EEEV |

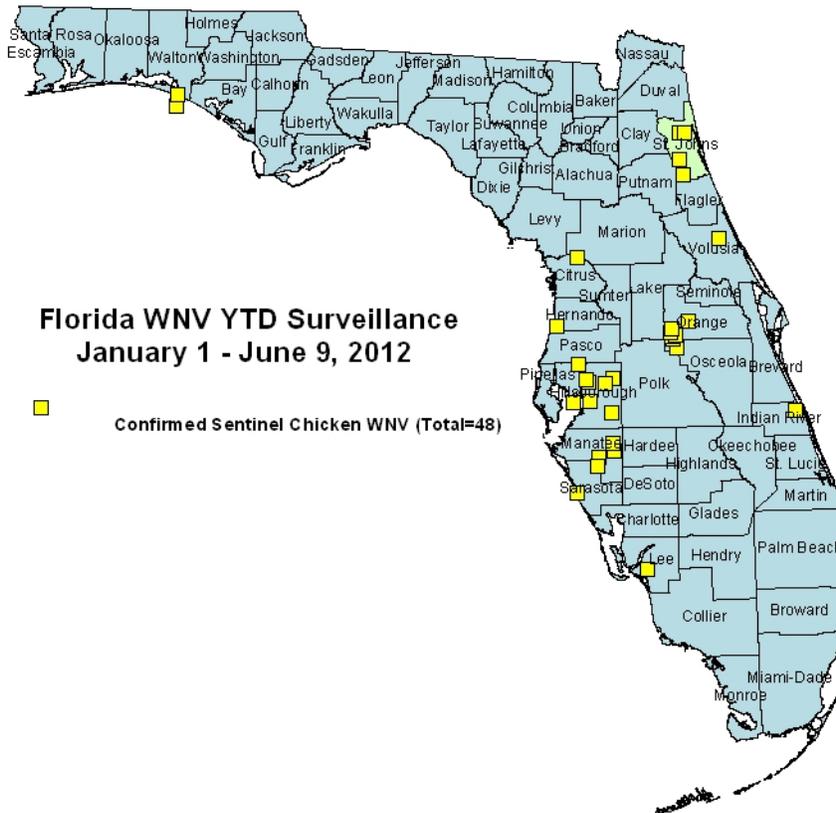
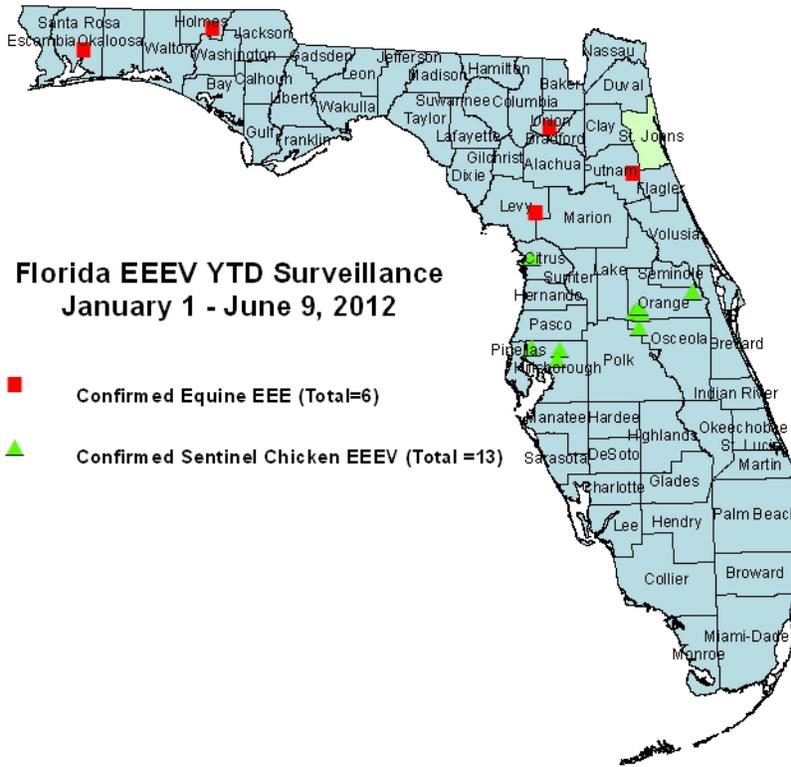


Dead Birds

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, four reports representing nine dead birds were received from four counties. Two were identified as crows; none were identified jays or raptors. In 2012, 185 reports representing a total of 548 dead birds (26 crows, 8 jays, 25 raptors) were 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/

Maps





Arbovirus Activity by County

| County | Arbovirus Activity |
|---------------------|--|
| Citrus | EEEV : 1 sentinel (1/30) WNV: 1 sentinel (5/29) HJV: 1 sentinel (1/3) |
| Hernando | WNV: 1 sentinel (1/23) |
| Hillsborough | EEEV : 4 sentinels (2/14, 3/13, 4/17) WNV: 11 sentinels (1/3, 1/17, 1/31, 2/14, 3/6) SLEV: 3 sentinels (1/3) |
| Holmes | EEEV : 1 horse (5/21) |
| Indian River | WNV: 1 sentinel (5/24) |
| Lee | WNV: 1 sentinel (1/23) SLEV: 1 sentinel (3/7) |
| Levy | EEEV: 2 horses (1/2) |
| Manatee | WNV: 3 sentinels (2/1, 3/14, 5/30) |
| Orange | EEEV : 8 sentinels (1/5, 1/9, 1/19, 1/23, 2/6, 3/15, 2/29, 5/21) WNV: 9 sentinels (1/9, 1/12, 1/19, 1/25, 3/1) |
| Pasco | WNV : 1 sentinel (5/29) |
| Putnam | EEEV: 1 horse (1/1) |
| Santa Rosa | EEEV : 1 horse (5/11) |
| Sarasota | WNV: 7 sentinels (1/9, 2/6, 3/19, 5/7, 5/14) |
| St. Johns | WNV : 9 sentinels (5/14, 5/22, 5/29) HJV : 1 sentinel (4/30) |
| Union | EEEV : 1 horse (5/12) |
| Volusia | WNV : 1 sentinel (5/29) |
| Walton | WNV : 3 sentinels (4/9, 4/23, 4/30) |

Acknowledgements and Data Sources

Contributors: Elizabeth Radke, MPH, Shaiasia Itwaru-Womack, Danielle Stanek, DVM, and Carina Blackmore, DVM, Ph.D., DOH Bureau of Environmental Public Health Medicine; Lillian Stark, Ph.D., Holly Hughes, Ph.D. and Valerie Mock, DOH Bureau of Laboratories.

For more surveillance information, please see the DOH website at:
<http://www.doh.state.fl.us/Environment/medicine/arboviral/index.html>

*Case tallies included in the weekly Florida arbovirus surveillance report include confirmed and probable cases for EEE, WNV infection, SLE, dengue, and malaria. In addition, dengue and malaria tallies may also include suspect cases. 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.doh.state.fl.us/Disease_ctrl/epi/surv/CaseDefinitions/2012CaseDef_FINAL.pdf

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.

Counties included in the EEE graph for north Florida and the Panhandle are: Alachua, Bay, Citrus, Duval, Escambia, Flagler, Gulf, Hernando, Jackson, Jefferson, Leon, Madison, Marion, Nassau, Orange, Pasco, Putnam, Seminole, St. Johns, Suwannee, Volusia, Walton (North and South), and Washington.

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.