



Florida Arbovirus Surveillance

Week 13: March 25 – March 31, 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 March 25 - March 31, 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 three equines and ten sentinel chickens have been received from five counties.

WNV activity: One sentinel chicken in Sarasota County tested positive for antibodies to WNV. In 2012, positive samples from 28 sentinel chickens have been received from six counties.

SLEV activity: No SLEV activity was reported this week. In 2012, positive samples from three sentinel chickens have been received from one county.

HJV activity: No HJV activity was reported this week. In 2012, a positive sample from one sentinel chicken has been received from one county.

Advisories/Alerts: No counties are currently under mosquito-borne illness advisory or alert. Center for Disease Control and Prevention has recommended antimalarial medication for travelers who may stay overnight in Island of Great Exuma, Bahamas. For details see http://www.cdc.gov/malaria/new_info/2012/malariabahamas.html

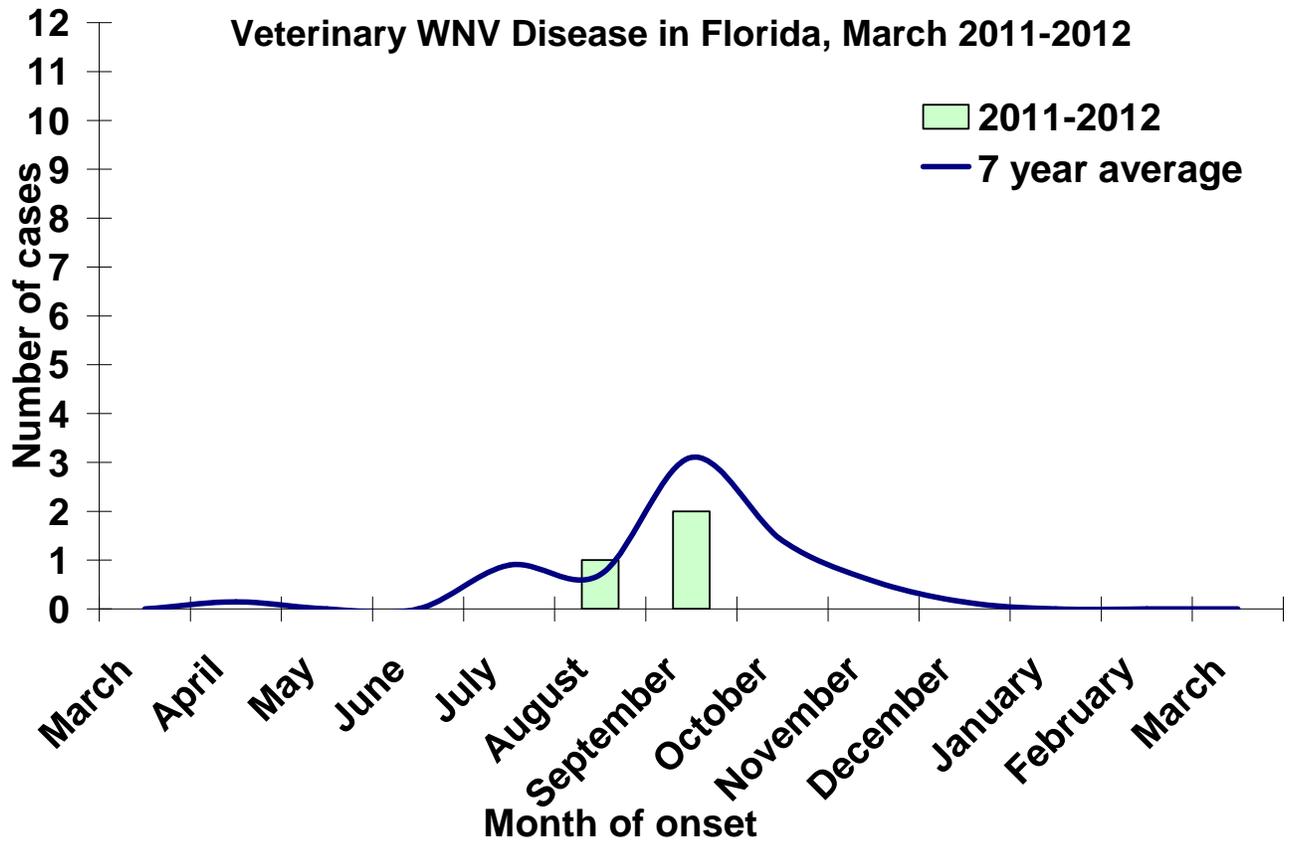
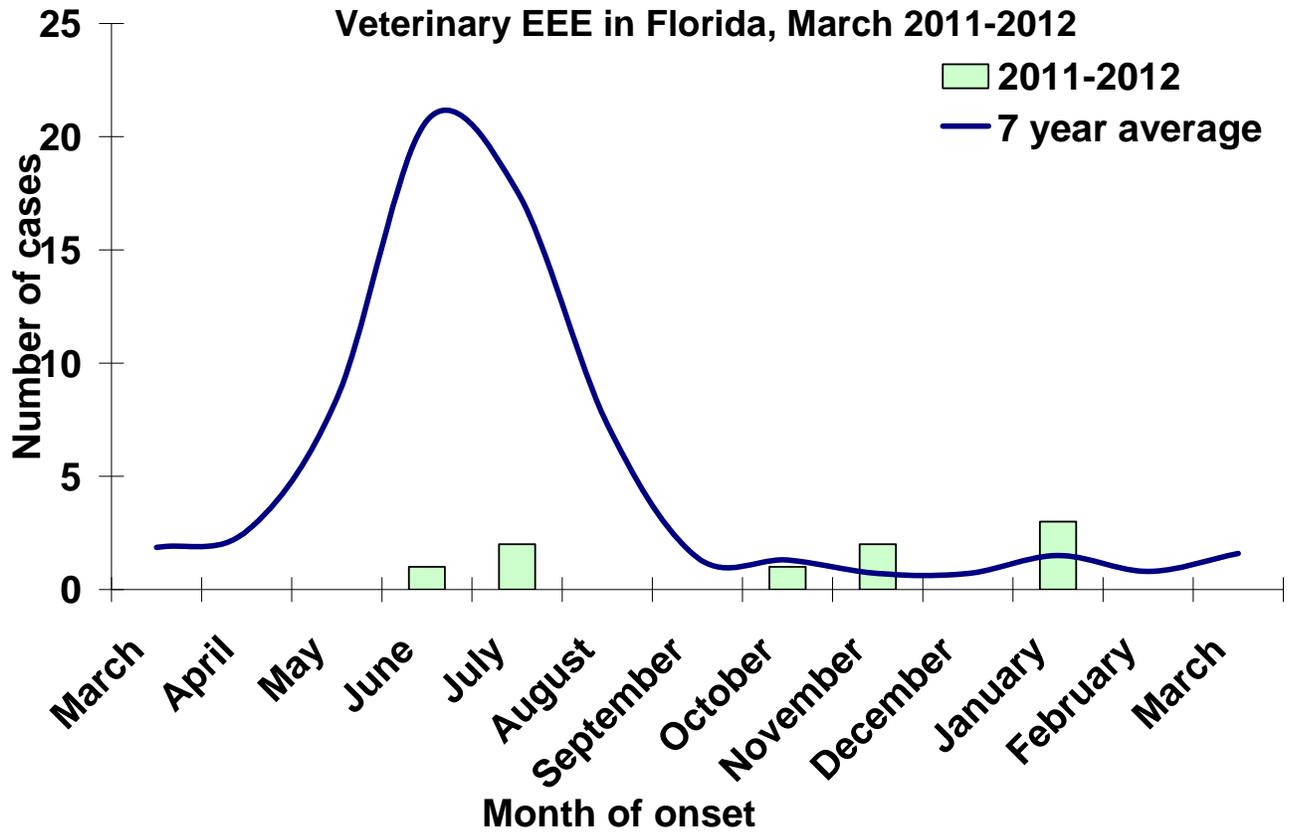
Year to Date Human Case Summary *

Imported Dengue: Six 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 Dominican Republic, Haiti, Ghana, Guyana, Mexico and Surinam. Counties reporting cases were Broward (5) and Lee.

Imported Malaria: Twelve imported cases of malaria with onset in 2012 have been reported. Countries of origin were: Ghana, Guyana, Haiti (7), Nigeria (2) and Sub Saharan Africa. Counties reporting cases were: Broward (5), Duval, Marion, Miami-Dade (2), Orange (2) and Palm Beach.

Veterinary Cases

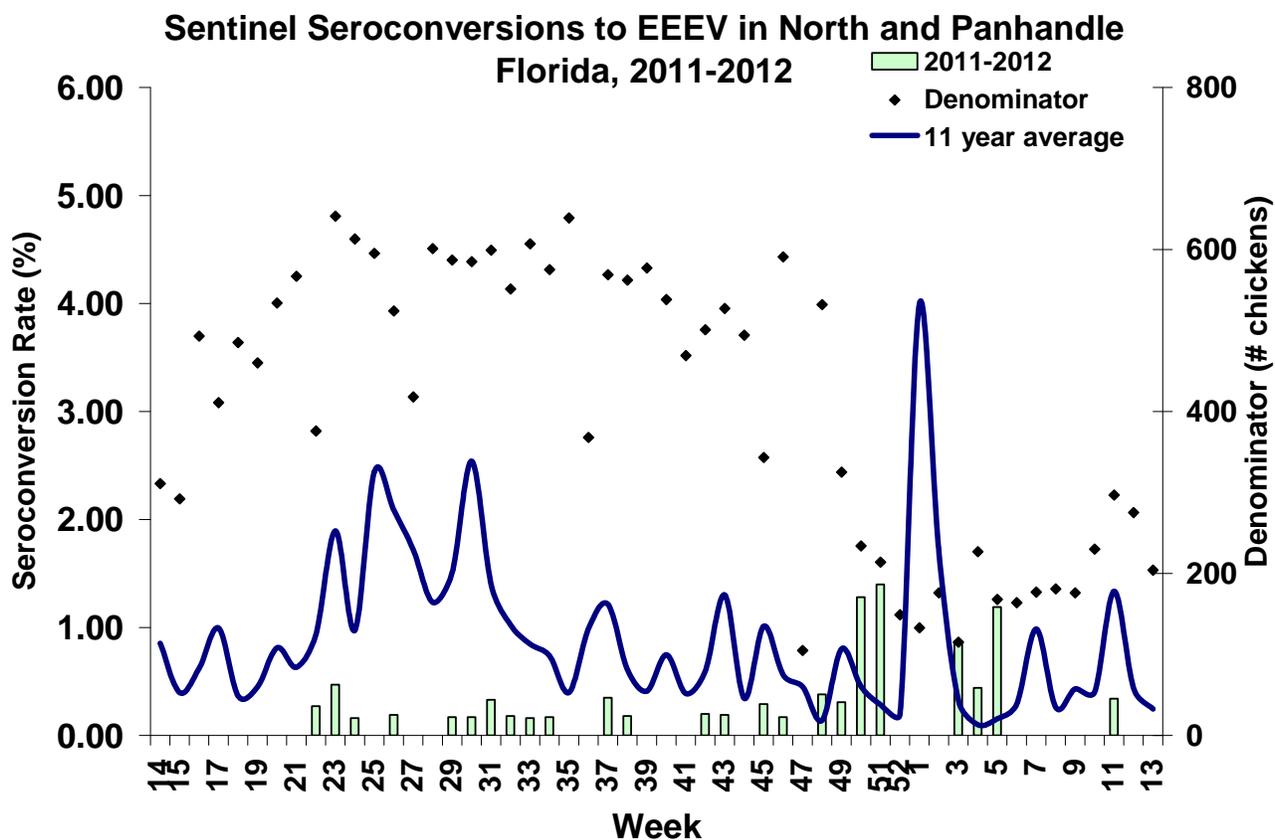
No positive horses were reported this week.

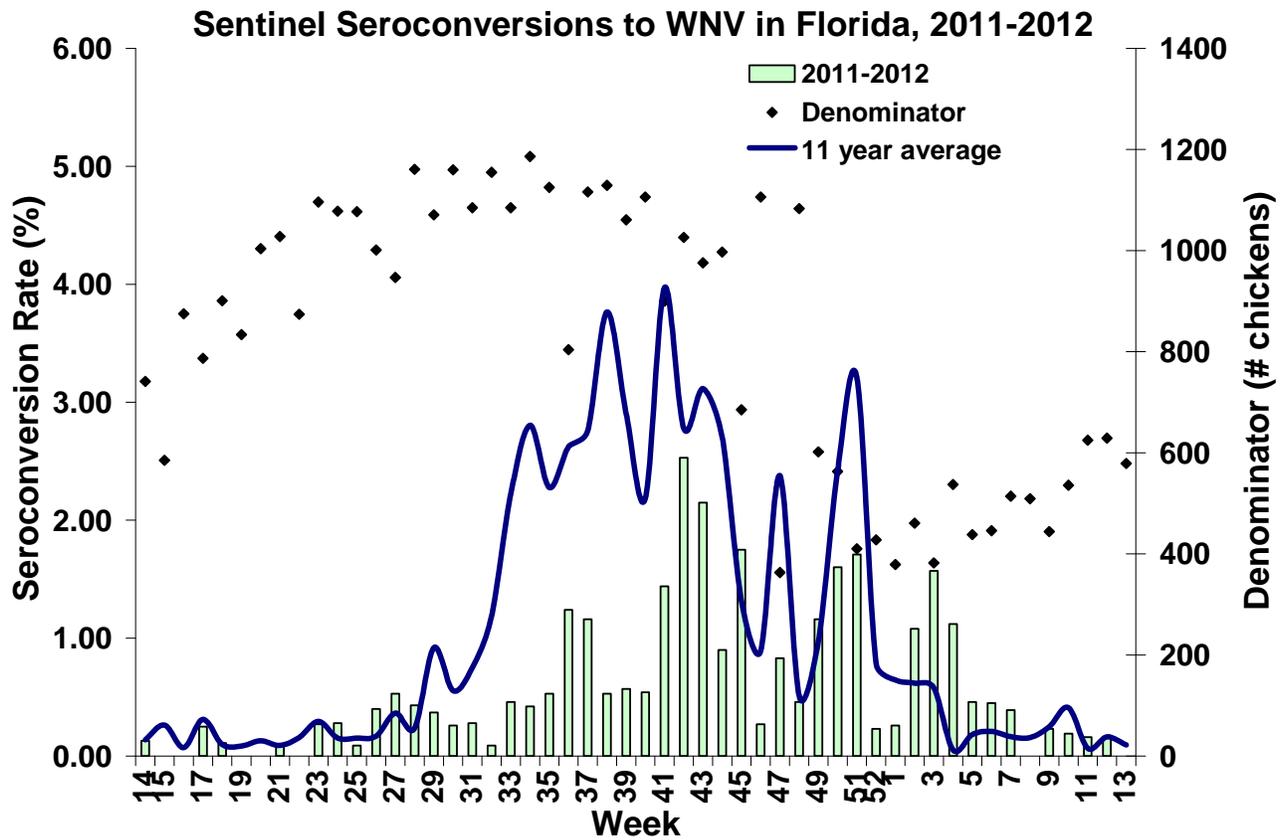


Sentinel Chickens

One sentinel chicken in Orange County tested positive for antibodies to EEEV. One sentinel chicken in Sarasota County tested positive for antibodies to WNV. Seroconversion rates are calculated by week and include previously reported results.

| County | Collection Date | Seroconversion Rates (%) | | | | County Totals | |
|--------------|-----------------|--------------------------|------|------|-----|---------------|---------------|
| | | SLEV | WNV | EEEV | HJV | Week | YTD |
| Sarasota | 03/19/12 | | 1.59 | | | 1 WNV | 4 WNV |
| Orange/Reedy | 03/15/12 | | | 2.38 | | 1 EEEV | 3 EEEV, 8 WNV |

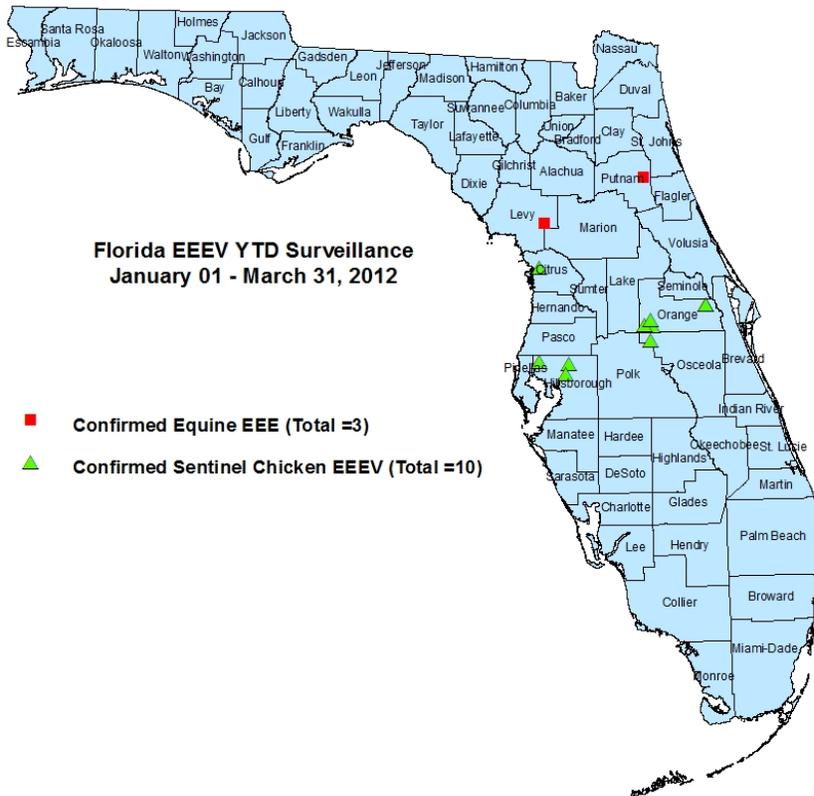


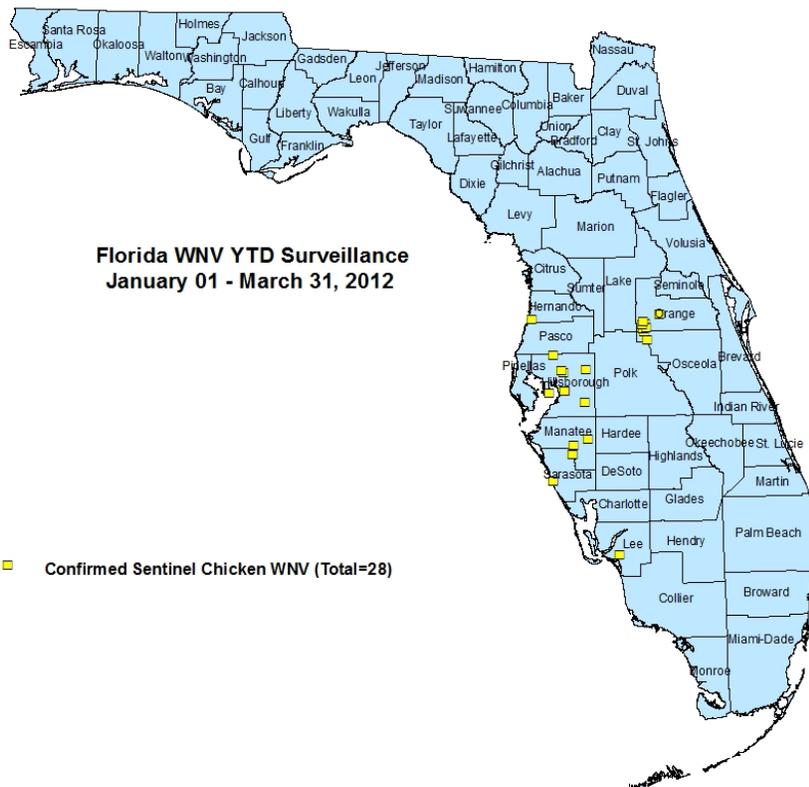


Dead Birds

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, 15 reports representing 39 dead birds were received from nine counties. Two birds were identified as raptors; one was identified as jay and one as crow. In 2012, one hundred and five reports representing a total of 330 dead birds (4 crows, 3 jays, 17 raptors, 306 others) were received from 37 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) HJV: 1 sentinel (1/3) |
| Hernando | WNV: 1 sentinel (1/23) |
| Hillsborough | EEEV : 3 sentinels (2/14, 3/13) SLEV: 3 sentinels (1/3) WNV: 11 sentinels (1/3, 1/17, 1/31, 2/14, 3/6) |
| Lee | WNV: 1 sentinel (1/23) |
| Levy | EEEV: 2 horses (1/2) |
| Manatee | WNV: 2 sentinels (2/1, 3/14) |
| Orange | EEEV : 6 sentinels (1/5, 1/9, 1/19, 1/23, 2/6, 3/15) WNV: 9 sentinels (1/9, 1/12, 1/19, 1/25, 3/1) |
| Putnam | EEEV: 1 horse (1/1) |
| Sarasota | WNV: 4 sentinels (1/9, 2/6, 3/19) |

Acknowledgements and Data Sources

Contributors: Leena Anil, Ph.D., Danielle Stanek, DVM, and Carina Blackmore, DVM, Ph.D., DOH Bureau of Environmental Public Health Medicine; Lillian Stark, 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.

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.