

Florida 2007 Arbovirus Activity by County Through December 29, 2007

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Year-to-Date Information for 2007

As of 12/29	Virus	2007 YTD	2006 YTD
Human cases	EEEV	0	0
	WNV	3 (1 out-of-state travel)	3 (all out-of-state travel)
	CEV	1 (out-of-state travel)	1 (out-of-state travel)
Counties under medical alert/advisory		None. (Lifted for Bay and Nassau counties.)	None.
Counties with activity	EEEV	24	22
	WNV	12	20
	HJV	7	6
	SLEV	2	8
	CEV	1	3

Disclaimer: Please note that data are subject to change with confirmatory information.

1. Human Surveillance

Eastern equine encephalitis virus (ICD9 Code 6220 and 6221)

None.

West Nile virus (ICD9 Codes 6630 and 6631)

Two cases of locally-acquired WNV encephalitis were confirmed in Bay County residents in August. Bay County is no longer under medical alert for mosquito-borne illness, due to a return to baseline levels of activity and colder temperatures. One case of WNV encephalitis was confirmed in a resident of Pinellas County, though the infection was acquired out-of-state. This case was reported as a Florida case acquired out-of-state.

La Crosse virus (ICD-9 Code 6250)

La Crosse encephalitis was confirmed in a Hillsborough County resident with travel history to North Carolina in September. This case was reported as a Florida case acquired out-of-state. La Crosse virus is a member of the California Encephalitis group of viruses.

2. Animal Surveillance

Eastern equine encephalitis virus

Positive samples from 113 live wild birds, 104 sentinel chickens, 18 horses and 1 antelope were received. To date, 24 of Florida's 67 counties have reported EEEV activity in an animal. Date of disease onset (horses, mammals), date of death (birds), and date of first known antibody positive bleed (sentinels, live wild birds**) is shown in parentheses.

Alachua: 1 horse (6/28), 1 sentinel chicken (9/17)

Brevard: 1 sentinel chicken (9/12)

Duval: 1 sentinel chicken (8/7)

Flagler: 1 sentinel chicken (7/2), 1 horse (8/2)
Gulf: 2 sentinel chickens (7/2x2)
Hillsborough: 3 sentinel chickens (4/3, 5/29, 6/5)
Holmes: 2 horses (5/29, 6/25)
Indian River: 1 sentinel chicken (10/11)
Jackson: 1 horse (6/26)
Lake: 1 horse (2/25)
Leon: 1 sentinel chicken (5/7)
Manatee: 1 sentinel chicken (7/23)
Marion: 2 horses (4/13, 7/13)
Nassau: 32 sentinel chickens (6/11, 6/25, 7/2x2, 7/9x2, 7/23x2, 7/30 x2, 8/13 x7, 8/20 x4, 9/3 x3, 9/10x2, 9/17, 10/1 x5), 1 antelope (8/24), 1 horse (10/26)
Okaloosa: 49 live wild birds (2 Sparrows 1/1, 3/19; 8 Cardinals 1/24, 1/29, 6/21, 7/12, 7/26, 7/30, 11/29, 12/12; 35 Blue Jays 1/29 x2, 2/5, 2/8, 3/5, 3/6, 3/12, 3/19 (also flavi-reactive), 4/9 x2, 4/16, 5/2 x2, 5/7, 5/9, 5/28, 6/4, 6/12 x3, 6/20, 6/25, 6/27x2, 7/5x2, 7/11, 7/25, 8/2, 8/8, 8/13, 8/15, 8/20, 8/29, 9/3; 1 Brown Thrasher 3/15; 3 Common Grackles 4/19, 6/28, 7/25)
Okeechobee: 1 horse (7/15)
Orange: 16 sentinel chickens (1/4, 1/11, 1/18, 1/25 x2, 2/1 x3, 2/8, 3/5 x2, 7/9, 8/3, 8/30, 12/13 x2), 1 horse (4/7)
Osceola: 4 sentinel chickens (1/4, 7/5, 11/1, 11/15), 1 horse (8/12)
Polk: 2 horses (1/02, 10/23)
Putnam: 4 sentinel chickens (5/11, 6/14, 8/16, 8/30)
Santa Rosa: 29 live wild birds (6 Sparrows 1/11, 1/24 x2, 1/29, 2/7, 12/3; 9 Cardinals 1/15, 4/4, 5/15 (also flavi-reactive), 5/22, 7/5, 11/27 x2, 12/3, 12/11; 9 Blue Jays 5/1, 5/2, 5/15, 5/28, 6/5, 6/12 (also flavi-reactive), 7/17, 7/24, 9/5; 2 Red-Winged Blackbirds 6/12, 6/19; 1 Brown-headed Cowbird 6/26; 2 Brown Thrashers 7/3, 9/5)
St. Johns: 1 sentinel chicken (8/13)
Walton: 35 sentinel chickens (1/11 x3, 1/24, 2/13, 3/21, 4/9 x2, 5/7 x2, 6/4, 6/11, 6/25 x2, 8/20 x3, 8/21, 9/4 x3, 9/24 x2, 10/12 x3, 11/27, 12/5 x5, 12/11 x3), 20 live wild birds (15 Cardinals 2/1 x3, 3/8, 3/15 x2, 4/12, 5/3 x2, 5/17, 6/14, 6/21, 9/6, 9/20, 9/28; 4 House Sparrows 5/31, 6/8, 6/28x2; 1 Blue Jay 7/6)
Washington: 15 live wild birds (11 Cardinals 1/18, 2/01, 4/19, 4/26, 5/10, 5/17, 5/24, 5/31, 6/8x2, 6/28; 1 Red-Winged Blackbird 2/01, 2 Sparrows 1/25, 9/6; 1 Northern Cardinal 3/22), 4 horses (5/7, 6/17, 7/2, 7/14)

Highlands J virus

Positive samples from 15 sentinel chickens were received from 6 counties.

Collier: 1 sentinel chicken (3/19)
Leon: 1 sentinel chicken (6/25)
Nassau: 2 sentinel chickens (8/27, 9/10)
Orange: 4 sentinel chickens (6/07, 6/21, 6/28, 7/9)
St Johns: 1 sentinel chicken (5/21)
Walton: 6 sentinel chickens (3/21 x2, 4/9, 5/21, 7/9 x2)

St. Louis encephalitis virus

Positive samples from 5 sentinel chickens were received from 2 counties.

Lee: 2 sentinel chickens (7/9, 9/4)
Orange: 3 sentinel chickens (1/2 x3)

West Nile virus

Positive samples from 13 live wild birds (flavivirus-reactive**) and 57 sentinel chickens were received. Flavivirus-reactive samples are indeterminate for SLEV or WNV antibodies. To date, 12 counties have reported WNV (or undetermined flavivirus) activity.

Bay: 7 sentinel chickens (8/21, 9/4 x2, 9/11, 10/16, 10/30 x2)

Duval: 1 sentinel chicken (7/9)

Escambia: 3 sentinel chickens (9/4, 10/9, 10/16)

Gulf: 1 sentinel chicken (7/2)

Okaloosa: 4 live wild birds (1 White-Throated Sparrow 2/5**, 2 House Sparrows 2/19**, 3/19**, 1 Blue Jay 3/19** (also positive for EEEV antibodies))

Orange: 1 sentinel chicken (6/14)

Palm Beach: 1 sentinel chicken (11/5)

Putnam: 4 sentinel chickens (6/21, 6/28, 10/13, 10/26)

Santa Rosa: 7 live wild birds (1 Sparrow 1/29**, 5 Blue Jays 5/1**, 5/8**, 5/15** also EEEV positive, 6/12**, 6/12** also EEEV positive; 1 Cardinal 10/9**)

St. Johns: 9 sentinel chickens (8/20, 9/10 x3, 9/17, 9/24, 10/3 x3)

Walton: 1 live wild bird (1 Cardinal 1/18**); 30 sentinel chickens (1/9, 1/11, 3/19, 5/1 x2, 5/9, 6/18x2, 7/9, 7/30, 8/13, 9/12 x2, 10/1, 10/3 x3, 10/5 x2, 10/8, 10/15, 10/17 x3, 10/29, 11/1 x3, 11/13 x2)

Washington: 1 live wild bird (1 Sparrow 1/11**)

3. Mosquito Surveillance

Since January 1st, 1,767 mosquito pools have been received for testing from 9 counties (Bay, Duval, Escambia, Flagler, Hillsborough, Monroe, Pinellas, Sarasota, Walton).

California encephalitis group virus was detected in a pool of 50 *Anopheles crucians* collected on March 2 in Sarasota County.

Highlands J virus was cultured from a pool of 50 *Culiseta melanura* collected on May 2 in Flagler County.

For more surveillance information, please see the DOH web site at:

<http://www.MyFloridaEH.com/community/arboviral/index.html> or call the Disease Outbreak Information Hotline which offers updates on medical alert status and surveillance at 888-880-5782.

Current Bird Mortality Reporting Guidelines:

1. Report dead birds to www.myfwc.com/bird/. From that site, you can link to online bird identification sites. Under most circumstances, testing is not warranted. There is value in the reported information submitted even if the bird is not tested. The Florida Fish and Wildlife Conservation Commission (FWC) tracks all clusters of wild bird mortality in the state. **Since January 1st, 2007, 1,048 reports representing a total of 4,569 dead birds (55 crows, 55 jays, 98 raptors, 4,361 other species) were received from 59 of Florida's 67 counties.**

2. The DOH Lab in Tampa still accepts dead bird specimens for testing, as long as they are shipped in good condition. When there is a need to verify the cause of an increased corvid (i.e. crows and jays) or overall bird mortality, a representative sample may be submitted to the Tampa laboratory for arboviral testing. Instructions for submission of dead birds are found at: <http://www.MyFloridaEH.com/community/arboviral/index.html>. Select "How Do I Report?", and then choose "Protocol for Collecting and Shipping Bird Carcasses" under "Dead Birds" subtopic. **Since January 1st, 164 specimens from 27 counties have been tested; all were negative.**

3. Clusters of mortality of single non-corvid species or families of birds such as doves, ducks or pelicans are usually not caused by WNV and should not be submitted for WNV testing. However, we still want them reported to the FWC website.

4. If personnel are not able to offer pick-up service, yet they desire to collect specimens, determine a drop-off station and provide the caller with safe handling instructions. A county may modify their testing approach depending on the availability of other surveillance systems in the county.

Acknowledgements and data sources: 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.

* Wild captured bird information is provided by the Florida A&M University, John A. Mulrennan Sr., Public Health Entomology Research & Education Center. For more information, go to <http://www.pherec.org/DECS>, and click on "Arbovirus Ecology" to download the database, then the "Bird Serology" tab.