

Florida 2008 Arbovirus Activity by County Through September 27, 2008

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Year-to-Date Information for 2008

As of 9/27	Virus	2008 YTD	2007 YTD
Human cases	EEEV	1	0
	WNV	3*	3*
	CEV	1*	0
Counties under	Mosquito-borne illness alert	1	1
	Mosquito-borne illness advisory	7	1
Counties with activity	EEEV	37	23
	WNV	11	11
	HJV	14	7
	SLEV	0	2
	CEV	1	1

*One case acquired out-of-state

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

Summary:

Three locally-acquired human arbovirus cases have been reported this year. One was an EEE case in a Leon County resident reported in August; and two were WNV cases in Escambia County residents reported in September. A Wakulla County resident was also found to have WNV disease, though it is likely that the infection was acquired out-of-state.

Escambia County is under mosquito-borne illness alert. The following counties are under a mosquito-borne illness advisory: Holmes, Jackson, Jefferson, Leon, Volusia, Walton, and Washington.

1. Eastern Equine Encephalitis virus surveillance

Positive samples from **1 human**, **74 live wild birds***, **91 sentinel chickens**, **84 equines**, **2 other mammals**, **3 mosquito pools** and **3 dead birds** were received. To date, 37 of Florida's 67 counties have reported EEEV activity. Date of disease onset (**equines, mammals**), date of death (**birds**), date of collection (**mosquito pools**) and date of first known antibody positive bleed (**sentinels, live wild birds**) is shown in parentheses.

Alachua: **6 sentinel chickens** (5/5, 7/14, 7/21x2, 9/15, 9/16), **2 horses** (5/3, 8/3)

Baker: **4 horses** (4/7, 5/26, 5/30, 8/5)

Bradford: **1 dead bird (emu, 3/27)**, **2 horses** (5/25, 5/26)

Brevard: **1 sentinel chicken** (6/12)

Citrus: **1 sentinel chicken** (1/7)

Clay: **2 horses** (2/27, 7/20)

Columbia: **3 horses** (3/10, 3/26, 4/8)

Duval: **2 sentinel chickens** (5/21, 7/18); **1 horse** (7/26)

Escambia: **3 sentinel chickens** (6/3, 6/24, 7/22)

Flagler: **1 mosquito pool** (*Cs. melanura*, 3/19), **5 sentinel chickens** (3/24, 5/12 x2, 7/7, 7/21); **1 horse** (6/12)

Gadsden: **1 horse** (7/6)

Gulf: 6 sentinel chickens (3/17, 4/7, 4/14, 5/12, 5/27, 7/22), 1 miniature donkey (8/24)
Hillsborough: 1 live wild bird (1 African Crane 2/13)
Holmes: 9 horses (6/5, 6/18, 6/19, 6/21, 6/24, 6/26, 6/28, 7/21 x2)
Jackson: 6 horses (4/18, 5/22, 6/20, 6/25, 7/10, 7/22)
Jefferson: 2 horses (6/18, 6/23)
Lake: 1 horse (1/28)
Leon: 8 sentinel chickens (5/6, 5/27, 6/9, 6/17, 8/4, 8/11, 9/2 x2), 1 horse (8/10); 1 human (locally-acquired, August)
Madison: 1 canine (5/31); 1 horse (7/17)
Marion: 5 horses (3/14, 5/14, 7/7, 7/27, 8/5)
Nassau: 2 horses (6/23, 7/17); 12 sentinel chickens (7/14 x2, 7/28, 8/4 x2, 8/18 x5, 9/1, 9/8)
Okaloosa: 43 live wild birds (3 White-throated Sparrows 1/02, 1/15, 1/21; 20 Cardinals 1/02, 4/30, 6/16 x2, 6/23, 7/14 x2, 7/28 x3, 7/30, 8/4, 8/6, 8/7, 8/11, 8/18 x2, 8/20, 8/25, 9/2; 2 House Sparrows 1/9, 2/13; 11 Blue Jays 3/10, 5/12, 6/12, 7/16, 7/21, 8/4 x2, 8/11 x2, 8/25 x2; 5 Brown Thrashers 4/23, 5/14, 5/19, 5/26, 6/25; 1 House Finch 6/16; 1 Northern Mockingbird 9/2)
Okeechobee: 1 horse (8/6)
Orange: 14 sentinel chickens (1/7, 1/10, 2/14, 4/21, 5/19, 5/22, 6/16 x2, 6/23, 7/17 x2, 7/28, 8/11 x2), 2 live wild birds (1 Red-tailed Hawk 2/6, 1 Red-shouldered Hawk 3/3), 2 horses (6/9, 7/12)
Osceola: 4 horses (4/11, 5/30, 6/6, 7/9)
Palm Beach: 1 horse (6/11)
Polk: 2 horses (2/14, 8/5)
Pinellas: 1 sentinel chicken (7/28)
Putnam: 3 horses (1/8, 6/18, 8/22), 3 sentinel chickens (3/20, 5/5, 8/18)
Santa Rosa: 25 live wild birds (11 Blue Jays 1/14, 3/31 x2, 4/10, 5/7, 5/13, 5/21, 6/3, 7/29, 8/5, 9/9; 1 Northern Mockingbird 1/15; 11 Cardinals 4/29, 6/3, 7/1, 7/22 x2, 7/29 x2, 8/5 x4; 1 House Finch 7/22; 1 Red-Winged Blackbird 8/12); 3 horses (5/16, 8/9, 8/29)
St. Johns: 22 sentinel chickens (3/10, 3/17, 3/24 x4, 3/31, 4/14, 4/28 x2, 5/19 x2, 5/27 x3, 6/2, 6/9 x2, 6/23, 6/30, 7/7, 7/21); 1 horse (5/8)
Sumter: 1 horse (9/8)
Suwannee: 2 dead birds (emus, onset 4/26); 1 alpaca (6/24)
Taylor: 1 horse (7/7)
Volusia: 10 horses (1/4, 1/26, 2/11, 2/26, 3/25, 3/28, 4/20, 5/26, 7/24, 7/28), 3 sentinel chickens (2/4 x2, 2/11); 2 mosquito pools (*Cx. salinarius*, 2/13; *Cx. nigripalpus*, 2/13)
Walton: 3 horses (6/1, 6/19, 8/5), 4 sentinel chickens (6/23 x2, 8/18, 9/8), 4 live wild birds (2 Cardinals 8/7, 8/14; 2 House Sparrows 8/21, 9/11)
Washington: 8 horses (5/25, 6/6, 6/9, 6/22 x2, 6/23, 6/25, 7/2)

2. West Nile virus surveillance

WNV-positive samples from 3 humans, 9 sentinel chickens and 1 horse were received from 11 counties. Date of disease onset (horses) and date of first known antibody positive bleed (sentinels, live wild birds) is shown in parentheses. Flavivirus-reactive samples were received from 3 live wild birds. It was not determined whether the wild bird samples were reactive to SLEV or WNV.

Bay: 1 sentinel chicken (9/16)
Hillsborough: 1 live wild bird (1 Vulture 2/28)
Escambia: 2 humans (locally-acquired, September)
Leon: 5 sentinel chickens (8/18 x2, 8/25 x2, 9/2)
Madison: 1 horse (4/15)
Okaloosa: 1 live wild bird (1 Blue Jay 7/16)

Orange: 1 sentinel chicken (9/5)
Putnam: 1 sentinel chicken (3/20)
Santa Rosa: 1 live wild bird (1 House Finch 1/29)
Wakulla: 1 human (acquired out-of-state, August)
Walton: 1 sentinel chicken (3/20)

3. Highlands J virus surveillance

Positive samples from 50 sentinel chickens, and 5 mosquito pools were received from 14 counties. Date of first known antibody positive bleed (chickens) and collection date (mosquito pools) is shown in parentheses.

Brevard: 1 sentinel chicken (8/15)
Citrus: 1 sentinel chicken (4/21)
Duval: 4 sentinel chickens (6/16, 8/25 x3)
Escambia: 4 sentinel chickens (2/19, 3/3, 3/18, 6/17)
Flagler: 2 mosquito pools (*Cs. melanura*, 3/19, 5/7); 1 sentinel chicken (8/4)
Gulf: 1 sentinel chicken (2/18)
Leon: 4 sentinel chickens (6/30, 7/8, 7/21, 8/25)
Nassau: 5 sentinel chickens (6/16, 6/30, 8/11, 8/18, 8/25)
Orange: 5 sentinel chickens (4/17, 6/12 x2, 8/18, 9/2)
Osceola: 2 sentinel chickens (6/12, 8/29)
Putnam: 2 sentinel chickens (4/25, 5/16)
St. Johns: 6 sentinel chickens (4/14, 5/19, 6/23 x2, 7/7, 7/28)
Volusia: 2 sentinel chickens (2/18, 7/28); 3 mosquito pools (*Cx. nigripalpus*, 2/22, 2/26, 3/28)
Walton: 12 sentinel chickens (5/19, 5/29 x2, 6/11 x3, 6/16)

4. St. Louis encephalitis virus surveillance

None.

5. California serogroup viruses surveillance

Positive samples were received for 1 human and 1 mosquito pool for California serogroup viruses. Collection date or onset month is shown in parentheses.

Hillsborough: 1 human (La Crosse, acquired out-of-state, July)
Santa Rosa: 1 mosquito pool (*An. crucians*, 7/16)

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. **Between January 1st- September 27th, 2008, 456 reports representing a total of 1,083 dead birds (37 crows, 56 jays, 55 raptors, 935 others) were received from 57 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.

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 John A. Mulrennan Public Health Entomology Research and 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.