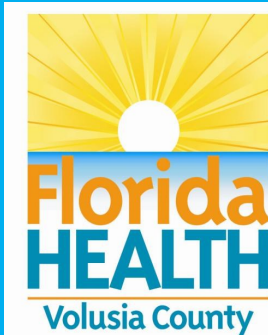


# EPI-LOG



## West Nile Virus

### Epidemiology

Suzanne Grubbs, MPH  
Suzanne.Grubbs@flhealth.gov  
386-274-0695

### Epidemiology

Brian Benton, MPH  
Brian.Benton@flhealth.gov  
386-274-0633

### Public Health Preparedness

Georgianne Cherry  
Georgianne.Cherry@flhealth.gov  
386-281-6647

### HIV/AIDS and STI's

Mary Lachendro-Figueroa  
Mary.Lachendro@flhealth.gov  
386 281-6545

### Ivette Rainey

Staff Assistant  
Ivette.Rainey@flhealth.gov  
386-274-0634

**Arbovirus Alert:** Volusia County has been under a West Nile Virus Alert since September 23, 2022 due to a Human Case of WNV infection that was locally acquired.

**Epidemiology:** West Nile virus (WNV), a flavivirus, was first identified in Uganda in 1937 and remained in the Eastern Hemisphere until introduced to the northeastern U.S. in the summer and fall of 1999. Since then the virus has spread and by the end of 2004, it had been detected in 48 states (not in Hawaii or Alaska). WNV was first detected in Florida in July 2001 in a crow in Jefferson County. Since its initial detection, WNV activity has been reported in all 67 Florida counties (2).

**Risk Factors:** Spending time outside, not using repellent or other prevention methods routinely, outdoor smoking without using repellent, torn or no screens at the residence, and not using air conditioning. Persons at risk due to spending time outside include those with outside occupations or hobbies and the homeless (2).

**Transmission:** WNV is transmitted to humans primarily through the bites of infected mosquitoes. Other modes of transmission include blood transfusion and organ transplantation.

**Incubation Period:** 2-14 days.

**Clinical Presentation:** The clinical

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spectrum for WNV infection includes asymptomatic infection or mild illness (fever and headache), aseptic meningitis and encephalitis that can progress to coma and death. WNV infection cases are often categorized into two primary groups: neuroinvasive disease and non-neuroinvasive disease. Approximately 80% of those infected show no clinical symptoms. Twenty percent have mild symptoms and less than 1% experience the neuroinvasive form of illness(3).

Neuroinvasive disease such as aseptic meningitis, encephalitis or acute flaccid paralysis (AFP).

Symptoms include:

- Fever
- Stiff neck
- Altered mental status
- Seizures
- Limb weakness
- Cerebrospinal fluid (CSF) pleocytosis
- Abnormal neuroimaging

Non-neuroinvasive disease (e.g., West Nile fever). Symptoms include:

- Fever
- Headache
- Myalgias
- Arthralgias
- Rash
- Gastrointestinal symptoms

**Patients at risk for severe disease:**

Individuals over 60 years of age, immunosuppressed patients.

### To report a disease or outbreak:

Phone: 386-274-0634

Fax: 386-274-0641

After hours: 386-316-5030

P.O. Box 9190, Bin #111

Daytona Beach, FL 32120-9190

## West Nile Virus

**WNV Laboratory Testing:** Testing for WNV-specific IgM antibodies should be requested for serum specimens or CSF. Volusia County Health Department can provide guidance on How and when to submit samples to the Florida Department of Health (FDOH) Bureau of Public Health Laboratories.

**Reporting:** Please contact Volusia CHD at (386) 274-0634 by the next business day if you suspect West Nile Virus infection to ensure prompt mosquito control efforts.

2. **Florida Department of Health.** Overview of Selected Zoonotic Mosquito-Borne Viruses in Florida [Online] [Cited: May 16, 2022.] [https://www.floridahealth.gov/diseases-and-conditions/mosquito-borne-diseases/\\_documents/guidebook-chapter-two.pdf](https://www.floridahealth.gov/diseases-and-conditions/mosquito-borne-diseases/_documents/guidebook-chapter-two.pdf)

3. Florida Department of Health. West Nile Fever and Neuroinvasive Disease— Information for Clinicians. [Online] [Cited: May 16, 2022.] <https://www.floridahealth.gov/diseases-and-conditions/mosquito-borne-diseases/guidebook.html>

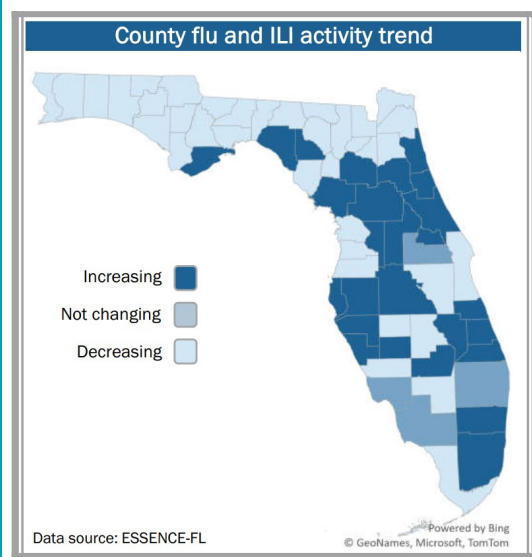
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## Influenza Season 2022-2023 from Florida Flu Review Week 48

**Influenza (flu)** is a respiratory infection caused by a variety of flu viruses spread primarily by droplets made when infected people cough, sneeze, or talk. Less often, a person might become infected with flu by touching a surface or object contaminated with flu virus and then touching their own mouth, eyes, or nose. **Influenza-like illness (ILI)** is defined as the presence of fever and cough or fever and sore throat without a laboratory-confirmed etiology.

**Season** The flu reporting year uses standard reporting weeks outlined by the Centers for Disease Control and Prevention (CDC), where every year has 52 or 53 reporting weeks. In Florida, the 2022–23 flu year began October 2, 2022 (week 40). Though flu season ends May 20, 2023 (week 20), surveillance continues year round. Seasons vary in timing, severity, and duration. It is not possible to predict what the 2022–23 flu season will be like in Florida. The current predominant strain circulating in our region is Influenza A H3.

Annual vaccination is the best way to protect yourself and others from potentially severe complications from flu. Flu shots take up to two weeks to become fully effective, so it's important to get vaccinated as soon as possible to reduce your chances of getting the flu this season. To locate a vaccine near you, visit: [VaccineFinder.org](https://www.vaccinefinder.org) or contact the Volusia County Health Department vaccine line at 386-274-0509.



CDC recommends antiviral treatment be initiated as soon as possible for people with confirmed or suspected flu who are at higher risk for complications (children <2 years, adults ≥65 years, pregnant people, and people with underlying medical conditions). Treatment should be administered within 48 hours of illness onset. For more information, contact your health care provider.

For more information on flu visit [Influenza \(Flu\) | CDC](https://www.cdc.gov/flu)

References: Centers for Disease Control and Prevention: [www.cdc.gov/flu](https://www.cdc.gov/flu)  
Florida Flu Review Week 48: [www.floridahealth.gov/floridaflu](https://www.floridahealth.gov/floridaflu)

Volusia County Disease Activity of Frequent Occurrence*	3rd Quarter 2022	3rd Quarter 2021	YTD 2022	Full Year 2021
<b>Vaccine Preventable</b>				
Mumps	3	1	6	2
Pertussis	0	0	2	1
Varicella	2	3	9	11
<b>CNS Diseases and Bacteremia's</b>				
Creutzfeldt-Jakob disease (CJD)	0	0	1	1
Haemophilus influenzae (invasive)‡	2	2	7	3
Meningitis (bacterial, cryptococcal, mycotic)	2	0	11	0
Meningococcal disease	0	0	0	1
Staphylococcus aureus (GISA/VISA)	0	0	0	0
Streptococcus pneumoniae (invasive disease)‡	7	1	26	9
<b>Enteric Infections</b>				
Campylobacteriosis	13	23	73	72
Cryptosporidiosis	8	8	23	18
Cyclosporiasis	18	25	18	26
Shiga-toxin producing E. coli, (STEC) infection	2	5	2	19
Giardiasis	9	6	28	19
Listeriosis	1	0	3	2
Salmonellosis	47	51	153	210
Shigellosis	4	3	7	6
Typhoid Fever (Salmonella Typhi infection)	0	1	0	1
<b>Viral Hepatitis</b>				
Hepatitis A	0	0	12	4
Hepatitis B, acute	10	6	38	30
Hepatitis B, chronic	42	25	122	110
Hepatitis B, pregnant Women	1	0	7	0
Hepatitis C, acute	17	18	67	68
Hepatitis C, chronic	197	123	599	530
<b>Vector Borne, Zoonoses</b>				
Babesiosis	1	0	1	1
Brucellosis	0	1	0	1
Dengue Fever	0	0	3	0
Ehrlichiosis/Anaplasmosis	1	2	2	9
Lyme disease	3	2	10	13
Malaria	0	0	0	1
Q Fever, acute	0	0	0	0
Rabies, animal	1	1	2	4
Rabies (possible exposure)	30	21	157	119
Rocky Mountain spotted fever/Spotted Fever	0	0	0	0
Rickettsiosis	0	0	0	0
West Nile virus, neuroinvasive	2	0	2	0
<b>Others</b>				
Arsenic Poisoning	1	0	2	3
Pesticide-related illness and injury acute	1	0	3	0
Carbon monoxide poisoning	6	0	10	1
Ciguatera Fish Poisoning	0	0	0	0
Hansen's Disease (leprosy)	0	0	1	1
Coronavirus disease 2019 (COVID-2019)	11891	27110	55966	57549
Influenza due to novel or pandemic strains	0	0	0	0
Influenza-associated pediatric mortality	0	0	0	0
Lead poisoning	15	7	33	21
Legionellosis	4	46	11	119
Scombroid Poisoning	0	0	1	1
Tetanus	1	0	3	1
Vibriosis (Excluding Cholera)	5	5	12	12
Monkeypox	19	0	30	0

\*Includes reported confirmed/probable/suspect cases. Data is provisional and subject to change. † Numbers are for Volusia/ County only ‡ Only reportable for young children

## MPOX CDC Health Advisory (October 3, 2022)

According to the CDC since May 2022, more than 25,000 monkeypox (mpox) cases have been identified in the United States. Mpox cases have been declining since mid-August 2022 in the United States, however, new cases— including clinically severe cases are continuing to occur. People who are immunocompromised due to HIV or other conditions are at higher risk for severe manifestations of mpox. As the mpox outbreak has progressed, an increasing proportion of cases have been identified among Black and Hispanic/Latino people. Black and Hispanic/Latino people are disproportionately affected by HIV.

### **Recommendations for Healthcare Providers**

- Upon initial presentation of signs and symptoms consistent with mpox, in addition to mpox, test all sexually active adults and adolescents for HIV (including acute infection) and other sexually transmitted infections (such as syphilis, herpes, gonorrhea, and chlamydia), and assess for other immunocompromising conditions.\*
- Be familiar with severe manifestations of monkeypox and risk factors for severe disease and consider multidisciplinary consultation with specialists such as infectious disease, ophthalmology, dermatology, urology, or critical care medicine.
- Contact local and state health departments early when there is concern for progression to severe manifestations or severe manifestations are present for guidance on management and securing necessary resources for treatment.
- Consider treating immunocompromised people diagnosed with mpox with tecovirimat early in the course of disease and consider a prolonged course of tecovirimat for those with more refractory and severe mpox infection. In certain clinical situations, modifications to the dose, frequency, and duration may be necessary depending on the individual's clinical condition, disease progression, therapeutic response, and clinical judgement in consultation with CDC and FDA as appropriate.
- Where available, healthcare providers should encourage people with mpox to be assessed for enrollment in the [ACTG STOMP trial](#) evaluating the efficacy of [tecovirimat](#).
- Have a low threshold to use multiple medical countermeasures, including tecovirimat, cidofovir or brincidofovir, and VIGIV in immunocompromised people who present with severe manifestations of monkeypox or are at high risk of progression to severe manifestations.
- Optimize immune function among immunocompromised people with suspected or confirmed monkeypox, specifically by ensuring those with HIV are on effective antiretroviral therapy.
- Discuss [HIV pre-exposure prophylaxis \(PrEP\)](#) with those who are HIV negative and at risk for HIV.
- Healthcare providers may request consultation with the CDC Mpox Response Clinical Escalations Team (email [eocevent482@cdc.gov](mailto:eocevent482@cdc.gov) or call the CDC EOC at (770) 488-7100).
- For more information please visit [Monkeypox | Poxvirus | CDC](#) or contact your county health department at: 386-274-0634
- Jynneos vaccine is available at Volusia County Health Department for high risk groups. To schedule an appointment for vaccination, call 386-274-0509

### **References**

1. HIV and Sexually Transmitted Infections Among Persons with Monkeypox—Eight U.S. Jurisdictions, May 17–July 22, 2022. *MMWR Morb Mort Wkly Rep* 2022; 71(36):1141 – 1147. <https://www.cdc.gov/mmwr/volumes/71/wr/mm7136a1.htm>
2. Outbreak of Human Monkeypox in Nigeria in 2017–18: A Clinical and Epidemiological Report – *The Lancet Infectious Diseases*. [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(19\)30294-4/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(19)30294-4/fulltext)
3. Centers for Disease Control and Prevention. Expanded Access IND Protocol: Use of Tecovirimat (TPOXX) for Treatment of Human Non-Variola Orthopoxvirus Infections in Adults and Children (IND 116,039/Protocol #6402).



Department of Health in Volusia County  
Office of Disease Control and Health Protection  
1845 Holsonback Drive, Bin 111  
Daytona Beach, Florida 32117