

The



# EPI gazette

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## Enterovirus D68 Respiratory Illness

The Centers for Disease Control and Prevention released an MMWR on a recent increase in Enterovirus D68 in multiple states; below is an excerpt. The complete MMWR article on these clusters can be viewed at the following link:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm63e0908a1.htm>

Hospitals in Missouri and Illinois are seeing more children than usual with severe respiratory illness caused by enterovirus D68. Several other states are investigating clusters of children with severe respiratory illness, possibly due to enterovirus D68.

Of the 19 patients from Kansas City in whom EV-D68 was confirmed, 10 (53%) were male, and ages ranged from 6 weeks to 16 years (median = 4 years). Thirteen patients (68%) had a previous history of asthma or wheezing, and six patients (32%) had no reported underlying respiratory illness. All patients had difficulty breathing and hypoxemia, and four (21%) also had wheezing. Notably, only five patients (26%) were febrile. All patients were admitted to the pediatric intensive care unit, and four required bilevel positive airway pressure ventilation. Chest radiographs showed perihilar infiltrates, often with atelectasis. Neither chest radiographs nor blood cultures were consistent with

bacterial coinfection.

The Bureau of Public Health Laboratories in Jacksonville and Tampa have the capacity to identify enterovirus D68. The Florida Department of Health (DOH) has not identified any outbreaks caused by enterovirus D68.

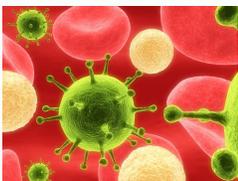
Recently, DOH surveillance activities have detected an increase in the number of visits by children with respiratory and influenza-like illnesses to emergency department and urgent care centers. The increase coincides with children returning to school and is seen each year. This year's respiratory illness activity is at or below expected levels for this time of year. Additionally, surveillance of respiratory illness among children <18 years old indicate that hospital admissions are currently at or below levels previously seen for this time of year.

Health care providers should consider EV-D68 as a possible cause of acute, unexplained severe respiratory illness; suspected clusters or outbreaks should be reported to your local health department.

Outbreak and disease characteristics of concern for enterovirus D68 may include:

- Unexplained respiratory disease outbreaks.
- Outbreaks that are PCR negative for influenza.
- Outbreaks that include severe respiratory disease.
- Minority of cases reporting fever.
- Illness that includes new onset of wheezing or asthma exacerbations.
- Outbreaks of respiratory illness predominantly among children.

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# West Nile Virus Clinician Guidance

## Epidemiology

Eight (8) cases of West Nile virus (WNV) disease have been reported in Florida in 2014, including one case reported recently in neighboring Volusia County. We are currently in the peak season for WNV transmission which typically occurs between July and September each year.

## Clinical Evaluation

West Nile Virus disease should be considered in any person with a febrile or acute neurologic illness who has had recent exposure to mosquitoes, blood transfusion, or organ transplantation, especially during the summer months in areas where virus activity has been reported. The diagnosis should also be considered in any infant born to a mother infected with WNV during pregnancy or while breastfeeding.

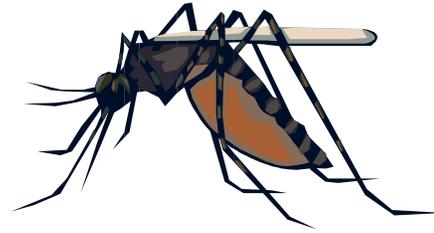
The incubation period for WNV disease is typically 2 to 6 days but ranges from 2 to 14 days and can be several weeks in immunocompromised people.

An estimated 70-80% of human WNV infections are subclinical or asymptomatic. Most symptomatic persons experience an acute systemic febrile illness that often includes headache, weakness, myalgia, or arthralgia; gastrointestinal symptoms and a transient maculopapular rash also are commonly reported. Less than 1% of infected persons develop neuroinvasive disease, which typically manifests as meningitis, encephalitis, or acute flaccid paralysis.

## Diagnostic Testing

Laboratory diagnosis is generally accomplished by testing of serum or cerebrospinal fluid (CSF) to detect WNV-specific IgM antibodies. Immunoassays for WNV-specific IgM are available commercially and through state public health laboratories.

WNV-specific IgM antibodies are usually detectable 3 to 8 days after onset of illness and persist for 30 to 90 days, but longer persistence has been documented. Therefore, positive IgM antibodies occasionally may reflect a past infection. If serum is collected within 8 days of illness onset, the absence of detectable virus-specific IgM does not rule out the diagnosis of WNV



infection, and the test may need to be repeated on a later sample.

The presence of WNV-specific IgM in blood or CSF provides good evidence of recent infection but may also result from cross-reactive antibodies after infection with other flaviviruses or from non-specific reactivity. According to product inserts for commercially available WNV IgM assays, all positive results obtained with these assays should be confirmed by neutralizing antibody testing of acute- and convalescent-phase serum specimens at DOH Bureau of Public Health Laboratories or CDC.

WNV IgG antibodies generally are detected shortly after IgM antibodies and persist for many years following a symptomatic or asymptomatic infection. Therefore, the presence of IgG antibodies alone is only evidence of previous infection and clinically compatible cases with the presence of IgG, but not IgM, should be evaluated for other etiologic agents.

### Prevention: Drain and Cover

**DRAIN** standing water to stop mosquitoes from multiplying.

**COVER** your skin with clothing and use mosquito repellent.

**COVER** doors and windows with screens to keep mosquitoes out .

Additional information on Mosquito-borne disease can be found at the following link:

<http://www.floridahealth.gov/diseases-and-conditions/mosquito-borne-diseases/index.html>

## Disease Incidence Table-Seminole County

Selected Diseases/Conditions Reported to DOH-Seminole	2014 through Week 36	2013 through Week 36	2012 through Week 36	2011–2013 Average through Week 36
AIDS*	20	38	30	32.3
Animal Bite to Humans**	11	21	8	13.7
Animal Rabies	1	7	2	3.7
Campylobacteriosis	21	26	36	29
Chlamydia	934	1427	1443	1021
<b>Cryptosporidiosis</b>	7	3	4	3
<b>Cyclosporiasis</b>	3	1	1	1.0
Dengue	1	2	2	0.7
<b>E. coli Shiga toxin-producing</b>	8	6	8	5.7
Giardiasis	11	6	13	9.7
<b>Gonorrhea</b>	175	314	352	143.3
Haemophilus influenzae (invasive)	2	7	1	3.3
Hepatitis A	2	0	3	1.6
Hepatitis B (acute and chronic)	47	34	44	46.3
<b>Hepatitis C (acute and chronic)</b>	324	207	235	215.3
Hepatitis B in Pregnant Women	1	3	5	5.3
HIV*	35	63	47	54.6
Lead poisoning	4	2	9	4.3
<b>Legionellosis</b>	4	7	1	3.3
<b>Lyme Disease</b>	6	3	2	2.3
<b>Meningococcal Disease</b>	1	1	1	0.7
<b>Pertussis</b>	18	8	10	6.7
<b>Salmonellosis</b>	57	43	52	50
Shigellosis	15	4	44	19.3
S. pneumoniae – drug resistant	5	9	6	7.3
<b>Syphilis</b>	50	41	29	36
Tuberculosis	4	4	4	5.3
Varicella	10	13	15	14

\* HIV data includes those cases that have converted to AIDS. These HIV cases cannot be added with AIDS cases to get combined totals since the categories are not mutually exclusive. AIDS/HIV/TB data are current through June 30, 2014.

\*\* Animal bite to humans by a potentially rabid animal resulting in a county health department or state health office recommendation for post-exposure prophylaxis (PEP), or a bite by a non-human primate.

Reported cases of diseases/conditions in **Bold** are >10% higher than the previous three year average for the same time period.

**All Data is Provisional**



# Disease Reporting

*The Epidemiology Program conducts disease surveillance and investigates suspected occurrences of infectious diseases and conditions reported from physician’s offices, hospitals and laboratories.*

*Surveillance is primarily conducted through passive reporting from the medical community as required by Chapter 381, Florida Statutes.*

*To report a reportable disease or outbreak during business hours please use the [Report of Communicable Disease Form](#) for diseases other than HIV/AIDS, STD, or TB, or contact the Epidemiology Department at (407) 665-3266.*

*To report an urgent reportable disease or outbreak after hours, please contact (407) 665-3266 and follow the instructions to reach the Epidemiologist on-call 24/7.*

[Reportable Diseases/Conditions in Florida - Practitioner List](#)

[Reportable Diseases/Conditions in Florida - Laboratory List](#)

[Disease Reporting Information for Health Care Providers and Laboratories](#)

*Foodborne Illnesses Reporting Links:*

[Report illnesses due to food online 24/7](#)

[Report unsafe or unsanitary conditions](#)

## MISSION

To protect, promote and improve the health of all people in Florida through integrated state, county and community efforts

## VISION

To be the Healthiest State in the Nation

## VALUES

Innovation  
Collaboration  
Accountability  
Responsiveness  
Excellence

## ADDRESS

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