



# Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

## Acute Flaccid Myelitis

Acute flaccid myelitis (AFM) is a rare condition that affects grey matter areas of the spinal cord. Recently the nation has seen an increase in cases since 2014. While the condition is not new, it remains very rare with the CDC estimating less than one in a million people in the US will get AFM every year. How one contracts AFM is still not known, however, there are a variety of possible causes such as viruses and environmental toxin exposures. The increase in AFM cases in 2014 coincided with a national outbreak of severe respiratory illness among people caused by enterovirus D68 (EV-D68), although a direct association has not been established. The majority of cases have been found in children and the CDC has not yet determined why. There are no reported cases in Orange County, however there are two cases in Florida, both of which are in children, meeting the CDC's definition for "persons under investigation" (PUI).

AFM is characterized by sudden onset of arm or leg weakness and loss of muscle tone and reflexes. Some cases might also display facial droop/weakness, difficulty moving the eyes, drooping eyelids, or difficulty with swallowing or slurred speech in addition to arm or leg weakness. Numbness or tingling sensations are rare in those with AFM, however pain sensations may be experienced. The most severe symptom of AFM is respiratory failure which can happen when respiratory muscles become weak. In very rare cases, AFM may trigger other serious neurologic complications that could lead to death.

A diagnosis of AFM is done by examining a patient's nervous system in combination with reviewing pictures of the spinal cord, primarily the areas of the body where weakness, poor muscle tone, and decreased reflexes have occurred. MRI, lumbar punctures for CSF analysis, and nerve conduction response tests may also be performed. AFM can be difficult to diagnose because it shares many of the same symptoms as other neurologic diseases like transverse myelitis and Guillain-Barre syndrome. You can learn more about the type of information that helps to determine if a patient has AFM [here](#).

There is no specific treatment for AFM, a neurologist may recommend certain interventions on a case-by-case basis. Long-term outcomes for those with AFM are not known. Preventative measures include polio vaccine and protecting against mosquito bites as poliovirus and West Nile virus may sometimes lead to AFM.

Clinicians should continue to be vigilant and aware of patients with sudden onset of flaccid limb weakness. **Clinicians should send information on patients who meet the clinical criteria regardless of any laboratory results or MRI findings to their state or local health departments as soon as possible.** A link to the AFM patient summary form can be found below, this form should be filled out and submitted to your local health department as soon as possible after patient identification so that they can be monitored in real time.

Your role in patient notification is crucial and much needed to help us better understand the spectrum of AFM, including all possible causes, risk factors, and outcomes of this condition.

[Acute Flaccid Myelitis: Patient Summary Form](#)

[AFM Case Definition](#)

## October 2018

(Updated December 26, 2018)

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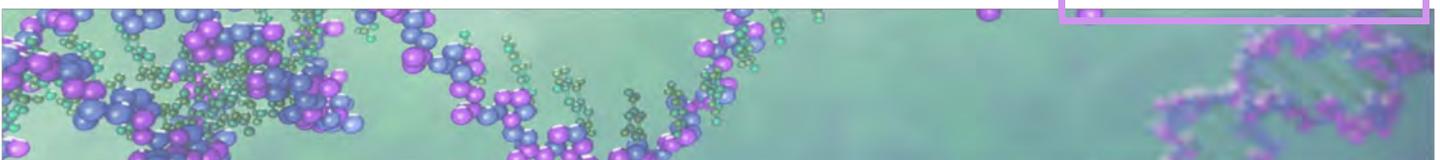
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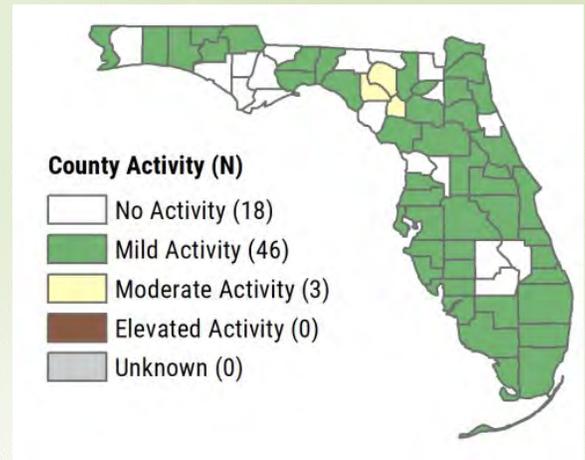


# Influenza Surveillance (data from [Florida Flu Review](#))

## Florida

- In week 43, influenza activity increased but remained at low levels statewide. Influenza activity is expected to increase as we head into flu season.
- No new influenza-associated pediatric deaths were reported in week 43. One influenza-associated pediatric death has been confirmed since the start of the 2018-19 influenza season. Annual vaccination remains the best way to protect children against influenza.
- The Florida Department of Health recommends **vaccination** for influenza **as soon as possible**.

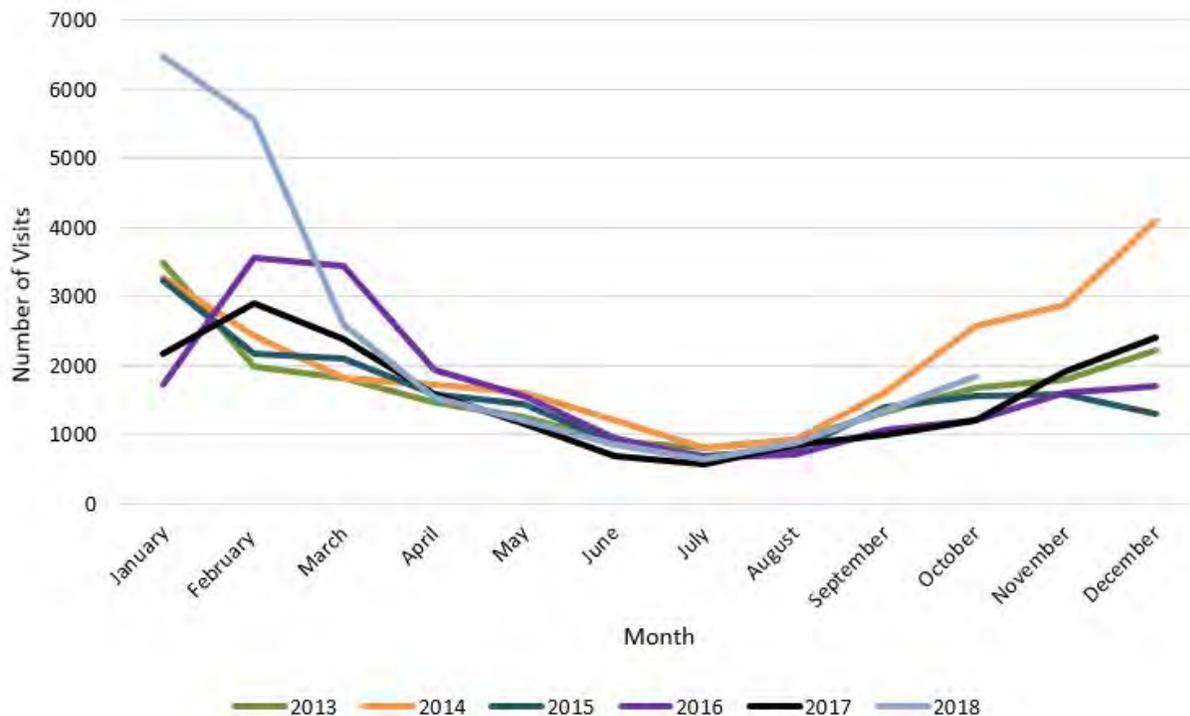
Influenza activity by county, week 43



## Orange County

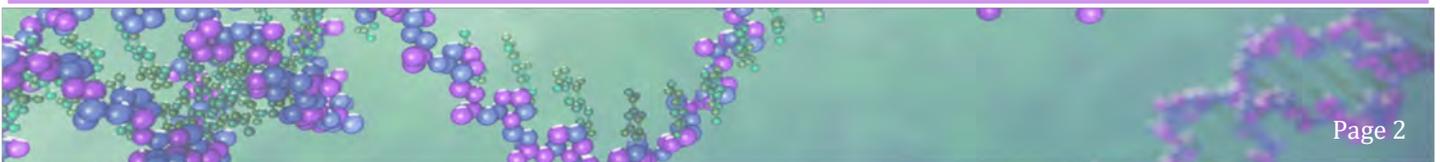
- No new influenza-like illness outbreaks were reported in Orange County for October 2018.
- There was an uptick in influenza activity for week 43 in Orange County but numbers still remain low.

Influenza-like Illness from Emergency Department Visits in Orange County, 2013 to 2018



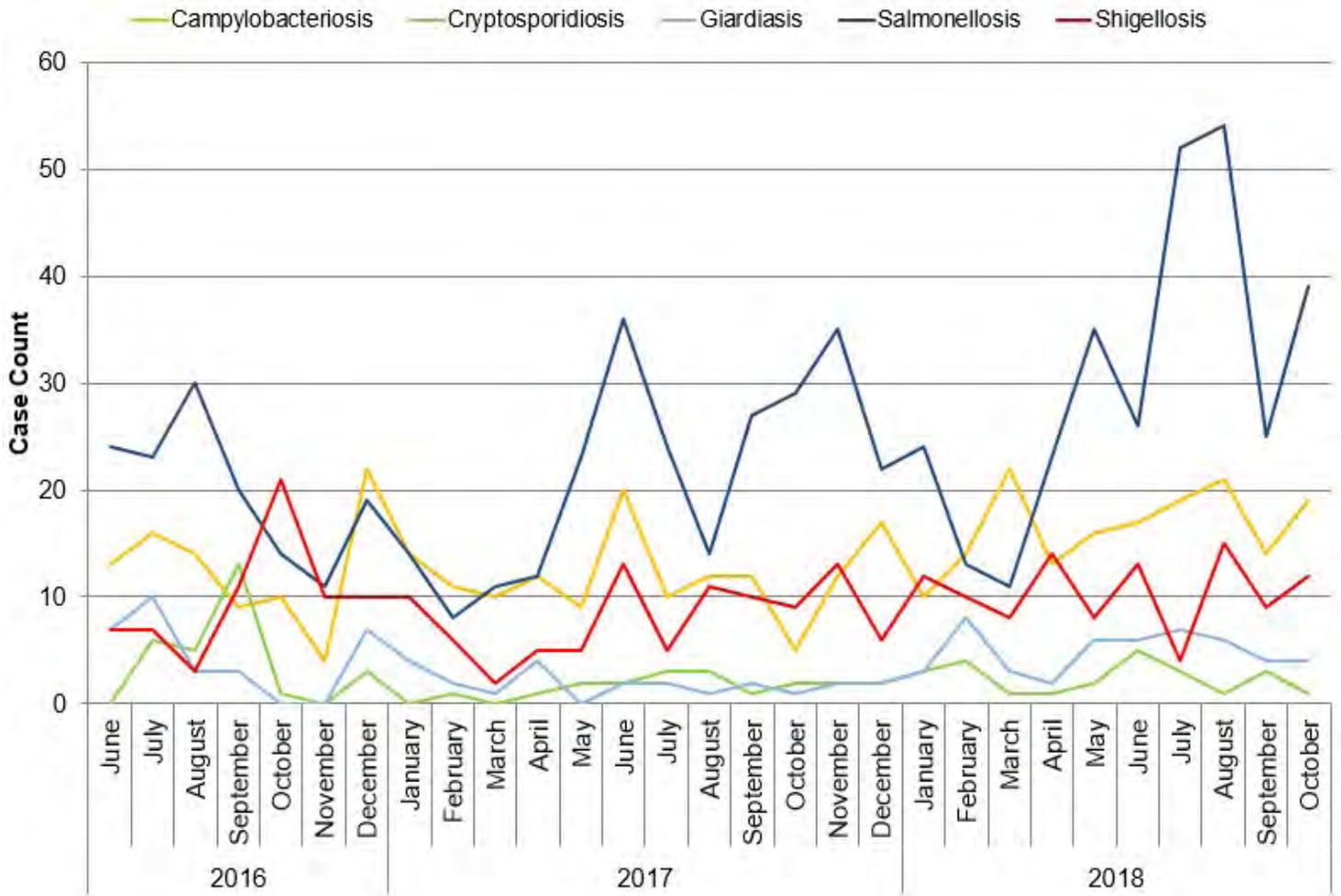
### Influenza Resources:

[Florida Department of Health Influenza](#)    [CDC: Influenza \(Health Professionals\)](#)    [CDC: Weekly US Influenza Surveillance Report](#)  
[Center for Disease Control and Prevention Weekly Influenza Activity Report](#)



# Gastrointestinal Illness Surveillance

## Select Reportable Enteric Diseases in Orange County, Florida, June 2016 to October 2018



## Gastrointestinal Illness Points of Interest:

- Enteric reportable disease cases were normal for the month of October.

### Gastrointestinal Illness Resources:

[Florida Online Foodborne Illness Complaint Form - Public Use](#)

[CDC: Healthy Water](#)

[Florida Food and Waterborne Disease Program](#)

[Florida Food Recall Searchable Database](#)

[Florida Department of Health - Norovirus Resources](#)

[CDC: A-Z Index for Foodborne Illness](#)



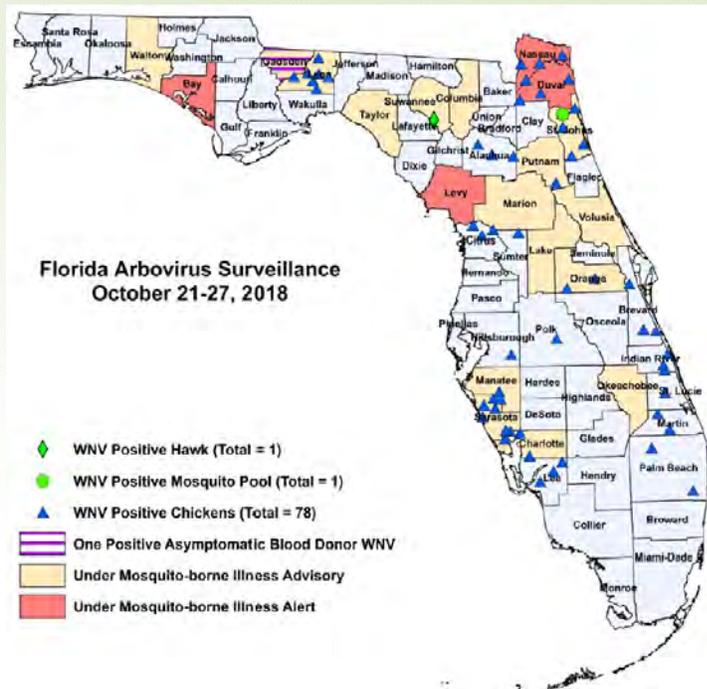
# Arboviral Surveillance

## International

- There is a Level 2 (Alert) Travel Health Notice from the CDC for multiple countries in Africa, the Caribbean, Central and South America, Southeast Asia, and Pacific Islands related to Zika virus transmission and an association with poor pregnancy outcomes. Pregnant women should consider postponing travel to these areas.
- There is also a Level 2 Travel Health Notice for Brazil and a Level 1 Travel Health Notice in Nigeria related to the transmission of yellow fever virus.

## Florida

- Thirty-six cases of **dengue** associated with international travel have been reported year to date.
- Three cases of **chikungunya** have been reported year to date in persons that had international travel.
- In 2018, positive samples of **West Nile virus** were reported from 17 humans, three blood donors, five horses, one zebra, one red-shouldered hawk, four crows, 28 mosquito pools, and 544 sentinel chickens were reported from 33 counties.
- Positive samples of **Eastern equine encephalitis** were reported in three humans, 51 horses, one mule, one donkey, one owl, one emu, five emu flocks, two mosquito pools, and 144 sentinel chickens from thirty-one counties in 2018.
- Charlotte, Columbia, Gadsden, Lake, Leon, Manatee, Marion, Okeechobee, Orange, Putnam, Sarasota, St. Johns, Suwannee, Taylor, Volusia, and Walton counties are currently under a **mosquito-borne illness advisory**. Bay, Duval, Levy, and Nassau counties are currently under a **mosquito-borne illness alert**. No other counties are currently under mosquito-borne illness advisory or alert.



## Orange County

- **No locally acquired** cases of Zika virus, West Nile virus, dengue virus, chikungunya virus, St. Louis encephalitis virus, or Eastern equine encephalitis virus have been identified in Orange County in 2018.
- Eleven cases of **Zika fever** have been reported year to date in individuals with travel history to a country or area experiencing Zika virus activity.
- **We are no longer offering free Zika testing at DOH-Orange for insured pregnant women. Testing for Zika may be ordered through commercial labs. Please notify DOH-Orange of symptomatic patients with a history of travel. Please refer to the following [letter](#) regarding updates on Zika virus testing at BPHL.**

### Arboviral Resources:

[Weekly Florida Arboviral Activity Report \(Released on Mondays\)](#)

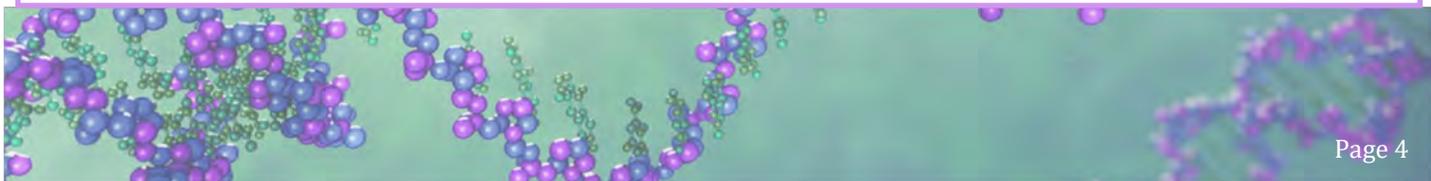
[Orange County Mosquito Control](#)

### Additional Resources:

[Florida Department of Health Zika](#)

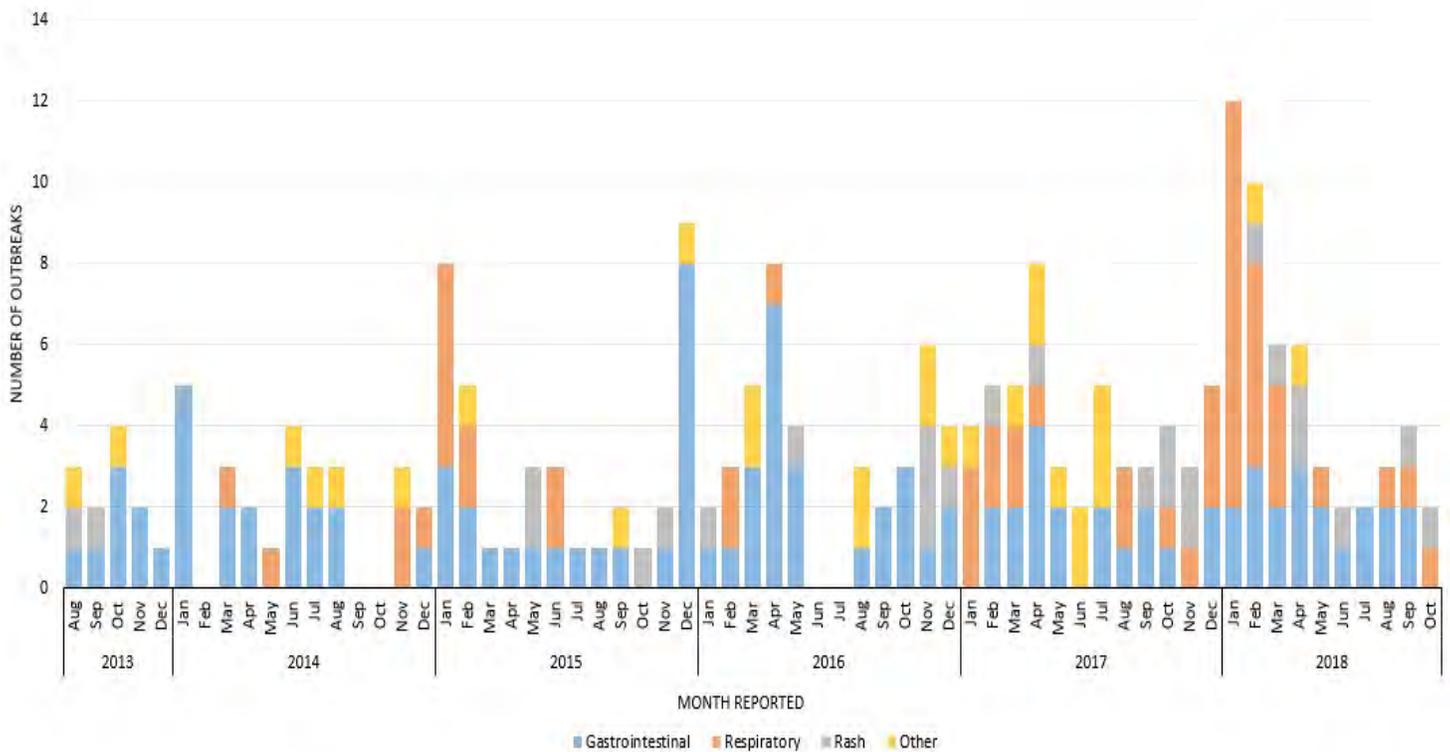
[Florida Department of Health Mosquito-Borne and Other Insect-Borne Diseases Information](#)

[Florida Department of Health Mosquito-Borne Disease Education Materials](#)



# Outbreaks in Orange County

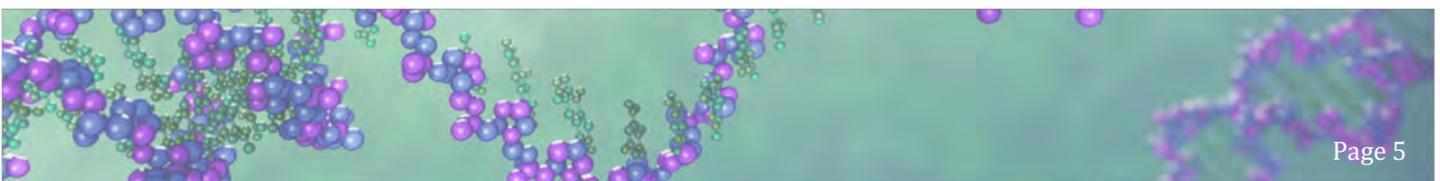
- In October 2018, the following outbreaks were investigated:
  - One rash outbreak in a daycare facility
  - One respiratory outbreak in a hotel setting



\*\*\* All Data In This Surveillance Report are Preliminary \*\*\*

**Reminder:** Outbreaks of any disease, any case, cluster of cases, or exposure to an infectious or non-infectious disease, condition, or agent found in the general community or any defined setting (e.g., hospital, school, or other institution) not listed [here](#) of urgent public health significance should be reported.

For more information on reporting, please follow this link.: [Reportable Disease Form](#)



Disease	ORANGE				All Counties			
	October		Cumulative (YTD)		October		Cumulative (YTD)	
	2018	Median (2013 - 2017)	2018	Median (2013 - 2017)	2018	Median (2013 - 2017)	2018	Median (2013 - 2017)
Amebic Infections (Balamuthia mandrillaris)	0	0	0	0	0	0	3	0
Anaplasmosis - HGA (Anaplasma phagocytophilum)	1	0	2	0	2	0	18	8
Arboviral Disease: Other	0	0	0	0	0	0	1	0
Arsenic Poisoning	0	0	0	0	3	1	14	12
Botulism: Infant	0	0	0	0	0	0	1	0
Brucellosis	0	0	0	0	3	0	15	6
California Serogroup Virus Neuroinvasive Disease	0	0	0	0	0	0	3	0
Campylobacteriosis	20	11	183	107	386	264	4156	3122
Carbon Monoxide Poisoning	1	0	6	13	46	24	221	225
Chikungunya Fever	0	0	1	0	0	1	3	9
Cholera (Vibrio cholerae Type O1)	0	0	0	0	0	0	0	2
Ciguatera Fish Poisoning	0	0	3	0	7	4	68	44
Creutzfeldt-Jakob Disease (CJD)	0	0	0	1	1	2	14	22
Cryptosporidiosis	2	4	25	36	48	70	516	507
Cyclosporiasis	0	0	8	2	1	1	78	36
Dengue Fever	1	1	2	4	11	10	44	70
Dengue Fever: Severe	0	0	0	0	0	0	2	0
Eastern Equine Encephalitis Neuroinvasive Disease	0	0	0	0	0	0	3	1
Ehrlichiosis - HME (Ehrlichia chaffeensis)	0	0	1	0	4	1	40	22
Escherichia coli: Shiga Toxin-Producing (STEC) Infection	9	1	58	17	61	40	788	439
Flavivirus Disease and Infection	0	0	0	0	0	0	2	0
Giardiasis: Acute	4	6	52	60	98	91	959	935
Haemophilus influenzae Invasive Disease	2	1	20	16	22	19	277	235
Hansen's Disease (Leprosy)	0	0	0	0	5	1	21	16
Hemolytic Uremic Syndrome (HUS)	0	0	0	1	0	1	9	6
Hepatitis A	19	0	65	4	83	9	347	110
Hepatitis B: Acute	5	1	30	16	64	43	679	440
Hepatitis B: Chronic	68	36	430	363	505	397	4486	4180
Hepatitis B: Perinatal	0	0	0	0	1	0	3	1
Hepatitis B: Surface Antigen in Pregnant Women	2	3	24	50	29	39	333	421
Hepatitis C: Acute	1	0	15	6	19	24	507	196
Hepatitis C: Chronic	150	115	1615	1225	1937	2148	20268	24774
Hepatitis C: Perinatal	0	0	1	0	2	0	16	0
Hepatitis D	1	0	1	0	1	0	4	1
Hepatitis E	0	0	0	0	1	0	5	4
Influenza-Associated Pediatric Mortality	0	0	0	0	0	0	8	6
Lead Poisoning	7	3	127	23	169	124	4024	785
Legionellosis	6	3	43	22	87	43	600	299
Leptospirosis	0	0	0	0	0	0	7	2
Listeriosis	1	0	4	2	6	8	49	39
Lyme Disease	0	0	3	4	12	16	162	176
Malaria	0	0	3	7	5	4	59	58
Measles (Rubeola)	0	0	0	0	0	0	15	5
Meningitis: Bacterial or Mycotic	0	0	3	1	13	9	93	108
Meningococcal Disease	0	0	3	1	1	1	23	23
Mercury Poisoning	0	0	0	0	0	1	36	13
Mumps	0	0	9	1	19	0	160	19
Neurotoxic Shellfish Poisoning	0	0	0	0	0	0	1	0
Paratyphoid Fever (Salmonella Serotypes Paratyphi A B C)	0	0	0	0	0	1	1	6
Pertussis	1	1	11	24	35	29	286	312
Pesticide-Related Illness and Injury: Acute	0	0	4	0	1	4	48	56
Q Fever: Acute (Coxiella burnetii)	0	0	0	0	0	0	2	2
Rabies: Possible Exposure	4	9	60	75	300	285	3393	2823
Ricin Toxin Poisoning	0	0	0	0	0	0	4	1
Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis	0	0	0	1	7	2	41	21
Rubella	0	0	0	0	0	0	0	1
Salmonellosis	49	47	340	284	838	848	5997	5441
Saxitoxin Poisoning (Paralytic Shellfish Poisoning)	0	0	0	0	0	0	4	0
Scambroid Poisoning	0	0	0	0	6	0	26	0
Shigellosis	15	18	109	86	128	133	1252	1156
Staphylococcus aureus Infection: Intermediate Resistance to Vancomycin (VISA)	0	0	0	0	0	0	2	3
Strep pneumoniae Invasive Disease: Drug-Resistant	6	1	22	17	15	14	216	210
Strep pneumoniae Invasive Disease: Drug-Susceptible	2	2	21	19	26	25	337	365
Tetanus	0	0	0	0	0	0	0	3
Tularemia (Francisella tularensis)	0	0	0	0	0	0	3	1
Typhoid Fever (Salmonella Serotype Typhi)	0	0	13	1	17	1	135	14
Varicella (Chickenpox)	1	1	37	17	52	45	689	582
Vibriosis (Grimontia hollisae)	0	0	0	0	0	0	5	2
Vibriosis (Other Vibrio Species)	0	0	1	0	10	2	55	10
Vibriosis (Vibrio alginolyticus)	0	0	3	2	5	7	68	55
Vibriosis (Vibrio cholerae Type Non-O1)	0	0	0	0	1	1	5	12
Vibriosis (Vibrio fluvialis)	0	0	0	0	1	2	11	11
Vibriosis (Vibrio mimicus)	0	0	0	0	0	0	0	7
Vibriosis (Vibrio parahaemolyticus)	0	0	1	1	3	5	47	43
Vibriosis (Vibrio vulnificus)	0	0	0	1	4	9	41	43
West Nile Virus Neuroinvasive Disease	0	0	0	0	9	1	26	5
West Nile Virus Non-Neuroinvasive Disease	0	0	0	0	4	0	9	2
Zika Virus Disease and Infection- Congenital	0	0	0	0	0	0	1	0
Zika Virus Disease and Infection- Non-Congenital	0	0	31	0	14	0	166	0
Total	378	264	3390	2510	5128	4810	52011	48564

\*\*ALL DATA ARE PRELIMINARY\*\*

# ACIP Hepatitis A Vaccine Recommendation Update

During the meeting of CDC's Advisory Committee on the Immunization Practices (ACIP), it was voted to add a new policy for Hepatitis A in those experiencing homelessness. They are now recommending that everyone ages 1 and older who is experiencing homelessness routinely be immunized against hepatitis A (HepA). At the meeting, the work group presented the increase in HepA cases and outbreaks since 2016 and explained that there have been outbreaks in 11 states with more than 7,500 cases.

"Homelessness was found to be independently associated with two to three times higher odds of infection with HepA and two to three times higher chance of severe outcomes such as hospitalization or death." Because of these findings, ACIP voted to recommend adding homeless individuals to the list of those who are at increased risk of HepA infection or severe HepA disease. The list of those at increased risk also includes: travelers, men who have sex with men, users of injection and non-injection drugs, people with clotting-factor disorders, people who work with nonhuman primates, people who anticipate close personal contact with an international adoptee, people with chronic liver disease, and homeless individuals.

Orange County, FL is also seeing an increase in HepA cases in the homeless population. The best way to prevent infection is through vaccination, but emphasizing proper hand hygiene after using the bathroom, changing diapers, and before preparing or eating food is important in prevention of additional cases.



Picture Source: [CDC](#)

Reference: [AAFP News– Health of the Public](#)

## Other Disease Resources

In the structure of DOH-Orange, tuberculosis, sexually transmitted infections, and human immunodeficiency virus are housed in separate programs from the Epidemiology Program. We recognize the importance of these diseases for our community partners and for your convenience have provided a link for surveillance information on these diseases in Florida and Area 7 HIV & AIDS Program.

Resource: <http://orange.floridahealth.gov/programs-and-services/index.html>

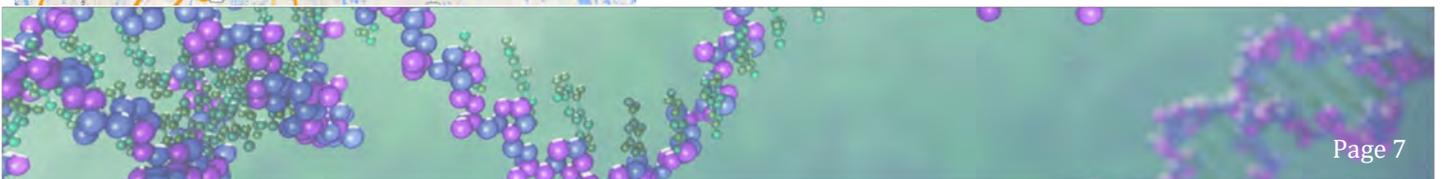
 Hospital linked to ESSENCE

Florida Hospital Centra Care Clinic linked to ESSENCE



Florida Department of Health: ESSENCE

Since 2007, the Florida Department of Health has operated the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE-FL), a state-wide electronic bio-surveillance system. The initial scope of ESSENCE was to aid in rapidly detecting adverse health events in the community based on Emergency Department (ED) chief complaints. In the following years, ESSENCE capabilities have continually evolved to currently allow for rapid data analysis, mapping, and visualization across several data sources, including ED record data, Merlin reportable disease data, Florida Poison Information Network consultations, and Florida Office of Vital Statistics death records. The majority of the information presented in this report comes via ESSENCE. Florida currently has 228 emergency departments and 35 urgent care centers reporting to ESSENCE-FL for a total of 263 facilities.



# Florida Department of Health in Orange County

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The Epidemiology Program conducts disease surveillance and investigates, controls, and prevents infectious diseases and conditions that are reported to DOH-Orange.

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

Data are collected and analyzed to track disease trend, and identify outbreaks and unusual occurrences for response and mitigation, to identify targets for prevention and reduction efforts.

In cooperation with the Office of Emergency Operations, the Epidemiology Program conducts syndromic and influenza-like-illness surveillance activities. Syndromic surveillance was added to the disease reporting process as an active method of determining activities in the community that could be early indicators of outbreaks and bioterrorism.

Our staff ensures that action is taken to prevent infectious disease outbreaks from occurring in Orange County communities and area attractions. Along with many public and private health groups, we work for the prevention of chronic and long-term diseases in Central Florida.

**ALL DATA ARE PROVISIONAL**

