



Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

Outbreak of Hepatitis A Virus in Orange County

Since May 2018, the Florida Department of Health in Orange County (DOH-Orange) has seen a 1000% increase in hepatitis A virus (HAV) cases. DOH-Orange disseminated a health care provider alert on June 19 to recommend proactive vaccinations in response to the substantial increase in locally-acquired hepatitis A infections and subsequently declared an HAV outbreak in August 2018. In Orange County, there are currently 30 laboratory-confirmed cases year to date; prior 5-year average yield 1.4 cases a year.

Most of these recent cases did not report international travel. Although infections have occurred across all demographic groups, approximately 75% of the recent cases are among males, 92% Non-Hispanic, 88% White. The median age of cases is 32 years. Fifty percent of cases had a history of intravenous drug use (IVDU) and 38% had a history of hepatitis B and/or C infections. Furthermore, HAV infections in populations of men who have sex with men, IVDU, and homelessness/under sheltered are 45%, 62%, and 24% respectively in Orange County.

On June 11, 2018, the Centers for Disease Control and Prevention (CDC) distributed a [health advisory](#) regarding an “Outbreak of Hepatitis A Virus (HAV) Infections among Persons Who Use Drugs and Persons Experiencing Homelessness.” From January 2017 to April 2018, the CDC has received more than 2,500 reports of hepatitis A infections associated with person-to-person transmission from multiple states, including Florida. Communities at risk for unrecognized clusters of hepatitis A infection include: persons who report drug use; persons who report homelessness; men who have sex with men; and persons who report recent incarceration.

Intravenous drug users are known to be at increased risk of hepatitis A infection. The Advisory Committee on Immunization Practices has recommended that all persons with IVDU risk receive two doses of hepatitis A vaccine; the second dose should be administered 6-12 months after the first dose.

The best way to prevent hepatitis A infection is through vaccination. The Epidemiology Program at DOH-Orange aims to promote awareness and facilitate the implementation of prevention and intervention measures moving forward through this outbreak period. This can be done by increasing in-person education and public knowledge regarding hepatitis A and through the organization and execution of local screening and vaccination events. DOH-Orange has conducted multiple community hepatitis A outreach events to date and will continue to promote vaccine/education awareness in our community.

For more information, please visit:

[Florida Department of Health In Orange County Hepatitis Program](#)

August 2018

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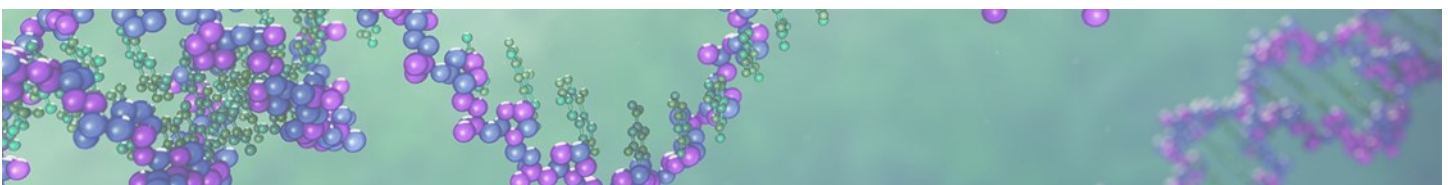
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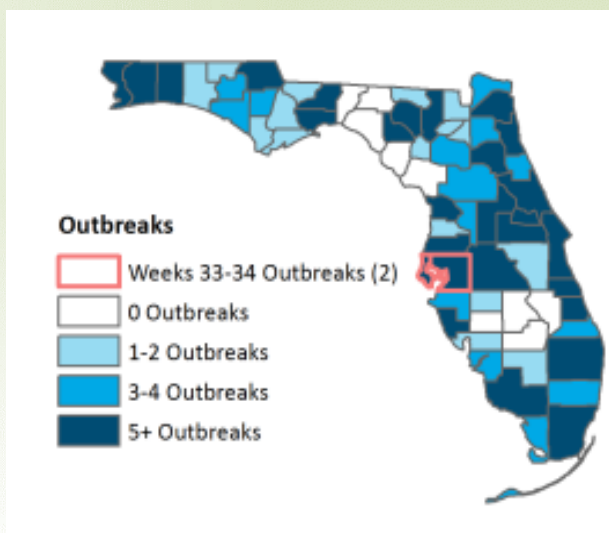
Influenza Surveillance (data from [Florida Flu Review](#))

Florida

- In week 34, state influenza activity continues to circulate at low levels across the state.
- No new influenza-associated pediatric deaths were confirmed in weeks 33-34. Eight have been confirmed since the start of the 2017-18 influenza season.
- Deaths due to pneumonia and influenza were below expected levels.

Flu reporting from the state office is released every 2 weeks during the summer.

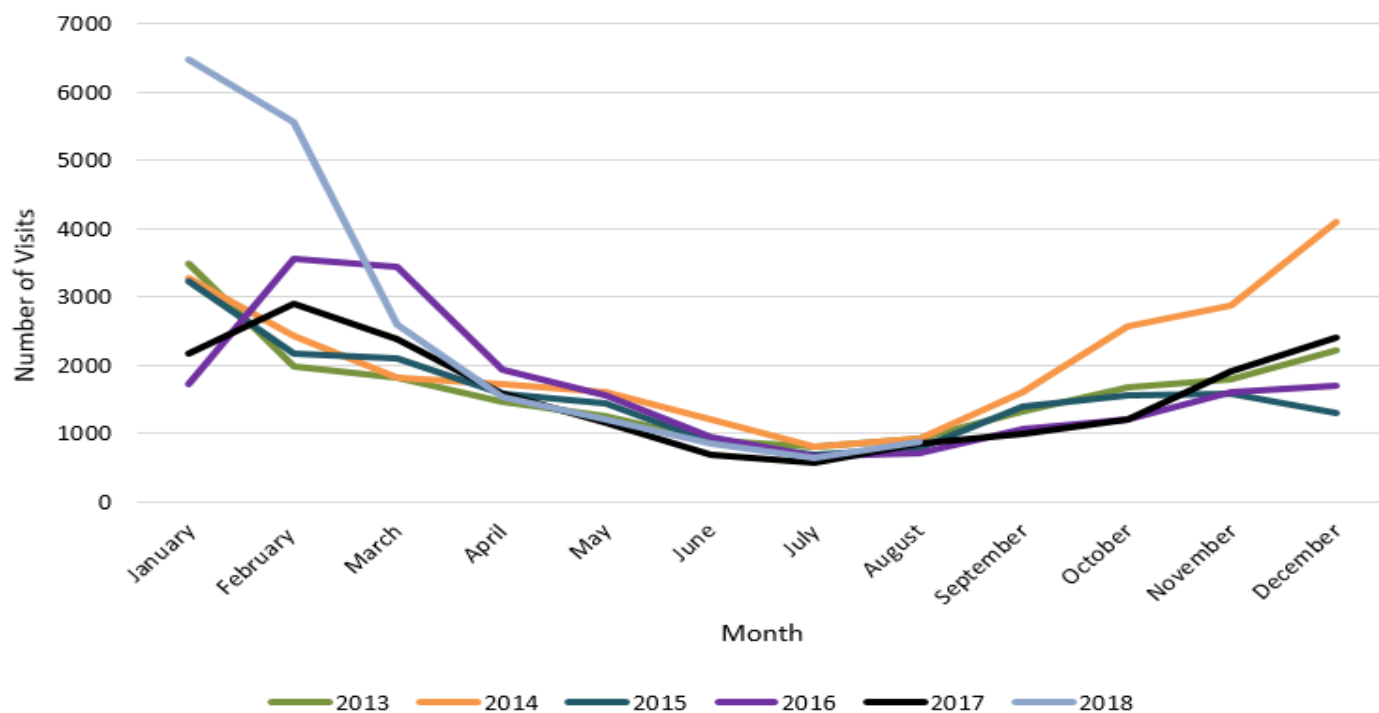
Influenza and ILI Outbreaks by County Week 40, 2017 through Week 34, 2018



Orange County

- No new influenza-like illness outbreaks were reported in Orange County in August 2018.
- There was a slight uptick in influenza activity for week 34 in Orange County but numbers still remain low.

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

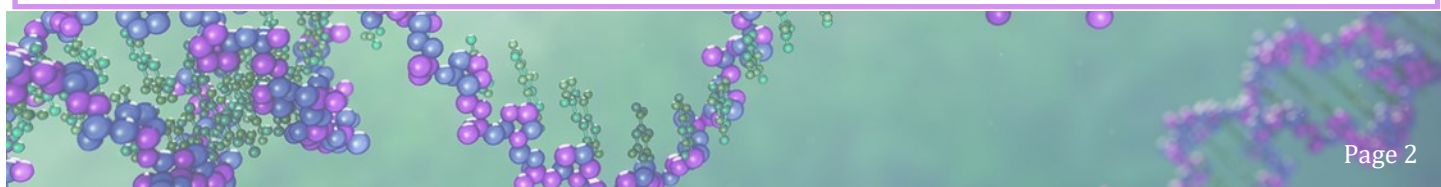


Influenza Resources:

[Florida Department of Health Influenza](#)

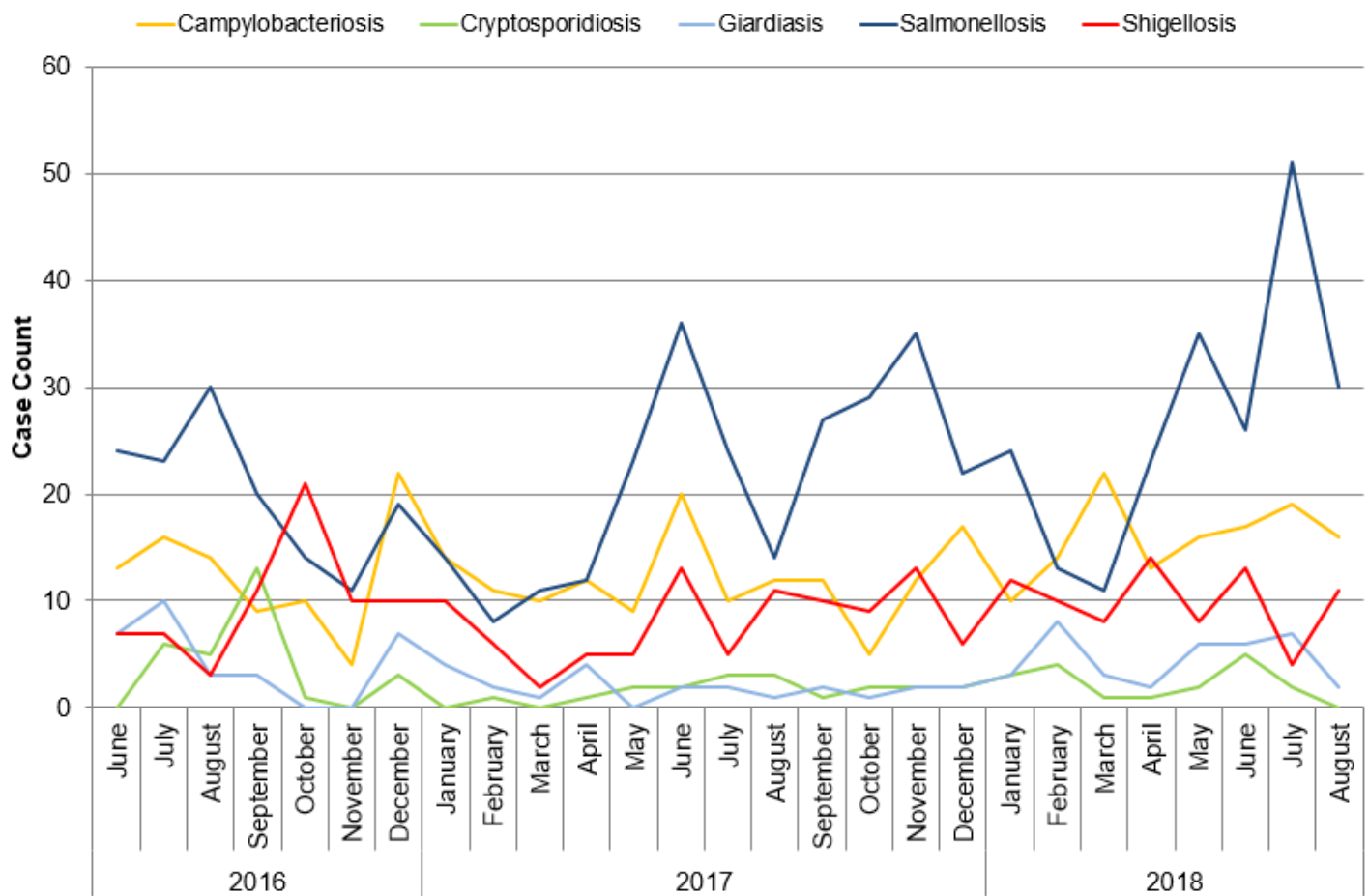
[CDC: Influenza \(Health Professionals\)](#)

[CDC: Weekly US Influenza Surveillance Report](#)



Gastrointestinal Illness Surveillance

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



Gastrointestinal Illness Points of Interest:

- Enteric reportable disease cases were normal for the month of August. Throughout the summer months, we expect the number of enteric illnesses to increase.
- In August, 21 foodborne illness complaints were investigated by DOH Orange County from various sources such as direct reporting, online reporting, social media, Department of Health, and crowd-sourced web-based reporting.

Gastrointestinal Illness Resources:

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

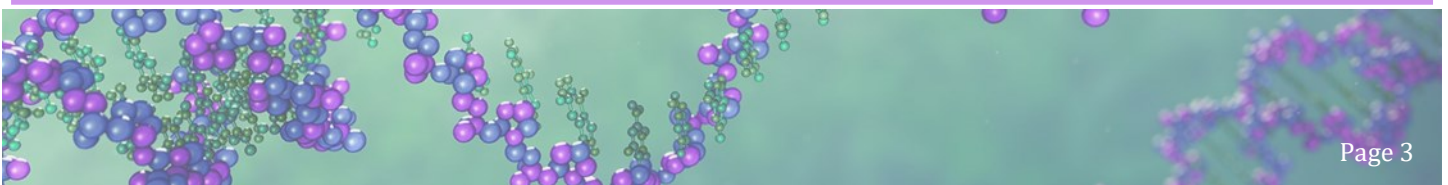
[CDC: Healthy Water](#)

[Florida Food and Waterborne Disease Program](#)

[Florida Food Recall Searchable Database](#)

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

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



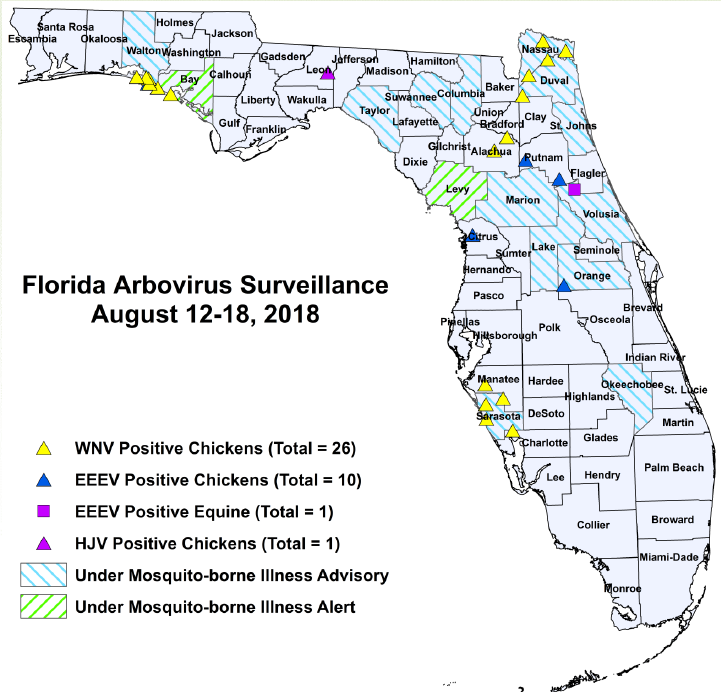
Arboviral Surveillance

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

- Fourteen cases of **dengue** associated with international travel have been reported year to date.
- Two 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 one human, one blood donor, one crow, eighteen mosquito pools, and one hundred eighteen sentinel chickens have been reported from fifteen counties.
- Positive samples of **Eastern equine encephalitis** were reported in three humans, forty-nine horses, one mule, one donkey, one owl, one emu, five emu flocks, two mosquito pools, and one hundred thirty-three sentinel chickens from thirty-one counties in 2018.
- Columbia, Duval, Lake, Marion, Nassau, Okeechobee, Orange, Sarasota, St. Johns, Suwannee, Taylor, Volusia, and Walton counties are currently under a **mosquito-borne illness advisory**. Bay and Levy 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.
- Nine 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 \(Released on Mondays\)](#)

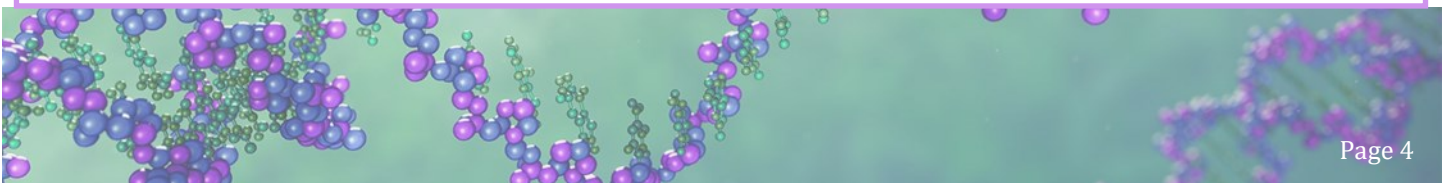
[Orange County Mosquito Control](#)

Additional Resources:

[Florida Department of Health Zika](#)

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

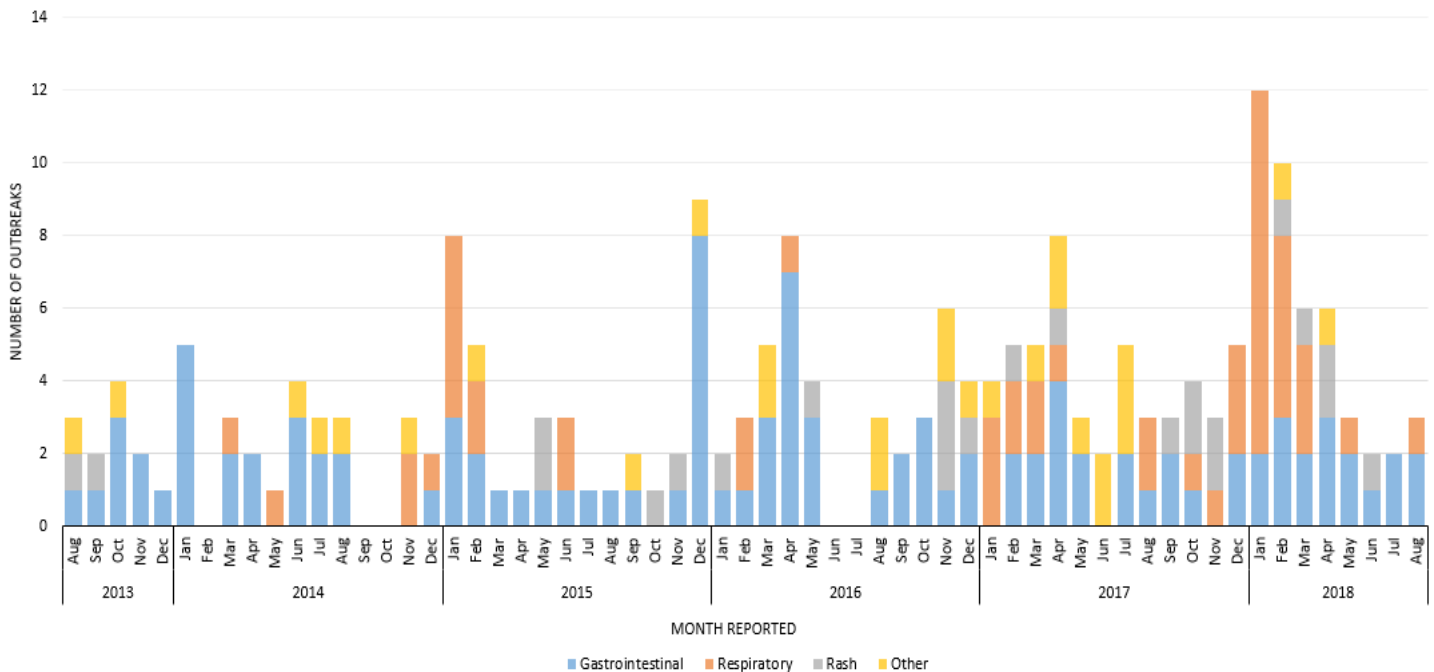
[Florida Department of Health Mosquito-Borne Disease Education Materials](#)



Outbreaks in Orange County

- In August 2018, the following outbreaks were investigated:
 - One legionellosis outbreak in a long term care facility.
 - One gastrointestinal illness outbreak associated with a restaurant.
 - One *Salmonella* braenderup outbreak associated with a restaurant.

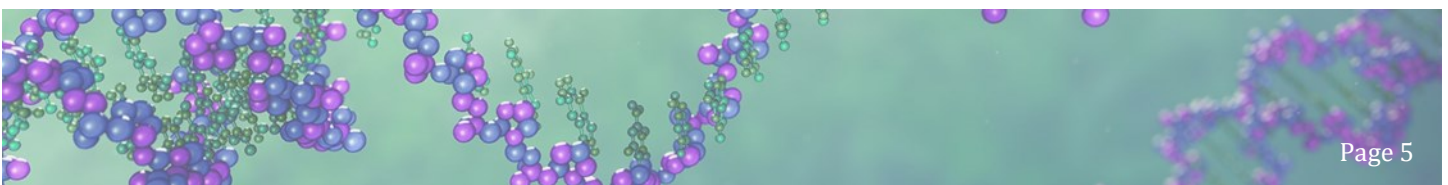
Number of Outbreaks Reported in Orange County, FL, by Month from 2013-2018



*** 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			
	August		Cumulative (YTD)		August		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	1	0	7	1	15	7
Arsenic Poisoning	0	0	0	0	0	1	11	9
Botulism: Infant	0	0	0	0	0	0	1	0
Brucellosis	0	0	0	0	2	0	12	5
California Serogroup Virus Neuroinvasive Disease	0	0	0	0	2	0	2	0
Campylobacteriosis	26	13	143	89	480	329	3410	2555
Carbon Monoxide Poisoning	0	0	5	8	16	13	149	149
Chikungunya Fever	0	0	1	0	1	0	2	8
Cholera (Vibrio cholerae Type O1)	0	0	0	0	0	0	0	2
Ciguatera Fish Poisoning	0	0	3	0	3	8	49	28
Creutzfeldt-Jakob Disease (CJD)	0	0	0	1	1	3	12	17
Cryptosporidiosis	1	6	19	21	76	85	404	339
Cyclosporiasis	2	0	8	2	18	9	75	34
Dengue Fever	0	0	1	3	6	9	18	61
Dengue Fever: Severe	0	0	0	0	1	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	2	27	17
Escherichia coli: Shiga Toxin-Producing (STEC) Infection	4	4	43	16	95	64	648	345
Flavivirus Disease and Infection	0	0	0	0	0	0	1	0
Giardiasis: Acute	4	8	40	46	117	115	756	720
Haemophilus influenzae Invasive Disease	1	1	17	12	8	15	236	203
Hansen's Disease (Leprosy)	0	0	0	0	2	3	14	15
Hemolytic Uremic Syndrome (HUS)	0	0	0	1	3	1	9	6
Hepatitis A	11	0	34	2	57	14	211	90
Hepatitis B: Acute	3	2	22	12	58	49	567	351
Hepatitis B: Chronic	40	40	321	280	469	461	3538	3363
Hepatitis B: Perinatal	0	0	0	0	0	0	2	1
Hepatitis B: Surface Antigen in Pregnant Women	0	5	22	46	36	37	271	338
Hepatitis C: Acute	4	1	18	5	92	23	435	169
Hepatitis C: Chronic	207	125	1329	980	2270	2645	16529	19899
Hepatitis C: Perinatal	0	0	1	0	0	0	13	0
Hepatitis D	0	0	0	0	0	0	3	1
Hepatitis E	1	0	1	0	1	0	3	3
Influenza-Associated Pediatric Mortality	0	0	0	0	0	0	7	6
Lead Poisoning	7	2	115	16	205	92	3683	591
Legionellosis	6	4	33	14	69	43	439	221
Leptospirosis	0	0	0	0	3	0	6	1
Listeriosis	0	0	2	2	4	7	36	27
Lyme Disease	0	1	2	3	30	51	123	135
Malaria	1	0	3	6	8	9	49	50
Measles (Rubeola)	0	0	0	0	7	0	14	5
Meningitis: Bacterial or Mycotic	0	0	3	1	4	12	71	91
Meningococcal Disease	1	0	2	1	1	1	18	19
Mercury Poisoning	0	0	0	0	3	1	35	12
Mumps	0	0	9	1	11	1	134	16
Neurotoxic Shellfish Poisoning	0	0	0	0	1	0	1	0
Paratyphoid Fever (Salmonella Serotypes Paratyphi A B C)	0	0	0	0	0	1	1	6
Pertussis	1	2	8	24	34	42	228	275
Pesticide-Related Illness and Injury: Acute	2	0	2	0	3	7	33	17
Q Fever: Acute (Coxiella burnetii)	0	0	0	0	0	0	2	2
Rabies: Possible Exposure	6	9	53	57	307	295	2760	2299
Ricin Toxin Poisoning	0	0	0	0	0	0	4	1
Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis	0	0	0	1	10	3	33	16
Rubella	0	0	0	0	0	0	0	1
Salmonellosis	52	36	240	193	823	751	4281	3751
Saxitoxin Poisoning (Paralytic Shellfish Poisoning)	0	0	0	0	0	0	3	0
Scombroid Poisoning	0	0	0	0	1	0	12	0
Shigellosis	13	4	84	53	112	163	1046	920
Staphylococcus aureus Infection: Intermediate Resistance to Vancomycin (VISA)	0	0	0	0	0	0	2	3
Strep pneumoniae Invasive Disease: Drug-Resistant	4	0	18	13	14	9	198	176
Strep pneumoniae Invasive Disease: Drug-Susceptible	2	1	17	15	18	12	292	321
Tetanus	0	0	0	0	0	0	0	2
Tularemia (Francisella tularensis)	0	0	0	0	2	0	3	0
Typhoid Fever (Salmonella Serotype Typhi)	2	0	10	1	16	2	106	12
Varicella (Chickenpox)	5	1	33	12	67	48	564	464
Vibriosis (Grimontia hollisae)	0	0	0	0	0	0	5	2
Vibriosis (Other Vibrio Species)	0	0	1	0	4	1	37	8
Vibriosis (Vibrio alginolyticus)	1	0	3	2	14	7	57	46
Vibriosis (Vibrio cholerae Type Non-O1)	0	0	0	0	3	1	5	7
Vibriosis (Vibrio fluvialis)	0	0	0	0	0	1	10	8
Vibriosis (Vibrio mimicus)	0	0	0	0	0	1	0	7
Vibriosis (Vibrio parahaemolyticus)	0	0	1	1	10	7	41	34
Vibriosis (Vibrio vulnificus)	0	0	0	0	10	6	31	25
West Nile Virus Neuroinvasive Disease	0	0	0	0	7	3	7	3
West Nile Virus Non-Neuroinvasive Disease	0	0	0	0	2	2	4	2
Zika Virus Disease and Infection- Non-Congenital	2	0	27	0	18	0	140	0
Total	410	265	2696	1940	5646	5466	41952	38318

ALL DATA ARE PRELIMINARY

How to Prevent Illness after a Natural Disaster

As we are well into hurricane season, it is important to understand the potential risks of infectious and communicable diseases that can arise with natural disasters. Illnesses can come from a wide array of sources including animals, insects, gases, and unsafe food and water. The health department may see an increase in mosquito-borne (e.g., dengue, West Nile, Zika, etc.), carbon monoxide poisoning, gastrointestinal (e.g., norovirus, *Salmonella*, *Cryptosporidium*, etc.), and respiratory (e.g., influenza, enterovirus, etc.) illnesses after severe weather, like hurricanes or heavy rains.

Below are best practices to prevent illness after a natural disaster:

- Treat water to make it safe to drink by boiling or using an appropriate chemical treatment.
- Cover cuts or abrasions with waterproof bandages or other coverings that seal out water.
- Never use generators, pressure washers, grills, camp stoves, or other gasoline, propane, natural gas, or charcoal-burning devices inside your home, basement, garage, or camper—or even outside near an open window, door, or vent.
- Always wash your hands with soap and boiled or disinfected water before preparing or eating food, after toilet use, after participating in cleanup activities, and after handling articles contaminated by floodwater or sewage.
- To protect yourself from mosquitoes, use screens on dwellings, and wear long pants, socks, and long-sleeved shirts and use insect repellents that contain DEET or Picaridin.
- Do not wade, swim, bathe, submerge your head in, or swallow floodwater or any fresh water source that may be contaminated by floodwater runoff.



Photo Credit: CDC

Resource: [CDC Health and Safety Concerns for All Disasters](https://www.cdc.gov/disasters/health-safety/index.html)

Other Disease Resources

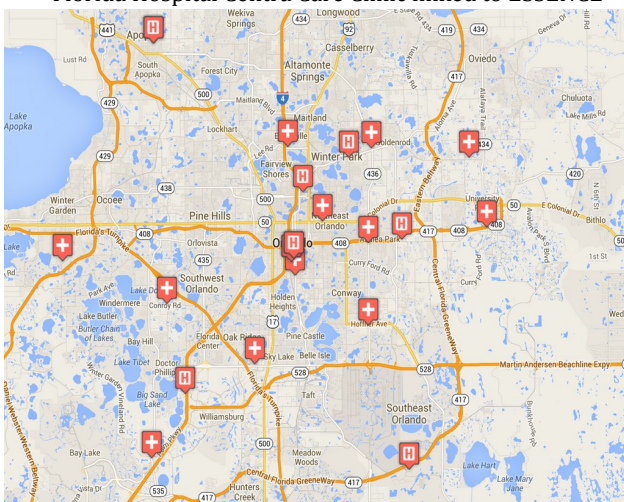
In the structure of DOH-Orange, tuberculosis, sexually transmitted infections, and human immunodeficiency virus are housed in separate programs from the Epidemiology Program. We recognize the importance of these diseases for our community partners and for your convenience have provided a link for surveillance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

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



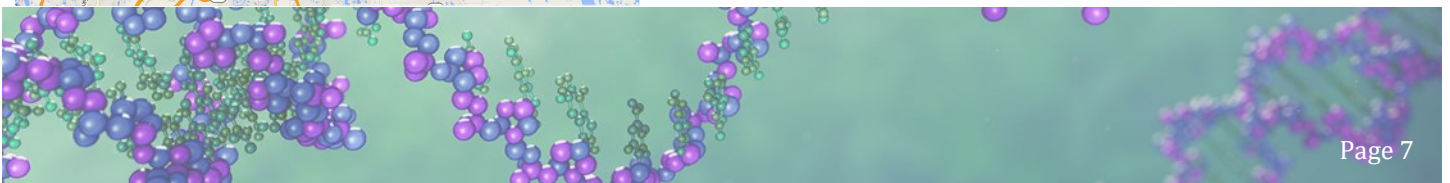
Hospital linked to ESSENCE

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

