



Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

Eastern Equine Encephalitis Mosquito Advisory

On July 3, 2018, the Florida Department of Health in Orange County (DOH- Orange) issued a mosquito-borne illness advisory after notification that several sentinel chicken flocks, in areas of Orange County, tested positive for Eastern equine encephalitis virus (EEEV) infection. Because of this increase in mosquito-borne disease activity, risk of transmission to humans has also increased.

EEEV is transmitted to humans by the bite of an infected mosquito. The mosquito will feed on the blood of an infected bird and subsequently bite an uninfected mammal, including humans, causing infection. The primary transmission cycle takes place in and around swampy areas where human populations are less dense, which limits human transmission. All residents and visitors to areas where EEEV activity has been identified are at risk of infection. People who engage in outdoor work and recreational activities in endemic areas are at increased risk of infection.

After an incubation period of 4-10 days, EEEV infection can result in one of two types of illness, systemic or encephalitic. The type of illness will depend on the age of the person and other comorbidities. It is possible that some people who become infected with EEEV may be asymptomatic. **Systemic** infection has an abrupt onset and is characterized by chills, fever, malaise, arthralgia, and myalgia. In infants, the encephalitic form is characterized by abrupt onset; in older children and adults, encephalitis is manifested after a few days of systemic illness. Signs and symptoms in **encephalitic** patients are fever, headache, irritability, restlessness, drowsiness, anorexia, vomiting, diarrhea, cyanosis, convulsions, and coma. Persons over age 50 and younger than age 15 are at greatest risk of severe disease (encephalitis) following infection.

Serologic testing remains the primary method for diagnosing EEEV infection. EEEV IgM tests are available commercially, in some state health department laboratories, and at CDC. All EEEV disease cases should be reported to local public health authorities. Reporting can assist local, state, and national authorities in recognizing outbreaks of this potentially serious disease and to institute control measures to limit future infections.

The best way to prevent infection is to reduce possible exposure to mosquito-borne diseases, especially since there is no vaccine for humans available against EEEV. Prevention recommendations include:

- Using repellent containing DEET, picaridin, IR3535 or oil of lemon eucalyptus on exposed skin and/or clothing by always following the directions on the package
- Wearing protective clothing like long sleeves and pants when weather permits
- Installing and repairing screens on windows and doors to keep mosquitoes out
- Draining standing water to stop mosquitoes from multiplying and laying eggs near homes and work places



Reference: [Mosquito Advisory Article](#) [CDC EEEV Home Page](#)

July 2018

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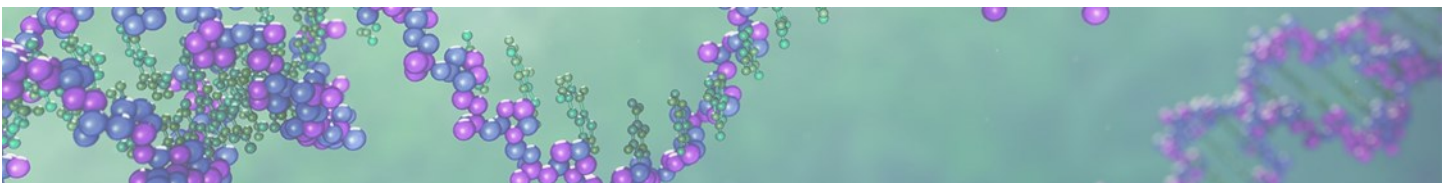
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Influenza Surveillance (data from [Florida Flu Review](#))

Florida

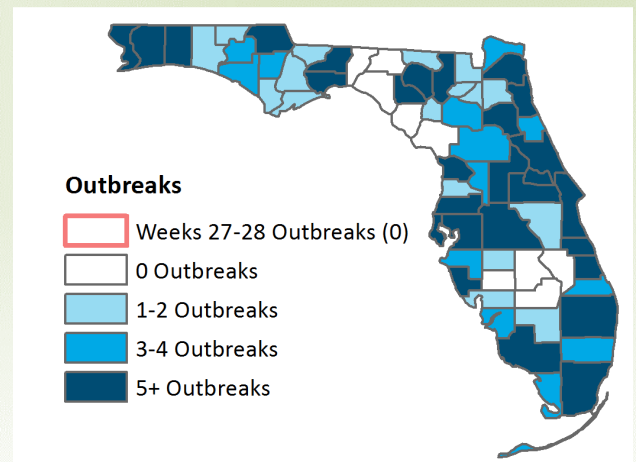
- In week 28, state influenza activity continues to circulate at low levels across the state.
- No new influenza-associated pediatric deaths were confirmed in weeks 27-28. Eight have been confirmed since the start of the 2017-18 influenza season.
- Deaths due to pneumonia and influenza were below expected levels.

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

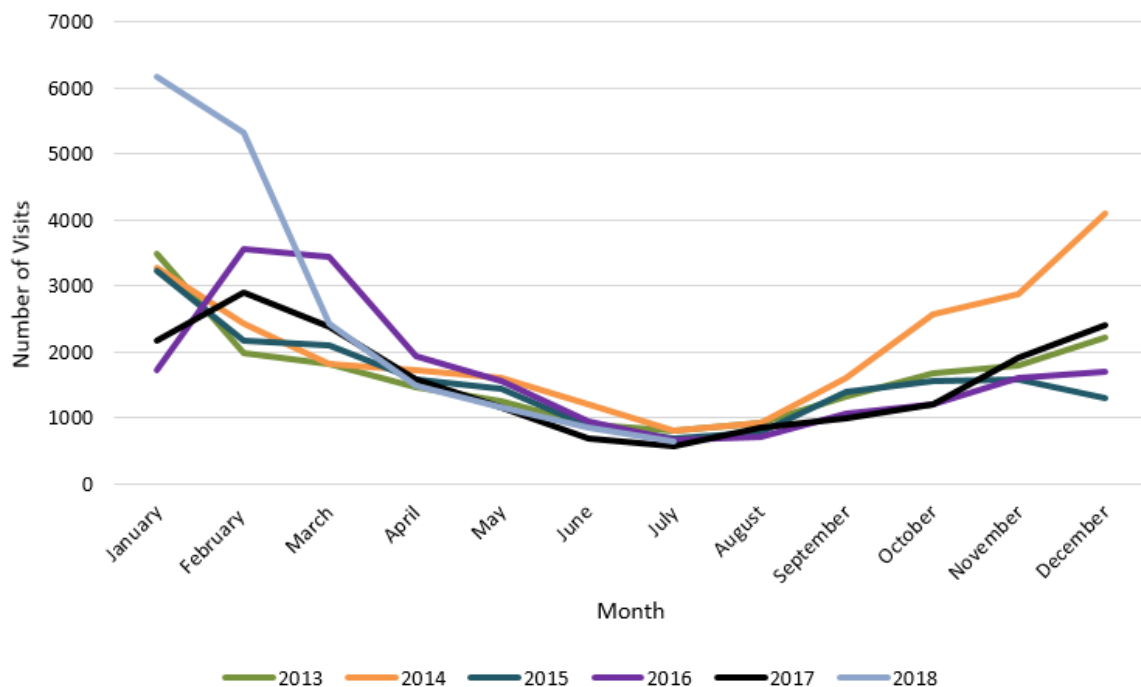
Orange County

- No new influenza-like illness outbreaks were reported in Orange County in July 2018.
- Orange County influenza activity level for week 28 is decreasing.

Influenza and ILI Outbreaks by County Week 40, 2017 through Week 28, 2018



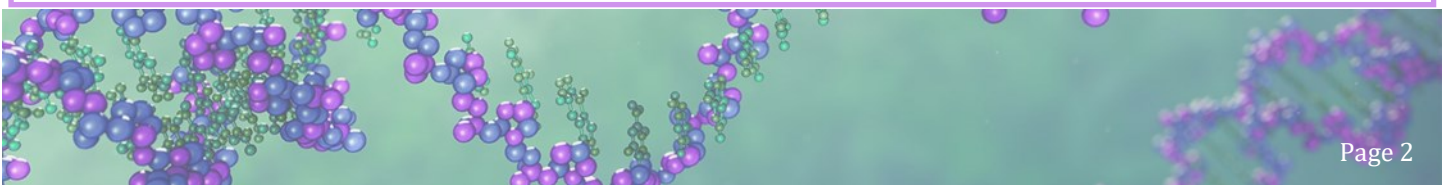
Influenza-like Illness from Emergency Department Visits in Orange County, 2013 to 2018



Influenza Resources:

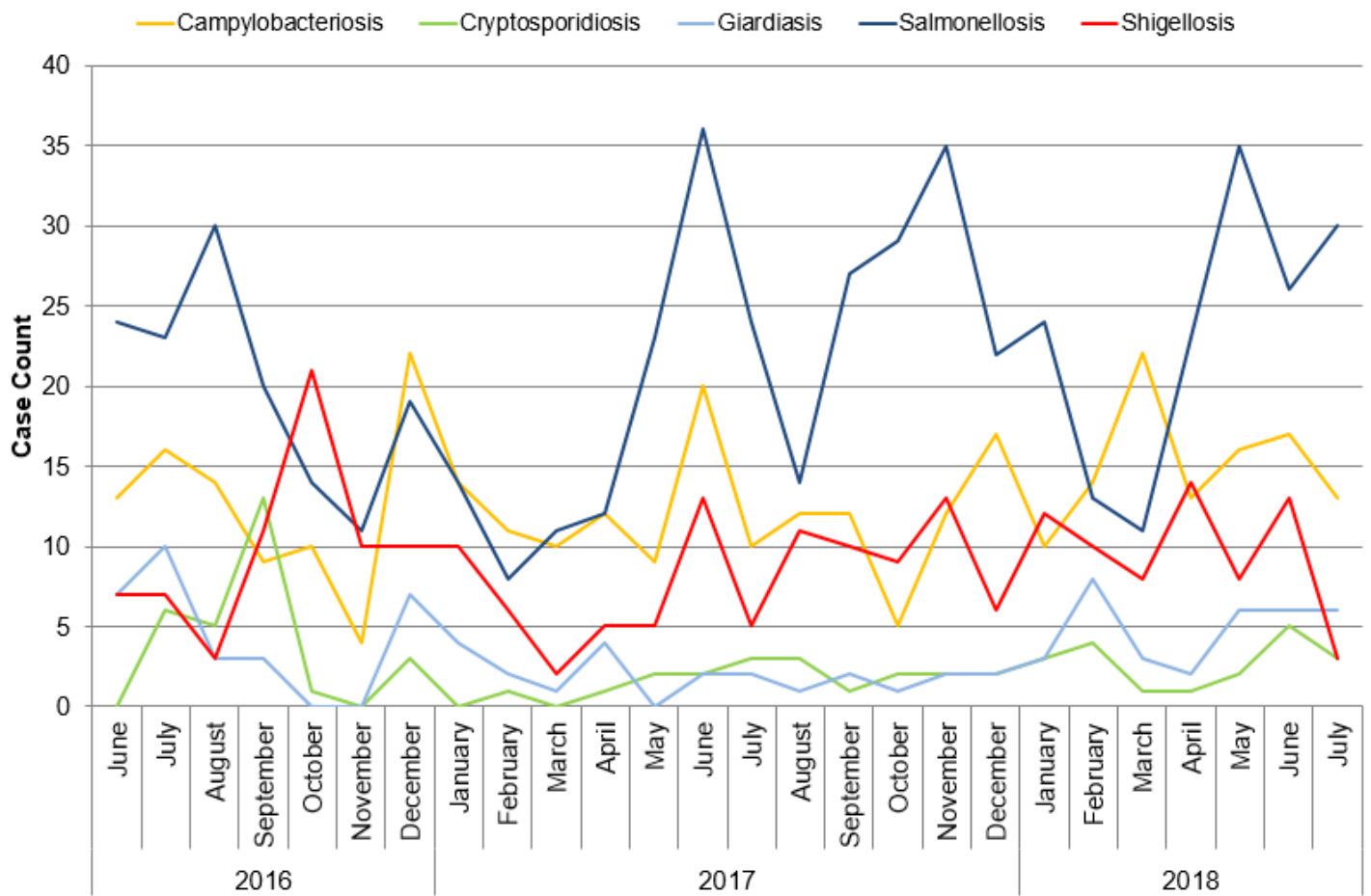
[Florida Department of Health Influenza](#)

[Center for Disease Control and Prevention Weekly Influenza Activity Report](#)



Gastrointestinal Illness Surveillance

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



Gastrointestinal Illness Points of Interest:

- Enteric reportable disease cases were normal for the month of July. Throughout the summer months, we expect the number of enteric illness to increase.
- In July, 14 foodborne illness complaints were investigated by 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](#)

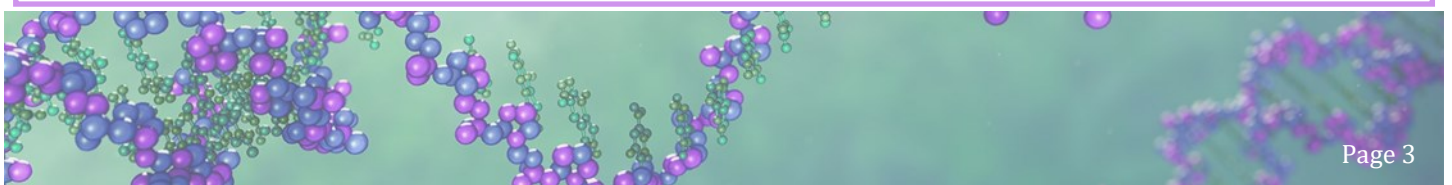
[CDC: Healthy Water](#)

[Florida Food and Waterborne Disease Program](#)

[Florida Food Recall Searchable Database](#)

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

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



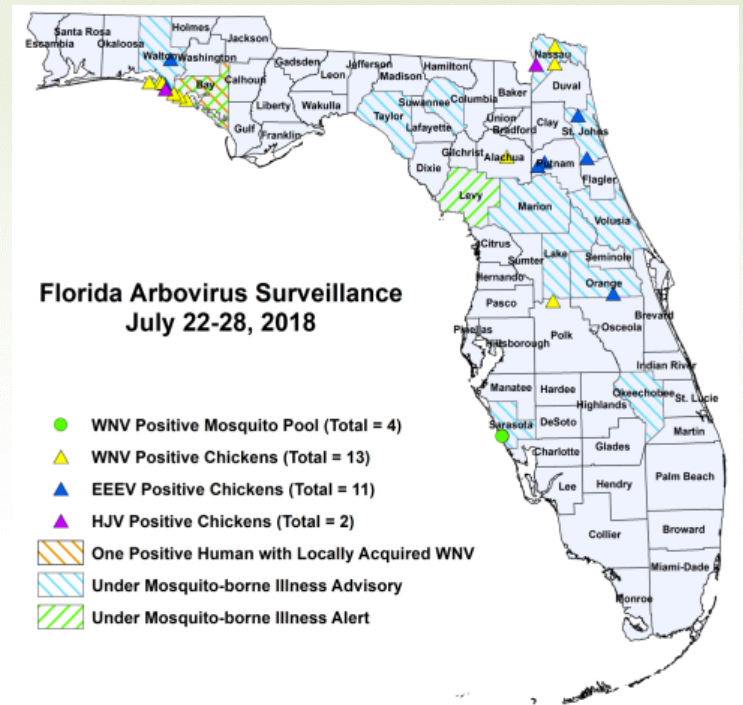
Arboviral Surveillance

International

- There is a Level 2 (Alert) Travel Health Notice from the CDC for multiple countries in 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

- Eleven cases of dengue associated with international travel has been reported year to date.
- One case of chikungunya has been reported year to date in a person that had international travel.
- One human case and one asymptomatic positive blood donor tested positive for West Nile Virus year to date; fifty sentinel chickens, one crow, and eleven mosquito pools have been reported from eleven counties.
- Positive samples of Eastern equine encephalitis (EEE) were reported in one human case, forty-four horses, one mule, one donkey, one owl, one emu, two mosquito pools, and one hundred sixteen sentinel chickens from thirty one counties in 2018.
- **Lake, Marion, Nassau, Okeechobee, Orange, Sarasota, St. Johns, Suwannee, Taylor, and Volusia 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 \(Released on Mondays\)](#)

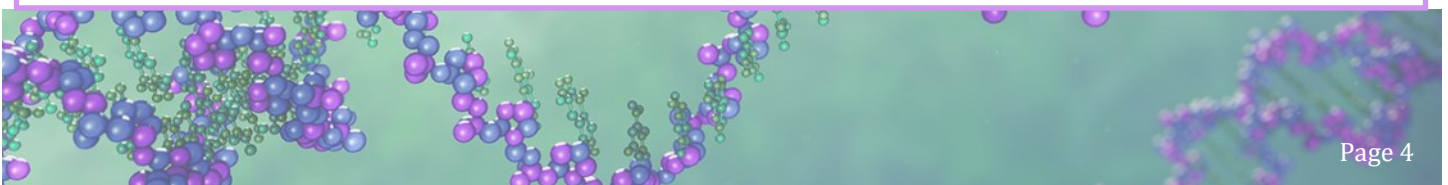
[Orange County Mosquito Control](#)

Additional Resources:

[Florida Department of Health Zika](#)

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

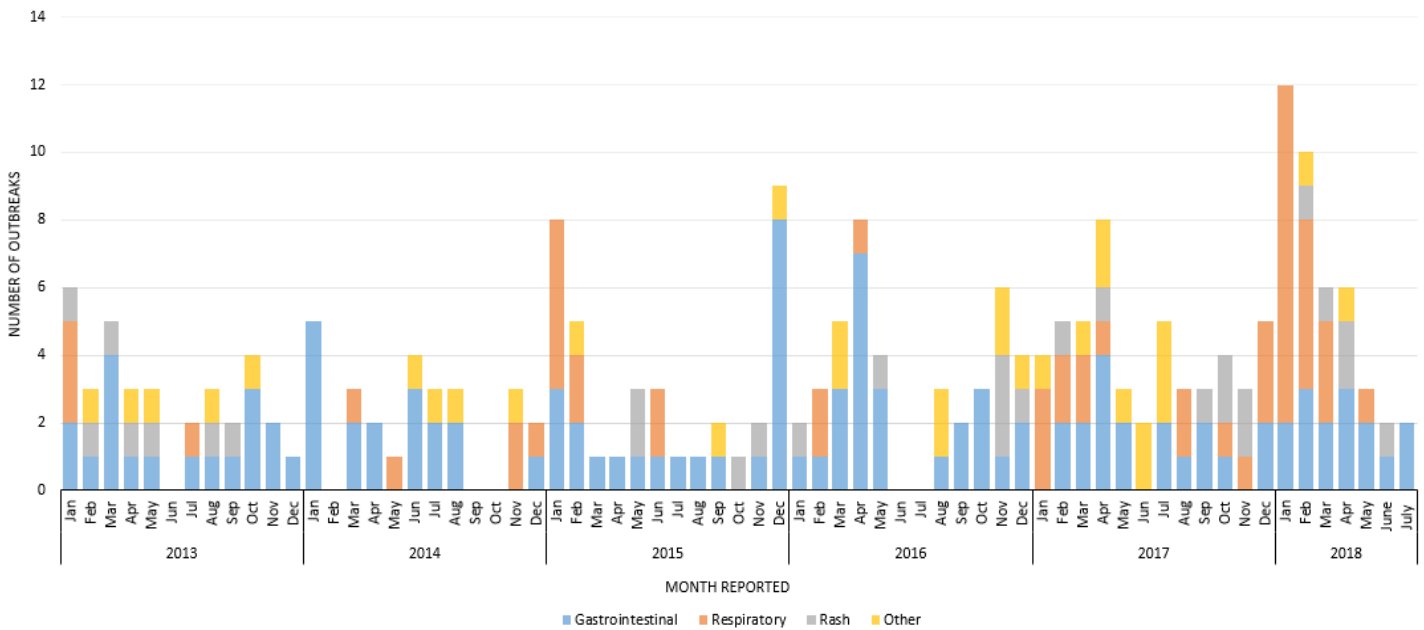
[Florida Department of Health Mosquito-Borne Disease Education Materials](#)



Outbreaks in Orange County

- In July 2018, the following outbreaks were investigated:
 - Two gastrointestinal illness outbreaks associated with local restaurants.

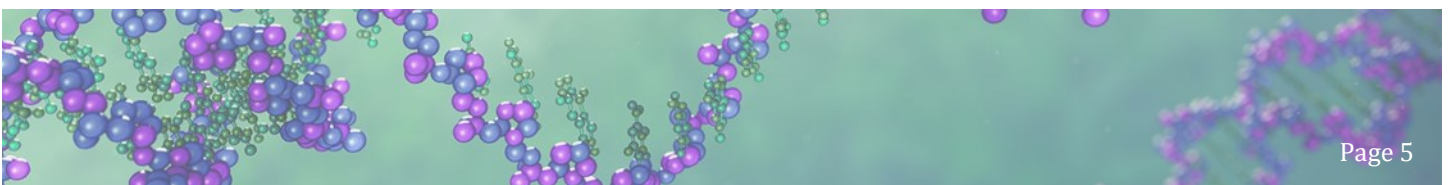
Number of Outbreaks Reported in Orange County, FL, by Month from 2013-2018



*** All Data 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 that is of urgent public health significance should be reported.



Disease	ORANGE				All Counties			
	July		Cumulative (YTD)		July		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)	0	0	0	0	4	3	8	4
Arsenic Poisoning	0	0	0	0	3	1	11	8
Brucellosis	0	0	0	0	1	1	10	5
Campylobacteriosis	18	16	117	76	489	359	2923	2147
Carbon Monoxide Poisoning	0	0	5	7	17	21	132	133
Chikungunya Fever	0	0	1	0	0	1	1	8
Ciguatera Fish Poisoning	0	0	3	0	7	5	46	20
Creutzfeldt-Jakob Disease (CJD)	0	0	0	1	0	1	8	14
Cryptosporidiosis	5	7	19	15	84	56	328	271
Cyclosporiasis	5	1	6	2	40	23	57	27
Dengue Fever	1	1	1	3	6	7	12	52
Dengue Fever: Severe	0	0	0	0	1	0	1	0
Eastern Equine Encephalitis Neuroinvasive Disease	0	0	0	0	2	0	3	1
Ehrlichiosis - HME (Ehrlichia chaffeensis)	0	0	1	0	6	5	22	14
Ehrlichiosis/Anaplasmosis: Undetermined	0	0	0	0	1	0	1	0
Escherichia coli: Shiga Toxin-Producing (STEC) Infection	13	2	39	15	108	53	554	291
Giardiasis: Acute	6	7	36	36	97	99	639	612
Haemophilus influenzae Invasive Disease	3	1	16	10	23	16	228	188
Hansen's Disease (Leprosy)	0	0	0	0	4	1	12	11
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	4	1	6	5
Hepatitis A	11	0	23	2	44	15	155	75
Hepatitis B: Acute	2	2	17	12	67	58	466	302
Hepatitis B: Chronic	43	32	283	255	521	398	3104	2901
Hepatitis B: Perinatal	0	0	0	0	1	0	2	1
Hepatitis B: Surface Antigen in Pregnant Women	3	6	22	40	31	50	231	296
Hepatitis C: Acute	0	1	6	4	21	21	223	146
Hepatitis C: Chronic	162	121	1142	855	1673	2440	14410	17258
Hepatitis C: Perinatal	0	0	1	0	1	0	13	0
Hepatitis D	0	0	0	0	0	0	3	1
Hepatitis E	0	0	0	0	0	0	2	3
Influenza-Associated Pediatric Mortality	0	0	0	0	0	0	7	6
Lead Poisoning	1	1	109	14	143	82	3496	499
Legionellosis	10	3	27	11	52	33	369	178
Leptospirosis	0	0	0	0	0	0	2	1
Listeriosis	1	0	2	2	3	7	31	21
Lyme Disease	0	0	2	2	31	37	87	83
Malaria	1	1	2	3	8	11	40	37
Measles (Rubeola)	0	0	0	0	3	0	7	5
Meningitis: Bacterial or Mycotic	3	0	3	1	13	13	67	77
Meningococcal Disease	0	0	1	0	2	2	17	18
Mercury Poisoning	0	0	0	0	1	1	31	12
Mumps	1	0	9	1	9	2	126	15
Paratyphoid Fever (Salmonella Serotypes Paratyphi A B C)	0	0	0	0	0	0	1	4
Pertussis	0	1	7	19	38	46	191	233
Pesticide-Related Illness and Injury: Acute	0	0	0	0	11	3	29	15
Q Fever: Acute (Coxiella burnetii)	0	0	0	0	1	0	2	2
Rabies: Possible Exposure	7	4	47	47	303	302	2413	1975
Ricin Toxin Poisoning	0	0	0	0	0	0	4	1
Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis	0	0	0	0	6	2	24	12
Rubella	0	0	0	0	0	0	0	1
Salmonellosis	48	34	188	155	814	723	3445	2988
Saxitoxin Poisoning (Paralytic Shellfish Poisoning)	0	0	0	0	0	0	3	0
Scombroid Poisoning	0	0	0	0	3	0	8	0
Shigellosis	7	9	71	49	162	159	934	757
Staphylococcus aureus Infection: Intermediate Resistance to Vancomycin (VISA)	0	0	0	0	0	0	2	3
Strep pneumoniae Invasive Disease: Drug-Resistant	2	2	14	13	11	14	185	168
Strep pneumoniae Invasive Disease: Drug-Susceptible	3	1	15	14	18	21	274	307
Tetanus	0	0	0	0	0	0	0	2
Tularemia (Francisella tularensis)	0	0	0	0	0	0	1	0
Typhoid Fever (Salmonella Serotype Typhi)	1	0	8	1	10	1	90	10
Varicella (Chickenpox)	4	2	28	11	75	40	494	418
Vibriosis (Grimontia hollisae)	0	0	0	0	0	0	5	2
Vibriosis (Other Vibrio Species)	1	0	2	0	14	4	35	8
Vibriosis (Vibrio alginolyticus)	1	1	2	2	12	10	43	40
Vibriosis (Vibrio cholerae Type Non-O1)	0	0	0	0	2	1	2	6
Vibriosis (Vibrio fluvialis)	0	0	0	0	2	1	9	5
Vibriosis (Vibrio mimicus)	0	0	0	0	0	1	0	4
Vibriosis (Vibrio parahaemolyticus)	0	0	0	1	6	5	30	26
Vibriosis (Vibrio vulnificus)	0	0	0	0	8	6	21	19
West Nile Virus Non-Neuroinvasive Disease	0	0	0	0	1	0	2	0
Zika Virus Disease and Infection- Non-Congenital	0	0	25	0	11	0	125	0
Total	1532	1193	9971	7904	16343	15558	120761	102217

** ALL DATA ARE PRELIMINARY **

Voluntary Product Recall Due to Potential Presence of *Salmonella*

The United States Department of Agriculture's Food Safety and Inspection Service issued a public health alert on July 20, 2018 due to concerns that products may be contaminated with *Salmonella* from whey powder which is supplied by a third-party manufacturer, Associated Milk Producers, Inc. Several companies, including Pepperidge Farm, have voluntarily recalled their products due to the potential presence of *Salmonella* in products that use whey powder as an ingredient. Products currently recalled: Swiss Rolls (distributed under several brand names), Captain John Derst's Old Fashioned Bread, Goldfish crackers, Ritz Cracker Sandwiches, Ritz Bits, and Hungry Man Chipotle BBQ Sauced Boneless Chicken Wyzngz TV dinner. Please see the link below for full recall information and product list.


Most persons infected with *Salmonella* develop diarrhea, fever, and abdominal cramps 12 to 72 hours after infection. The illness usually lasts 4 to 7 days, and most persons recover without treatment. However, in some persons, the diarrhea may be so severe that the patient needs to be hospitalized. A person can still transmit the bacteria for several weeks and even several months later, however, infectivity is typically highest during the time of overt symptoms. Fluid and electrolyte replacement are the mainstay of treatment for persons with salmonellosis. Antibiotic treatment is usually not indicated as it may prolong carriage and encourage the appearance of resistant strains. If treatment is indicated, antibiotic resistance testing should be done. No illnesses have been reported due to these recalls.



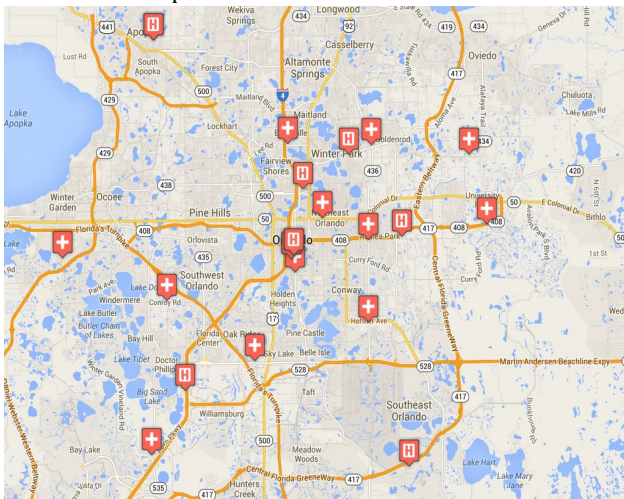
Resources: <https://www.fda.gov/safety/recalls/default.htm>

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.

 Hospital linked to ESSENCE

Florida Hospital Centra Care Clinic linked to ESSENCE

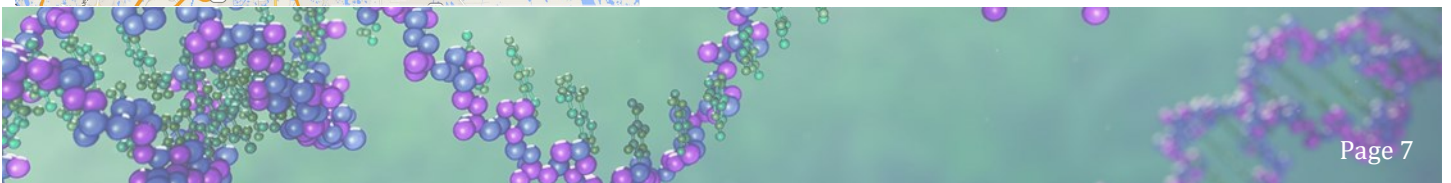


Resources: <http://orange.floridahealth.gov/programs-and-services/index.html>



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

