



Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

National Rise in Travel Acquired Measles Cases

Measles (also known as rubeola), is a highly contagious systemic illness caused by the rubeola virus. Measles is transmitted from person to person via nasopharyngeal secretions of infected people in droplets or by direct contact. Symptoms of measles are rash, cough, muscle aches, fever, conjunctivitis, rhinorrhea, and Koplik spots (tiny white spots with bluish-white centers found inside the mouth). A typical case of measles begins with mild to moderate fever, cough, runny nose, red eyes and sore throat. Two or three days after symptoms begin, Koplik spots may appear inside the mouth. Three to five days after the start of symptoms, a blotchy, maculopapular rash appears. The rash usually begins on a person's face at the hairline and spreads downward. When the rash appears, a person's fever may spike to more than 104 degrees Fahrenheit. After a few days, the fever usually subsides and the rash fades. Symptoms of measles commonly appear about 7 days (range, 7-21 days) after a person is exposed. Period of communicability is about 4 days before to 4 days after rash onset. The virus can live for up to 2 hours in an airspace or on surfaces where the infected person coughed or sneezed.

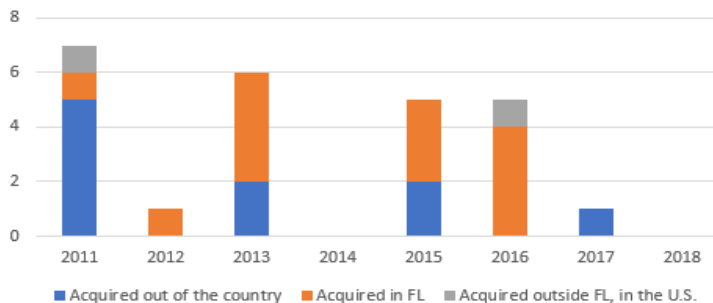
From January 1 to April 21, 2018, measles activity has been elevated in the United States and internationally. Sixty-three people from 16 states, including California, New York, and multiple Midwestern states, were reported to have measles. So far, all outbreaks have been linked to someone bringing the disease from an international location and spreading it to susceptible contacts within the US. Internationally, there has been measles activity in Europe, Asia, Ukraine, Afghanistan, Taiwan, Venezuela, the Pacific, and Africa. The majority of those who had contracted measles were unvaccinated and had traveled to these countries where measles is still commonly transmitted.

The measles, mumps, and rubella (MMR) vaccine is recommended for individuals ages 12 months or older. A single dose of the vaccine is 93% effective and two doses are 97% effective. You can find more information on MMR vaccines by following this link: <https://www.cdc.gov/measles/vaccination>. International travel in Orange County is increasing with summer approaching and it's important to be aware of the potential to see diseases such as measles that aren't endemic in the US. The Florida Department of Health is reminding providers to stay vigilant and to consider measles as a differential diagnosis if the symptoms and exposure history fit outlined criteria within the links below as well as to encourage appropriate vaccination with the MMR vaccine.

Immediately report any suspected measles infection to the Florida Department of Health in Orange County, Epidemiology Program at (407) 858-1420

Resources: <http://www.floridahealth.gov/diseases-and-conditions/vaccine-preventable-disease/measles/index.html>; <https://www.cdc.gov/measles/about/index.html>

Number of Measles Cases in Florida, by Year 2011-2018



April 2018

Contents:

Special Interest Articles

[National Rise in Travel Acquired Measles Cases](#) 1

[Shiga Toxin-Producing Escherichia coli O157:H7 Outbreak Associated with Romaine Lettuce](#) 7

Individual Highlights

[Influenza Surveillance](#) 2

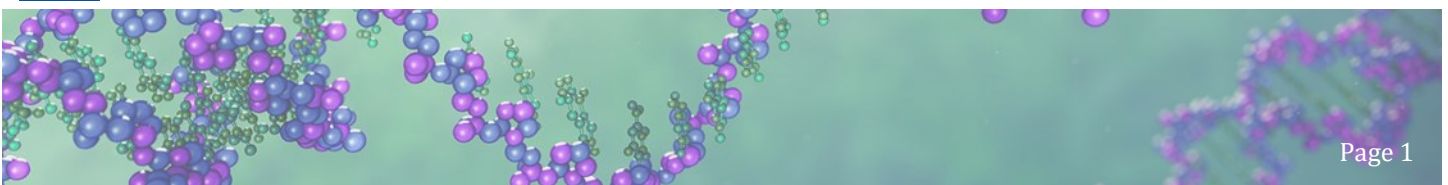
[Gastrointestinal Illness Surveillance](#) 3

[Arboviral Surveillance](#) 4

[Outbreaks](#) 5

[Reportable Diseases Table](#) 6

[Resources](#) 7

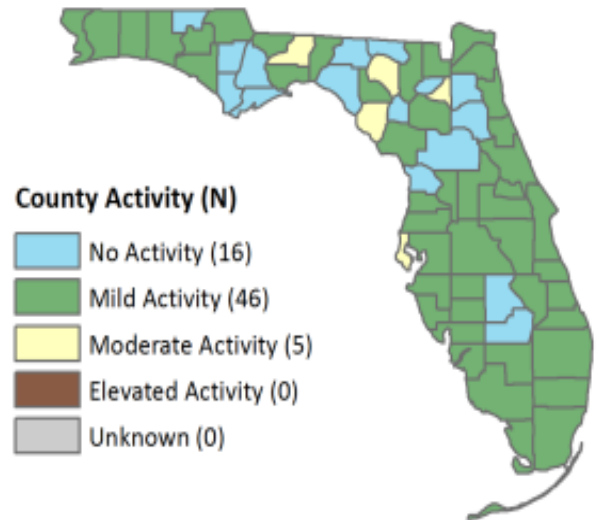


Influenza Surveillance (data from [Florida Flu Review](#))

Florida

Influenza Activity Level, by County for Week 17, 2018

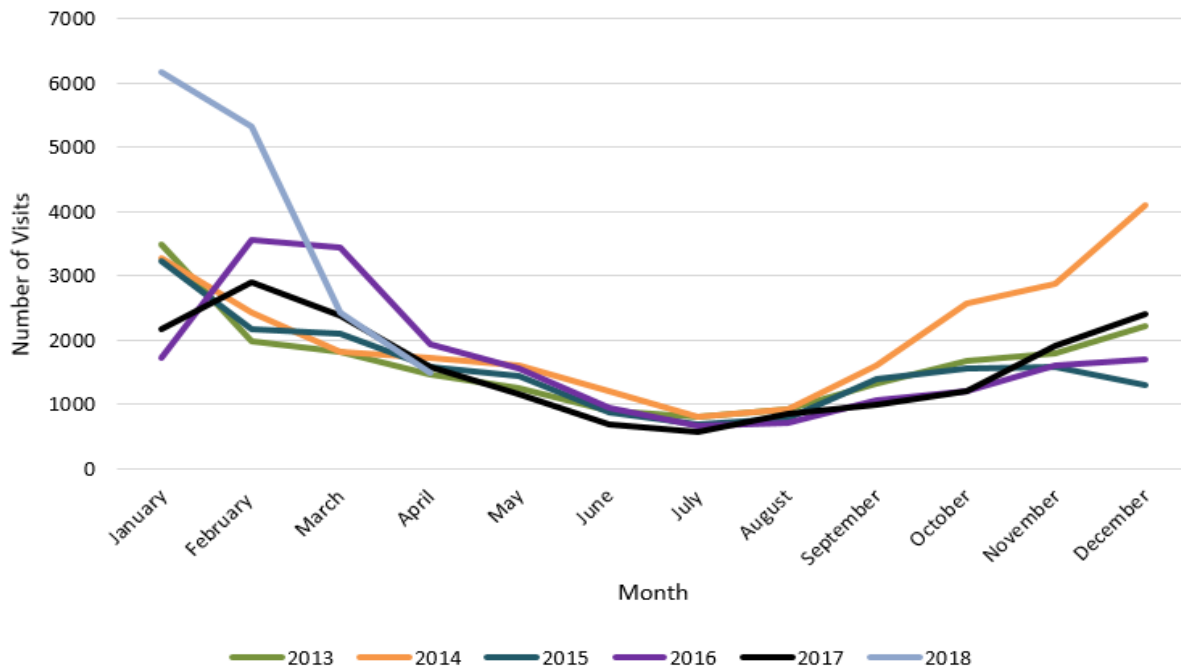
- ◆ In week 17, state influenza activity continues to decrease.
- ◆ One new influenza-associated pediatric death was confirmed. Eight have been confirmed so far in the 2017-18 influenza season.
- ◆ Deaths due to pneumonia and influenza were below expected levels.



Orange County

- ◆ No influenza outbreaks were reported in Orange County in April 2018.
- ◆ Orange County influenza activity level for week 17 is decreasing.

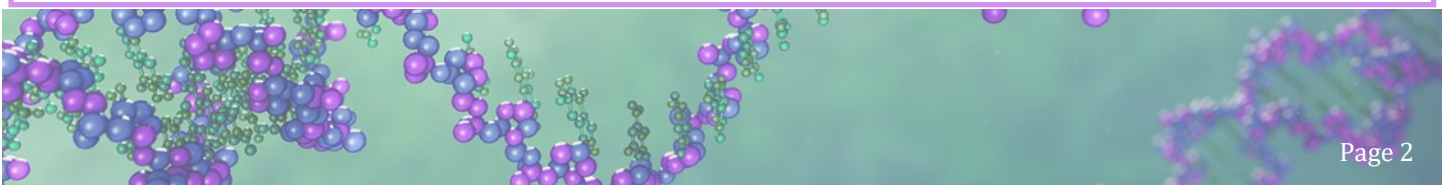
Influenza-like Illness from Emergency Department Visits in Orange County, 2013 to 2018



Influenza Resources:

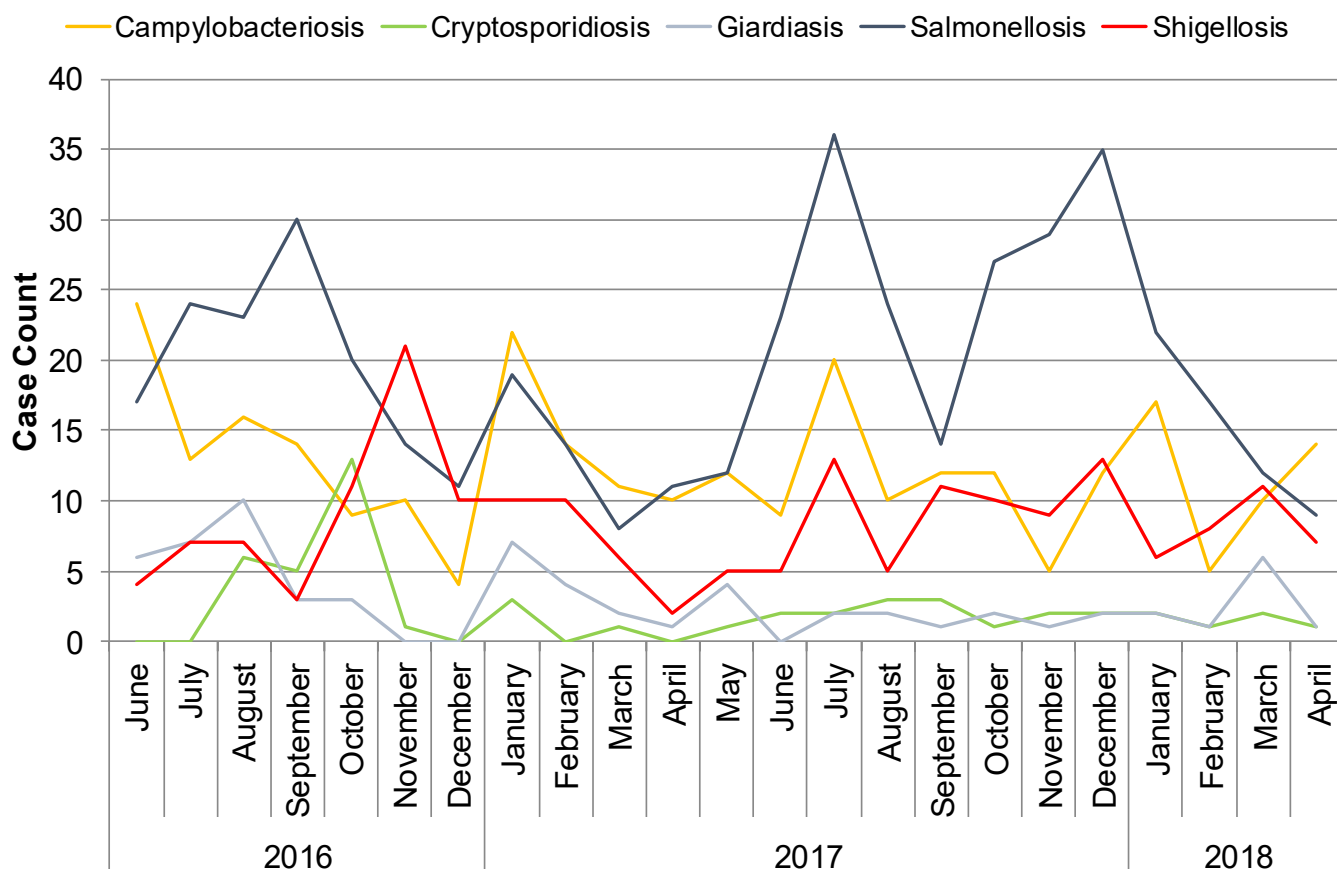
[Florida Department of Health Influenza](#)

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



Gastrointestinal Illness Surveillance

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



[REPORT
FOODBORNE
ILLNESS ONLINE](#)

Gastrointestinal Illness Points of Interest:

- Enteric reportable disease cases were normal for the month of April. As the summer months approach, we expect the number of enteric illnesses to increase.
- In April, 20 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.

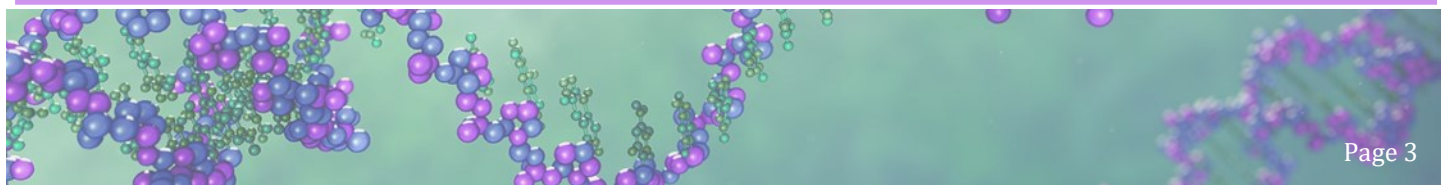
Gastrointestinal Illness Resources:

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

[CDC: Healthy Water](#)

[Florida Food and Waterborne Disease Program](#)

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



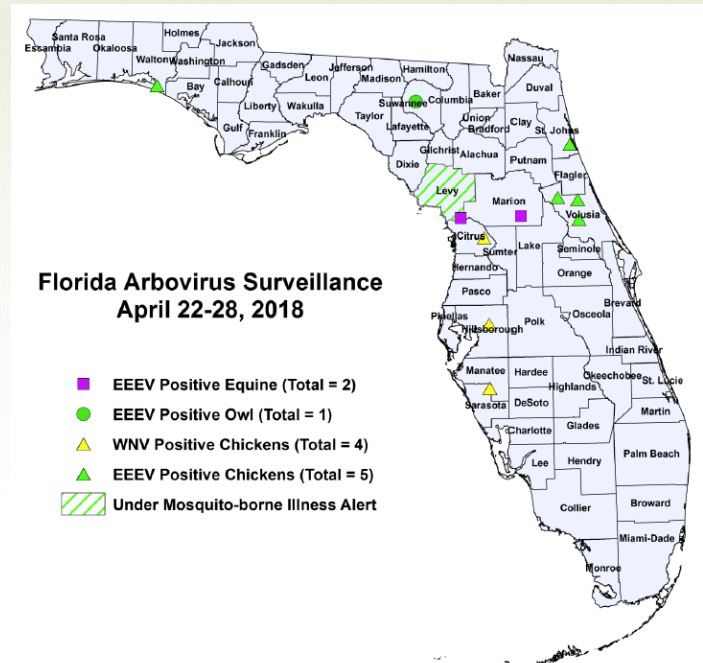
Arboviral Surveillance

International

- There is a Level 2 (Alert) Travel Health Notice from the CDC for multiple countries in the Caribbean, Central and South America, Mexico, Cape Verde, 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 a CDC Level 2 Travel Health Notice for Brazil and a Level 1 Travel Health Notice in Nigeria related to the transmission of yellow fever virus.
- There is a CDC Level 1 Travel Health Notice for Sri Lanka related to the transmission of dengue virus.

Florida

- One case 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.
- No human cases of West Nile virus were reported this week. Positive samples from 24 sentinel chickens have been reported in 2018.
- **Levy County is 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.
- Five 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 this [letter](#) regarding updates on Zika virus testing at BPHL.**

Arboviral Resources:

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

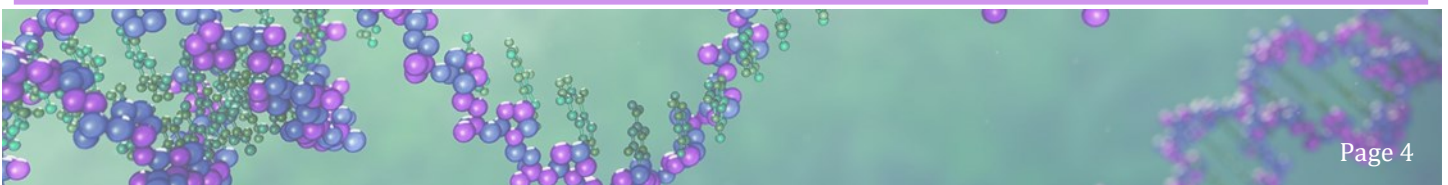
[Orange County Mosquito Control](#)

Additional Resources:

[Florida Department of Health Zika](#)

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

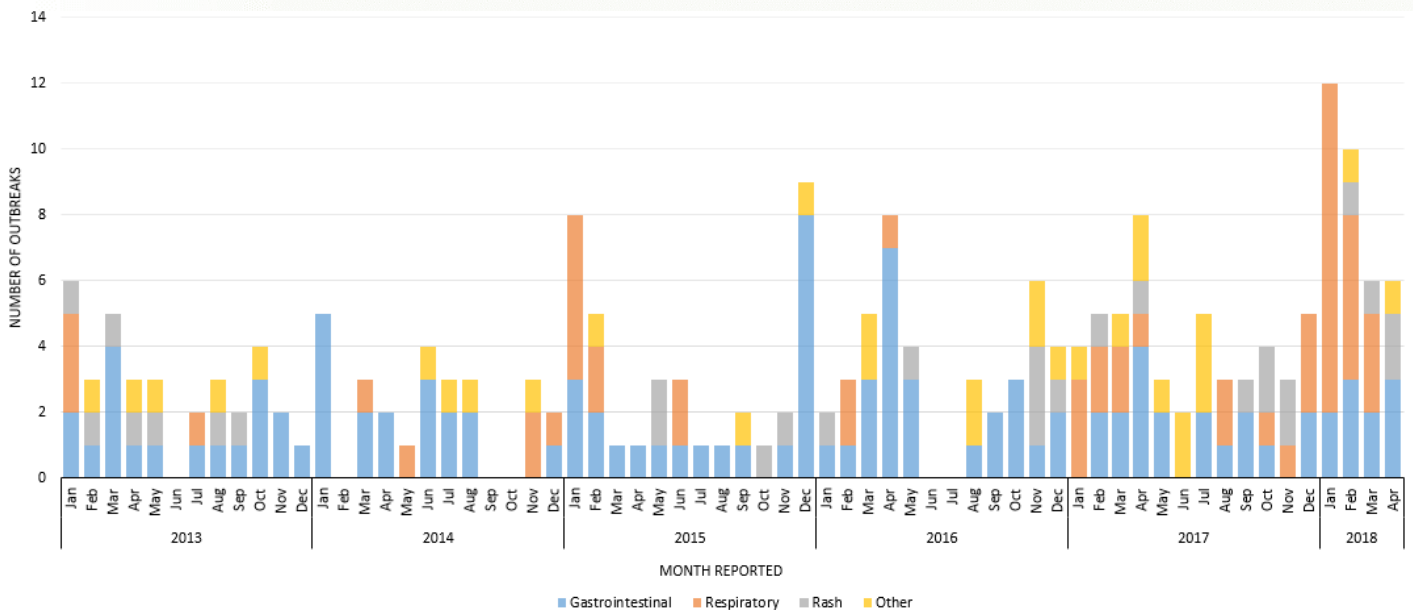
[Florida Department of Health Mosquito-Borne Disease Education Materials](#)



Outbreaks in Orange County

- In April 2018, the following outbreaks were investigated:
 - One gastrointestinal illness outbreak in a daycare.
 - One norovirus outbreak in a long-term care facility.
 - One scabies outbreak in a long-term care facility.
 - One gastrointestinal illness outbreak in a restaurant.
 - One hand, foot, and mouth disease outbreak at a daycare.
 - One ciguatera fish poisoning outbreak in a private household.

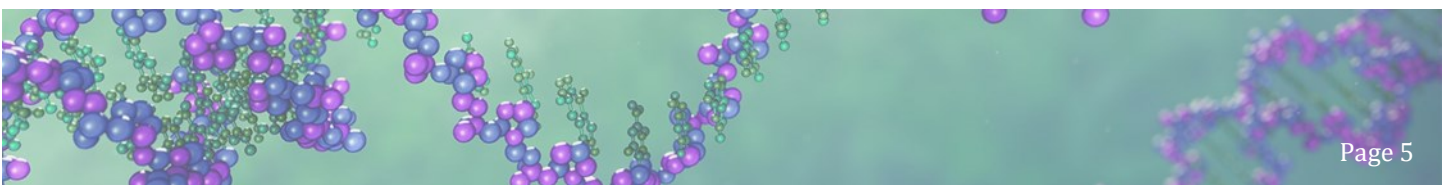
Number of Outbreaks Reported in Orange County, FL, by Month from 2013-2018



*** 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			
	April		Cumulative (YTD)		April		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	1	0	1	0
Anaplasmosis - HGA (Anaplasma phagocytophilum)	0	0	0	0	1	0	2	1
Arsenic Poisoning	0	0	0	0	2	0	5	4
Brucellosis	0	0	0	0	5	1	7	2
Campylobacteriosis	17	8	63	43	443	271	1421	1123
Carbon Monoxide Poisoning	3	0	4	3	26	14	93	66
Chikungunya Fever	0	0	1	0	0	1	1	2
Ciguatera Fish Poisoning	2	0	3	0	5	1	25	9
Creutzfeldt-Jakob Disease (CJD)	0	0	0	0	0	2	5	7
Cryptosporidiosis	1	2	9	7	42	33	160	143
Cyclosporiasis	0	0	0	0	0	0	1	0
Dengue Fever	0	0	0	1	0	2	1	31
Ehrlichiosis - HME (Ehrlichia chaffeensis)	0	0	0	0	4	1	6	2
Escherichia coli: Shiga Toxin-Producing (STEC) Infection	5	2	17	7	87	39	292	148
Giardiasis: Acute	4	5	17	21	76	96	357	351
Haemophilus influenzae Invasive Disease	1	1	9	6	36	26	150	107
Hansen's Disease (Leprosy)	0	0	0	0	3	2	5	8
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0	0	3
Hepatitis A	2	0	4	2	23	13	70	40
Hepatitis B: Acute	1	2	9	6	66	46	296	158
Hepatitis B: Chronic	73	40	188	157	562	448	1837	1630
Hepatitis B: Perinatal	0	0	0	0	0	0	1	1
Hepatitis B: Surface Antigen in Pregnant Women	0	3	11	19	31	38	142	169
Hepatitis C: Acute	0	0	5	3	25	24	126	76
Hepatitis C: Chronic	156	124	624	476	2087	2546	8708	9728
Hepatitis C: Perinatal	1	0	1	0	5	0	10	0
Hepatitis D	0	0	0	0	0	0	2	1
Hepatitis E	0	0	0	0	0	0	1	2
Influenza-Associated Pediatric Mortality	0	0	0	0	1	0	7	5
Lead Poisoning	10	2	56	9	377	83	1427	293
Legionellosis	2	2	7	7	48	23	198	106
Leptospirosis	0	0	0	0	1	0	3	0
Listeriosis	0	0	1	0	3	3	22	9
Lyme Disease	0	1	2	2	9	9	44	28
Malaria	0	0	1	2	5	4	16	16
Measles (Rubeola)	0	0	0	0	0	0	0	3
Meningitis: Bacterial or Mycotic	0	0	0	1	8	10	41	44
Meningococcal Disease	1	0	1	0	5	1	13	15
Mercury Poisoning	0	0	0	0	5	4	12	8
Mumps	1	0	6	0	12	1	94	9
Pertussis	1	4	5	12	19	38	88	129
Pesticide-Related Illness and Injury: Acute	0	0	0	0	5	1	11	7
Q Fever: Acute (Coxiella burnetii)	0	0	0	0	0	0	0	1
Rabies: Possible Exposure	5	6	27	28	297	279	1345	1048
Ricin Toxin Poisoning	0	0	0	0	0	0	4	0
Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis	0	0	0	0	7	1	11	4
Rubella	0	0	0	0	0	0	0	1
Salmonellosis	19	16	74	61	378	359	1361	1229
Shigellosis	12	7	41	21	119	89	450	312
Staphylococcus aureus Infection: Intermediate Resistance to Vancomycin (VISA)	0	0	0	0	0	0	1	1
Strep pneumoniae Invasive Disease: Drug-Resistant	1	5	10	10	18	28	140	104
Strep pneumoniae Invasive Disease: Drug-Susceptible	2	3	10	11	38	41	201	220
Tetanus	0	0	0	0	0	0	0	2
Typhoid Fever (Salmonella Serotype Typhi)	6	0	6	0	37	2	57	4
Varicella (Chickenpox)	4	1	10	5	63	67	241	283
Vibriosis (Grimontia hollisae)	0	0	0	0	0	1	3	2
Vibriosis (Other Vibrio Species)	0	0	0	0	4	1	12	3
Vibriosis (Vibrio alginolyticus)	0	0	1	1	6	4	19	9
Vibriosis (Vibrio cholerae Type Non-O1)	0	0	0	0	0	2	1	4
Vibriosis (Vibrio fluvialis)	0	0	0	0	1	1	5	2
Vibriosis (Vibrio mimicus)	0	0	0	0	0	0	0	2
Vibriosis (Vibrio parahaemolyticus)	0	0	0	0	4	6	12	11
Vibriosis (Vibrio vulnificus)	0	0	0	0	2	1	4	4
Zika Virus Disease and Infection- Non-Congenital	1	0	15	0	11	0	79	0
Total	1407	1146	5670	4319	16933	15222	68031	56637

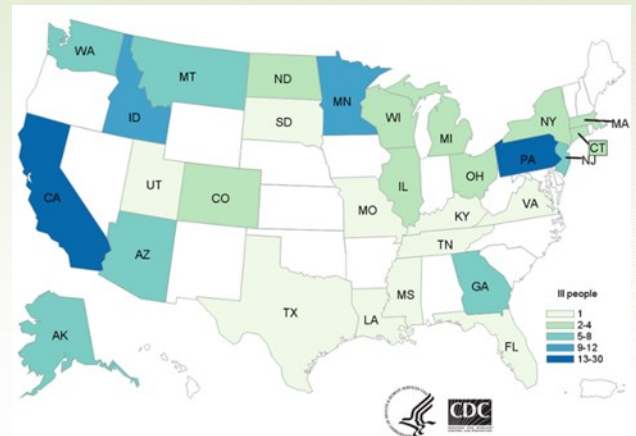
Shiga Toxin-Producing *Escherichia coli* O157:H7 Outbreak Associated with Romaine Lettuce

The multistate *E. coli* O157:H7 outbreak linked to romaine lettuce from the Yuma growing region is currently ongoing. The last reported cases had illness onset on April 21, 2018. Illnesses that occurred in the last two to three weeks might not yet be reported due to the time period between onset of symptoms and reporting to the Centers for Diseases Control and Prevention (CDC).

As of May 9, 2018, there have been 149 people infected with the outbreak strain from 29 states. One death was reported from California, 64 people have been hospitalized, 17 of whom have developed hemolytic uremic syndrome (HUS), a type of kidney failure. Ill people range in age from 1 to 88 years, with a median age of 29 years. Sixty-three percent of ill people are female.

The CDC advises consumers to refrain from buying or eating romaine lettuce, unless you can confirm that it is **not** from the Yuma growing region. This includes whole heads and hearts of romaine, chopped romaine, baby romaine, organic romaine, and salads and salad mixes containing romaine lettuce. General *E. coli* prevention methods include: handwashing after using the bathroom or changing diapers, before and after preparing food, and after contact with animals; refraining from preparing food when ill; cooking meats thoroughly; and washing fruits and vegetables before eating.

Antibiotics are not recommended for patients with suspected *E. coli* O157 infections until diagnostic testing can be performed and *E. coli* O157 infection is ruled out. Some studies have shown that administering antibiotics to patients with *E. coli* O157 infections might increase their risk of developing HUS, and the benefit of antibiotic treatment has not been clearly demonstrated. **People infected with the outbreak strain of *E. coli* O157:H7, by state of residence, as of May 8, 2018 (n=149)**



MAP: <https://www.cdc.gov/ecoli/2018/o157h7-04-18/map.html>

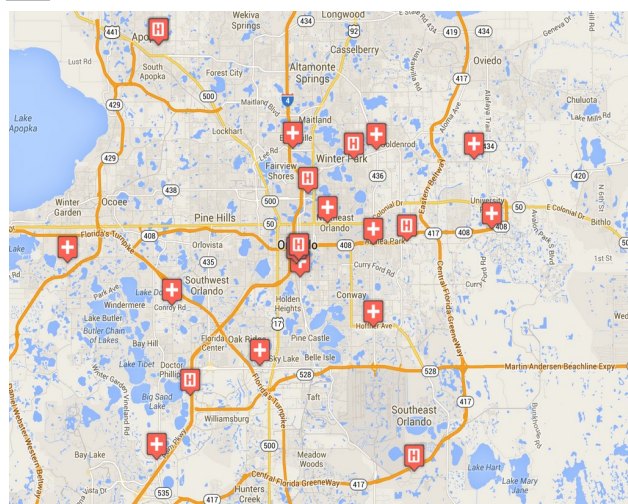
Resources: <https://www.cdc.gov/ecoli/2018/o157h7-04-18/index.html> <https://www.cdc.gov/ecoli/2018/o157h7-04-18/advice-consumers.html>

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 have provided a link for surveillance information on these diseases in Florida as well as Area 7 HIV & AIDS Program.

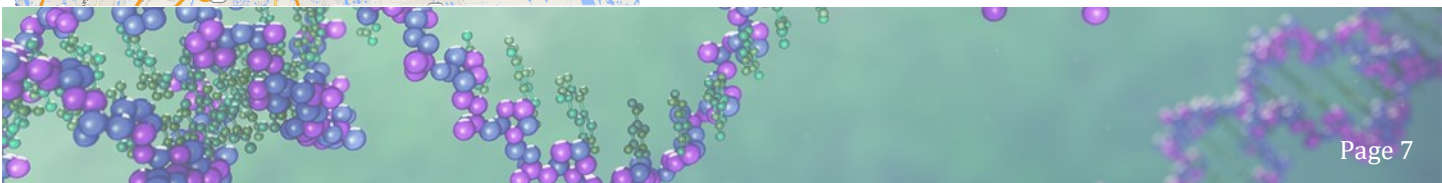
Resources: <http://orange.floridahealth.gov/programs-and-services/index.html>

Hospital 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 253 emergency departments and 70 urgent care centers reporting to ESSENCE-FL for a total of 323 facilities.



Florida Department of Health in Orange County

Epidemiology Program
6101 Lake Ellenor Drive
Orlando, Florida 32809

Phone: 407-858-1420

Fax: 407-858-5517

<http://orange.floridahealth.gov/>

Sign up for Electronic Health Alerts & Epidemiology Monthly Surveillance Reports

Email Contact Information to:

CHD48.EPIRegistration@flhealth.gov

Follow the FL Department of Health in Orange County on

Twitter @GOHealthyOrange!



Issue Contributors:

Alvina Chu, MHS

Epidemiology Program Manager

Michelle Persaud, MPH

Epidemiologist

Taylor Campion, MPH

Epidemiologist

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 ensure 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

