

Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

Updates for Influenza Season 2017-2018

With the 2017-2018 flu season at its start, it is important to be protected by getting vaccinated. The CDC recommends the inactivated influenza vaccine (IIV) or the recombinant influenza vaccine (RIV) for the 2017-2018 season. The trivalent vaccines contain an A/Michigan/45/2015 (H1N1) pdm09-like virus (updated), an A/Hong Kong/4801/2014 (H3N2)-like virus, and a B/Brisbane/60/2008-like (B/Victoria lineage) virus, while the quadrivalent vaccines include a B/Phuket/3073/2013-like (B/Yamagata lineage) virus in addition to the components found in the trivalent vaccines. The nasal spray flu vaccine (LAIV) is not recommended again this flu season.

Some new information regarding the 2017-2018 flu season include:

- The first cell-based candidate flu vaccine virus has been approved for use in production in the Northern Hemisphere.
- Pregnant women may receive any licensed, recommended, and age-appropriate flu vaccine.
- Two new quadrivalent flu vaccines have been licensed: one inactivated influenza vaccine (“Afluria Quadrivalent” IIV) and one recombinant influenza vaccine (“Flublok Quadrivalent” RIV).
- The age recommendation for “Flulaval Quadrivalent” has been changed from 3 years old and older to 6 months and older to be consistent with FDA-approved labeling.
- The trivalent formulation of Afluria is recommended for people 5 years and older, instead of 9 years and older to match the Food and Drug Administration package insert.

The flu season remains unpredictable each year due to antigenic drift and antigenic shift (which happens occasionally) of influenza viruses. Thus, vaccine effectiveness may vary widely. Figure 1 shows the percent effectiveness of the seasonal flu vaccine from years 2004 to 2017.

October 2017

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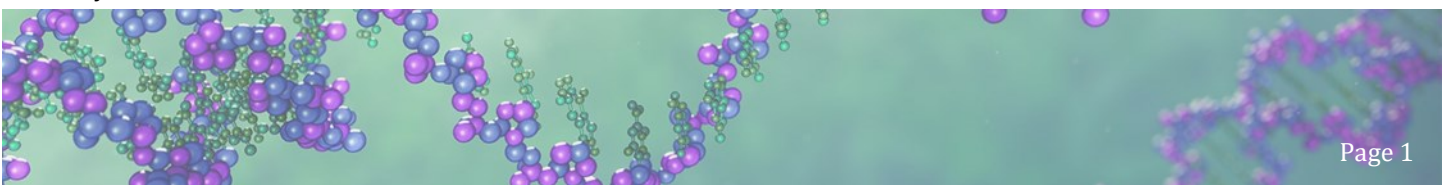
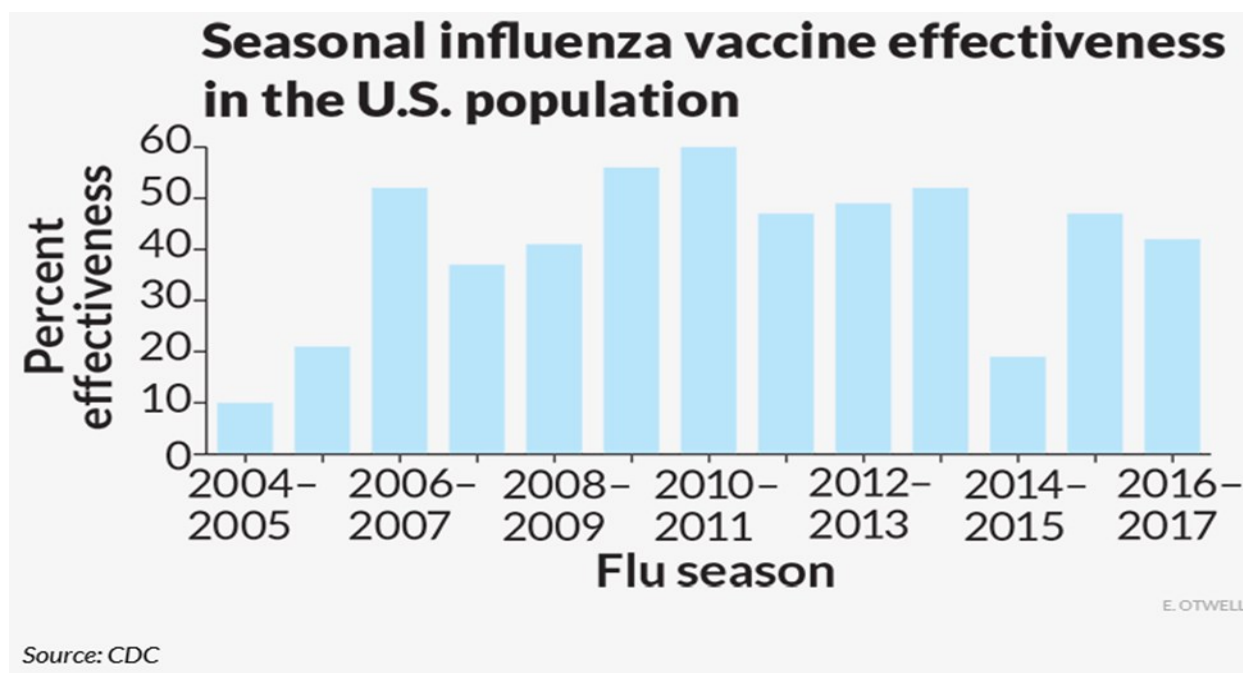


Figure 1.

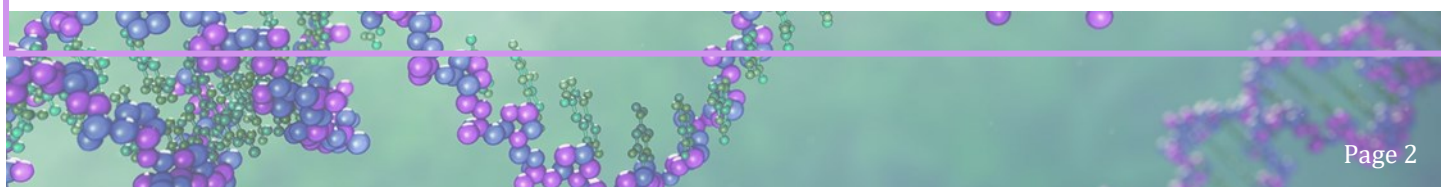


DOH-Orange recommends that people get a flu vaccine by the end of October, if possible. Getting vaccinated later, however, can still be beneficial and vaccination should continue to be offered throughout the flu season, even into January or later. Emphasis should be placed on vaccination of the following high-risk groups:

- Children aged 6 months-59 months
- Adults aged ≥ 50 years
- Persons with chronic pulmonary, cardiovascular, renal, hepatic, neurologic, hematologic, or metabolic disorders
- Persons who are immunocompromised
- Pregnant women or women trying to get pregnant
- Residents of nursing homes and other long-term care facilities
- American Indians/Alaska Natives
- Persons who are obese ($BMI \geq 40$)
- Health care personnel
- Household contacts and caregivers of children aged ≤ 59 months

Resources:

1. [CDC: 2017-2018 Influenza Season](#)
2. [Science News—Influenza virus](#)
3. [CDC 2017-18 Influenza Recommendations](#)



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

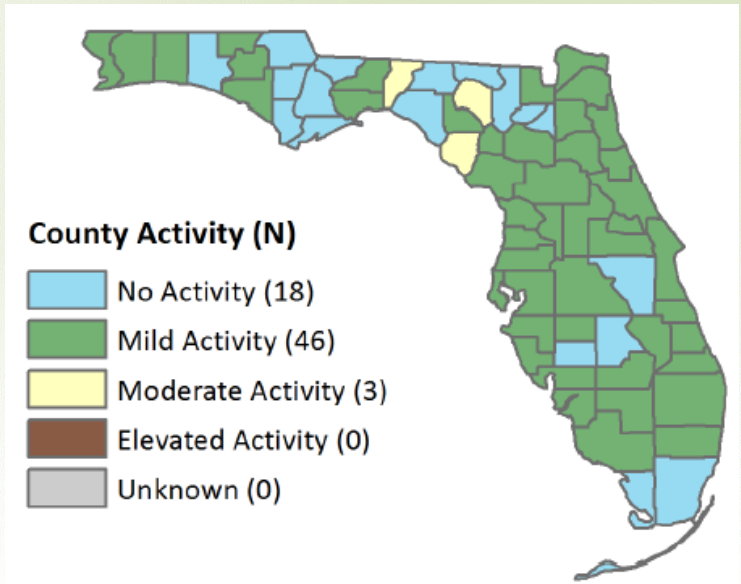
Florida

- ◆ In week 42, Influenza and ILI activity increased but remained at low levels across the state. Activity is expected to increase as the winter months draw near.
- ◆ Respiratory syncytial virus (RSV) activity in children <5 years increased, and has remained higher than previous seasons for several weeks in a row.
- ◆ No influenza-associated pediatric deaths were reported.

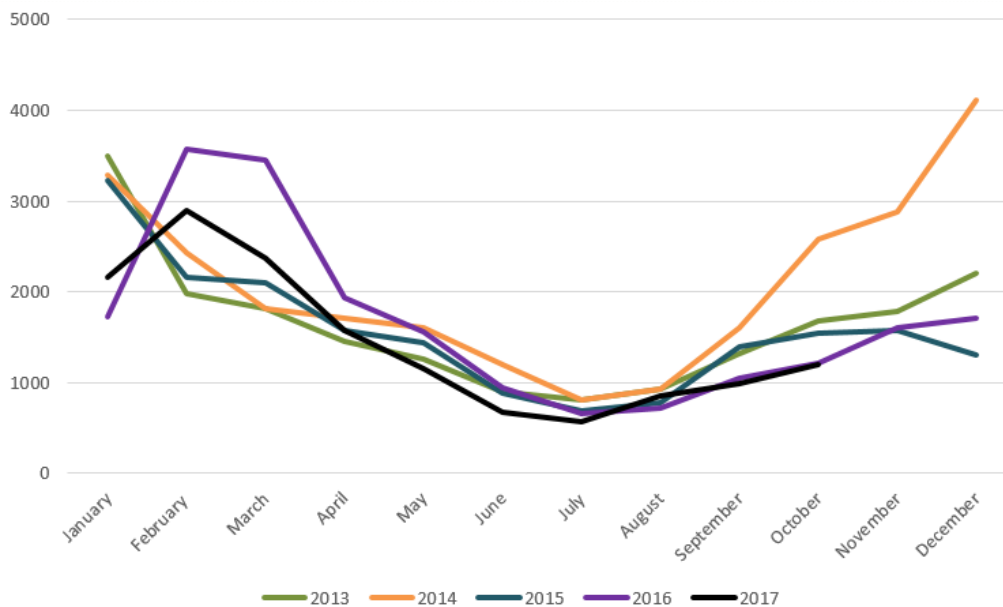
Orange County

- ◆ One outbreak of Influenza A was reported in Orange County in October 2017.
- ◆ Orange County influenza activity level for week 42 is increasing.

Influenza Activity Level, by County for Week 42, 2017



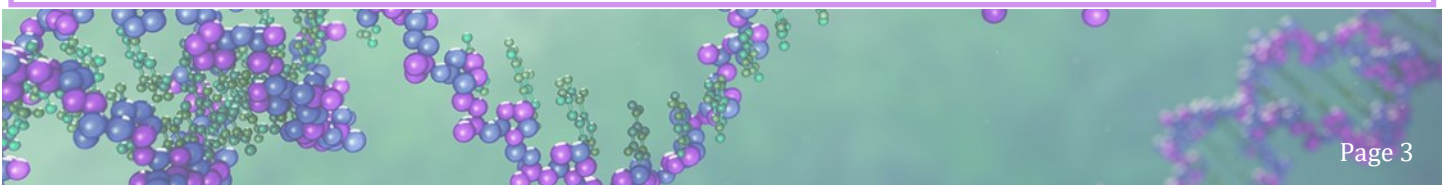
Influenza-like Illness from Emergency Department Visits in Orange County, 2013 to 2017



Influenza Resources:

[Florida Department of Health Influenza](#)

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



ZIKA Virus Surveillance

Laboratory-confirmed symptomatic Zika virus disease cases (2015-2017)

Top 3 States	Total Case Count
Florida	1193
New York	1062
California	465

As of October 26, 2017

National

- ◆ CDC travel recommendations regarding Zika virus can be viewed [here](#).
- ◆ Differences in case counts can be attributed to surveillance reporting time lags between agencies.
- ◆ On August 29, 2017, the Zika cautionary was lifted in Brownsville, TX. There are no longer travel recommendations related to Zika virus for Brownsville, TX.

Florida

- ◆ The **first** case of local transmission was reported in Manatee County, Florida after travel to the Caribbean.
- ◆ There is no evidence of ongoing, active transmission in the state.

Orange County

- ◆ **No** local transmission of Zika has been identified in Orange County.
- ◆ Pregnant women (with or without exposure) can get tested for free at three Health Department locations in Orange County (Tues-Thurs 9:00AM-1:30PM).
 - ◆ Lila Mitchell Clinic: 5151 Raleigh St. Suite B
 - ◆ Southside: 6101 Lake Ellenor Dr.
 - ◆ Eastside: 12050 E. Colonial Dr. Building A (Testing referrals will be given on a walk-in basis only.)

Travel-Related Zika Cases in FL by County

County	Case Count 2016	Case Count 2017
Miami-Dade	350	82
Broward	182	28
Orange	167	15
Palm Beach	65	8
Hillsborough	46	9
Osceola	38	0
Polk	31	2
Seminole	28	4
Collier	28	7
Pinellas	25	2
Brevard	17	0

As of November 1, 2017

Clinician Guidance/Updates

Clinicians who suspect a patient has a Zika virus infection should:

- ◆ Test for dengue and chikungunya viruses also, due to similar geographic spread of diseases and clinical presentation
- ◆ Contact their local county health department to report the disease upon suspicion. The local health department will be able to provide consultation for laboratory testing recommendations. Local health department contact information is available [here](#).

Zika Virus Resources:

[Florida Department of Health](#)

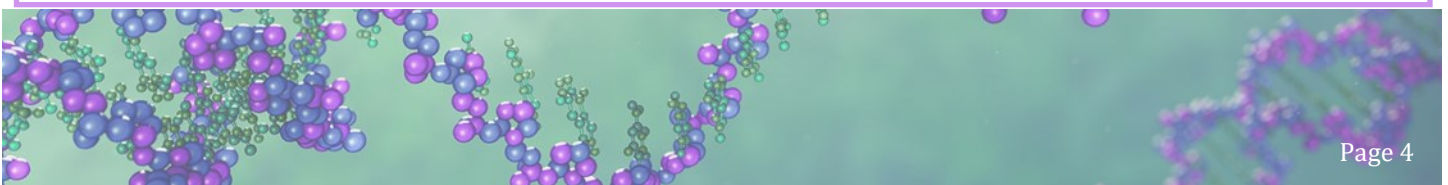
[Latest Travel Notices](#)

[Orange County Mosquito Control](#)

[CDC Healthcare Guidance](#)

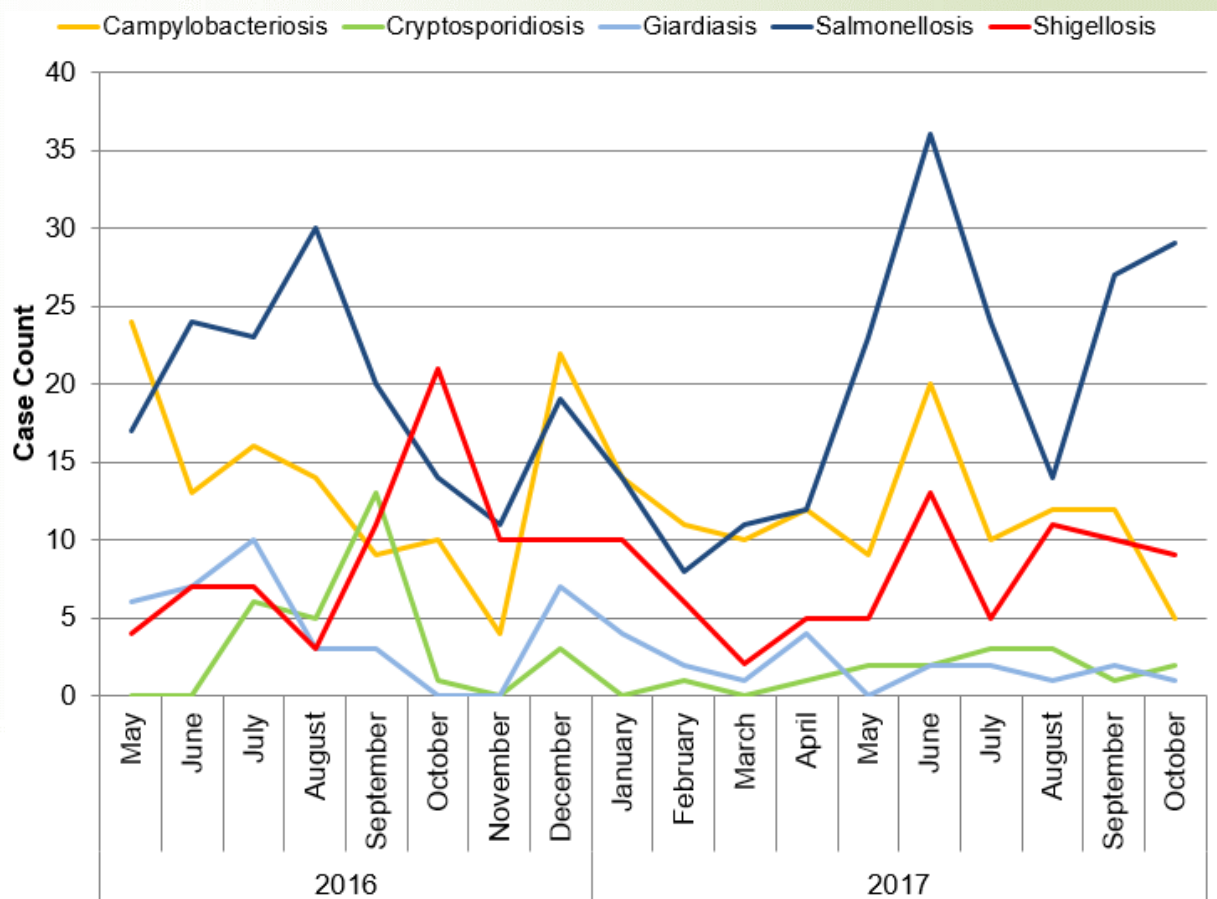
[Centers for Disease Control and Prevention](#)

[Local Health Department Contact Information](#)



Gastrointestinal Illness Surveillance

Select Reportable Enteric Diseases in Orange County, Florida, May 2016 to October 2017



Gastrointestinal Illness Points of Interest:

- Enteric reportable disease cases remain within seasonally expected levels.
- In October, 8 foodborne illness complaints were investigated by Orange County.

[REPORT
FOODBORNE
ILLNESS ONLINE](#)

Gastrointestinal Illness Resources:

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

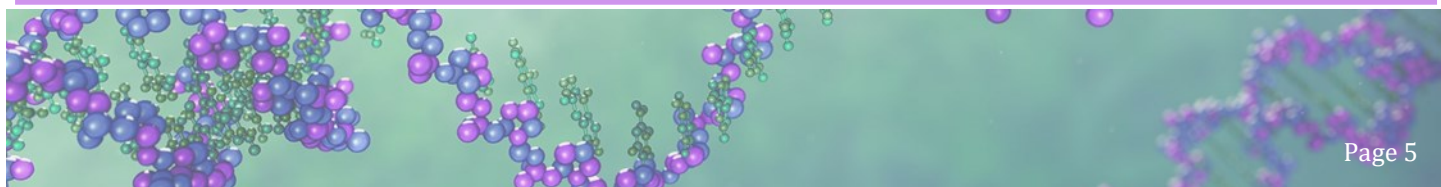
[CDC: Healthy Water](#)

[Florida Food and Waterborne Disease Program](#)

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

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

[Florida Food Recall Searchable Database](#)



Arboviral Surveillance

National

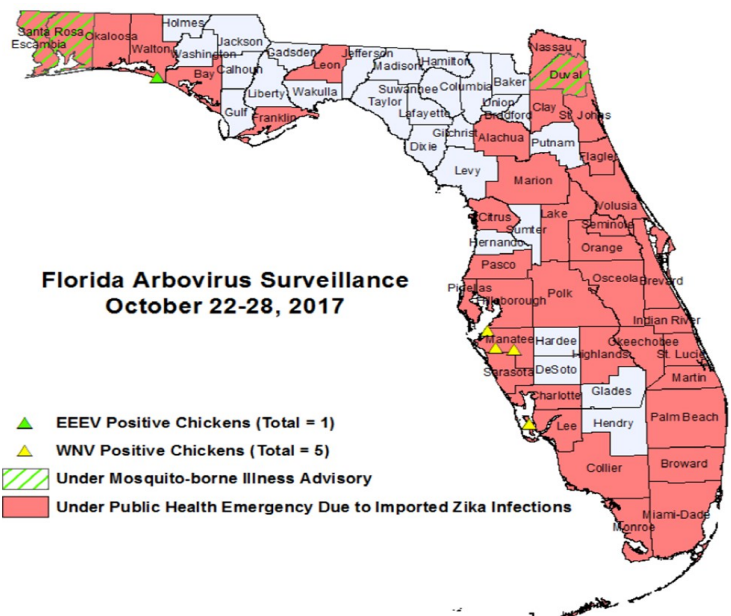
- There are no longer travel recommendations related to Zika virus for Brownsville, TX.

International

- There is a CDC Level 2 (Alert) Travel Health Notice for multiple countries in the Caribbean, Central and South America, Mexico, Cape Verde, Southeast Asia, and Pacific Islands related to Zika and poor pregnancy outcomes.
- There is a CDC Level 2 Travel Health Notice for Brazil related to the transmission of Yellow Fever virus.
- There is a CDC Level 1 (Watch) Travel Health Notice for Brazil and Italy, related to the transmission of chikungunya virus.
- There is a CDC Level 1 Travel Health Notice for Sri Lanka and Vietnam related to the transmission of dengue virus.

Florida

- Eleven travel-associated cases of dengue have been reported in 2017. One travel-associated case of chikungunya was reported in 2017.
- One asymptomatic blood donor was identified as West Nile virus (WNV) positive in Escambia County in August. In September, one human case of WNV illness acquired in Florida has been reported in 2017 in Santa Rosa County.
- In September 2017, one human case of eastern equine encephalitis was reported in Duval County.
- **Duval, Escambia, and Santa Rosa counties are currently under a mosquito-borne illness advisory.**



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 2017.
- No travel-related cases of Zika virus were reported in September 2017. In total, there are 14 travel-related cases of Zika virus in 2017.

Arboviral Resources:

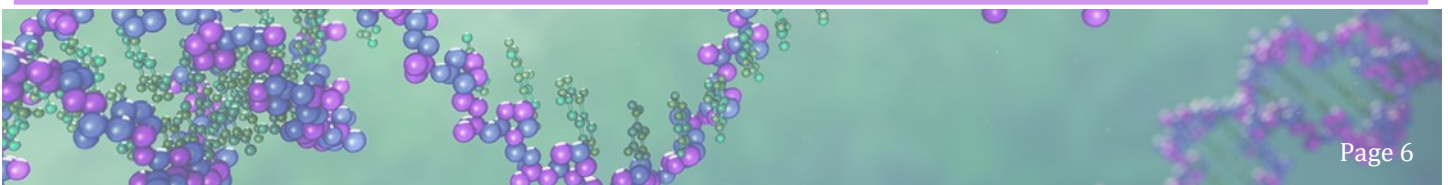
[Weekly Florida Arboviral Activity Report \(Released on Mondays\)](#)

[Orange County Mosquito Control](#)

Additional Resources:

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

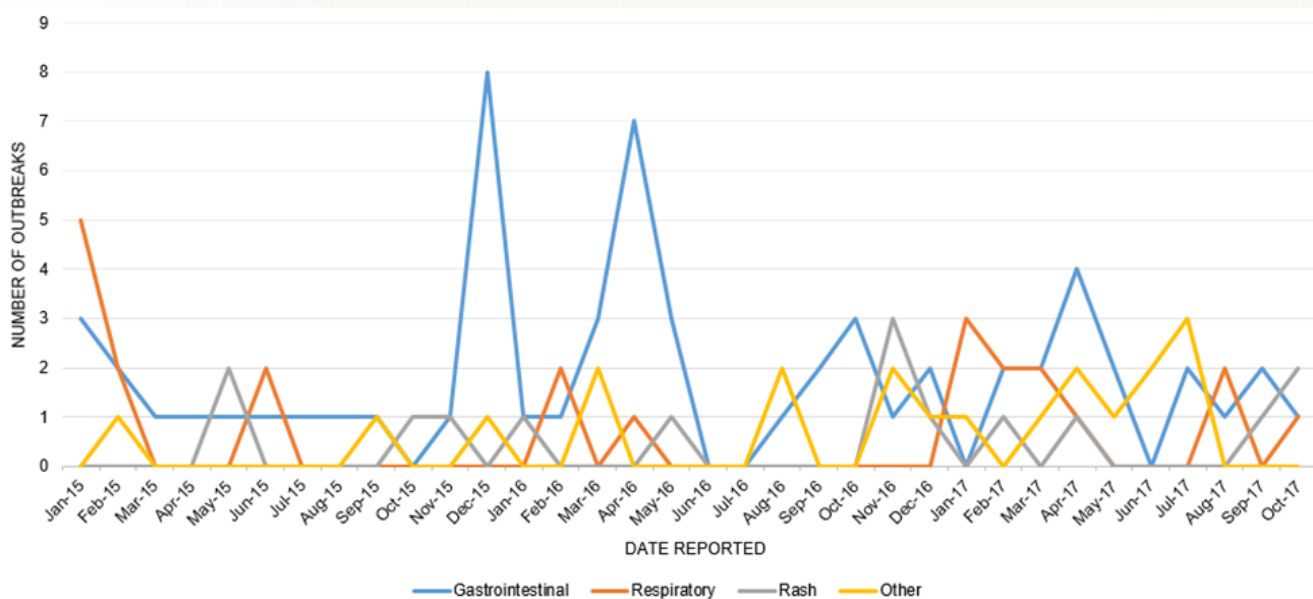
[Florida Department of Health Mosquito-Borne Disease Education Materials](#)



Outbreaks in Orange County

- In October 2017, two Hand, Foot, and Mouth Disease outbreaks were investigated.
 - One was associated with an elementary school.
 - One was associated with a daycare.
- One *Shigella* outbreak at a daycare was investigated.
- One Influenza A outbreak at a long term care facility was investigated.

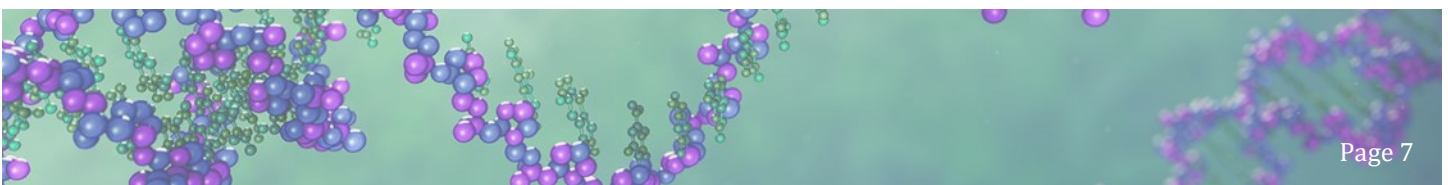
Number of Outbreaks Reported in Orange County, FL, by Month from 2015-2017



*** 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			
	October		Cumulative (YTD)		October		Cumulative (YTD)	
	2017	Median 5YR	2017	Median 5YR	2017	Median 5YR	2017	Median 5YR
Campylobacteriosis	7	11	163	107	298	256	3698	2654
Carbon Monoxide Poisoning	3	0	21	9	102	24	690	164
Creutzfeldt-Jakob Disease (CJD)	0	0	1	1	1	1	22	22
Cryptosporidiosis	3	2	26	36	58	66	457	507
Cyclosporiasis	0	0	4	2	1	1	113	33
Dengue Fever	0	1	0	4	3	11	22	92
Ehrlichiosis - HME (Ehrlichia chaffeensis)	1	0	1	0	2	1	20	22
Escherichia coli: Shiga Toxin-Producing (STEC) Infection	1	1	27	17	30	37	547	416
Giardiasis: Acute	2	6	43	60	61	95	851	935
Haemophilus influenzae Invasive Disease	3	0	16	12	24	14	250	233
Hemolytic Uremic Syndrome (HUS)	0	0	1	0	1	0	10	5
Hepatitis A	0	0	10	4	23	9	247	110
Hepatitis B: Acute	0	1	29	10	64	42	652	341
Hepatitis B: Chronic	30	36	366	363	372	373	4300	4132
Hepatitis B: Surface Antigen in Pregnant Women	1	4	50	55	21	38	373	422
Hepatitis C: Acute	2	0	21	6	31	21	326	168
Hepatitis C: Chronic	133	115	1203	1209	1965	2269	20755	24925
Influenza-Associated Pediatric Mortality	0	0	1	0	0	0	13	3
Lead Poisoning	3	2	18	23	60	124	873	780
Legionellosis	5	2	37	22	51	35	447	272
Listeriosis	0	0	2	2	5	8	50	37
Lyme Disease	2	0	7	4	14	18	247	149
Malaria	1	0	3	7	4	4	58	58
Measles (Rubeola)	0	0	1	0	0	0	4	5
Meningitis: Bacterial or Mycotic	0	0	1	2	7	10	94	114
Meningococcal Disease	1	0	3	0	1	4	20	43
Mercury Poisoning	0	0	1	0	8	1	38	11
Mumps	2	0	6	0	7	0	82	17
Neurotoxic Shellfish Poisoning	0	0	2	0	0	0	2	0
Pertussis	0	3	22	33	16	33	315	517
Q Fever: Acute (Coxiella burnetii)	0	0	1	0	0	0	2	2
Rabies: Possible Exposure	17	6	75	76	199	264	2752	2548
Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis	0	0	1	0	5	2	49	15
Salmonellosis	51	47	280	286	846	847	5455	5439
Shigellosis	17	10	107	86	116	141	1134	1655
Strep pneumoniae Invasive Disease: Drug-Resistant	2	1	17	19	12	15	206	349
Strep pneumoniae Invasive Disease: Drug-Susceptible	2	2	19	19	23	25	298	367
Typhoid Fever (Salmonella Serotype Typhi)	0	0	2	1	8	1	50	10
Varicella (Chickenpox)	1	1	44	17	32	55	536	639
Vibriosis (Vibrio alginolyticus)	1	0	6	2	7	7	67	55
Vibriosis (Vibrio parahaemolyticus)	0	0	1	1	6	5	43	40
Vibriosis (Vibrio vulnificus)	0	0	1	0	9	9	49	43
Zika Virus Disease and Infection- Non-Congenital	0	0	21	0	23	0	278	0
Total	291	251	2661	2495	4516	4866	46495	48349

*** All Data are Preliminary ***

Outbreaks of Hepatitis A in Multiple States Among People Who are Homeless and People Who Use Drugs

Large hepatitis A outbreaks are ongoing in multiple California counties, as well as in Michigan and Utah. The virus is spreading through person-to-person transmission, primarily among persons who are homeless or use injection and non-injection drugs, and their close contacts. California has the highest number of cases so far, 610, followed by Michigan with 457, and Utah with 45 cases (Table 1). State and local health departments, along with assistance from the CDC’s Division of Viral Hepatitis, are working diligently to identify contacts of case-patients and administer postexposure prophylaxis (PEP), and halt the ongoing transmission. In California, active prevention and control measures have also included providing handwashing stations and toilets to homeless communities. Symptoms of hepatitis A virus infection can include: yellow eyes or skin, abdominal pain, pale stools, and dark urine. Clinicians should follow the Advisory Committee on Immunization Practices (ACIP) recommendations for administering the hepatitis A vaccine, including recommending the vaccine to people who use injection and non-injection illegal drugs, and people with hepatitis B or hepatitis C. It is also important to encourage proper handwashing after bathroom use and before eating or preparing meals as a method of preventing hepatitis A virus infection.

Table 1. Outbreak associated hepatitis A infections by state or jurisdiction as of October 20th (CA), 24th (UT), and 26th (MI).

State/Jurisdiction	Cases	Hospitalizations	Deaths
California	610	403	19
San Diego	516	357	19
Santa Cruz	73	33	0
Los Angeles	9	6	0
Other	12	7	0
Michigan	457	370	18
Utah	45	45	0

Please report all cases of hepatitis A to DOH-Orange immediately 24/7 by phone at (407) 858-1420.

Resources: [California Department of Public Health](#), [CDC Viral Hepatitis](#) [Hepatitis A ACIP Vaccine Recommendations](#)

Other Disease Resources

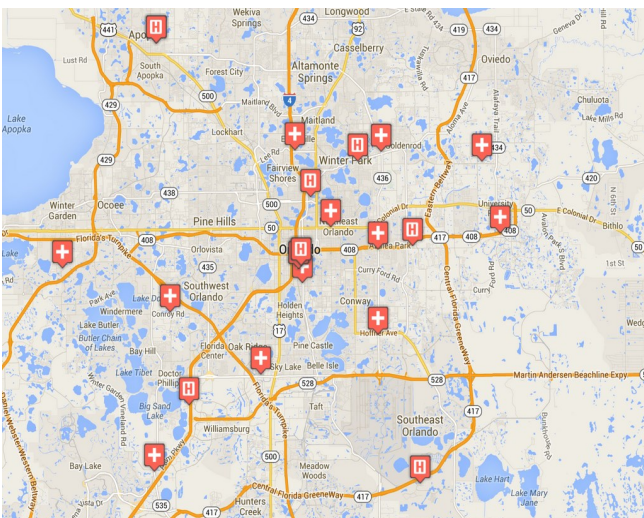
In the structure of DOH-Orange, tuberculosis, sexually transmitted infections, and human immunodeficiency virus are housed in separate programs from the Epidemiology Program. We recognize the importance of these diseases for our community partners and for your convenience have provided links for surveillance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



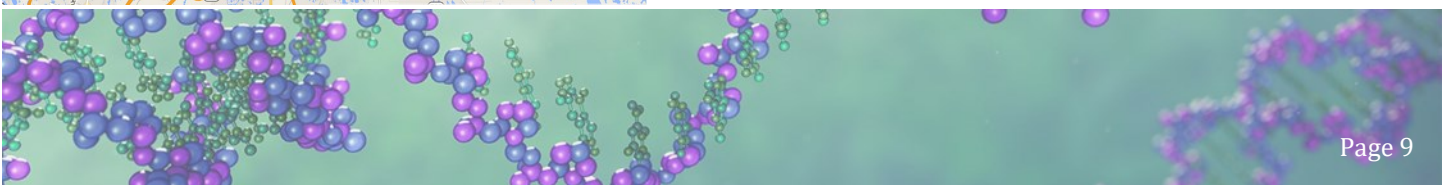
Florida Department of Health: ESSENCE

Hospital linked to ESSENCE

Florida Hospital Centra Care Clinic linked to 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 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

