



Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

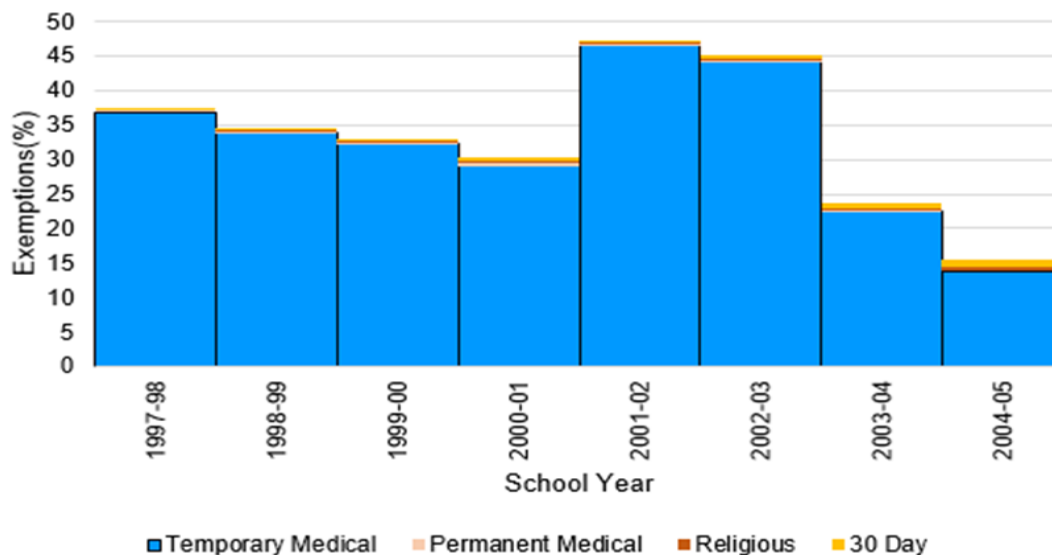
Back to School Vaccinations

Before the start of the school year, ensuring that children are up to date on vaccinations is important to confer immunity and protection from life-threatening illnesses. While diseases such as polio and diphtheria are becoming rare in the US due to vaccinations, other vaccine preventable illnesses have been increasing due to importation, non-vaccination/under-vaccination of children, and waning immunity. Epidemics and outbreaks of diseases like measles, mumps, and, pertussis remain a threat.

Between years 2012 and 2016, the average number of reported cases of pertussis, mumps, and measles in Florida was 536.8, 15.4, and 3.4 respectively. During the current year of 2017, the reported case count of pertussis, mumps, and measles cases in Florida was 269, 3, and 3 respectively as of August 31, 2017. Outbreaks of pertussis are seen in middle schools and high schools where unvaccinated children contribute to this trend. Although immunity wanes over time in individuals who are vaccinated against pertussis, acquiring the illness will likely result in a milder form compared to those lacking the vaccination.

It is estimated that among children born during 1994– 2013, vaccination will prevent approximately 322 million illnesses, 21 million hospitalizations, and 732,000 deaths¹. After the implementation of Florida Administrative Code 64D-3.046 Immunization Requirements: Public and Nonpublic Schools, Grades Preschool, Kindergarten Through 12, and Adult Education Classes in 2006, overall vaccine rates increased by 1.5 fold between years 1997 and 2017 for seventh grade students in Florida. From years 1997 to 2017, permanent medical exemptions doubled, while 30 day exemptions remained the same (Figures 1 & 2). In contrast, temporary medical exemptions decreased by 18 fold, however religious exemptions increased by seven fold (Figures 1 & 2).

Figure 1. Percentage of Vaccine Exemptions of Seventh Grade Students by School Year, Florida, 1997-2005



August 2017

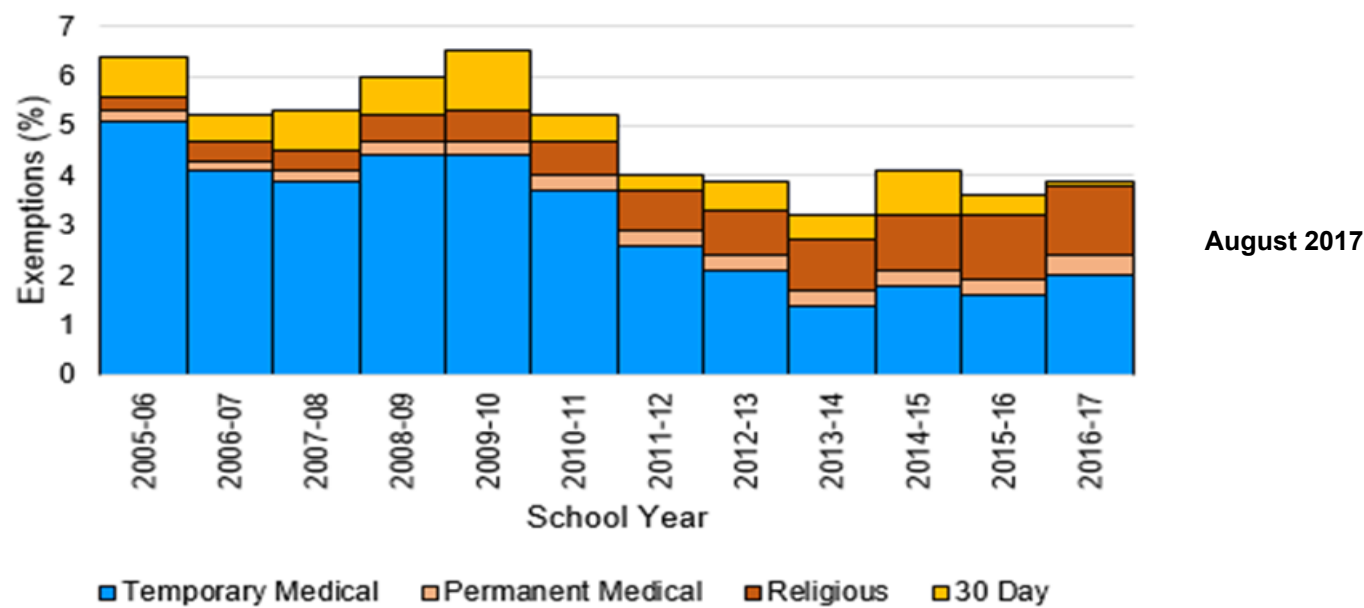
Points of Interest:

- **Back to School Vaccinations**
- **West Nile Virus in the Florida Panhandle**

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Figure 2. Percentage of Vaccine Exemptions of Seventh Grade Students by School Year, Florida, 2005-2017



The single most effective way to prevent illness from measles, mumps, and pertussis, is through vaccination. Vaccines not only protect an individual but also those who are unvaccinated or under-vaccinated through herd immunity which occurs when a certain proportion of the population is vaccinated and immune to infection. The recommended schedule for vaccine preventable illnesses can be found on the Centers for Disease Control and Prevention website, [here](#). Healthcare providers should bring up the discussion of vaccines to parents/caregivers during back to school physicals or office visits, to educate them on the benefits of vaccinations and address any barriers or concerns they may have.

1. [CDC MMWR](#)

2. [FAC 64D-3.046](#)

3. [Recommended Immunization Schedule](#)

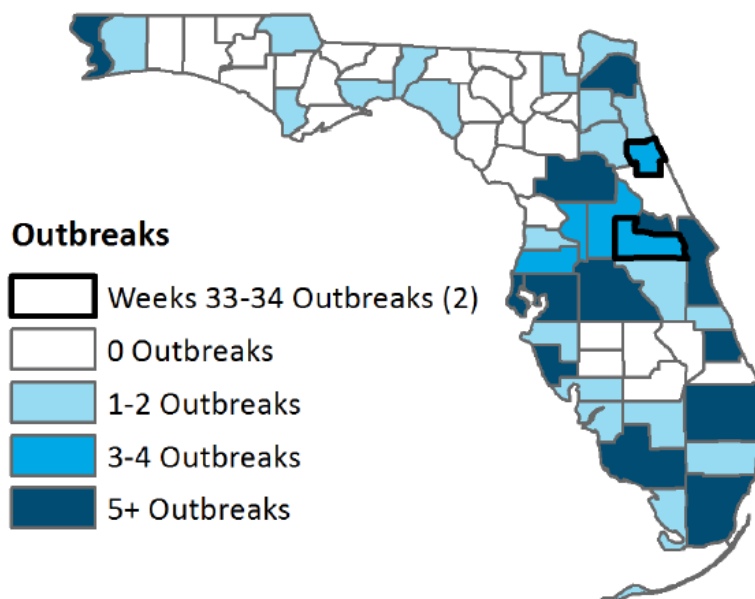


Influenza Surveillance (data from [Florida Flu Review](#))

Florida

- ⇒ In weeks 33-34, Influenza and ILI activity remained low, which is typical for this time of the year.
- ⇒ In weeks 33-34, two outbreaks were reported: one outbreak of ILI and one rhinovirus/enterovirus.
- ⇒ No influenza-associated pediatric deaths were reported.

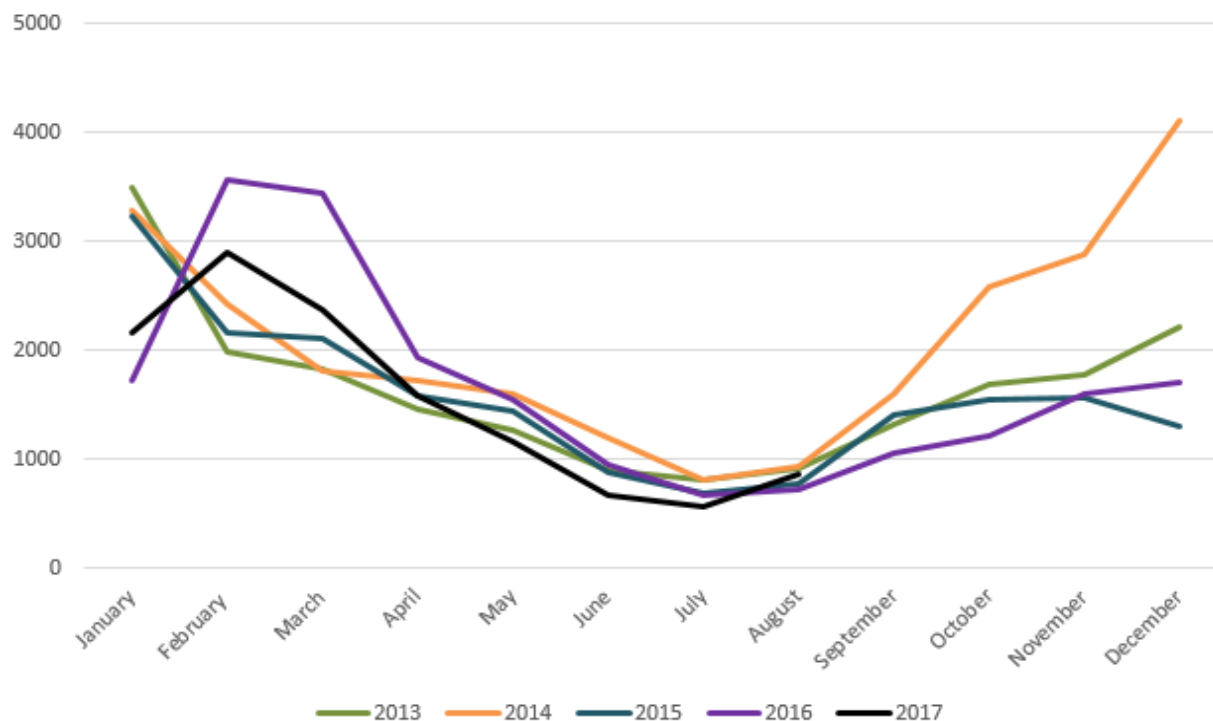
Influenza and ILI Outbreaks by County Week 40, 2016 through Week 34, 2017



Orange County

- ⇒ Orange County influenza activity level for weeks 33-34 has increased.
- ⇒ A long term care facility in Orange County reported 23 individuals with ILI.

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 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

- ⇒ On August 1, 2017, the first case of sexually transmitted Zika infection was confirmed in Pinellas County. There are no reports of local transmission by mosquitos in Florida.
- ⇒ On June 2, the CDC removed the cautionary area designation for Miami-Dade County.
- ⇒ There are no longer travel recommendations related to Zika virus for Miami-Dade County, Florida. However, the level of risk for Zika virus transmission after a yellow area is removed remains unknown. Therefore individuals should continue to protect themselves by following CDC recommendations.

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.

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

Top 3 States	Total Case Count
Florida	1174
New York	1050
California	459

As of September 14, 2017

Travel-Related Zika Cases in FL by County

County	Case Count 2016	Case Count 2017
Miami-Dade	350	64
Broward	182	21
Orange	167	14
Palm Beach	65	7
Hillsborough	46	8
Osceola	38	0
Polk	31	2
Seminole	28	3
Collier	28	5
Pinellas	25	2
Brevard	17	0

As of September 18, 2017

Clinician Guidance

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

- 1) Test for dengue and chikungunya viruses also due to similar geographic spread of diseases and clinical presentation;
- 2) 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](#)

[Orange County Mosquito Control](#)

[Centers for Disease Control and Prevention](#)

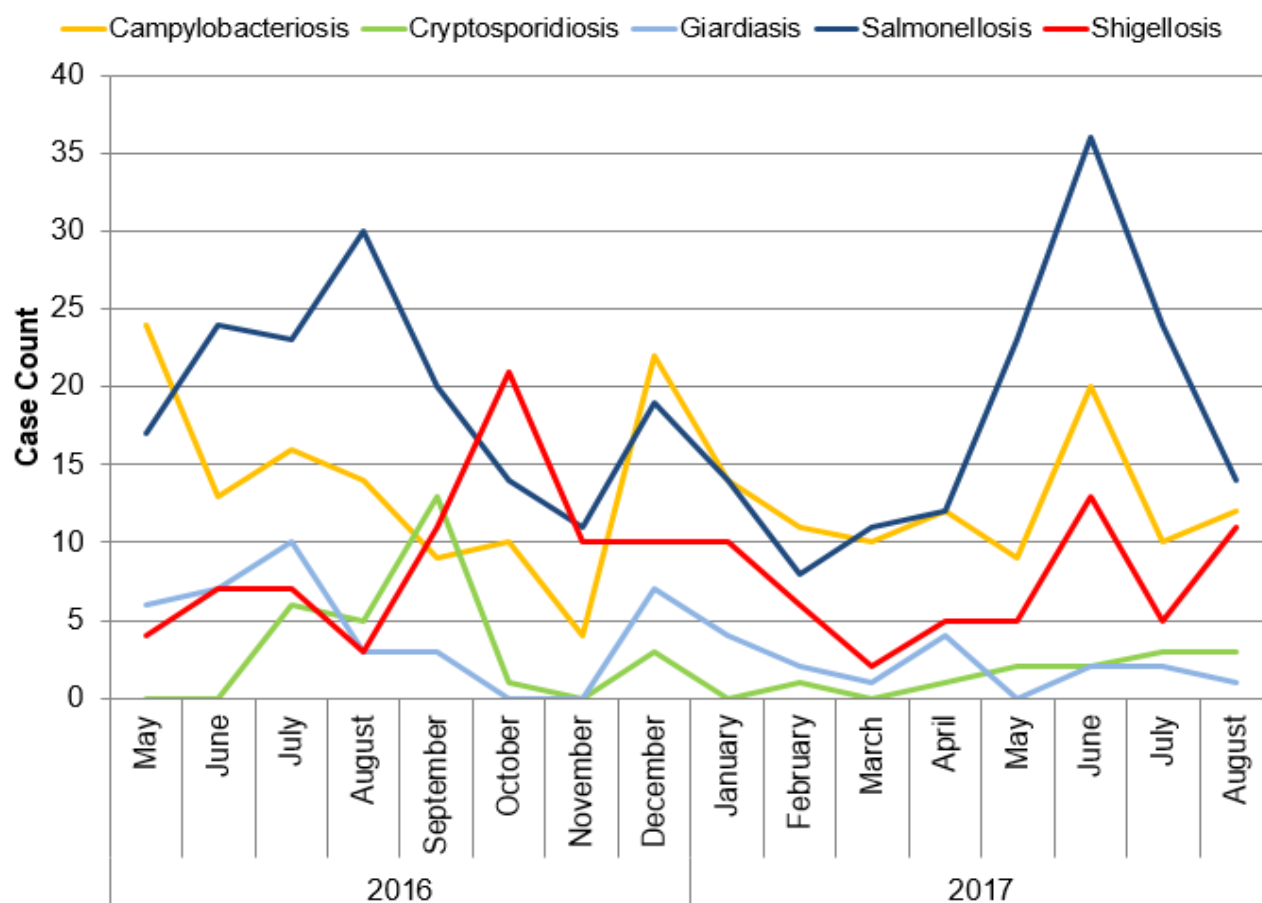
[Latest Travel Notices](#)

[CDC Healthcare Guidance](#)

[Local Health Department Contact Information](#)

Gastrointestinal Illness Surveillance

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



Gastrointestinal Illness Points of Interest:

- ⇒ Enteric reportable disease cases remain within seasonally expected levels.
- ⇒ One GI illness outbreak was reported to Orange County during August.
- ⇒ In August, there were 15 foodborne illness complaints reported to Orange County.

Gastrointestinal Illness Resources:

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

[Florida Food and Waterborne Disease Program](#)

[Florida Food Recall Searchable Database](#)

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

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

[CDC: Healthy Water](#)

**REPORT
FOODBORNE
ILLNESS
ONLINE**

Arboviral Surveillance

Florida

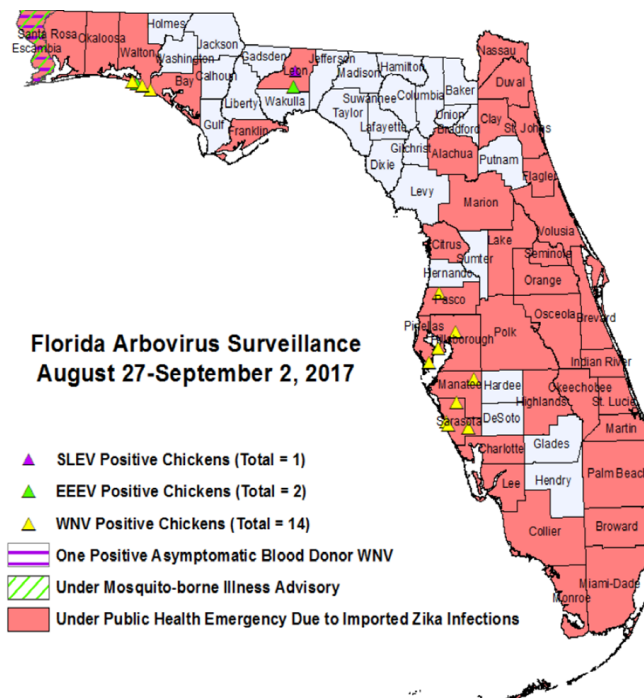
- ⇒ Seven travel-associated cases of dengue have been reported in 2017. One travel-associated case of chikungunya was reported in 2017. **One asymptomatic blood donor was identified as West Nile virus positive in Escambia County.**
- ⇒ **Escambia County is currently under a mosquito-borne illness advisory.**
- ⇒ The best method of prevention is to avoid mosquito bites and to reduce mosquito breeding sites.

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 Mexico, 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.



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.
- ⇒ Four travel-related cases of Zika virus were reported in August 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:

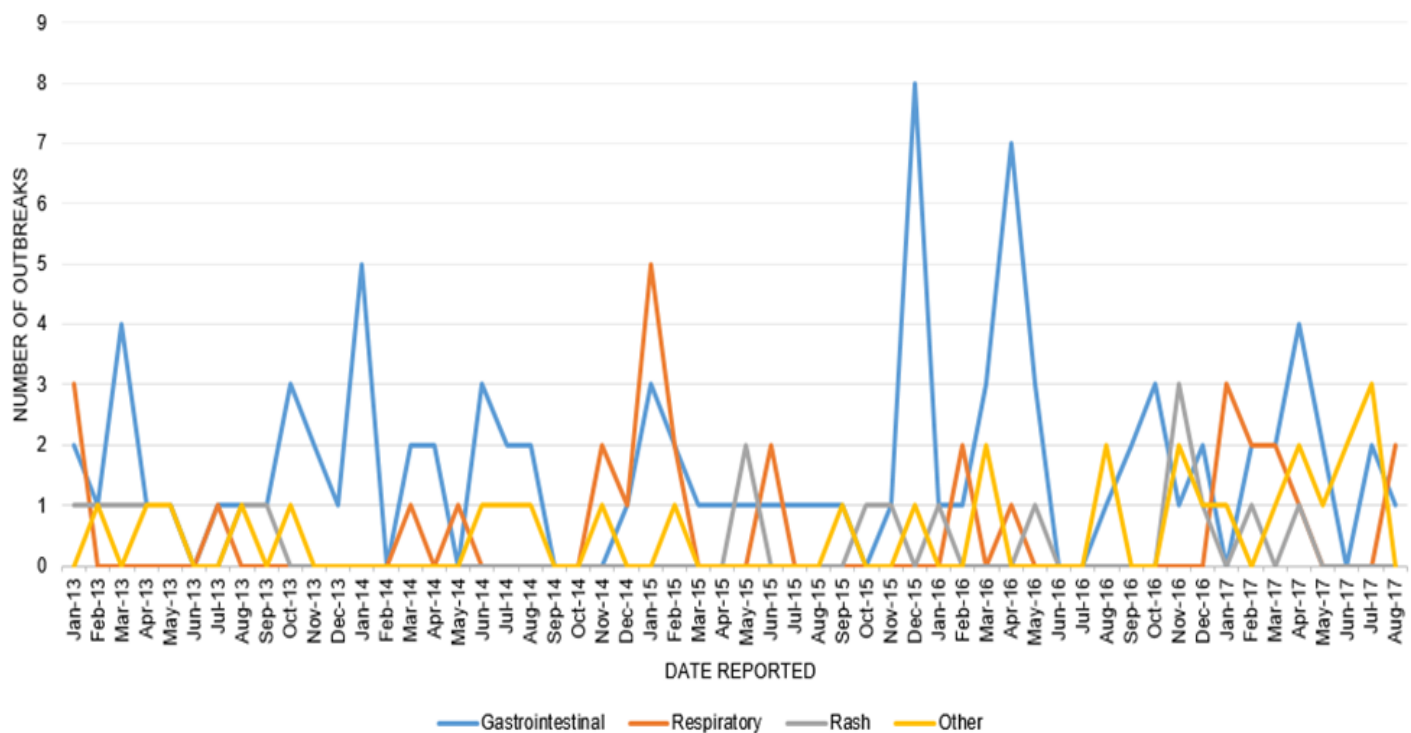
[Florida Department of Health Mosquito-Borne and Other Insect-Borne Diseases Information](#)

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

Outbreaks in Orange County, FL

- ⇒ In August 2017, there was one Gastrointestinal Illness outbreak associated with a local restaurant that was reported to Orange County.
- ⇒ There was one ILI outbreak at a skilled nursing facility.
- ⇒ There was one Influenza B outbreak at a county jail.

Number of Outbreaks Reported in Orange County, FL, by Month from 2013 - 2017



*** All Data are Preliminary ***

Disease	ORANGE				All Counties			
	August		Cumulative (YTD)		August		Cumulative (YTD)	
	2017	Median 5YR	2017	Median 5YR	2017	Median 5YR	2017	Median 5YR
Campylobacteriosis	20	13	140	89	425	293	3082	2162
Carbon Monoxide Poisoning	1	0	11	7	16	9	149	112
Creutzfeldt-Jakob Disease (CJD)	0	0	1	0	2	3	17	17
Cryptosporidiosis	6	6	21	20	81	68	329	339
Cyclosporiasis	2	0	4	2	55	7	108	31
Dengue Fever	0	0	0	4	3	14	13	62
Escherichia coli: Shiga Toxin-Producing (STEC) Infection	4	2	20	13	72	54	474	337
Giardiasis: Acute	8	9	35	46	94	115	727	720
Haemophilus influenzae Invasive Disease	2	1	12	10	20	15	202	203
Hansen's Disease (Leprosy)	0	0	0	1	0	3	14	7
Hemolytic Uremic Syndrome (HUS)	0	0	1	0	1	0	9	4
Hepatitis A	2	0	9	2	36	13	199	86
Hepatitis B: Acute	2	1	25	9	55	29	513	257
Hepatitis B: Chronic	27	41	299	279	389	460	3637	3358
Hepatitis B: Surface Antigen in Pregnant Women	7	5	48	45	33	32	323	338
Hepatitis C: Acute	2	1	15	4	39	23	253	136
Hepatitis C: Chronic	122	126	978	989	2135	2630	17425	19911
Influenza-Associated Pediatric Mortality	0	0	1	0	1	0	13	3
Lead Poisoning	1	1	14	16	86	70	805	586
Legionellosis	4	3	29	14	51	30	333	208
Listeriosis	0	0	2	1	6	5	38	26
Lyme Disease	1	0	7	2	59	38	228	119
Malaria	0	1	2	6	13	9	49	50
Measles (Rubeola)	0	0	1	0	0	0	4	5
Meningitis: Bacterial or Mycotic	0	0	1	2	13	12	81	96
Meningococcal Disease	0	0	1	0	2	1	18	31
Mercury Poisoning	0	0	1	0	2	1	26	9
Mumps	3	0	4	0	26	1	72	13
Neurotoxic Shellfish Poisoning	0	0	2	0	0	0	2	0
Pertussis	1	5	19	26	43	54	280	424
Q Fever: Acute (Coxiella burnetii)	0	0	1	0	0	0	2	2
Rabies: Possible Exposure	9	8	53	62	284	292	2256	2028
Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis	1	0	1	0	14	2	38	12
Salmonellosis	28	37	191	185	764	751	3860	3700
Shigellosis	14	4	73	53	162	165	916	1388
Strep pneumoniae Invasive Disease: Drug-Resistant	0	0	13	16	9	13	174	318
Strep pneumoniae Invasive Disease: Drug-Susceptible	1	2	15	17	12	14	250	340
Streptococcal Invasive Disease (Group A) - Expired 6/4/2014	0	0	0	8	0	0	0	162
Typhoid Fever (Salmonella Serotype Typhi)	0	0	2	1	5	2	35	8
Varicella (Chickenpox)	2	1	39	12	44	48	460	508
Vibriosis (Vibrio alginolyticus)	0	0	4	2	3	7	48	45
Vibriosis (Vibrio parahaemolyticus)	0	0	1	0	8	7	35	32
Vibriosis (Vibrio vulnificus)	0	0	1	0	6	6	24	21
Zika Virus Disease and Infection- Non-Congenital	3	0	20	0	44	0	224	0
Total	273	267	2117	1943	5123	5297	37789	38221

*** All Data are Preliminary ***

West Nile Virus in the Florida Panhandle

The first human case of West Nile virus (WNV) in 2017 has been reported in Escambia County, Florida. Residents and visitors of the Panhandle and the rest of the state should adopt proper precautions to reduce the risk of disease transmission. WNV is transmitted to humans primarily through the bites of infected mosquitoes, but can also be transmitted through blood transfusion and organ transplantation. The clinical spectrum for WNV infection includes asymptomatic infection or mild illness (fever and headache), aseptic meningitis, and encephalitis that can progress to coma and death. Approximately 80% of those infected show no clinical symptoms. Twenty percent have mild symptoms, and less than 1% experience the neuroinvasive form of illness. Populations at risk for severe illness include individuals over 60 years of age and immunosuppressed patients.



To reduce the risk of WNV infection, DOH-Orange recommends use of an EPA-registered insect repellent and wearing long-sleeved shirts and long pants. To control mosquitoes in and around the house, it is important to ensure windows and doors are fully screened, use air conditioning or sleep under a mosquito bed net if not available, and empty out all items that may contain water once a week.

Please contact DOH-Orange by the next business day if you suspect WNV infection to ensure prompt mosquito control efforts.

Resources: [DOH-Escambia](#)

[CDC Public Health Image Library](#)

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).

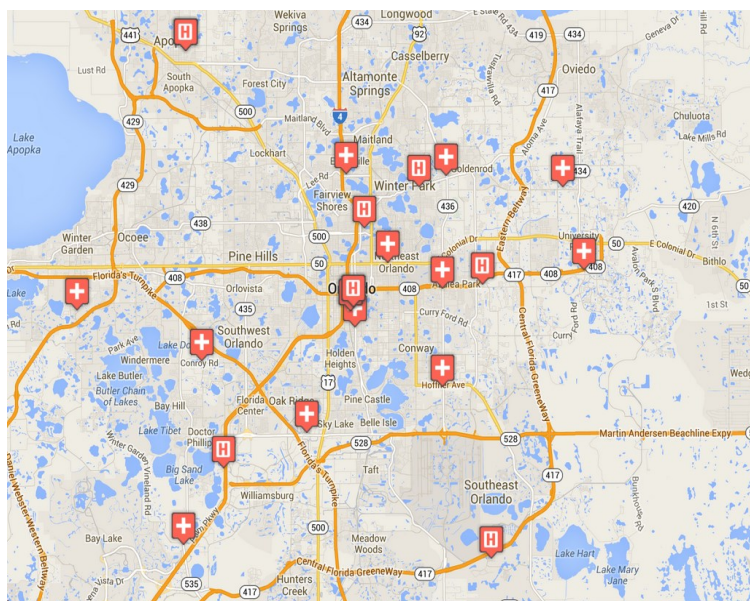


Florida Department of Health:

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.

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Sign up for Electronic Health Alerts & Epidemiology Monthly Surveillance Reports

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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