



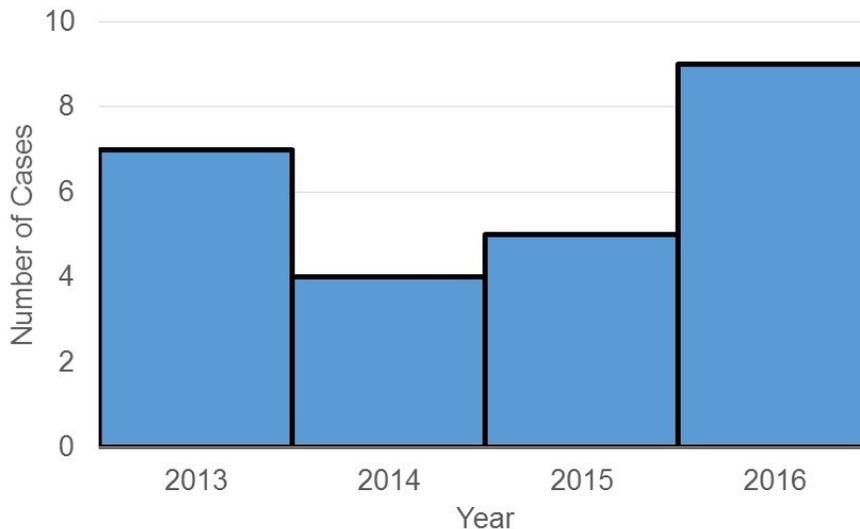
# Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

## Directing Attention Towards Malaria

Amidst the current concerns of Zika in the state of Florida, the Florida Department of Health in Orange County would like to remind providers of the importance of testing travelers exhibiting a febrile-illness for malaria. With an estimated of 3.2 billion individuals at risk for infection each year<sup>1</sup>, malaria is still a primary international public health concern. The generalizable symptoms associated with malaria are fever and influenza-like symptoms, which typically occur in intervals. These symptoms that present in individuals with malaria are similar to other arboviruses, such as Zika, Dengue, and Chikungunya. Clinicians should consider malaria in any patient with a febrile-illness who has recently returned from a malaria-endemic area.

**Malaria Cases by Year in Orange County, FL 2013-2016**



## Geographic Distribution

The geographic distribution of malaria is depicted in **Map 1. & Map 2.** Please note that these maps are shaded **completely** even if transmission only occurs in small area of the country. For additional information regarding malaria transmission in specific countries and areas within the country, it is recommended to view the [CDC's Yellow Book on Yellow Fever & Malaria Information, by Country.](#)

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### Points of Interest:

- Directing Attention Towards Malaria
- Zika Virus Detection

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## Prevention

Individuals traveling to a malaria endemic areas should be provided with recommendations on prevention measures. Clinicians should remind travelers to prevent mosquito bites by using insect repellent with DEET when outdoors, to wear clothing that covers most of the body, and to sleep with an insecticide-treated bed net (if necessary). Patients should also be educated on the mode of transmission and when the peak periods of feeding occur (**dusk and dawn**). In addition, patients should be recommended to take chemoprophylaxis regimens.

## Chemoprophylaxis

Several factors should be considered between the patient and provider when choosing a chemoprophylaxis regimen. The provider should review the travel itinerary with the traveler to determine whether the patient is traveling to an area of the country where malaria is endemic and if there is an antimalarial drug resistance in that area. For information regarding anti-malarial drug resistance view the [CDC's Yellow Book on Yellow Fever & Malaria Information, by Country](#).

## Treatment

Malaria treatment options differ depending on the species of malaria, the likelihood of drug resistance, the age of the patient, pregnancy status, and the severity of infection.

Recommendations of effective treatment options can be found on the [CDC's Guidance for Clinicians](#). Clinicians who need additional assistance with protocols, diagnosis, or treatment should contact their Infectious Disease Doctor, Infection Control Practitioner, local county health department, or the [CDC Malaria Hotline](#) (770-488-7788 or toll-free at 855-856-4713). Any clinician that has a suspected or confirmed case of malaria, especially *Plasmodium falciparum*, should treat it as a medical emergency and intervene immediately.



## Malaria Resources:

[CDC MMWR](#)

[CDC Infectious Diseases Related to Travel](#)

[CDC's Yellow Book](#)

[CDC's Guidance for Clinicians](#)

[CDC Malaria Hotline](#)

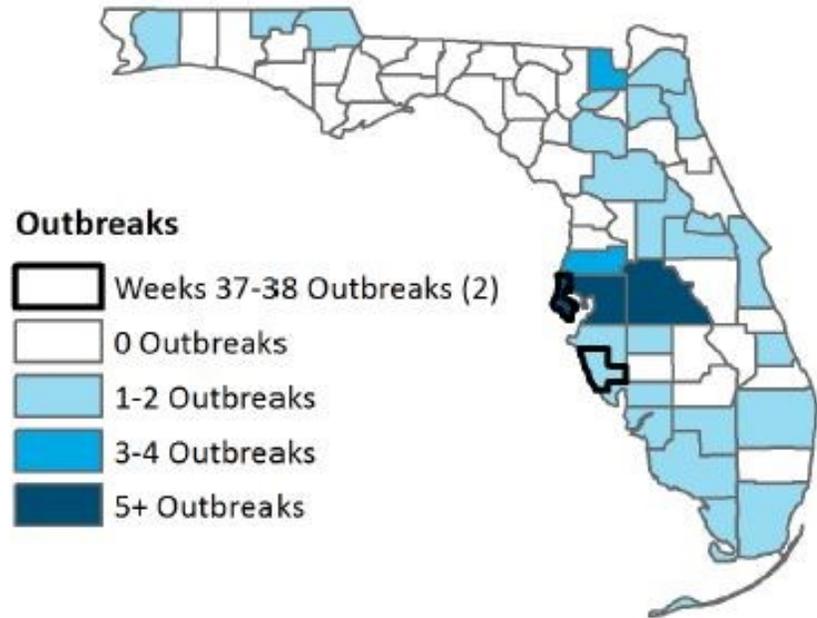
[CDC Travelers' Health](#)

# Influenza Surveillance (data from Florida Flu Review)

## Florida

- ⇒ Influenza activity during the 15'-16' influenza season peaked between weeks 7-11. This peak in activity occurred later than in the past six seasons.
- ⇒ In recent weeks, emergency department and urgent care center ILI visits reported into ESSENCE-FL (Florida's syndromic surveillance system) has slightly increased, which is typical for this time in the influenza season.

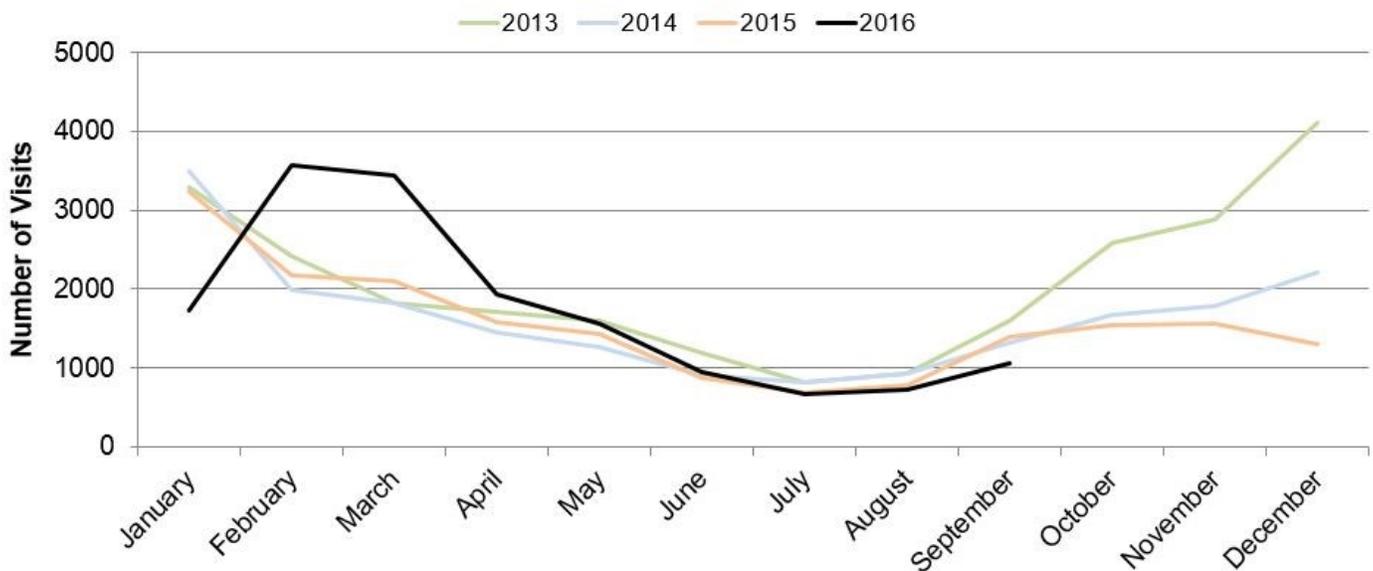
### Influenza and ILI outbreaks, by county from week 40, 2015 through week 38, 2016



## Orange County

- ⇒ No influenza outbreaks were reported in Orange County during September, 2016.
- ⇒ Influenza-like illness was at seasonally expected levels in Orange County during September, 2016.

### Influenza-like Illness from Emergency Department Visits in Orange County, 2013 to 2016



## Influenza Resources:

- [Florida Department of Health Weekly Influenza Activity Report](#)
- [Center for Disease Control and Prevention Weekly Influenza Activity Report](#)

As of October 3, 2016:

## Zika Virus Surveillance

### National

⇒ The CDC has issued travel recommendations concerning the Zika virus. The latest travel recommendations can be viewed [here](#).

### Florida

⇒ **At this time, the department is conducting active investigations, for non-travel related Zika infections in [Miami-Dade and Palm Beach counties](#).**

⇒ 37 counties are currently under a declared state of emergency due to identification of Zika infections.

⇒ As of October 3, 2016:

- **A total of 932 confirmed cases have been identified in Florida**
  - ◆ 711 confirmed cases of Zika are travel-related to Zika epidemic areas.
  - ◆ 97 confirmed cases of Zika have been among pregnant women in Florida.
  - ◆ 124 confirmed cases of Zika are non-travel related.

### Orange County

⇒ No local transmission has been identified in Orange County

### Clinician Guidance

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

- 1) Test for dengue and chikungunya viruses 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](#).

Top 3 States	Travel-associated Cases
New York	811
Florida	672
California	267

As of October 3, 2016:

FL County	Travel-associated Cases
Alachua	10
Bay	3
Brevard	14
Broward	114
Charlotte	1
Citrus	2
Clay	4
Collier	7
Duval	8
Escambia	3
Flagler	2
Hernando	4
Highlands	1
Hillsborough	23
Lake	3
Lee	12
Leon	2
Manatee	4
Marion	3
Martin	2
Miami-Dade	234
Monroe	5
Nassau	1
Okaloosa	3
Okeechobee	1
Orange	84
Osceola	30
Palm Beach	37
Pasco	8
Pinellas	16
Polk	27
Santa Rosa	1
Sarasota	3
Seminole	21
St Johns	4
St. Lucie	5
Volusia	9

## Zika Virus Resources:

[Florida Department of Health](#)

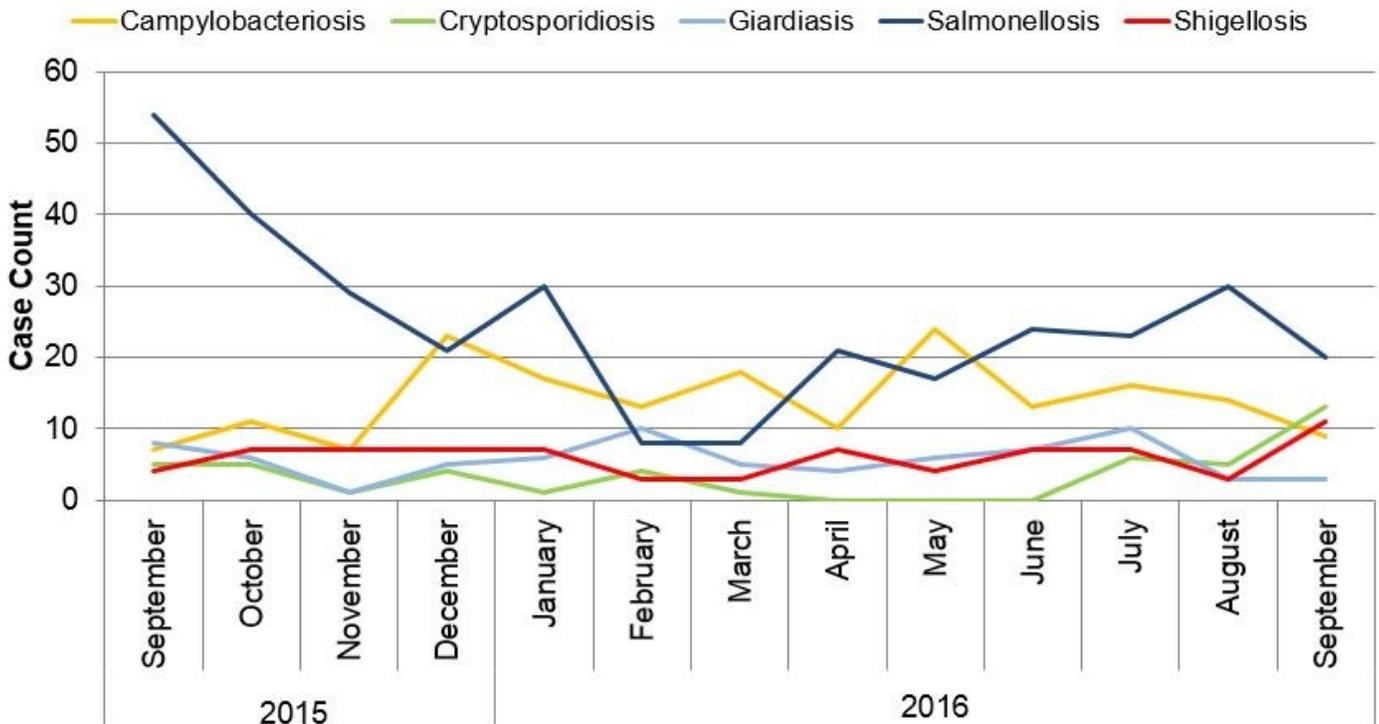
[Orange County Mosquito Control](#)

[Latest Travel Notices](#)

[CDC Healthcare Guidance](#)

## Gastrointestinal Illness Surveillance

Select Reportable Enteric Diseases in Orange County, Florida, September 2015 to September 2016



### Gastrointestinal Illness Points of Interest:

- ⇒ Enteric reportable diseases cases remain within seasonally expected levels.
- ⇒ One foodborne outbreak of unknown etiology was reported during September 2016.
- ⇒ One person-to-person gastrointestinal illness outbreak was reported during September 2016. The illness was linked to a Norovirus GII infection.
- ⇒ No waterborne disease outbreaks were identified in September 2016.

### 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](#)

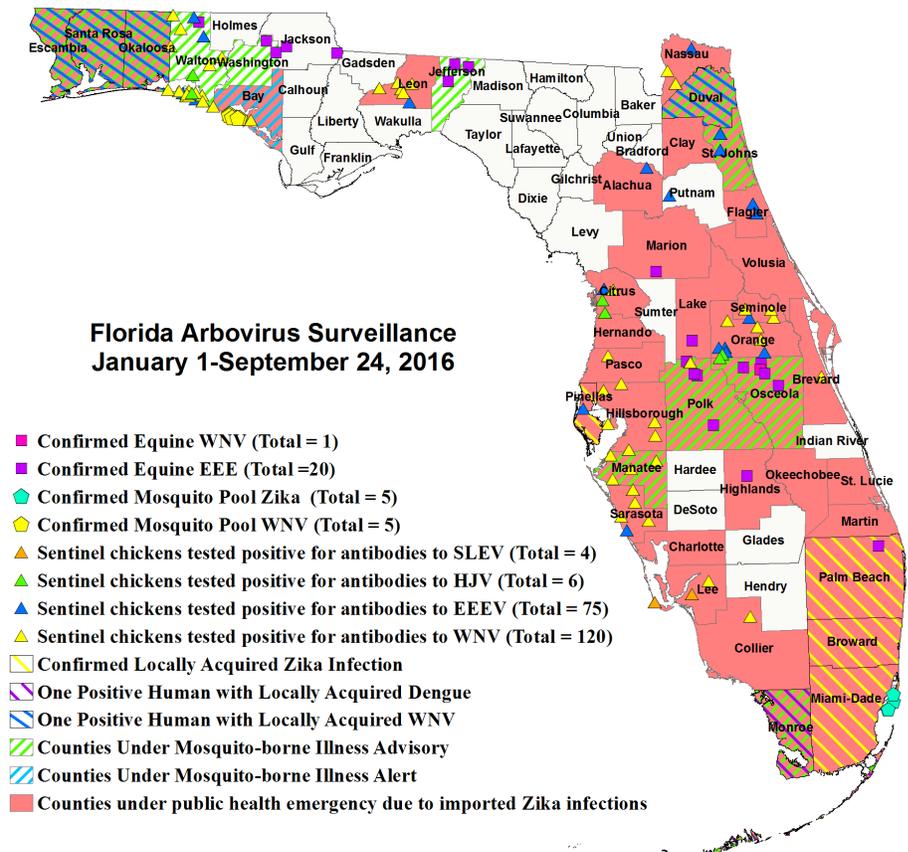
[CDC: Healthy Water](#)

**REPORT  
FOODBORNE  
ILLNESS  
ONLINE**

## Arboviral Surveillance

### Florida

- ⇒ Four cases of locally acquired West Nile Virus was reported in Florida during 2016.
- ⇒ One case of locally acquired Dengue was reported in Florida during 2016.
- ⇒ Imported cases of Dengue, Malaria, and Chikungunya virus have been reported in Florida during 2016.
- ⇒ More details available below with link to: [Weekly Florida Arboviral Activity Report](#).



### Orange County

- ⇒ No locally acquired cases of Zika Virus, West Nile Virus, Dengue, Chikungunya Virus, St. Louis Encephalitis Virus, or Eastern Equine Encephalitis Virus have been identified in Orange County.
- ⇒ In 2016, sentinel chickens tested positive for West Nile Virus (WNV) Highlands J Virus, and Eastern Equine Encephalitis (EEE) in Orange County.

### Arboviral Resources:

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

[Orange County Mosquito Control](#)

### Chikungunya Resources

[Florida Department of Health Chikungunya Information](#)

[CDC Chikungunya Information](#)

[CDC Chikungunya MMWR](#)

Disease	ORANGE				All Counties			
	September		Cumulative (YTD)		September		Cumulative (YTD)	
	2016	Median	2016	Median	2016	Median	2016	Median
		5YR		5YR		5YR		5YR
Campylobacteriosis	16	11	145	95	259	236	2817	2090
Carbon Monoxide Poisoning	0	1	8	7	19	19	192	129
Chikungunya Fever	0	0	0	0	1	0	14	0
Cholera (Vibrio cholerae Type O1)	0	0	1	0	0	1	1	4
Ciguatera Fish Poisoning	0	0	1	0	9	7	22	40
Creutzfeldt-Jakob Disease (CJD)	0	0	0	1	3	3	11	19
Cryptosporidiosis	13	2	33	21	86	48	424	354
Cyclosporiasis	0	0	2	1	2	1	36	33
Dengue Fever	0	0	5	5	8	18	65	68
Escherichia coli: Shiga Toxin-Producing (STEC) Infection	4	1	26	13	47	41	489	345
Giardiasis: Acute	5	8	59	51	75	111	877	840
Haemophilus influenzae Invasive Disease	0	0	10	12	16	13	251	208
Hansen's Disease (Leprosy)	0	0	1	0	1	0	19	7
Hepatitis A	4	1	7	3	8	13	101	94
Hepatitis B: Acute	2	1	17	9	57	35	496	272
Hepatitis B: Chronic	39	34	350	304	376	353	3891	3387
Hepatitis B: Perinatal	0	0	0	0	0	0	0	1
Hepatitis B: Surface Antigen in Preg. Women	3	6	32	54	20	37	275	385
Hepatitis C: Acute	0	1	4	6	18	16	231	144
Hepatitis C: Chronic	137	121	1289	1194	2276	2557	24523	22871
Influenza A: Novel or Pandemic Strains	0	0	0	0	0	0	0	0
Influenza-Associated Pediatric Mortality	0	0	1	0	0	0	6	2
Lead Poisoning	0	3	53	19	63	62	926	614
Legionellosis	2	3	22	15	39	29	260	199
Leptospirosis	0	0	1	0	0	0	1	1
Lyme Disease	2	1	4	4	35	21	325	129
Malaria	2	1	9	6	8	6	62	54
Measles (Rubeola)	0	0	0	0	0	0	5	9
Meningitis: Bacterial or Mycotic	0	0	1	7	10	11	93	112
Meningococcal Disease	0	0	0	1	1	4	11	39
Mumps	0	0	1	0	0	3	24	17
Pertussis	5	0	31	24	21	30	270	454
Pesticide-Related Illness and Injury: Acute	0	1	0	4	12	18	21	53
Rabies: Possible Exposure	7	5	51	70	203	202	2433	2102
Salmonellosis	38	47	223	223	813	864	4595	4486
Shigellosis	13	10	59	81	93	152	686	1677
Strep pneumoniae Invasive Disease: Drug-Susceptible	1	1	13	17	18	29	338	401
Tetanus	0	0	0	0	1	0	4	3
Varicella (Chickenpox)	1	1	13	22	53	67	602	597
Vibriosis (Vibrio parahaemolyticus)	0	0	1	0	4	3	42	34
Vibriosis (Vibrio vulnificus)	0	0	2	0	2	5	31	30

\*\*\* All Data is Preliminary \*\*\*

## The Atlantic Hurricane Season and Hurricane Preparedness

The Atlantic hurricane season lasts from June 1st through November 30th; here in Florida we still have two months until the end of the 2016 season.

If you don't have emergency supply kits and plans for family and business, now is the time to prepare those. Information on assembling a plan can be found at Florida Division of Emergency Management's [FLGetAPlan](#). An additional source for plan guidance is Ready.gov's [Make a Plan](#). Ready.gov also provides Information to help build a basic disaster supplies kit at [Ready.gov/kit](#).

Orange County and The Florida Department of Health in Orange County are prepared to jointly operate a special needs shelter in the event of evacuations in any part of the county. The People with Special Needs Program (PSN) is for any Orange County resident or visitor that during times of disaster evacuation has no other alternative and/or requires transportation assistance to evacuate their home and/or has a health/medical condition that requires medical attention by skilled medical professional in a shelter environment. Information on the program, including ways to register, can be found at Orange County's [People With Special Needs Program Frequently Asked Questions](#).

### 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).



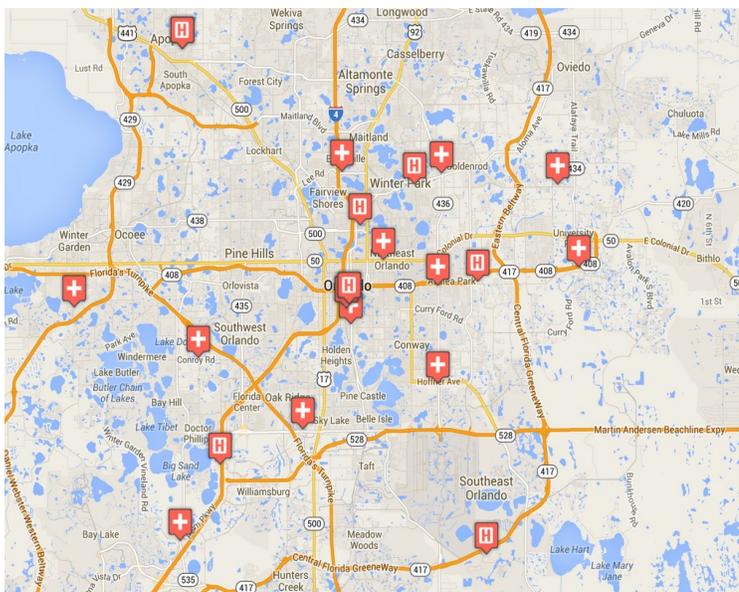
### Florida Department of Health: ESSENCE



Hospital linked to ESSENCE



Florida Hospital Centra Care Clinic linked to ESSENCE



Since 2007, the Florida Department of Health has operated the Early Notification of Community-based Epidemics (ESSENCE), 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 past seven 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 from 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

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](mailto:CHD48.EPIRegistration@flhealth.gov)



#### Issue Contributors

**Ben Klekamp, MSPH, CPH, CIC**  
Interim Epidemiology Program Manager

**Jack Tracy, M Ed**  
Influenza Surveillance Coordinator

**Danielle Rankin, MPH**  
Florida Epidemic Intelligence Service Fellow

*The Epidemiology Program conducts disease surveillance and investigates suspected occurrences of infectious diseases and conditions that are reported from physician's offices, hospitals, and laboratories.*

*Surveillance is primarily conducted through passive reporting from the medical community as required by Chapter 381, Florida Statutes.*

*Data is collected and examined to determine the existence of trends. 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 IS PROVISIONAL**