



Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

Zika Virus Updates: Sexual Transmission, Pregnancy

On March 25th, in separate issues, updated interim guidance for both [prevention of sexual transmission of Zika virus](#) and for [health care providers caring for women of reproductive age with possible Zika Virus exposure](#) was published by the Centers for Disease Control and Prevention (CDC) in its *Morbidity and Mortality Weekly Report* (MMWR).

The following is excerpted from the updated interim guidance relating to the prevention of sexual transmission of the virus, ***which applies to men who have traveled to or reside in areas with active Zika virus transmission and their female or male sex partners:***

Recommendations for Men and Their Pregnant Partners: Men and their pregnant sex partners should consistently and correctly use condoms during sex, or abstain from sex for the duration of the pregnancy.

Recommendations for men and their non-pregnant sex partners: Men and their non-pregnant sex partners who want to reduce the risk for sexual transmission of Zika virus should use condoms consistently and correctly during sex or abstain from sex.

Zika Virus Testing and Sexual Transmission: Neither serum or semen testing of men for the purpose of assessing risk for sexual transmission is currently recommended.

The following is excerpted from the updated interim guidance for health care providers caring for women of reproductive age with possible Zika virus exposure:

The guidance is updated to ***include recommendations on counseling women and men*** with possible Zika virus exposure who are interested in conceiving. Women who have Zika virus disease should wait at least 8 weeks after symptom onset to attempt conception, and men with Zika virus disease should wait at least 6 months after symptom onset to attempt conception. Women and men with possible exposure to Zika virus but without clinical illness consistent with Zika virus disease should wait at least 8 weeks after exposure to attempt conception.

This updated guidance for providers caring for women of reproductive age with possible exposure to the virus includes: preconception counseling recommendations, recommendations for testing of persons attempting conception,

[CDC: Zika and Sexual Transmission](#)

[Florida Health: Zika Virus](#)

March 2016

Volume 7, Issue 3

Points of Interest:

- Zika Virus Updates
- Legionella In Facilities
- Zika Virus Surveillance
- Zika Virus Specimen Submission Update

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Florida Department of Health in Orange County Urges all Orange County Health Care Facilities to Develop and Operate Legionella Prevention Programs

The Florida Department of Health in Orange County is reminding administrators of all Orange County health care facilities of the importance of preventing the accumulation of disease causing bacteria, such as *Legionella pneumophila*, through active prevention programs and preventive maintenance of all water systems at their facilities (e.g., premise plumbing, fountains, heating, ventilation and air conditioning (HVAC) including water towers). Vigilance is strongly encouraged to prevent Legionellosis in their facilities and is accomplished through the development of a *Legionella* Prevention Program that includes routine monitoring of water system environmental conditions.

The first risk factor listed for Legionellosis on the Centers for Disease Control and Prevention (CDC) Legionella website is: "Recent travel with an overnight stay outside of the home, including stay in a healthcare facility".

The Centers for Disease Control and Prevention (CDC) warns that *Legionella* bacteria can cause Legionnaires' disease or Pontiac fever, collectively known as Legionellosis. Pneumonia is the distinguishing clinical manifestation of Legionnaires' disease compared to Pontiac fever and as a result, Legionnaires' disease generally is a more serious illness. Transmission occurs when water mist or vapor is inhaled that is contaminated with *Legionella*.

[Stout, et al. \(2007\)](#) reported that *Legionella* species were isolated from 70% of the hospital water systems tested, 43% of those demonstrating high-level colonization of the water systems.

Risk factors for Legionellosis such as age (> 50 years), smoking, chronic lung disease (e.g., emphysema), cancer, diabetes, kidney failure, and medications (e.g., steroids) are common to many patients admitted to health care facilities; these patients are at higher risk when admitted to facilities with colonized *Legionella* in their water systems. [Benin et al. \(2002\)](#) reported the annual percent of Legionnaires' disease cases that were hospital-acquired from 1980–1998 ranged from 25 to 45 percent.

The incubation period for Legionnaires' disease is most commonly 2-10 days, with an average of 5-6 days. Individual cases or outbreaks can be difficult to identify, because often they are associated with travel or a stay at a facility and then a return to home before signs and symptoms appear. As with all diagnostic work-ups, social and travel history is a critical component.

Research studies estimate that 8,000-18,000 hospitalized cases of the disease may occur in the United States each year, while between 2008 and 2012, a total of 3000-4000 cases of Legionnaires disease were actually reported to CDC each year. Accurate data reflecting the true incidence of this disease are not available because of underutilization of diagnostic testing and underreporting.

Risk Factors:

- Recent travel with an overnight stay outside of the home, including stay in a healthcare facility
- Exposure to hot tubs
- Recent repairs or maintenance work on domestic plumbing
- Renal or hepatic failure
- Diabetes
- Chronic lung disease
- Systemic malignancy
- Smoking (current or historical)
- Immune system disorders
- Age ≥50 years

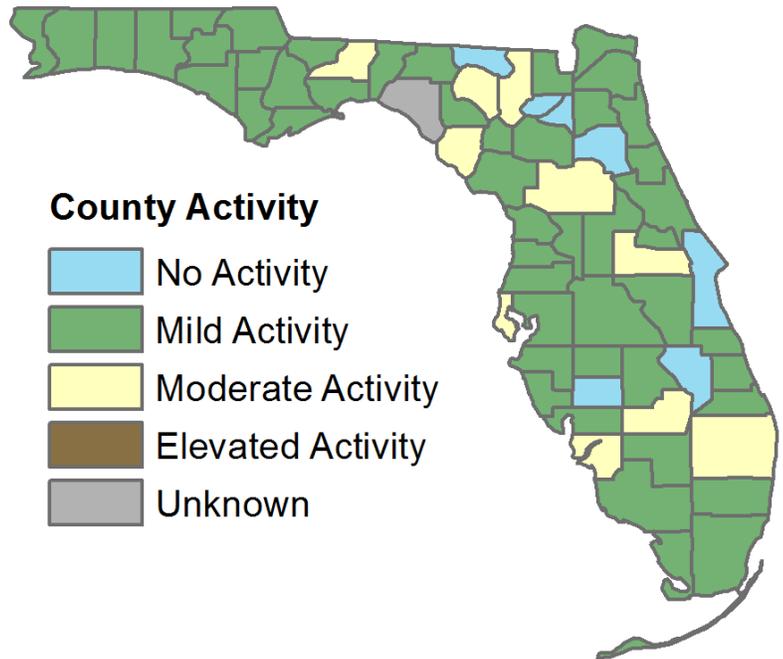
Source: **CDC Legionella**

[Florida Department of Health Legionnaires' Disease](#)
[CDC Legionella ASHRAE Standard 188-2015](#)
[American Industrial Hygiene Assoc](#)
[CDC Legionella: Water System Maintenance](#)

Influenza Surveillance (data from Florida Flu Review)

Florida

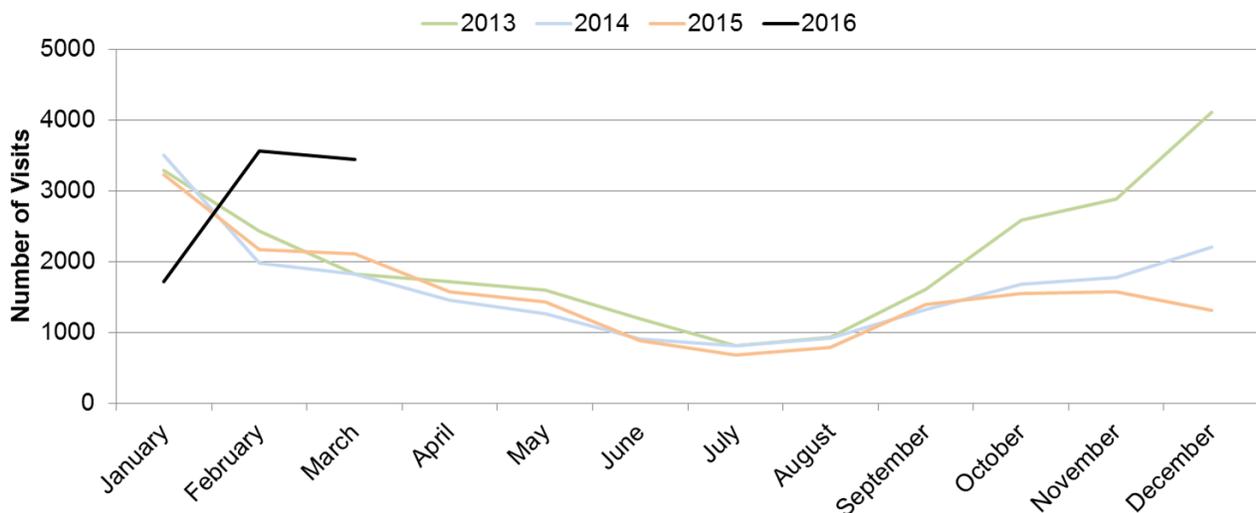
- ⇒ Preliminary data suggests that influenza activity this season has peaked, with peak activity occurring between weeks 7 and 11. This peak in activity has occurred later than in the past six seasons.
- ⇒ In recent weeks, the preliminary estimated number of deaths due to pneumonia and influenza remained elevated. The most notable increase in deaths due to pneumonia and influenza were observed in the 55-74 age group.
- ⇒ The CDC recommends that persons at high risk for developing complications from influenza infections (such as children and pregnant women) or very ill patients suspected of having influenza receive prompt treatment with antiviral drugs, even prior to laboratory confirmation.



Orange County

- ⇒ Orange County reported Moderate influenza activity in week 14 of 2016.
- ⇒ A significant increase in influenza-like illness was observed in February compared to January 2016. This increased continued into March of 2016 and remains at levels of Influenza-like illness (ILI) above the past three years.

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



Influenza Resources:

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

As of April 13, 2016

Top 10 States	Travel-associated Cases
Florida	82
New York	54
California	29
Texas	27
Minnesota	12
Pennsylvania	12
Georgia	11
Illinois	10
North Carolina	9
Ohio	9

As of April 15, 2016

FL County	Travel-associated Cases
Alachua	4
Brevard	2
Broward	13
Clay	1
Collier	1
Hillsborough	3
Lee	4
Miami-Dade	36
Orange	5
Osceola	4
Palm Beach	4
Polk	3
Santa Rosa	1
Seminole	1
St Johns	1

Zika Virus Surveillance

National

- ⇒ The CDC has issued travel recommendations concerning the Zika virus. The latest travel recommendations can be viewed [here](#).
- ⇒ No locally-acquired Zika cases have been reported within the continental United States.

Florida

- ⇒ No locally-acquired cases of Zika virus have been reported in Florida.
- ⇒ 15 counties are currently under a declared state of emergency due to identification of travel-associated Zika infections (see table for counties).
- ⇒ As of April 15, 2016:
 - ⇒ A total of 88 confirmed imported cases have been identified in Florida.
 - ⇒ 5 imported confirmed cases of Zika have been among pregnant women in Florida.

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 for consultation and specimen collection and shipment information to the Florida Department of Health Bureau of Public Health Laboratories. **Authorization must be given from the local health department prior to specimen shipment and testing.** 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](#)

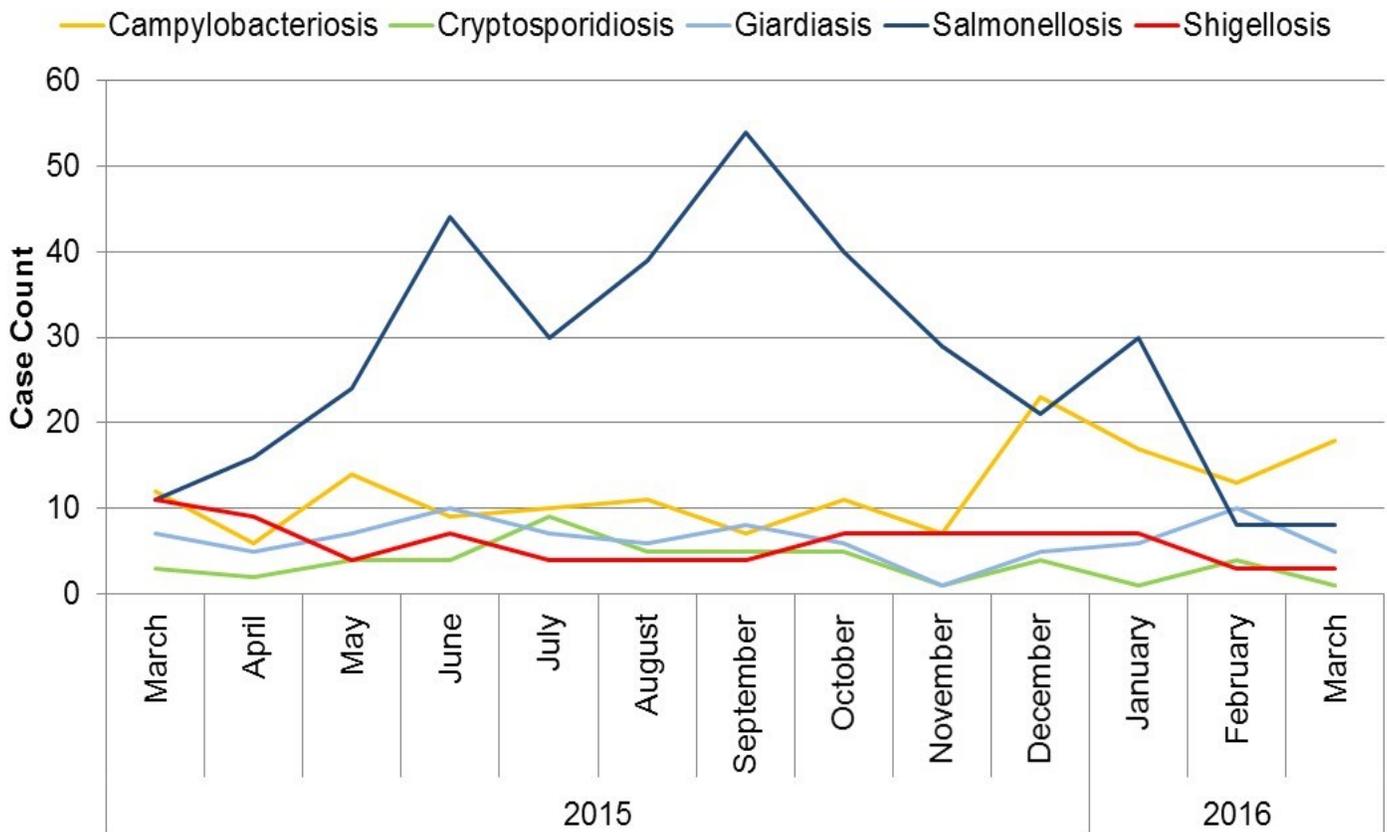
[Latest Travel Notices](#)

[CDC Healthcare Guidance](#)

[Local Health Department Contact Information](#)

Gastrointestinal Illness Surveillance

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



Gastrointestinal Illness Points of Interest:

- ⇒ Enteric reportable diseases cases remain at seasonally expected low levels. A slight increase in Campylobacter cases may signal the beginning of the expected summertime increase in enteric cases.
- ⇒ One waterborne outbreak associated with *Legionella* infection was reported among Orange County residents related to healthcare exposure in Seminole County in March 2016.
- ⇒ Two gastrointestinal illness outbreaks were reported in March 2016. Both have been linked to Norovirus GII infections. One chemical exposure foodborne outbreak was reported in March 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](#)

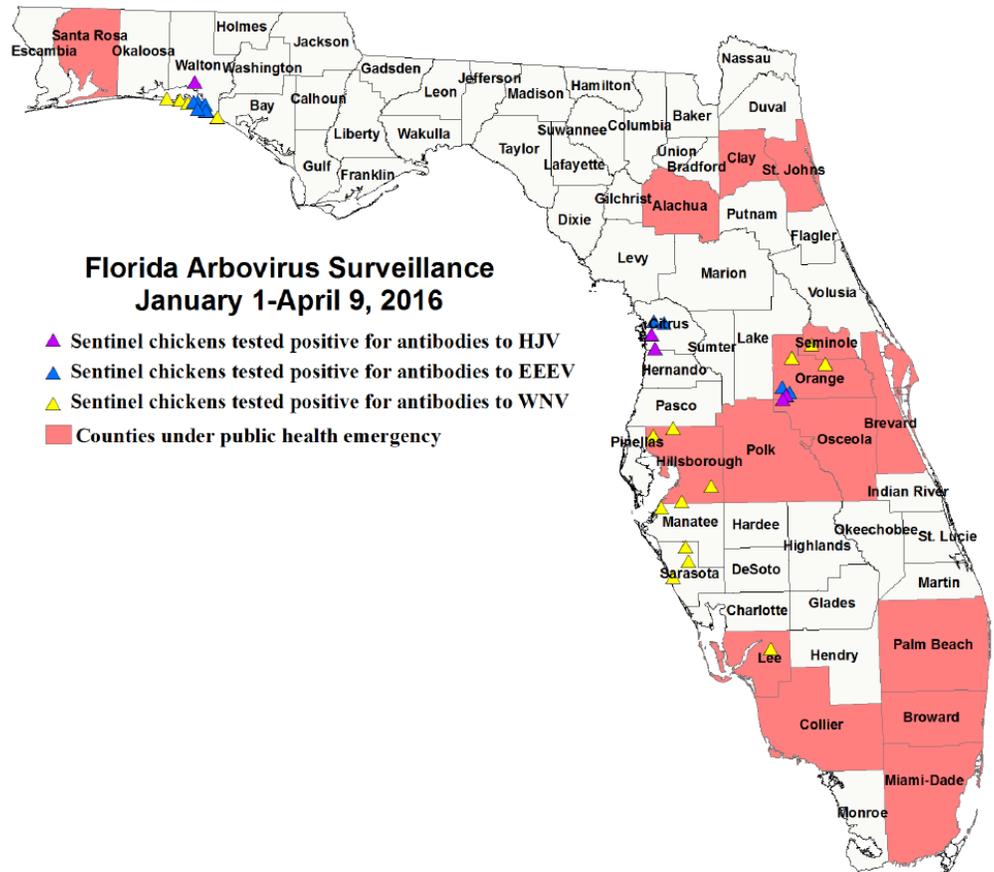
[CDC: A-Z Index for Foodborne Illness](#) [CDC: Healthy Water](#)



Arboviral Surveillance

Florida

- ⇒ Fifteen counties are currently under a declared public health emergency due to the identification of travel-associated Zika infections.
- ⇒ No locally-acquired cases of Zika, Dengue, Chikungunya, West Nile, St. Louis Encephalitis, or Eastern Equine Encephalitis viruses have been reported in Florida during 2016.
- ⇒ Imported cases of Zika, Dengue, and Chikungunya virus have been reported in Florida during 2016.



Orange County

- ⇒ No human cases of West Nile Virus, Chikungunya Virus, St. Louis Encephalitis Virus, or Eastern Equine Encephalitis Virus have been reported among Orange County residents in 2016.
- ⇒ Five imported confirmed cases of Zika virus have been reported among Orange County residents in 2016.
- ⇒ 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			
	March		Cumulative (YTD)		March		Cumulative (YTD)	
	2016	Median	2016	Median	2016	Median	2016	Median
Arsenic Poisoning	0	0	0	0	0	1	2	2
Brucellosis	0	0	0	0	0	0	2	1
Campylobacteriosis	18	10	48	28	274	178	851	608
Carbon Monoxide Poisoning	0	0	8	2	13	15	66	51
Chikungunya Fever	0	0	1	0	1	0	7	0
Cholera (Vibrio cholerae Type O1)	0	0	0	0	0	0	0	1
Ciguatera Fish Poisoning	0	0	0	0	2	1	2	8
Creutzfeldt-Jakob Disease (CJD)	0	0	0	0	1	1	1	4
Cryptosporidiosis	1	2	6	4	30	30	120	114
Cyclosporiasis	0	0	0	0	0	0	0	1
Dengue Fever	0	0	3	1	9	3	32	12
Dengue Fever: Severe	0	0	0	0	0	0	0	0
Escherichia coli: Shiga Toxin-Producing (STEC)	4	1	11	4	49	35	150	102
Giardiasis: Acute	5	5	21	13	91	88	250	246
Haemophilus influenzae Invasive Disease	2	1	4	2	25	25	73	72
Hansen's Disease (Leprosy)	0	0	1	0	0	0	9	1
Hepatitis A	0	0	1	1	5	10	29	27
Hepatitis B: Acute	2	2	4	3	41	24	140	77
Hepatitis B: Chronic	49	30	116	82	491	396	1302	1074
Hepatitis B: Perinatal	0	0	0	0	0	0	0	0
Hepatitis B: Surface Antigen Pregnant Women	7	5	17	14	26	49	86	127
Hepatitis C: Acute	1	1	2	2	11	17	64	41
Hepatitis C: Chronic	161	143	478	381	2815	2761	8345	7507
Influenza-Associated Pediatric Mortality	0	0	0	0	2	1	4	2
Lead Poisoning	1	1	6	7	64	58	178	219
Legionellosis	4	1	9	4	32	17	84	50
Listeriosis	0	0	0	0	3	2	5	8
Lyme Disease	0	0	0	1	28	6	89	19
Malaria	1	0	2	1	4	3	10	18
Measles (Rubeola)	0	0	0	0	0	0	0	2
Meningitis: Bacterial or Mycotic	0	0	0	1	9	12	36	34
Meningococcal Disease	0	0	0	0	3	6	5	15
Mercury Poisoning	0	0	0	0	1	0	5	2
Mumps	0	0	0	0	4	2	8	3
Pertussis	3	2	9	6	25	33	96	98
Rabies: Possible Exposure	9	8	11	25	279	228	732	641
Ricin Toxin Poisoning	0	0	0	0	0	0	0	0
Rocky Mountain Spotted Fever	0	0	0	0	1	0	2	0
Rubella	0	0	0	0	0	0	1	0
Salmonellosis	8	13	46	43	296	271	977	821
Shigellosis	3	8	14	21	54	156	192	433
Strep pneumoniae : Drug-Resistant	0	3	6	11	19	66	70	190
Strep pneumoniae : Drug-Susceptible	3	4	10	9	52	63	146	224
Typhoid Fever (Salmonella Serotype Typhi)	0	0	1	0	2	1	4	2
Varicella (Chickenpox)	1	3	4	9	67	84	261	230
Vibriosis (Vibrio vulnificus)	0	0	0	0	0	1	2	2

Update on Zika Specimen Requirements for Patients With Suspected Zika Virus Infection

Saliva specimens are no longer required as a part of the sample submission for patients with suspected Zika virus infection.

As always, case consultation with the Florida Department of Health In Orange County Epidemiology Program is required prior to shipment of specimens to the DOH state laboratory.

Please call the Epidemiology office at 407-858-1420 for case consultation, or for any questions you may have regarding this process. If specimen submission is indicated, we will provide complete guidance, including completion of the state lab submission form and packaging and shipping details.

Collecting Specimens:

After approval from the Epidemiology Department, you *may* be asked to collect the following specimens:

- Serum (2 ml tiger top/red top tubes; please spin down)
- Urine (1-2ml) in a Sterile container (ONLY SYMPTOMATIC)

As with all emerging infectious diseases, guidance and procedures continually evolve as case information accumulates. We will continue to provide updated information.

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)



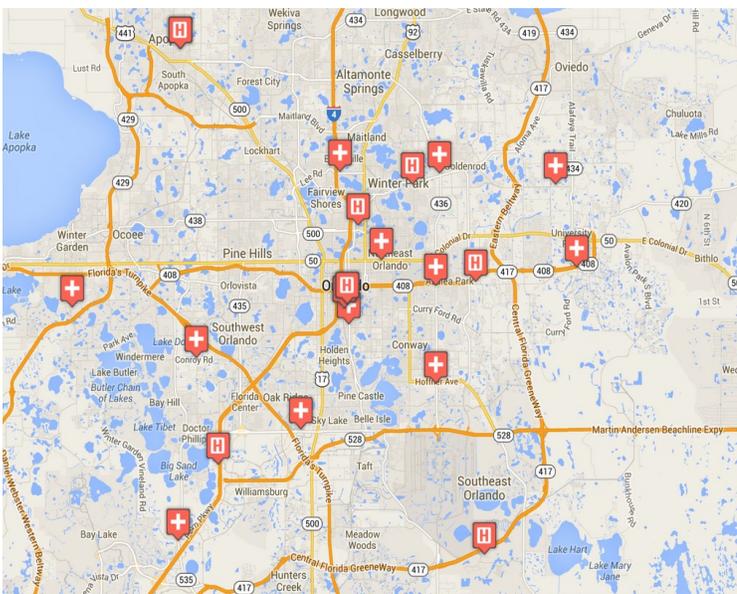
Florida Department of Health: ESSENCE



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.

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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