



# Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

## Chikungunya: A Florida Update

Currently, Orange County has two imported cases of Chikungunya. Both cases had recent travel to Haiti. Among the cases in Florida, the countries of origin have been Haiti, Dominica, Dominican Republic, and Martinique.

**Caribbean outbreak:** Prior to December of 2013, there were no reported cases of this mosquito-borne disease due to local transmission in the entire Western Hemisphere. Since then, local transmission has been identified in 17 countries or territories in the Caribbean or South America, with the majority of cases reported from: Dominican Republic, Martinique, Guadeloupe, Haiti, and Saint Martin.

**Most common signs and symptoms:** Acute onset of fever and polyarthralgia (usually bilateral and symmetric) are most commonly seen, and other symptoms may include headache, myalgia, arthritis, conjunctivitis, nausea/vomiting, or maculopapular rash.

**Importance of travel history in clinical work-up:** A key element in the diagnostic process is the finding of a history of travel (within previous 2 weeks) to an endemic area. The incubation period is 1-12 days.

**Chikungunya and Dengue fever are endemic in the same areas:** These two diseases have similar clinical features, are transmitted by the same types of mosquitos, and a co-infection can occur. Differential diagnosis is critical.

**Chikungunya is a reportable disease:** Please contact your county health department if you have a patient suspected of having Chikungunya or Dengue fever; the office can provide guidance on lab tests and other aspects of case management, including disease control.

**Disease control:** Notification also greatly contributes to our efforts at local disease control- ensuring prompt mosquito control efforts and additional steps which are taken for prevention of transmission to others.

County	Cases
Orange	2
Brevard	1
Broward	5
Clay	1
Duval	1
Hillsborough	3
Miami-Dade	7
Palm Beach	4
Pasco	1
Volusia	1

As of 06/13/2014

May 2014

Volume 5, Issue 5

### Points of Interest:

- Chikungunya update
- MERS-CoV physician screening tool
- Influenza-like illness continues to decrease
- Seasonal enteric diseases are increasing
- Recreational water and enteric diseases

### Contents

Respiratory Disease Surveillance	2-3
Gastrointestinal Illness Surveillance	4
Arboviral Surveillance	5
Enteric Disease: Recreational Water Transmission	6
Reportable Disease Incidence Table	7
	8
Contact/ Signup for Health Alerts / Provide Feedback	9

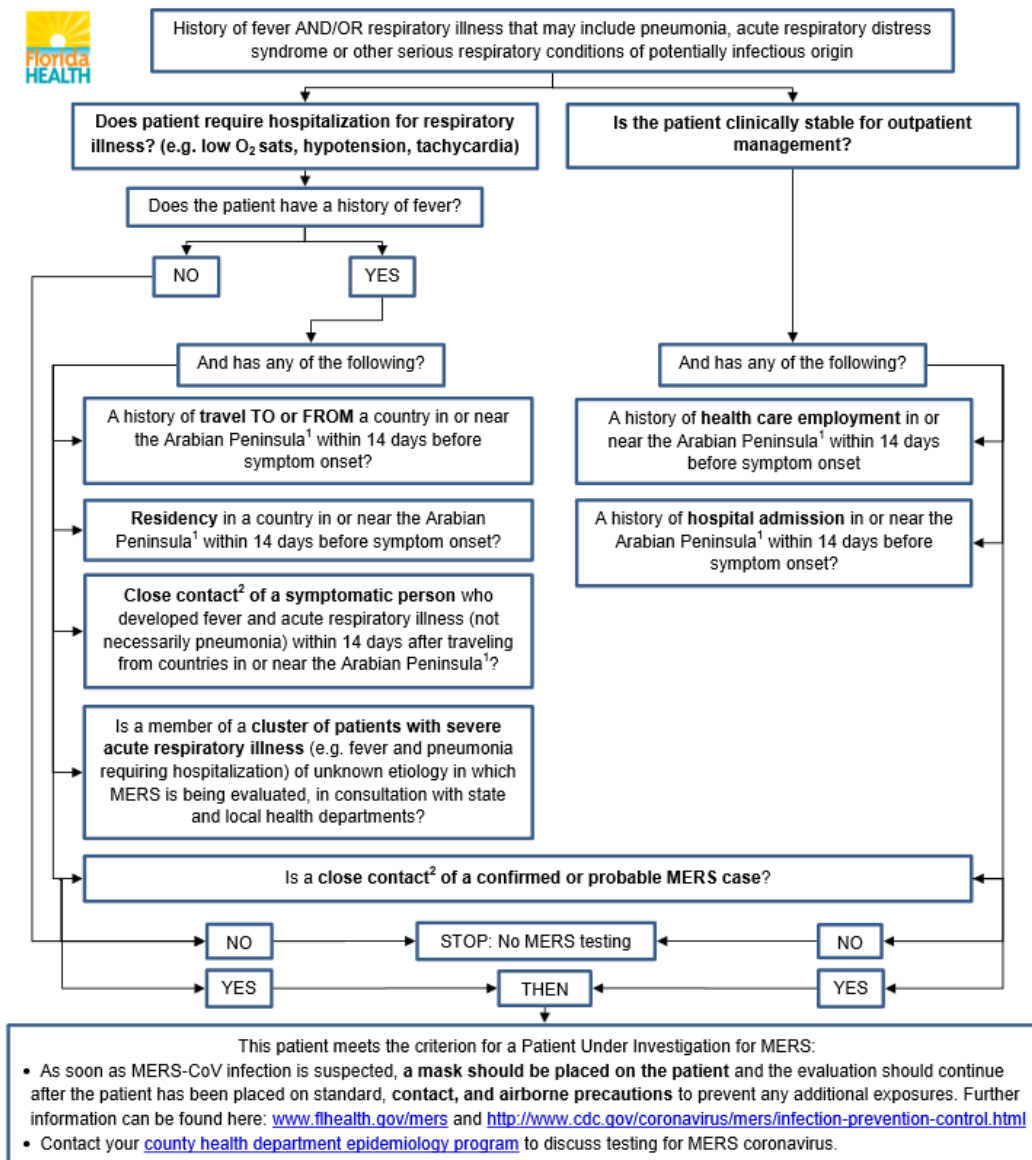
## Chikungunya Resources

- ⇒ [Florida Department of Health Chikungunya Information](#)
- ⇒ [CDC Chikungunya Information](#)
- ⇒ [CDC Chikungunya MMWR](#)

## Respiratory Disease Surveillance

### Middle East Respiratory Syndrome-Coronavirus Surveillance

- ⇒ Only one case of MERS-CoV has been identified in Florida in 2014. There is no evidence of sustained community wide transmission of MERS-CoV in the United States.
- ⇒ MERS represents a very low risk to the general public in the United States.
- ⇒ **Physicians should immediately call the local health department if a patient fits the criteria of a MERS Patient Under Investigation. [Screening tool link.](#)**



### MERS-CoV Resources:

[Florida Department of Health MERS-CoV Information](#)

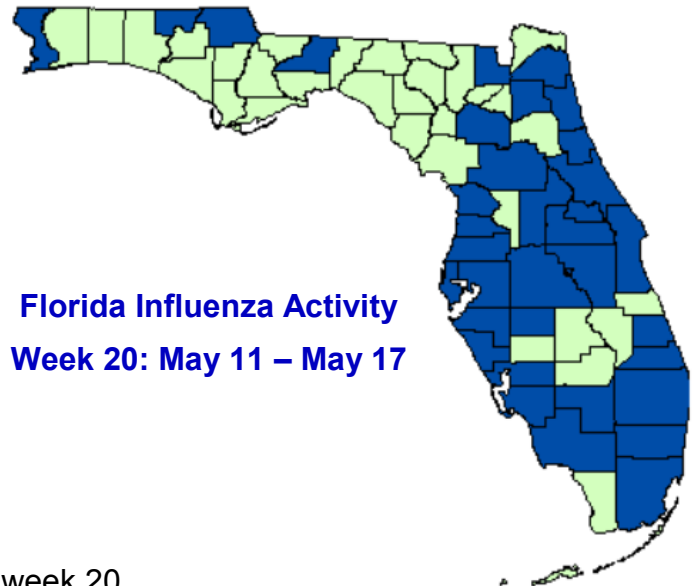
[Centers for Disease Control and Prevention MERS-CoV Information](#)

## Influenza Surveillance



### Florida

- ⇒ Influenza virus is circulating at low levels in Florida, which is typical for this time of year.
- ⇒ The most common subtype detected in recent weeks has been influenza B. This shift from influenza A (2009 H1N1), which was the predominant strain earlier in the year, has been observed in previous years.
- ⇒ No pediatric influenza-associated death was reported in week 20. Five pediatric influenza-associated deaths have been reported in the 2013-2014 influenza season.

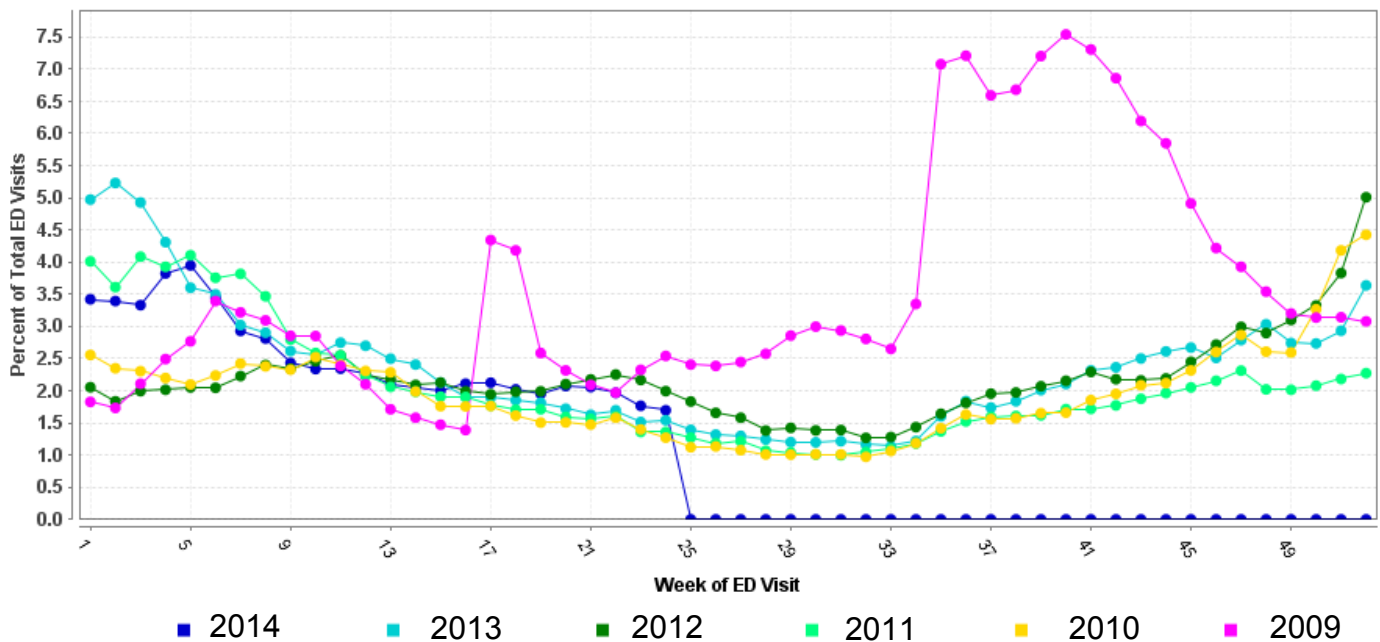


**Florida Influenza Activity**  
Week 20: May 11 – May 17

### Orange County

- ⇒ Orange County demonstrated mild flu activity in week 20.
- ⇒ No influenza or ILI outbreaks were reported in Orange County during May 2014.

**ESSENCE, Weekly Percentage of Visits with Chief Complaint of Influenza-Like Illness, 2009-2014**

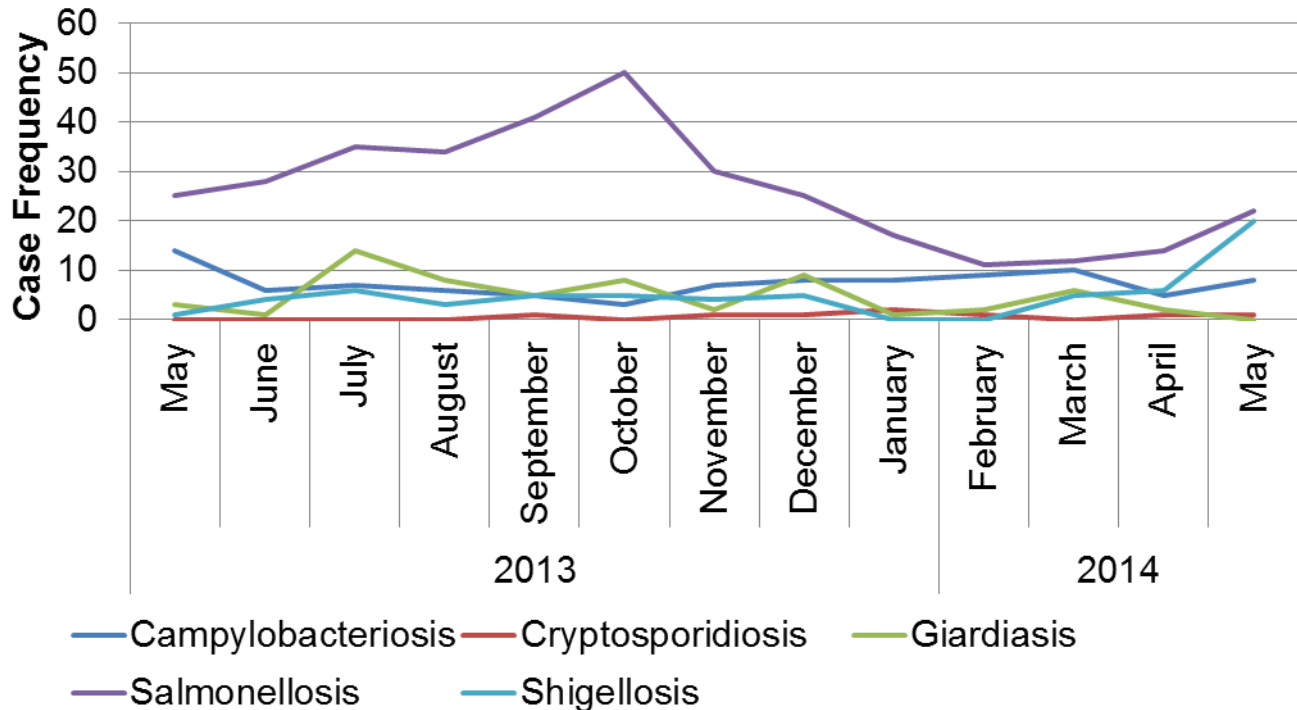


## Influenza Resources:

- [Florida Department of Health Weekly Influenza Activity Report](#)
- [Center for Disease Control and Prevention Weekly Influenza Activity Report](#)
- [Centers for Disease Control and Prevention 2013-2014 Influenza Season](#)
- [CDC: Preventing Seasonal Flu With Vaccination](#)
- ["Know Flu" Campaign: Florida Department of Health in Orange County](#)

## Gastrointestinal Illness Surveillance

Reportable Enteric Diseases in Orange County, Florida from May 2013 to May 2014



### Gastrointestinal Illness Points of Interest:

- ⇒ Cases of reportable enteric diseases have increased since April 2014, which is expected with seasonal trends. Combined, 45 salmonella and shigellosis cases were reported in Orange County residents during May 2014.
- ⇒ During May, 14 foodborne illness complaints were reported to the Florida Department of Health in Orange County (DOH-Orange) for investigation.
- ⇒ No foodborne or waterborne outbreaks were reported to DOH-Orange in May 2014.

### Gastrointestinal Illness Resources:



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

[Florida Food Recall Searchable Database](#)

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

## Arboviral Surveillance

Arboviral Activity in Orange County, Florida, May 2014						
Disease	Bird/Sentinel Chicken		Horse Case		Human Case	
	Month	Cumulative (YTD) 2014	Month	Cumulative (YTD) 2014	Month	Cumulative (YTD) 2014
Eastern equine encephalitis virus	-	-	-	-	-	-
St. Louis encephalitis virus	-	-	-	-	-	-
West Nile virus	-	-	-	-	-	-
Dengue virus	-	-	-	-	-	2

### Worldwide:

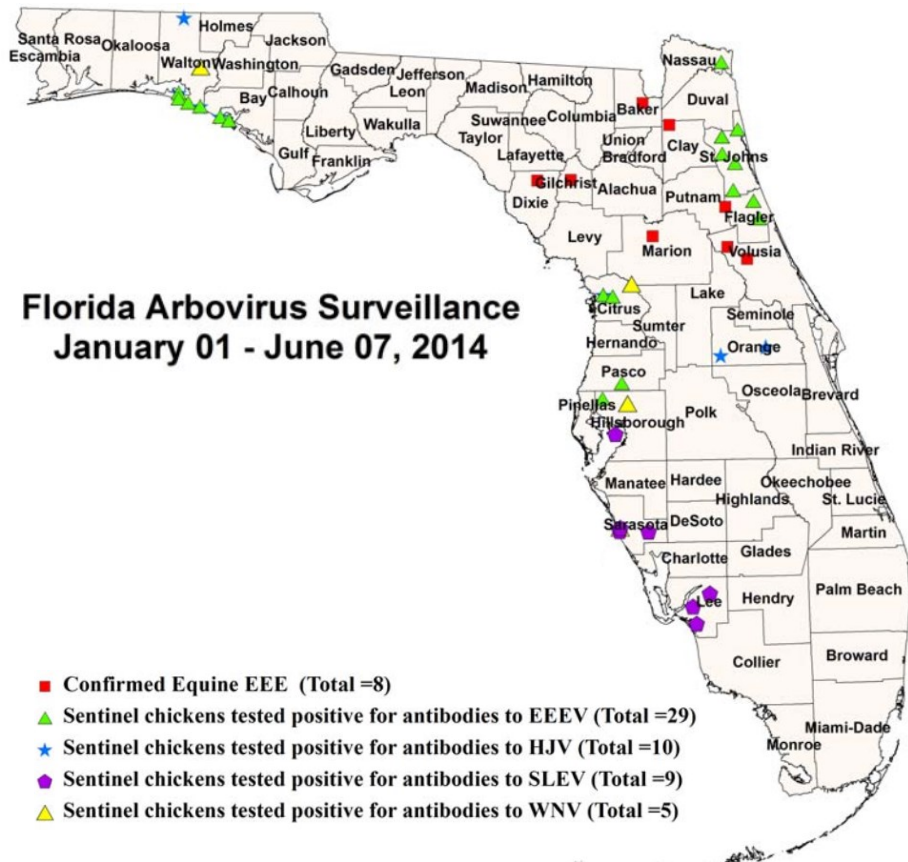
- ⇒ CDC Level 1 Watch Notice in seven Caribbean countries for Chikungunya.

### Statewide:

- ⇒ No counties are currently under a mosquito-borne advisory or alert.
- ⇒ No local transmission of Chikungunya reported.
- ⇒ 25 cases of imported Chikungunya reported in 2014.

### Orange County:

- ⇒ **Two human cases of imported Chikungunya with travel history to Haiti since May 1, 2014.**



## Arboviral Resources:

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

[Orange County Mosquito Control](#)

## Enteric Diseases: Recreational Water Transmission

Enteric diseases, such as salmonella (bacteria), norovirus (virus), and giardia (parasite), are transmitted from person-to-person through the fecal-oral route and cause disease primarily in the intestine. These are commonly thought of as foodborne diseases; however, transmission through recreational water is an important, yet overlooked, source of infection. Reasons for this oversight include difficulty distinguishing foodborne from waterborne infections and the frequently held notion that germs in a pool are killed immediately by the chlorine. Even in a properly chlorinated pool, *cryptosporidium* has been shown to survive between [3.5 to 10.6 days](#).

The Centers for Disease Control and Prevention reported a total of 81 recreational water-associated outbreaks between 2009-2010. Of the outbreaks that were associated with treated water (n=57), 84% were determined to have been caused by a *cryptosporidium* contamination.

Swimming with diarrhea, even if good hygiene has been followed, can result in heavy contamination of a pool. Keeping yourself or others from swimming is essential to preventing illness.

Recommendations for healthy swimming, including the “Triple A’s of Healthy Swimming” can be found at CDC’S [“Triple A’s of Healthy Swimming” website](#)

Pool operators should be familiar with Florida Statute 64E-9: [Public Swimming Pools and Bathing Places](#)

### Top Causes of Treated Recreational Water Outbreaks

- ⇒ [Cryptosporidium](#)
- ⇒ [Pseudomonas](#)
- ⇒ [Legionella](#)
- ⇒ *Disinfection agents & byproducts*
- ⇒ [Giardia](#)
- ⇒ [Shigella](#)
- ⇒ [E. coli](#), [Norovirus](#) (tie)
- ⇒ *Bacillus*, [Campylobacter](#) (tie)
- ⇒ [Adenovirus](#)
- ⇒ Endotoxins, [Hepatitis A](#), [Salmonella](#), [Staphylococcus](#), [Streptococcus](#) (tie)

### Enteric Diseases & Recreational Water Resources:

[Florida Department of Health Food and Waterborne Disease Program](#)

[Florida Department of Health Swimming Pool Information](#)

[Florida Swimming Pool / Spa Inspection Reports](#)

[CDC Recreational Water Illness](#)

[EPA Water Science](#)

Disease	ORANGE COUNTY						FLORIDA					
	May			Cumulative (YTD)			May			Cumulative (YTD)		
	2014	2013	Mean 2009-13	2014	2013	Mean 2009-13	2014	2013	Mean 2009-13	2014	2013	Mean 2009-13
Campylobacteriosis	8	15	8	<b>40</b>	46	28.8	185	176	156	918	763	652
Carbon Monoxide Poisoning	0	3	0.6	<b>3</b>	5	1.4	10	8	6	61	62	38
Cryptosporidiosis	6	2	1.4	<b>17</b>	9	9.6	26	41	35	173	141	154
Cyclosporiasis	1	0	0.6	<b>1</b>	0	1	1	2	4	3	3	12
Dengue Fever	0	1	0.6	<b>1</b>	8	3.2	4	3	4	28	43	23
Giardiasis	0	3	5.8	<b>11</b>	19	30	70	69	119	384	399	558
H. influenzae Invasive Disease	3	1	1	<b>8</b>	12	6	30	21	20	151	134	117
Hepatitis A	0	0	0.4	<b>2</b>	0	2.6	11	5	9	57	36	57
Hepatitis B, Acute	1	1	1.8	<b>4</b>	3	6.6	36	31	28	168	138	128
Hepatitis B, Chronic	36	34	32.2	<b>154</b>	170	164	459	371	366	1950	1831	1761
Hepatitis B, HBsAg in Pregnant Women	0	5	5.8	<b>16</b>	30	29.2	29	41	41	203	195	207
Hepatitis B, Perinatal	0	0	0	<b>0</b>	1	0.2	0	0	0	0	2	1
Hepatitis C, Acute	0	1	0.8	<b>5</b>	3	4.2	14	23	16	84	101	57
Hepatitis C, Chronic	90	93	69.2	<b>449</b>	435	374	1909	1795	1504	9163	8553	7360
Influenza-Associated Pediatric Mortality	0	0	0	<b>1</b>	0	0	0	1	0	4	4	2
Lead Poisoning	2	2	1.4	<b>7</b>	11	14	45	44	57	225	352	336
Legionellosis	1	1	1	<b>4</b>	2	5.6	17	16	12	114	71	62
Leptospirosis	0	0	0	<b>0</b>	0	0	0	1	0	0	1	0
Listeriosis	0	0	0.2	<b>1</b>	2	1	2	4	5	10	15	14
Lyme Disease	0	1	0.6	<b>0</b>	2	1.2	6	7	6	16	20	22
Malaria	0	1	1.6	<b>1</b>	5	4.6	7	5	8	18	23	35
Measles	0	0	1	<b>0</b>	4	1.8	0	0	1	0	7	4
Meningitis (Bacterial, Cryptococcal, Mycotic)	0	1	1.4	<b>1</b>	6	5.6	13	15	17	61	58	79
Meningococcal Disease	0	0	0.2	<b>0</b>	0	0.2	8	1	3	22	29	29
Middle East Respiratory Syndrome	0	0	0	<b>1</b>	0	0	0	0	0	1	0	0
Mumps	0	0	0	<b>0</b>	0	0	0	0	1	0	0	3
Pertussis	2	3	0.8	<b>14</b>	19	9	60	76	49	299	234	180
Pesticide-Related Illness Or Injury	0	0	0.2	<b>0</b>	1	0.8	0	14	4	4	23	24
Rabies, Animal	1	0	0.2	<b>3</b>	1	3.4	11	11	10	40	45	52
Rabies, Possible Exposure	7	8	7.4	<b>38</b>	37	38	225	220	213	1067	1130	940
S. pneumoniae Invasive Disease, Drug-Resistant	0	2	2.2	<b>15</b>	18	21.2	32	47	49	275	290	366
S. pneumoniae Invasive Disease, Drug-Susceptible	0	2	1.6	<b>16</b>	15	14.2	28	43	45	285	322	347
Salmonellosis	22	25	22	<b>76</b>	77	70.6	458	448	429	1617	1553	1513
Shiga Toxin-Producing E. coli (STEC) Infection	0	0	0.2	<b>1</b>	6	2.2	5	15	11	42	46	36
Shigellosis	23	1	13.8	<b>36</b>	6	33.4	301	84	155	1079	239	509
Streptococcus Invasive Disease (Group A)	3	0	1	<b>7</b>	6	6.8	30	40	24	172	133	122
Typhoid Fever	0	0	0	<b>1</b>	0	0.8	1	2	1	6	4	6
Vaccinia Disease	0	0	0	<b>0</b>	0	0	0	0	0	0	0	0
Varicella	3	3	4.6	<b>8</b>	25	22.2	62	63	103	280	340	537
Vibriosis (Vibrio parahaemolyticus)	0	0	0	<b>1</b>	0	0	4	6	5	10	15	14
<b>Total</b>	<b>209</b>	<b>210</b>	<b>195.4</b>	<b>944</b>	<b>985</b>	<b>928</b>	<b>4130</b>	<b>3781</b>	<b>3611</b>	<b>19104</b>	<b>17459</b>	<b>16567</b>

The Top 10 Reported Disease and Conditions in Orange County Year-To-Date are Highlighted in GREY.

## Dire Need for MEDICAL VOLUNTEERS

Help Shepherd's Hope provide quality healthcare to the uninsured. Shepherd's Hope is a Central Florida nonprofit founded in 1996 to provide non-emergency care at no charge to people of all ages who cannot afford health insurance. Shepherd's Hope relies on strong partnerships within the growing local community to ensure its services reach those most in need.

Patients who are eligible for services through Shepherd's Hope have income at or below 200% of the poverty level, are uninsured and not eligible for government assisted health care programs. Utilizing these criteria, Shepherd's Hope has provided over 160,000 free medical visits and patient services since first opening.

Volunteers may help the organization as doctors or nurses, or by running the reception desk, working in medical records, assisting with health center set up and clean up, serving as bilingual interpreters, and by providing emotional support to patients. Follow the initiative of Dr. Sherin, who recently was awarded the 2014 Volunteer Award by Shepherd's Hope for his commitment to the organization.

Please visit [Shepherd's Hope.org](http://Shepherd's Hope.org) for more information, and to volunteer!

## Other Disease Resources

In the structure of FDOH-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 [Orange County](#).



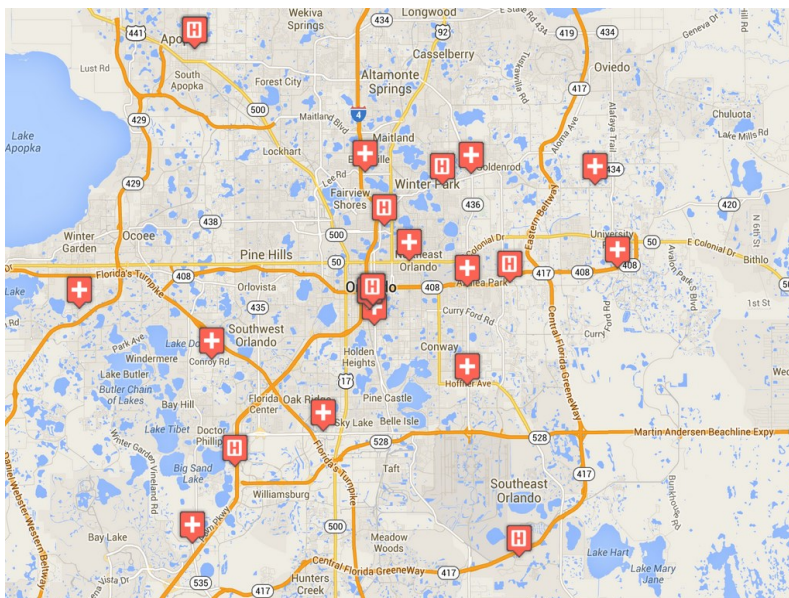
## Florida Department of Health: ESSENCE



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 172 emergency departments and 25 urgent care centers (Florida Hospital Centra Care) reporting to ESSENCE-FL for a total of 197 facilities.



## Florida Department of Health in Orange

Epidemiology Program  
6101 Lake Ellenor Drive  
Orlando, Florida 32809

Phone: 407-858-1420  
Fax: 407-858-5517  
www.ORCHD.com  
www.ORCHD.mobi

### 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

**Sarah Matthews, MPH**  
Epidemiology Program Manager

**Ben Klekamp, MSPH, CPH**  
Epidemiologist

**Debra Mattas, BS**  
Epidemiologist

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

**Toni Hudson, MSPH**  
Florida Epidemic Intelligence Service Fellow

**Charlene McCarthy**  
Administrative Assistant

*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**