



# Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

## 2013-2014 Influenza Season

September 29 marked the official start of the 2013-2014 influenza season. Although flu surveillance increases this time of year DOH-Orange conducts influenza surveillance year round. This year round surveillance allowed for detection of one influenza A H3 outbreak reported in a local nursing home this past summer. Additionally, our hospital partners reported the start of increased influenza activity in early September. Current flu activity and trends has been consistent with previous flu seasons.

### Surveillance and Reporting

Community partners, medical partners, colleagues and the public are encouraged to report any unusual cases, disease trends, or outbreaks to DOH-Orange. All of these reporting sources are used to determine the flu activity level for Orange County each week. Testing of unusual cases and outbreak-associated cases can be facilitated through the Bureau of Public Health Laboratories for influenza and other respiratory pathogens, however, please consult with DOH-Orange prior to submitting a sample. Pediatric influenza deaths and all influenza outbreaks are required to be reported to the health department.

### Vaccination

Annual influenza vaccination is recommended for all health-care personnel and persons in training for health-care professions. Personnel in health-care settings who should be vaccinated include physicians, nurses, and other workers in inpatient and outpatient-care settings, medical emergency-response workers (e.g., paramedics and emergency medical technicians), employees of nursing home and long-term care facilities who have contact with patients or residents, and students in these professions who will have contact with patients.

ACIP guidance for immunization of health-care personnel can be found at the following link: <http://www.cdc.gov/mmwr/pdf/rr/rr6007.pdf>

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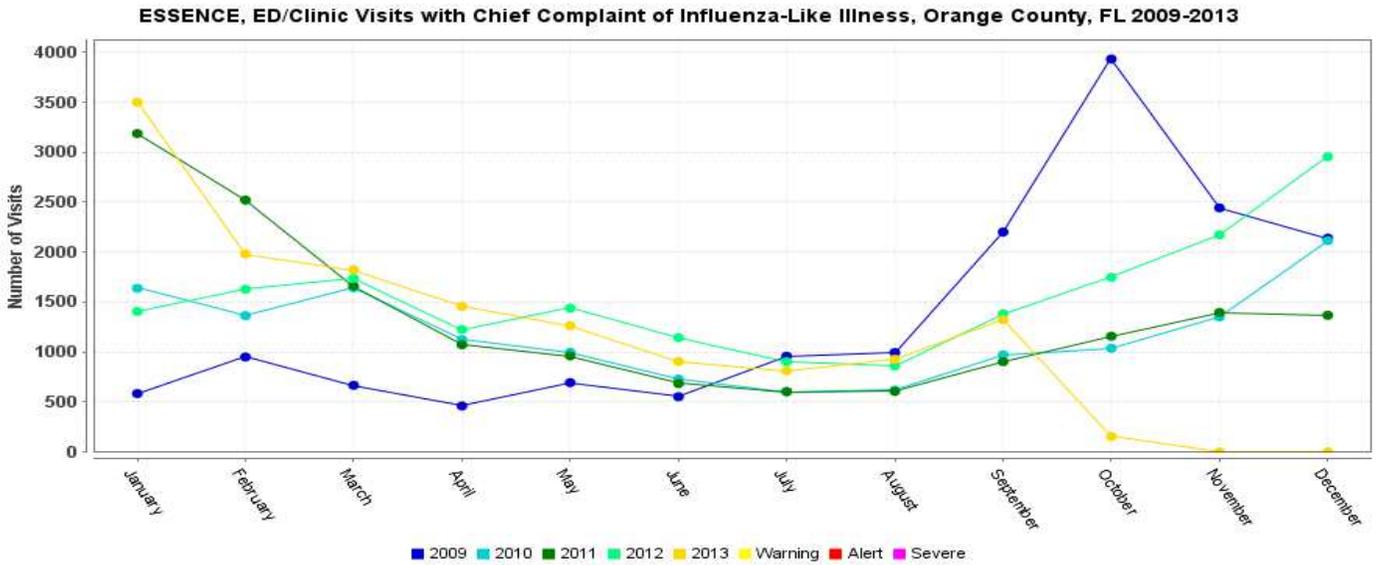
### Special points of interest:

- Influenza Season Begins.
- Influenza Resources for the new season.
- Brucellosis case with laboratory exposures.
- New DOH Email Addresses!

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# Influenza Surveillance

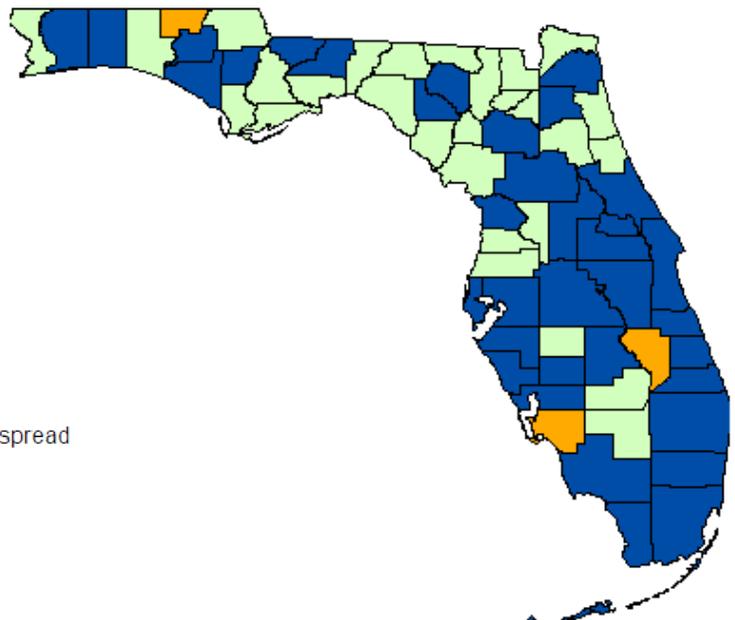


## Orange

- ⇒ We are currently experiencing mild influenza activity.
- ⇒ No influenza or ILI outbreaks have been reported to date this flu season.

## Florida

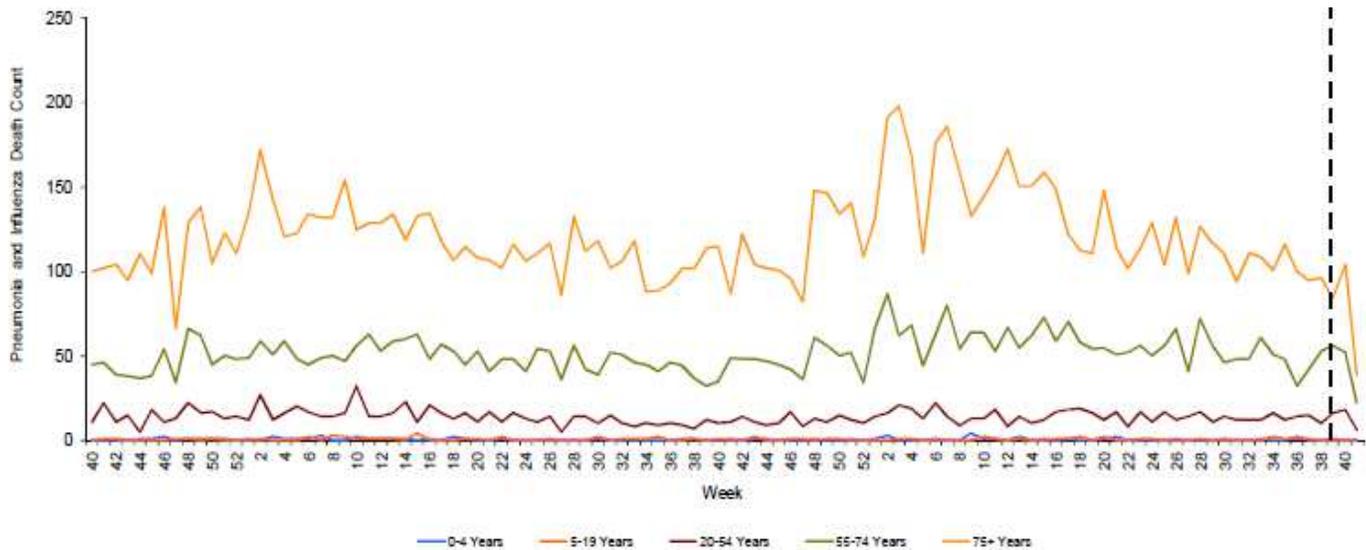
- ⇒ Most Florida counties are reporting mild or no influenza activity.
- ⇒ Emergency Departments and urgent care centers on ESSENCE have reported an increase in ILI visits in recent weeks. Visits are at or near typical levels for this time of year.
- ⇒ the most common influenza subtype detected in recent weeks has been influenza A (2009 H1N1).
- ⇒ No pediatric influenza-associated deaths have been reported this flu season.



## Florida Influenza Activity Week 40



## Vital Statistics Florida Pneumonia and Influenza Deaths by Age Group, ESSENCE, Week 40 2010 –Week 41 2013



### Influenza Points of Interest: Novel Influenza A (H7N9) Virus

- ⇒ **On April 1, 2013, the World Health Organization (WHO) reported that confirmed human infection with novel avian influenza A (H7N9) virus was identified in China.** The first onset of illness was on February 19, 2013.
- ⇒ WHO reports 135 total confirmed cases as of August 12, all in or with recent travel to China. Forty-four infected individuals have died. DOH continues to actively monitor the situation.
- ⇒ **There is no evidence that avian influenza A (H7N9) virus is capable of sustained person-to-person transmission.**
- ⇒ **There is no evidence of avian influenza A (H7N9) virus infection in the United States or any countries other than China.** No travel advisories to China are in effect.
- ⇒ **The CDC Health Advisory for testing, treatment and infection control guidelines for suspect H7N9 cases can be found at the following link:**

<http://www.cdc.gov/flu/avianflu/h7n9-virus.htm>

### Influenza Resources:

Florida Department of Health Weekly Influenza Activity Report

<http://www.doh.state.fl.us/floridaflu/reports.htm>

Center for Disease Control and Prevention Weekly Influenza Activity Report

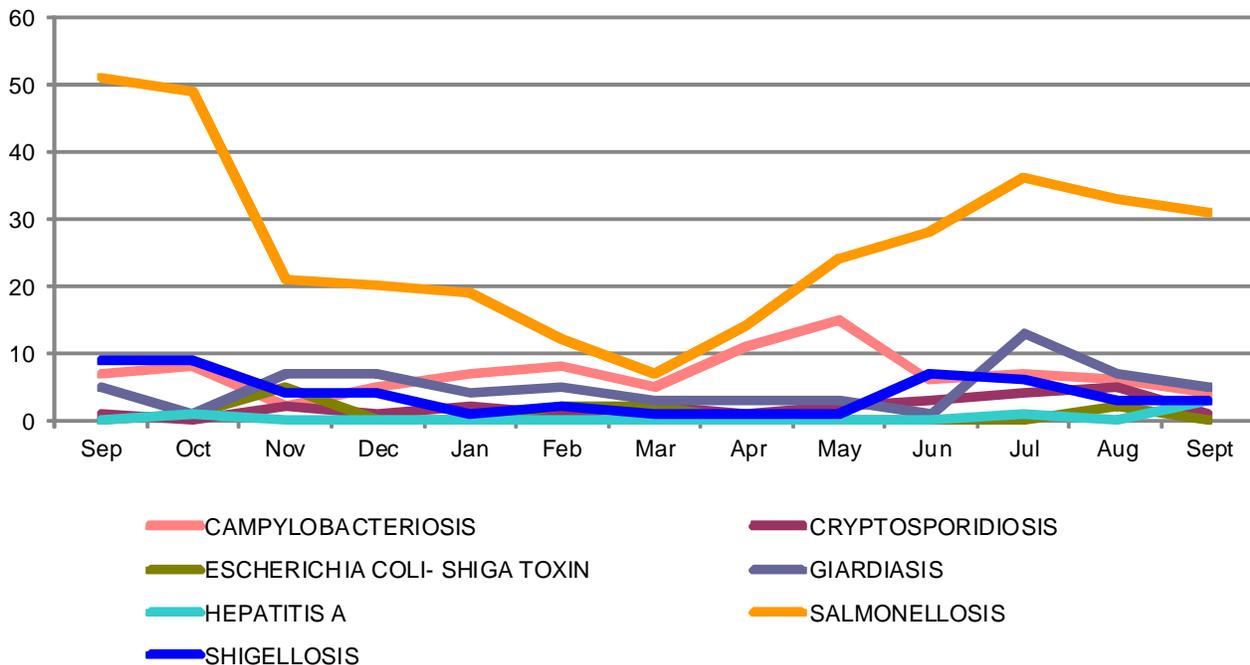
<http://www.cdc.gov/flu/weekly/fluactivitysurv.htm>

2011-2012 Influenza Vaccination Estimates

[www.cdc.gov/flu/professionals/vaccination/coverage\\_1112estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1112estimates.htm)

## Gastrointestinal Illness Surveillance

Merlin, Reportable Enteric Illness by Event Date, Orange County, FL, 2012-2013



### Gastrointestinal Illness Points of Interest:

- ⇒ Reportable enteric disease cases are starting to decline per the typical seasonal trend.
- ⇒ Statewide, two alerts of outbreaks of norovirus or norovirus-like illness were reported in EPICOM (DOH's Health Alert Network) in September 2013
- ⇒ During September, 13 foodborne illness complaints were reported to the Florida Department of Health in Orange County (DOH-Orange) for investigation.

### Gastrointestinal Illness Resources

Florida Online Foodborne Illness Complaint Form - Public Use

[http://www.doh.state.fl.us/Environment/medicine/foodsurveillance/Online\\_Foodborne\\_Complaint\\_Form.html](http://www.doh.state.fl.us/Environment/medicine/foodsurveillance/Online_Foodborne_Complaint_Form.html)

Florida Food Recall Searchable Database

[http://doh.state.fl.us/environment/medicine/foodsurveillance/Recalls\\_Page.htm](http://doh.state.fl.us/environment/medicine/foodsurveillance/Recalls_Page.htm)

Florida Department of Health - Norovirus Outbreak Control Documents

[http://www.doh.state.fl.us/Disease\\_ctrl/epi/Norovirus.htm](http://www.doh.state.fl.us/Disease_ctrl/epi/Norovirus.htm)

# Arboviral Surveillance

Arboviral Activity in Orange County, Florida, September 2013						
Disease	Bird/Sentinel Chicken		Horse Case		Human Case	
	Month	Cumulative (YTD)	Month	Cumulative (YTD)	Month	Cumulative (YTD)
Eastern equine encephalitis virus	4	22	—	—	—	—
St. Louis encephalitis virus	—	—	—	—	—	—
West Nile virus	—	—	—	—	—	—
Dengue virus	—	—	—	—	—	12

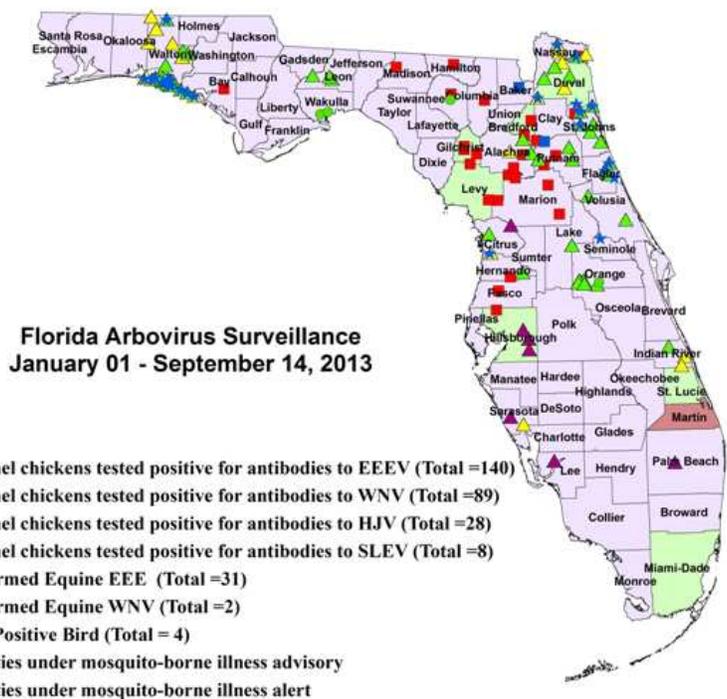
## Arboviral Points of Interest

### Statewide:

- ⇒ 21 cases of locally acquired dengue have been reported since July 2013.
- ⇒ 75 cases of imported dengue have been reported in 2013.
- ⇒ 33 cases of imported malaria have been reported in 2013.

### Orange County:

- ⇒ 12 cases of imported dengue have been reported in Orange County in 2013.
- ⇒ 7 cases of imported malaria have been reported in Orange County in 2013.



## Arboviral Resources

Weekly Florida Arboviral Activity Report (Released on Monday's)  
<http://www.doh.state.fl.us/Environment/medicine/arboviral/surveillance.htm>

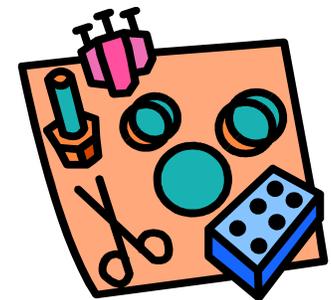
Orange County Mosquito Control  
<http://www.orangecountyfl.net/FamiliesHealthSocialSvcs/MosquitoSafety.aspx>

## Brucellosis Laboratory Exposures

Brucellosis is among the most commonly reported laboratory-acquired bacterial infections. Amplification of bacteria in culture increases bacteria numbers and also the likelihood of aerosolization, putting laboratory workers at risk. Each year in Florida, multiple laboratory workers are exposed to *Brucella*, most often because they were not advised that a sample might contain *Brucella*. These exposures can be easily avoided. If *Brucella* is suspected, please notify the laboratory in advance so that they can take additional precautions to prevent unnecessary staff exposures. In addition, please notify DOH–Orange immediately upon suspicion and forward specimens to the Bureau of Laboratories.

Brucellosis is a relatively rare, but epidemiologically important zoonotic disease caused by the *Brucella* bacteria. The most common species of *Brucella* isolated from Florida patients is *B. suis*, which is endemic in Florida feral hogs. Due to the naturally occurring infection in feral hogs, hog hunters are at increased risk of developing brucellosis. Feral hog data collected by the United States Department of Agriculture (USDA) indicate seroprevalences as high as 50% in some feral swine herds in central Florida, and statewide prevalence is estimated to be 10-20%.

### Recommendations for Safe Laboratory Practices for *Brucella* Species



- ◆ When brucellosis is suspected, clinicians should note ‘suspect or rule out brucellosis’ on the laboratory submission.
- ◆ Review laboratory containment methods and microbiological procedures to ensure compliance with recommendations in the Biosafety in Microbiological and Biomedical Laboratories (BMBL) manual, 5th edition.
- ◆ Use primary barriers: Use safety centrifuge cups, personal protective equipment, and class II or higher Biological Safety Cabinets (BSCs) for procedures with a high likelihood of producing droplet splashes or aerosols.
- ◆ Use secondary barriers: Restrict access to the laboratory when work is being performed and maintain the integrity of the laboratory’s air handling system by keeping external doors and windows closed.
- ◆ Perform all procedures on unidentified isolates carefully to minimize the creation of splashes or aerosols.
- ◆ Prohibit sniffing of opened culture plates to assist in the identification of isolates.
- ◆ Manipulate isolates of small gram-negative or gram-variable rods within a BSC

**For more information on *Brucella*, please visit: <http://www.cdc.gov/brucellosis/>**

### Risk Assessment:

<http://myfloridaeh.com/medicine/arboviral/Zoonoses/pdfs/LabExposureRiskAssessment.pdf>



## Orange County Select Reportable Disease Incidence Table September 2013

Disease	ORANGE					All Counties				
	September		Cumulative (YTD)			September		Cumulative (YTD)		
	2013	2012	2013	2012	Mean (2008 - 2012)	2013	2012	2013	2012	Mean (2008 - 2012)
AMEBIC ENCEPHALITIS	0	0	0	0	0.2	0	0	1	0	0.6
ANIMAL RABIES	0	0	0	0	0	0	0	0	0	0
BRUCELLOSIS	1	0	2	0	0	1	2	6	16	8.8
CAMPYLOBACTERIOSIS	11	17	88	150	66.8	214	237	2059	2091	1305.4
CARBON MONOXIDE POISONING	0	6	7	6	2.2	28	17	141	69	64
CIGUATERA	0	0	0	0	0.2	7	2	40	16	33.8
CREUTZFELDT-JAKOB DISEASE (CJD)	0	0	0	0	0.8	1	4	17	22	14.4
CRYPTOSPORIDIOSIS	1	1	21	12	18.4	46	38	296	352	358.8
CYCLOSPORIASIS	0	0	1	0	2.4	1	4	47	23	44.6
DENGUE FEVER	4	0	17	8	5.4	30	18	150	68	64
EASTERN EQUINE ENCEPHALITIS- NEUROINVASIVE	0	0	0	0	0	0	0	2	1	1.2
EASTERN EQUINE ENCEPHALITIS- NON-NEUROINVASIVE	0	0	0	0	0	0	0	0	0	0
ESCHERICHIA COLI- SHIGA TOXIN PRODUCING	1	1	15	10	7.4	70	27	404	331	215.4
GIARDIASIS	7	6	53	50	65.4	118	110	841	827	1151
HAEMOPHILUS INFLUENZAE (INVASIVE DISEASE)	0	1	16	10	7	10	19	215	189	168.4
HEMOLYTIC UREMIC SYNDROME	0	0	0	0	0.4	2	0	8	1	3.2
HEPATITIS A	3	0	4	6	5.6	28	9	104	95	118.6
HEPATITIS B (posHBsAg IN PREGNANT WOMEN)	5	6	51	54	60	32	27	364	320	402.8
HEPATITIS B- ACUTE	1	0	6	9	15.6	30	29	267	220	231.8
HEPATITIS B- CHRONIC	28	17	310	263	327.4	310	331	3420	3114	3221.4
HEPATITIS B- PERINATAL	0	0	1	0	0	0	1	2	1	0.4
HEPATITIS C- ACUTE	1	2	4	12	7.4	18	20	185	123	74.2
HEPATITIS C- CHRONIC	125	126	1254	1029	1369.8	2627	2242	23522	19687	18180.2
INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY	0	0	0	0	0	0	0	7	2	3.2
LEAD POISONING	4	2	15	35	23.8	39	44	406	757	590.4
LEGIONELLOSIS	3	3	17	14	13	29	23	199	159	135
LEPTOSPIROSIS	0	0	0	0	0	0	0	1	1	0.6
LISTERIOSIS	0	0	2	1	1.8	3	4	33	26	30.2
LYME DISEASE	1	0	4	1	3.2	31	9	155	91	87.4
MALARIA	1	0	8	5	8	8	4	49	56	73.2
MEASLES	0	0	6	0	1	0	0	9	0	3
MELIOIDOSIS	0	0	0	0	0	0	0	0	0	0
MENINGITIS (BACTERIAL, CRYPTOCOCCAL, MYCOTIC)	0	3	9	7	14.4	9	16	113	134	156.6
MENINGOCOCCAL DISEASE	0	0	2	0	1.6	4	2	49	39	45.8
MUMPS	0	0	1	0	0.6	3	1	5	5	15
PERTUSSIS	0	1	50	28	14.8	61	30	502	454	321.4
PESTICIDE-RELATED ILLNESS OR INJURY	0	4	4	7	3	0	7	56	62	44.4
RABIES- POSSIBLE EXPOSURE	5	4	62	72	69	178	186	2047	1869	1565.6
ROCKY MOUNTAIN SPOTTED FEVER	0	0	2	1	0.2	7	1	27	28	13.2
SALMONELLOSIS	47	45	222	223	217.4	881	903	4462	4486	4245.6
SHIGELLOSIS	5	10	29	81	81.4	165	126	688	1514	1052.8
STAPHYLOCOCCUS AUREUS- COMMUNITY ASSOCIATED MORTALITY	0	0	0	0	0.2	1	0	12	5	7.6
STREP PNEUMONIAE- INVASIVE DISEASE- DRUG-R	0	0	30	16	28.2	30	32	418	350	522.4
STREP PNEUMONIAE- INVASIVE DISEASE- SUSCEPT	0	1	21	18	19.6	30	31	464	401	490.2
STREPTOCOCCAL DISEASE INVASIVE GROUP A	4	0	16	10	11.2	24	19	231	181	201.4
VARICELLA	4	0	33	22	32.8	64	47	528	668	876.6
VIBRIO ALGINOLYTICUS	0	0	1	2	1	4	9	36	42	32.6
VIBRIO CHOLERAEE TYPE O1	0	0	0	0	0	0	1	3	5	3
VIBRIO PARAHAEMOLYTICUS	1	0	1	0	0.2	8	3	42	34	23.8
VIBRIO VULNIFICUS	1	0	1	0	0.2	9	5	30	22	23
<b>Total</b>	<b>264</b>	<b>256</b>	<b>2388</b>	<b>2167</b>	<b>2587.6</b>	<b>5180</b>	<b>4674</b>	<b>42803</b>	<b>39119</b>	<b>37391.2</b>

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

## New DOH Email Addresses

The Florida Department of Health has implemented a new email address format for all DOH users. The new email address format took effect on October 1, 2013.

**The format for the new address is: [firstname.lastname@flhealth.gov](mailto:firstname.lastname@flhealth.gov)**

**(i.e. [John.Doe@flhealth.gov](mailto:John.Doe@flhealth.gov))**

The old email addresses will continue to be functional for one year. In the interim, please update your email contacts and list serves that include DOH contacts.

## Other Disease Resource

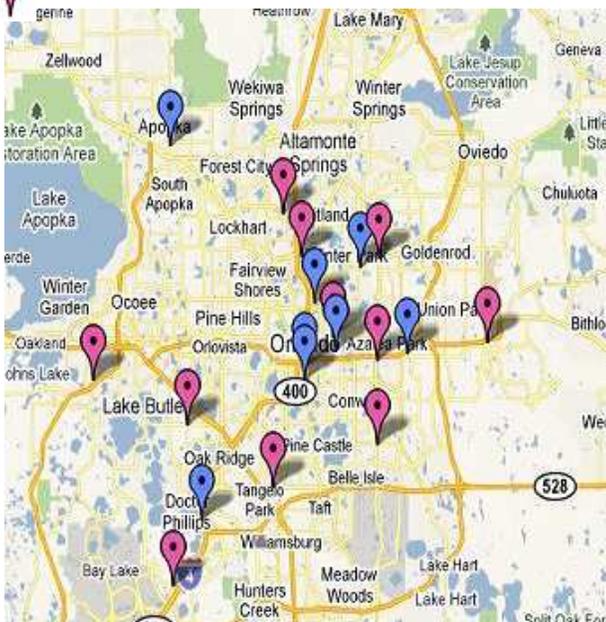
In the structure of DOH-Orange, tuberculosis, sexually transmitted infections, and human immunodeficiency virus are housed in separate programs from the Epidemiology Program. We recognize the importance of these diseases for our community partners and for your convenience have provided the below link for surveillance information on these diseases in Florida and Orange County.



## Florida Department of Health: ESSENCE

 Hospital linked to ESSENCE

 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 Department of Health in Orange County

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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**