



Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

A New Influenza Season Begins

True to its unpredictable nature, influenza brought us an unexpected flu strain which predominated in the 2014-2015 season, and, because it was a Flu A (H3N2), which usually has a higher morbidity and mortality associated with it than other seasonal flu types, for example H1N1, **and** because this strain (A/Switzerland/9715293/2013) was not part of the 2014-2015 Northern Hemisphere seasonal flu vaccine, we experienced a “moderately severe” season, both nationally, statewide, and locally.

Vaccine Components: The trivalent vaccine for this past season (2014-2015) had the same antigenic components of the 2013-2014 season: an A/California/7/2009-like (2009 H1N1) virus, an A/Texas/50/2012-like (H3N2) virus, and a B/Massachusetts/2/2012-like (B/Yamagata lineage) virus. The trivalent vaccine components for the 2015–16 Northern Hemisphere vaccines, selected in February 2015, are the same as those selected for the 2015 Southern Hemisphere season, and include an A/California/7/2009 (H1N1)pdm09-like virus, an A/Switzerland/9715293/2013 (H3N2)-like virus, and a B/Phuket/3073/2013-like (B/Yamagata lineage) virus. The quadrivalent vaccine has an additional influenza B virus: B/Brisbane/60/2008-like [B/Victoria lineage].

Flu Activity: Flu activity this past season was similar to the most recent Flu A-(H3N2) predominant season, 2012-2013. The 2013-2014 season, interestingly enough, was the first flu season since the pandemic 2009-2010 season in which the pandemic strain A (H1N1)pdm09 actually predominated, and that season was characterized as having overall lower levels of outpatient flu illness and mortality than Flu A (H3N2)-predominant seasons.

Nationally, including Florida, this past season was particularly severe in adults aged ≥ 65 years; higher rates of influenza-associated hospitalizations were seen among this age group, than in the previous A (H3N2) season (2012-2013).

In Florida, during the 2013-2014 season, 23 Influenza or influenza-like outbreaks were reported into EpiCom, Florida Department of Health’s outbreak communication system. During the 2014-2015 season, 105 outbreaks were reported, 71 of which were in facilities primarily serving adults aged ≥65 years.

Across the nation, the weekly percentage of outpatient visits for influenza-like illness (ILI) to health care providers in ILINET (the U.S. Outpatient Influenza-Like Illness Surveillance Network) was at or above the national baseline level of 2.0% for 20 consecutive weeks during the 2014–15 influenza season, 5 more weeks than seen in the 2013-2014 season. Florida’s ILINET providers reported activity above 2.0% for 12 weeks during this past season, and for 12 weeks as well for the 2013-2014 season.

September 2015

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Points of Interest:

- Influenza Season Begins!
- Heartland Virus Testing
- CDC/FDA Recommendations on Reusable Medical Devices

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[Florida Flu Review](#) [Florida Department of Health Influenza](#)

[CDC MMWR: Influenza Activity– United States 2014-2015](#) [CDC Flu](#)

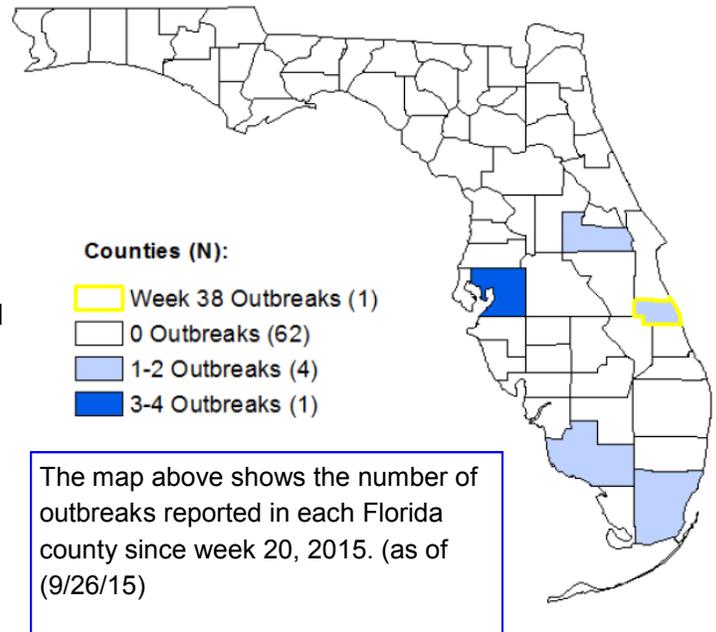
Influenza Surveillance (data from Florida Flu Review)

National

⇒ Highly pathogenic avian influenza (HPAI) H5 viruses have been identified in U.S. backyard and commercial flocks of birds during the spring and summer of 2015. HPAI H5 has not been identified in Florida birds, but identifications are anticipated. No humans have been identified with HPAI infection in Florida or the rest of the nation. To learn more about HPAI, please visit: <http://www.floridahealth.gov/diseases-and-conditions/diseases-from-animals/novel-influenza-viruses.html>.

Florida

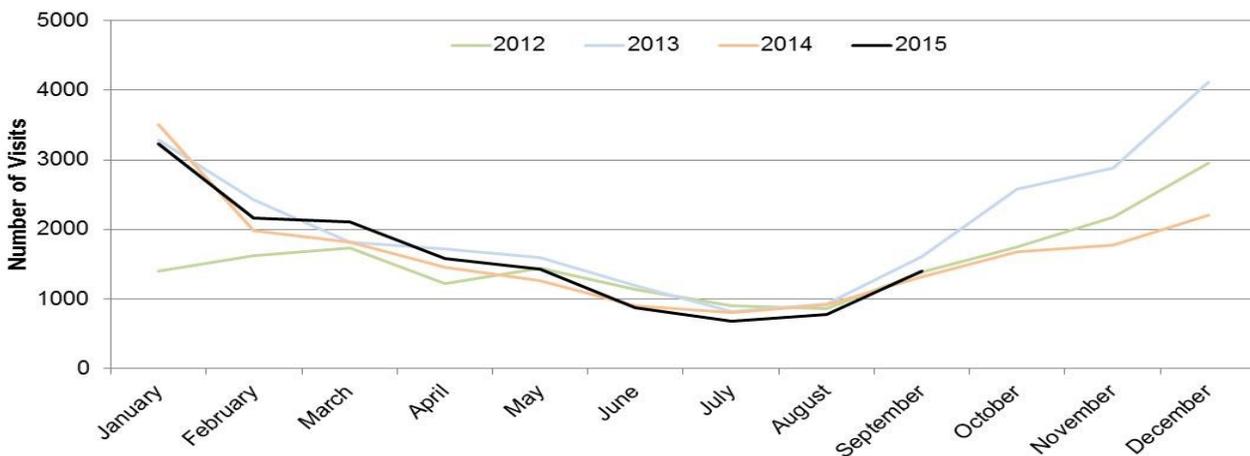
- ⇒ Emergency department (ED) and urgent care center (UCC) ILI visits reported into ESSENCE-FL (Florida’s syndromic surveillance system) are beginning to increase, which is typical for this time of year.
- ⇒ In weeks 37 and 38, eight of 54 (14.8%) specimens submitted to Bureau of Public Health Labs (BPHL) for influenza testing were PCR positive for seasonal strains of influenza: seven were positive for influenza A (H3) and one was positive for influenza B not yet subtyped.



Orange County

⇒ No outbreaks of influenza-like illness were reported to DOH-Orange in September 2015.

Influenza-like Illness from Emergency Department Visits in Orange County, 2012 to 2015



Influenza Resources:

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

Vibrio vulnificus Surveillance

Vibrio vulnificus is a bacterium that normally lives in warm seawater and is part of a group of vibrios that are called “halophilic” because they require salt. *Vibrio vulnificus* infections are rare. *Vibrio vulnificus* is a naturally occurring bacterium in warm, brackish seawater. Water and wounds do not mix. Do not enter the water if you have fresh cuts or scrapes.

[Florida Department of Health Vibrio Information Page](#)

Vibrio vulnificus Cases in Orange County and Florida, 2010 to 2015 (YTD)

	2010	2011	2012	2013	2014	2015
Orange County	0	0	0	1	1	0
Florida	32	35	26	42	31	37

Ebola Surveillance

Florida

- ⇒ Per [Executive Order Number 14-280](#) issued by the Office of the Governor, the Florida Department of Health **continues** the practice of twice daily in-person temperature monitoring and symptom checking of all travelers from Guinea and Sierra Leone during their 21-day Ebola incubation period.
- ⇒ Travelers from Liberia are no longer required to be monitored by twice daily in person temperature and symptom checks as of September 21, 2015 in Florida. Travelers from Liberia are being asked to self-monitor for temperature and symptoms.
- ⇒ Ebola continues to represent a **very low risk** to the general public in Florida and the United States.
- ⇒ **Physicians should immediately call the local health department if a patient fits the criteria of an Ebola Patient Under Investigation** (link to Patient Screening Tool below).

[Days Since Last Case via CDC](#)



International

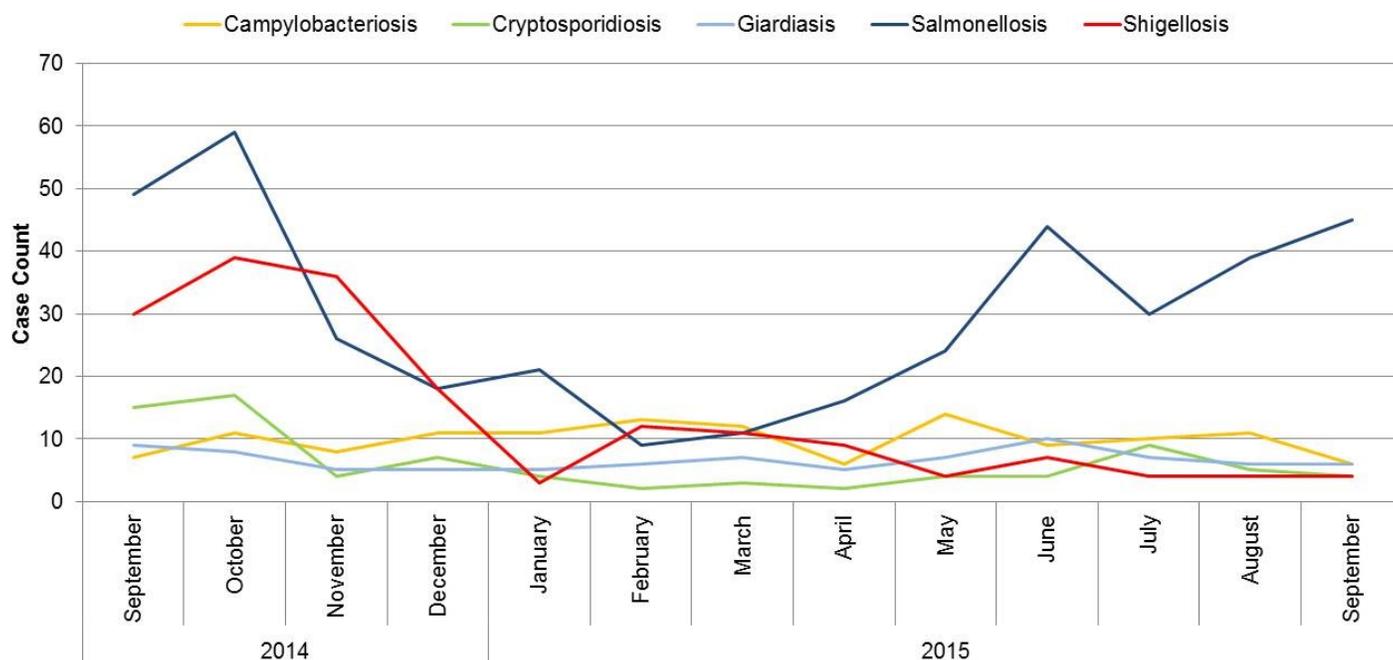
Updated September 29, 2015:

Ebola Resources:

- Patient Screening Tool: [Florida Department of Health](#) [Florida Department of Health EVD Resources](#)
- Centers for Disease Control and Prevention: [Ebola Information and Guidance](#)
- World Health Organization: [Global Alert and Response Situation Reports](#)

Gastrointestinal Illness Surveillance

Select Reportable Enteric Diseases in Orange County, Florida, September 2014 to September 2015



Gastrointestinal Illness Points of Interest:

- ⇒ 45 cases of Salmonellosis were reported among Orange County residents in September 2015. This represents an increase from August 2015, but is still within the seasonal expected disease incidence trend for Salmonellosis.
- ⇒ During September, 9 foodborne illness complaints were reported to the Florida Department of Health in Orange County for investigation.
- ⇒ Two foodborne outbreaks were reported in Orange County during September 2015; a case of ciguatera fish poisoning associated with barracuda consumption and a gastrointestinal outbreak associated with a catered event.

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](#)

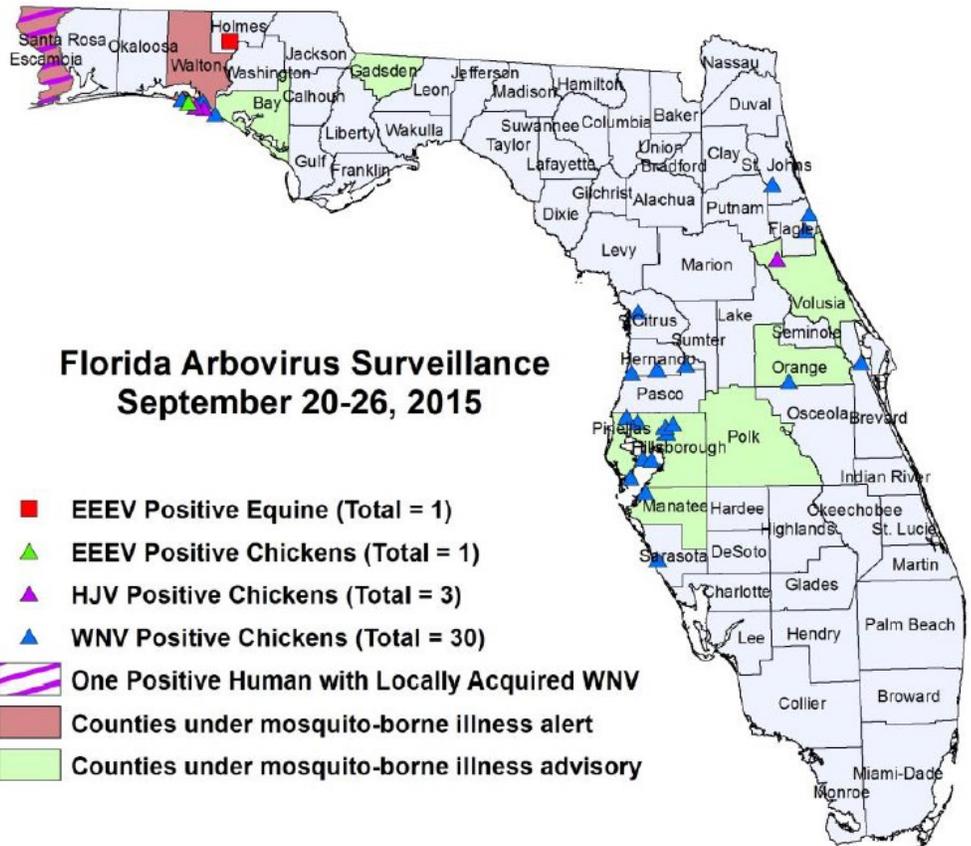
[CDC: Healthy Water](#)



Arboviral Surveillance

Florida

- ⇒ Bay, Gadsden, Hillsborough, Manatee, Orange, Pinellas, Polk, and Volusia Counties are currently under mosquito-borne illness advisory. Escambia and Walton Counties are currently under mosquito-borne illness alert.
- ⇒ One human case of West Nile Virus (WNV) infection was reported this week in Escambia County.



Orange County

- ⇒ No human cases of West Nile Virus, Chikungunya Virus, St. Louis Encephalitis Virus, Eastern Equine Encephalitis Virus, or Dengue Virus were reported among Orange County residents during September 2015.
- ⇒ In September, two sentinel chickens tested positive for West Nile Virus (WNV) in Orange County.
- ⇒ Prior to September 2015, 15 sentinel chickens and 1 horse have tested positive for EEEV, two sentinel chickens tested positive for Highlands J Virus, and 8 sentinel chickens tested positive for WNV 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)	
	2015	5yr Median	2015	5yr Median	2015	5yr Median	2015	5yr Median
Amebic Encephalitis	0	0	0	0	0	0	1	1
Arsenic Poisoning	0	0	1	0	1	0	14	4
Brucellosis	0	0	1	0	0	1	9	6
Campylobacteriosis	6	11	94	93	285	222	2864	2061
Carbon Monoxide Poisoning	0	1	13	6	31	17	198	129
Chikungunya Fever	0	0	3	0	7	0	112	0
Cholera (Vibrio cholerae Type O1)	0	0	2	0	0	1	4	4
Ciguatera Fish Poisoning	1	0	2	0	17	2	46	37
Creutzfeldt-Jakob Disease (CJD)	0	0	1	1	0	3	22	19
Cryptosporidiosis	4	1	37	21	152	43	708	352
Cyclosporiasis	0	0	2	1	0	1	22	47
Dengue Fever	0	1	1	8	4	19	41	82
Escherichia coli: Shiga Toxin-Producing (STEC) Infection	0	1	16	12	37	41	354	332
Giardiasis: Acute	6	9	60	51	110	113	806	891
Haemophilus influenzae Invasive Disease	7	0	12	10	75	12	197	189
Hansen's Disease (Leprosy)	0	0	2	0	1	0	20	7
Hemolytic Uremic Syndrome (HUS)	0	0	1	1	0	1	4	4
Hepatitis A	1	1	2	3	11	16	102	94
Hepatitis B: Acute	2	1	12	8	40	31	384	241
Hepatitis B: Chronic	37	35	387	304	456	352	4257	3368
Hepatitis B: Perinatal	0	0	0	0	0	0	0	1
Hepatitis B: Surface Antigen in Pregnant Women	0	6	48	54	26	39	328	385
Hepatitis C: Acute	1	1	5	7	14	14	140	123
Hepatitis C: Chronic	168	126	1501	1297	3042	2240	27845	19671
Lead Poisoning	4	2	20	19	142	62	757	614
Legionellosis	2	3	14	14	29	24	254	159
Leptospirosis	0	0	0	0	1	0	3	1
Listeriosis	1	0	1	2	2	5	29	31
Lyme Disease	0	1	5	2	39	21	235	100
Malaria	0	0	2	7	5	6	39	56
Measles (Rubeola)	0	0	0	0	0	0	11	1
Meningitis: Bacterial or Mycotic	0	0	0	8	7	14	100	134
Meningococcal Disease	0	0	0	1	3	4	22	47
Middle East Respiratory Syndrome (MERS)	0	0	0	0	0	0	1	0
Mumps	0	0	0	0	3	3	19	13
Pertussis	0	1	10	24	27	32	267	454
Rabies: Human	0	0	0	0	0	0	0	0
Rabies: Possible Exposure	8	5	71	68	168	186	2455	1869
Rocky Mountain Spotted Fever and Spotted Fever								
Rickettsiosis	0	0	1	0	3	0	34	1
Salmonellosis	51	47	246	223	814	885	4581	4468
Shigellosis	4	10	58	81	140	152	1677	1514
Strep pneumoniae Invasive Disease: Drug-Resistant	1	0	12	30	15	32	129	429
Strep pneumoniae Invasive Disease: Drug-Susceptible	0	0	15	17	14	31	197	450
Typhoid Fever (Salmonella Serotype Typhi)	0	0	0	1	0	1	6	9
Varicella (Chickenpox)	1	4	13	23	88	67	596	664
Vibriosis (Vibrio alginolyticus)	0	0	2	1	6	4	50	42
Vibriosis (Vibrio parahaemolyticus)	0	0	0	1	2	3	34	30
Vibriosis (Vibrio vulnificus)	0	0	0	0	11	4	39	29
West Nile Virus Neuroinvasive Disease	0	0	0	0	2	5	8	8
West Nile Virus Non-Neuroinvasive Disease	0	0	0	0	1	2	2	3

Heartland Virus Testing Available

Heartland virus (HRTV) is a recently discovered tickborne phlebovirus that causes an Ehrlichiosis-like illness ([more info](#)). As testing is still investigational, patients must meet the study inclusion criteria and provide consent for the testing to be performed.

Minimum criteria for testing is exposure and all of the following: Aged ≥ 18 years, Fever ($\geq 38^{\circ}\text{C}$), Leukopenia (white blood cell count $< 4,500$ cells/ μL), Thrombocytopenia (platelet count $< 150,000$ cells/mL), Acute illness onset in the last two weeks, No underlying conditions that could explain their clinical findings (e.g., cancer).

Exposure: having been in wooded, brushy, or grassy areas (i.e., potential tick habitat) during the 2 weeks prior to onset of illness. A history of a tick bite is not required. Most people who develop a tick-borne disease do not remember being bitten by a tick.

CDC/FDA Recommends Healthcare Facility Protocol Review of Reusable Medical Devices

The Centers for Disease Control and Prevention (CDC) and U.S. Food and Drug Administration (FDA) are alerting healthcare providers and facilities about the public health need to properly maintain, clean, and disinfect or sterilize reusable medical devices. Recent infection control lapses due to non-compliance with recommended reprocessing procedures highlight a critical gap in patient safety.

Full recommendations can be viewed here: <http://emergency.cdc.gov/han/han00382.asp>

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 [Orange County](#).



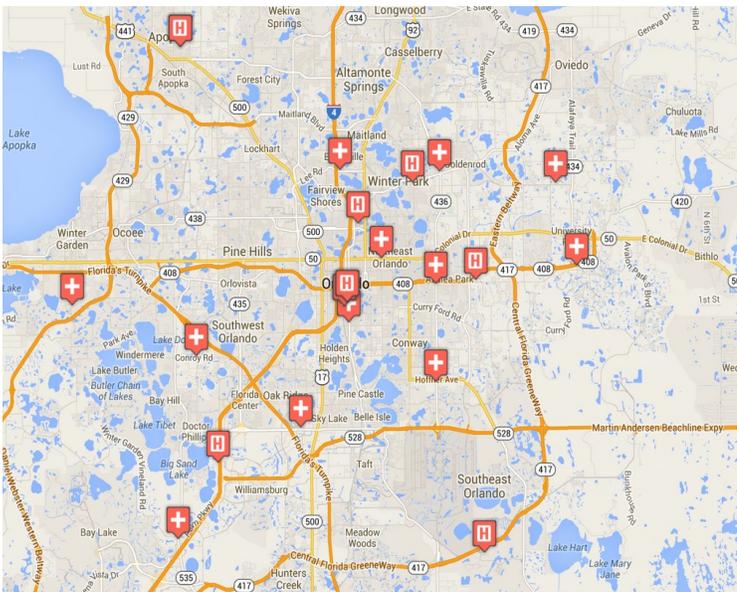
Florida Department of Health: ESSENCE



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 186 emergency departments and 30 urgent care centers (Florida Hospital Centra Care) reporting to ESSENCE-FL for a total of 216 facilities.

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