Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

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CMS Healthcare Facility Requirements to Prevent Legionellosis

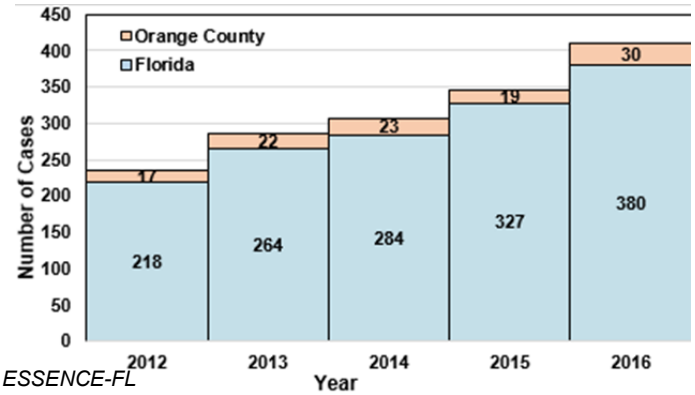
On June 2, 2017, the Centers for Medicare & Medicaid Services released a policy memorandum describing the requirements to prevent *Legionella* infections in healthcare facilities. The memorandum applies to Hospitals, Critical Access Hospitals (CAHs), and Long-Term Care (LTC) facilities. Healthcare facilities must adhere to these policies/ procedures, and are expected to implement an active water management program to reduce the risk of *Legionella* amplification and transmission in human-made water systems.

Legionella bacteria are naturally found in freshwater environments and can become a health concern when they grow in human-made water systems such as premise plumbing systems, hot water tanks/heaters, showers, faucets, decorative fountains, cooling towers, and whirlpool spas.

The inhalation of *Legionella* bacteria from aerosolized water can result in legionellosis, a respiratory illness. Legionellosis includes two different respiratory illnesses: a severe type that causes pneumonia called Legionnaires' disease (LD), and Pontiac fever, a milder form that causes flu-like symptoms. Those at risk for LD include persons 50 years of age or older, former/current smokers, immunosuppressed individuals, and those with chronic medical conditions such as chronic lung disease, diabetes, cancer, and kidney failure.

From 2000-2014, the overall rate of reported legionellosis cases in the US increased from 0.42 to 1.62 cases per 100,000 persons, representing a 286% increase[1]. While the majority of reported cases were sporadic, 4% were outbreak-associated[1]. Similarly, there was a significant increase of legionellosis cases in the state of Florida; during 2012-2016 a 74% increase was noted (Figure 1). If you suspect a case of legionellosis at your facility, please consider appropriate testing for LD and notify the Florida Department of Health in Orange County Epidemiology Program via phone (407) 858-1420 or secure fax at (407) 858-5517.

Figure 1. Number of Reported Legionellosis Cases in FL, by Year, 2012—2016



Data Source: ESSENCE-FL

1. CDC MMWR
2. CMS Memorandum
3. IDSA Management of Community-Acquired Pneumonia

Points of Interest:

- **CMS Legionella Prevention Requirements**
- **Rat Lungworm in Florida**

Contents

Influenza Surveillance (data from Florida Flu Review)

Florida

⇒ In weeks 25-26, Influenza and ILI activity remained low, which is typical for this time of the year.

⇒ In weeks 25-26, 2 influenza B outbreaks and 2 ILI outbreaks were reported.

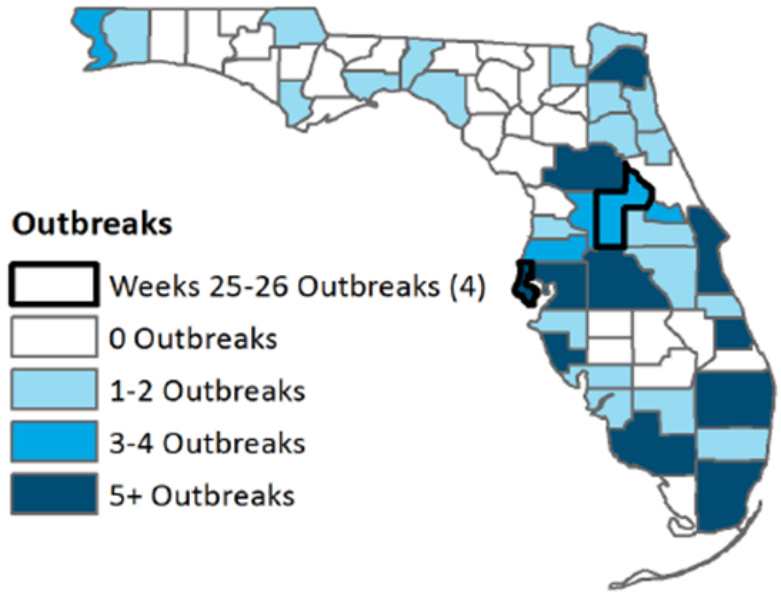
⇒ No influenza-associated pediatric deaths were reported in weeks 25-26.

Orange County

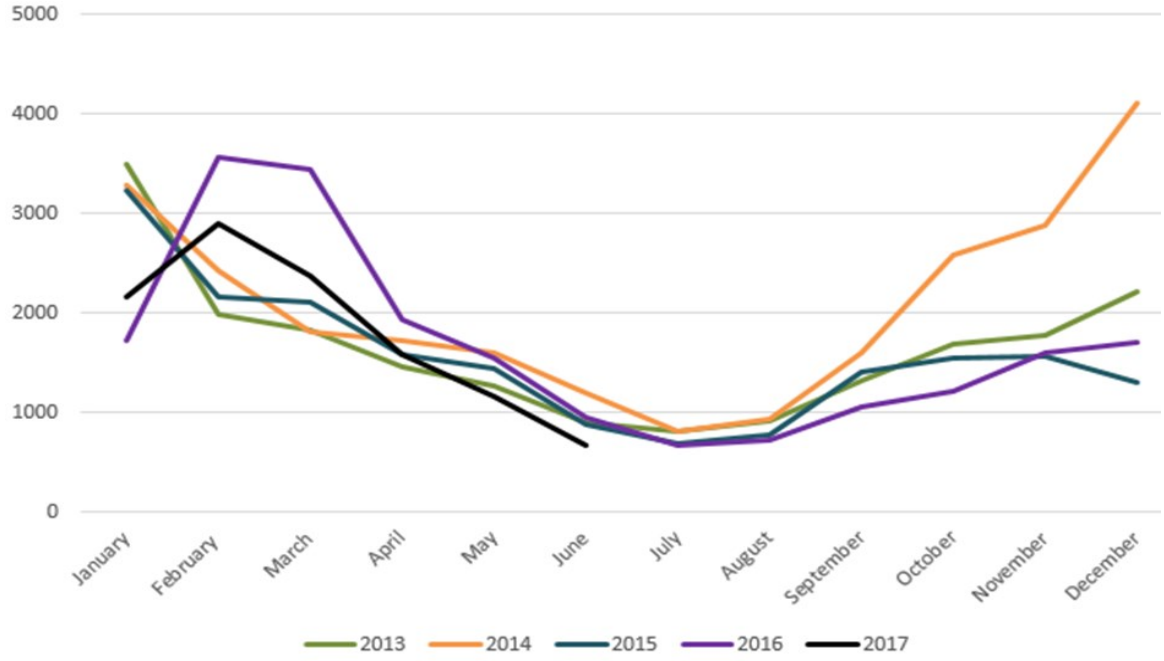
⇒ Orange County influenza activity level for weeks 25-26 decreased.

⇒ No influenza outbreaks were investigated in Orange County.

Influenza and ILI Outbreaks by County Week 40, 2016 through Week 26, 2017



Influenza-like Illness from Emergency Department Visits in Orange County, 2013 to 2017



Influenza Resources:

Florida Department of Health Influenza

Center for Disease Control and Prevention Weekly Influenza Activity Report

Zika Virus Surveillance

National

⇒ The CDC maintains travel recommendations concerning the Zika virus. Travel recommendations can be viewed here.

⇒ Differences in case counts can be attributed to surveillance reporting time lags between agencies.

Laboratory-confirmed symptomatic Zika virus disease cases

Top 3 States	Total Case Count
Florida	1131
New York	1030
California	436

As of July 5, 2017

Florida

⇒ **On June 2, the CDC removed the cautionary area designation for Miami-Dade County after more than 45 days since the last confirmed local case.**

⇒ There are no longer travel recommendations related to Zika virus for Miami-Dade County, Florida. However, the level of risk for Zika virus transmission after a yellow area is removed remains unknown. Sporadic cases may still occur, therefore individuals should continue to protect themselves by following CDC recommendations.

⇒ The best method of prevention is to avoid mosquito bites and to reduce mosquito breeding sites.

Travel-Related Zika Cases in FL by County

County	Case Count 2016	Case Count 2017
Miami-Dade	350	29
Broward	182	15
Orange	167	7
Palm Beach	65	4
Hillsborough	46	4
Osceola	38	0
Polk	31	2
Seminole	28	0
Collier	28	3
Pinellas	25	0
Brevard	17	0

As of July 10, 2017

Orange County

⇒ No local transmission of Zika has been identified in Orange County.

⇒ Pregnant women (with or without exposure) can get tested for free at three Health Department locations in Orange County (Tues-Thurs 9:00AM-1:30PM).

- Lila Mitchell Clinic: 5151 Raleigh St. Suite B
- Southside: 6101 Lake Ellenor Dr.
- Eastside: 12050 E. Colonial Dr. Building A Testing referrals will be given on a walk-in basis only.

Clinician Guidance

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

1) Test for dengue and chikungunya viruses also due to similar geographic spread of diseases and clinical presentation;

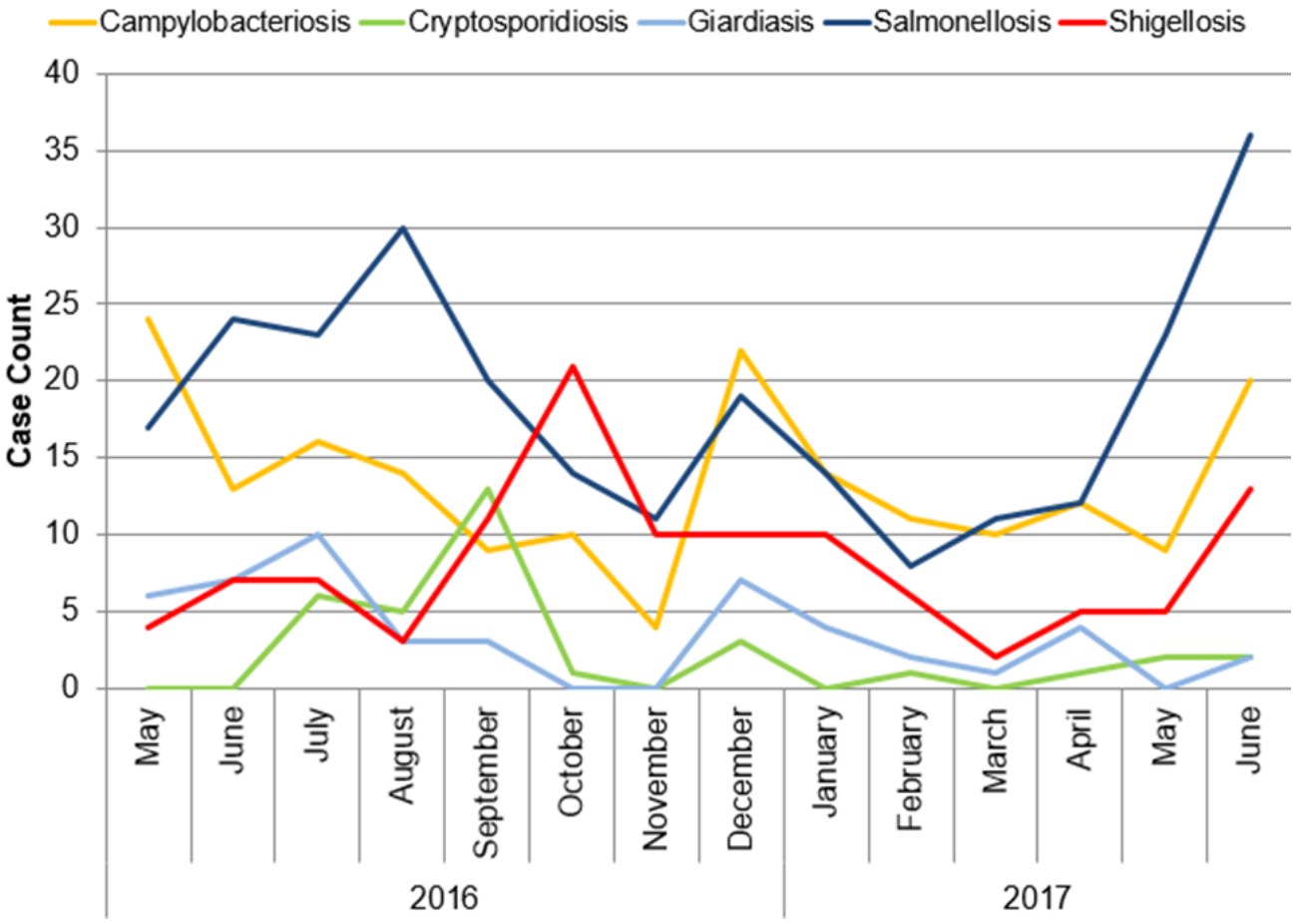
2) Contact their local county health department to report the disease upon suspicion. The local health department will be able to provide consultation for laboratory testing recommendations. Local health department contact information is available here.

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, May 2016 to May 2017



Gastrointestinal Illness Points of Interest:

⇒ Enteric reportable disease cases increased during the month of June.

⇒ No GI illness outbreaks were reported to Orange County during June.

⇒ In May, there were 18 foodborne illness complaints reported to Orange County.

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

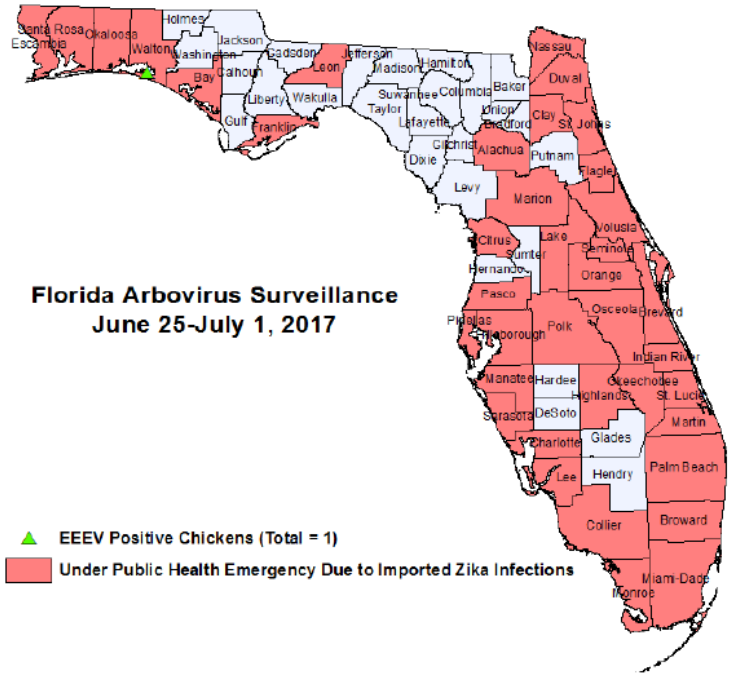
REPORT FOODBORNE ILLNESS ONLINE

Arboviral Surveillance

Florida

⇒ Three travel-associated case of dengue have been reported in 2017. One travel-associated case of chikungunya was reported in 2017. No human cases of West Nile virus (WNV) have been reported.

⇒ No counties are currently under a mosquito-borne illness advisory or alert.



National

⇒ There is a CDC Level 2 (Alert) Travel Health Notice for multiple countries in the Caribbean, Central and South America, Mexico, Cape Verde, Southeast Asia, and Pacific Islands related to Zika and poor pregnancy outcomes.

⇒ There is a CDC Level 2 Travel Health Notice for Brazil related to the transmission of Yellow Fever virus.

⇒ There is a CDC Level 1 (Watch) Travel Health Notice for multiple countries in the Caribbean, Central and South America, and Mexico, related to the transmission of chikungunya virus.

Orange County

⇒ No locally acquired cases of Zika virus, West Nile virus, dengue virus, chikungunya virus, St. Louis encephalitis virus, or Eastern equine encephalitis virus have been identified in Orange County in 2017.

⇒ Four travel-related cases of Zika virus were reported in May 2017. In total, there are 7 travel-related cases of Zika virus in 2017.

Arboviral Resources:

Weekly Florida Arboviral Activity Report (Released on Mondays)

Orange County Mosquito Control

Additional Resources:

Florida Department of Health Mosquito-Borne and Other Insect-Borne Diseases Information

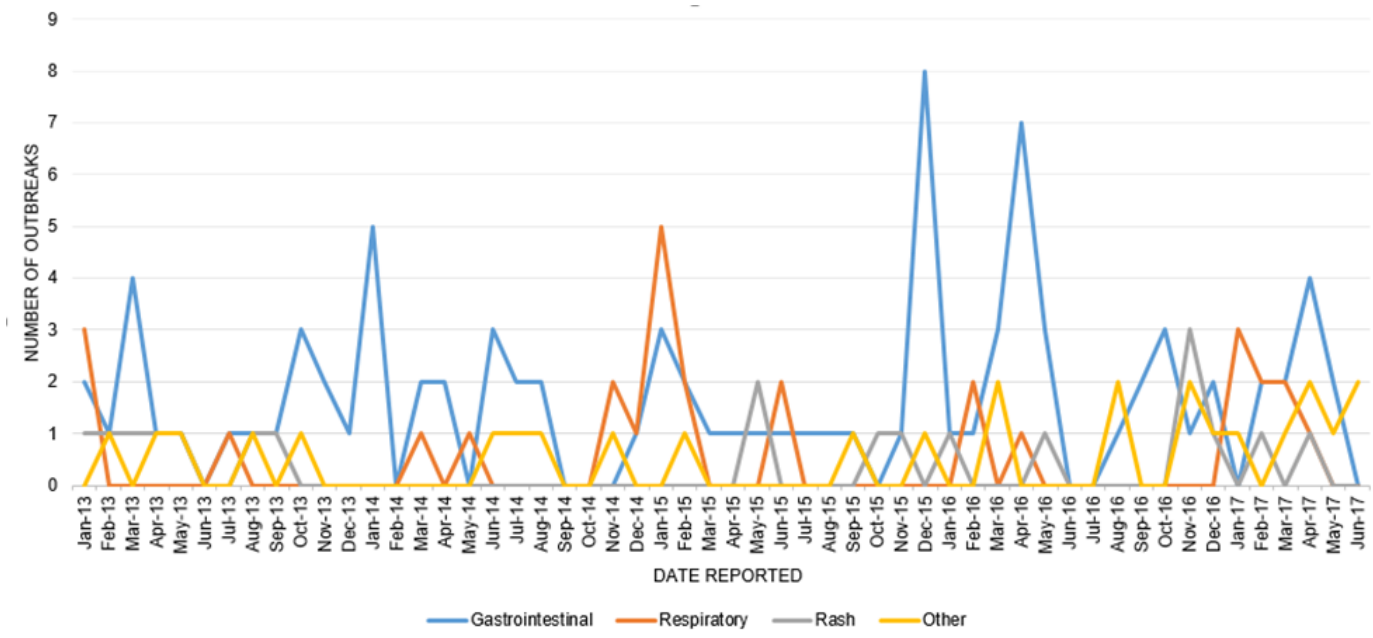
Florida Department of Health Mosquito-Borne Disease Education Materials

Outbreaks in Orange County, FL

⇒ In June 2017, there were 2 Legionnaires' disease outbreaks reported to Orange County.

⇒ Both were associated with fitness centers.

Number of Outbreaks Reported in Orange County, FL, by Month from 2013 - 2017

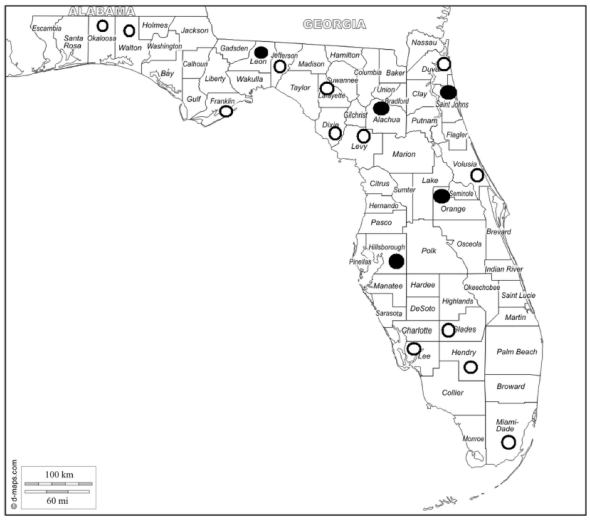


*** All Data are Preliminary ***

Disease	ORANGE				All Counties			
	June		Cumulative (YTD)		June		Cumulative (YTD)	
	2017	Median 5YR	2017	Median 5YR	2017	Median 5YR	2017	Median 5YR
Campylobacteriosis	21	10	96	66	454	305	2191	1540
Carbon Monoxide Poisoning	5	0	6	3	33	12	111	90
Creutzfeldt-Jakob Disease (CJD)	0	0	1	0	0	2	10	13
Cryptosporidiosis	4	1	10	10	34	32	199	219
Cyclosporiasis	1	0	1	0	22	3	23	4
Dengue Fever	0	0	0	2	0	3	9	36
Escherichia coli: Shiga Toxin-Producing (STEC) Infection	2	2	13	9	62	41	327	226
Giardiasis: Acute	2	4	21	30	74	93	543	515
Gonorrhea	230	159	1552	942	2616	1805	15618	10358
Haemophilus influenzae Invasive Disease	1	2	10	7	36	19	157	164
Hansen's Disease (Leprosy)	0	0	0	1	4	1	14	5
Hemolytic Uremic Syndrome (HUS)	1	0	1	0	3	0	8	3
Hepatitis A	1	0	7	2	23	8	137	60
Hepatitis B: Acute	4	2	17	7	69	37	370	197
Hepatitis B: Chronic	32	33	240	206	442	361	2853	2334
Hepatitis B: Surface Antigen in Pregnant Women	7	5	35	35	33	33	232	243
Hepatitis C: Acute	1	0	10	3	36	14	174	103
Hepatitis C: Chronic	124	111	781	738	2159	2478	13525	14921
Influenza-Associated Pediatric Mortality	0	0	1	0	1	0	13	3
Lead Poisoning	1	2	12	13	102	64	624	411
Legionellosis	7	1	22	7	39	21	231	145
Listeriosis	0	0	2	0	2	2	25	15
Lyme Disease	0	0	5	1	17	13	153	46
Malaria	0	1	2	3	2	9	22	30
Measles (Rubeola)	0	0	1	0	0	0	4	4
Meningitis: Bacterial or Mycotic	0	0	1	2	15	12	57	75
Mercury Poisoning	0	0	1	0	5	2	21	9
Mumps	0	0	1	0	10	1	34	12
Neurotoxic Shellfish Poisoning	0	0	2	0	0	0	2	0
Pertussis	6	2	19	16	43	54	202	267
Q Fever: Acute (Coxiella burnetii)	0	0	1	0	0	0	2	1
Rabies: Possible Exposure	7	8	41	48	277	270	1589	1437
Salmonellosis	38	31	125	110	693	534	2420	2235
Shigellosis	17	7	50	45	176	201	596	1031
Strep pneumoniae Invasive Disease: Drug-Resistant	0	2	11	16	31	25	151	270
Strep pneumoniae Invasive Disease: Drug-Susceptible	0	0	13	14	27	27	218	318
Streptococcal Invasive Disease (Group A) - Expired 6/4/2014	0	0	0	6	0	1	0	120
Typhoid Fever (Salmonella Serotype Typhi)	1	0	1	0	4	1	25	5
Varicella (Chickenpox)	6	1	35	9	36	48	364	416
Vibriosis (Vibrio alginolyticus)	1	0	3	1	9	10	32	26
Vibriosis (Vibrio vulnificus)	1	0	1	0	4	3	8	9
Zika Virus Disease and Infection- Non-Congenital	6	0	17	0	20	0	153	0
Total	**527**	**384**	**3168**	**2352**	**7613**	**6545**	**43447**	**37916**

*** All Data are Preliminary ***

Rat Lungworm Spreads in Florida



A recent study demonstrated the prevalence of *Angiostrongylus cantonensis*, a parasitic nematode called rat lungworm, in multiple counties throughout Florida. Researchers from the University of Florida collected samples from rats, the definitive hosts of the parasite, along with environmental rat fecal samples, and snails, the intermediate hosts in 18 counties. *A. cantonensis* was detected in samples from Orange County, Leon County, Hillsborough County, Alachua County, and Saint Johns County.

People can be infected with rat lungworm by eating raw or undercooked snails or slugs infected with the parasite, or raw produce contaminated by snails or slugs. There have also been cases linked to consumption of freshwater shrimp, land crabs, frogs and lizards, although these exposures are less common in the US. Those infected may not exhibit any symptoms, or may present with symptoms similar to bacterial meningitis, including nausea, vomiting, neck stiffness, and severe headaches.

Climate change and rising temperatures provide an environment for wider geographic distribution of the parasite, and cause for vigilance and adoption of disease prevention methods. Recommendations for prevention against rat lungworm include avoiding consuming raw or undercooked snails or slugs, frogs, or shrimp/prawns, thoroughly washing fresh produce, and wearing gloves and washing hands if handling snails or slugs.

The full article can be found here. For additional information about rat lungworm, visit the CDC's Angiostrongyliasis page.

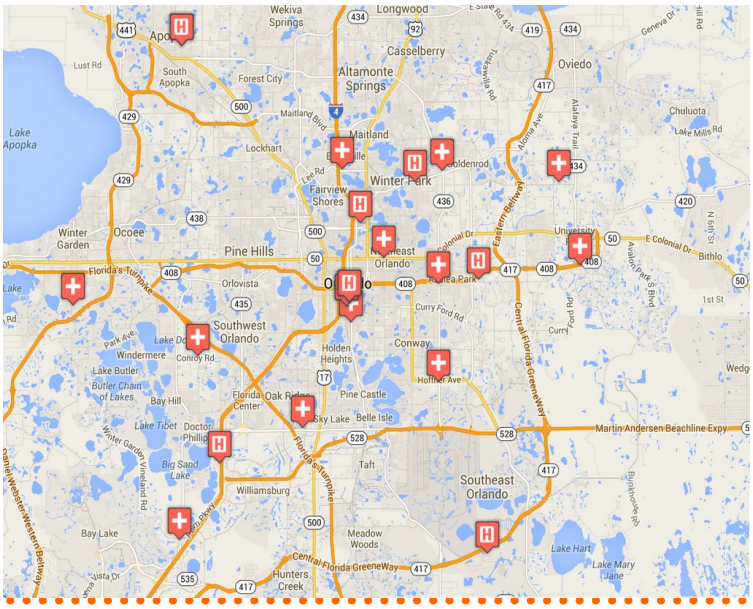
Other Disease Resources

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:

Hospital linked to ESSENCE

Florida Hospital Centra Care Clinic linked to ESSENCE



Since 2007, the Florida Department of Health has operated the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE-FL), 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 following 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 via 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

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The Epidemiology Program conducts disease surveillance and investigates, controls, and prevents infectious diseases and conditions that are reported to DOH-Orange.

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

Data are collected and analyzed to track disease trend, and identify outbreaks and unusual occurrences for response and mitigation, to identify targets for prevention and reduction efforts.

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 ensure 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.