Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

Pertussis Health Alert

The Florida Department of Health would like to notify health care providers of increased local transmission of pertussis (whooping cough) among children and adults. In Florida during 2013, over 700 cases of pertussis were reported, the most in 20 years. Infants and immune compromised persons remain at highest risk for hospitalization and mortality from the disease.

We request that all health care providers remain vigilant for pertussis and coordinate appropriate testing, treatment, exclusion, prevention, and reporting of pertussis cases.

THINK PERTUSSIS

Consider pertussis in your differential diagnosis for persistent cough illnesses. Pertussis vaccines are effective, but a history of pertussis immunization or infection does not preclude the possibility of pertussis.

Pertussis typically starts with mild upper respiratory symptoms. Although the disease course varies, progression to a persistent cough that lasts weeks is typical. Coughing paroxysms may be present and can be followed by post-tussive vomiting or an inspiratory whoop. Fever is absent or minimal and cough is nonproductive. Pertussis patients with a previous vaccination history may present with milder symptoms.

The diagnosis of pertussis in infants less than 6 months is often delayed because of a brief initial period of mild symptoms. Gagging, emesis, gasping, cyanosis, apnea, or seizures may be apparent rather than a cough or whoop. While evaluating patients ask about pertussis immunization status and history of cough illness in parents, siblings, and other close contacts.

When evaluating a patient with a history of contact with a pertussis case or exposures in a setting where pertussis transmission has been identified, a low threshold is recommended for testing, treating, and prophylaxing close contacts. This is especially important if high-risk persons (infants, pregnant women, or immune compromised) are in the household. Don't hesitate to reach out to your local health department for help with the identification of close contacts.

TEST FOR PERTUSSIS

Clinics should stock the supplies needed to test for pertussis, which may be acquired from commercial labs. For suspected pertussis cases obtain a nasopharyngeal aspirate or swab prior to treatment and send it for *Bordetella pertussis* polymerase chain reaction (PCR) and culture (if available) at a commercial laboratory. *Serologic testing is not recommended.* http://www.cdc.gov/pertussis/clinical/diagnostic-testing/index.html

TREAT PERTUSSIS

Appropriate antibiotic treatment (i.e., erythromycin, clarithromycin, azithromycin, or Bactrim®) should be initiated as soon as pertussis is suspected in a patient. Early treatment of pertussis is very important. The earlier a person, especially an infant, starts treatment the better. If treatment for pertussis is started early in the course of illness, during the first 1-2 weeks before coughing paroxysms occur, symptoms may be lessened.

Pertussis Resources:

About Pertussis – Center for Disease Control and Prevention (CDC)

Pertussis (Whooping Cough)- Florida Department of Health

March 2014

Volume 5, Issue 3

Special points of interest:

- **Pertussis Alert**
- **Dr. Sherin Receives McKeefery Volunteer Award**

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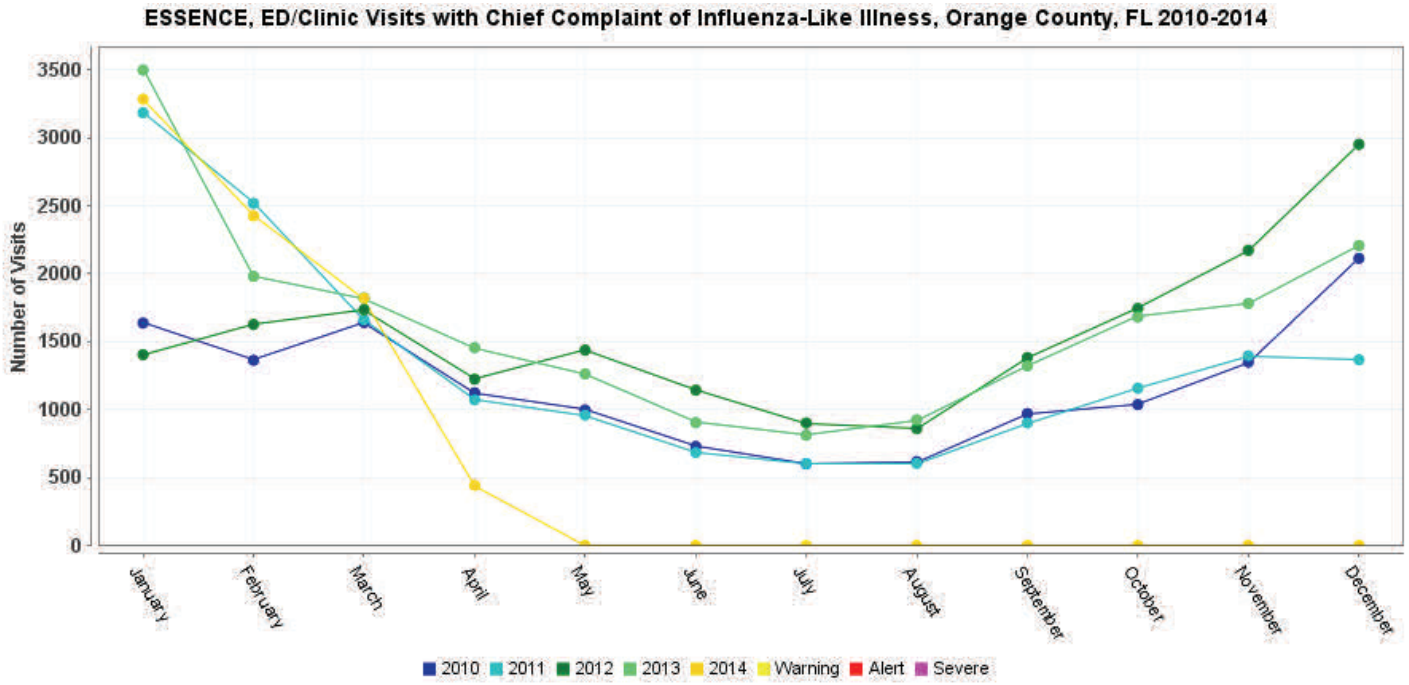


Orange

⇒ Orange County flu level activity has demonstrated a consistent decline since mid-February.

⇒ One respiratory illness outbreak in Orange County was reported in March.

Florida

⇒ Most Florida counties are reporting mild influenza activity. Thirty-six counties reported decreasing influenza activity; 26 counties indicated activity is at a plateau in Week 13.

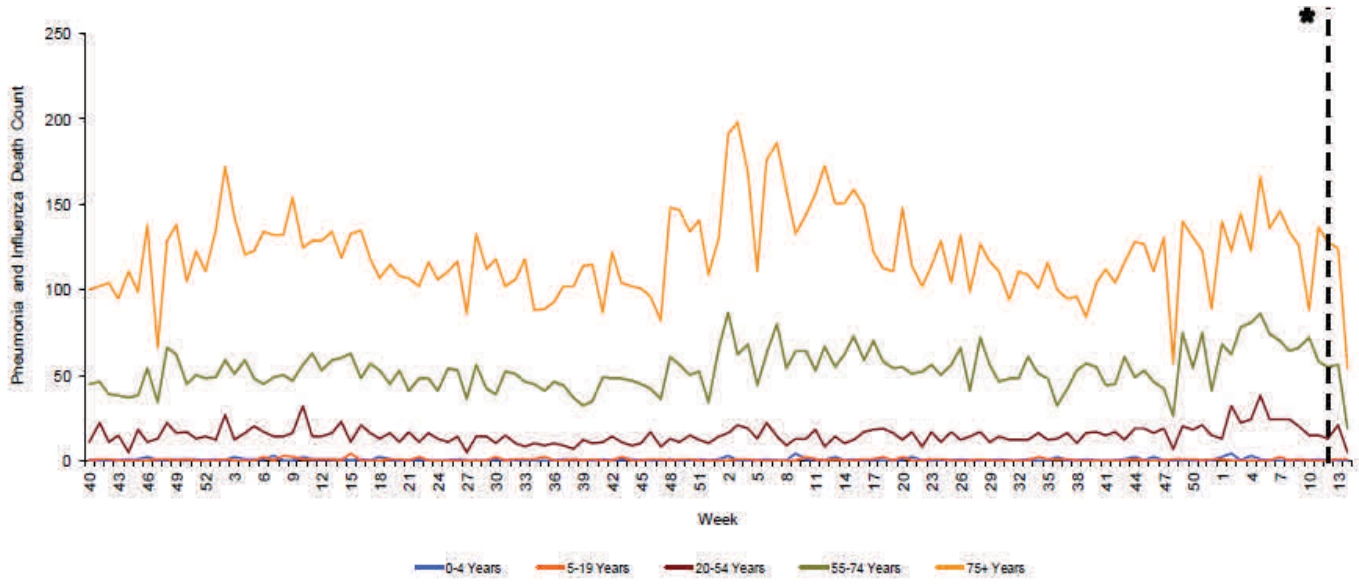
⇒ Emergency Departments (ED) and urgent care center (UCC) ILI visits have decreased in recent weeks and is as expected for this time of year; preliminary data suggest that the influenza season has peaked. However, those at high risk for infection, such as pregnant women are among those presenting to EDs and UCCs for care. Pregnant women are among those at high risk for severe complications due to influenza infection.

⇒ In Florida, the most common subtype detected in recent weeks has been influenza A (2009 H1N1).

⇒ One pediatric influenza-associated death was reported in week 11. Four pediatric influenza-associated deaths have been reported in the 2013-2014 season.

Florida Influenza Activity Week 13

Vital Statistics Florida Pneumonia and Influenza Deaths by Age Group, ESSENCE-FL, Week 40 2010–Week 14, 2014



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.

⇒ The Center for Infectious Disease Research and Policy (CIDRAP) reports 406 total confirmed cases and 122 deaths as of March 31, 2014, all in or with recent travel to China. 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**. No travel restrictions 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:

Influenza Resources:

Florida Department of Health Weekly Influenza Activity Report

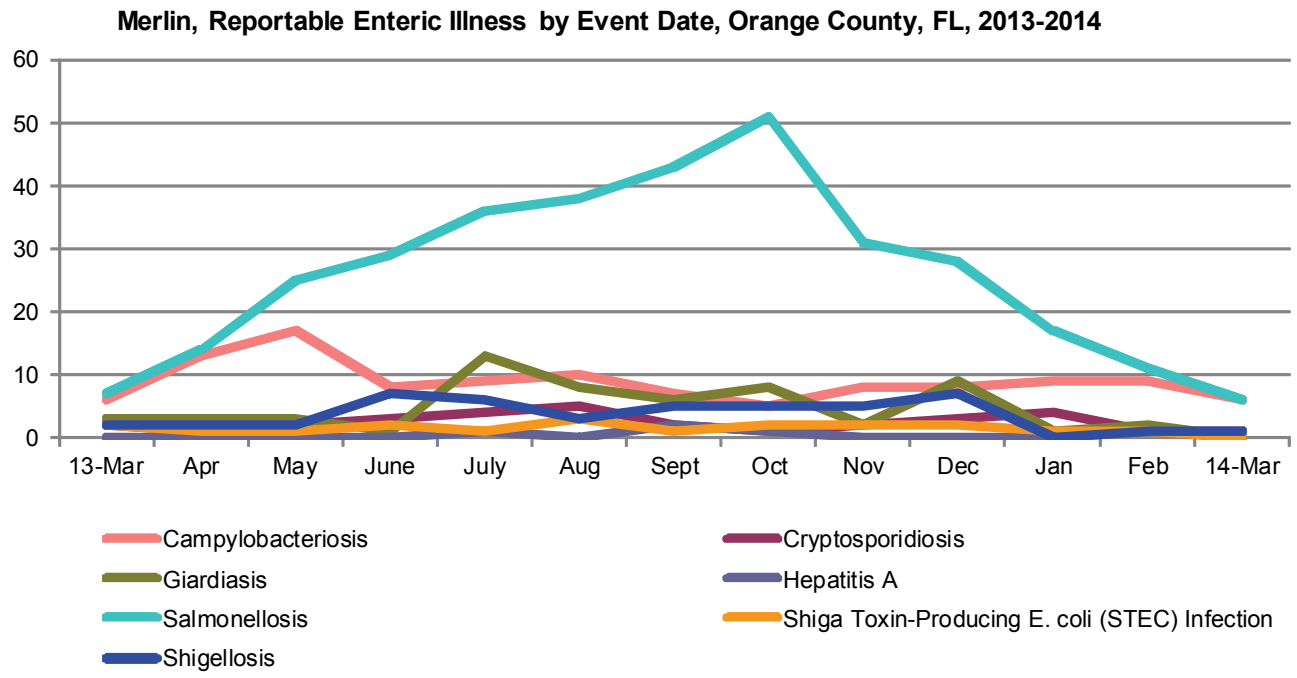
Center for Disease Control and Prevention Weekly Influenza Activity Report

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



Gastrointestinal Illness Points of Interest:

- ⇒ Cases of reportable enteric disease continue to decline per the typical seasonal trend.
- ⇒ Statewide, 15 alerts of outbreaks of norovirus or norovirus-like illness occurring in March 2014 were reported in EPICOM (DOH's Health Alert Network).
- ⇒ During March, 21 foodborne illness complaints were reported to the Florida Department of Health in Orange County (DOH-Orange) for investigation.
- ⇒ There were no reported foodborne or waterborne outbreaks to DOH-Orange in March 2014.

Gastrointestinal Illness Resources:

Florida Online Foodborne Illness Complaint Form - Public Use

http://www.floridahealth.gov/diseases-and-conditions/food-and-waterborne-disease/online-food-complaint-form.html

Florida Food Recall Searchable Database

Florida Department of Health - Norovirus Resources

Arboviral Surveillance

Arboviral Activity in Orange County, Florida, March 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	0	0	0	0	0	0
St. Louis encephalitis virus	—	—	—	—	—	—
West Nile virus	0	0	—	—	—	—
Dengue virus	—	—	—	—	1	1

Statewide:

⇒ No cases of locally acquired dengue have been reported in 2014.

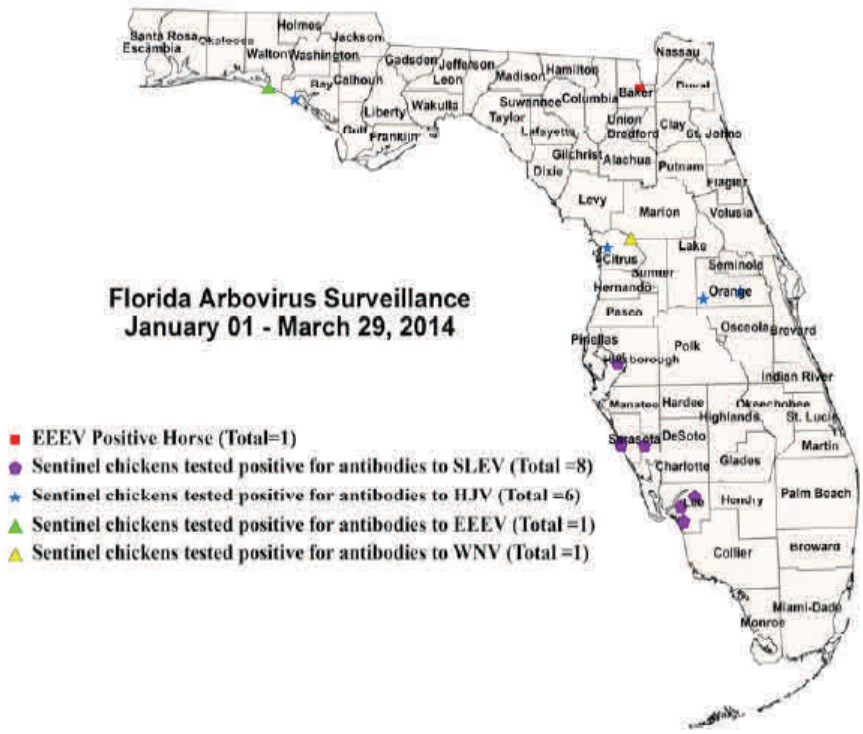
⇒ 18 cases of imported dengue with onset in 2014 have been reported.

⇒ 6 cases of imported malaria with onset in 2014 have been reported.

Orange County:

One case of imported dengue has been reported in Orange County in 2014.

⇒ 1 case of imported malaria was reported in Orange County in 2014.



Arboviral Resources:

Weekly Florida Arboviral Activity Report (Released on Mondays)

Orange County Mosquito Control

Dr. Sherin Receives Volunteer Service Award

The White House considers Shepherd's Hope the best example of an inter-faith, multi-location volunteer free clinic in the United States. On April 10, 2014, Shepherd's Hope Inc. in Orlando honored Dr. Kevin Sherin, Director DOH-Orange, with the Dr. Ruth M McKeefery Volunteer Award for his service as a clinical provider.

Regional Coordinators work with DOH entities, community and faith-based health care providers to promote access to quality health care for the medically underserved and uninsured residents of Florida through the commitment of volunteers. Dr. Sherin is a provider with the State of Florida's Volunteer Health Services Program (VHSP), a program administered by the Florida Department of Health (DOH). The VHSP accomplishes its role through two volunteer programs, Chapters 110 and 776, authorized by Florida Statutes. The Chapter 110 program provides opportunities for anyone who wants to donate goods and/or their services to those in need under the supervision of the DOH. A variety of volunteer opportunities are available in many DOH facilities to individuals with clerical, administrative, technical and professional skills. Under the Chapter 110 program is the Medical Reserve Corps (MRC) whose mission is to augment local public and community health and medical services staff with pre-identified, trained and credentialed volunteers to improve preparedness and response capabilities during an emergency response.

Dr. Ruth McKeefery Award for outstanding volunteer service winners Dr. Paulette Westrup-N'Ghiri (left) and Dr. Kevin Sherin (middle) with Dr. Ruth McKeefery

Dr. Bill Barnes (left), founder of Shepherd's Hope & lead pastor of St. Luke's United Methodist Church, presents Dr. Sherin with the Dr. Ruth McKeefery award for outstanding volunteer service.

Dr. Sherin (left) accompanied by two Florida State University School of Medicine students, Angela Guzman (middle) and Joanna Meadors at the Shepherd's Hope Clinic in Orlando, FL.

On the other hand, the VHSP, s.766.1115, F.S., allows private licensed health care providers (like Dr. Sherin) to volunteer their services to the medically indigent residents of Florida with incomes at or below 200% of the Federal Poverty Level and be protected under the State's Sovereign Immunity. Through a contract, a provider can be designated an agent of the state and have sovereign immunity for uncompensated services rendered to clients determined eligible and referred by DOH. Under this program, providers have the option to see eligible clients in their private offices, free clinics or corporate facilities.

To learn how you can become a part of the VHSP or Central Florida MRC:

Florida Department of Health (DOH) Volunteer Health Services

Volunteer Health Services Staff Directory

DOH Medical Reserve Corps

Sign up to become a Medical Reserve Corps volunteer!

Disease	ORANGE					All Counties				
	March		Cumulative (YTD)			March		Cumulative (YTD)		
	2014	2013	2014	2013	Mean (2009 - 2013)	2014	2013	2014	2013	Mean (2009 - 2013)
Amebic Encephalitis	0	0	0	0	0	0	0	0	0	0
Brucellosis	0	0	0	1	0.2	0	0	0	1	1.8
Campylobacteriosis	10	7	28	22	18.2	254	178	707	509	400.4
Carbon Monoxide Poisoning	0	2	3	2	0.6	14	49	50	58	35
Cholera (Vibrio cholera, Type O1)	0	0	0	0	0	0	0	1	0	1.2
Ciguatera Fish Poisoning	0	0	0	0	0.2	2	0	9	0	3
Creutzfeldt-Jakob Disease (CJD)	0	0	0	0	0.2	1	2	3	4	3.6
Cryptosporidiosis	1	1	8	4	5.2	23	30	110	80	87.6
Cyclosporiasis	0	0	0	0	0.4	1	0	2	1	7.6
Dengue Fever	1	0	1	5	1.8	2	4	29	38	16.4
Eastern Equine Encephalitis Virus Neuroinvasive Disease	0	0	0	0	0	0	1	1	2	0.4
Eastern Equine Encephalitis Virus Non-Neuroinvasive Disease	0	0	0	0	0	0	0	0	0	0
Giardiasis	4	5	8	19	18	93	76	248	246	325.8
H. influenzae Invasive Disease	3	3	6	8	2.8	35	25	99	78	67.4
Hemolytic Uremic Syndrome	0	0	0	0	0.2	1	1	2	1	1.4
Hepatitis A	0	0	1	0	1.4	16	5	31	17	33.4
Hepatitis B, Acute	2	0	2	3	4	27	24	91	77	72.4
Hepatitis B, Chronic	32	46	80	111	97.8	424	427	1078	1165	1059.8
Hepatitis B, HBsAg in Pregnant Women	5	3	16	17	16.8	53	38	128	119	132.2
Hepatitis B, Perinatal	0	1	0	1	0.2	0	1	1	2	0.4
Hepatitis C, Acute	0	0	1	2	2.8	17	17	39	52	29.2
Hepatitis C, Chronic	147	150	446	388	414.6	2865	2795	8304	7583	6148.4
Influenza-Associated Pediatric Mortality	0	0	1	0	0	1	1	3	6	2.4
Lead Poisoning	1	1	4	7	9.8	32	51	284	171	194.8
Legionellosis	1	0	3	2	3.6	27	8	75	47	42.4
Leptospirosis	0	0	0	0	0	0	0	0	0	0
Listeriosis	0	0	0	2	0.6	1	3	6	12	8.8
Lyme Disease	0	0	0	1	0.8	8	4	21	20	17.6
Malaria	0	1	1	2	2.2	0	3	8	18	23.4
Measles	0	1	0	5	1	0	3	0	8	2.2
Melioidosis	0	0	0	0	0	0	0	0	0	0
Meningitis (Bacterial, Cryptococcal, Mycotic)	1	2	1	6	3.8	14	11	36	34	49.4
Meningococcal Disease	0	0	0	0	0	4	8	15	28	21.4
Mumps	0	0	0	0	0	1	0	4	0	2.6
Pertussis	5	2	9	8	4.8	73	31	205	98	88.8
Pesticide-Related Illness Or Injury	0	0	0	0	0.4	1	1	9	16	21.8
Rabies, Animal	0	0	0	0	0	0	0	0	0	0
Rabies, Possible Exposure	8	6	28	25	23	195	258	596	675	540.8
Rocky Mountain Spotted Fever	0	0	0	0	0	2	0	4	1	2.2
S. aureus Infection, Intermediate Resistance to Vancomycin (VISA)	0	0	0	0	0	0	0	0	1	1.4
S. aureus Infection, Resistant to Vancomycin (VRSA)	0	0	0	0	0	0	0	0	0	0
S. aureus, Community-Associated Mortality	0	0	0	0	0.2	2	1	3	6	4.6
S. pneumoniae Invasive Disease, Drug-Resistant	2	6	10	14	17	73	66	192	215	266.8
S. pneumoniae Invasive Disease, Drug-Susceptible	5	4	13	11	12	63	63	224	232	252.4
Salmonellosis	14	14	47	46	40.6	267	287	908	821	789.2
Shiga Toxin-Producing E. coli (STEC) Infection	0	4	3	6	2.6	41	35	112	105	74.2
Shigellosis	7	2	11	5	11.4	237	32	484	101	223.6
Streptococcus Invasive Disease (Group A)	1	2	3	5	4.8	36	19	118	60	72.2
Toxoplasmosis	1	0	1	0	0.2	1	0	8	2	2
Varicella	0	3	4	18	14	62	73	159	200	302.4
Vibriosis (Vibrio alginolyticus)	0	0	0	0	0	6	0	10	1	2.8
Vibriosis (Vibrio parahaemolyticus)	1	0	1	0	0	2	1	2	5	4.8
Vibriosis (Vibrio vulnificus)	0	0	0	0	0	2	0	2	0	1
Total	252	266	740	746	741.6	4985	4644	14436	12947	11492.4

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

Pertussis Health Alert continued from page 1

For diagnosed or suspected cases, antibiotic prophylaxis for household and high-risk contacts is recommended to prevent disease. Please reach out to your local health department for further guidance if needed.

EXCLUSION OF PERTUSSIS CASES

Pertussis cases should isolate themselves at home while infectious. Cases are non-infectious, and can return to normal activities (e.g. school, daycare, work) after five days of effective antibiotic therapy or after 21 days of cough onset.

PREVENT PERTUSSIS

Recommend routine pertussis vaccination of children, adolescents, close contacts of infants, and healthcare providers as detailed by the Advisory Committee on Immunization Practices. In particular, to protect both mothers and infants, Tdap is recommended for pregnant women during each pregnancy, preferably in their final trimester. http://www.cdc.gov/vaccines/vpd-vac/pertussis/default.htm

REPORT PERTUSSIS

Report all pertussis cases, even without laboratory confirmation, immediately to the DOH-Orange Epidemiology Program.

For more information please contact DOH-Orange Epidemiology Program (contact information) or visit http://www.cdc.gov/pertussis/.

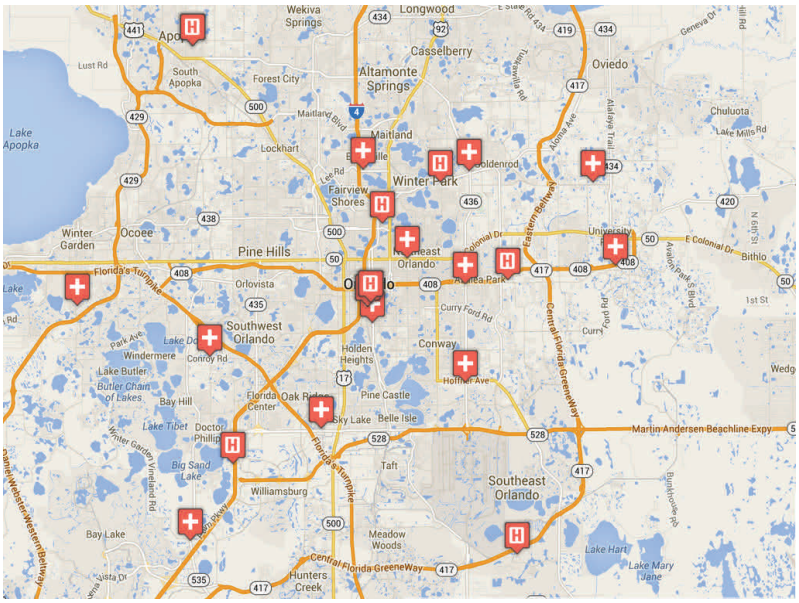
Other Disease Resources

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

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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