Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

March 2019

Contents:

County Program Contacts

Epidemiology

Ph: 407-858-1420
Fax: 407-858-5517

Hepatitis Program

Ph: 407-723-5054

Environmental Health

Ph: 407-858-1497

HIV/AIDS Surveillance

Ph: 407-858-1437

Tuberculosis

Ph: 407-858-1446
Fax: 407-245-0047

Sexually Transmitted Diseases

Ph: 407-858-1445
Fax: 407-845-6134

Healthy Start

Ph: 407-858-1472

The Epidemiology Program conducts surveillance and investigates, controls, and prevents occurrences of acute infectious diseases and outbreaks that are reported to the program.

Surveillance is conducted primarily through required reporting from health care providers, facilities, and clinical labs, and other required reporters as required by Chapter 381, Florida Statutes.

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

The Epidemiology Program conducts syndromic and influenza-like-illness surveillance activities through voluntary reporting from emergency departments and urgent care centers across Orange County. Syndromic surveillance is a method of determining activities in the community that could be early indicators of outbreaks and bioterrorism.

Health Advisories, News, & Alerts:

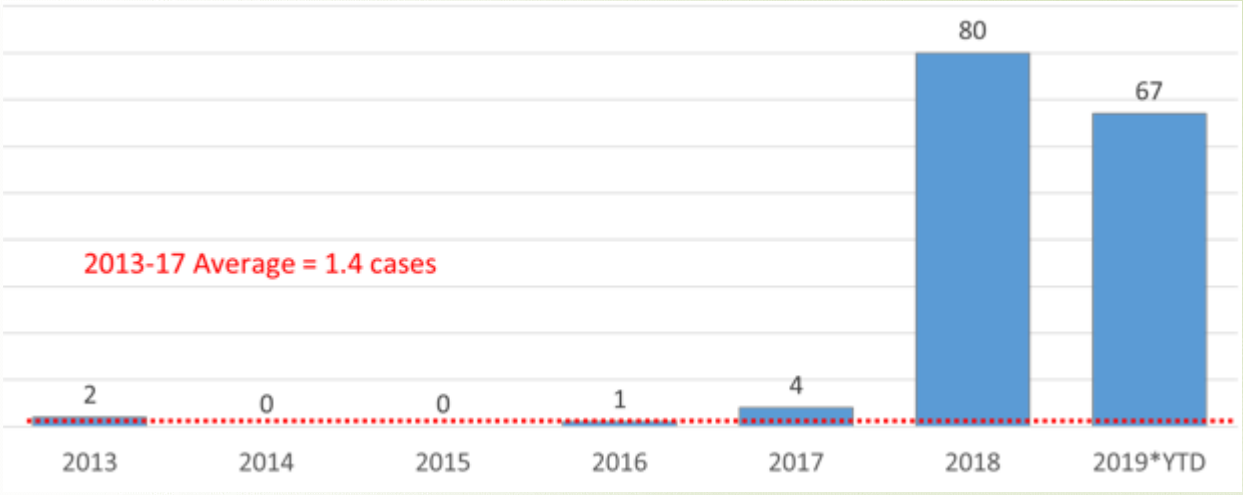
- DOH-Orange Recommends Prevention and Vaccination for Hepatitis A
- Measles Outbreak, Information for Healthcare Providers
- Appendix: Verona Integron-Mediated Metallo-Beta-Lactamase (VIM)-Producing Carbapenem-Resistant Pseudomonas aeruginosa: Information for Clinicians and Laboratory Providers (March 28, 2019)"

CDC Travel Notices: Travel notices are designed to inform travelers and clinicians about current health issues related to specific international destinations

- Rubella in Japan
- Drug-Resistant Infections in Patients Who Had Weight-Loss Surgery in Mexico
- Ebola in Democratic Republic of the Congo
- Cyclone Idai in Mozambique, Malawi, and Zimbabwe

Hepatitis A County Update

Orange County Non-Travel Associated Hepatitis A Cases, 2013-2019 *YTD



Deaths: 2
Hospitalized: 86% (n=147)
Age range: 2-72 years
Median = 37 years
Sex: 66% male (n=147)
Non-Hispanic: 89% (n=147)
White: 78% (n=147)
Secondary cases (contact of previously known case) = 14

Risk factors (where data are known):
MSM = 15% (n=128)
DU (IV and non-IV) = 57% (n=135)
Homeless = 31% (n=126)
Hep B/C co-infected = 40% (n=143)
Incarcerated =21% (n=70)
Healthcare workers: n=4
Childcare/school age children: n=2
Food service workers/facilities: n=5

Florida Update

Florida Department of Health Hepatitis A Surveillance Report

2018-To-Date Key Points

1,239 cases

19% cases linked to other cases

30-39 year olds had highest incidence

27% co-infected with hepatitis B or C

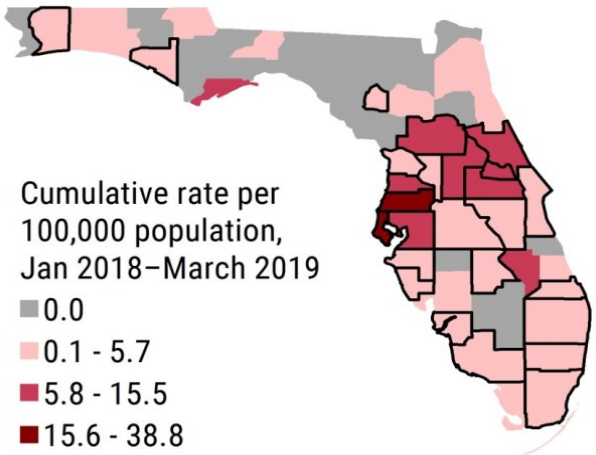
Top 5 Impacted Counties in Florida

CONFIRMED, PROBABLE, SUSPECT CASES OF HEPATITIS A WITH REPORT DATE 1/1/2018 to 4/1/2019

County	2018	2019 *YTD	TOTAL
Pinellas	113	**158**	271
Pasco	66	**140**	206
Orange	93	**70**	163
Hillsborough	84	**58**	142
Seminole	30	**21**	51
TOTAL	386	**246**	833

Source: Florida Merlin

March Map of Hepatitis A Cases noted in 25 counties, outlined in black (N=265)



Source: Hepatitis A Surveillance Report

Influenza Surveillance

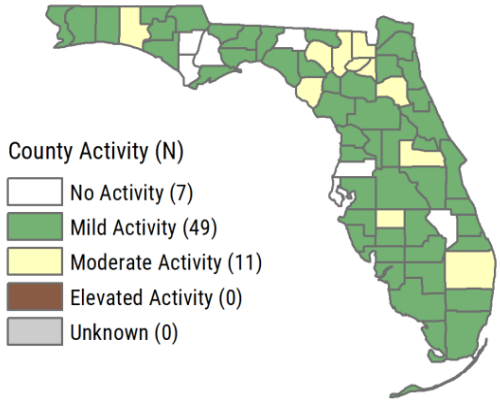
(MMWR Week 13: March 24-30, 2019)
Season 2018-19

Statewide Activity

Geographic Spread: **Regional**

Predominant Strain: **A (H3)**

ILI Activity Trend: **Decreasing**



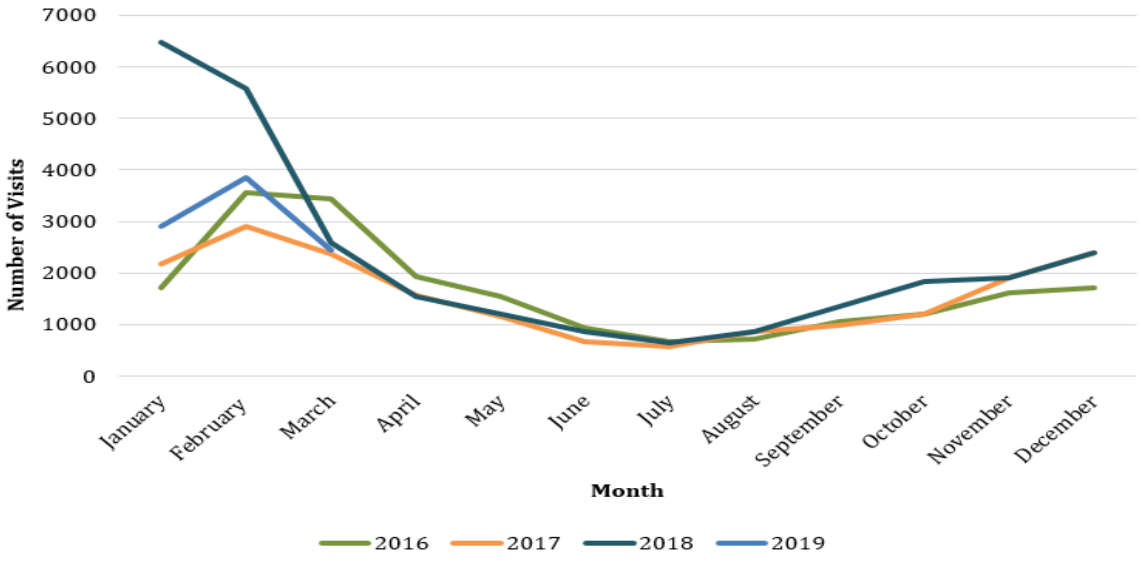
- In week 13, influenza and ILI activity continue to decrease statewide and was within levels observed at this time in the past season.
- 11 counties reported moderate influenza activity.
- 10 outbreaks of influenza or ILI were reported from various counties.
- No new influenza-associated pediatric deaths were reported in week 13. Three influenza-associated pediatric deaths have been reported so far this season, all in unvaccinated children.

Source: DOH Flu Review

Orange County Activity

- No influenza or influenza-like illness outbreaks were reported in Orange County for week 13.

ILI Emergency Department Visits in Orange County, 2016 to 2019



Flu Level: **Mild**

Flu Trend: **Decreasing**

Source: ESSENCE

Influenza Resources:

Florida Department of Health Influenza | CDC: Influenza (Health Professionals) | CDC: Weekly US Influenza Surveillance Report | Center for Disease Control and Prevention Weekly Influenza Activity Report

Arboviral Surveillance

(MMWR Week 13: March 24-30, 2019)

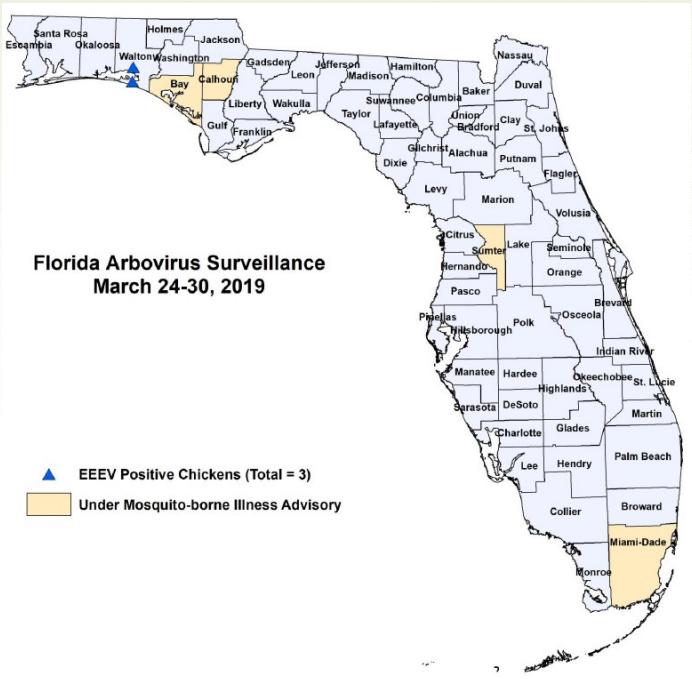
International

- There is a Level 2 (Alert) Travel Health Notice from the CDC for India related to Zika virus transmission and an association with poor pregnancy outcomes. Pregnant women should consider postponing travel to these areas.
- There is a Level 1 (Watch) Travel Health Notice in Senegal related to dengue virus transmission. There are also Level 2 Travel Health Notices for Brazil and Nigeria related to the transmission of yellow fever virus.

Florida

- Three cases of **dengue fever** were reported in week 13 in individuals with international travel. In 2019, 21 travel-associated cases have been reported.
- One case of **chikungunya fever** were reported this week in persons that had international travel. In 2019, two travel-associated case has been reported.
- No human cases of **West Nile virus** (WNV) infection were reported in week 13. In 2019, 12 sentinel chickens have been reported from seven counties.
- No human cases of **Eastern equine encephalitis virus** (EEEV) infection were reported in week 13. In 2019, five horses, one emu, and nine sentinel chickens have been reported from seven counties.
- One case of **Zika fever** was reported in week 13 in a person that had international travel. In 2019, 11 travel-associated cases have been reported.
- Bay, Calhoun, Miami-Dade, and Sumter counties are currently under a **mosquito-borne illness advisory**. No other counties are currently under mosquito-borne illness advisory or alert.

Arbovirus Surveillance by County, Week 13



Source: DOH Arboviral Report

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 2019.
- Two cases of **Zika fever** has been reported in a person with international travel in March 2019. Our total count as of week 13 is 3 cases.
- **We are no longer offering free Zika testing at DOH-Orange for insured pregnant women. Testing for Zika may be ordered through commercial labs. Please notify DOH-Orange of symptomatic patients with a history of travel. Please refer to the following letter regarding updates on Zika virus testing at BPHL.**

Arboviral Resources:

Weekly Florida Arboviral Activity Report (Released on Mondays)

Orange County Mosquito Control

Additional Resources:

Florida Department of Health Zika

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

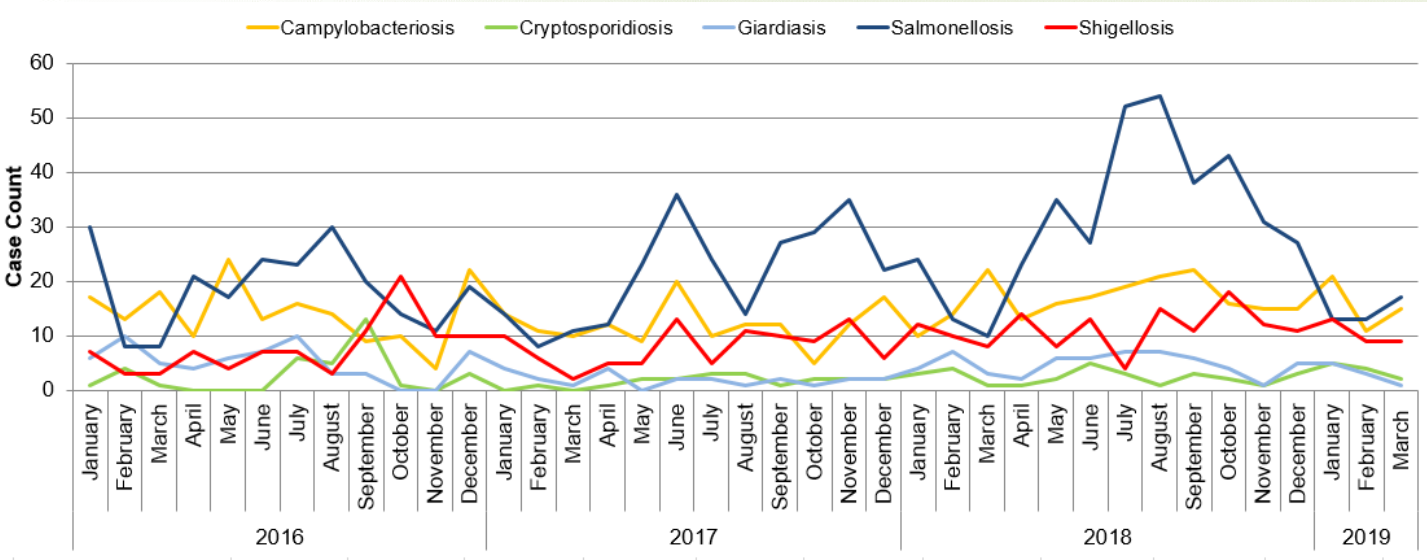
Florida Department of Health Mosquito-Borne Disease Education Materials

Gastrointestinal Illness Surveillance

Points of Interest:

- Enteric reportable disease cases were normal for the month of March.
- In March, 30 foodborne illness complaints were investigated by DOH Orange County from various sources such as direct reporting, online reporting, social media, Department of Health, and crowd-sourced web-based reporting.

Select Reportable Enteric Diseases in Orange County, Florida, January 2016 to March 2019



Source: ESSENCE

A Public Health Message for Grilling Safely:

Source: CDC Grilling Saftey

Gastrointestinal Illness Resources:

Florida Online Foodborne Illness Complaint Form - Public Use

Florida Food and Waterborne Disease Program

Florida Department of Health - Norovirus Resources

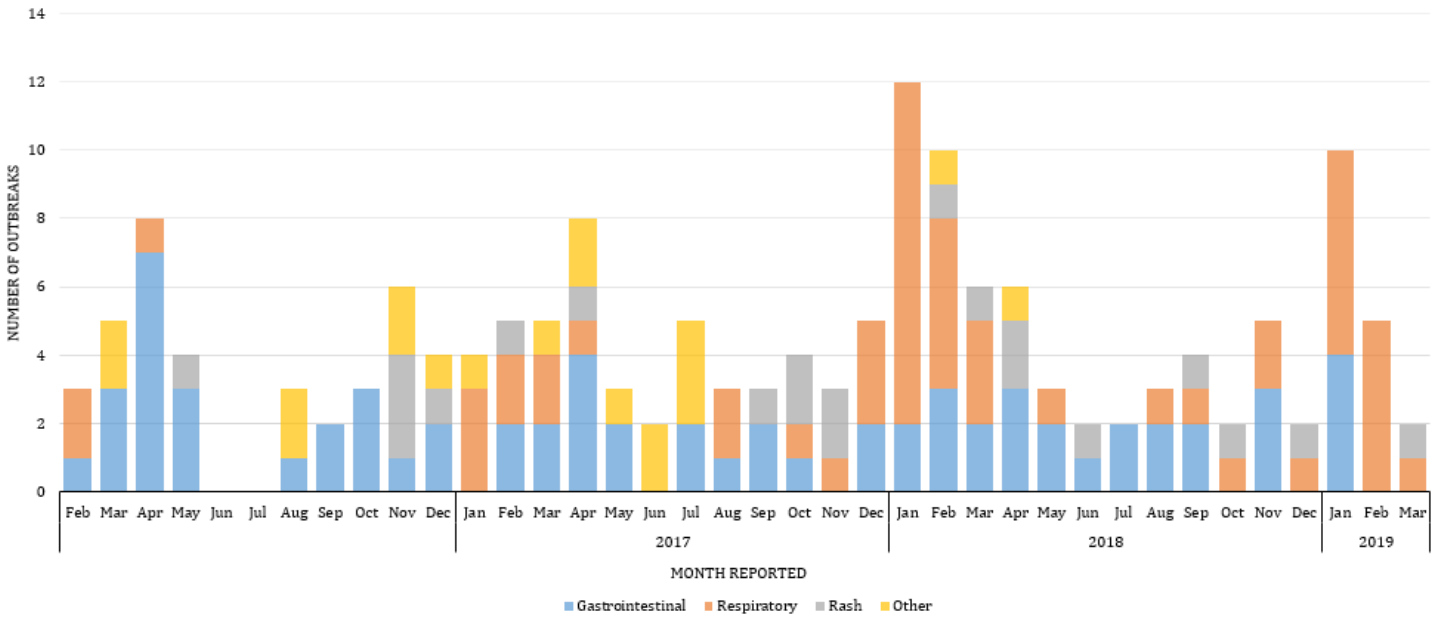
CDC: Healthy Water

CDC: A-Z Index for Foodborne Illness

Outbreaks in Orange County

- In March 2019, the following outbreaks were investigated:
  - One rash-like illness outbreak in a daycare
  - One respiratory outbreaks in a healthcare facility

Number of Outbreaks Reported in Orange County, FL, by Month from 2016-2019



Source: DOH-Orange Epidemiology Program

Reminder: Outbreaks of any disease, any case, cluster of cases, or exposure to an infectious or non-infectious disease, condition, or agent found in the general community or any defined setting (e.g., hospital, school, or other institution) not listed here of urgent public health significance should be reported.

For more information on reporting, please follow this link.: Reportable Disease Form

Source: Children's Health

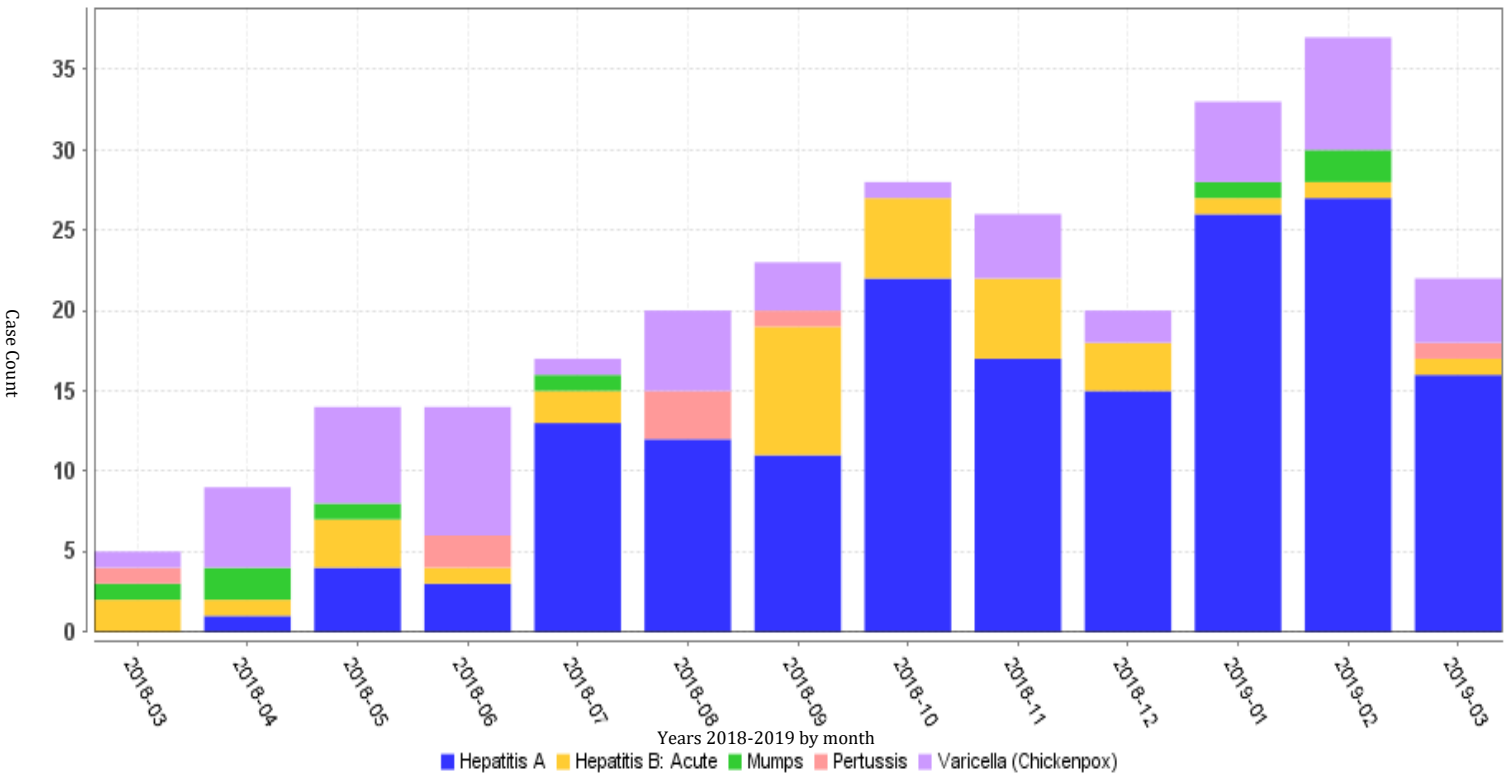
Food Recalls

Brand Name	Food/Food Product	Date of Recall	Health Risk	
Henry Avocado Corporation	Whole Avocados	23-Mar-19	Listeria	Details
Kingston Pharma, LLC	DG™/health NATURALS baby Cough Syrup + Mucus	20-Mar-19	Bacillus cereus	Details
Butterball LLC	Turkey Products	13-Mar-19	Salmonella Schwarzengrund	Details
Monogram Meat Snacks LLC	Pork Sausage Products	13-Mar-19	Product Tampering	Details
Hometown Food Company	Pillsbury® Unbleached All Purpose 5lb Flour	12-Mar-19	Salmonella	Details
Fullei Fresh	Organic Bean Sprouts	8-Mar-19	Listeria	Details
McDaniel Life-Line LLC	Life-Line Water	5-Mar-19	Pseudomonas aeruginosa	Details

Source: U.S. Food & Drug Administration

Vaccine Preventable Disease Surveillance

Orange County top 5 vaccine preventable disease cases by illness to include confirmed, probable and suspect cases, counted monthly, March 2018-2019



Source: ESSENCE

Resources:

U.S. Food and Drug Administration Recalls

Florida Department of Health- Vaccine Preventable Diseases

Disease	Orange			All Counties		
	March 2019	Cumulative (YTD) 2019	Cumulative 2018	March 2019	Cumulative (YTD) 2019	Cumulative 2018
Amebic Infections (Acanthamoeba)	0	0	0	0	0	1
Amebic Infections (Balamuthia mandrillaris)	0	0	0	0	0	3
Anaplasmosis, HGA (Anaplasma phagocytophilum)	0	0	1	0	0	20
Arboviral Disease, Other	0	0	0	0	0	1
Arsenic Poisoning	0	0	0	0	4	16
Babesiosis	0	0	0	0	0	19
Botulism, Infant	0	0	0	0	0	1
Brucellosis	0	0	0	0	3	15
California Serogroup Virus Neuroinvasive Disease	0	0	0	0	0	3
Campylobacteriosis	18	47	205	365	1211	4733
Carbon Monoxide Poisoning	0	10	7	14	78	238
Chikungunya Fever	0	0	1	1	2	5
Ciguatera Fish Poisoning	0	0	3	10	25	69
Creutzfeldt-Jakob Disease (CJD)	0	0	0	2	3	19
Cryptosporidiosis	1	11	27	49	152	586
Cyclosporiasis	0	1	8	1	2	76
Dengue Fever	0	0	4	4	28	84
Dengue Fever, Severe	0	0	0	1	1	4
Eastern Equine Encephalitis Neuroinvasive Disease	0	0	0	0	0	3
Ehrlichiosis, HME (Ehrlichia chaffeensis)	0	0	1	0	3	45
Escherichia coli, Shiga Toxin-Producing (STEC) Infection	5	18	63	55	178	860
Flavivirus Disease and Infection	0	0	0	0	1	6
Giardiasis, Acute	1	11	59	83	285	1100
Haemophilus influenzae Invasive Disease	2	3	22	35	103	311
Hansen's Disease (Leprosy)	0	0	1	0	4	20
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	2	8
Hepatitis A	21	75	93	262	773	555
Hepatitis B, Acute	2	3	36	61	196	771
Hepatitis B, Chronic	30	102	463	461	1305	4906
Hepatitis B, Perinatal	0	0	0	0	0	2
Hepatitis B, Pregnant Women	5	16	28	28	102	391
Hepatitis C, Acute	3	5	19	52	122	406
Hepatitis C, Chronic	126	442	1760	1564	5423	21304
Hepatitis C, Perinatal	0	0	1	4	10	46
Hepatitis D	0	0	1	1	1	5
Hepatitis E	0	0	0	1	3	7
Influenza-Associated Pediatric Mortality	0	0	0	0	1	9
Lead Poisoning	8	17	132	128	419	4111
Legionellosis	1	4	48	47	167	656
Leptospirosis	0	1	0	1	3	7
Listeriosis	0	0	5	1	4	53
Lyme Disease	1	1	4	8	28	197
Malaria	1	1	3	4	9	59
Measles (Rubeola)	0	0	0	1	1	15
Meningitis, Bacterial or Mycotic	0	0	3	5	16	112
Meningococcal Disease	1	1	4	3	7	18
Mercury Poisoning	0	0	0	2	7	38
Mumps	0	3	7	11	39	178
Neurotoxic Shellfish Poisoning	0	0	0	0	0	1
Pertussis	1	1	10	24	84	327
Pesticide-Related Illness and Injury, Acute	0	1	4	4	7	51
Q Fever, Acute (Coxiella burnetii)	0	0	0	0	0	1
Q Fever, Chronic (Coxiella burnetii)	0	0	0	0	0	1
Rabies, Possible Exposure	12	37	68	256	1015	4071
Ricin Toxin Poisoning	0	0	0	1	1	4
Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis	0	0	0	1	7	38
Salmonella Paratyphi Infection	0	3	0	2	7	0
Salmonella Typhi Infection	1	2	19	22	44	176
Salmonellosis	18	50	379	345	1118	7262
Saxitoxin Poisoning (Paralytic Shellfish Poisoning)	0	0	0	0	0	4
Scombroid Poisoning	0	0	1	6	16	32
Shigellosis	7	29	137	111	410	1513
Staphylococcus aureus Infection, Intermediate Resistance to Vancomycin	0	0	0	0	0	2
Strep pneumoniae Invasive Disease, Drug-Resistant	3	11	21	36	103	205
Strep pneumoniae Invasive Disease, Drug-Susceptible	4	13	20	67	167	370
Tetanus	0	0	0	0	1	1
Tularemia (Francisella tularensis)	0	0	0	0	0	2
Varicella (Chickenpox)	8	16	42	83	275	867
Vibriosis (Grimontia hollisae)	0	0	0	0	1	7
Vibriosis (Other Vibrio Species)	0	0	1	3	25	64
Vibriosis (Vibrio alginolyticus)	0	0	2	4	5	70
Vibriosis (Vibrio cholerae Type Non-O1)	0	0	0	2	5	5
Vibriosis (Vibrio fluvialis)	0	0	0	0	0	12
Vibriosis (Vibrio mimicus)	0	0	0	0	2	0
Vibriosis (Vibrio parahaemolyticus)	0	1	1	3	11	43
Vibriosis (Vibrio vulnificus)	0	0	0	0	1	42
West Nile Virus Neuroinvasive Disease	0	0	0	0	1	34
West Nile Virus Non-Neuroinvasive Disease	0	0	0	0	0	11
Zika Virus Disease and Infection, Congenital	0	0	0	0	0	1
Zika Virus Disease and Infection, Non-Congenital	1	3	43	8	30	172
Total	281	939	3757	4243	14057	57481

Source: Merlin

ALL DATA ARE PRELIMINARY

Florida Department of Health in Orange County

Epidemiology Program
6101 Lake Ellenor Drive
Orlando, Florida 32809

Phone: 407-858-1420
Fax: 407-858-5517
http://orange.floridahealth.gov/

Sign up for Electronic Health Alerts & Epidemiology Monthly Surveillance Reports

Email Contact Information to:

CHD48.EPIRegistration@flhealth.gov

Follow the FL Department of Health in Orange County on **Twitter** @GOHealthyOrange!

Issue Contributors:

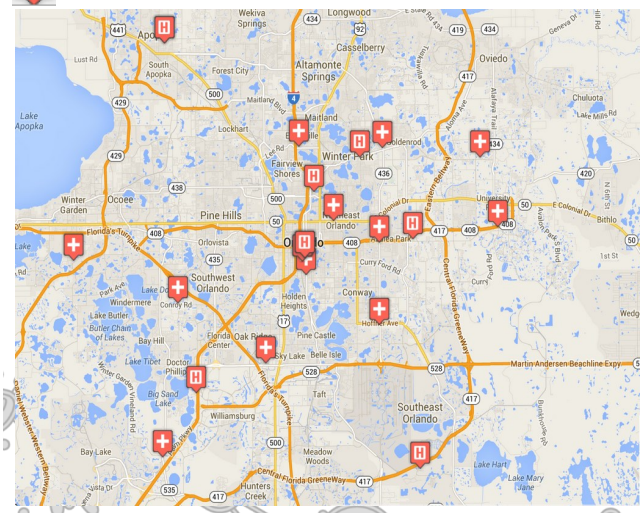
Alvina Chu, MHS
Epidemiology Program Manager

Taylor Langston, MPH
Epidemiologist

Michelle Persaud, MPH
Epidemiologist

Hospital linked to ESSENCE

AdventHealth Centra Care Clinic linked to ESSENCE



Florida Department of Health: 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.

Verona Integron-Mediated Metallo-Beta-Lactamase (VIM)-Producing Carbapenem-Resistant *Pseudomonas aeruginosa*: Information for Clinicians and Laboratory Providers Version 1.0 March 28, 2019

FloridaHealth.gov • Florida Department of Health

Background

The Florida Department of Health (Florida Health) has identified increasing cases of a rare, carbapenem-resistant *Pseudomonas aeruginosa*, specifically Verona Integron-Encoded Metallo-Beta-Lactamase-producing *Pseudomonas aeruginosa* (VIM-CRPA). This is uncommonly found in the U.S., but Florida has identified several health care-associated outbreaks since 2017. Florida accounts for 12% of all VIM-CRPA isolates identified nationally and has detected VIM in 8.6% of CRPA tested, compared to about 1.3% nationally. VIM-CRPA causes severe infections, is difficult to treat, and causes high morbidity and mortality. Carbapenem-resistant (CR) Enterobacteriaceae (CRE) and *Pseudomonas aeruginosa* (CRPA) with unusual carbapenemases like VIM have the potential to spread rapidly in a region. Florida Health is instituting containment measures through rapid identification and response strategies.

Information for Health Care Providers

Early detection and rapid public health response can prevent spreading of VIM-CRPA in Florida. Florida Health supports the Centers for Disease Control and Prevention's (CDC) standard of clinical care national guidance to prevent the spread of antibiotic resistance:

1. Clinical laboratories with capacity for carbapenemase testing should consider performing testing for CRPA, along with CRE.
2. Health care facilities should develop a method to identify at admission patients who had an overnight stay in a health care facility outside the U.S. within the last six months; place these patients on contact precautions, and screen them for the presence of carbapenemase-producing organisms.
3. Health care facilities should implement infection prevention and control measures as outlined in the CDC's Facility Guidance for Control of CRE for all carbapenemase-producing organisms, including CRPA. Guidance available at www.cdc.gov/hai/organisms/cre/cre-toolkit/index.html
4. Health care facilities should initiate a containment response with the Florida Health HAI Prevention Program as described in CDC's Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-Resistant Organisms (MDROs) www.cdc.gov/hai/containment/guidelines.html
5. Health care providers, facility infection preventionists, and laboratories should report unusual antibiotic resistant microorganisms (e.g. CRE and CRPA) to county and state health departments for notification and submission of isolates for the confirmation of antibiotic-resistant microorganisms.

Florida Health and the CDC sponsored Antibiotic Resistance Laboratory Network (www.cdc.gov/drugresistance/solutions-initiative/ar-lab-network.html) will provide free rectal swabs, postage/shipping, and carbapenemase testing for CRE and CRPA screening and surveillance. Contact the HAI Prevention Program to access these resources or to learn more about available program resources by email at HAI_Program@flhealth.gov or call 850-245-4401.