

Epidemiology Program • www.seminolecohealth.com

Seminole County End of the Year Review, 2015

In 2015, Seminole County investigated 13 outbreak cases. Examples of the outbreaks that occurred in 2015 are pertussis at a dialysis facility, legionella at a local hotel and salmonella at a quinceañera.

A common enteric pathogen, Campylobacter

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Enteritis is a diarrheal illness contracted from direct contact with infected animals, improperly cooked meat, untreated water, and unpasteurized milk.

Seminole County had 57 confirmed cases of Campylobacteriosis in 2015 (Chart 1).

In 2015, Seminole county had 488 cases of Hepatitis C (Chart 2), a liver infection caused by the Hepatitis C virus (HCV). Hepatitis C is a blood-borne virus that is continuously increasing. The majority of infected persons might not be aware of their infection, because they are not clinically ill. There is no vaccine for Hepatitis C. HCV can be transmitted through the reuse or inadequate sterilization of medical equipment, especially syringes and needles. Additional ways of contracting the virus is through unscreened blood and blood products transfusion, injecting drug use through the sharing of injection equipment, unprotected sex, and from an infected mother to baby.

Legionellosis is severe pneumonia from the bacterium L. pneumophila. The most common form of transmission of Legionella is inhalation of contaminated aerosols produced in conjunction with water sprays, jets or mists. Infection can also occur by aspiration of contaminated water particularly

in susceptible hospital patients. Outbreaks are linked to poorly maintained artificial water systems, such as: cooling towers, whirlpool spas, and evaporative condensers associated with air conditioning and industrial cooling. In 2015, there were 10 cases in Seminole County (Chart 3).

The Ebola epidemic brought Seminole County 21 travelers in 2015 that needed to be monitored from countries with an Ebola outbreak. The travelers came from the following countries: Guinea (4 monitored), Liberia (6 monitored), Mali (2 monitored) and Sierra Leone (9 monitored). No travelers became symptomatic during the 21 day monitoring (incubation) period. Human to human transmission spreads through direct contact with bodily secretions, blood and bodily fluids. This contact can spread from broken skin, mucous membranes, bedding, clothing and surfaces infected with the virus. The virus incubation period from infection to onset of symptoms can range from 2 to 21 days. Symptoms include fever, diarrhea, vomiting, muscle pain, headache, and impaired liver functions to name a few. At present, there is no vaccination against the virus. Patients are given oral and intravenous supportive fluid treatments for symptoms. (Centers for Disease Control and Prevention, 2015, para. 2).

References

Centers for Disease Control and Prevention. (2015). Ebola (Ebola Virus Disease) Treatment. Retrieved from http://www.cdc.gov/vhf/ebola/treatment/index.html

World Health Organization. (2016). Ebola Virus Disease. Retrieved from http://www.who.int/mediacentre/factsheets/fs103/en/

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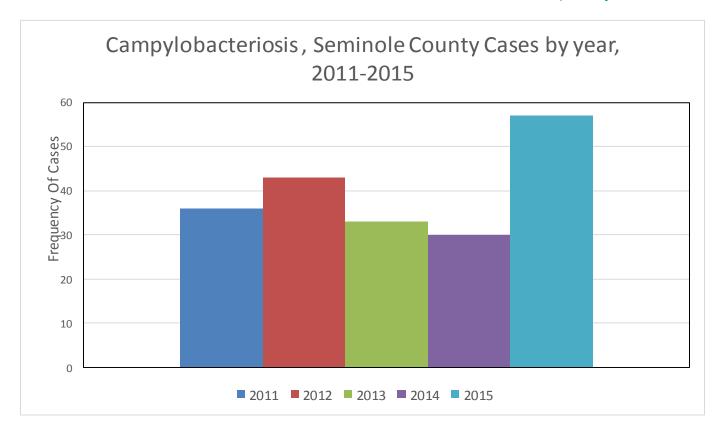
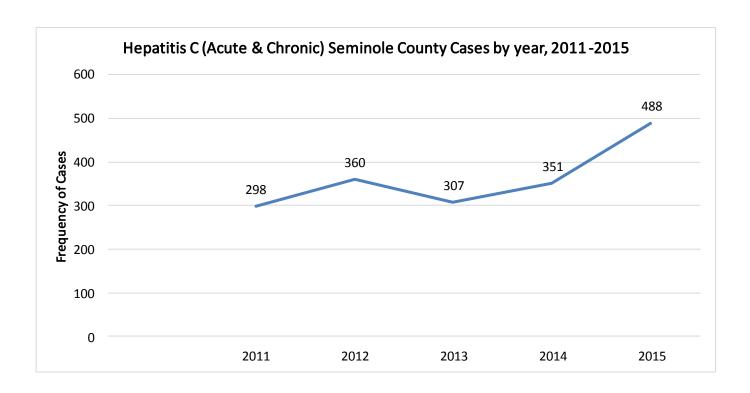
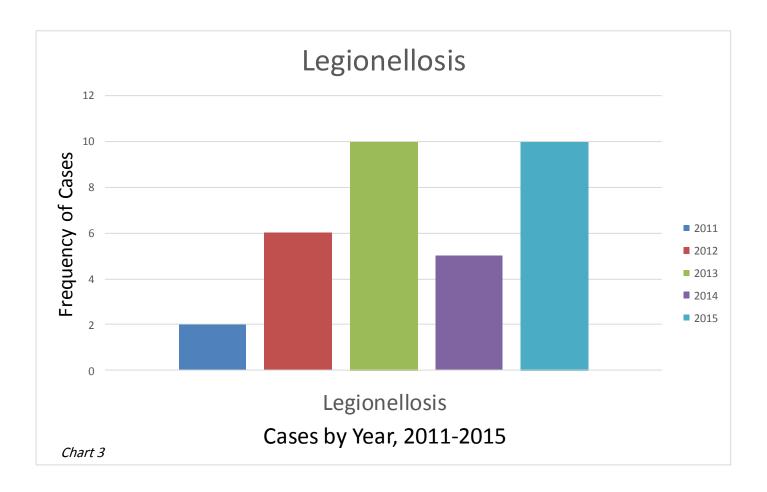


Chart 1





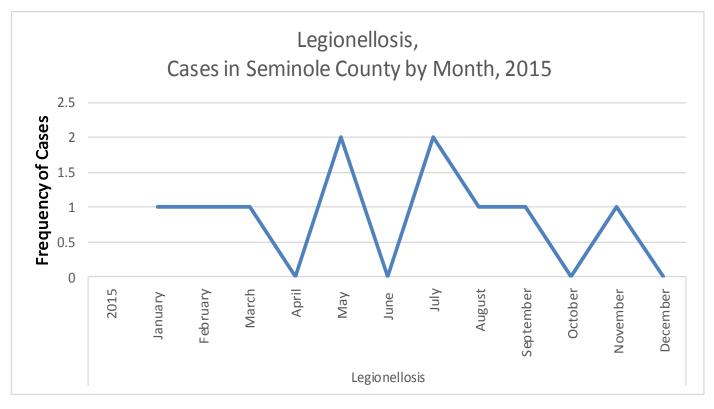
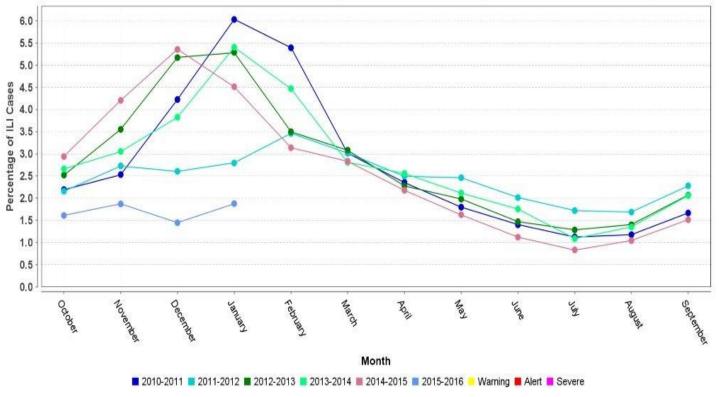


Chart 4

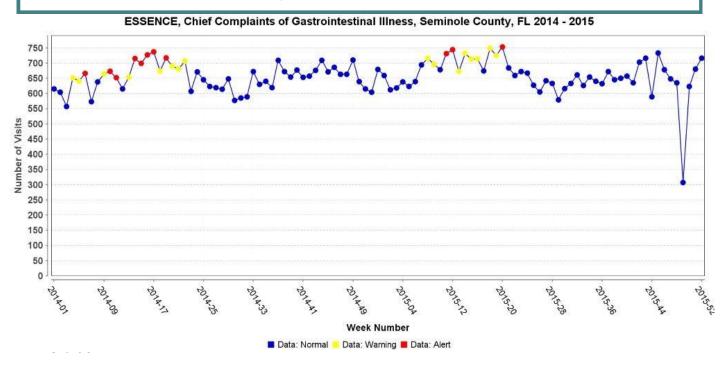
Percentage of Influenza Like Illness out of Total Cases at Emergency Departments and Urgent Centers, Seminole County, 2011 - 2015



Gastrointestinal Illness Surveillance

Gastrointestinal Illness typically follows a trend similar to influenza season, peaking in the winter months. There have been no gastrointestinal illness outbreak investigated by DOH-Seminole in December.

Food and Waterborne Illness Complaints can be submitted at the following link. A health department employee will follow-up with the complainant by phone: http://www.floridahealth.gov/diseases-and-conditions/food-and-waterborne-disease/online-food-complaint-form.html



Disease Incidence Table-Seminole County

Selected Diseases/Conditions Reported to DOH-Seminole	2013	2014	2015	2011-2015 Average
Amebic Encephalitis	0	1	0	0.2
Animal Bite to Humans**	34	35	23	28.6
Animal Rabies	10	5	5	6.2
Botulism (infant)	0	0	0	0.2
Brucellosis	0	0	0	0.2
Campylobacteriosis	33	30	57	39.8
Carbon Monoxide Poisoning	16	3	2	5.0
Chikungunya Fever	0	8	3	2.2
Creutzfeldt-Jakob Disease	0	0	1	1.0
Chlamydia	1415	1469	1639	1492.2
Ciguatera Fish Poisoning	3	0	0	0.6
Cryptosporidiosis	8	12	7	7.0
Cyclosporiasis	1	3	1	1.4
Dengue	2	2	2	2.5
Ehrilichiosis (HME/Ehrilichia chaffeensis)	1	1	0	0.6
E. coli Shiga toxin-producing	7	12	7	8.6
Giardiasis	9	14	15	14.2
Gonorrhea	307	303	396	328.0
Haemophilus influenzae (invasive)	10	3	0	3.6
Hansen's Disease (Leprosy)	0	0	1	0.2
Hepatitis A		3	0	2.3
Hepatitis B in Pregnant Women	4	1	5	4.8
Hepatitis B (acute and chronic)	44	66	92	72.0
Hepatitis C (acute and chronic)	307	351	488	360.8
Hepatitis D	4	1	0	2.0
Hepatitis E	0	1	0	0.2
HIV*	47	40	60	42.8
Lead poisoning	5	5	4	5.2

- * HIV data includes those cases that have converted to AIDS. These HIV cases cannot be added with AIDS cases to get combined totals since the categories are not mutually exclusive.
- ** Animal bite to humans by a potentially rabid animal resulting in a county health department or state health office recommendation for post-exposure prophylaxis (PEP), or a bite by a non-human primate.

Reported cases of diseases/conditions in **Bold** are >10% higher than the previous four year average for the same time period.

Selected Diseases/Conditions Reported to DOH-Seminole	2013	2014	2015	2011-2015 Average
Legionellosis	10	5	10	6.6
Listeriosis	0	3	0	0.6
Lyme Disease	4	5	4	3.6
Malaria	3	1	0	1.2
Measles (Rubeola)	2	0	0	0.4
Meningitis, Bacterial or Mycotic	2	1	1	3.6
Meningococcal Disease	1	1	0	0.8
Pertussis	9	17	0	8.0
Pesticide-Related Illness and Injury (Acute)	1	0	0	0.2
Salmonellosis	90	109	98	98.0
Shigellosis	4	50	19	27.2
S. pneumoniae – drug resistant	12	6	3	8.4
S. pneumoniae – drug susceptible	5	6	8	6.2
Syphilis	61	82	108	71.4
Tuberculosis	6	5	2	6.4
Varicella	21	14	10	15.6
Vibriosis (Vibrio alginolyticus)	0	2	0	0.8
Vibriosis (Vibrio vulnificus)	0	0	0	0.2

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All Data is Provisional

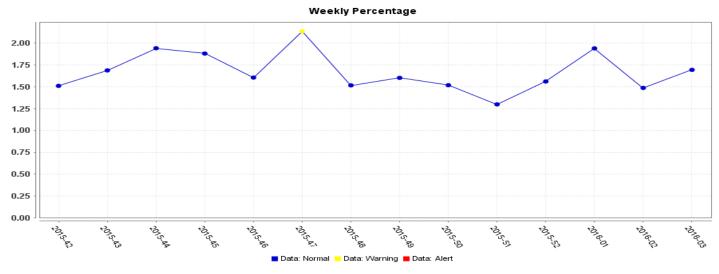
Influenza Surveillance

Local: Seminole County is reporting **MILD** flu activity for the month of December. No **influenza outbreaks** have been reported in Seminole for the 2015-2016 influenza season. The ESSENCE Syndromic Surveillance system is showing a slight increase in influenza-like illness (ILI) chief complaints.

State: Florida is currently reporting **MILD** flu activity. Influenza activity has Increased in recent weeks. **Five influenza or ILI outbreak** has been reported this flu season. One influenza-associated pediatric death was reported in week 52 in a Dade County resident. Two influenza-associated pediatric deaths have been reported so far in the 2015-16 influenza season.

National: Low levels of flu activity are being reported nationwide but are increasing. Additional information can be found at the following link: http://emergency.cdc.gov/han/han00374.asp

Seminole County 2015-2016 Flu Season ILI Complaints



Arbovirus Surveillance

Seminole County Mosquito-borne Illness Statistics 2015 Year to Date:

West Nile Virus: 15 sentinels

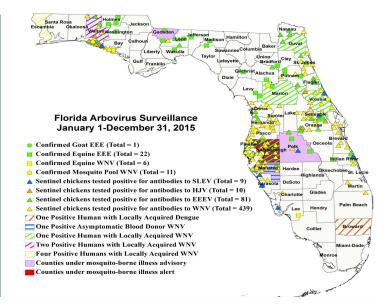
Eastern Equine Encephalitis: 4 sentinels

St. Louis Encephalitis: 1 sentinel

Dengue: 2 human imported cases

Chikungunya: 3 human imported cases

Malaria: No cases





Disease Reporting

The Epidemiology Program conducts disease surveillance and investigates suspected occurrences of infectious diseases and conditions 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.

To report a reportable disease or outbreak during business hours please use the <u>Report of Communicable Disease Form</u>. Contact the Division of Epidemiology at 407-665-3266 for diseases other than HIV/AIDS and STDs.

To report an urgent reportable disease or outbreak after hours, call 407-665-3266 and follow the instructions to reach the on-call Epidemiologist.

Reportable Diseases/Conditions in Florida - Practitioner List

Reportable Diseases/Conditions in Florida - Laboratory List

Disease Reporting Information for Health Care Providers and Laboratories

Foodborne Illnesses Reporting Links:

Report illnesses due to food online 24/7

Report unsafe or unsanitary conditions

Disaster Preparedness Link: http://www.floridadisaster.org/index.asp

MISSION

To protect, promote and improve the health of all people in Florida through integrated state, county and community efforts

VISION

To be the Healthiest State in the Nation

VALUES

Innovation
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Responsiveness

Excellence

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