

The

EPI
 gazette

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Zika Virus

Zika virus is a mosquito borne infection caused by a *flavivirus*. The virus is primarily transmitted from the bite of an infected mosquito. *Aedes species mosquito (A. aegypti and A. albopictus mosquito)* can transmit the Zika virus, Dengue, and Chikungunya. These mosquitoes lay eggs in and near standing water in buckets, bowls, animal dishes, flower pots, and vases. They prefer to bite and live near people.

Mosquitoes that spread chikungunya, dengue, and Zika are aggressive daytime biters. They can also bite at night. There is some evidence that transmission can occur perinatally (in utero), sexually or through blood transfusion.

A mother already infected with Zika virus near the time of delivery can pass on the virus to her newborn around the time of birth, but this is rare. A mother infected with the Zika virus can pass it to her fetus during pregnancy. Currently, there is no evidence of the virus being passed to the infant through breastfeeding. Because of the benefits of breastfeeding, mothers are encouraged to breastfeed even in areas where Zika virus is found.



Zika virus has been identified in several countries in Central and South America, Mexico and the Caribbean including Puerto Rico. Outbreaks have previously been reported in Africa, Southeast Asia and the

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Pacific Islands. The cases identified in Florida have all been linked with travel to these areas.

Potential infected men with pregnant partners and non-pregnant partners should abstain from sex or use condoms during sex (i.e. vaginal intercourse, anal intercourse and fellatio). The virus is present in semen longer than blood.

Suspect cases should be advised to avoid mosquito bites while ill to prevent infection of local mosquitoes. Only about 1 in 5 people infected with Zika virus are symptomatic. Zika virus is a mild illness with symptoms similar to those of mild dengue fever. Severe disease requiring hospitalization is uncommon. Treatment is symptomatic and illness typically resolves within a week. Co-infections with Dengue or Chikungunya are possible and should be considered. Aspirin and other non-steroidal anti-inflammatory drugs are not advised in case of co-infection with Dengue. Pregnant women with fever should be treated with acetaminophen. The incubation period is approximately 2 to 14 days.

Signs/symptoms of Zika virus may include:

- Acute Fever
- Maculopapular rash
- Arthralgia
- Conjunctivitis
- Myalgia
- Headache
- Retro-orbital pain
- Vomiting

All suspected cases of Zika virus must be reported immediately to the Florida Department of Health in Seminole County at (DOH-Seminole) at **407-665-3266**. If a patient is hospitalized for Zika virus, their health status must be updated with DOH-Seminole every **24 hours** until discharge. The health status of non-hospitalized Zika virus patients must be updated **every 72 hours** until symptoms resolve. Polymerase chain reaction (PCR) at DOH Bureau of Public Health Laboratories (BPHL) can be used to detect viral RNA in serum, urine and saliva samples collected during the first three weeks after illness onset.

Testing can be performed on pregnant women, non pregnant and males experiencing two or more of the following signs/symptoms: fever, maculopapular rash, arthralgia, or conjunctivitis **within two weeks of travel to an area reporting Zika virus activity** regardless of the length of time since the travel/illness occurred. Asymptomatic pregnant women that have a history of travel to an area reporting Zika virus activity can be tested as well. If you have questions on testing, symptoms and/or procedures for suspected cases, please call DOH-Seminole before sending clients.

For more information on Zika virus:

<http://www.cdc.gov/zika/index.html>

<http://www.floridahealth.gov/diseases-and-conditions/zika-virus/>

Health Alert Network Summary

The Health Alert Network is reporting increasing severe influenza illnesses nationally. Patients should continue to be treated if influenza is suspected in high-risk outpatients, those with progressive disease, and all hospitalized patients with antiviral medications as soon as possible, regardless of negative rapid influenza diagnostic test (RIDT) results and without waiting for RT-PCR testing results. Early antiviral treatment works best, but treatment may offer benefit when started up to 4-5 days after symptom onset in hospitalized patients. The Centers for Disease Control and Prevention (CDC) has identified influenza A(H3N2), A(H1N1)pdm09, and influenza B viruses causing the increase in influenza cases. H1N1pdm09 viruses have dominated with severe respiratory illness among young-to middle-aged adults. Patients have tested negative for influenza by RIDT. These cases were diagnosed with influenza by molecular assays. Clinicians are seeing an increasing number of unvaccinated patients being diagnosed with influenza. Clinicians are strongly encouraged to vaccinate patients for the influenza viruses this season. Severely ill and high-risk patients suspected with influenza should start antiviral treatment immediately.

For More Information on Influenza:

- Summary of Weekly U.S. Influenza Surveillance Report <http://www.cdc.gov/flu/weekly/summary.htm>
- People at High Risk of Developing Flu–Related Complications http://www.cdc.gov/flu/about/disease/high_risk.htm
- Clinical Signs and Symptoms of Influenza <http://www.cdc.gov/flu/professionals/acip/clinical.htm>
- ACIP Recommendations for the Prevention and Control of Influenza with Vaccines, United States, 2015-16: Summary for Clinicians <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a3.htm>
- Influenza Antiviral Medications: Summary for Clinicians <http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>
- Guidance for Clinicians on the Use of Rapid Influenza Diagnostic Tests http://www.cdc.gov/flu/professionals/diagnosis/clinician_guidance_ridt.htm
- Patient Education: Influenza Brochures, Fact Sheets, and Posters <http://www.cdc.gov/flu/freeresources/index.htm>

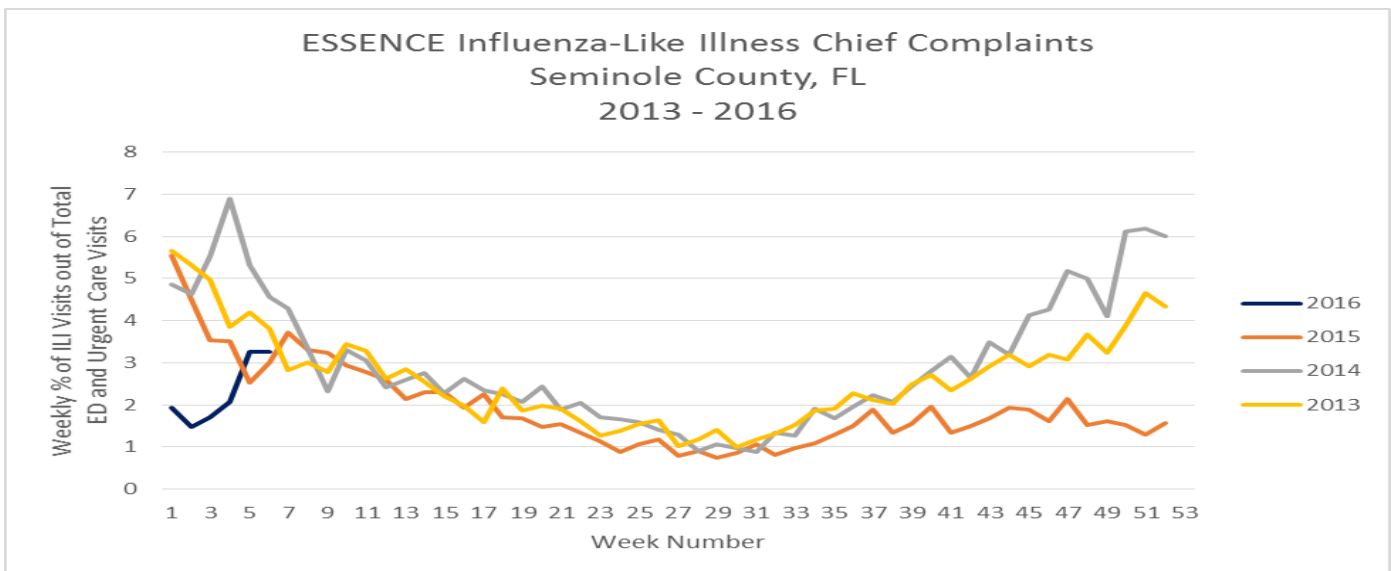
Influenza Surveillance

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

State: Florida is currently reporting **Sporadic** flu activity. Influenza activity has remained relatively stable but has increased slightly in recent weeks. Ten **influenza or ILI outbreaks** have been reported this flu season. The predominantly circulating strain identified in Florida so far this season is Influenza A 2009(H1N1). Four influenza-associated pediatric deaths have been reported so far in the 2015-16 influenza season.

National: **Increasing** levels of flu activity are being reported nationwide. The predominantly circulating strain identified nationally so far this season is Influenza A 2009(H1N1).

Additional information can be found at the following link: <http://emergency.cdc.gov/han/han00374.asp>



Arbovirus Surveillance

Seminole County Mosquito-borne Illness Statistics 2016 Year to Date:

West Nile Virus: N/A

Eastern Equine Encephalitis: N/A

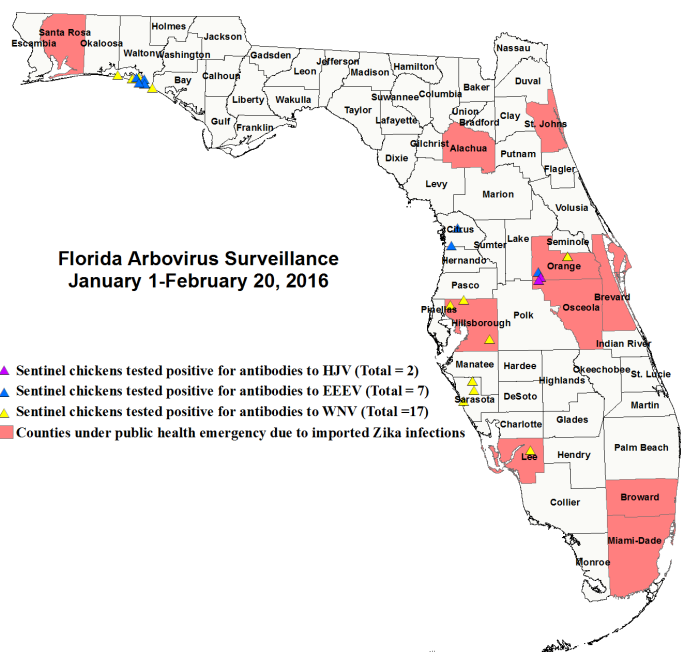
St. Louis Encephalitis: N/A

Dengue: 2

Chikungunya: N/A

Malaria: N/A

Zika Virus: 1

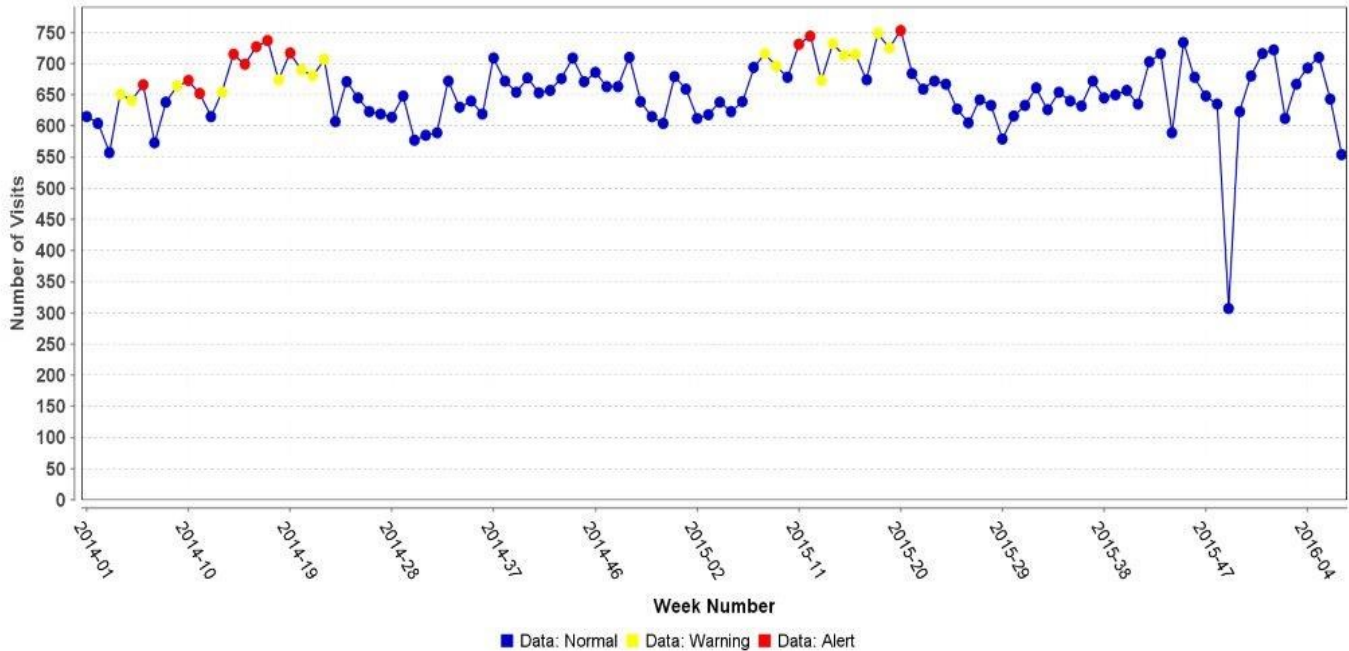


Gastrointestinal Illness Surveillance

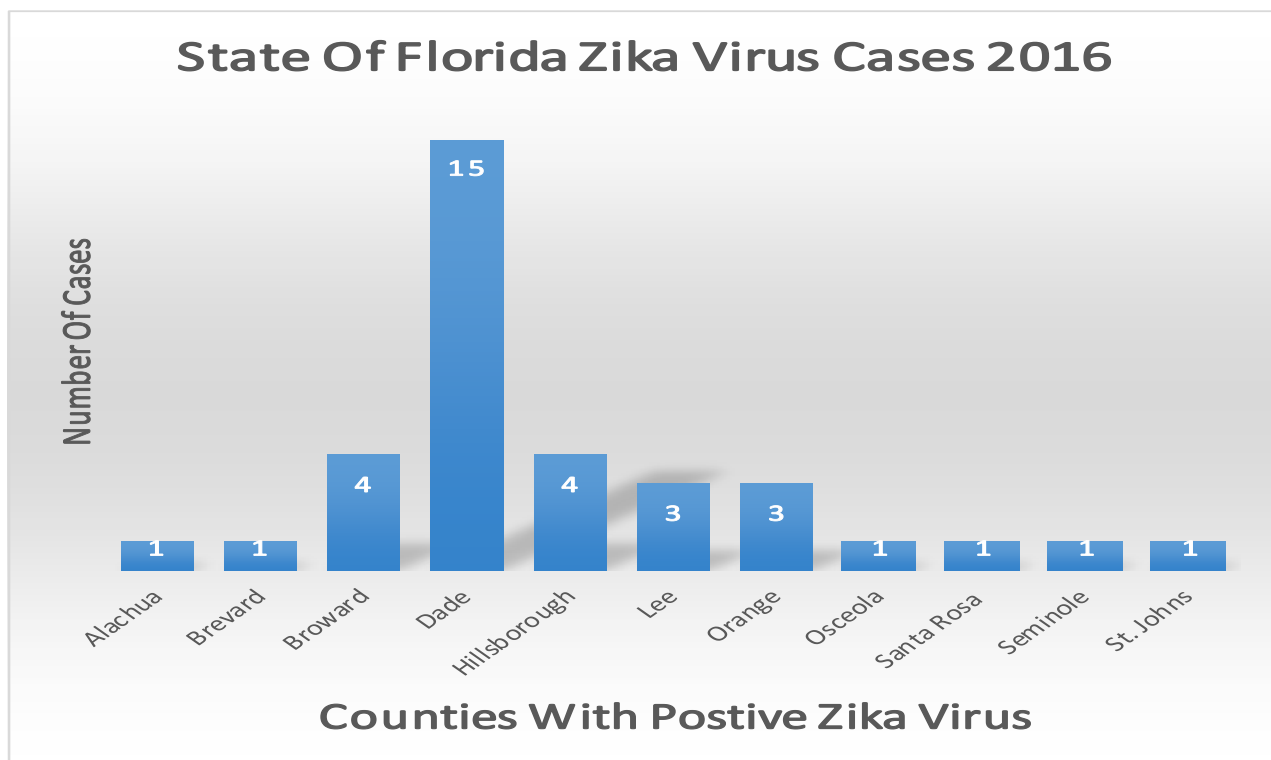
Gastrointestinal Illness typically follows a trend similar to influenza season, peaking in the winter months. There have been no gastrointestinal illness outbreaks investigated by DOH-Seminole in January.

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>

ESSENCE, Chief Complaints of Gastrointestinal Illness, Seminole County, FL, 2014 - 2016



State Of Florida Zika Virus Cases 2016



Disease Incidence Table-Seminole County

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Selected Diseases/Conditions Reported to DOH-Seminole	2016 through Week 4	2015 through Week 4	2014 through Week 4	2014-2016 Week 4 Average
Animal Bite to Humans**	3	1	3	2.3
Animal Rabies	0	1	1	0.7
Campylobacteriosis	6	6	1	4.3
Chlamydia	116	135	95	115.3
Cryptosporidiosis	0	3	0	1.0
Cyclosporiasis	0	0	0	0.0
Dengue	0	0	0	0.0
E. coli Shiga toxin-producing	0	0	0	0.0
Giardiasis	3	2	0	1.7
Gonorrhea	30	26	22	26.0
Haemophilus influenzae (invasive)	0	0	0	0.0
Hepatitis A	0	0	0	0.0
Hepatitis B in Pregnant Women	0	0	0	0.0
Hepatitis B (acute and chronic)	4	6	4	4.7
Hepatitis C (acute and chronic)	39	22	21	27.3
HIV*	1	5	5	3.7
Lead poisoning	0	1	0	0.3
Legionellosis	0	1	0	0.3
Lyme Disease	0	0	0	0.0
Meningococcal Disease	0	0	0	0.0
Pertussis	0	0	2	0.7
Salmonellosis	2	3	2	2.3
Shigellosis	0	0	0	0.0
S. pneumoniae – drug resistant	0	0	0	0.0
Syphilis	2	5	5	4.0
Tuberculosis	0	0	0	0.0
Varicella	0	0	2	0.7

- * 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 three year average for the same time period.

All Data is Provisional



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 [Report of Communicable Disease Form](#). 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
Collaboration
Accountability
Responsiveness
Excellence

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