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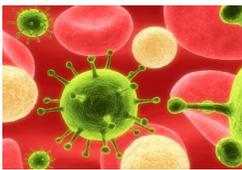
**EPI**  
gazette

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The Florida Department of Health in Seminole featured in the Centers for Disease Control and Prevention's Morbidity and Mortality Weekly Report  
*Notes from the Field: Primary Amebic Meningoencephalitis Associated with Hot Spring Exposure During International Travel — Seminole County, Florida, July 2014*

On July 2, 2014, the Florida Department of Health was notified of a suspected case of primary amebic meningoencephalitis (PAM). PAM is a rare, devastating infection of the brain caused by *Naegleria fowleri*, a

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free-living ameba found in warm, fresh water bodies throughout the world. Amebae are aspirated into the nasal cavity through swimming, splashing, or nasal irrigation. After attachment to the nasal mucosa, amebae migrate across the cribriform plate to the brain via the olfactory nerves, causing extensive damage to the frontal lobes of the brain (1). In August 2013, miltefosine, an antiparasitic drug with activity against *N. fowleri*, became available from CDC as an investigational drug used for the treatment of free-living ameba infections in

combination with other antimicrobial drugs (2).

On June 27, 2014, the patient, an 11 year-old boy, experienced a headache, low grade fever, stiff neck, nausea, and vomiting. He was hospitalized on June 29, with a presumptive diagnosis of viral meningitis. The initial cerebral spinal fluid (CSF) analysis was negative for motile ameba. All other routine tests were negative. His condition deteriorated, progressing to altered mental status, slurred speech, and seizures. On July 1, the patient required intubation and mechanical ventilation. A second CSF specimen was collected in the evening of July 1, and motile ameba were observed and reported in the early morning of July 2. Physician consultation with CDC was immediately facilitated by the Florida Department of Health to arrange for the release and delivery of miltefosine from Atlanta, Georgia to Orlando, Florida; however, the patient died before its arrival on July 2. On July 9, CDC confirmed the presence of *N. fowleri* in the CSF by real-time polymerase chain reaction.

An interview of the patient's parents conducted by the Florida Department of Health in Seminole County revealed the family was on vacation Costa Rica from June 19–June 27, 2014. They engaged in swimming, zip lining,

and water slide use at a resort; hot springs on June 23. The parents reported no exposure to bodies of fresh water in Florida, because of public awareness of *N. fowleri*, but said they were unaware of the risk for PAM internationally. No other swimming or nasal insufflation of water was reported either in Costa Rica or Florida during the week before illness onset. *N. fowleri* was detected in water samples from the hot springs and river pond located at the resort (3).

PAM is typically fatal; only three nonfatal cases have been reported in the United States (4). Miltefosine was administered as part of the successful treatment of a case of PAM in 2013 (5). Miltefosine can be requested from CDC upon clinical suspicion of PAM infection and before laboratory confirmation. Physicians should consider a diagnosis of PAM in persons with a clinically compatible illness who have a history of fresh water exposure 1 – 9 days before illness onset. Early diagnosis and prompt treatment are thought to be essential because of the high mortality rate. Strategic placement of miltefosine in Texas and Florida, where approximately half of all cases in the United States have been reported, is being considered and might reduce the time to initiate treatment associated with transport of the medication, thereby increasing the possibility of patient survival. Health care professionals and the public need to be aware that *N. fowleri* can be found in any warm, fresh water body throughout the world, including latitudes in the northern United States previously thought to have a climate incompatible with ameba activity (6).

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# Influenza Surveillance

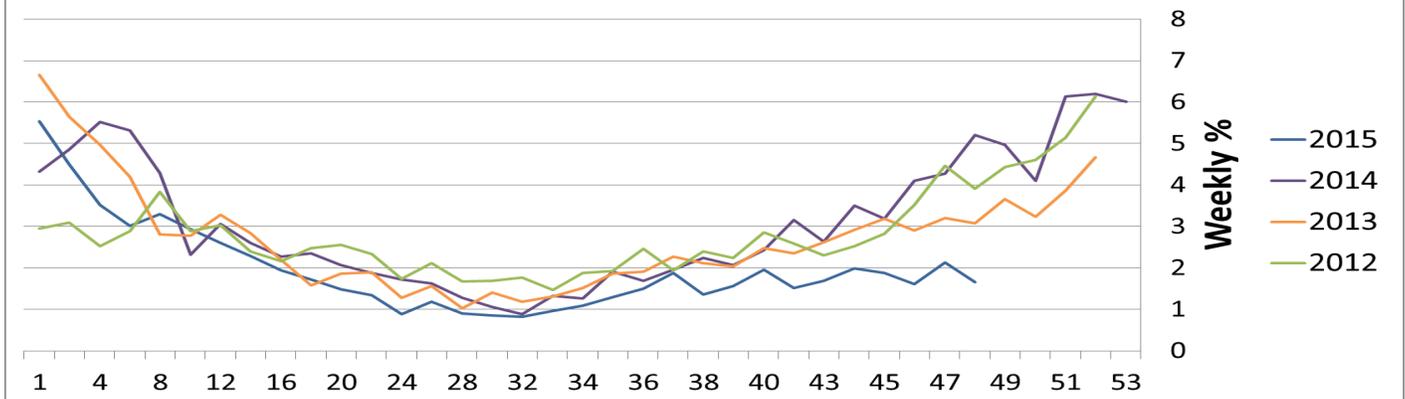
**Local:** Seminole County is reporting **MILD** flu activity for the month of November. No **influenza outbreaks** have been reported in Seminole for the 2015-2016. flu season. The ESSENCE Syndromic Surveillance system is showing **plateaued** influenza-like illness (ILI) chief complaints.

**State:** Florida is currently reporting **Sporadic** flu activity. Influenza activity has remained relatively stable but has increased slightly in recent weeks. Four **influenza or ILI outbreaks** have been reported this flu season. Influenza A (H3) is the most commonly circulating virus identified by BPHL so far in the 2015-16 season.

**National:** **Low** but increasing levels of flu activity are being reported nationwide. The predominantly circulating strain identified nationally so far this season is influenza A (H3). Other strains of influenza are also circulating, but at lower levels.

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

**ESSENCE Influenza-Like Illness Chief Complaints, Seminole County, FL 2012-2015**



# Arbovirus Surveillance

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

**West Nile Virus:** 12 sentinel chicken

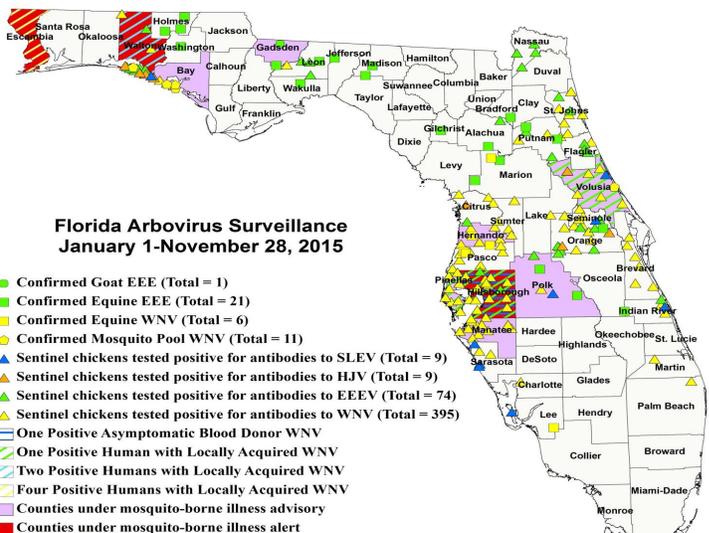
**Eastern Equine Encephalitis:** 4 sentinel chicken

**St. Louis Encephalitis:** 1 sentinel chicken

**Dengue:** 1 human imported case

**Chikungunya:** 3 human imported cases

**Malaria:** N/A

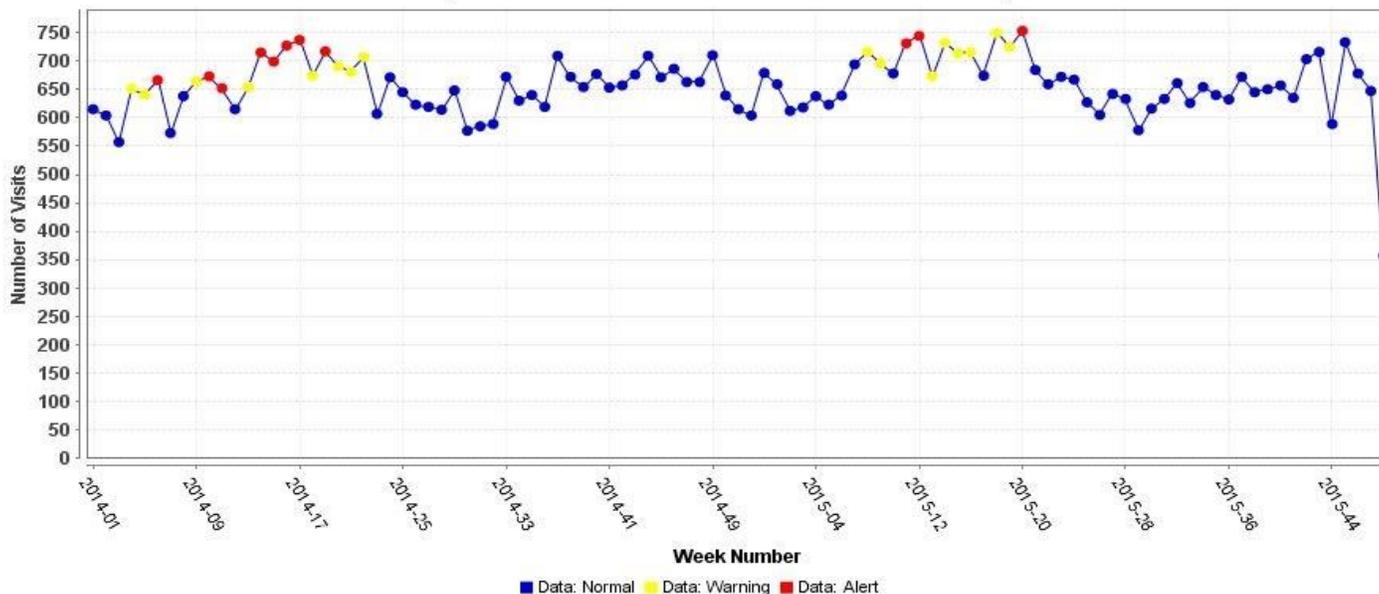


# Gastrointestinal Illness Surveillance

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 November.

**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 - 2015



## Ebola Virus Disease Update

### Current Statistics:

	Cases	Deaths
Guinea	3,804	2,536
Liberia*	10,675	4,808
Sierra Leone**	14,122	3,955
Total	28,601	11,299

Case count as of December 1, 2015

The U.S., Nigeria, Senegal, Spain, Mali, and U.K. previously reported cases but have since been declared Ebola-free. \* Liberia was declared Ebola-free on May 9, 2015. Following the declaration, 6 new cases were identified, including 2 deaths. On September 3, 2015, WHO again declared Liberia free of Ebola virus transmission. Three confirmed cases of Ebola were reported from Liberia in the week of November 22 \*\*On November 7, 2015, WHO declared Sierra Leone free of Ebola virus transmission after 42 days (two incubation periods) had passed since the last patient tested negative.

The Florida Department of Health continues to encourage healthcare providers and hospitals to prepare for an Ebola case in Florida.

**The latest FDOH guidance on Ebola Virus Disease can be found at the following link:**

<http://www.floridahealth.gov/diseases-and-conditions/ebola/index.html>

## Disease Incidence Table-Seminole County

Selected Diseases/Conditions Reported to DOH-Seminole	2015 through Week 48	2014 through Week 48	2013 through Week 48	2012–2014 Average through Week 48
Animal Bite to Humans**	21	30	34	26.5
Animal Rabies	5	3	10	5.5
<b>Campylobacteriosis</b>	49	28	31	37.5
<b>Chlamydia</b>	1,497	1,313	1,291	1,358.0
Cryptosporidiosis	7	10	8	7.8
Cyclosporiasis	1	3	1	1.5
Dengue	2	2	2	2.3
E. coli Shiga toxin-producing	7	12	7	8.8
Giardiasis	14	14	9	13.8
<b>Gonorrhea</b>	349	273	280	306.8
Haemophilus influenzae (invasive)	0	3	10	3.5
Hepatitis A	0	3	0	2.0
<b>Hepatitis B (acute and chronic)</b>	78	61	45	62.0
<b>Hepatitis C (acute and chronic)</b>	445	328	284	348.0
<b>Hepatitis B in Pregnant Women</b>	5	1	4	3.8
<b>HIV*</b>	51	36	45	40.5
Lead poisoning	3	5	3	5.0
<b>Legionellosis</b>	10	5	10	7.8
Lyme Disease	3	4	4	3.5
Meningococcal Disease	1	1	1	1.0
Pertussis	12	18	8	12.3
Salmonellosis	91	101	77	91.0
Shigellosis	17	45	4	27.0
S. pneumoniae – drug resistant	3	5	12	6.5
<b>Syphilis</b>	98	76	55	68.5
Tuberculosis	2	6	5	5.0
Varicella	10	11	20	14.0

- \* 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. AIDS data is current through March 2015.
- \*\* 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

### ADDRESS

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