

Epidemiology Program • www.seminolecohealth.com

Hepatitis Awareness

Hepatitis, or inflammation of the liver, is often caused by a virus. The liver is a vital organ that processes nutrients, filters blood, and fights infections. When the liver is inflamed or damaged, its function can be affected. Heavy alcohol use, toxins, some medications, and certain medical conditions can cause hepatitis. In the United States the most common types of viral hepatitis are hepatitis A, hepatitis B, and hepatitis C. Many people with hepatitis do not have symptoms and

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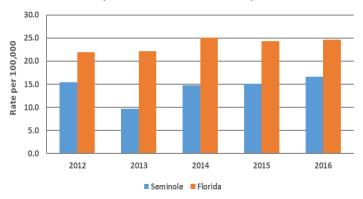
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do not know they are infected. If symptoms do occur with an acute infection, they can appear from 2 weeks to 6 months after exposure. Symptoms of chronic viral hepatitis can take decades to develop. Symptoms of hepatitis can include: fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, grey-colored stools, joint pain, and jaundice.

Seminole County

As of 2017 approximately 385 new cases of both chronic hepatitis B and chronic hepatitis C combined were reported in Seminole County. The Florida Department of Health in Seminole County (DOH-Seminole) in partnership

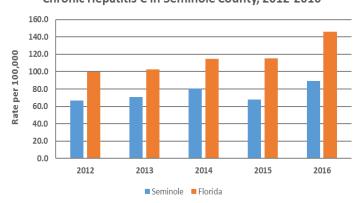
Chronic Hepatitis B in Seminole County, 2012-2016



with Shepherd's Hope offered free hepatitis testing and vaccines on May 31, 2018.

On May 24, 2018, DOH-Seminole, in partnership with Gilead Sciences, Inc. hosted a lunch and learn entitled, *Introduction to Hepatitis C, HCV Can Be Cured, Your Role in Screening and Linking HCV Patients to Care.*

Chronic Hepatitis C in Seminole County, 2012-2016



Data Sources: FL CHARTS/ Centers for Disease Control and Prevention

Arbovirus Surveillance

Seminole County Mosquito-Borne Illness Statistics April through June 2018:

West Nile Virus: 0

Eastern Equine Encephalitis: 1 (horse)

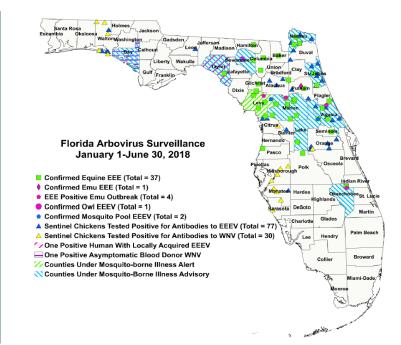
St. Louis Encephalitis: 0

Dengue: 0

Chikungunya: 0

Malaria: 2 travel-related (humans)

Zika Virus: 0



Seminole County Mosquito Control

Seminole	April	May	June
Average Rain	3.28"	7.20"	6.07"
# Traps Set	167	194	180
# Mosquitoes Identified	2766	5479	11,391
Service Requests	82	217	327
Fogging Miles	0	11,135	29,004

Arbovirus Surveillance Resources:

- FDOH Weekly Arbovirus Reports
- FDOH Zika Guidance
- CDC Zika Guidance for Healthcare Providers

Amoeba Awareness

In the United States, the majority of ameba infections have been caused by *Naegleria fowleri* a heat loving, free-living single celled ameba commonly found in fresh bodies of water primarily located in southerntier states. Although the infection is rare, they commonly occur mainly during the summer months of July, August, and September. This ameba can be found in multiple places such as lakes and rivers, geothermal water such as hot springs, warm water discharge from industrial plants, naturally occurring hot water sources, swimming pools that are poorly maintained/minimally-chlorinated, water heaters, and soil. This ameba grows when temperatures are as high as

115° F.

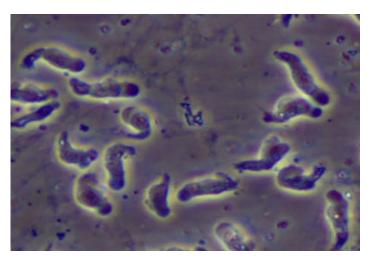
It is important to note that you cannot get infected from drinking contaminated water, only when the contaminated water enters and travels through the nose. This can occur through diving, splashing, and submerging ones head in fresh water or cleansing their noses during religious practices and when irrigating sinuses using contaminated tap water. Initial symptoms include headache, fever, nausea, or vomiting and later symptoms can include stiff neck, confusion, lack of attention to people and surroundings, loss of balance, seizures, and hallucinations. After the start of symptoms, the disease progresses rapidly and usually causes death within about 5 days. Infection is rare and typically occurs when people go swimming or diving in warm freshwater places, like lakes and rivers.

Very rarely, infections have been reported when people submerge their heads, cleanse their noses during religious practices, or irrigate their sinuses (nose) using contaminated tap or faucet water. The associated fatality rate is over 97%, with only 5 out of 143 infected individuals in the United States from 1962-2016 who have survived. Currently, there are no methods that accurately and reproducibly measure the number of amebae in water.

More than half of all infections occur in both Florida and Texas. It is important to take precaution when being in a potentially infected area by wearing nose plugs to prevent or limit the amount of water going up the nose. Although most cases of primary amebic meningoencephalitis (PAM) caused by *Naegleria fowleri* infection in the United States have been fatal, there have been five well documented survivors. Recently an investigational breast cancer and antileishmanial drug, miltefosine, has shown promise in combination with some other drugs in treating ameba infection. Miltefosine has shown ameba killing activity against free-living amebae, including *Naegleria fowleri*, in the laboratory. Miltefosine has also been used to successfully treat patients infected with *Balamuthia* and disseminated *Acanthamobea* infection.

Where Amoebas Can Be Found:

- Warm lakes, ponds, and rock pits
- Mud puddles
- Warm, slow-flowing rivers, especially those with low water levels
- Untreated swimming pools and spas
- Untreated well water or untreated municipal water
- Hot springs and other geothermal water sources
- Thermally polluted water, such as runoff from power plants
- Aquariums
- · Soil, including indoor dust



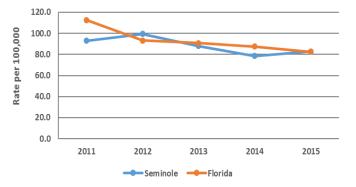
Data Sources: Centers for Disease Control and Prevention

Men's Health Month

Aside from skin cancer, prostate cancer is the most common cancer among men in the United States. It is also one of the leading causes of cancer death among men of all races. The prostate is part of the male reproductive system, located just below the bladder and in front of the rectum. As a man ages, the prostate increases in size.

Prostate cancer is caused by changes in the DNA of a normal prostate cell. Some gene mutations can be passed down from generation to generation and are inherited. These inherited genes cause about 5% to 10% of prostate cancers. However, all men are at risk for prostate cancer. Nearly 13 in 100 men will get prostate cancer during their lifetime and about 2 to 3 men will die from prostate cancer. The greatest risk factor is age. The older a man is, the greater the chance of getting prostate cancer. Other factors that increase one's chances of developing prostate cancer are, if they are African American, or if one has a family history of having the disease.

Age-Adjusted Prostate Cancer Incidence in Seminole County, 2011-2015



Symptoms vary among those with prostate cancer and some men do not have symptoms at all. Symptoms can include:

- Difficulty starting urination
- Weak or interrupted flow of urine
- Frequent urination-especially at night
- Difficulty emptying the bladder completely
- Pain or burning during urination
- Blood in the urine or semen
- Pain in the back, hips, or pelvis that doesn't go away
- Painful ejaculation

For those who are concerned about getting prostate cancer, screening is available for them. In 2018, the U.S.

Preventive Services Task Force (USPSTF) made the following recommendations about prostate cancer screening: Men who are 55 to 69 years old should make individual decisions about being screened for prostate cancer with a prostate specific antigen (PSA) test. Before making a decision, men should talk to their doctor about the benefits and harms of screening for prostate cancer and men who are 70 years old should not be screened for prostate cancer routinely.

Treatments for those with prostate cancer include:

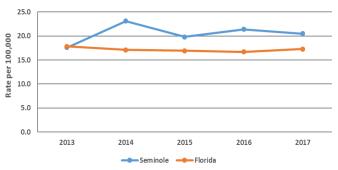
- Close monitoring and follow up visits
- Surgery
- Chemotherapy
- Cryotherapy
- Hormonal therapy
- Radiation

However, it is best to talk with your doctor when deciding what treatment would work best for you.

Seminole County

June is Men's Health Month and the Florida Department of Health in Seminole County (DOH-Seminole) offers affordable health screenings, including labs, consultations, and referrals for men. Getting screening tests is one of the most important things that men can do for their health and to help them live longer lives. Screening tests can help doctors detect diseases earlier, often before there are symptoms, and when they are easier to treat. For more information please call (407) 665-3700.

Prostate Cancer Deaths in Seminole County, 2013-2017



Data Sources: FL CHARTS/ Centers for Disease Control and Prevention

Disease Incidence Table-Seminole County

Selected Diseases/Conditions Reported to DOH-Seminole	2018 Jan-June	2017 Jan-June	2016 Jan-June	2016–2018 Average
AIDS	15	17	26	28.0
Campylobacteriosis	26	33	30	29.6
Chlamydia	93	73	95	87.0
Cyclosporiasis	0	0	2	0.6
Dengue	0	1	4	1.6
E. coli Shiga toxin-producing	4	2	3	3.0
Giardiasis	5	7	8	6.6
Gonorrhea	24	29	43	32.0
Haemophilus influenzae (invasive)	3	3	1	2.3
Hepatitis A	2	0	0	0.6
Hepatitis B (acute and chronic)	38	30	54	40.6
Hepatitis B in Pregnant Women	3	1	0	1.3
Hepatitis C (acute and chronic)	170	190	232	197.3
HIV	54	37	80	50.0
Lead poisoning	43	17	7	22.3
Legionellosis	4	5	6	5.0
Pertussis	1	3	4	2.6
Rabies , Possible Exposure	73	33	39	48.3
Salmonellosis	42	29	33	34.6
Shigellosis	7	14	2	7.6
S. pneumoniae – drug resistant	3	4	0	2.3
Syphilis	53	47	49	49.6
Tuberculosis	5	3	0	2.6
Varicella	11	18	6	11.6
Zika Virus, Non-Congenital	3	3	17	7.6

^{***}The disease was not reported in the year.



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> or Contact the Division of Epidemiology at 407-665-3266.

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 Disease Lists:

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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