

EPI SCOPE

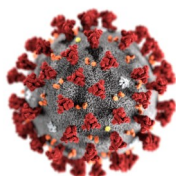
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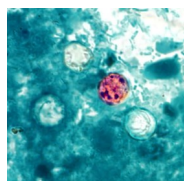
Seminole County Highlights



Of all eligible Seminole County residents, **60%** have received at least one dose of a COVID-19 vaccine.



COVID-19 cases are increasing in Seminole County. For more information, view the weekly COVID-19 report on the [COVID-19 website](#).



Cyclosporiasis ("Cyclo") cases are increasing in Seminole County. Cyclo season is from May to August every year. [Learn about this parasite, symptoms and how to diagnose and treat it.](#) Cyclo is reportable to your county health department upon diagnosis.

Carbon Monoxide Poisoning from Generator Use During Hurricane Season

by Taylor Kwiatkowski, MPH

Hurricane season has started, running from June 1st to November 30th, and it is important for Seminole County residents to prepare if a hurricane comes to the area. When power outages occur, generators, grills, or other gasoline, propane, natural gas, or charcoal-burning devices may be used to provide alternative sources of fuel or electricity. Improper use of these devices can cause carbon monoxide (CO) to build up inside of the home and poison the people and animals inside. The Florida Department of Health (FDOH) reported 791 cases of CO poisoning between the 2016 and 2020 hurricane seasons. Of those cases, 422 (53%) cases were associated with generator use, with 347 (82%) of the generator-associated cases occurring during Hurricane Irma in 2017.



CO is an odorless, colorless, poisonous gas that can cause sudden illness and death if sufficient concentration is present in the ambient air. Clinical presentation of CO poisoning varies depending on duration of exposure and magnitude, and can include headache, lethargy, dizziness, weakness, and altered mental status. Severe CO poisoning symptoms include dyspnea, tachycardia, ataxia, hypotension, seizures, and death. CO poisoning results in systemic toxicity, wherein poisoning impairs oxygen delivery and disrupts oxygen utilization and respiration at the cellular level, particularly in organs which are highly demanding for oxygen (i.e., the brain and heart).

Diagnosis of CO poisoning is completed based on exposure history, physical findings, and measuring the patient's carboxyhemoglobin (COHb) level. A COHb level test can be performed on whole blood or with a pulse oximeter. A COHb level above 2% for non-smokers and 9% for smokers strongly supports CO poisoning. COHb levels do not correlate well with severity of illness, outcomes, or response to therapy, making it important to assess clinical symptoms and history of exposure while formulating treatment plans. Treatment for CO poisoning includes placing the patient on 100% oxygen until symptom-free (usually about 4-5 hours) and serial neurologic exams to assess progress and to monitor for signs of cerebral edema. If the patient's COHb levels are 25-30% or higher, there are signs of cardiac involvement, or neurologic impairment, hyperbaric oxygen therapy may be considered.

Practicing safe generator use is the most important way to prevent generator-associated CO poisonings. The Centers for Disease Control and Prevention (CDC) and FDOH recommend using generators a minimum of 20 feet away from your home, doors, and windows, and to never use them inside the home or garage. Additionally, battery-operated CO detectors can be installed and regularly checked near each sleeping area of the home. **For any questions about CO poisoning or to report a suspected CO case, contact the Florida Department of Health in Seminole County (DOH-Seminole) Epidemiology Program at 407-665-3243. For medical questions, contact Florida Poison Control Centers at 800-222-1222.**

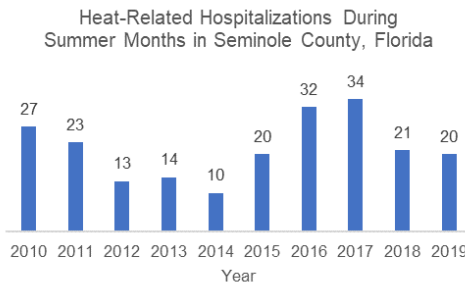
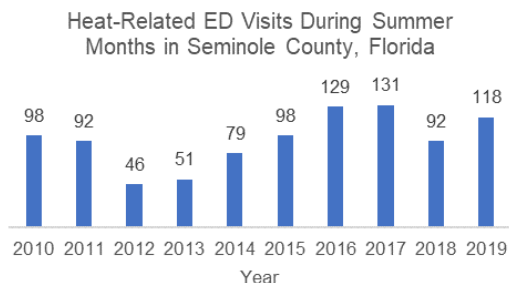
Sources: [CDC: Clinical Guidance for CO Poisoning](#); [CDC: Generator Safety Fact Sheet](#); [Florida CHARTS](#)

EXTREME HEAT EVENTS & HEAT-RELATED ILLNESS AWARENESS

by Tyler Weston, MPH

Extreme heat events are common and can pose a serious danger to people, especially during the summer months (May-September). Due to its geographic vulnerability and mostly subtropical climate, Florida is susceptible to extreme heat events, affecting both human and natural systems. The rise in extreme heat events can result in illnesses such as heat stroke, heat exhaustion, heat cramps, and heat rashes. Symptoms of heat-related illness (HRI) vary, and can range from headache, dizziness, sweating, and nausea as seen with heat stroke and heat exhaustion, which require immediate medical attention, to red clusters of blisters on the skin, often seen with heat rash. Among those at greatest risk for HRI are older adults, very young children, people with underlying medical conditions, and even healthy people who exercise or work in hot weather conditions.

In Seminole County, the average annual number of emergency department (ED) visits for HRI from 2010 to 2019 during summer months was approximately 93.4 visits. A similar pattern was seen with heat-related hospitalizations during the same period. The average annual number of hospitalizations for HRI was approximately 21.4 hospitalizations. Only two heat-related deaths were recorded in Seminole County, one in 2010 and the other in 2017.

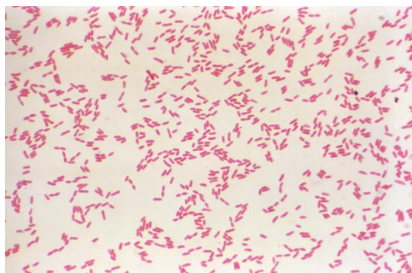


HRIs and heat-related deaths are preventable. It is important that health care providers recognize and understand the differences in the types of HRI, as well as how to manage patients who present with HRI symptoms. Health care providers must also be aware of the populations who are at greatest risk for HRI and identify which treatment is best. Lastly, it is crucial that health care providers educate patients on HRI warning signs, management, and preventative measures. For more information on HRI and prevention, please visit the CDC's webpage on [Extreme Heat](#).

References: [CDC Extreme Heat](#); [FDOH Health Effects of Summer Heat in Florida](#); [FDOH Public Health Tracking System - Heat-Related Events](#)

CDC ADVISORY: THREE NON-TRAVEL ASSOCIATED MELIIDOSIS CASES

by Carley Robinson, MPH, CPH



Microscopic view of *Burkholderia pseudomallei*. Courtesy of CDC

Melioidosis, which is sometimes referred to as Whitmore's disease, is a rare infection of a bacterium called *Burkholderia pseudomallei*. In March 2021, three cases, (one male and two females; one pediatric case) were reported in Texas, Kansas, and Minnesota. One of these cases was fatal. Notably, none had a history of travel outside of the United States. These cases presented with a range of symptoms including shortness of breath, cough, intermittent fever, rash, and encephalitis. The investigation is ongoing but the cases are believed to be linked to a common point-source which has not yet been identified.

Typically, U.S. cases are linked to travel to areas where melioidosis is endemic, particularly Southeast Asia and northern Australia. Person-to-person transmission is rare, and exposure usually occurs by inhaling contaminated water droplets or dust particles, through ingestion of contaminated food, or exposure to contaminated soil. Around a dozen cases are identified in the U.S. each year. Signs and symptoms vary widely and are non-specific, which often leads to delayed diagnosis. Because *B. pseudomallei* is readily found in natural environments in some parts of the world, can cause severe disease, and is closely related to other bioterrorism weapons, it has been identified as a select agent that could be used in bioterrorism attacks.

In healthcare settings, laboratory personnel can be at risk when performing procedures that may aerosolize *B. pseudomallei*. Other healthcare workers should use precautions when administering percutaneous injections to patients with Melioidosis.

If a patient is suspected to have Melioidosis, please contact DOH-Seminole immediately. The epidemiology team is available 24/7 and can be reached at 407-665-3243 Monday-Friday, from 8 a.m.-5 p.m. or at 407-665-3000, option 1, in the evenings, on weekends, or holidays. The full health advisory, including healthcare provider recommendations and patient treatment, can be found on the [CDC Health Alert Network website](#).

Mission:

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



Ron DeSantis
Governor

Scott A. Rivkees, MD
State Surgeon General

Vision: To be the Healthiest State in the Nation

July 6, 2021

Dear Colleague:

As Florida approaches the warm summer months when swimming activities are more common and when the majority of the primary amebic meningoencephalitis (PAM) cases are diagnosed, the Florida Department of Health would like to remind physicians to consider the diagnosis of PAM in any patient presenting with symptoms of meningitis and a history of exposure to fresh water. The infections include those caused by *Naegleria fowleri*, *Balamuthia mandrillaris* and *Acanthamoeba* species. Physicians who suspect they have a patient with an infection due to free-living amoebae are directed to contact the Centers for Disease Control and Prevention (CDC) **immediately** at 770-488-7100. Confirmatory testing or laboratory evidence of a free-living amoebae infection is not a prerequisite for contacting CDC. CDC physicians will offer direct consultation services including guidance regarding specimen collection, shipping instructions and treatment recommendations.

There have been 148 reported cases of PAM from 1962–2019 nationally with four known survivors. The aggressive treatment regimens for three of the survivors included miltefosine, which is available commercially (www.impavido.com).

Amebic encephalitis is a reportable disease in Florida per Florida Administrative Code Rule 64D-3.029 and any suspected case needs to be reported to the county health department or the Department's Bureau of Epidemiology at 850-245-4401 immediately. Early diagnosis, reporting and consultation are critical factors for the effectiveness of any medical treatment regimen. Thank you for your help in keeping our communities safe and healthy.

Sincerely,

Carina Blackmore, DVM, PhD, Dipl ACVPM
Director
Division of Disease Control & Health Protection
State Epidemiologist

SEMINOLE COUNTY MONTHLY SURVEILLANCE DATA

Confirmed and probable cases of select notifiable diseases as per 64D-3, Florida Administrative Code

These data are provisional and subject to change.

Disease	Seminole Monthly Total		Year to Date Total		Seminole County Annual Totals		
	June 2021	June 2020	Seminole 2021	Florida 2021	2020	2019	2018
A. Vaccine Preventable							
Measles	0	0	0	0	0	0	0
Mumps	0	0	0	3	0	1	0
Pertussis	0	0	0	28	10	6	4
Varicella	0	3	6	165	18	24	17
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	0	0	0	5	0	1	1
Meningitis (Bacterial, Cryptococcal, Mycotic)	0	0	0	38	1	2	3
Meningococcal Disease	0	0	0	10	0	0	0
C. Enteric Infections							
Campylobacteriosis	2	4	23	1834	38	75	59
Cryptosporidiosis	0	0	1	147	4	4	1
Cyclosporiasis	0	1	0	26	6	25	1
<i>E. coli Shiga Toxin (+)</i>	0	0	20	227	6	7	9
Giardiasis	1	0	5	276	16	14	18
Hemolytic Uremic Syndrome (HUS)	0	0	0	3	0	0	0
Listeriosis	0	0	0	17	0	0	0
Salmonellosis	6	6	38	2068	59	120	121
Shigellosis	0	0	2	207	12	22	17
D. Viral Hepatitis							
Hepatitis A	0	0	0	127	10	48	30
Hepatitis B in Pregnant Women	0	0	1	179	2	13	4
Hepatitis B, Acute	2	0	7	240	8	16	16
Hepatitis C, Acute	2	3	9	654	24	15	6
E. Vectorborne/Zoonoses							
Animal Rabies	0	2	0	40	7	2	1
Rabies, possible exposure	9	9	41	1769	135	180	134
Chikungunya Fever	0	0	0	2	0	0	1
Dengue	0	0	0	0	0	5	0
Eastern Equine Encephalitis	0	0	0	0	0	0	0
Lyme Disease	0	0	0	53	3	4	3
Malaria	1	0	1	13	0	3	4
West Nile Virus	0	0	0	1	0	0	0
Zika Virus Disease	0	0	0	0	0	0	1
F. Others							
Chlamydia	207	176	767	n/a*	1745	1994	1978
Gonorrhea	67	66	279	n/a*	592	619	646
Hansen's Disease	0	0	0	6	0	0	1
Legionellosis	0	0	4	214	13	8	16
Mercury Poisoning	0	0	0	7	0	0	0
Syphilis, Total	15	20	108	n/a*	151	149	132
Syphilis, Infectious (Primary and Secondary)	6	4	37	n/a*	51	46	35
Syphilis, Early Latent	3	11	34	n/a*	61	55	63
Syphilis, Congenital	0	0	0	n/a*	1	0	2
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	6	5	37	n/a*	38	48	32
Tuberculosis	0	0	2	n/a*	0	0	0
<i>Vibrio Infections</i>	1	0	1	107	5	2	2

*n/a—Data not available

Florida Department of Health in Seminole County

400 W Airport Blvd, Sanford, FL 32773
Phone: 407-665-3000

Donna Walsh, MPA, BSN, RN
Health Officer

Ana Scuteri, MPH
Community & Population Health Director

Sarah Alvarez Wright, MPH, BSN
Executive Community Health Nursing
Director

Dr. Meena Joseph, MD
Medical Director

Udgit Mehta, MBA, FCCM
Business & Community Relations Director

Epi Scope Staff

Kevin Baker, MPH, CPH, CHES
Epi Scope Editor
Epidemiology Program Manager

Maria Bermudez, MS
Carley Robinson, MPH, CPH
Keisha Nauth, MPH

Tara Rao, MS, MS

Tyler Weston, MPH

Taylor Kwiatkowski, MPH
Epidemiology Program Staff & Contributors

Disease Reporting

Epidemiology Program
COVID-19 Phone: 407-665-3000, option 1
Non-COVID-19 Phone: 407-665-3243
Fax: 407-845-6055

**Afterhours Urgent Disease
Reporting and Consultations**
Phone: 407-665-3000, option 1

Tuberculosis Program
Phone: 407-665-3243
Fax: 407-665-3279

STD Program
Phone: 407-665-3384
Fax: 407-845-6134

HIV/AIDS Program
Phone: 407-723-5065
Fax: 407-858-5985

Questions?

Email:
DiseaseControlSeminole@FLHealth.gov

ADDITIONAL INFORMATION AND RESOURCES

Florida Department of Health Websites

[Florida Department of Health](#)

[Florida Department of Health in Seminole County](#)

General Public Health Surveillance & Data Resources

[Florida Statewide Weekly Influenza Surveillance Report—Flu Review](#)

[CDC U.S. Weekly Influenza Surveillance Report—FluView](#)

[Florida Health CHARTS—Public Health Data](#)

[Agency for Health Care Administration Data](#)

COVID-19 Surveillance & Data Resources

[Florida Department of Health—COVID-19 Data and Information](#)

[CDC—U.S. COVID-19 Data](#)

[World Health Organization—Nationwide COVID-19 Data](#)

Practitioner Resources

[Florida Department of Health Practitioner Disease Report Form](#)

[Florida Department of Health—Report Food and Waterborne Illness](#)

Health Alerts and Advisories

- [CDC Travel Health Notices](#)
- [FDA Food Recalls](#)

Epi Scope Information

The Epi Scope is a monthly newsletter provided at no cost to consumers to share epidemiological data and trends, public health and health care guidance and current events to Seminole County stakeholders.

To subscribe to the Epi Scope distribution list, please visit the Florida Department of Health in Seminole County [Epi Scope webpage](#).

