

Summer  
2016

Florida Department of Health  
Volusia County

Office of Disease Control  
and Health Protection

# EPI-LOG



## Disease Control

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### To report a disease or outbreak:

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## Ciguatera Toxicity

We have investigated two outbreaks of ciguatera toxicity in Volusia County residents in 2016. Ciguatera fish poisoning occurs after eating reef fish contaminated with ciguatoxin. This toxin is produced by dinoflagellates which are consumed by fish and the toxins are concentrated in the muscle tissue, organs, and fat. Fish that are most likely to cause ciguatera poisoning are carnivorous reef fish, including barracuda, grouper, moray eel, amberjack, sea bass, or sturgeon. Omnivorous and herbivorous fish such as parrot fish, surgeonfish, and red snapper can also be a risk.



Typical ciguatera poisoning results in a gastrointestinal illness and may also cause neurologic symptoms. Although rare, cardiovascular collapse may result. The first symptoms generally include nausea, vomiting, diarrhea, and abdominal pain, followed by neurologic symptoms such as parasthesias, pain in the teeth, and temperature reversal. Onset can be as quickly as one hour after ingestion and is usually within 24 hours. Neurologic symptoms usually last a few days to several weeks. The

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diagnosis of ciguatera poisoning is based on the clinical signs and symptoms and a history of eating species of fish that are known to carry ciguatera toxin. There is no specific antidote for ciguatoxin poisoning.



Treatment is generally symptomatic and supportive care. In uncontrolled studies intravenous mannitol has been reported to reduce the severity and duration of neurologic symptoms, particularly if given within 48 hours of the onset of symptoms.

Prevention is by avoiding or limiting consumption of the fish noted above especially if they weigh less than six pounds. Never eat high-risk fish such as barracuda or moray eel. Remember that ciguatera toxins do not affect the texture, taste, or smell of fish, and they are not destroyed by gastric acid, cooking, smoking, freezing, canning, salting, or pickling.

For more information go to: <http://www.floridahealth.gov/environmental-health/aquatic-toxins/ciguatera-fish-poisoning.html>

## Disease Intervention Specialists

Public health and medical professionals have made enormous progress in prevention and treatment of HIV. But there's much more to be done. HIV remains a priority public health issue, both in the United States and around the world. STD prevention and control programs play an important role.



Fortunately, health departments across the country are staffed with passionate, proactive disease intervention specialists (DIS) going above and beyond to prevent and identify HIV infection and to ensure that people are able to access care. DIS are public health professionals who work in the community to track people diagnosed with reportable diseases, like STDs and HIV. DIS work to find new cases of the disease and prevent new ones from happening.

Originally established to work in the field of STD prevention, their ground-level investigative skills have become key components of other public health programs. DIS receive extensive training on essential investigative skills such as communication, interviewing, and case analysis.

Here are a few statistics regarding STDs in 2016. One in eight people in the U.S. who have HIV don't know it. \$1.5 billion is the cost of new HIV cases every year that can be attributed to STDs. Also, 8,400 is the number of new HIV cases every year that are identified by STD clinics. These factors are contributing to rising STDs in the U.S. and Florida. DIS are working vigilantly to help reduce the spread of infection.

For more information on DIS:

<http://www.ncsddc.org/blog/becoming-disease-intervention-specialist-do-you-realize-what-it-takes>

For more information on STDs: <http://www.cdc.gov/std/default.htm>

## Hurricane Season

Hurricane season officially begins on June 1, with September generally considered the peak month of the season. Hurricane season lasts from June 1 until November 30. Over the last several years, it has remained relatively quiet as Florida has been fortunate enough to avoid any storms. That being said, family and self-preparedness should remain a number one concern and goal for all. Taking small initiatives and working towards becoming more knowledgeable and prepared for natural disasters such as hurricanes, can help save lives in the future.

One smart step to prepare would be to gather all immediate family and discuss evacuation plans, critical items that must come with the family in case of evacuation, and plans for those of the family that may have medical or special needs. Every family should compose a Go-Kit. This is a bag or suitcase that has family essentials. Items going into the kit should be last at least 72 hours post-disaster/emergency. To ensure that you have enough, consider the size of the family and plan and pack accordingly. Items to consider are water bottles, non-perishable food, a basic first-aid kit, general medicine or any medication that is urgent to any specific family member. Other essentials to include in the family Go-Kit are a flashlight with extra batteries, personal hygiene items, and a map of the local area to help keep those involved oriented to the area's surroundings. One important detail to bring up when discussing emergency situations with your family is an alternative meeting place. Once disaster strikes, it typically brings chaos and frenzy. Families may unintentionally get separated. It is important to discuss with family members at least two alternate meet-up locations. This way if separation does occur, loved ones know where to go to reunite with other family members.



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Disasters like hurricanes can hit with little to no warning. Be sure that your family is prepared. Sit down with your family and discuss different options and make it a point to organize and assemble a Go-Kit. These steps can save lives and raise awareness in the midst of a natural disaster. For more information go to: <http://www.floridahealth.gov/programs-and-services/emergency-preparedness-and-response/prepare-yourself/index.html>

Volusia County Disease Activity*	2nd Quarter 2016	2nd Quarter 2015	YTD 2016 (Jun 30)	Full Year 2015
<b>Vaccine Preventable</b>				
Mumps	0	0	0	0
Pertussis	0	0	0	2
Varicella	0	4	0	16
<b>CNS Diseases and Bacteremias</b>				
Creutzfeldt-Jakob disease (CJD)	0	0	0	0
Haemophilus influenzae (invasive)‡	20	1	22	3
Meningitis (bacterial, cryptococcal, mycotic)	0	1	0	1
Meningococcal disease	0	0	0	1
Staphylococcus aureus (GISA/VISA)	0	0	0	0
Streptococcus pneumoniae (invasive disease)‡	18	2	24	9
<b>Enteric Infections</b>				
Campylobacteriosis	17	26	36	75
Cryptosporidiosis	3	7	8	37
Cyclosporiasis	0	0	0	1
Escherichia coli, shiga-toxin producing (STEC)	4	1	8	7
Giardiasis	8	5	13	17
Listeriosis	1	1	1	1
Salmonellosis	31	26	51	154
Shigellosis	5	3	13	13
Typhoid Fever	0	0	0	0
<b>Viral Hepatitis</b>				
Hepatitis A	0	0	0	0
Hepatitis B, acute	2	3	5	11
Hepatitis B, chronic	23	19	42	88
Hepatitis C, acute	0	1	6	4
Hepatitis C, chronic	285	182	468	788
Hepatitis E	0	0	0	0
Hepatitis +HBsAg in pregnant women	0	2	1	3
<b>Vector Borne, Zoonoses</b>				
Brucellosis	0	0	0	1
Chikungunya	0	0	0	5
Dengue Fever	0	0	0	0
Ehrlichiosis/Anaplasmosis	1	2	1	3
Lyme disease	1	0	1	8
Malaria	0	0	0	0
Monkey bite	0	0	0	0
Q Fever, acute	0	0	0	0
Rabies, animal	0	0	1	3
Rabies (possible exposure)	35	47	72	146
Rocky Mountain spotted fever/Spotted Fever Rickettsiosis	0	2	1	6
West Nile virus, neuroinvasive	0	0	0	1
Zika virus disease	2	0	2	0
<b>HIV/AIDS†</b>				
HIV	21	28	55	123
AIDS	13	9	20	36
<b>STDs†</b>				
Chlamydia	662	501	1268	2064
Gonorrhea	210	148	400	652
Syphilis				
Infectious (Primary and Secondary)	14	5	21	21
Early latent (Infection for <1 year)	19	4	37	21
Late latent (Tertiary)	8	5	13	17
Latent, unknown duration	0	0	0	5
<b>Others</b>				
Carbon monoxide poisoning	7	6	16	30
Ciguatera Fish Poisoning	0	0	0	0
Hansen's Disease (Leprosy)	0	0	0	2
Hemolytic Uremic Syndrome	0	0	0	0
Influenza due to novel or pandemic strains	0	0	0	0
Influenza-associated pediatric mortality	0	0	0	0
Lead poisoning	7	0	10	16
Legionellosis	3	0	5	2
Pesticide related illness or injury	0	0	0	0
Tuberculosis	-	-	4	8
Vibriosis	3	1	3	1

\*Includes reported confirmed/probable cases. Data is provisional and subject to change. † Numbers are for Area 12 (Volusia/Flagler) ‡ Only reportable for young children

## Hand, Foot, and Mouth Disease

With schools in session and the weather beginning to turn cooler, it is not unusual to see individual cases and even outbreaks of hand, foot, and mouth disease. The disease is caused by several different viruses and is typically seen in children. However older children and adults can also be affected. The symptoms are blisters on the mouth, fingers, hands and feet and typically last about a week. It can also show up with cold like symptoms. It is highly contagious and the virus can be shed for weeks through the respiratory tract and months in the feces. Spread is through contact with respiratory droplets or indirectly through contact with surfaces contaminated with the viruses. Many children can shed the virus without every showing symptoms. The disease can be prevented by teaching children proper cough/sneeze etiquette, not sharing toys or having close contact with others while infected, and as with many other diseases practicing proper and effective hand hygiene at every opportunity. There is no specific treatment, only treatment of symptoms. Typically with hand, foot, and mouth disease, children should be excluded from group settings only if they cannot participate in normal activities due to their illness. Exclusion has not been shown to reduce disease spread because of the asymptomatic carriage and spread. The decision to exclude should be made on an individual basis. Infected persons do develop lifelong immunity to the particular virus that caused their illness, but because several different viruses can cause it, they can be re-infected. Hand, foot, and mouth disease is not reportable to the state of Florida so no incident data is available. Note that hand, foot, and mouth disease is completely different from the foot and mouth disease seen in animals. For more information go to: <http://www.cdc.gov/Features/HandFootMouthDisease/index.html>



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