FLORIDA DEPARTMENT OF HEALTH IN PINELLAS COUNTY

EPI WATCH

Monthly Epidemiology Newsletter

June 2019

Florida Department of Health in Pinellas County
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Division of Disease Control and Health Protection

Disease Reporting

To report diseases and clusters of illness:

Phone: (727) 824-6932

Fax: (727) 484-3865 (excluding HIV/AIDS)

To report HIV/AIDS by mail: Surveillance Room 3-138

205 Dr. MLK Jr St. N

St. Petersburg, FL 33701

Follow us:
@HealthyPinellas

New CDC Phone App for Health Care Providers

Health care providers can now easily access all CDC recommended immunization schedules!

Click here to read more and download the app.

Cryptosporidiosis

By: Rachel Steele, MPH, CPH

Cryptosporidiosis is a gastrointestinal illness caused by the parasite, *Cryptosporidium* (Crypto), which causes diarrhea, stomach cramps, nausea and vomiting. The parasite can live in the small intestine of humans and animals, and is spread when an infected person or animal sheds the parasite's oocysts (similar to an egg) in their poop. The oocyst-containing poop can contaminate surface water, soil, food, and surfaces, and when a different individual ingests the oocysts that person can then become infected[1].

Crypto is the most common cause of waterborne illness in the United States. In Florida, Crypto is commonly spread through water parks and other recreational water sources. Since January, Pinellas County has reported 22 confirmed cases, which is double of what was reported last year during this time.

Alcohol-based sanitizers do not kill Crypto, and the parasite can even survive in recreational water maintained at the appropriate chlorine and pH level for over 10 days. A person sick with Cryptosporidiosis can shed the parasite for up to two weeks after symptoms (usually diarrhea) subside. Making good swimming hygiene, such as showering with soap, and ensuring symptomatic individuals avoid public water areas two weeks after diarrhea stops are two important steps to preventing the spread of Crypto[1]. Additionally, thoroughly washing and cooking produce and washing hands thoroughly after using the bathroom and can help prevent infection with Crypto.

For more information about* Cryptosporidium*, please visit:
https://www.cdc.gov/parasites/crypto/general.html

References:
[1]Centers of Disease Control and Prevention (CDC). Parasites- *Cryptosporidium* (also known as "Crypto"). Webpage: https://www.cdc.gov/parasites/crypto/index.html. Accessed on June 2019.

Update: Hepatitis A in Pinellas County

Hepatitis A cases continue to increase in Pinellas County since January 2018. Florida has reported a total of 1,373 cases in 2019, where 262 (19%) of those cases are from Pinellas County.

Pinellas has identified some common risk factors across cases, including: anyone who has not been vaccinated for hepatitis A, those who use drugs, homelessness or couch-surfing, men who have sex with men (MSM) and travelers to countries where hepatitis A is common.

An individual can become infected with hepatitis A by touching contaminated surfaces, eating/drinking contaminated products, close contact with a person who has hepatitis A and through the fecal-oral route. The best way to prevent hepatitis A is to practice proper hand hygiene and vaccination. The Florida Department of Health in Pinellas County continues to offer the two-dose hepatitis A vaccine at no cost (for a limited time) at the following locations:

St. Petersburg
205 Dr MLK JR St N
St Petersburg, FL 33701

Mid-County
8751 Ulmerton Rd
Largo, FL 33771

Pinellas Park
6350 76th Ave N
Pinellas Park, FL 33781

Clearwater
310 N Myrtle Ave
Clearwater, FL 33755

Tarpon Springs
301 S Disston Ave
Tarpon Springs, FL 34689

Primary Amebic Meningoencephalitis

By: Kristine Aviles, DVM, MPH

Primary Amebic Meningoencephalitis (PAM) and Granulomatous Amebic Encephalitis (GAE) are rare, but severe diseases. PAM is caused by *Naegleria fowleri*, a free-living amoeba. *N. fowleri* is found worldwide in warm freshwater such as lakes, rivers and hot springs, as well as in soil. This ameba grows best at higher temperatures up to 115 ºF (46 ºC). Very rarely, people can get infected from other sources such as an inadequately chlorinated pool or contaminated tap water. During summer months, when swimming and other outdoor activities are more common, it is important to consider this disease in patients[1].

Infection often occurs when contaminated water enters the body through the nose. It then travels to the brain to cause PAM which is fatal in over 97% of cases documented. The symptoms of PAM occur in two stages and symptoms progress rapidly. People typically die 1-18 days after symptoms begin. Stage 1 symptoms include severe frontal headache, fever, nausea and vomiting. Stage 2 symptoms are stiff neck, seizures, altered mental status, hallucinations and coma.

Physicians who are treating a person who presents with meningitis like symptoms and has a recent history of fresh water exposure are urged to **contact the CDC immediately** for consultation and treatment recommendations. Physicians should also report the suspected case to the county health department or state health department immediately (see attached letter).

N. fowleri organisms, nucleic acid, and/or antigen can be detected in CSF, biopsy or tissue specimens. For more information regarding testing click here. Consideration based on clinical appearance of patient and exposure history is critical to timely treatment. Miltefosine has been recently used on patients with PAM who have subsequently survived. For more information on this treatment please visit impavido.com.

For more information on these parasites, please visit the following CDC website: https://www.cdc.gov/parasites/naegleria/

References:
[1]Centers of Disease Control and Prevention (CDC). Parasites- *Naegleria fowleri*- Primary Amebic Meningoencephalitis (PAM)- Amebic Encephalitis. Webpage: https://www.cdc.gov/parasites/naegleria/. Accessed on June 2019

Summer Time is Approaching: Learn More About Vibriosis

By: Abdiel E. Laureano-Rosario, PhD

Vibrio bacteria are endemic species that live in our coastal waters. These bacteria are typically in higher concentrations between May and October, where water temperatures are warmer[1]. During this time, we observe higher numbers of vibriosis cases in Florida, as well as Pinellas County[2].

The Centers for Disease Control and Prevention (CDC) estimated over 80,000 illnesses around the United States (U.S.) related to vibriosis. From these, about 52,000 are related to eating contaminated food[1]. The most common species in the U.S. are *Vibrio parahaemolyticus*. Both Florida and Pinellas County mostly report *Vibrio alginolyticus*, followed by *Vibrio parahaemolyticus* and *Vibrio vulnificus*[2].

Most common symptoms when ingesting *Vibrio* bacteria include watery diarrhea, abdominal cramping, nausea, vomiting, fever and chills. These symptoms usually occur within 24 hours of ingestion and can last about 3 days. Individuals who are immunocompromised are more likely to get vibriosis[3]. Also, eating raw seafood and exposing open wounds to salt or braskish water can increases chances of exposure.

To learn more about vibriosis and how to prevent it, please visit: https://www.cdc.gov/vibrio/prevention.html

References:
[1]Centers of Disease Control and Prevention (CDC). Questions and Answers (Vibrio Species). Webpage: https://www.cdc.gov/vibrio/faq.html. Accessed on June 2019.
[2]Based on data from the Florida Department of Health Surveillance System (Merlin).
[3]Centers of Disease Control and Prevention (CDC). Vibrio Species Causing Vibriosis. Webpage: https://www.cdc.gov/vibrio/index.html. Accessed on June 2019.

Health Advisories and Travel Notices

CDC Current U.S. Outbreak List

Global Measles Outbreak Notice

Circulating vaccine-derived poliovirus type 2 (Cameroon)

Select Reportable Diseases in Pinellas County

	Pinellas		YTD Total		Pinellas County Annual Totals		
Disease	**May 2019**	**May 2018**	**Pinellas 2019**	**Florida 2019**	**2018**	**2017**	**2016**
A. Vaccine Preventable							
Measles	**0**	**0**	**1**	**2**	7	0	0
Mumps	**0**	**0**	**1**	**35**	2	2	0
Pertussis	**1**	**2**	**7**	**138**	32	36	18
Varicella	**1**	**2**	**16**	**421**	67	24	74
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	**1**	**0**	**1**	**9**	1	2	2
Meningitis (Bacterial, Cryptococcal, Mycotic)	**0**	**0**	**2**	**32**	9	7	7
Meningococcal Disease	**0**	**0**	**0**	**12**	1	0	0
C. Enteric Infections							
Campylobacteriosis	**25**	**35**	**122**	**1897**	264	207	178
Cryptosporidiosis	**10**	**3**	**22**	**245**	34	40	27
Cyclosporiasis	**0**	**0**	**0**	**9**	4	6	5
E. coli Shiga Toxin (+)	**2**	**1**	**10**	**279**	14	9	4
Giardiasis	**7**	**7**	**26**	**451**	41	45	41
Hemolytic Uremic Syndrome (HUS)	**0**	**0**	**0**	**2**	0	0	0
Listeriosis	**1**	**0**	**1**	**9**	1	0	2
Salmonellosis	**22**	**19**	**49**	**1915**	233	278	188
Shigellosis	**1**	**4**	**8**	**591**	40	26	19
D. Viral Hepatitis							
Hepatitis A	**50**	**5**	**261**	**1363**	113	1	2
Hepatitis B: Pregnant Woman +HBsAg	**1**	**0**	**7**	**154**	14	25	28
Hepatitis B, Acute	**6**	**2**	**33**	**362**	52	51	70
Hepatitis C, Acute	**13**	**6**	**43**	**407**	40	30	49
E. VectorBorne/Zoonoses							
Animal Rabies	**0**	**0**	**0**	**56**	1	3	3
Rabies, possible exposure	**14**	**12**	**55**	**1641**	130	140	131
Chikungunya Fever	**0**	**0**	**0**	**1**	0	0	1
Dengue	**0**	**0**	**1**	**37**	0	0	2
Eastern Equine Encephalitis	**0**	**0**	**0**	**0**	0	0	0
Lyme Disease	**0**	**0**	**3**	**23**	12	17	16
Malaria	**0**	**0**	**3**	**18**	3	0	0
West Nile Virus	**0**	**0**	**0**	**2**	0	0	0
Zika Virus Disease	**0**	**0**	**3**	**38**	2	5	23
F. Others							
Chlamydia	**367**	**440**	**1817**	**n/a**	4422	4188	4133
Gonorrhea	**110**	**144**	**492**	**n/a**	1439	1574	1566
Hansen's Disease	**0**	**0**	**0**	**5**	0	0	0
Legionellosis	**1**	**2**	**8**	**143**	0	0	0
Mercury Poisoning	**0**	**0**	**0**	**9**	0	0	0
Syphilis, Total	**26**	**24**	**146**	**n/a**	438	382	400
Syphilis, Infectious (Primary and Secondary)	**18**	**11**	**70**	**n/a**	190	160	188
Syphilis, Early Latent	**8**	**13**	**72**	**n/a**	158	128	146
Syphilis, Congenital	**0**	**0**	**4**	**n/a**	2	5	2
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	**0**	**0**	**0**	**n/a**	88	89	64
Tuberculosis	**3**	**3**	**12**	**n/a**		28	31
Vibrio Infections	**6**	**0**	**7**	**95**	6	11	8

*YTD up to May 31, 2019. n/a = not available at this time

Reportable diseases include confirmed and probable cases only. All case counts are current and provisional as of **June 10, 2019**. Data is collected from the Merlin Reportable Disease database, surveillance systems maintained at the Florida Department of Health in Pinellas County, and Florida CHARTS http://www.floridacharts.com/charts/default.aspx. STD data in STARS is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.

May 24, 2019

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 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 amebae 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 amebae 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 145 reported cases of PAM from 1962–2018 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 and any suspected case needs to be reported to the county health department or state health department (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
Division of Disease Control & Health Protection
Director
State Epidemiologist

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