



EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

June 2017

Florida Department of Health in Pinellas County

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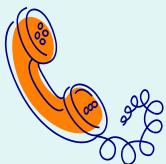
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For more information, or to add your e-mail address to the distribution list, please contact the Editor.

Division of Disease Control and Health Protection

Disease Reporting

To report diseases and clusters of illness:
Phone: (727) 824-6932
Fax: (727) 820-4270 (excluding HIV/AIDS)



To report HIV/AIDS by mail:

Surveillance Room 3-138
205 Dr. MLK Jr St. N.
St. Petersburg, FL 33701

Possible Rabies Exposure/

Animal Bite Reports:
Phone: (727) 524-4410 x7665

Hurricane Preparedness & Special Needs Shelters in Pinellas County

By Kaila Yeager, *Special Needs Shelter Coordinator*

Hurricane season is upon us, spanning the months of June to November. During these months, it is especially important to be prepared. Creating a family preparedness plan online at www.floridadisaster.org is strongly recommended for all Florida residents. These plans provide many useful resources including emergency preparedness checklists and essential information to remember during a severe storm.



When an evacuation order is issued and the need arises, special needs shelters in Pinellas County are opened for residents who require minimal medical assistance. This includes individuals who live in the community independently, but may require assistance with medication, are oxygen dependent, use electricity-dependent medical devices, etc. It is vital to remember that evacuating to a shelter of any kind should be a last resort and additional options should be explored beforehand. The Florida Department of Health in Pinellas County works alongside many community partners to ensure the effective maintenance of these shelters before and during operation.

If residents believe they qualify for a special needs shelter, pre-registration is not required, but is strongly recommended. Of note, residents who need transportation assistance to a shelter are required to pre-register. The [registration form](#) and additional information can be found online through [Pinellas County Emergency Management](#). Once the form is submitted, the resident's local fire department will reach out to follow up and determine placement. There are three special needs shelter locations in Pinellas County: Dunedin Highland Middle School in Dunedin, Oak Grove Middle School in Clearwater, and John Hopkins Middle School in St. Petersburg.

For questions regarding special needs shelters, please contact the Florida Department of Health in Pinellas County at 727-824-6932. More information about the Public Health Preparedness Program can be found here: <http://pinellas.floridahealth.gov/programs-and-services/emergency-preparedness-and-response/index.html>

CDC MMWR: Pregnancy Outcomes After Maternal Zika Virus Infection During Pregnancy — U.S. Territories, January 1, 2016–April 25, 2017

Morbidity and Mortality Weekly Report (MMWR); Early Release June 8, 2017

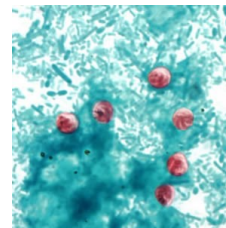
Summary: Zika virus infection during pregnancy causes serious brain abnormalities and/or microcephaly and has been associated with other severe birth defects. Local transmission of Zika virus was reported in U.S. territories in 2016. Overall, about 5% of fetuses and infants born to women with laboratory evidence of recent possible Zika virus infection in the U.S. territories had possible Zika-associated birth defects, the same as the percentage reported in the 50 U.S. states during 2016. Possible Zika-associated birth defects including brain abnormalities and/or microcephaly were reported following Zika virus infection during every trimester of pregnancy. Among completed pregnancies with positive nucleic acid tests confirming Zika virus infection identified in the first, second, and third trimesters, the percentages of fetuses or infants with possible Zika-associated birth defects was 8%, 5%, and 4%, respectively. Current data suggest that Zika virus infection during any trimester of pregnancy might result in Zika-associated birth defects. Identification and follow-up of infants born to women with laboratory evidence of recent possible Zika virus infection during pregnancy can facilitate timely and appropriate clinical intervention services and assessment of future needs. Information about adherence to the recommended newborn testing and screening can improve monitoring and care of infants affected by Zika.

Complete report can be found here: <https://www.cdc.gov/mmwr/volumes/66/wr/mm6623e1.htm>

Cryptosporidiosis Season in Florida

By Simi Aduayi, MPH, Epidemiologist

Cryptosporidiosis, commonly known as “Crypto,” is a diarrheal disease caused by a single-celled parasite, *Cryptosporidium*.^{1,2} Crypto can be found in water, food, soil and on surfaces that have been contaminated with feces from infected humans or animals.^{1,3} The two most commonly isolated species of Crypto in humans are *C. hominis* and *C. parvum*. Over the years, Crypto has become the leading cause of waterborne illness in humans worldwide, due to its ability to survive outside the body for long periods of time and its resistance to chlorine and other disinfectants used for treatment of potable and recreational water.^{1,3} For example, *C. parvum* is able to survive for up to ninety minutes in chlorinated water with a concentration of 80mg/L and has a 99.9% inactivation rate.⁴



Crypto infections are commonly associated with the ingestion of the parasite in fecally-contaminated food or water.^{1,3} As warmer weather continues, recreational water exposures will increase, and therefore individuals will be at an increased risk of being infected with Crypto. Other forms of exposure include contact with infected persons (including oral-anal sexual contact) or animals.³ The illness is characterized by the onset of watery diarrhea that may also be accompanied by abdominal cramps, nausea, dehydration, low-grade fever and weight loss. On average, symptoms typically develop 7 days after infection and may last for several days or weeks depending on the immune system of an individual.

For Crypto to be diagnosed, an individual must submit a stool sample for testing through their health care provider. While everyone is susceptible to Crypto infection, the most at-risk groups for severe illness include young children, pregnant women, and individuals with severely weakened immune systems.¹ In most cases, healthy individuals can resolve illness without any form of treatment, however, nitazoxanide is the preferred drug for treatment for those who need it.^{1,3} Individuals who believe that they have been infected with Crypto should follow up with their healthcare provider, stay hydrated, wash their hands following bowel movements, refrain from preparing food for others, should not enter recreational water while symptomatic, and should be excluded from sensitive situations such as child care and health care settings.³ Infection with Crypto can be prevented by frequent handwashing, disinfection of contaminated surfaces and recreational water, and showering before and after contact with recreational water.

Crypto in Florida

Crypto cases are reported in many of Florida's counties, particularly in summer months when individuals are more likely to be exposed to recreational water. In 2014, Florida experienced a Crypto outbreak, with 9.7 cases reported per 100,000 residents, which was significantly higher than the prior three-year average of 2.3 per 100,000.⁵ Most of the cases in Pinellas County reported recreational water exposure during this outbreak, so control measures were framed around swimming pools and natural bodies of water. The number of confirmed and probable Crypto cases has significantly decreased in Florida and is approaching pre-2014 case counts; however, it is important that residents avoid recreational water while experiencing diarrhea and follow up with their healthcare provider if they believe they have diarrheal illness to prevent future outbreaks.

Further information about Crypto can be found at https://www.cdc.gov/parasites/crypto/gen_info/infect.html.

References:

¹ U.S Centers for Disease Control and Prevention. (November 2, 2010). Parasites- Cryptosporidium (also known as “Crypto”). Retrieved from: https://www.cdc.gov/parasites/crypto/gen_info/infect.html.

² University of Florida IFAS Extension. (2015). Cryptosporidium: A waterborne Pathogen. Retrieved from: <http://edis.ifas.ufl.edu/ss189>.

³ Florida Department of Health. Surveillance and Investigation Guidance. 2017. Cryptosporidiosis. Retrieved from: http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/_documents/gsi-crypto.pdf.

⁴ U.S Centers for Disease Control and Prevention. (March 21, 2012). Effect of Chlorination on Inactivating Selected Pathogen. Retrieved from: <https://www.cdc.gov/safewater/effectiveness-on-pathogens.html>

⁵ Florida Department of Health. FLHealthCharts. 2016. Retrieved from: <http://www.flhealthcharts.com/charts/OtherIndicators/NonVitalIndNoGrpDataViewer.aspx?cid=0195>

Selected Reportable Diseases in Pinellas County

Disease	Pinellas		YTD Total		Pinellas County Annual Totals		
	May 2017	May 2016	Pinellas 2017	Florida 2017	2016	2015	2014
A. Vaccine Preventable							
Measles	0	0	0	3	0	0	0
Mumps	0	0	1	11	0	0	0
Pertussis	1	2	21	150	18	17	19
Varicella	1	4	11	318	74	38	35
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	0	0	0	14	2	3	0
Meningitis (Bacterial, Cryptococcal, Mycotic)	1	1	5	41	7	6	4
Meningococcal Disease	0	0	0	11	0	1	0
C. Enteric Infections							
Campylobacteriosis	13	19	68	1618	146	104	103
Cryptosporidiosis	3	2	9	154	27	49	240
Cyclosporiasis	0	0	0	1	5	3	0
<i>E. coli</i> Shiga Toxin (+)	0	0	1	61	3	2	6
Giardiasis	5	4	25	449	41	30	42
Hemolytic Uremic Syndrome (HUS)	0	0	0	6	0	0	0
Listeriosis	0	0	0	18	2	2	0
Salmonellosis	18	7	57	1615	188	196	216
Shigellosis	0	4	7	399	19	174	21
D. Viral Hepatitis							
Hepatitis A	0	1	0	99	2	4	2
Hepatitis B: Pregnant Woman +HBsAg	2	5	14	197	28	37	21
Hepatitis B, Acute	1	5	16	283	68	57	44
Hepatitis C, Acute	1	5	9	136	49	32	19
E. VectorBorne/Zoonoses							
Animal Rabies	0	0	2	27	4	1	2
Rabies, possible exposure	7	7	50	1292	131	114	190
Chikungunya Fever	0	0	0	1	1	2	10
Dengue	0	0	0	12	2	3	1
Eastern Equine Encephalitis	0	0	0	0	0	0	0
Lyme Disease	2	0	6	64	11	6	5
Malaria	0	0	0	18	0	2	3
West Nile Virus	0	0	0	1	1	1	0
F. Others							
Chlamydia	368	366	1851	n/a	4086	4168	3853
Gonorrhea	132	138	617	n/a	1562	1439	1295
Hansen's Disease	0	0	0	9	0	0	0
Lead Poisoning	5	6	13	344	32	40	62
Legionellosis	3	0	7	130	19	18	13
Mercury Poisoning	0	0	0	17	0	1	2
Syphilis, Total	27	30	132	n/a	400	289	186
Syphilis, Infectious (Primary and Secondary)	13	15	68	n/a	188	151	75
Syphilis, Early Latent	8	10	36	n/a	146	83	61
Syphilis, Congenital	0	0	1	n/a	2	3	0
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	6	5	27	n/a	64	52	50
Tuberculosis	7	1	11	n/a	31	14	25
<i>Vibrio</i> Infections	0	1	2	91	8	11	10

n/a = not available at this time. Reportable diseases include confirmed and probable cases only. All case counts are provisional. 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 PRISM is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.

* Florida tracks cases of HIV/AIDS. For the most up to date data, please visit: <http://www.floridahealth.gov/diseases-and-conditions/aids/surveillance/index.html>