



EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

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Florida Department of Health in Pinellas County

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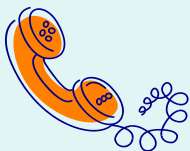
Disease Reporting

To report diseases and clusters of illness

(other than TB/STD/HIV/AIDS)

Phone: (727) 507-4346

Fax: (727) 507-4347



For TB, STD or HIV/AIDS Reporting

Phone: (727) 824-6932

Animal Bite Reporting

Phone: (727) 524-4410
x7665

Increase in Cryptosporidiosis in Pinellas County, 2014

BY ANDREA LEAPLEY, MPH

Cryptosporidium is a parasite that causes an acute diarrheal illness referred to as cryptosporidiosis. There are many species of *Cryptosporidium* that infect the intestinal tract of humans and animals. *Cryptosporidium* can be found in soil, food, water, or on other surfaces contaminated with feces from infected humans or animals. Infection occurs when the oocysts are swallowed. *Cryptosporidium* oocysts are chlorine-tolerant and can remain infectious in moist environments. Infection is most commonly associated with swallowing contaminated drinking water or recreational water in swimming pools and water parks.

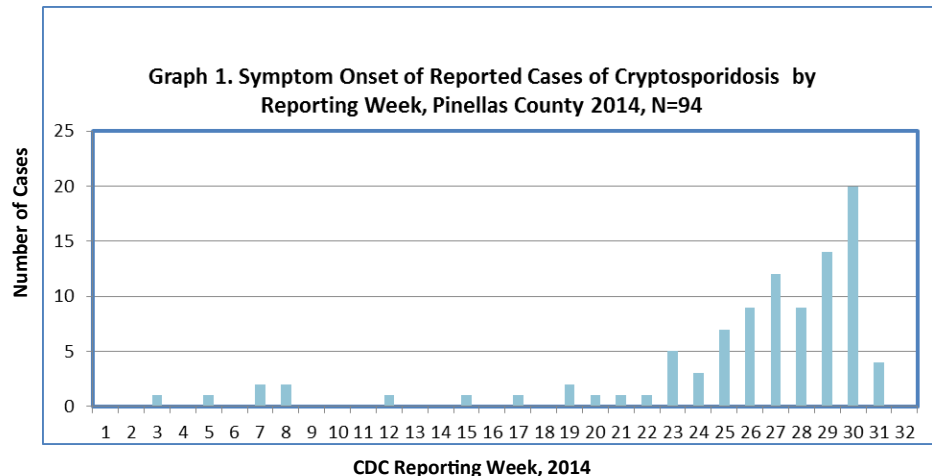
The most common symptom of cryptosporidiosis is watery diarrhea, but abdominal pain, dehydration, nausea, vomiting, fever, and weight loss can also occur. The average incubation period is 5-8 days (range 2-12 days). People infected with *Cryptosporidium* are infectious as long as the oocysts are being shed in the stool, which generally lasts for about two weeks after symptoms have resolved. During this period, exposure to swimming pools, splash parks, and other recreational water should be avoided.

Transmission of *Cryptosporidium* occurs throughout Florida and the United States. Symptom onset and disease incidence typically coincide with the summer recreational water season. In 2014, the Florida Department of Health in Pinellas County (DOH-Pinellas) has seen an increase in cases of cryptosporidiosis. The current year-to-date incidence rate in Pinellas County is 10.43 per 100,000 population. At this same time last year, DOH-Pinellas reported 13 cases (a rate of 1.42 per 100,000 population). Of the cases reported this year, more than one third were reported symptom onset between July 13 and July 26 (see Graph 1).

At this time, no geographical trends have been identified and cases have spanned across Pinellas County. Both sporadic and outbreak associated cases have been reported. Ongoing transmission has been identified in households and daycare settings. Patients have reported exposures to multiple different public recreational water facilities prior to symptom onset, as well as after.

DOH-Pinellas has implemented a multifaceted approach to infection prevention. Control measures include providing education to patients, close contacts, and pool and recreational facility operators. A formal letter and guidance on cryptosporidiosis and hyperchlorination was distributed to the owners and operators of the majority of public pools and recreational water facilities in Pinellas County. Education has been provided to daycare facilities when cases have reported attending during the incubation period or while symptomatic. In addition, local press releases were provided to inform the public about proper hygiene in pools and to avoid swimming while ill with diarrhea.

Case data collection and analysis is ongoing. Cryptosporidiosis is a reportable disease in Florida and physicians should report cases to their local health department no later than next business day. If you suspect that you have cryptosporidiosis, see your local health care provider.



Additional information about Cryptosporidiosis can be found on the Centers for Disease Control and Prevention website: <http://www.cdc.gov/parasites/crypto/>

Ebola Outbreak in West Africa - 2014



The current Ebola outbreak is affecting four countries in West Africa: Liberia, Guinea, Sierra Leone, and Nigeria; although there is the potential for further spread to neighboring African countries. This is the largest Ebola outbreak ever documented and the first in West Africa. The Centers for Disease Control and Prevention (CDC) is working with the World Health Organization (WHO) to rapidly increase efforts and deploy resources to affected areas to help control the outbreak. To date, no cases have been reported in the United States. **Ebola does not pose a significant risk to the U.S. public.**

Ebola Virus Disease (EVD) is one of the numerous Viral Hemorrhagic Fevers. It is a severe, often fatal disease in humans and nonhuman primates (such as monkeys, gorillas and chimpanzees). There are five identified subspecies of Ebolavirus, four of the five have caused disease in humans. The natural reservoir of ebolaviruses has not yet been identified; however, new evidence strongly implicates bats as the likely reservoir. The first Ebolavirus species was discovered in 1976, in what is now the Democratic Republic of the Congo near the Ebola River. Since then, outbreaks have appeared sporadically.

When infection does occur in humans, the virus can be transmitted to others by direct contact with the blood or secretions of an infected person or exposure to objects (such as needles) that have been contaminated with infected secretions. Infectious bodily fluids include saliva, breastmilk, sweat, tears, and semen. EVD is characterized by sudden onset of fever and malaise, accompanied by other nonspecific signs and symptoms, such as myalgia, headache, vomiting, and diarrhea. Patients with severe forms of the disease may develop hemorrhagic symptoms and multi-organ failure, leading to shock and death. Symptoms may appear 2 to 21 days (commonly 8-10 days) after exposure to ebolavirus. **Individuals infected with Ebola virus are not contagious until symptoms appear.**

Standard treatment for EVD is still limited to supportive therapy. Timely treatment of EVD is important, but challenging since the disease is difficult to diagnose clinically in the early stages of infection. An experimental treatment, ZMapp, was developed for individuals infected with Ebola virus, but has not been tested in humans for safety and effectiveness. Some patients infected with Ebola virus do get better spontaneously or with supportive care.

There are currently no FDA approved vaccines for Ebola. Ebola outbreaks can be contained using available interventions, including early detection and isolation of symptomatic individuals, contact tracing and monitoring, and adherence to strict infection control practices. EVD can spread quickly within health care settings if primary prevention measures are not followed. Patient placement, healthcare provider protection, and environmental infection control will reduce the risk of exposure to ebolaviruses among healthcare staff. Proper cleaning and disposal of instruments, such as needles and syringes, is also important.

Hospitals in the U.S. can safely manage a patient with EVD by following the recommended isolation and infection controls measures. The CDC recently distributed guidance for healthcare providers which outlines how to evaluate suspected patients for Ebola virus infection who have both consistent symptoms and risk factors. The complete guidelines for evaluation, classification of high and low risk patients, and infection control recommendations in U.S. hospitals can be found here, <http://www.cdc.gov/vhf/ebola/hcp/patient-management-us-hospitals.html>.

The CDC reports that the most effective way to stop the current Ebola outbreak in West Africa is through heightened surveillance and rapid case identification, isolating and caring for those patients, and tracing contacts to stop ongoing transmission. In addition, providing education to people about safe burial practices and having health care workers follow strict infection control in hospitals. In the past, these methods have proven effective in stopping Ebola outbreaks. The international response to the current Ebola outbreak in West Africa is ongoing and updates are provided regularly on the CDC website.

Please contact your local health department with any questions regarding healthcare management of suspected patients infected with Ebola virus. All of the information provided above can be found on the Centers for Disease Control and Prevention, Ebola Hemorrhagic Fever webpage: <http://www.cdc.gov/vhf/ebola/>



Source: www.cdc.gov

Selected Reportable Diseases in Pinellas County

Disease	Pinellas	Year-to-Date		Pinellas County Annual Totals		
	July 2014	Pinellas 2014	Florida 2014	2013	2012	2011
A. Vaccine Preventable						
Measles						
Mumps						
Pertussis	6	16	524	17	10	10
Varicella	1	11	347	19	16	21
B. CNS Diseases & Bacteremias						
Creutzfeldt-Jakob Disease (CJD)			15		2	3
Meningitis (Bacterial, Cryptococcal, Mycotic)		1	82	5	6	7
Meningococcal Disease			28	1		
<i>S. Pneumoniae, Invasive Disease, Drug Resistant</i>	1	11	322			
<i>S. Pneumoniae, Invasive Disease, Susceptible</i>	1	11	326	24	16	22
				11	25	11
C. Enteric Infections						
Campylobacteriosis	7	66	1341	63	59	83
Cryptosporidiosis	40	60	412	19	29	19
Cyclosporiasis			22	5	1	2
<i>E. coli Shiga Toxin (+)</i>		4	68	7	8	2
Giardiasis	5	19	634	34	32	27
Hemolytic Uremic Syndrome (HUS)			4	1		
Listeriosis			20		5	3
Salmonellosis	21	94	2717	203	203	225
Shigellosis	1	14	1554	5	18	93
D. Viral Hepatitis						
Hepatitis A		2	71	6	4	5
Hepatitis B: Pregnant Woman +HBsAg		18	316	17	16	29
Hepatitis B, Acute	4	16	236	39	16	10
Hepatitis C, Acute	1	13	118	17	5	13
E. Vector Borne, Zoonoses						
Animal Rabies			49			2
Rabies, possible exposure	17	109	1587	193	201	217
Chikungunya Fever	3	3	119			
Dengue		1	46	2	3	1
Eastern Equine Encephalitis			1			
Lyme Disease		1	49	8	6	9
Malaria	2	2	30	1	2	1
St. Louis Encephalitis						
West Nile Virus						
F. Others						
AIDS**	13	91	n/a	118	130	123
HIV**	20	148	n/a	192	177	189
Chlamydia	350	2274	n/a	4141	3812	3863
Gonorrhea	94	724	n/a	1424	1029	1034
Hansen's Disease			3			
Lead Poisoning: Children < 6 years:	2	5	83	4	2	4
Legionellosis	1	7	115	10	13	13
Mercury Poisoning		2	5			2
Syphilis, Total	16	112	n/a	114	141	132
Syphilis, Infectious (Primary and Secondary)	11	38	n/a	52	61	66
Syphilis, Early Latent	4	40	n/a	37	47	35
Syphilis, Congenital			n/a			1
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	1	34	n/a	25	33	30
Tuberculosis	5	14	n/a	30	17	9
<i>Vibrio Infections</i>		5	78	11	10	11

n/a = not available at this time. Blank cells indicate no cases reported. Reportable diseases include confirmed and probable cases only. All case counts are provisional. Data is collected from the Merit 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.

**Current HIV Infection data reflects any case meeting the CDC definition of "HIV infection" which includes all newly reported HIV cases and newly reported AIDS cases with no previous report of HIV. Newly reported HIV Infection cases do not imply they are all newly diagnosed cases. For a more detailed explanation on changes in reporting and changes in trends, please contact the Bureau of HIV/AIDS, Data Analysis Section.