FLORIDA DEPARTMENT OF HEALTH IN PINELLAS COUNTY

# EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

December 2015

**Florida Department of Health in Pinellas County**
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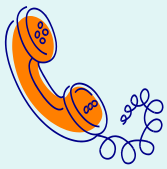
***For more information, or to add your e-mail address to the distribution list, please contact the Editor.***

## 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**

**Animal Bite Reporting:**

**Phone: (727) 524-4410 x7665**

# Shigellosis in Pinellas County

**By Steven Peterson, MPH**

Shigellosis is a bacterial infection caused by a group of bacteria called *Shigella*. There are four different species of the *Shigella* bacteria: *S. sonnei, S. flexneri, S. boydii,* and *S. dysenteriae.* The *S. sonnei* species is the most common species found in the United States and the *S. boydii* and *S. dysenteriae* species are more common in developing countries. Shigellosis is transmitted from person to person via the fecal-oral route when *Shigella* bacteria are present in the stool of infected individuals.

Shigellosis is a gastrointestinal illness that is characterized by diarrhea that may be bloody, fever, stomach cramps, and tenesmus (a painful sensation of needing to pass stools even when bowels are empty). Symptoms will typically develop one to two days after exposure to the bacteria, but infected persons may not show any symptoms at all. The infection usually resolves in five to seven days in healthy individuals, but possible complications may arise including post-infectious arthritis, blood stream infections, seizures, and hemolytic-uremic syndrome (HUS). It may take several months for bowel habits to return to normal after the infection has cleared. It is important to note that asymptomatic individuals may still pass the *Shigella* bacteria to others for possibly up to two weeks after diarrhea has gone away. Once a person has been infected with shigellosis, they are not likely to be infected with the same *Shigella* species again for at least several years but can be infected with other species of *Shigella*.

According to the Centers for Disease Control and Prevention, there are approximately 500,000 cases of shigellosis every year in the United States. The number of shigellosis cases reported in Pinellas County varies greatly by year because shigellosis is characterized by large, community-wide outbreaks that occur every three to five years. The table below displays the number of shigellosis cases in Pinellas County in the past five years. Pinellas County has seen a significant increase in the number of shigellosis cases in 2015 when compared to the previous three years. These community-wide outbreaks are frequently associated with child care facilities and in community settings with frequent contact without adequate hand hygiene. Of the 170 cases of shigellosis reported in Pinellas in 2015, 91 (54 %) of cases were determined to be outbreak associated and 79 (46%) cases were sporadic.

Reduce the risk of getting shigellosis by washing your hands frequently, washing raw foods properly, avoid swallowing of water from ponds, lakes, or untreated pools, and avoid sexual activity with those who have diarrhea or who recently recovered from diarrhea.

**Total Number of Shigellosis Cases reported in Pinellas County by year, 2011-2015**

| Year | # of Cases in Pinellas |
|---|---|
| 2011 | 93 |
| 2012 | 18 |
| 2013 | 5 |
| 2014 | 21 |
| 2015 (through 11/30) | 170 |

*This is preliminary data that includes only confirmed and probable cases of shigellosis.

***For more information about Shigellosis, please visit: http://www.cdc.gov/shigella/***

# Chagas Disease

Chagas disease, also known as American trypanosomiasis, is caused by the parasite *Trypanosoma cruzi*, which is transmitted to animals and people by triatomine bugs. These insect vectors are found only in the Americas. **Not all triatomine bugs are infected with the parasite that causes Chagas disease and only rare cases of Chagas disease have been acquired in the southern United States.**

The bugs are commonly found in houses made from material such as mud, adobe, straw, and palm thatch. Because most indoor structures in the United States are built with plastered walls and sealed entryways, triatomine bugs rarely infest indoor areas of houses.

The transmission of Chagas disease from a bug to a human is not easy. If the bug is infected, the parasite that causes the disease is in the bug's feces. The bug generally defecates on or near a person while it is feeding on his or her blood, generally when the person is sleeping. Transmission occurs when fecal material gets rubbed into the bite wound or into a mucous membrane and the parasite enters the body.

Chagas disease has an acute and a chronic phase. The acute phase lasts for the first few weeks or months of infection. It usually occurs unnoticed because the infected person may be symptom-free or exhibit only mild symptoms and signs that are not unique to Chagas disease. Symptoms can include: fever, fatigue , body aches, rash, or gastrointestinal illness. Individuals may also experience swelling of the eyelids on the side of the face near the bite wound. The acute phase can also be severe in people with weakened immune systems. People with chronic Chagas disease may remain asymptomatic for decades or life; however, some people develop cardiac or intestinal complications due to infection. The average life-time risk of developing one or more of these complications is about 30%.

Antiparasitic treatment is most effective early in the course of infection but is not limited to cases in the acute phase. In the United States, this type of treatment is available through the Centers for Disease Control and Prevention (CDC). If untreated, infection is lifelong.

If you suspect you have Chagas disease, consult your health care provider. Chagas disease is not required to be reported in the state of Florida.

***For more information about Chagas Disease, please visit:*** ***http://www.cdc.gov/parasites/chagas/gen_info/index.html***

**Photos from www.CDC.gov.**
**Top: *Triatoma sanguisuga***
**Middle: *Triatoma protracta***
**Bottom: *Triatoma gerstarckeri* next to a penny for scale.**

## 2014-2015 Ebola Outbreak in West Africa - Update

***as of December 15, 2015***

- According to the most recent World Health Organization (WHO) Situation Report, a total 28,601 suspected, probable, and confirmed cases of Ebola virus disease (EVD) have been reported.
- No confirmed cases of EVD were reported in the week of December 6.
- According to WHO, the last case in Guinea was reported on 29 October 2015.
- Investigations into the origin of infection of the cluster of 3 confirmed cases of EVD reported from Liberia in late November are continuing, with a working assumption that the cluster arose as a result of a rare re-emergence of persistent virus from a survivor.
- Surveillance measures to ensure the rapid detection of any reintroduction or re-emergence of EVD in currently unaffected areas is still underway.

**Additional information, including case counts and EVD affected areas, can be found here:**

**http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/index.html**

# Selected Reportable Diseases in Pinellas County

| | Pinellas | | YTD Total | | | Pinellas County Annual Totals | | |
|---|---|---|---|---|---|---|---|---|
| Disease | November 2015 | November 2014 | Pinellas 2015 | Pinellas 3 YR Avg. | Florida 2015 | 2014 | 2013 | 2012 |
| **A. Vaccine Preventable** | | | | | | | | |
| Measles | | | | 0 | 5 | | | |
| Mumps | | | | 0 | 11 | | | |
| Pertussis | 4 | | 16 | 15 | 304 | 19 | 17 | 10 |
| Varicella | 3 | 5 | 32 | 18 | 695 | 35 | 19 | 16 |
| **B. CNS Diseases & Bacteremias** | | | | | | | | |
| Creutzfeldt-Jakob Disease (CJD) | | | 3 | 1 | 26 | | | 2 |
| Meningitis (Bacterial, Cryptococcal, | 1 | 2 | 5 | 5 | 111 | 4 | 5 | 6 |
| Meningococcal Disease | | | 1 | 0 | 21 | | 1 | |
| **C. Enteric Infections** | | | | | | | | |
| Campylobacteriosis | 6 | 5 | 100 | 69 | 1931 | 103 | 63 | 59 |
| Cryptosporidiosis | 5 | 5 | 46 | 93 | 810 | 240 | 19 | 29 |
| Cyclosporiasis | | | 3 | 3 | 30 | | 5 | 1 |
| *E. coli Shiga Toxin (+)* | | | 2 | 5 | 109 | 6 | 7 | 8 |
| Giardiasis | 3 | 2 | 27 | 32 | 962 | 42 | 34 | 32 |
| Hemolytic Uremic Syndrome (HUS) | | | | 0 | 4 | | 1 | |
| Listeriosis | | | 2 | 1 | 41 | | | 5 |
| Salmonellosis | 20 | 23 | 181 | 192 | 5379 | 216 | 203 | 203 |
| Shigellosis | 10 | 1 | 170 | 14 | 1652 | 21 | 5 | 18 |
| **D. Viral Hepatitis** | | | | | | | | |
| Hepatitis A | | | 4 | 4 | 102 | 2 | 6 | 4 |
| Hepatitis B: Pregnant Woman | 2 | | 34 | 17 | 410 | 21 | 17 | 16 |
| Hepatitis B, Acute | 3 | 5 | 51 | 29 | 459 | 44 | 39 | 16 |
| Hepatitis C, Acute | 7 | 2 | 28 | 13 | 176 | 19 | 17 | 5 |
| | | | | | | | | |
| Animal Rabies | | | 1 | 0 | 77 | 2 | | |
| Rabies, possible exposure | 4 | 15 | 103 | 177 | 3016 | 190 | 193 | 201 |
| Chikungunya Fever | 1 | | 3 | 3 | 118 | 10 | | |
| Dengue | 3 | | 3 | 2 | 65 | 1 | 2 | 3 |
| Eastern Equine Encephalitis | | | | 0 | | | | |
| Lyme Disease | | | 6 | 5 | 170 | 5 | 8 | 6 |
| Malaria | | | 2 | 2 | 35 | 3 | 1 | 2 |
| St. Louis Encephalitis | | | | 0 | | | | |
| West Nile Virus | | | 1 | 0 | 11 | | | |
| **F. Others** | | | | | | | | |
| AIDS** | 9 | 10 | 111 | 128 | 2297 | 148 | 118 | 130 |
| HIV** | 24 | 23 | 293 | 212 | 6240 | 263 | 185 | 177 |
| Chlamydia | 308 | 271 | 3828 | 3767 | n/a | 3853 | 4141 | 3812 |
| Gonorrhea | 108 | 90 | 1311 | 1180 | n/a | 1295 | 1424 | 1029 |
| Hansen's Disease | | | | 0 | 20 | | | |
| Lead Poisoning: Children < 6 years: | | 1 | 4 | 4 | 133 | 8 | 4 | 2 |
| Legionellosis | 2 | 1 | 16 | 12 | 279 | 13 | 10 | 13 |
| Mercury Poisoning | | | 1 | 1 | 14 | 2 | | |
| Syphilis, Total | 25 | 12 | 251 | 156 | n/a | 186 | 114 | 141 |
| Syphilis, Infectious (Primary and | 8 | 6 | 139 | 59 | n/a | 75 | 52 | 61 |
| Syphilis, Early Latent | 8 | 6 | 65 | 50 | n/a | 61 | 37 | 47 |
| Syphilis, Congenital | | | 3 | 0 | n/a | | | |
| Syphilis, Late Syphilis (Late Latent; Neurosyphilis ) | 9 | | 44 | 39 | n/a | 50 | 25 | 33 |
| Tuberculosis | | | 13 | 20 | n/a | 25 | 30 | 17 |
| *Vibrio Infections* | 1 | 1 | 8 | 9 | 174 | 10 | 11 | 10 |

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 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.

**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.