FLORIDA DEPARTMENT OF HEALTH IN PINELLAS COUNTY

EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

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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) 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

Multistate Outbreak of Listeriosis Linked to Soft Raw Milk Cheese Made by Vulto Creamery

Source: Centers for Disease Control and Prevention (CDC) https://www.cdc.gov/listeria/outbreaks/soft-cheese-03-17/index.html

The Centers for Disease Control and Prevention (CDC) is collaborating with public health and regulatory officials in several states, and the U.S. Food and Drug Administration (FDA) to investigate a multi-state outbreak of *Listeria monocytogenes* infections (listeriosis). At this time, epidemiologic and laboratory evidence indicates that soft raw milk cheese made by Vulto Creamery of Walton, NY, is the likely source of this outbreak.

Since September 1, 2016, a total of six people infected with the outbreak strain of Listeria have been reported from four states (New York, Vermont, Connecticut and Florida). All six people were hospitalized and two people have passed away. One illness was reported in a newborn. Each individual reported eating various types of soft cheeses in the month before their symptom onset. The Florida case reported consuming the soft cheese while spending time in New York. Whole genome sequencing performed on clinical isolates from all six ill people shows that the isolates are closely related genetically. This close genetic relationship provides additional evidence of a common source exposure.

On March 7, 2017, Vulto Creamery recalled all lots of Ouleout, Miranda, Heinennellie, and Willowemoc soft wash-rind raw milk cheeses. On March 10, 2017, Vulto Creamery expanded its recall to include four additional cheeses. For more information on the recall, please visit the FDA website, https://www.fda.gov/Safety/Recalls/ucm546133.htm.

Listeriosis primarily affects pregnant women and their newborns, the elderly and people with weakened immune systems. Symptoms commonly include fever, muscle aches and headaches, sometimes preceded by diarrhea and leads to an invasive infection. The incubation period can range from a few days to a couple of months, but symptoms usually appear within a month of consumption of contaminated food. Treatment with antibiotics is available.

CDC recommends that consumers do not eat, restaurants do not serve, and retailers do not sell recalled raw milk cheeses made by Vulto Creamery. The investigation is ongoing and updates can be found here: https://www.cdc.gov/listeria/outbreaks/soft-cheese-03-17/index.html.

Source: www.fda.gov

Campylobacteriosis

By Dana Elhassani, *Epidemiology Program Intern*

Campylobacteriosis is a zoonotic illness caused by rod-shaped gram negative bacteria in the genus Campylobacter[1]. It is also the most common cause of foodborne illness in the United States[2]. This bacteria is naturally found in wild birds, poultry, pigs, cats, dogs, shellfish and cattle[1,3]. The three most commonly isolated species of Campylobacter are C. jejuni, followed by C. coli, and C. upsaliensis[1]. Campylobacter is transmitted to humans by fecal-to-oral route. The most common sources of infection are exposure to contaminated raw or undercooked meat, unpasteurized milk, and untreated water and ice. The most frequent causes of outbreaks are typically unpasteurized milk or contaminated water. Infants have been infected by sitting in shopping carts where poultry and meat packages were previously placed. Direct person-to-person transmission is rare but may occur if the person is exposed to a large volume of infected diarrhea[4].

While everyone is susceptible to campylobacter infection, the most at risk groups are children under five years, elderly, and immunocompromised individuals. Healthcare providers and food handlers are also at an increased risk due to increased exposure to possible contaminants[1]. While most infections resolve without medical intervention, several complications have been linked to campylobacteriosis including Guillain-Barre syndrome, irritable bowel syndrome, reactive arthritis, and septicemia[2,5].

In Florida, the case definition for a confirmed infection of campylobacteriosis is only achieved by isolation of Campylobacter from stool, blood, wound exudates or abscesses. Probable cases can be identified by a person with clinically compatible symptoms, culture independent tests, and without identification of other enteric pathogens. Treatment is usually indicated for patients with high fevers, bloody diarrhea or more than eight stools per day, or if symptoms are progressively worsening. Treatment options include use of erythromycin or azithromycin and fluid therapy[4]. In the United States, antibiotic resistance has been identified in C. jejuni to erythromycin (1%), tetracycline (43%), and ciprofloxacin (22%)[5].

In the United States, the percentage of confirmed cases of campylobacter infections begins to increase in March and peaks in July. In 2015, there were over 6,000 confirmed cases, with an incidence rate of 12.82 per 100,000. The age group with the highest incidence is children <5 years of age; however, the greatest hospitalization rate for campylobacteriosis is for individuals 70+[7].

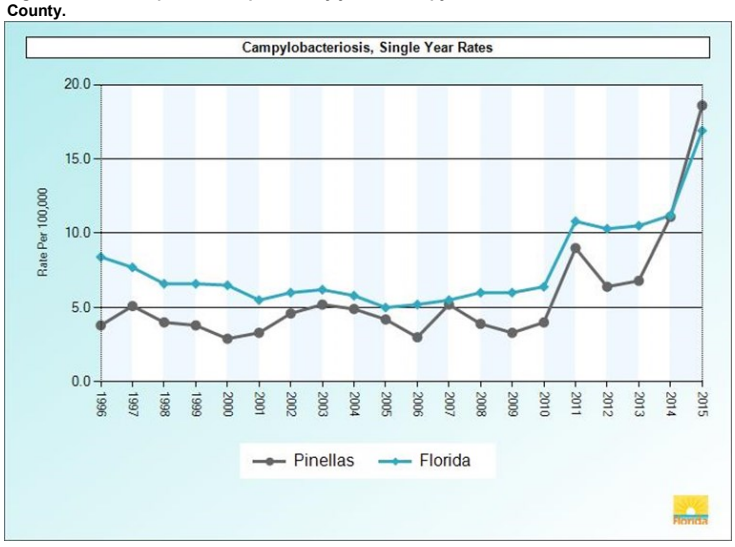
How does Florida compare?

In 2015, the incidence rate of campylobacter infections in Florida reflected the national rate at 12.9 per 100,000 persons. The counties with the greatest percentage of reported cases (confirmed and probable) are Miami-Dade, Hillsborough, Palm Beach, Pinellas and Polk. The current data for 2016 continues to match national trends with increased reporting beginning early spring to late summer. The most affected age group statewide is children under four years old. Pinellas County differed in that the most affected age group was individuals 60+ years old[8].

Transmission of campylobacter can be prevented by storing raw meats in the freezer, using separate cutting boards for meat and produce, abstaining from consuming unpasteurized milk or untreated water, and following proper hand hygiene procedure[1].

Note: In 2015, there was a national case definition change adopted by the CDC. This change involved categorizing culture independent diagnostic tests as "probable" instead of "suspect" provided there are no other enteric pathogens detected [9]. The change can be observed in the increased incidence observed in Figure 1 from FLhealthCHARTS.

Figure 1: Incidence per 100,000 persons by year of Campylobacteriosis in Florida vs. Pinellas County.



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Selected Reportable Diseases in Pinellas County

Disease	Pinellas		YTD Total		Pinellas County Annual Totals		
	February 2017	February 2016	Pinellas 2017	Florida 2017	2016	2015	2014
A. Vaccine Preventable							
Measles	0	0	0	2	0	0	0
Mumps	1	0	1	2	0	0	0
Pertussis	0	2	1	40	18	17	19
Varicella	4	22	7	129	74	38	35
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	0	0	0	5	2	3	0
Meningitis (Bacterial, Cryptococcal, Mycotic)	2	0	2	16	7	6	4
Meningococcal Disease	0	0	0	7	0	1	0
C. Enteric Infections							
Campylobacteriosis	10	18	25	312	146	104	103
Cryptosporidiosis	1	1	3	46	27	49	240
Cyclosporiasis	0	0	0	0	5	3	0
E. coli Shiga Toxin (+)	1	0	1	16	3	2	6
Giardiasis	2	0	7	167	41	30	42
Hemolytic Uremic Syndrome (HUS)	0	0	0	5	0	0	0
Listeriosis	0	0	0	10	2	2	0
Salmonellosis	15	12	20	503	188	196	216
Shigellosis	2	3	3	85	19	174	21
D. Viral Hepatitis							
Hepatitis A	0	0	0	26	2	4	2
Hepatitis B: Pregnant Woman +HBsAg	2	0	4	69	28	37	21
Hepatitis B, Acute	4	5	9	92	68	57	44
Hepatitis C, Acute	2	6	4	47	49	32	19
E. VectorBorne/Zoonoses							
Animal Rabies	2	0	2	21	4	1	2
Rabies, possible exposure	17	4	31	455	131	114	190
Chikungunya Fever	0	0	0	1	1	2	10
Dengue	0	0	0	8	2	3	1
Eastern Equine Encephalitis	0	0	0	0	0	0	0
Lyme Disease	1	0	1	23	11	6	5
Malaria	0	0	0	2	0	2	3
West Nile Virus	0	0	0	0	1	1	0
Zika Virus	0	0	3	96	23	0	0
F. Others							
AIDS**	10	8	17	n/a	108	118	129
HIV**	21	26	55	n/a	194	252	171
Chlamydia	348	328	732	n/a	4129	4168	3853
Gonorrhea	90	139	240	n/a	1565	1439	1295
Hansen's Disease	0	0	0	3	0	0	0
Lead Poisoning	3	4	7	92	32	40	62
Legionellosis	1	1	2	56	19	18	13
Mercury Poisoning	0	0	0	8	0	1	2
Syphilis, Total	15	27	64	n/a	400	289	186
Syphilis, Infectious (Primary and Secondary)	7	14	30	n/a	188	151	75
Syphilis, Early Latent	7	10	26	n/a	146	83	61
Syphilis, Congenital	0	0	0	n/a	2	3	0
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	1	3	6	n/a	64	52	50
Tuberculosis	1	1	1	n/a	31	14	25
Vibrio Infections	0	1	2	22	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.

* YTD HIV/AIDS data excludes reported DOC cases. Current HIV Infection data by year of report 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 in Florida. If a case is later identified as being previously diagnosed and reported from another state, the case will no longer be reflected as a Florida case and the data will be adjusted accordingly. Data from the last calendar year (2016) and the current calendar year (2017) are considered provisional and therefore should not be used to confirm or rule out an increase in newly reported cases in Florida. The final year-end numbers for 2016 and 2017 are generated in July of the following year (2017 & 2018 respectively), after duplicate cases are removed from the dataset, as is customary of HIV surveillance in the US.