EPI WATCH

Monthly Epidemiology Newsletter

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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

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Summer is Cyclosporiasis Season in Florida

by Marcin Chmiel, MPH

Cyclospora cayetanensis is a parasite that causes cyclosporiasis and is one of the organisms commonly associated with "traveler's diarrhea". Infections occur around the world, most commonly in tropical and subtropical regions, and consuming food contaminated with fecal matter is the primary method of transmission. Humans are the only confirmed reservoir for the parasite. Excreted oocysts or “egg cysts” must sporulate outside the host in a process that can take days to weeks to complete before the parasite becomes infectious, resulting in limited person-to-person transmission. Symptoms typically start 2-14 days after exposure and can include sporadic diarrhea, abdominal cramping, bloating, and fever that can last over a month. Symptoms subsiding and returning on multiple occasions during the infection is also characteristic of cyclosporiasis. The parasite’s physical characteristics, life cycle, and similarity of symptoms to other infections make the organism difficult to diagnose. While most people with healthy immune systems will recover on their own, the infection may be treated with trimethoprim/sulfamethoxazole if required.

Cyclosporiasis cases occur year-round in the United States with many cases acquired due to foreign travel. Domestically acquired cases have demonstrated seasonal increases of incidence. This seasonality is especially evident in Florida, where 50% of cases occur in June and July. Annual case counts have been on the rise in Florida and most infections are due to contaminated produce. Produce frequently associated with exposures include fresh raspberries, lettuce, basil, snow peas, and cilantro. In 2020, a major multistate outbreak of cyclosporiasis that sickened 700 and hospitalized 37 nationwide was linked to a farm in Florida growing lettuce later used in a prepackaged salad mix. The contamination source at the farm was linked to nearby regional water management canals which tested positive for *Cyclospora* during a Food and Drug Administration (FDA) investigation.

The Centers for Disease Control and Prevention (CDC) recommend avoiding food and water that may have been contaminated with feces as the best way of preventing cyclosporiasis as the parasite can withstand routine chemical disinfection and sanitizing methods. The parasite is also capable of remaining viable for extended periods of time in cool and damp environments, so consumers should properly and thoroughly wash their hands, utensils, and surfaces used in food preparation. Also recommended is the thorough washing of produce under running water, cutting away any damaged or bruised portions, and then properly cooking or storing the produce within two hours.

For current data on domestically acquired cyclosporiasis cases, please visit CDC Domestically Acquired Cases of Cyclosporiasis– United States, May-July 2021

For more on cyclosporiasis, please visit CDC Cyclosporiasis

COVID-19 Cases are on the Rise

by Isabel Carattini, MPH, CPH

Rates of COVID-19 have been rising all over the United States in recent weeks. Since May 2021, the seven day moving percent positivity has more than doubled in Florida. In the same timeframe, the number of vaccine doses administered has decreased by more than half statewide. In Pinellas County, emergency department visits and testing related to COVID-19 have both increased substantially. COVID-19 cases have been on the rise across all age groups, but most noticeably among the 20-29 age group, who have consistently had higher rates of COVID-19 than other age groups. Meanwhile, the 70-89 age group experienced the smallest increase and remain the least afflicted age group.

There are several behaviors that may be contributing to the recent rise in cases across the state. First, lockdown restrictions and mask mandates were lifted several weeks ago in Pinellas County and across the state. Additionally, with the arrival of summer, a concurrent increase in travel, tourism, and large gatherings can be expected. Another contributing factor is likely the arrival of the COVID-19 Delta variant in Florida. The Delta variant (officially B.1.617.2) is a COVID mutation originating from India that has rapidly become the dominant strain in the U.S. and may be up to 60% more transmissible than the previously dominant variant in the U.S, the Alpha variant (B.1.1.7). This increased transmissibility makes Delta spread easily from individual to individual, especially in indoor settings.

The recent rise in cases and percent positivity is concerning; however, Pinellas County previously reduced case numbers and we can do it again. First and foremost, increasing vaccination coverage will be critical in addressing recent COVID-19 case trends. At this time, individuals over the age of 12 are eligible for vaccination and 53% of the eligible Pinellas County residents have completed a vaccine series. While 70% of residents 65 years and up have completed a vaccine series, vaccination coverage remains comparatively low among the younger age groups. For those county residents who remain hesitant to get the vaccine, encouraging vaccinated individuals to speak to their friends and loved ones about the benefits and safety of vaccination is often the most effective way to overcome vaccine hesitancy. In addition to increasing countywide vaccination rates, we should continue to observe proper precautions while in groups, attending large gatherings, and while traveling. Proper precautions include the use of face masks, frequent hand washing, and maintaining social distances of at least six feet, regardless of vaccination status. While we have reached milestones in our fight against COVID-19, we are not done yet. Higher vaccination coverage along with increased adherence to pandemic safety precautions will help fight the recent increase in cases and keep our population safe.

For up to date COVID-19 trends in Florida, please visit: http://ww11.doh.state.fl.us/comm/_partners/covid19_report_archive/covid19-data/covid19_data_latest.pdf

For more information on how to protect yourself against COVID-19, please visit CDC COVID-19

Lesser Known Sources of Carbon Monoxide Poisoning

by Holly Clancy, CHES

Carbon monoxide (CO) is a colorless, odorless gas that can kill an individual without warning. This gas is produced whenever a fuel is burned, such as wood, gasoline, natural gas, charcoal, and propane. Symptoms of CO poisoning closely resemble symptoms of influenza, which means people may not realize the early signs and allow the gas to accumulate in their body. The first signs of exposure include headache, breathlessness with mild exercise, dizziness, fatigue, and nausea. Some symptoms that are indicative of CO poisoning and not influenza include the person feeling better when they are away from the home, everyone in the home is sick at the same time versus at different times, and the absence of other influenza symptoms such as fever, body aches, and swollen lymph nodes. Carbon monoxide poisoning is preventable with the installation of carbon monoxide detectors in the home 10 feet away from a bedroom, properly maintaining fuel burning appliances every year, abiding by manufacturer's instructions, and venting fumes from appliances to outdoor air.

Many people are familiar with the risk of CO poisoning associated with using a generator. However, there are many other sources that can produce enough of the harmful gas to cause harm. Rear-facing engines and/or generators on boats can produce CO that may build up above the water, which poses a risk to people swimming near the rear swim deck or platform. Back drafting is also another potential boat exposure when it is moving at a high bow angle. Other sources include, but are not limited to, clothes dryers, water heaters, furnaces, gas stoves and ovens, grills, power tools, lawn equipment, tobacco smoke, and motor vehicles, especially vehicles that can automatically start on their own with a remote key fob. One unusual exposure that has been documented is an ice resurfacer that emitted 4.8% of total CO emissions in an indoor ice arena when it was in use and led to 74 individuals having elevated carboxyhemoglobin levels. Another unusual case involved a basement that had carbon monoxide levels of 500 ppm due to explosives that were used near a rain sewer construction site close to the home that contaminated the soil and air in the area for a week.

For more information on carbon monoxide poisoning, please visit CDC Carbon Monoxide Poisoning

Select Reportable Diseases in Pinellas County

	Pinellas		YTD Total		Pinellas Annual Totals		
Disease	**June 2021**	**June 2020**	**Pinellas 2021**	**Florida 2021**	**2020**	**2019**	**2018**
A. Vaccine Preventable							
Measles	**0**	**0**	**0**	**0**	0	1	7
Mumps	**0**	**0**	**1**	**15**	1	7	10
Pertussis	**1**	**0**	**1**	**28**	8	27	32
Varicella	**4**	**0**	**13**	**165**	18	33	67
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	**0**	**0**	**0**	**5**	0	3	1
Meningitis (Bacterial, Cryptococcal, Mycotic)	**1**	**0**	**1**	**38**	6	7	9
Meningococcal Disease	**0**	**0**	**1**	**10**	3	1	1
C. Enteric Infections							
Campylobacteriosis	**27**	**18**	**124**	**1839**	252	310	264
Cryptosporidiosis	**4**	**2**	**18**	**147**	44	64	34
Cyclosporiasis	**2**	**0**	**2**	**26**	9	28	4
E. coli Shiga Toxin (+)	**1**	**1**	**6**	**255**	10	24	15
Giardiasis	**0**	**2**	**13**	**276**	28	52	41
Hemolytic Uremic Syndrome (HUS)	**0**	**0**	**0**	**3**	0	1	0
Listeriosis	**0**	**0**	**0**	**17**	2	2	1
Salmonellosis	**14**	**15**	**51**	**2065**	176	201	233
Shigellosis	**2**	**1**	**15**	**207**	19	22	40
D. Viral Hepatittis							
Hepatitis A	**0**	**0**	**2**	**139**	4	377	113
Hepatitis B: Pregnant Woman	**3**	**1**	**3**	**179**	40	24	14
Hepatitis B, Acute	**7**	**3**	**28**	**227**	103	72	52
Hepatitis C, Acute	**7**	**7**	**37**	**652**	18	82	40
E. Vector Borne/ Zoonoses							
Animal Rabies	**0**	**0**	**0**	**40**	1	2	1
Rabies, possible exposure	**15**	**6**	**68**	**1766**	128	128	130
Chikungunya Fever	**0**	**0**	**0**	**2**	0	0	0
Dengue	**0**	**1**	**0**	**8**	0	3	0
Eastern Equine Encephalitis	**0**	**0**	**0**	**0**	0	0	0
Lyme Disease	**0**	**0**	**1**	**72**	11	22	14
Malaria	**0**	**0**	**0**	**13**	2	5	3
West Nile Virus	**0**	**0**	**0**	**1**	0	0	0
Zika Virus Disease	**0**	**0**	**0**	**0**	0	3	2
F. Others							
Chlamydia	**347**	**345**	**2026**	**n/a**	3982	4588	4422
Gonorrhea	**177**	**126**	**964**	**n/a**	1640	1537	1439
Hansen's Disease	**0**	**0**	**0**	**6**	0	0	0
Legionellosis	**8**	**2**	**21**	**383**	35	43	37
Mercury Poisoning	**0**	**0**	**2**	**7**	1	1	1
Syphilis, Total	**40**	**36**	**277**	**n/a**	469	479	438
Syphilis, Primary and Secondary	**18**	**16**	**121**	**n/a**	224	213	190
Syphilis, Early Latent	**17**	**12**	**98**	**n/a**	161	191	158
Syphilis, Congenital	**0**	**0**	**2**	**n/a**	5	6	2
Syphilis, Late Syphilis	**5**	**8**	**56**	**n/a**	89	69	88
Tuberculosis	**0**	**1**	**9**	**n/a**	24	23	33
Vibrio Infections	**3**	**3**	**6**	**107**	12	18	6

*YTD up to June 30, 2021. n/a = not available at this time

Reportable diseases include confirmed and probable cases only. All case counts are current and 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 STARS is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.