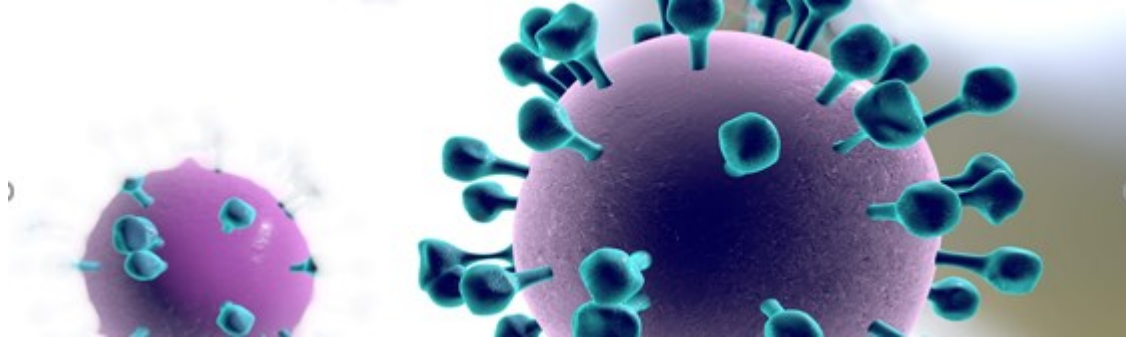




EPI WATCH

Monthly Epidemiology Newsletter



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**Division of Disease Control
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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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Fight Flu- Get Vaccinated!

By Marcin Chmiel, MPH

As the COVID-19 pandemic approaches its second year and prevention measures meant to slow its spread begin to ease across the U.S., it is important for health professionals to also remain vigilant for influenza. Influenza viruses are responsible for at least 5 pandemics since 1900 and are believed to have been affecting mankind for at least 2,000 years². Historically, each season an average of 8% of the U.S. population will become ill from the flu, with some seasons ranging as high as 11%. However, circulating flu viruses were reduced to dramatically low levels during the 2020-2021 flu season⁵.

Despite high levels of testing, the 2020-2021 flu season exhibited unusually low levels of activity, and only 0.2% of specimens tested were positive for flu, compared to 26.2% the previous season. Due to the similarity of symptoms between flu, COVID-19, and other respiratory diseases, testing will be of paramount importance this flu season to confirm a diagnosis when symptoms are present³. Unfortunately, people can be infected by flu and COVID-19 at the same time and exhibit symptoms of both as well. Flu differs from COVID-19 in that persons become ill with flu more quickly after exposure and are not infectious for as long. While flu and COVID-19 can both be serious illnesses, flu is less likely to result in serious illness or death.

Research indicates that a combination of COVID-19-driven health behaviors and a record number of 193.8 million flu vaccine doses distributed during 2020-2021 contributed to the dramatic decrease in flu circulation. As the pandemic unfolds, it is unclear how long prevention measures will remain in place that also help suppress the flu. Luckily, flu vaccines can be administered at the same time as COVID-19 vaccines, and every person who is eligible should be encouraged to receive both. Every year, the flu vaccine's formula is based on the previous year's data. Due to the pandemic, data on the circulating strains has been extremely limited when compared to pre-pandemic years. It is unknown if in the limited data will affect the efficacy of the vaccine; however researchers are optimistic that the previous decrease in circulation has resulted in less genetic variability, which could make the vaccine more effective³.

Currently there are 10 different FDA approved flu vaccines available in the U.S. for everyone 6 months of age and older, administered via injection or intranasal spray. All vaccines this year will be quadrivalent, meaning that they will contain components of 4 strains of influenza viruses. Vaccination is particularly important for people in the third trimester of pregnancy as flu can lead to complications during pregnancy and it can help protect infants from the flu. Due to mutations of the flu virus and the tendency of declining immunity over time, it is important for those 6 months of age and older to get vaccinated annually¹.

For more information, please visit [CDC Influenza](#)

References

- 1Center for Biologics Evaluation and Research. (n.d.). *Influenza vaccine for the 2020-2021 season*. U.S. Food and Drug Administration. Retrieved October 7, 2021, from <https://www.fda.gov/vaccines-blood-biologics/lot-release/influenza-vaccine-2020-2021-season>
- 2Centers for Disease Control and Prevention. (2018, August 10). *Past pandemics*. Centers for Disease Control and Prevention. Retrieved October 7, 2021, from <https://www.cdc.gov/flu/pandemic-resources/basics/past-pandemics.html>
- 3Centers for Disease Control and Prevention. (2021, July 22). *2020-2021 flu season summary*. Centers for Disease Control and Prevention. Retrieved October 7, 2021, from <https://www.cdc.gov/flu/season/faq-flu-season-2020-2021.htm>
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- 5Centers for Disease Control and Prevention. (2021, August 26). *Key facts about seasonal flu vaccine*. Centers for Disease Control and Prevention. Retrieved October 7, 2021, from <https://www.cdc.gov/flu/prevent/keyfacts.htm>

LGBTQ+ Health is Public Health

by Rachel Ilic, MPH, CIC

October is lesbian, gay, bisexual, transgender, queer and others (LGBTQ+) History Month, chosen to coincide with National Coming Out Day on October 11 and the anniversary of the first march on Washington for gay and lesbian rights in 1979. The month highlights and celebrates the history and achievements of the queer community.

The LGBTQ+ community faces a variety of health disparities due to societal stigma, discrimination, and the denial of basic rights, all of which have led to increased rates of suicide, violence, sexually transmitted infections, psychiatric disorders, and substance abuse.¹ LGBTQ+ youth are four times more likely than straight youth to make a suicide attempt requiring medical attention. As many as 70% of transgender and gender diverse people report being the victim of discrimination when seeking healthcare and 1 in 5 have been denied by a provider. Transgender people are also twice as likely than cisgender people to be unemployed, with transgender people of color more than four times as likely to be unemployed.



LGBTQ+ health is an important part of public health. By reducing LGBTQ+ health disparities, an improvement in mental and physical health can be seen, along with reduced disease transmission and decreased health care costs. Efforts public health and health care professionals can take include ongoing evaluation of additional health disparities, improving patient-provider relationships by appropriately inquiring about sexual orientation and gender identity, providing training to increase culturally competent care, supporting antibullying policies in schools, and providing supportive social services to reduce suicide and homelessness in youth.

While the United States has come a long way since 1979, it is important to understand the history of oppression and discrimination that the LGBTQ+ community has faced, acknowledge the impact of the ongoing health disparities, and to remain culturally competent in order to provide the best care to the LGBTQ+ community.

For more resources on LGBTQ+ health, please visit [CDC LGBT Health](#)

References

LGBTQ+ Pride Month Heritage Guide https://www.hopkinsmedicine.org/diversity/resources/cultural-materials/docs/Pride_Month_Heritage_Guide.pdf

Texas *Naegleria fowleri* Infection Linked to Splash Pad

by Becky Bohinc, MPH, CPH

In September, a case of primary amebic meningoencephalitis (PAM) received national attention when a 3-year-old child in Texas died after being infected. The child had recently visited a splash pad several times prior to becoming ill. Upon review, it was found that the park employees did not consistently check or record chlorine levels for the splash pad, despite the requirement for daily water quality tests to be performed daily prior to opening. Testing of the water detected *Naegleria fowleri*.



Primary amebic meningoencephalitis (PAM) is a severe brain infection caused by the amoeba *Naegleria fowleri*. The amoeba is commonly found in warm, fresh water such as rivers, lakes, hot springs, or soil. However, it can also be present in improperly maintained swimming pools or contaminated tap water. More cases are seen during the summer months and more often in the southern United States. Infection occurs when water containing the amoeba enters the nasal passage, often through swimming or diving. Less frequently, infections may occur when individuals submerge their head underwater or use contaminated tap water to irrigate their sinuses. The amoeba travels through the nose to the brain, eventually causing a severe infection called PAM.

Symptoms such as fever, nausea, severe frontal headaches, or seizures often occur within 9 days (median 5 days) and death often occurs within 18 days (median 5 days) after onset. Due to the rapid progression of disease, detection is difficult, and a suspected diagnosis should be considered even in the absence of diagnostic testing. Prompt treatment is critical to a positive outcome for the patient and can be obtained rapidly following consultation with the Centers for Disease Control and Prevention (CDC). PAM is almost always fatal and there have been only four survivors among 151 cases reported in the United States from 1962-2019. There have been 36 cases with reported exposures in Florida, second only to Texas with 39. Florida reported two cases in 2020 and has not reported any in 2021 as of September 30.

This case serves as a reminder to consider all recreational water exposures, even those treated with chlorine, when PAM is suspected in a patient.

For more information, please visit [CDC Naegleria fowleri](#)

Select Reportable Diseases in Pinellas County

Disease	Pinellas		YTD Total		Pinellas Annual Totals		
	September 2021	September 2020	Pinellas 2021	Florida 2021	2020	2019	2018
A. Vaccine Preventable							
Measles	0	0	0	0	0	1	7
Mumps	0	0	2	24	1	7	10
Pertussis	0	0	1	36	8	27	32
Varicella	2	0	22	247	18	33	67
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	0	0	1	15	0	3	1
Meningitis (Bacterial, Cryptococcal, Mycotic)	0	0	3	58	6	7	9
Meningococcal Disease	0	0	1	17	3	1	1
C. Enteric Infections							
Campylobacteriosis	12	21	170	2937	252	310	264
Cryptosporidiosis	1	8	23	229	44	64	34
Cyclosporiasis	0	2	9	248	9	28	4
<i>E. coli Shiga Toxin (+)</i>	1	0	14	477	10	24	15
Giardiasis	1	4	18	490	28	52	41
Hemolytic Uremic Syndrome (HUS)	0	0	0	3	0	1	0
Listeriosis	0	0	2	43	2	2	1
Salmonellosis	28	37	117	4331	176	201	233
Shigellosis	3	1	28	338	19	22	40
D. Viral Hepatitis							
Hepatitis A	0	0	1	150	4	377	113
Hepatitis B: Pregnant Woman	2	1	6	229	40	24	14
Hepatitis B, Acute	6	2	44	394	103	72	52
Hepatitis C, Acute	2	11	57	1093	18	82	40
E. Vector Borne/ Zoonoses							
Animal Rabies	0	0	0	64	1	2	1
Rabies, possible exposure	10	9	106	2646	128	128	130
Chikungunya Fever	0	0	0	1	0	0	0
Dengue	0	0	0	13	0	3	0
Eastern Equine Encephalitis	0	0	0	0	0	0	0
Lyme Disease	6	3	10	202	11	22	14
Malaria	0	0	2	31	2	5	3
West Nile Virus	0	0	0	8	0	0	0
Zika Virus Disease	0	0	0	0	0	3	2
F. Others							
Chlamydia	342	366	3121	n/a	3982	4588	4422
Gonorrhea	146	184	1447	n/a	1640	1537	1439
Hansen's Disease	0	0	0	10	0	0	0
Legionellosis	3	7	29	677	35	43	37
Mercury Poisoning	0	0	2	12	1	1	1
Syphilis, Total	40	50	448	n/a	469	479	438
Syphilis, Primary and Secondary	18	21	197	n/a	224	213	190
Syphilis, Early Latent	15	20	167	n/a	161	191	158
Syphilis, Congenital	1	0	3	n/a	5	6	2
Syphilis, Late Syphilis	6	9	81	n/a	89	69	88
Tuberculosis	2	4	16	n/a	24	23	33
<i>Vibrio Infections</i>	0	1	10	195	12	18	6

*YTD up to September 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.