



EPI WATCH

Monthly Epidemiology Newsletter

Increase in Chickenpox Cases—2023

By Rachel Ilic, MPH, CPH, CIC

205 Dr. MLK Jr. St. N
St. Petersburg, FL 33701
(727) 824-6900

Director
Ulyee Choe, DO

Editor
Rachel Ilic, MPH, CPH, CIC
Rachel.Ilic@FLHealth.gov

Division of Disease Control and Health Protection

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

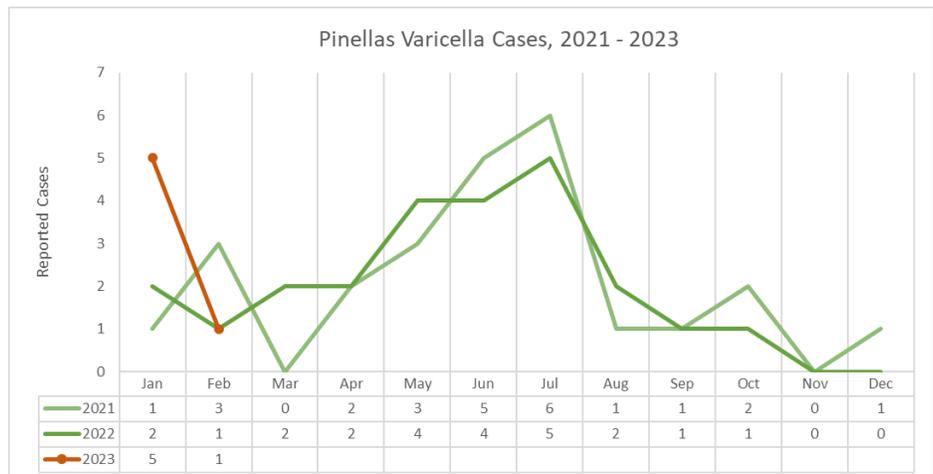
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Varicella (chickenpox) is a viral infection that causes an itchy, blister-like rash. After initial infection, the virus can stay in the body and reappear later in life as shingles. Chickenpox can cause serious infection and complications in babies and others with weakened immune systems including pregnant women. While rare, maternal varicella infection before 20 weeks gestation can lead to various birth defects.¹

Chickenpox spreads through the air but may also occur by direct contact with blister fluid. Chickenpox is highly contagious, infecting between 61-90% of those who are susceptible. Those with chickenpox are considered contagious until all lesions have crusted over, typically five days, and should be excluded from activities during this time. The best way to prevent chickenpox infection is through vaccination. The vaccine is given in a two-dose series with the first dose given between age 12-15 months and the second at 4-6 years.²

Chickenpox typically follows a seasonal pattern with the highest occurrence in winter and early spring.¹ In January 2023, DOH-Pinellas identified an increase in chickenpox cases compared to the same time last year (see graph below). Similarly, chickenpox cases increased statewide with 47 cases reported in January 2023, while 23 were reported in 2022 for the same time period.



Additionally, the Centers for Disease Control and Prevention (CDC) recently identified an increase in varicella cases in US-bound refugee children from Tanzania. If a refugee from Tanzania presents with symptoms consistent with varicella infection, the patient should be isolated and tested via real-time PCR.

Chickenpox cases, whether physician diagnosed or by lab result, are reportable in Florida. Please contact DOH-Pinellas Epidemiology Program at 727-824-6932 with questions or concerns.

¹<https://www.cdc.gov/vaccines/pubs/pinkbook/varicella.html>

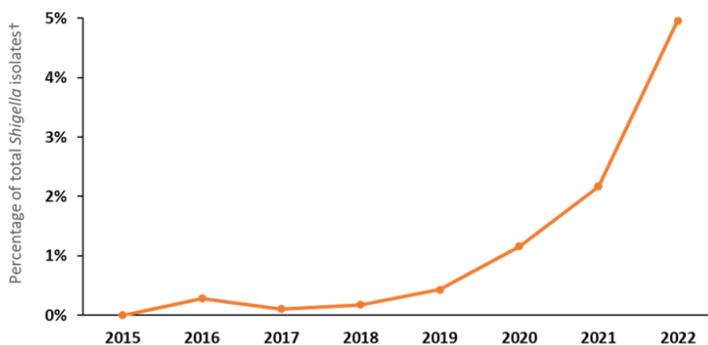
²<https://www.cdc.gov/chickenpox/about/index.html>

HAN 486: Increase in Extensively Drug-Resistant Shigellosis in the United States

CDC Health Alert Network

The Centers for Disease Control and Prevention (CDC) has been monitoring an increase in extensively drug-resistant (XDR) *Shigella* infections (shigellosis) reported through national surveillance systems¹. In 2022, about 5% of *Shigella* infections reported to CDC were caused by XDR strains, compared with 0% in 2015. Clinicians treating patients infected with XDR strains have limited antimicrobial treatment options. *Shigella* bacteria are easily transmissible. XDR *Shigella* strains can spread antimicrobial resistance genes to other enteric bacteria. Given these potentially serious public health concerns, CDC asks healthcare professionals to be vigilant about suspecting and reporting cases of XDR *Shigella* infection to their local or state health department and educating patients and communities at increased risk about prevention and transmission.

Figure: Percentage of *Shigella* isolates that showed an extensively drug resistant (XDR)* phenotype or genotype in the United States, by year, 2015–2022¹



*XDR *Shigella* bacteria (n=239) are defined as resistant to azithromycin, ciprofloxacin, ceftriaxone, trimethoprim-sulfamethoxazole, and ampicillin.

†Among sequenced *Shigella* isolates submitted to CDC's [PulseNet Whole Genome Sequencing Database](#); data are preliminary and based on broth microdilution susceptibility testing and/or presence of resistance genes and mutations found in whole genome sequences of bacterial DNA.

Retrieved from [Health Alert Network \(HAN\) - 00486 | Increase in Extensively Drug-Resistant Shigellosis in the United States \(cdc.gov\)](#)

¹CDC. [National Antimicrobial Resistance Monitoring System \(NARMS\) Now: Human Data](#). Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 2/24/2023.

²Shane AL, Mody RK, Crump J, et al. [2017 Infectious Diseases Society of America clinical practice guidelines for the diagnosis and management of infectious diarrhea](#). Clin Infect Dis. 2017 Dec; 65(12): p. e45–e80.

Shigellosis is an acute enteric infection that is an important cause of domestically acquired and travel-associated bacterial diarrhea in the United States. Shigellosis usually causes inflammatory diarrhea that can be bloody and may also lead to fever, abdominal cramping, and tenesmus. Infections are generally self-limiting; however, antimicrobial treatment may be indicated to prevent complications or shorten the duration of illness². CDC defines XDR *Shigella* bacteria as strains that are resistant to all commonly recommended empiric and alternative antibiotics – azithromycin, ciprofloxacin, ceftriaxone, trimethoprim-sulfamethoxazole (TMP-SMX), and ampicillin. Currently, there are no data from clinical studies of treatment of XDR *Shigella* to inform recommendations for the optimal antimicrobial treatment of these infections. As such, CDC does not have recommendations for optimal antimicrobial treatment of XDR *Shigella* infections.

Avian Influenza A (H5N1) - Cambodia

By: Rachel Ilic, MPH, CPH, CIC

On February 23, 2023, the Cambodia International Health Regulations (IHR) National Focal Point (NFP) reported one confirmed case of human infection with avian influenza A (H5N1). On February 24, a second case, a close contact to the index case, was identified.

The index case was an 11 year old female who developed symptoms on February 16 and subsequently passed away on February 22. Sequencing of the decedent's sample showed the H5N1 virus belonging to clade 2.3.2.1c which is similar to the clade viruses circulating in poultry in southeast Asia since 2014. An investigation into the source of infection and possible modes of transmission is currently ongoing.

H5N1 infection in humans can cause severe disease and has a high mortality rate; however, this varies among outbreaks. In Cambodia, a total of 58 cases of human infection with H5N1 have been identified since 2003, of which, 38 have died (mortality rate of 66%).¹

While the overall risk of infection to the human population remains low, sporadic human cases can be expected when avian influenza is circulating in the bird population.

For more information on Avian Influenza A (H5N1) please visit: <https://www.cdc.gov/flu/avianflu/index.htm>

¹<https://www.who.int/emergencies/disease-outbreak-news/item/2023-DON445>



Select Reportable Diseases in Pinellas County

Disease	Pinellas		YTD Total		Pinellas County Annual Totals		
	Jan 2023	Jan 2022	Pinellas 2023	Florida 2023	2022	2021	2020
A. Vaccine Preventable							
Coronavirus 2019	4712	48126	4712	136162	119224	103356	44852
Measles	0	0	0	0	0	0	1
Mpox	1	0	1	8	2861	0	0
Mumps	0	0	0	0	14	9	20
Pertussis	0	0	0	10	60	55	216
Varicella	5	0	5	44	440	365	348
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	0	0	0	9	51	22	10
Meningitis (Bacterial, Cryptococcal, Mycotic)	2	1	2	13	131	83	81
Meningococcal Disease	0	0	0	6	68	27	17
C. Enteric Infections							
Campylobacteriosis	11	17	11	309	4022	3873	3403
Cryptosporidiosis	3	3	3	60	619	343	291
Cyclosporiasis	0	0	0	4	509	252	153
<i>E. coli Shiga Toxin (+)</i>	1	1	1	71	1033	573	454
Giardiasis	0	1	0	93	1179	710	656
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	17	3	4
Listeriosis	0	1	0	2	55	57	38
Salmonellosis	12	7	12	406	7060	6240	6738
Shigellosis	7	1	7	96	948	535	549
D. Viral Hepatitis							
Hepatitis A	0	4	0	15	320	203	1021
Hepatitis B: Pregnant Woman +HBsAg	1	1	1	39	426	292	325
Hepatitis B, Acute	2	1	2	60	794	654	549
Hepatitis C, Acute	8	12	8	129	1669	1809	1688
E. Vectorborne/Zoonoses							
Animal Rabies	0	0	0	2	65	85	82
Rabies, possible exposure	16	10	16	425	4839	3738	3458
Chikungunya Fever	0	0	0	0	1	1	0
Dengue fever	0	0	0	43	960	32	116
Eastern Equine Encephalitis	0	0	0	0	0	0	0
Lyme Disease	0	0	0	4	257	193	121
Malaria	1	0	1	5	60	44	18
West Nile Virus	0	0	0	0	9	10	51
Zika Virus Disease	0	0	0	0	0	0	0
F. Others							
Chlamydia	298	286	298	N/A	4027	4090	3956
Gonorrhea	139	159	139	N/A	1734	1883	1634
Hansen's Disease	0	0	0	2	8	13	27
Legionellosis	2	6	2	29	523	503	428
Mercury Poisoning	0	0	0	4	37	15	9
Syphilis, Total	54	39	54	N/A	879	634	479
Syphilis, Infectious (Primary and Secondary)	37	13	37	N/A	336	274	212
Syphilis, Early Latent	15	17	15	N/A	269	239	166
Syphilis, Congenital	0	1	0	N/A	5	7	5
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	2	8	2	N/A	269	114	96
Tuberculosis	0	2	0	N/A	22	21	24
<i>Vibrio Infections</i>	0	1	1	2	230	178	226

*YTD up to January 31, 2023. n/a = not available at this time