

ANNUAL SUMMARY OF
**REPORTABLE
DISEASES**
2022

Columbus & Franklin County, Ohio



THE CITY OF
COLUMBUS
ANDREW J. GINTHER, MAYOR

**COLUMBUS
PUBLIC HEALTH**



Franklin County
Public Health

ANNUAL SUMMARY OF REPORTABLE DISEASES 2022

Columbus & Franklin County, Ohio

Published October 2023

Compiled and Prepared by:

Jeanetta Keslar, MPH
Epidemiologist
Columbus Public Health

Scott Brewer, MPH, RS
Infectious Disease Epidemiologist
Franklin County Public Health

Rachel Saadey, BS
Intern, Office of Epidemiology
Columbus Public Health

Kara Keller, MPH
Infectious Disease Epidemiologist
Franklin County Public Health

Cover Image: This is a colorized transmission electron microscopic image of mpox virus particles (teal), which were found within an infected cell (brown), having been cultured in the laboratory. The image was captured and color-enhanced at the National Institute of Allergy and Infectious Diseases (NIAID), Integrated Research Facility (IRF), located in Fort Detrick, Maryland. Image obtained from www.cdc.gov.

TABLE OF CONTENTS

Introduction	4
Demographic Profile of Franklin County	5
Counts and Rates of Reportable Diseases	
Enteric	6
Hepatitis	7
Sexually Transmitted	7
Vaccine-preventable	8
Vector-borne & Zoonotic	9
Other	10-11
Deaths Associated with Reportable Diseases	12
Infectious Disease Outbreaks	13
Disease Spotlights	
Lyme Disease	14
Salmonellosis	15
Shigellosis	16
Featured Outbreak Investigations	
Measles	17
Mpox	18
Timeliness of Disease Reporting	19
Technical Notes	20-21
References	22

ACKNOWLEDGEMENTS

We would like to thank the staff of:

Columbus Public Health

Office of Epidemiology
Elizabeth Wilson
Mysheika W. Roberts, MD, MPH
Ann Luttfiring
Elizabeth Koch, MD, MPH&TM
Naomi Tucker, RN, MPH, CIC, NHDP-BC

Franklin County Public Health

Radhika Iyer, MPH, CPH
Joe Mazzola, MPA
Alexandria Jones, MS, RN, CPH

INTRODUCTION

Infectious diseases are illnesses caused by microorganisms, such as bacteria, viruses, parasites and fungi. The route of transmission varies by disease and may include direct contact with contaminated body fluids or excretions, contact with contaminated objects, inhalation of contaminated airborne particles, ingestion of contaminated food or water, or transmission from a vector (i.e., arthropod) or other animal carrying the microorganism.

According to Ohio Administrative Code Chapter 3701-3, cases and suspected cases of selected infectious diseases are required to be reported to state and local public health agencies. These “reportable diseases” or “reportable conditions” were determined to be of public health significance in Ohio. Many of these diseases must also be reported to the Centers for Disease Control and Prevention (CDC) as part of national public health surveillance. In addition, outbreaks of infectious diseases must be reported to state and local public health agencies in Ohio, even if the individual disease is not classified as a reportable disease.

For over 20 years, Columbus Public Health and Franklin County Public Health have joined forces to make the reporting, tracking and investigation of infectious disease cases easier and more convenient through the centralized Infectious Disease Reporting System (IDRS). This system provides early identification of potential outbreaks and new trends in infectious diseases. Infectious disease staff ensure proper investigation, timely follow-up of case reports, and interventions to prevent additional cases.

The 2022 Annual Summary includes cases of reportable diseases that were diagnosed among residents of Columbus and Franklin County, reported to public health, and found to meet the public health surveillance definition of a confirmed, probable or suspected case. This report also includes data on confirmed and probable infectious disease outbreaks in Columbus and Franklin County. These data do not represent all reportable infectious disease cases or outbreaks that occurred in the community because individuals may not seek medical care for mild or asymptomatic infections, case information (such as exposure history) may be unavailable, and reported cases or clusters of illness may not meet public health surveillance definitions. Surveillance definitions are designed to standardize data collection and reporting across public health jurisdictions and may differ from clinical definitions used in patient management. Public health messaging or media coverage of a particular disease can also influence testing and reporting rates. Data in this summary are considered provisional.

This summary is intended to be a resource for individuals and public health partners concerned about infectious diseases in Columbus and Franklin County. Further information on infectious diseases and reporting procedures may be obtained by contacting Columbus Public Health or Franklin County Public Health or by visiting www.IDRSinfo.org.

KEY FINDINGS:

- Rates of the following reportable diseases increased from 2019-2022: Coronavirus Disease 2019 (COVID-19), Ehrlichiosis/anaplasmosis, Listeriosis, Lyme Disease, Measles, Mpox, West Nile virus infection, and primary and secondary syphilis.
- A total of 289 confirmed and probable outbreaks were reported in 2022, involving 5,464 cases; Healthcare-Associated and Institutional were the most common types of outbreaks with 136 outbreaks (47%) each, followed by Community with nine outbreaks (3%).
- The largest outbreak was caused by *severe acute respiratory syndrome-related coronavirus* (SARS-CoV-2) and involved 103 cases.

DEMOGRAPHIC PROFILE OF FRANKLIN COUNTY

FRANKLIN COUNTY POPULATION, 2022¹

- The population of Franklin County increased 0.3% from 2021 to 2022.
- 50.8% of Franklin County residents were female and 49.2% were male.
- 65.1% of Franklin County residents were White; 24.9% were Black or African American; 6.0% were Asian; 0.33% were American Indian and Alaskan Native; 0.05% were Native Hawaiian and Other Pacific Islander; and 3.6% identified as two or more races.
- 6.4% of Franklin County residents were Hispanic or Latino.

TABLE 1: FRANKLIN COUNTY POPULATION BY GENDER, 2022¹

GENDER	2022	
	POPULATION	PERCENT
Female	671,231	50.8%
Male	650,589	49.2%
Total	1,321,820	100%

TABLE 3: FRANKLIN COUNTY POPULATION BY ETHNICITY, 2022¹

ETHNICITY	2022	
	POPULATION	PERCENT
Hispanic or Latino	84,586	6.4%
Non-Hispanic or Non-Latino	1,237,234	93.6%
Total	1,321,820	100%

TABLE 2: FRANKLIN COUNTY POPULATION BY RACE, 2022¹

RACE	2022	
	POPULATION	PERCENT
American Indian or Alaska Native	4,353	0.33%
Asian	79,218	6.0%
Black or African American	328,961	24.9%
Native Hawaiian and Other Pacific Islander	674	0.05%
White	860,711	65.1%
Two or more races	47,903	3.6%
Total	1,321,820	100%

TABLE 4: FRANKLIN COUNTY POPULATION BY AGE GROUP, 2022¹

AGE (YEARS)	2022	
	POPULATION	PERCENT
0-4	85,439	6.5%
5-14	168,890	12.8%
15-24	177,993	13.5%
25-34	230,186	17.4%
35-44	188,725	14.3%
45-54	151,961	11.5%
55-64	143,798	10.9%
65-74	108,138	8.2%
75-84	49,159	3.7%
85+	17,531	1.3%
Total	1,321,820	100%

COUNTS & RATES OF REPORTABLE DISEASES

TABLE 5: ENTERIC DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2019-2022

Year:		2019			2020			2021			2022				
		1,316,756			1,324,357			1,317,560			1,321,820				
CLASS	DISEASE NAME	Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses			
		# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†		
B	Amebiasis	2	0.2	3	0.2	6	0.5	8	0.6	0	0.0	7	0.5	8	0.6
A	Botulism, Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Campylobacteriosis	227	17.2	227	17.2	151	11.4	151	11.4	222	16.8	269	20.4	269	20.4
A	Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Cryptosporidiosis	123	9.3	123	9.3	29	2.2	29	2.2	47	3.6	68	5.1	68	5.1
B	Cyclosporiasis	38	2.9	38	2.9	14	1.1	18	1.4	25	1.9	26	2.0	9	0.7
B	<i>Escherichia coli</i> O157:H7 and Shiga toxin-producing <i>E. coli</i> (STEC)	108	8.2	110	8.4	62	4.7	63	4.8	78	5.9	90	6.8	92	7.0
B	Giardiasis	101	7.7	107	8.1	52	3.9	63	4.8	68	5.2	92	7.0	100	7.6
B	Hemolytic uremic syndrome (HUS)	2	0.2	2	0.2	0	0.0	0	0.0	2	0.2	2	0.2	1	0.1
B	Hepatitis A	297	22.6	377	28.6	5	0.4	24	1.8	4	0.3	16	1.2	4	0.3
B	Hepatitis E	0	0.0	2	0.2	0	0.0	1	0.1	0	0.0	2	0.2	2	0.2
B	Listeriosis	0	0.0	0	0.0	5	0.4	5	0.4	6	0.5	6	0.5	7	0.5
B	Salmonellosis	199	15.1	199	15.1	126	9.5	127	9.6	150	11.4	151	11.5	168	12.8
B	<i>Salmonella</i> Paratyphi infection	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	<i>Salmonella</i> Typhi infection (typhoid fever)	2	0.2	3	0.2	0	0.0	1	0.1	1	0.1	2	0.2	2	0.2
B	Shigellosis	94	7.1	94	7.1	58	4.4	58	4.4	51	3.9	93	7.0	93	7.0
B	Trichinellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Vibriosis	6	0.5	6	0.5	3	0.2	3	0.2	11	0.8	11	0.8	9	0.7
B	Yersiniosis	22	1.7	25	1.9	18	1.4	18	1.4	25	1.9	26	2.0	33	2.5

† Rate per 100,000 population

N/A = Not a reportable condition during the specified time period

TABLE 6: HEPATITIS B & C AMONG FRANKLIN COUNTY RESIDENTS, 2019-2022

		2019				2020				2021				2022			
		1,316,756				1,324,357				1,317,560				1,321,820			
CLASS	DISEASE NAME	Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses	
		# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†
B	Hepatitis B, acute	63	4.8	63	4.8	30	2.3	30	2.3	24	1.8	25	2.9	12	0.9	12	0.9
B	Hepatitis B, chronic	472	35.8	472	35.8	334	25.2	334	25.2	401	30.4	401	30.4	373	28.2	373	28.2
B	Hepatitis B, perinatal*	0	--	24	--	0	--	37	--	0	--	25	--	0	--	62	--
B	Hepatitis C, acute	75	5.7	75	5.7	10	0.8	10	0.8	23	1.7	23	1.7	11	0.8	11	0.8
B	Hepatitis C, chronic	1,399	106.2	1,399	106.2	1,077	81.3	1,077	81.3	1,253	95.1	1,253	95.1	968	73.2	968	73.2
B	Hepatitis C, perinatal	7	--	7	--	9	--	9	--	7	--	7	--	0	--	6	--

† Rate per 100,000 population
 *Hepatitis B perinatal numbers updated from previous years reports

TABLE 7: SEXUALLY TRANSMITTED INFECTIONS AMONG FRANKLIN COUNTY RESIDENTS, 2019-2022

		2019				2020				2021				2022			
		1,316,756				1,324,357				1,317,560				1,321,820			
CLASS	DISEASE NAME	Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses	
		# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†
^	HIV/AIDS*	216	16.4	216	16.4	204	15.4	204	15.4	188	14.2	188	14.2	196	14.8	196	14.8
B	Chancroid	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	<i>Chlamydia trachomatis</i> infections	10,344	791.0	10,344	791.0	9,359	706.7	9,359	706.7	9,429	715.6	9,429	715.6	9,852	745.3	9,852	745.3
B	Gonorrhea (<i>Neisseria gonorrhoeae</i>)	4,972	380.2	4,972	380.2	5,008	378.1	5,008	378.1	4,935	374.6	4,935	374.6	5,056	382.5	5,056	382.5
B	Syphilis, congenital	7	38.1	7	38.1	5	28.6	5	28.6	20	115.2	20	115.2	34	197.1	34	197.1
B	Syphilis, primary and secondary	213	16.3	213	16.3	319	24.1	319	24.1	651	49.4	651	49.4	853	64.5	853	64.5

† Rate per 100,000 population for all diseases except "syphilis, congenital" which is per 100,000 live births²
 ²Report on forms and in a manner prescribed by the director, described in Ohio Administrative Code Chapter 3701-3-12
 *Case counts obtained from the Ohio Department of Health (see Technical Notes)

TABLE 8: VACCINE-PREVENTABLE DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2019-2022
 VACCINE-PREVENTABLE DISEASES

		2019			2020			2021			2022				
		1,316,756			1,324,357			1,317,560			1,321,820				
CLASS	DISEASE NAME	Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses			
		# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†		
B	Coronavirus Disease 2019 (COVID-19)	N/A	N/A	N/A	N/A	90,311	6,817.2	93,786	7,081.6	131,857	10,007.8	155,693	11,778.7	155,983	11,800.6
B	<i>Haemophilus influenzae</i> (invasive disease)	43	3.3	43	3.3	18	1.4	18	1.4	14	1.1	28	2.1	29	2.2
B	Influenza-associated hospitalization	819	62.2	829	62.2	732	55.3	735	55.5	27	2.0	574	43.4	577	43.7
B	Influenza-associated pediatric mortality	1	--	1	--	0	--	0	--	0	--	0	--	0	--
A	Measles	0	0.0	3	0.3	0	0.0	0	0.0	0	0.0	85	6.4	106	8.0
A	Meningococcal disease	0	0.0	0	0.0	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0
B	Mumps	10	0.8	16	1.2	1	0.1	5	0.5	0	0.0	2	0.2	1	0.3
B	Pertussis	142	10.8	208	15.8	38	2.9	44	3.3	34	2.6	46	3.5	39	3.0
B	Poliomyelitis (including vaccine-associated cases)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Rubella, congenital	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
A	Rubella, not congenital	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
B	<i>Streptococcus pneumoniae</i> , invasive disease (ISP)	167	12.7	167	12.7	88	6.6	89	6.7	82	6.2	25	1.9	25	1.9
B	Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Varicella	45	3.4	47	3.6	21	1.6	38	2.9	24	1.8	32	2.4	38	2.9

† Rate per 100,000 population for all diseases except "rubella, congenital" which is per 100,000 live births²

-- No rate is calculated

COUNTS & RATES OF REPORTABLE DISEASES, continued

TABLE 9: VECTORBORNE AND ZOONOTIC DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2019-2022
VECTORBORNE AND ZOONOTIC DISEASES

		2019				2020				2021				2022			
		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses	
		# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†
Population:		1,316,756		1,324,357		1,317,560		1,321,820									
CLASS	DISEASE NAME																
B	Babesiosis	0	0.0	2	0.2	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
B	Brucellosis	0	0.0	2	0.2	0	0.0	2	0.2	3	0.2	0	0.0	1	0.1	0	0.0
B	Chikungunya	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Dengue	3	0.2	5	0.4	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	3	0.2
B	Eastern equine encephalitis virus disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Ehrlichiosis/Anaplasmosis	0	0.0	5	0.4	1	0.1	2	0.2	1	0.1	5	0.4	5	0.4	6	0.5
B	Hantavirus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Jamestown Canyon Virus	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	La Crosse virus disease (other California serogroup virus disease)	2	0.2	2	0.2	0	0.0	0	0.0	1	0.1	1	0.1	1	0.1	2	0.2
B	Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
B	Lyme disease	16	1.2	44	3.3	21	1.6	82	6.2	23	1.7	126	9.6	38	2.9	117	8.9
B	Malaria	27	2.1	27	2.1	7	0.5	7	0.5	40	3.0	40	3.0	43	3.3	43	3.3
B	Other arthropod-borne disease*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0
A	Plague	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Powassan virus disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Psittacosis	0	0.0	1	0.1	0	0.0	2	0.2	0	0.0	1	0.1	0	0.0	1	0.1
B	Q fever	1	0.1	2	0.2	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	1	0.1
A	Rabies, human	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Spotted fever rickettsiosis, including Rocky Mountain spotted fever (RMSF)	3	0.2	7	0.5	1	0.1	8	0.6	1	0.1	9	0.7	0	0.0	3	0.2
B	St. Louis encephalitis virus disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	1	0.1
A	Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1	0	0.0	2	0.2
A	Viral hemorrhagic fever (VHF)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	West Nile virus infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.2	2	0.2
B	Western equine encephalitis virus disease	0	0.0	0	0.0	1	0.1	5	0.4	0	0.0	0	0.0	0	0.0	0	0.0
B	Yellow fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Zika virus infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

† Rate per 100,000 population
* Includes cases of arthropod-borne disease that did not belong to an individual disease category during the reporting period

COUNTS & RATES OF REPORTABLE DISEASES, continued

TABLE 10: OTHER REPORTABLE INFECTIOUS DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2019-2022
OTHER REPORTABLE INFECTIOUS DISEASES

CLASS	DISEASE NAME	2019				2020				2021				2022			
		Confirmed & Probable		All		Confirmed & Probable		All		Confirmed & Probable		All		Confirmed & Probable		All	
		# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†	# of Cases	Case Rate†
Population†:		1,316,756				1,324,357				1,317,560				1,321,820			
A	Anthrax	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
A	Any unexpected pattern of cases, deaths, or disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Botulism, infant	2	--	2	--	2	--	1	--	2	--	0	--	0	--	0	--
B	Botulism, wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
B	<i>Candida auris</i>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
B	Carbapenemase-producing carbapenem-resistant <i>Enterobacteriaceae</i> (CP-CRE)	37	2.8	38	2.9	25	1.9	21	2.4	31	2.4	21	1.6	22	1.7	32	2.4
B	Coccidioidomycosis	6	0.5	18	1.4	1	0.1	7	0.7	9	0.7	7	0.5	22	1.7	4	0.3
B	Creutzfeldt-Jakob disease	2	0.2	2	0.2	2	0.2	0	0.2	2	0.2	0	0.0	0	0.0	1	0.1
A	Influenza A- novel virus infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Legionnaires' disease	143	10.9	144	10.9	101	7.6	118	8.2	109	8.2	118	9.0	121	9.2	81	6.1
B	Leprosy (Hansen's disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Meningitis, aseptic (viral)	115	8.7	115	8.7	41	3.1	56	4.3	41	3.1	56	4.3	59	4.5	85	6.4
B	Meningitis, bacterial (not <i>N. meningitidis</i>)	27	2.1	28	2.1	14	1.1	16	1.2	16	1.2	16	1.2	16	1.2	28	2.1
A	Middle East Respiratory Syndrome (MERS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Mpox	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	110	8.3
A	Multisystem Inflammatory Syndrome in Children (MIS-C)	N/A	N/A	N/A	N/A	15	--	38	--	15	--	38	--	39	--	22	--

Table continued on next page.

COUNTS & RATES OF REPORTABLE DISEASES, continued

TABLE 10: OTHER REPORTABLE DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2019-2022, continued

OTHER REPORTABLE DISEASES		2019				2020				2021				2022			
		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses	
Population ¹ :		1,316,756		1,324,357		1,317,560		1,321,820									
CLASS	DISEASE NAME	# of Cases	Case Rate [†]	# of Cases	Case Rate [†]	# of Cases	Case Rate [†]	# of Cases	Case Rate [†]	# of Cases	Case Rate [†]	# of Cases	Case Rate [†]	# of Cases	Case Rate [†]	# of Cases	Case Rate [†]
A	Severe acute respiratory syndrome (SARS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
A	Smallpox	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	<i>Staphylococcus aureus</i> , with resistance or intermediate resistance to vancomycin (VRSA, VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
B	Streptococcal disease, group A, invasive (IGAS)	137	10.4	142	10.8	115	8.7	97	7.4	104	7.9	83	6.3	90	6.8		
B	Streptococcal disease, group B, in newborn	15	81.7	16	87.2	10	57.1	12	69.1	13	74.9	13	75.4	16	92.7		
B	Streptococcal toxic shock syndrome (STSS)	15	1.1	15	1.1	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1		
B	Toxic shock syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Tuberculosis (TB), including multi-drug resistant TB (MDR-TB)	47	3.6	47	3.6	52	3.9	48	3.6	48	3.6	48	3.6	48	3.6	48	3.6

[†] Rate per 100,000 population for all diseases except "streptococcal disease, group B, in newborn," which is per 1,000 live births²
 N/A = not a reportable condition during the specified time period
 -- No rate is calculated

DEATHS ASSOCIATED WITH DISEASE

In 2022, a total of 826 deaths occurred among confirmed and probable cases of reportable diseases in Franklin County. Of these deaths, 22 were associated with multiple reportable diseases. Coronavirus (COVID-19) was associated with the most deaths (n=770), followed by influenza-associated hospitalization (n=15), Streptococcus pneumoniae, invasive disease (ISP) (n=14), and Hepatitis C, chronic (n=7). The greatest number of deaths occurred among individuals aged 65 years and older (n=572). Eleven deaths occurred among cases less than 18 years old.

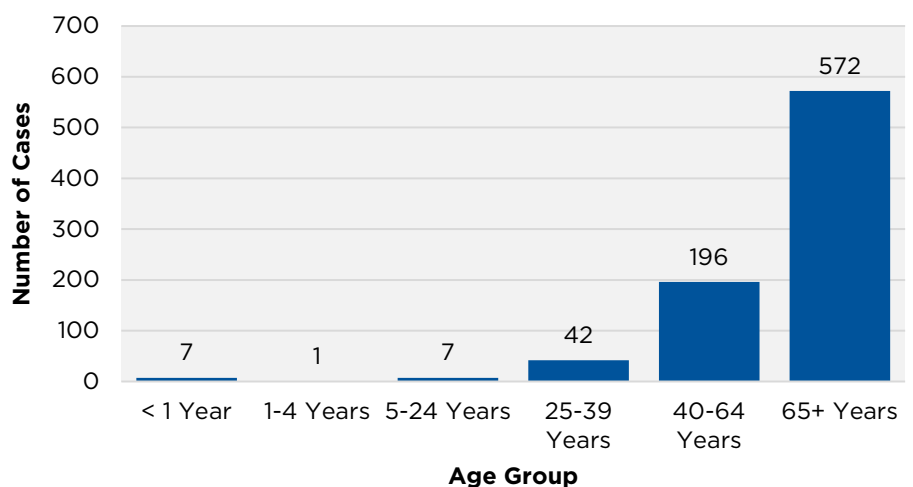
Death data were obtained from the Ohio Disease Reporting System (ODRS) and are subject to several limitations. A death is only captured in the ODRS record if the person dies during the course of a case or outbreak investigation. If a person dies after the investigation has ended, the record is not necessarily updated. Therefore, the number of deaths reported in Table 11 may underestimate the true number of deaths that occurred among reportable disease cases. Furthermore, investigators do not determine whether a reportable disease contributed to an individual's death. It is not possible to determine the true cause(s) of death without additional information from death or medical records.

TABLE 11: NUMBER OF DEATHS* AMONG CONFIRMED AND PROBABLE CASES OF REPORTABLE DISEASE, EXCLUDING SEXUALLY TRANSMITTED INFECTIONS, FRANKLIN COUNTY, 2022

REPORTABLE DISEASE	DEATHS*
<i>C. auris</i>	1
COVID-19	770
Campylobacteriosis	3
Carbapenemase-producing carbapenem-resistant Enterobacteriaceae (CP-CRE)	6
Creutzfeldt-Jakob Disease	1
<i>Haemophilus influenzae</i> (invasive disease)	2
Hepatitis B, chronic	4
Hepatitis C, chronic	7
Hepatitis E	1
Influenza-associated hospitalization	15
Invasive Group A Streptococcal Disease (IGAS)	6
Legionnaires' disease	6
Meningitis, bacterial	4
Meningitis, aseptic/viral	3
Mpox	1
Salmonellosis	1
<i>Streptococcus pneumoniae</i> , invasive disease (ISP)	14
Tuberculosis	2
Yersiniosis	1

*The number of deaths is specific to the reportable disease category. Twenty-two deaths were associated with multiple reportable diseases and are represented more than once in this table.

AGE DISTRIBUTION OF DEATHS AMONG CONFIRMED AND PROBABLE CASES OF REPORTABLE DISEASE, 2022 (N=826)*



*1 death is missing age

INFECTIOUS DISEASE OUTBREAKS

According to Ohio Administrative Code 3701-3, outbreaks, unusual incidence or epidemics of infectious diseases must be reported to state and local public health agencies. Outbreaks are Class C reportable conditions categorized by the setting or mode of transmission: cluster, community, foodborne, healthcare-associated, institutional, waterborne, zoonotic, and other.³ Franklin County Public Health (FCPH) and Columbus Public Health (CPH) may identify an outbreak through reportable disease case investigation, review of surveillance data, or report from an individual or institution. CPH and FCPH investigate outbreaks and implement prevention measures to help stop the spread of illness. Prevention measures can include, but are not limited to: increased surveillance for additional cases, laboratory testing, vaccination, post-exposure prophylaxis, exclusion of ill persons from a particular setting, and/or notification of individuals who may have been exposed.

NUMBER OF CONFIRMED AND PROBABLE OUTBREAKS REPORTED BY YEAR, FRANKLIN COUNTY, 2019-2022

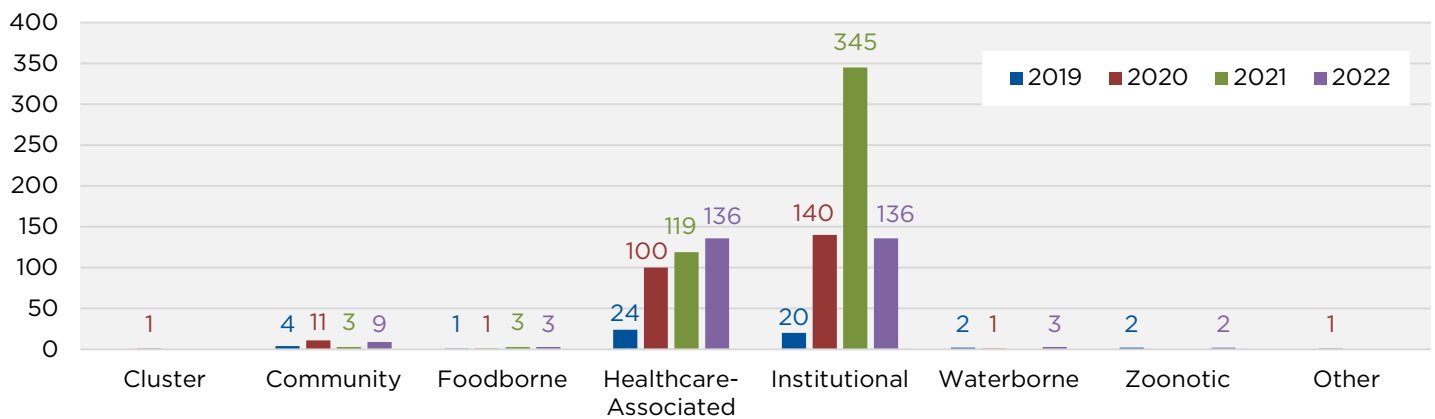


TABLE 12: NUMBER OF CONFIRMED AND PROBABLE OUTBREAKS, MOST COMMON SETTING AND MOST COMMON ETIOLOGY, BY TYPE OF OUTBREAK, FRANKLIN COUNTY, 2022

OUTBREAK TYPE	NUMBER OF OUTBREAKS	MOST COMMON SETTING	MOST COMMON ETIOLOGY
Community	9	Private home, Day care center, Blank	<i>Mpox</i> [6]
Foodborne	3	Blank	<i>Norovirus</i> [3]
Healthcare-Associated	136	Blank, Long term care facility, Assisted Living	<i>Severe acute respiratory syndrome-related coronavirus (SARS-CoV-2)</i> [125]
Institutional	136	Blank, Day care center, School	<i>Severe acute respiratory syndrome-related coronavirus (SARS-CoV-2)</i> [119]
Waterborne	3	Blank	<i>Legionella sp.</i> [3]
Zoonotic	2	Private home, Other	<i>Campylobacter</i> [2]

In Columbus and Franklin County in 2022:

- A total of 289 confirmed and probable outbreaks were reported; Healthcare-Associated and Institutional were the most common types of outbreak (both 47%) followed by Community (3%).
- Severe acute respiratory syndrome-related coronavirus (SARS-CoV-2) was the most common etiology with 245 outbreaks (85%).
- The largest outbreak was caused by severe acute respiratory syndrome-related coronavirus (SARS-CoV-2) and involved 103 cases.
- In total, 5,464 cases were associated with an infectious disease outbreak.

DISEASE SPOTLIGHT:

LYME DISEASE

LYME DISEASE		2022
Number of Cases		38
Rate*	<i>Overall</i>	2.9
	<i>Female</i>	2.4
	<i>Male</i>	3.4
Age of cases (in years)	<i>Mean</i>	29
	<i>Median</i>	18
	<i>Range</i>	4-72

* Rate per 100,000 population

EPIDEMIOLOGY³

Infectious Agent: *Borrelia burgdorferi* or *Borrelia mayonii*, spirochete-type bacteria

Case Definition: Please see the Ohio Infectious Disease Control Manual: Lyme Disease.

Mode of Transmission: The spirochete-type bacteria is transmitted through the bite of a tick: *Ixodes pacificus* in the western and *Ixodes scapularis* in the eastern and midwestern United States.

Incubation Period: Erythema migrans rash appears 3-32 days after tick bite (mean 7-10 days); early stages of the illness may be unapparent and the patient may present with later manifestations.

Symptoms: Approximately 70-80% of infected persons develop a circular rash called erythema migrans (EM) that begins at the site of a tick bite after a delay of 3-32 days (average is 7 days). The rash gradually expands over a period of several days, reaching up to 12 inches (30 cm) across. Other symptoms include fatigue, chills, fever, headache, muscle and joint aches, and swollen lymph nodes.

Days to Months Post Tick Bite: Untreated, infection may spread from the site of the bite to other parts of the body, producing Bell's palsy, severe headaches, neck stiffness, additional EM rashes, pain in tendons, muscles, joints, bones, shooting pains, heart palpitations and dizziness, nerve pain, pain and swelling in large joints. Up to 5% of untreated patients may develop chronic neurological complaints months to years after infection, including shooting pains, numbness, tingling in the hands and feet, problems with concentration and short term memory. Untreated disease produces a wide range of symptoms including fever, rash, facial paralysis and arthritis.

Treatment: Antibiotic therapy is recommended during the acute phase to reduce the incidence and severity of arthritic, neurologic, and cardiac manifestations. Commonly used antibiotics for oral treatment include doxycycline, amoxicillin or cefuroxime axetil. Patients with certain neurological or cardiac forms of illness may require intravenous treatment with drugs such as ceftriaxone or penicillin.

Prevention: Tick avoidance in endemic areas is the best preventive measure. Avoid woody areas with high grass and leaf litter. Wear long sleeves, pants, and socks. Use insect repellent. Wear light-colored clothing to facilitate frequent checks for crawling ticks. Remove ticks promptly. Bathe as soon as possible after coming indoors. Check pets and gear for ticks each day. Keep grass and weeds mowed short. Reduce mouse population by habitat reduction.

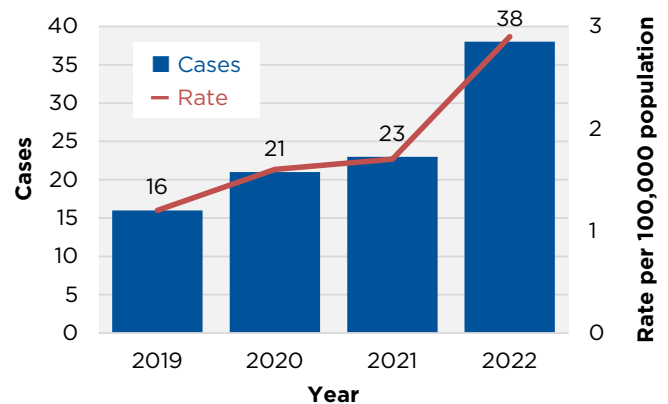
Case counts and rates include confirmed and probable cases.

LOCAL FACTS:

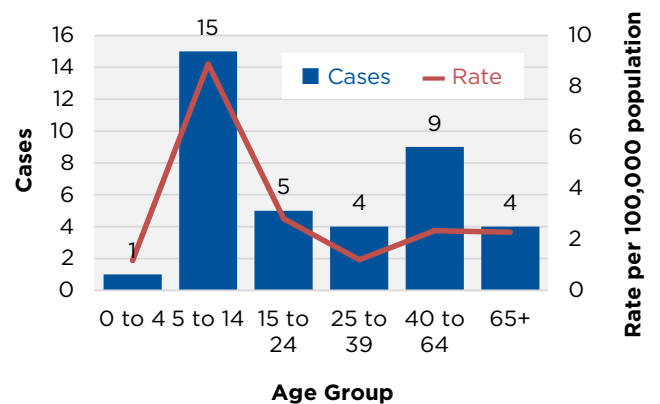
In Columbus and Franklin County in 2022:

- The Lyme disease rate among males was higher than the rate among females.
- 50% of confirmed and probable cases were pediatric cases.
- 96.8% of confirmed and probable cases were among whites of non-Hispanic or non-Latino descent.

LYME DISEASE CASES AND RATES BY YEAR, FRANKLIN COUNTY, 2019-2022



LYME DISEASE CASES AND RATES BY AGE GROUP, FRANKLIN COUNTY, 2022



DISEASE SPOTLIGHT:

SALMONELLOSIS

SALMONELLOSIS		2022
Number of Cases		168
Rate*	<i>Overall</i>	12.7
	<i>Female</i>	13.4
	<i>Male</i>	12.0
Age of cases (in years)	<i>Mean</i>	36.7
	<i>Median</i>	37.5
	<i>Range</i>	0-99

* Rate per 100,000 population

LOCAL FACTS:

In Columbus and Franklin County in 2022:

- The Salmonellosis rate among females was higher than the rate among males.
- 17% of total cases were among those less than 5 years old.
- 28% of total cases were pediatric cases.

EPIDEMIOLOGY³

Infectious Agent: Over 2,500 serotypes of *Salmonella* are known. *Salmonella* serotypes Typhimurium and Enteritidis account for nearly one-third of all human *Salmonella* isolated types in Ohio.

Case Definition: Please see the Ohio Infectious Disease Control Manual: Salmonellosis.

Mode of Transmission: Humans may acquire *Salmonella* directly (via the fecal-oral route) from animals such as pets, livestock and reptiles. May also be acquired from ingestion of contaminated food or water. Although uncommon, direct person-to-person transmission may occur via the fecal-oral route.

Incubation Period: 6-72 hours, usually 12-36 hours. Longer incubation periods of up to 16 days have been documented and may not be uncommon following low-dose ingestion.

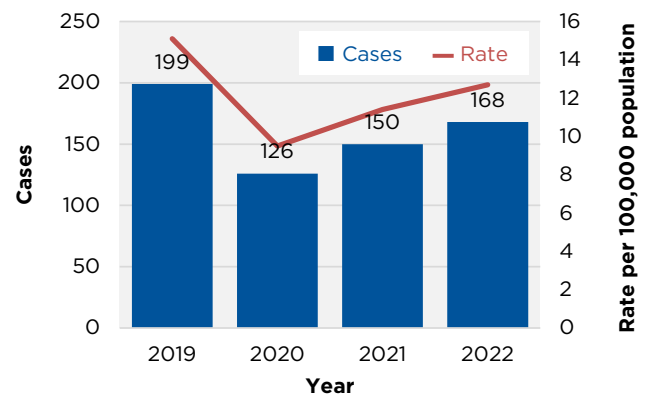
Symptoms: Most commonly, an acute gastrointestinal illness characterized by diarrhea, abdominal cramps, fever and sometimes vomiting. Infection may progress from gastroenteritis to septicemia or a focal infection (e.g., cholecystitis, meningitis).

Treatment: Antibiotics are generally not administered in cases of uncomplicated gastroenteritis, as they can lead to the carrier state. Antibiotic treatment may be indicated for infants, the elderly, those with underlying medical conditions, and patients with continued fever or extra-intestinal infections.

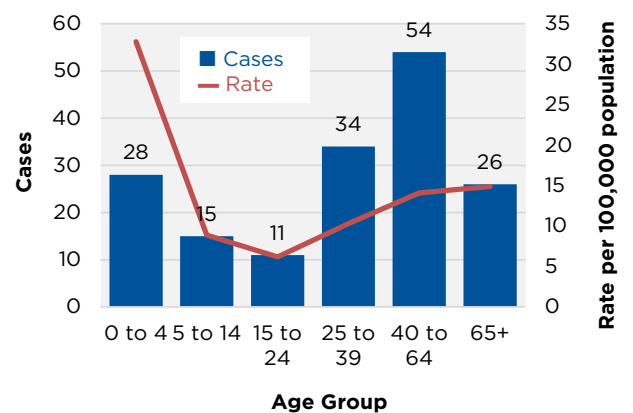
Prevention: Meat and egg dishes should be thoroughly cooked. Avoid cross-contamination of food (raw fruits and vegetables with raw meat juices). Thoroughly wash hands, especially after bowel movements, changing diapers, after contact with animals, and before eating and preparing food. Reptiles, chicks, and ducklings are inappropriate pets for small children since they may be *Salmonella* carriers. Food handlers who were symptomatic may return to work after diarrhea has ceased and two consecutive stool specimens are negative. Persons who work in sensitive occupations (e.g., healthcare, childcare) may return to work when diarrhea has ceased provided their duties do not include food handling.

Case counts and rates include confirmed and probable cases.

SALMONELLOSIS CASES AND RATES BY YEAR, FRANKLIN COUNTY 2019-2022



SALMONELLOSIS CASES BY AGE GROUP, FRANKLIN COUNTY, 2022



DISEASE SPOTLIGHT:

SHIGELLOSIS

SHIGELLOSIS		2022
Number of Cases		93
Rate*	Overall	7.0
	Female	5.5
	Male	8.6
Age of cases (in years)	Mean	29.7
	Median	30
	Range	1-86

* Rate per 100,000 population

LOCAL FACTS:

In Columbus and Franklin County in 2022:

- The Shigellosis rate among males was higher than the rate among females.
- 44% of cases were among Black individuals.
- 37% of cases were pediatric cases.

EPIDEMIOLOGY^{3, 6}

Infectious Agent: *Shigella sonnei* (also known as group D) accounts for most shigellosis cases in Ohio. *S. flexneri* (group B), *S. dysenteriae* (group A), and *S. boydii* (group C) can also cause human illness.

Case Definition: Please see the Ohio Infectious Disease Control Manual: Shigellosis.

Mode of Transmission: *Shigella* is usually transmitted directly person-to-person by the fecal-oral route. Food served raw or contaminated after cooking can serve as a vehicle for *Shigella*. Swimming in contaminated recreational water (e.g., lakes, beaches) is another way to acquire shigellosis. The low infectious dose facilitates transmission by these routes. It can also be spread through sexual activity. Of particular concern are multidrug-resistant *Shigella* outbreaks among men who have sex with men.

Incubation Period: 12-96 hours, usually 1-3 days.

Symptoms: Most commonly an acute gastrointestinal illness characterized by diarrhea, fever, abdominal pain, tenesmus, malaise, and sometimes vomiting. Typically, there is blood and mucous in the stool. Mild and asymptomatic infections can occur. Illness is usually self-limited and lasts 4-7 days on average.

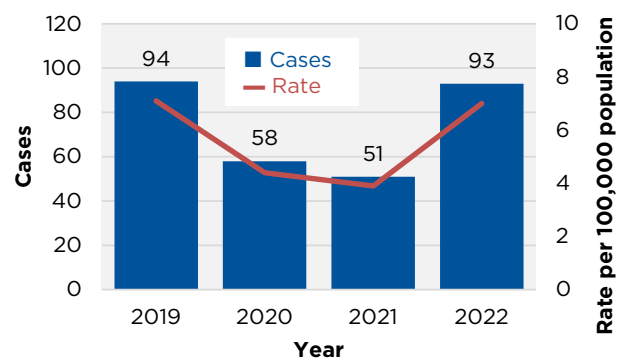
Treatment: People with mild infections may only need fluids and rest, and usually recover without antibiotic treatment in 4-7 days. Bismuth subsalicylate (Pepto-Bismol) can be helpful. Appropriate antibiotic treatment is recommended for patients with severe disease, bloody diarrhea or compromised immune systems. Antibiotic sensitivity of the patient's isolate should be determined to be treated with the appropriate antibiotic. Resistance to traditional first-line antibiotics such as ampicillin and Bactrim (trimethoprim-sulfamethoxazole/TMP-SMX) is common among *Shigella* across the globe. Parenteral ceftriaxone, a fluoroquinolone (such as ciprofloxacin), or azithromycin may be given if there is resistance to both ampicillin and TMP-SMX, or if susceptibility is unknown. Outbreaks of shigellosis resistant to ciprofloxacin or azithromycin, the two most common antibiotics used to treat *Shigella*, have recently been reported within the United States and other industrialized countries. Around 27,000 *Shigella* infections in the United States each year are resistant to one or both of these antibiotics. Resistant *Shigella* infections have been increasing since 2013.

Prevention: Education on the importance of hand washing can help limit the spread of disease. Thorough hand washing should be emphasized, especially after bowel movements, after changing diapers, and before eating or preparing food. Symptomatic persons who work in sensitive occupations (food handler, healthcare worker, childcare) may return to work after diarrhea has ceased and after two consecutive stools test negative for *Shigella*. New prevention methods are needed as increasing drug resistant strains threaten available treatment options. Routine surveillance for sexually transmitted diseases could be adapted to enhance *Shigella* prevention efforts.

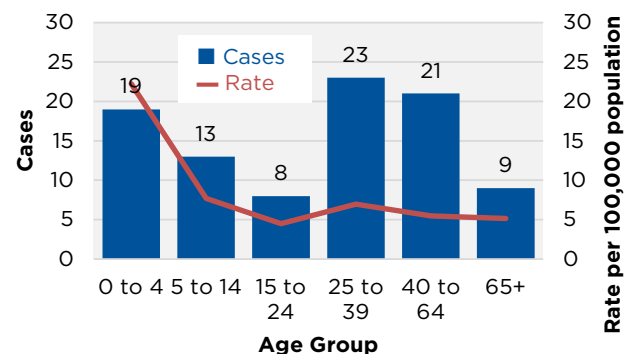
Prevention: Education on the importance of hand washing can help limit the spread of disease. Thorough hand washing should be emphasized, especially after bowel movements, after changing diapers, and before eating or preparing food. Symptomatic persons who work in sensitive occupations (food handler, healthcare worker, childcare) may return to work after diarrhea has ceased and after two consecutive stools test negative for *Shigella*. New prevention methods are needed as increasing drug resistant strains threaten available treatment options. Routine surveillance for sexually transmitted diseases could be adapted to enhance *Shigella* prevention efforts.

Case counts and rates include confirmed and probable cases.

SHIGELLOSIS CASES AND RATES BY YEAR, FRANKLIN COUNTY, 2019-2022



SHIGELLOSIS CASES AND RATES BY AGE GROUP, FRANKLIN COUNTY, 2022



FEATURED OUTBREAK INVESTIGATION:

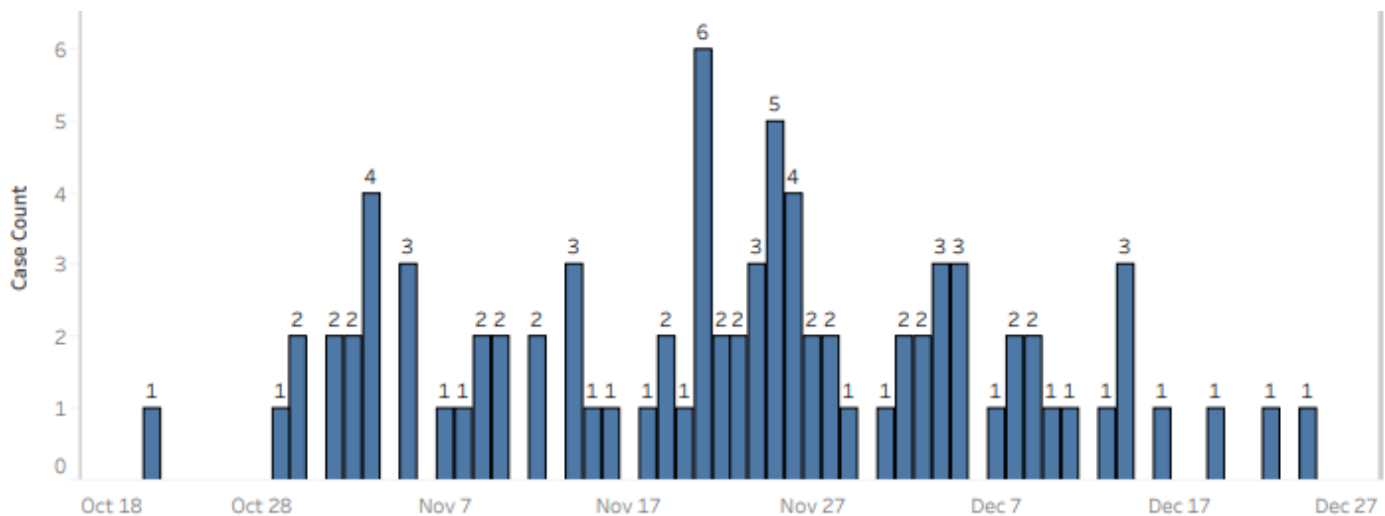
MEASLES

From November 2022 until February 2023, Columbus Public Health and Franklin County Public Health investigated a measles outbreak in central Ohio. In early November, CPH was notified of two children who were admitted to a local hospital with symptoms of rash, fever, cough and congestion, concerning for measles. Reported measles cases were interviewed and investigated by the local health departments and appropriate actions were taken to mitigate the spread of measles. The best thing a person can do to protect themselves and others is to get the MMR (Measles, Mumps, and Rubella) vaccine.

There were a total of 85 confirmed measles cases who were a part of this outbreak in central Ohio. Of the 85 cases, 36 were hospitalized and there were zero deaths. Twenty-five (29%) out of 85 cases were less than 1 year old, 55 (65%) were aged 1-5 years old and five cases (6%) were aged 6 -17 years old. Just over half of cases were male (44, 52%). The majority of cases (80, 94%) were unvaccinated. Unvaccinated means the case had zero doses of the MMR vaccine. About 30% of cases were not eligible for any doses because of age. Four cases were partially vaccinated, meaning they had one dose of the MMR vaccine. Some cases may not have been eligible yet for the second dose due to age. One case had unknown vaccination status.

Measles is one of the most contagious diseases. It is a virus that lives in the throat and nose mucus of the infected person. It spreads to other people through coughing and sneezing. People can become infected if they touch surfaces contaminated with the virus, and then touch their eyes, nose or mouth. It also can be spread through the air if people breathe in contaminated air. It is possible for the virus to live up to two hours in the airspace once an infected person leaves the space. Animals do not get or spread measles. The first symptoms typically show 7-14 days after infection, and can include high fever, cough, runny nose, and watery eyes. Tiny white spots (Koplik spots) may appear inside the mouth 2-3 days after symptoms start. Measles rash typically appears 3-5 days after the first symptoms. The rash usually begins as flat red spots that appear on the face at the hairline and spread downward to the neck, trunk, arms, legs and feet. When the rash appears, the infected person's fever could spike to over 104 degrees Fahrenheit. Measles can be prevented with the MMR vaccine. Two doses are about 97% effective at preventing measles, while one dose is about 93% effective. Anyone who is not protected against measles is at risk for contracting an infection.^{3,7}

MEASLES CASES BY DATE OF RASH ONSET, CENTRAL OHIO



*Epi curve shows Measles cases reported by date of rash onset from October 22, 2022 to December 24, 2022 in Central Ohio.

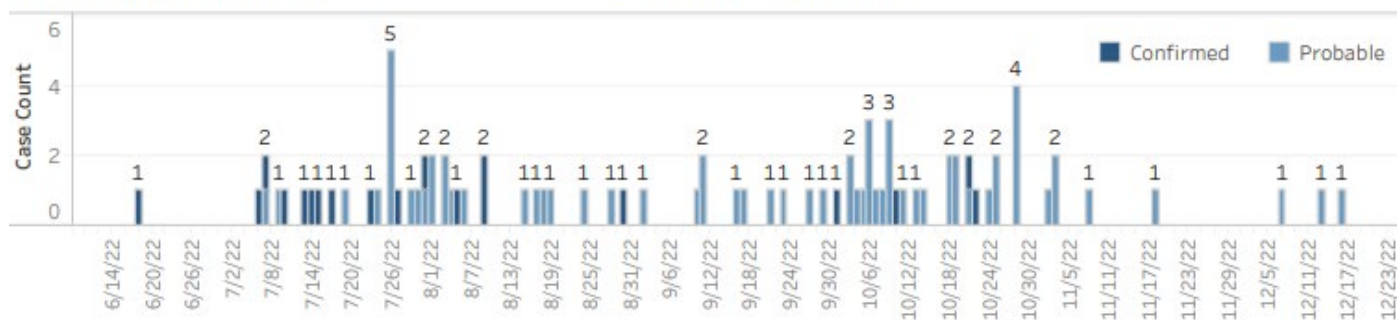
FEATURED OUTBREAK INVESTIGATION: MPOX

From June 2022 until December 2022, Columbus Public Health and Franklin County Public Health investigated an mpox outbreak in central Ohio. The first human case of mpox was documented in 1970 and since then, human cases have been reported in several central and western African countries. In 2022, an outbreak of mpox spread globally in countries that normally do not report mpox, including the United States. Before the 2022 outbreak, most mpox cases in humans outside of Africa were linked to international travel to countries where mpox commonly occurs or linked to imported animals from these countries.⁸

There were 88 cases in the Columbus and Franklin County jurisdictions during the 2022 mpox outbreak. The average age of cases was 37.1 years old. Case ages ranged from 21 to 64 years old. Nearly all cases (87, 98.9%) were male. In total, 6,313 doses of mpox vaccine were administered by CPH and FCPH. There were 3,364 first doses and 2,949 second doses administered.

Mpox disease is caused by infection with the mpox virus, which is a virus in the same family of viruses as variola, the virus that causes smallpox. Mpox is considered a rare disease. Mpox was first discovered from two outbreaks of pox-like disease in groups of monkeys kept for research in 1958. The source of the disease remains unknown, despite initially being named “monkeypox.” The incubation period for mpox is 5-21 days. Symptoms typically start within three weeks of exposure to the virus. Symptoms often include a rash which may be located on hands, feet, chest, face, mouth, or near the genitals. The rash can start by looking like pimples or blisters, and may be painful or itchy. The rash will go through several stages, including scabs, before healing. Other symptoms can include flu-like symptoms such as fever, chills, swollen lymph nodes, exhaustion, muscle and backaches, headaches, sore throat, nasal congestion, or cough. Some people only experience a rash, while others get a rash first, followed by other symptoms. Some may experience flu-like symptoms before the rash, with the rash developing 1-4 days later. Mpox can spread to anyone through close, intimate, skin-to-skin contact. Direct contact with mpox rash and scabs from a person infected with mpox, or contact with their saliva, mucus, and areas near the anus and genitals can spread mpox disease. Risk of infection is considered low from touching objects and surfaces used by someone with mpox and not disinfected. However, infections have also occurred through non-sexual contact with infectious lesions and from contaminated instruments in clinic settings. Mpox can also be spread from infected animals to people, most commonly through direct contact with infected rashes, scabs or bodily fluids. Infected urine and feces may also be a source of infection. Infected people may also spread mpox to animals through close contact. Prevention methods to protect oneself from getting mpox include avoiding close, skin-to-skin contact with people who have a rash that looks like mpox, avoiding contact with contaminated objects and materials, washing hands often, and getting vaccinated.^{3,8}

MPOX CASES BY EVENT DATE, CENTRAL OHIO



*Epi curve shows mpox cases reported by event date from June 18, 2022 to December 16, 2022 in central Ohio.

TIMELINESS OF DISEASE REPORTING

As part of reportable disease surveillance, CPH and FCPH monitor and work to improve timeliness of disease reports and completeness of reportable disease records. While CPH and FCPH continually work to improve data completeness through internal processes and procedures, timeliness largely depends on recognition and rapid reporting of cases by healthcare providers and laboratories.

Timely infectious disease reporting enables public health agencies to track disease occurrence and implement appropriate interventions for disease prevention. Timeliness requirements vary based on the communicability and severity of the disease as seen in the below table.

Table 13 lists selected diseases and their corresponding case counts, median and mean lag times, and proportion of cases missing diagnosis date. Median and mean lag time values should be less than one business day for Class A diseases (immediately reportable) and less than two business days for Class B diseases (reportable by end of next business day). Values that meet the lag time goal are shown in italics in *green*. Values that do not meet the goal are shown in parentheses in *red*.

Regular monitoring of timeliness data helps to address two key issues: late reporters and missing data. If specific reporters are found to be contributing to longer lag times, data will be shared with the reporter, challenges to timely reporting will be identified and addressed, and closer monitoring of reports will follow. Addressing missing or incorrect dates will improve data accuracy and aid in implementing appropriate interventions.

In addition to quality improvement efforts of CPH and FCPH, the Ohio Department of Health and the Association of Ohio Health Commissioners publish a public health quality indicators report including timeliness and completeness data for selected reportable diseases. For more information on ODH public health quality indicators and to view the reports, please visit: <https://odh.ohio.gov/wps/portal/gov/odh/about-us/Local-Health-Departments/Accreditation/>

TABLE 13: REPORTING LAG TIME* FOR CONFIRMED & PROBABLE CASES OF SELECTED REPORTABLE DISEASES, FRANKLIN COUNTY, 2022

REPORTABLE CONDITION	Reporting Requirement	2022			
		Confirmed & Probable Cases	Median Lag Time (business days)	Mean Lag Time (business days)	% of Cases Missing Diagnosis Date
<i>E. coli O157:H7</i> and Shiga toxin-producing <i>E. coli</i> (STEC) (Class B)	By end of next business day	90	<i>1</i>	<i>1.20</i>	27.8%
Hepatitis A (Class B)	By end of next business day	4	<i>1</i>	<i>0.75</i>	25.0%
Listeriosis (Class B)	By end of next business day	7	<i>1</i>	(17.43)	28.6%
Measles (Class A)	Immediately	85	<i>0</i>	(3.18)	6.0%
Meningococcal disease (Class A)	Immediately	0	N/A	N/A	N/A
Mumps (Class B)	By end of next business day	1	(4)	(4)	0.0
Pertussis (Class B)	By end of next business day	39	<i>1</i>	<i>1.08</i>	15.4%
Rubella (Class A)	Immediately	0	N/A	N/A	N/A
Salmonellosis (Class B)	By end of next business day	168	<i>1</i>	(2.76)	38.1%

*Reporting lag time = Difference between the diagnosis date** and the date the case was reported to the local health department

**If blank, "Diagnosis Date" defaulted to the following ODRS date fields (in order): specimen collection date, laboratory result date, onset date, date reported to Ohio Department of Health, created date. If a date occurred after the date of report to the local health department, the diagnosis date defaulted to the next proxy. These dates were obtained from case records in the Ohio Disease Reporting System (ODRS).

TECHNICAL NOTES

Ohio Administrative Code 3701-3-02, 3701-3-05 and 3701-3-12 require that communicable diseases be reported to local health departments.

TABLES OF DISEASE COUNTS AND RATES

Reportable disease data are likely to underestimate true disease occurrence. For a case to be included in this report, a disease must have been diagnosed among a resident of Columbus or Franklin County, reported to public health, met the public health surveillance case definition, and been recorded in the Ohio Disease Reporting System (ODRS) at the time of data analysis. Data in this report are considered provisional.

All statuses includes confirmed, probable and suspected cases.

Year refers to the case event date in ODRS for sexually transmitted infections; the date the case was counted for hepatitis B, hepatitis C, and tuberculosis; and the date the case record was created in ODRS for all other conditions. For outbreaks, year is the year that the outbreak record was created in ODRS.

Event date is calculated automatically in ODRS. If specimen collection date is blank, event date is the earliest of the following dates: illness onset date, diagnosis date, date reported to the local health department, date reported to the Ohio Department of Health (ODH).

Counts of newly diagnosed HIV/AIDS cases were obtained from the ODH HIV/AIDS Surveillance Program. Diagnoses of HIV infection include persons with a diagnosis of HIV infection (not AIDS), a diagnosis of HIV infection and a later AIDS diagnosis, and concurrent diagnoses of HIV infection and AIDS. Yearly HIV case counts include all reported cases diagnosed in a given year.

CASE AND OUTBREAK CLASSIFICATIONS

Case definitions for nationally notifiable diseases are determined by the Council of State and Territorial Epidemiologists (CSTE) in conjunction with the Centers for Disease Control and Prevention (CDC). Definitions are published in the *Morbidity and Mortality Weekly Report* and posted to CDC's National Notifiable Diseases Surveillance System website.⁴ In Ohio, case and outbreak definitions can be found in Section 3 of the Infectious Disease Control Manual.³ More information on reportable diseases and reporting procedures in Columbus and Franklin County can be found at www.IDRSinfo.org.

REPORTABLE DISEASE CLASS DEFINITIONS³

Reportable conditions in Ohio are grouped by class. Class definitions in 2022 were as follows:

Class A: Diseases of major public health concern because of the severity of disease or potential for epidemic spread. Report by telephone immediately upon recognition that a case, a suspected case or a positive laboratory result exists.

Class B: Disease of public health concern needing timely response because of potential for epidemic spread. Report by the end of the next business day after the existence of a case, a suspected case or a positive laboratory result is known.

Class C: Outbreak, unusual incidence or epidemic of other infectious diseases. Report by the end of the next business day.

DISEASE COUNTS AND RATES	DATA ARE CURRENT AS OF:
Chlamydia, gonorrhea and syphilis	May 16, 2023
HIV/AIDS data from the Ohio Department of Health	June 30, 2023
Infectious Disease Outbreaks	June 16, 2023
All other reportable conditions	May 11, 2023

Technical Notes continued on next page.

REPORTABLE DISEASE CHANGES IN OHIO IN 2022

No changes.

CASE DEFINITION CHANGES FOR NATIONALLY NOTIFIABLE DISEASES IN 2022⁴

Mpox, Lyme Disease

REPORTING SYSTEMS

Most disease cases in this summary were reported through the Infectious Disease Reporting System (IDRS), a joint effort between Columbus Public Health and Franklin County Public Health. Cases of sexually transmitted infections, HIV/AIDS, and tuberculosis have separate reporting systems.

The Ohio Disease Reporting System (ODRS)⁵ was developed as a web-based system to make disease reporting more timely and efficient for disease reporters (e.g., hospitals, laboratories and physicians) and to improve communication about infectious disease cases between disease reporters, local health departments and ODH. Currently, ODH, local health departments and infection preventionists have the ability to enter and update case and laboratory reports in ODRS. The system uses patient address to determine the correct local health jurisdiction to receive the report for follow-up and investigation. In addition, some laboratories have the ability to electronically upload batches of reports from their databases into ODRS via Electronic Laboratory Reporting (ELR), minimizing paperwork and data re-entry. If a disease report is inadvertently assigned to an incorrect health jurisdiction, the health department receiving the report can re-direct it to the correct jurisdiction. Updates to information can be made to the record in the database, and all fields in the ODH and CDC reporting forms are included in ODRS.

JURISDICTION

Each case is reported based on the address of residence and each jurisdictional boundary is determined by tax district. Franklin County Public Health and Columbus Public Health jurisdictions have boundaries that include parts of other counties, such as Delaware, Fairfield, Licking or Union. Cases represented in the tables may live in one of these neighboring counties. If a case lives in a neighboring county but is served by Franklin County Public Health or Columbus Public Health, the case would not be represented in Franklin County population estimates listed in the Demographic Profile in this report. Listed below are jurisdictions that Franklin County Public Health or Columbus Public Health serve that may be located in part of another county:

- Canal Winchester (Fairfield)
- Columbus (Delaware, Fairfield)
- Dublin (Delaware, Union)
- New Albany (Licking)
- Pickerington (Fairfield)
- Reynoldsburg (Fairfield, Licking)
- Westerville (Delaware)

PAST REPORTS

Previous CPH-FCPH Annual Summaries of Reportable Diseases are available at idsinfo.org/data.

REFERENCES

1. New Vintage 2020 Population Estimates Available for Nation, States, Counties, and Puerto Rico Commonwealth and Municipios by Demographic Characteristics. Source: Annual County and Puerto Rico Municipio Resident Population Estimates by Selected Age Groups and Sex: April 1, 2020 to July 1, 2022. Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin: April 1, 2020 to July 1, 2022. Last accessed: 06 July 2023. <https://www.census.gov/data/tables/time-series/demo/popest/2020s-counties-detail.html>.
2. Ohio Department of Health, Vital Statistics. Ohio Resident Live Births (2006-Present), Resident Live Births by County of Residence – Franklin County, 2022. Last updated: 28 April 2023. Last accessed: 04 May 2023. <http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/OhioLiveBirths>.
3. Ohio Department of Health. Infectious Disease Control Manual: Section 3. Published: 19 April 2022. Last accessed: 06 July 2023. <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/infectious-disease-control-manual/section3/>.
4. Centers for Disease Control and Prevention, Division of Health Informatics and Surveillance. National Notifiable Diseases Surveillance System (NNDSS) – Search Results for All Conditions. Last accessed: 25 May 2023. <https://www.cdc.gov/nndss/>.
5. Ohio Department of Health. Ohio Disease Reporting System. Published: 1 June 2018. Last accessed: 23 June 2023. <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/Ohio-Disease-Reporting-System/Ohio-Disease-Reporting-System>.
6. Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), Division of Healthcare Quality Promotion (DHQP). Antimicrobial Resistance. National Infection & Death Estimates. Drug-resistant Shigella. Last accessed 28 June 2023. <https://www.cdc.gov/drugresistance/pdf/threats-report/shigella-508.pdf>.
7. Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases, Division of Viral Diseases. Measles (Rubeola). Last accessed 28 June 2023. <https://www.cdc.gov/measles/index.html>.
8. Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), Division of High-Consequence Pathogens and Pathology (DHCPP). Mpox. Last accessed 28 June 2023. <https://www.cdc.gov/poxvirus/mpox/about/index.html>.