



# ANNUAL SUMMARY OF REPORTABLE DISEASES 2023

Columbus & Franklin County, Ohio



THE CITY OF  
**COLUMBUS**  
ANDREW J. GINTHER, MAYOR

**COLUMBUS  
PUBLIC HEALTH**



Franklin County  
**Public Health**

# ANNUAL SUMMARY OF REPORTABLE DISEASES 2023

Columbus & Franklin County, Ohio

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*Cover Image: This photomicrograph of a Gram stained specimen reveals a field of numerous Gram-negative, rod shaped Yersinia enterocolitica bacteria, the cause of yersiniosis in humans as well as many animals. Image obtained from [www.cdc.gov](http://www.cdc.gov).*

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# INTRODUCTION

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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 (mosquito, tick, etc.) 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 2023 Annual Summary includes cases of reportable diseases that were diagnosed among residents of Columbus and Franklin County, reported to public health, and met public health surveillance case definition standards and/or were suspected cases. 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](http://www.IDRSinfo.org).

## KEY FINDINGS:

- COVID-19 was responsible for the majority of deaths due to reportable diseases across Franklin County in 2023 (157 of 239 deaths due to reportable diseases).
- In 2023, the largest outbreak in Franklin County was caused by COVID-19 and involved 170 cases.
- From 2020 to 2023, Franklin County saw a year-on-year increase in case count and case rate for Chlamydia. In 2023, more than 10,000 cases were reported at a rate of 785.1 cases per 100,000 residents.

# DEMOGRAPHIC PROFILE OF FRANKLIN COUNTY

## FRANKLIN COUNTY POPULATION, 2023<sup>1</sup>

- The population of Franklin County increased 0.3% from 2022 to 2023.
- 50.9% of Franklin County residents were female and 49.1% were male.
- 64.7% of Franklin County residents were White; 25.3% were Black or African American; 5.9% were Asian; 0.4% were American Indian and Alaskan Native; 0.1% were Native Hawaiian and Other Pacific Islander; and, 3.7% identified as two or more races.
- 7.5% of Franklin County residents were Hispanic or Latino.

TABLE 1: FRANKLIN COUNTY POPULATION BY GENDER, 2023<sup>1</sup>

GENDER	2023	
	POPULATION	PERCENT
Female	675,208	50.9%
Male	650,855	49.1%
<b>Total</b>	<b>1,326,063</b>	<b>100%</b>

TABLE 3: FRANKLIN COUNTY POPULATION BY ETHNICITY, 2023<sup>1</sup>

ETHNICITY	2023	
	POPULATION	PERCENT
Hispanic or Latino	99,891	7.5%
Non-Hispanic or Non-Latino	1,226,172	92.5%
<b>Total</b>	<b>1,326,063</b>	<b>100%</b>

TABLE 2: FRANKLIN COUNTY POPULATION BY RACE, 2023<sup>1</sup>

RACE	2023	
	POPULATION	PERCENT
American Indian or Alaska Native	4,946	0.4%
Asian	78,246	5.9%
Black or African American	335,106	25.3%
Native Hawaiian and Other Pacific Islander	681	0.1%
White	857,370	64.7%
Two or more races	49,714	3.7%
<b>Total</b>	<b>1,326,063</b>	<b>100%</b>

TABLE 4: FRANKLIN COUNTY POPULATION BY AGE GROUP, 2023<sup>1</sup>

AGE (YEARS)	2023	
	POPULATION	PERCENT
0-4	84,959	6.4%
5-14	171,388	12.9%
15-24	176,418	13.3%
25-34	227,551	17.2%
35-44	192,548	14.5%
45-54	152,135	11.5%
55-64	141,851	10.7%
65-74	110,723	8.3%
75-84	51,932	3.9%
85+	16,558	1.2%
<b>Total</b>	<b>1,326,063</b>	<b>100%</b>

## COUNTS & RATES OF REPORTABLE DISEASES

TABLE 5: ENTERIC DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2020-2023

ENTERIC DISEASES																	
Year:		2020			2021			2022			2023						
Population:		1,324,357			1,317,560			1,321,820			1,326,063						
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	Amebiasis	6	0.5	8	0.6	0	0.0	0	0.0	7	0.5	8	0.6	4	0.3	7	0.5
A	Botulism, Foodborne	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	Campylobacteriosis	151	11.4	151	11.4	222	16.8	223	16.9	269	20.4	269	20.4	353	26.6	354	26.7
A	Cholera	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	Cryptosporidiosis	29	2.2	29	2.2	47	3.6	47	3.6	68	5.1	68	5.1	59	4.4	64	4.8
B	Cyclosporiasis	14	1.1	18	1.4	25	1.9	26	2.0	9	0.7	9	0.7	45	3.4	45	3.4
B	<i>Escherichia coli</i> O157:H7 and Shiga toxin-producing <i>E. coli</i> (STEC)	62	4.7	63	4.8	78	5.9	78	5.9	90	6.8	92	7.0	120	9.0	121	9.1
B	Giardiasis	52	3.9	63	4.8	68	5.2	92	7.0	79	6.0	100	7.6	135	10.2	144	10.9
B	Hemolytic uremic syndrome (HUS)	0	0.0	0	0.0	2	0.2	2	0.2	1	0.1	1	0.1	2	0.2	2	0.2
B	Hepatitis A	5	0.4	24	1.8	4	0.3	16	1.2	4	0.3	13	1.0	9	0.7	18	1.4
B	Hepatitis E	0	0.0	1	0.1	0	0.0	2	0.2	2	0.2	4	0.3	0	0.0	0	0.0
B	Listeriosis	5	0.4	5	0.4	6	0.5	6	0.5	7	0.5	8	0.6	0	0.0	0	0.0
B	Salmonellosis	126	9.5	127	9.6	150	11.4	151	11.5	168	12.7	169	12.8	209	15.8	209	15.8
B	<i>Salmonella</i> Paratyphi 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	<i>Salmonella</i> Typhi infection (typhoid fever)	0	0.0	1	0.1	1	0.1	1	0.1	2	0.2	2	0.2	6	0.5	6	0.5
B	Shigellosis	58	4.4	58	4.4	51	3.9	51	3.9	93	7.0	93	7.0	117	8.8	117	8.8
B	Trichinellosis	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	Vibriosis	3	0.2	3	0.2	11	0.8	11	0.8	9	0.7	9	0.7	11	0.8	11	0.8
B	Yersiniosis	18	1.4	18	1.4	25	1.9	26	2.0	33	2.5	33	2.5	51	3.8	52	3.9

† Rate per 100,000 population

TABLE 6: HEPATITIS B &amp; C AMONG FRANKLIN COUNTY RESIDENTS, 2020-2023

HEPATITIS B & C													
Year:		2020			2021			2022			2023		
Population:		1,324,357			1,317,560			1,321,820			1,326,063		
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	Hepatitis B, acute	30	2.3	30	2.3	24	1.8	25	1.9	12	0.9	7	0.5
B	Hepatitis B, chronic	334	25.2	334	25.2	401	30.4	401	30.4	373	28.2	401	30.2
B	Hepatitis B, perinatal	0	--	37	--	0	--	25	--	0	--	88	--
B	Hepatitis C, acute	10	0.8	10	0.8	23	1.7	23	1.7	11	0.8	20	1.5
B	Hepatitis C, chronic	1,077	81.3	1,077	81.3	1,253	95.1	1,253	95.1	968	73.2	721	54.4
B	Hepatitis C, perinatal	9	--	9	--	7	--	7	--	0	--	3	--

## VACCINE-PREVENTABLE DISEASES

Rate per 100,000 population for all diseases except "rubella, congenital" which is per 100,000 live births<sup>2</sup>

# COUNTS & RATES OF REPORTABLE DISEASES, continued

TABLE 9: VECTOR-BORNE AND ZOONOTIC DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2020-2023

VECTOR-BORNE AND ZOONOTIC DISEASES																	
Year:		2020				2021				2022				2023			
Population¹:		1,324,357				1,317,560				1,321,820				1,326,063			
CLASS	DISEASE NAME	Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses	
		# of Cases	Case Rate¹	# of Cases	Case Rate¹	# of Cases	Case Rate¹	# of Cases	Case Rate¹	# of Cases	Case Rate¹	# of Cases	Case Rate¹	# of Cases	Case Rate¹	# of Cases	Case Rate¹
B	Babesiosis	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	2	0.2	5	0.4		
B	Brucellosis	0	0.0	2	0.2	2	0.2	3	0.2	0	0.0	1	0.1	2	0.2		
B	Chikungunya	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	Dengue	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	3	0.2	2	0.2	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	1	0.1	2	0.2	1	0.1	5	0.4	5	0.4	6	0.5	3	0.2	8	0.6
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	0	0.0	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)	0	0.0	0	0.0	1	0.1	1	0.1	1	0.1	2	0.2	0	0.0	1	0.1
B	Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1	0	0.0	0	0.0
B	Lyme disease	21	1.6	82	6.2	23	1.7	126	9.6	38	2.9	117	8.9	46	3.5	139	10.5
B	Malaria	7	0.5	7	0.5	40	3.0	40	3.0	43	3.3	43	3.3	40	3.0	40	3.0
B	Other arthropod-borne disease*	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	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	2	0.2	0	0.0	1	0.1	0	0.0	1	0.1	0	0.0	0	0.0
B	Q fever	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	3	0.2
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)	1	0.1	8	0.6	1	0.1	9	0.7	0	0.0	3	0.2	0	0.0	4	0.3
B	St. Louis encephalitis virus disease	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	1	0.1	0	0.0	0	0.0
A	Tularemia	0	0.0	0	0.0	1	0.1	1	0.1	0	0.0	2	0.2	0	0.0	0	0.0
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	2	0.2	2	0.2	2	0.2	2	0.2
B	Western equine encephalitis virus disease	1	0.1	5	0.4	0	0.0	0	0.0	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

## OTHER REPORTABLE INFECTIOUS DISEASES

Table continued on next page.

## COUNTS &amp; RATES OF REPORTABLE DISEASES, continued

TABLE 10: OTHER REPORTABLE INFECTIOUS DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2020-2023, continued

OTHER REPORTABLE INFECTIOUS DISEASES															
Year:		2020			2021			2022			2023				
Population:		1,324,357			1,317,560			1,321,820			1,326,063				
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†		
A	Multisystem Inflammatory Syndrome in Children (MIS-C)	15	--	15	--	38	--	39	--	21	--	0	--	0	--
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
A	Smallpox	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	1	0.1	1	0.1	1	0.1
B	Streptococcal disease, group A, invasive (IGAS)	115	8.7	115	8.7	97	7.4	104	7.9	83	6.3	90	6.8	160	12.1
B	Streptococcal disease, group B, in newborn	10	57.1	10	57.1	12	69.1	13	74.9	13	74.6	16	91.8	12	70.4
B	Streptococcal toxic shock syndrome (STSS)	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1	7	0.5
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
B	Tuberculosis (TB), including multi-drug resistant TB (MDR-TB)	52	3.9	52	3.9	48	3.6	48	3.6	48	3.6	48	3.6	70	5.3

† Rate per 100,000 population except "Streptococcal disease, group B, in newborn" which is per 100,000 live births²

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

-- No rate is calculated

# DEATHS IN REPORTABLE DISEASE CASES

In 2023, a total of 240 deaths occurred among confirmed and probable cases of reportable diseases in Franklin County. Eleven of these deaths were associated with multiple reportable diseases. Coronavirus (COVID-19) was associated with the most deaths (n=157), followed by influenza-associated hospitalization (n=19), Invasive Group A Streptococcal Disease (IGAS) (n=15), and chronic Hepatitis B (n=11). The greatest number of deaths occurred among individuals aged 65 years and older (n=169). Six deaths occurred among cases less than 18 years old.

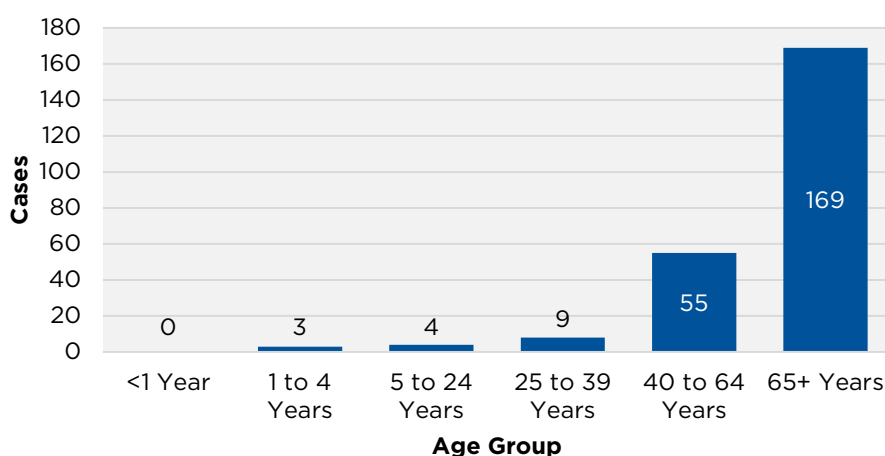
Death data were obtained from the Ohio Disease Reporting System (ODRS) and are subject to several limitations. A death is only captured in the ODRS record if the person dies during the course of an investigation. If a person dies after the investigation has ended, the record is not necessarily updated. 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, 2023**

REPORTABLE DISEASE	DEATHS*
Campylobacteriosis	1
<i>C. auris</i> - Colonization	3
COVID-19	157
Coccidioidomycosis	1
CPO	7
Creutzfeldt-Jakob Disease	2
<i>Haemophilus influenzae</i> (invasive disease)	1
Hepatitis B, chronic	11
Hepatitis C, chronic	8
Influenza-associated hospitalization	19
Invasive Group A Streptococcal Disease (IGAS)	15
Legionnaires' disease	5
Malaria	1
Meningitis, bacterial	2
Meningitis, aseptic/viral	1
Salmonellosis	1
<i>Staphylococcus aureus</i> , with resistance or intermediate resistance to vancomycin (VRSA, VISA)	1
<i>Streptococcus pneumoniae</i> , invasive disease (ISP)	10
Streptococcal toxic shock syndrome (STSS)	4
Tuberculosis	1

\*The number of deaths is specific to the reportable disease category. Eleven 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, 2023 (N=240)\***



# 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.<sup>3</sup> 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.

**Although the majority of outbreaks in recent years have been Institutional, in 2023 healthcare-associated outbreaks were most common.**

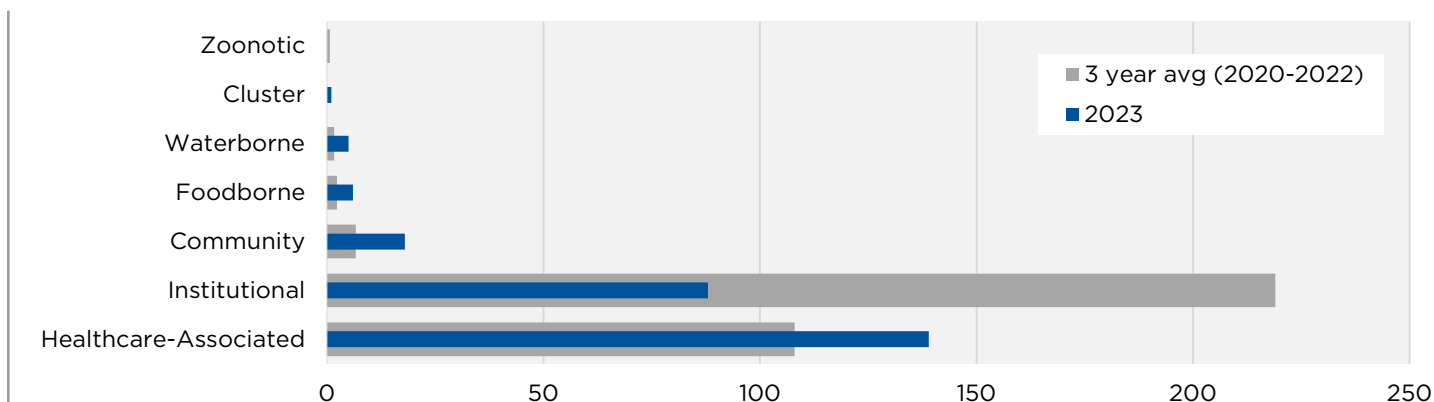


TABLE 12: NUMBER OF CONFIRMED AND PROBABLE OUTBREAKS, MOST COMMON SETTING AND MOST COMMON ETIOLOGY, BY TYPE OF OUTBREAK, FRANKLIN COUNTY, 2023

OUTBREAK TYPE	NUMBER OF OUTBREAKS	MOST COMMON SETTING	MOST COMMON ETIOLOGY
<b>Cluster</b>	1	N/A*	<i>Cryptosporidium</i> [1]
<b>Community</b>	18	Private home	<i>Shigella</i> [6]
<b>Foodborne</b>	6	N/A*	<i>Campylobacter</i> [2]
<b>Healthcare-Associated</b>	139	Nursing home/Skilled nursing facility	SARS-CoV-2 [86]
<b>Institutional</b>	88	Day care center	SARS-CoV-2 [32]
<b>Waterborne</b>	5	Drinking water, treated	<i>Legionella sp.</i> [5]

\*The setting "N/A" is used due to the lack of setting reported through investigation

In Columbus and Franklin County in 2023:

- A total of 257 confirmed and probable outbreaks were reported; Healthcare-Associated (54%), Institutional (34%) and Community (7%) were the most common types of outbreaks.
- *Severe acute respiratory syndrome coronavirus* (SARS-CoV-2) was the most common etiology with 164 outbreaks (64%).
- The largest outbreak was caused by SARS-CoV-2 and involved 170 cases.
- In total, 4,469 cases were associated with an infectious disease outbreak.

## DISEASE SPOTLIGHT:

# CARBAPENEMASE-PRODUCING ORGANISMS (CPO)

CPO	2023
Number of Cases	58
Rate*	<i>Overall</i> 4.4
	<i>Female</i> 3.9
	<i>Male</i> 4.9
Age of cases (in years)	<i>Mean</i> 57.6
	<i>Median</i> 61.5
	<i>Range</i> 1-92

\* Rate per 100,000 population

### LOCAL FINDINGS:

In Columbus and Franklin County in 2023:

- Rates of CPO between men and women are similar, albeit slightly higher rate for men.
- Nearly 47% of confirmed and probable cases were among persons 65 years of age or older.
- Most cases were among either White or Black residents of Franklin County, representing 51% and 36% of total cases respectively.

## EPIDEMIOLOGY<sup>3</sup>

**Infectious Agent:** Carbapenemase-producing organisms (CPO) produce the enzyme “Carbapenemase,” which breaks down carbapenem and beta-lactam antibiotics, making them ineffective. Organisms that are classified as CPO include, but are not limited to, genera in the Enterbacterales order (e.g., *Escherichia*, *Enterobacter*, *Klebsiella*, *Citrobacter*, *Morganella*, *Serratia*, *Providencia*, *Proteus*), *Pseudomonas* species, and *Acinetobacter baumannii*. Carbapenemase-producing genes, also called “mechanisms,” include, but are not limited to, *Klebsiella pneumoniae* Carbapenemase (KPC), New Delhi Metallo-beta-lactamase (NDM), Verona Integron-encoded Metallo-beta-lactamase (VIM), Imipenemase Metallo-beta-lactamase (IMP), Oxacillinase-48-like beta-lactamase (OXA-48), Oxacillinase-23-like beta-lactamase (OXA-23), Oxacillinase-24/40-like beta-lactamase (OXA-24/40), and Oxacillinase-58-like beta-lactamase (OXA-58).

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

**Mode of Transmission:** In healthcare settings, CPO are transmitted from person to person, often via contaminated hands of healthcare personnel or through direct contact with contaminated surfaces. CPO can colonize areas of the body. Infection can occur when the bacteria enter the body, often through medical devices. Both colonized and infected patients can be sources of transmission.

**Incubation Period:** The incubation period is not well defined, particularly due to the ability of CPO to colonize an individual for an extended interval of time.

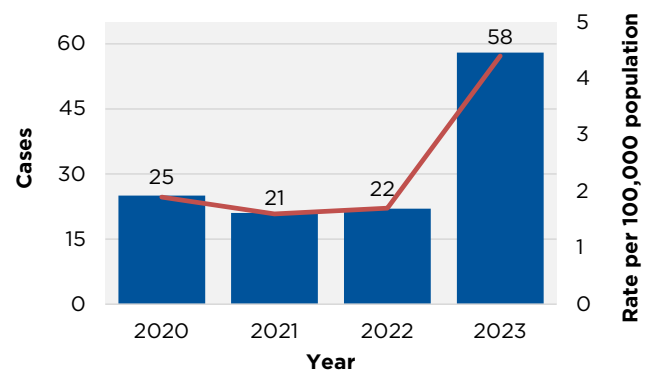
**Symptoms:** CPO infections may be invasive or non-invasive. Signs and symptoms vary by organism and site, and some patients may have no symptoms. CPO can cause healthcare-associated infections, primarily affecting those with chronic medical conditions and compromised immune function. CPO can cause pneumonia, bloodstream infections, urinary tract infections, intra-abdominal infections, and surgical site infections among others.

**Treatment:** CPO infections can be difficult to treat due to their resistance to most antibiotics. Treatment is determined on a case-by-case basis. Colonized patients do not need to be treated with antibiotics if they are asymptomatic. Even after treatment for invasive infections, patients generally remain colonized with CPO for long periods, potentially indefinitely.

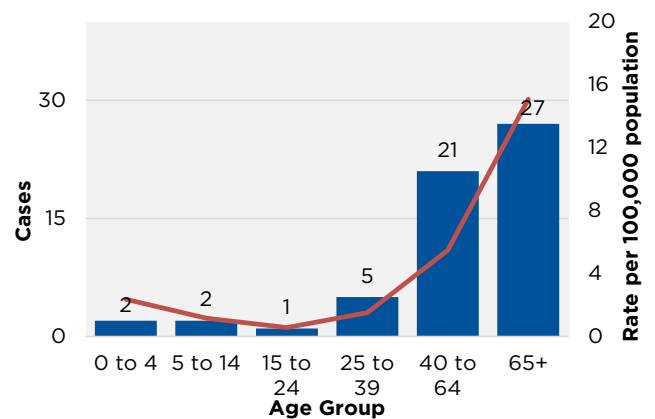
**Prevention:** Prompt identification of CPO and immediate implementation of recommended infection control measures are the best methods to prevent additional patients from becoming infected or colonized with CPO.

Case counts and rates include confirmed and probable cases.

### CPO CASES AND RATES BY YEAR, FRANKLIN COUNTY, 2020-2023



### CPO CASES AND RATES BY AGE GROUP, FRANKLIN COUNTY, 2023



## DISEASE SPOTLIGHT: YERSINIOSIS

YERSINIOSIS		2023
Number of Cases		51
Rate*	Overall	3.8
	Female	3.3
	Male	4.5
Age of cases (in years)	Mean	44
	Median	47
	Range	1-90

\* Rate per 100,000 population

### LOCAL FINDINGS:

In Columbus and Franklin County in 2023:

- The yersiniosis rate among males was higher than the rate among females.
- Cases and rates of yersiniosis have increased each year over the past four years.
- 31% of total cases were in those aged 40-64.

### EPIDEMIOLOGY<sup>3</sup>

**Infectious Agent:** *Yersinia enterocolitica* and *Yersinia pseudotuberculosis*, Gram-negative bacilli.

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

**Mode of Transmission:** Humans can acquire *Yersinia* directly (via the fecal-oral route) from infected humans or animals (e.g., pets, livestock) or from ingestion of contaminated food or water. A wide variety of foods have been found to be contaminated with *Yersinia*. One example is pork chitterlings. *Y. enterocolitica* can multiply under refrigeration, and there is an increased risk of infection if uncured meat that was stored in plastic bags is undercooked. Transmission via transfused blood from asymptomatic or recently ill donors also has been reported.

**Incubation Period:** three-10 days, usually three-seven days.

**Symptoms:** An acute gastrointestinal illness characterized by headache, watery diarrhea, fever and vomiting. Infection can progress from gastroenteritis to septicemia or a focal infection (e.g., arthritis, cutaneous ulceration, osteomyelitis).

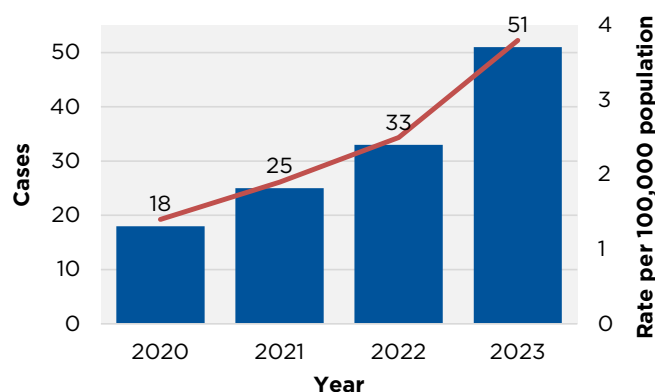
**Treatment:** Neonates, immunocompromised hosts, and all patients with septicemia or extra-intestinal disease require treatment for *Yersinia* infection. Antibiotics may be helpful with gastrointestinal disease and should shorten the duration of shedding.

**Prevention:** Hand washing prior to eating and food handling, after animal contact, and after handling raw pork can prevent yersiniosis. All meat dishes should be thoroughly cooked. Avoid cross-contamination of food (especially raw fruits and vegetables) with raw meat juices. After slaughter of a pig, the head and neck should be removed to avoid contamination from the pig's pharynx. Food handlers 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.

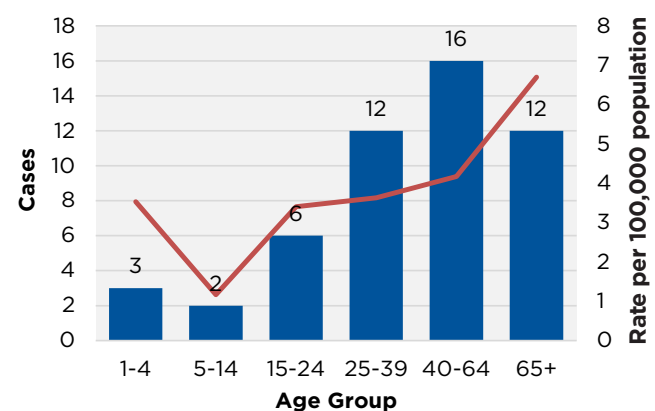
**Other Information:** It is especially hazardous for infants and small children to be around the preparation of dishes containing pork (e.g., pork chitterlings). Adults should be especially careful not to contaminate a baby's bottle, food or immediate environment with raw pork when preparing these dishes.

Case counts and rates include confirmed and probable cases.

### YERSINIOSIS CASES AND RATES BY YEAR, FRANKLIN COUNTY, 2020-2023



### YERSINIOSIS CASES AND RATES BY AGE GROUP, FRANKLIN COUNTY, 2023



FEATURED OUTBREAK INVESTIGATION:

# CYCLOSPORIASIS

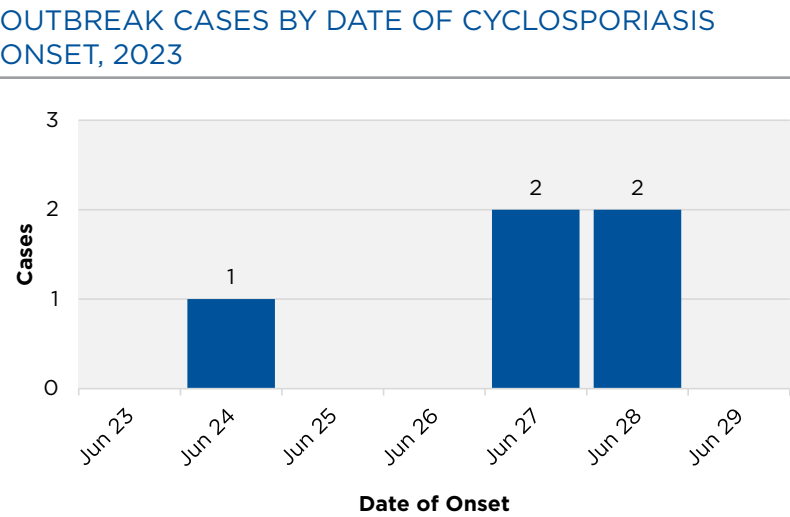
On July 6, 2023, Columbus Public Health received notification of 2 cases of cyclosporiasis through the Ohio Disease Reporting System (ODRS). Interviews revealed that both cases were healthcare providers at a local hospital and had dined at the hospital cafeteria. The cases (an occupational therapist and an X-ray technician) ate from the salad bar prior to illness onset. Outbreak investigation and response were initiated promptly.

Five confirmed cyclosporiasis cases among staff and visitors were identified as part of this outbreak. Cases ranged in age from 32 to 55 years, with a mean age of 39 years and a median age of 35 years. Sixty percent of the cases were female and 40 percent were male. No hospitalizations or deaths were recorded.

Of the five specimens obtained, four were polymerase chain reaction (PCR) positive for *Cyclospora cayetanensis*. The fifth was positive for *Cyclospora* oocysts via ova and parasite concentration, microscopic examination and trichrome stain.

Public health interventions included case exclusion, hand washing promotion, enhanced cleaning, and food safety and health education of all cases on cyclosporiasis to prevent transmission and further illness. Active surveillance for new cases was conducted for four weeks after the most recent onset date until the outbreak resolved.

Cyclosporiasis is an intestinal illness caused by a parasite, *Cyclospora cayetanensis*, also known as *Cyclospora*. People can become infected by consuming food or water that contains the parasite. Outbreaks and cases are typically associated with contaminated fruits and vegetables. The incubation period can range from two days – two weeks or more<sup>4</sup>. People who are infected with *Cyclospora* may or may not experience symptoms, such as frequent and sometimes explosive bowel movements, loss of appetite, weight loss, cramping, and/or bloating.



FEATURED OUTBREAK INVESTIGATION:

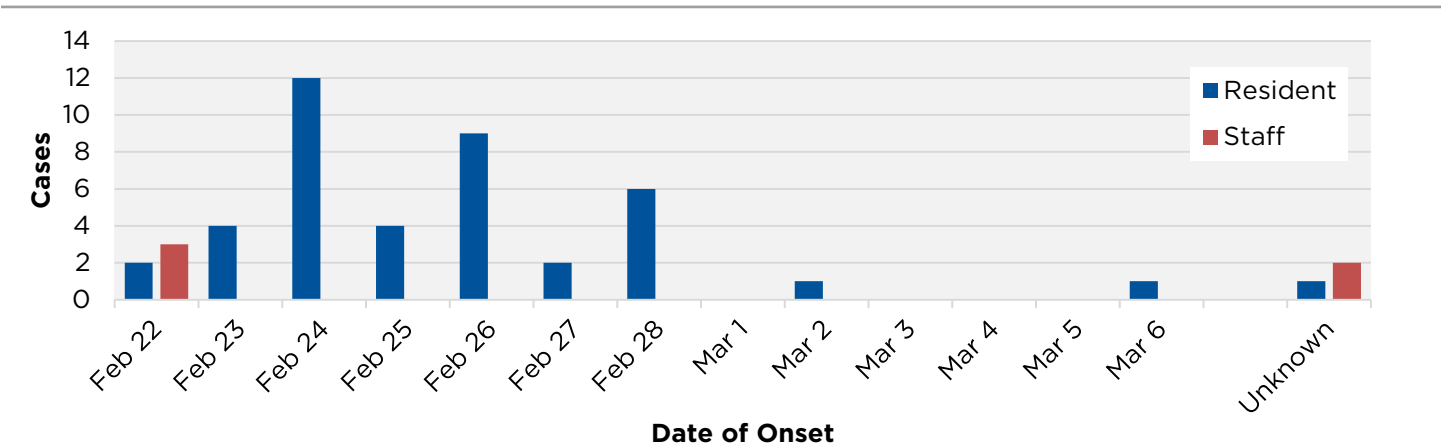
# NOROVIRUS

In late February 2023, Franklin County Public Health investigated a norovirus outbreak in an assisted living facility located in Franklin County. Initially, 29 residents were reported ill with gastroenteritis symptoms such as vomiting, nausea and diarrhea. In conjunction with the Ohio Department of Health Laboratory, testing was offered to the facility, and Norovirus GII.3 was identified from submitted samples. Public health interventions included staff staying home and residents staying in their rooms until 48 hours after resolution of symptoms, an increase in cleaning, cancellation of events and activities offered by the facility, notification about the outbreak at entrances to the facility, and education on the importance of handwashing. The facility also started increasing their surveillance for any gastroenteritis illnesses among residents and staff, resulting in additional cases being identified.

There were a total of 47 cases during the outbreak. The average age of cases was 83 years old, ranging from 50 to 100 years old. Of the cases with information provided (n=42), 32 (76%) were female and 10 (24%) were male. Two (4%) cases required hospitalization; no deaths were reported.

Noroviruses are non-enveloped, single-stranded RNA viruses in the family *Caliciviridae*. Norovirus outbreaks are common with more than 2,500 outbreaks reported throughout the United States each year. Outbreaks are most commonly reported between November and April. The incubation period for norovirus is 12-48 hours. Symptoms often include diarrhea, vomiting, nausea and abdominal cramping or pain. Other symptoms can include fever, headache or body aches. Most people recover after one-three days; however, it is possible to spread the virus up to two weeks after recovery. It is possible to get norovirus multiple times, as there are many types of noroviruses and infection of one type does not provide protection against other types. Anyone can get infected with norovirus; however, children under 5 years old, older adults, and those with weakened immune systems are most likely to have severe illnesses. Norovirus is very contagious and can spread from person to person (direct contact), by eating or drinking contaminated food or water, or by touching contaminated objects or surfaces. Prevention methods to protect oneself from getting norovirus include washing hands frequently, cleaning and disinfecting contaminated surfaces, washing laundry in hot water, cooking foods thoroughly, washing fruits and vegetables, and staying home for 48 hours after symptoms stop.<sup>3, 8</sup>

OUTBREAK CASES BY DATE OF NOROVIRUS ONSET, 2023



# 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 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 (ODH) 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, 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, 2023**

REPORTABLE CONDITION	Reporting Requirement	2023			
		Confirmed & Probable Cases	Median Lag Time (business days)	Mean Lag Time (business days)	% of Cases Missing Diagnosis Date
<i>E. coli</i> O157:H7 and Shiga toxin-producing <i>E. coli</i> (STEC) (Class B)	By end of next business day	120	<i>1</i>	<i>0.6</i>	0.8%
Hepatitis A (Class B)	By end of next business day	9	<i>1</i>	<i>1</i>	0.0%
Listeriosis (Class B)	By end of next business day	0	N/A	N/A	N/A
Measles (Class A)	Immediately	0	N/A	N/A	N/A
Meningococcal disease (Class A)	Immediately	0	N/A	N/A	N/A
Mumps (Class B)	By end of next business day	2	<i>1.5</i>	<i>1.5</i>	0.0%
Pertussis (Class B)	By end of next business day	53	<i>1</i>	<i>1.1</i>	1.9%
Rubella (Class A)	Immediately	0	N/A	N/A	N/A
Salmonellosis (Class B)	By end of next business day	209	<i>1</i>	( <i>2.1</i> )	2.4%

\*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). In the case when illness onset date occurs before specimen collection date, then event date is calculated as equal to illness onset date.

**Counts of newly diagnosed HIV/AIDS cases** were obtained from the ODH HIV/AIDS Surveillance Program.<sup>5</sup> 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.<sup>4</sup> In Ohio, case and outbreak definitions can be found in Section 3 of the Infectious Disease Control Manual.<sup>3</sup> More information on reportable diseases and reporting procedures in Columbus and Franklin County can be found at [www.IDRSinfo.org](http://www.IDRSinfo.org).

## REPORTABLE DISEASE CLASS DEFINITIONS<sup>3</sup>

Reportable conditions in Ohio are grouped by class. Class definitions in 2023 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	June 16, 2024
HIV/AIDS data from the Ohio Department of Health	June 30, 2024
Infectious Disease Outbreaks	May 23, 2024
All other reportable conditions	March 19, 2024

Technical Notes continued on next page.

## REPORTABLE DISEASE CHANGES IN OHIO IN 2023

No changes.

## CASE DEFINITION CHANGES FOR NATIONALLY NOTIFIABLE DISEASES IN 2023<sup>6</sup>

- Added *Candida auris*, screening
- Carbapenemase-Producing Organisms (CPO) replaced Carbapenemase Producing Carbapenem-Resistant Enterobacteriaceae (CP-CRE)
- Added Carbapenemase-producing organisms, screening
- Updated Melioidosis

## REPORTING SYSTEMS

Most reportable conditions in this summary were reported through Electronic Laboratory Reporting (ELR). ELR allows eligible healthcare providers to report laboratory test results for reportable infectious diseases through an automated and secure process. ELR allows for more rapid reporting to public health and reduces the amount of staff time it takes a facility to report information to public health. Additionally, the Infectious Disease Reporting System (IDRS), a joint effort between Columbus Public Health and Franklin County Public Health, allows for healthcare providers to call, email, fax and mail reports. Cases of sexually transmitted infections, HIV/AIDS and tuberculosis have separate reporting systems.

The Ohio Disease Reporting System (ODRS)<sup>7</sup> was developed as a web-based system to make disease reporting more timely and efficient for disease reporters (e.g., hospitals, laboratories, physicians) and to improve communication about infectious disease cases between disease reporters, local health departments, and the Ohio Department of Health (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, most laboratories electronically upload case reports from their databases into ODRS via 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 at the time of diagnosis, 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 extend into 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 [idrsinfo.org/data](https://idrsinfo.org/data).

# REFERENCES

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