



ANNUAL SUMMARY OF REPORTABLE DISEASES 2019

Columbus & Franklin County, Ohio



THE CITY OF
COLUMBUS
ANDREW J. GINTHER, MAYOR

**COLUMBUS
PUBLIC HEALTH**



Franklin County
Public Health

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Cover Image: This is a medical illustration of drug-resistant, Bordetella pertussis bacteria, presented in the Centers for Disease Control and Prevention (CDC) publication titled, Antibiotic Resistance Threats in the United States, 2019 (AR Threats Report). Image obtained from phil.cdc.gov.

TABLE OF CONTENTS

Introduction1

Demographic Profile of Franklin County 2

Counts and Rates of Reportable Diseases

 Enteric..... 3

 Hepatitis..... 4

 Sexually Transmitted 4

 Vaccine-preventable..... 5

 Vectorborne & Zoonotic..... 6

 Other 7-8

Deaths Associated with Reportable Diseases..... 9

Infectious Disease Outbreaks in Franklin County 10

Timeliness of Disease Reporting 11

Technical Notes..... 12-13

References14

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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 an animal or vector (i.e., arthropod) 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. Outbreaks of infectious diseases must also 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 15 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 ensures proper investigation, timely follow-up of case reports, and interventions to prevent additional cases.

The 2019 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 annually from 2016 to 2019: bacterial meningitis (not *Neisseria meningitidis*), cyclosporiasis, *Escherichia coli* O157:H7 and Shiga toxin-producing *E. coli* (STEC), gonorrhea, *Haemophilus influenza* invasive disease, and invasive Group A streptococcal disease (IGAS).
- Rates of chronic hepatitis C and shigellosis decreased annually.
- Rates of hepatitis A in 2018 and 2019 were much higher than in previous years due to a statewide community outbreak.
- A total of 50 confirmed and probable outbreaks were reported, involving 636 cases; health care-associated outbreaks were the most common type (46% of outbreaks), followed by institutional (40%).

DEMOGRAPHIC PROFILE OF FRANKLIN COUNTY

FRANKLIN COUNTY POPULATION, 2019¹

- The population of Franklin County increased 0.8% from over 1.31 million in 2018 to 1.32 million in 2019.
- 51.2% of Franklin County residents were female, and 48.8% were male.
- 66.8% of Franklin County residents were White; 23.8% were Black or African American; 5.7% were Asian; 0.3% were American Indian or Alaskan Native; 0.1% were Native Hawaiian and Other Pacific Islander; and 3.3% identified as two or more races.
- 5.8% of Franklin County residents were Hispanic or Latino.

TABLE 1: FRANKLIN COUNTY POPULATION BY GENDER, 2019¹

GENDER	2019	
	POPULATION	PERCENT
Female	673,920	51.2%
Male	642,836	48.8%
Total	1,316,756	100%

TABLE 3: FRANKLIN COUNTY POPULATION BY ETHNICITY, 2019¹

ETHNICITY	2019	
	POPULATION	PERCENT
Hispanic or Latino	76,123	5.8%
Non-Hispanic or Non-Latino	1,240,633	94.2%
Total	1,316,756	100%

TABLE 2: FRANKLIN COUNTY POPULATION BY RACE, 2019¹

RACE	2019	
	POPULATION	PERCENT
American Indian or Alaska Native	3,950	0.3%
Asian	75,055	5.7%
Black or African American	313,388	23.8%
Native Hawaiian and Other Pacific Islander	1,317	0.1%
White	879,593	66.8%
Two or more races	43,453	3.3%
Total	1,316,756	100%

TABLE 4: FRANKLIN COUNTY POPULATION BY AGE GROUP, 2019¹

AGE (YEARS)	2019	
	POPULATION	PERCENT
0-4	91,906	7.0%
5-14	167,616	12.7%
15-24	173,335	13.2%
25-34	240,144	18.2%
35-44	177,845	13.5%
45-54	153,347	11.6%
55-64	149,420	11.3%
65-74	99,796	7.6%
75-84	45,013	3.4%
85+	18,334	1.4%
Total	1,316,756	100%

TABLE 5: ENTERIC DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2016–2019

ENTERIC DISEASES																	
Year:		2016				2017				2018				2019			
Population:		1,264,518				1,291,981				1,310,300				1,316,756			
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	8	0.6	8	0.6	4	0.3	6	0.5	1	0.1	1	0.1	2	0.2	3	0.2
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	172	13.6	172	13.6	226	17.5	226	17.5	249	19.0	249	19.0	227	17.2	227	17.2
A	Cholera	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	Cryptosporidiosis	931	73.6	958	75.8	66	5.1	67	5.2	69	5.3	71	5.4	123	9.3	123	9.3
B	Cyclosporiasis	0	0.0	0	0.0	6	0.5	6	0.5	18	1.4	18	1.4	38	2.9	38	2.9
B	<i>Escherichia coli</i> O157:H7 and Shiga toxin-producing <i>E. coli</i> (STEC)	47	3.7	83	6.6	61	4.7	87	6.7	105	8.0	107	8.2	108	8.2	110	8.4
B	Giardiasis	90	7.1	97	7.7	94	7.3	98	7.6	115	8.8	122	9.3	101	7.7	107	8.1
B	Hemolytic uremic syndrome (HUS)	1	0.1	2	0.2	1	0.1	1	0.1	0	0.0	0	0.0	2	0.2	2	0.2
B	Hepatitis A	13	1.0	19	1.5	7	0.5	17	1.3	175	13.4	192	14.7	297	22.6	377	28.6
B	Hepatitis E	1	0.1	3	0.2	2	0.2	6	0.5	1	0.1	4	0.3	0	0.0	2	0.2
B	Listeriosis	2	0.2	2	0.2	3	0.2	3	0.2	4	0.3	4	0.3	0	0.0	0	0.0
B	Salmonellosis	185	14.6	194	15.3	151	11.7	151	11.7	193	14.7	194	14.8	199	15.1	199	15.1
B	<i>Salmonella</i> Paratyphi infection	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	0.1	1	0.1
B	<i>Salmonella</i> Typhi infection (typhoid fever)	3	0.2	3	0.2	27	2.1	31	2.4	1	0.1	2	0.2	2	0.2	3	0.2
B	Shigellosis	385	30.4	407	32.2	218	16.9	220	17.0	200	15.3	201	15.3	94	7.1	94	7.1
B	Trichinellosis	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	Vibriosis	1	0.1	1	0.1	6	0.5	6	0.5	9	0.7	9	0.7	6	0.5	6	0.5
B	Yersiniosis	5	0.4	5	0.4	2	0.2	10	0.8	8	0.6	12	0.9	22	1.7	25	1.9

† 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, 2016–2019

HEPATITIS B & C																	
Year:		2016				2017				2018				2019			
Population:		1,264,518				1,291,981				1,310,300				1,316,756			
		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses	
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 [†]
B	Hepatitis B, acute	73	5.8	73	5.8	71	5.5	71	5.5	72	5.5	72	5.5	63	4.8	63	4.8
B	Hepatitis B, chronic	464	36.7	464	36.7	515	39.9	515	39.9	481	36.7	481	36.7	472	35.8	472	35.8
B	Hepatitis B, perinatal	0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--
B	Hepatitis C, acute	46	3.6	46	3.6	43	3.3	43	3.3	57	4.4	57	4.4	75	5.7	75	5.7
B	Hepatitis C, chronic	2,366	187.1	2,366	187.1	2,315	179.2	2,315	179.2	1,762	134.5	1,762	134.5	1,399	106.2	1,399	106.2
B	Hepatitis C, perinatal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7	0.4	7	0.4	7	0.4	7	0.4

[†] Rate per 100,000 population.

-- Population data are not available for children 0–24 months old.

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

TABLE 7: SEXUALLY TRANSMITTED INFECTIONS AMONG FRANKLIN COUNTY RESIDENTS, 2016–2019

SEXUALLY TRANSMITTED INFECTIONS																	
Year:		2016				2017				2018				2019			
Population:		1,264,518				1,291,981				1,310,300				1,316,756			
		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses		Confirmed & Probable		All Statuses	
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 [†]
^	HIV/AIDS*	196	15.5	196	15.5	222	17.2	222	17.2	198	15.1	198	15.1	216	16.4	216	16.4
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	9,892	782.3	9,892	782.3	9,413	728.6	9,413	728.6	10,178	776.8	10,178	776.8	10,784	819.0	10,784	819.0
B	Gonorrhea (<i>Neisseria gonorrhoeae</i>)	4,276	338.2	4,276	338.2	4,447	344.2	4,447	344.2	4,935	376.6	4,935	376.6	5,070	385.0	5,070	385.0
B	Syphilis, congenital	4	21.1	4	21.1	8	42.6	8	42.6	7	38.3	7	38.3	5	27.2	5	27.2
B	Syphilis, primary and secondary	278	22.0	278	22.0	323	25.0	323	25.0	212	16.2	212	16.2	190	14.4	190	14.4

[†] Rate per 100,000 population for all diseases except "syphilis, congenital" which is per 100,000 live births.²

*Report 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, 2016-2019

VACCINE-PREVENTABLE DISEASES																	
Year:		2016				2017				2018				2019			
Population:		1,264,518				1,291,981				1,310,300				1,316,756			
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 [†]
A	Diphtheria	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>Haemophilus influenzae</i> (invasive disease)	10	0.8	10	0.8	22	1.7	22	1.7	25	1.9	26	2.0	43	3.3	43	3.3
B	Influenza-associated hospitalization	288	22.8	290	23.0	784	60.7	785	60.8	1,103	84.2	1,104	84.3	819	62.2	829	62.2
B	Influenza-associated pediatric mortality	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
A	Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.3
A	Meningococcal disease	1	0.1	1	0.1	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
B	Mumps	2	0.2	14	1.1	8	0.6	8	0.6	0	0.0	7	0.5	10	0.8	16	1.2
B	Pertussis	372	29.4	535	42.3	277	21.4	393	30.4	134	10.2	174	13.3	142	10.8	208	15.8
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	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	0	0.0
A	Rubella, not congenital	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0
B	<i>Streptococcus pneumoniae</i> , invasive disease (ISP)*	119	9.4	121	9.6	161	12.5	167	12.9	132	10.1	133	10.2	167	12.7	167	12.7
B	Tetanus	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	Varicella	69	5.5	78	6.2	50	3.9	54	4.2	81	6.2	85	6.5	45	3.4	47	3.6

† Rate per 100,000 population.

TABLE 9: VECTORBORNE AND ZOONOTIC DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2016-2019

VECTORBORNE AND ZOONOTIC DISEASES																	
Year:		2016				2017				2018				2019			
Population:		1,264,518				1,291,981				1,310,300				1,316,756			
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	Babesiosis	0	0.0	1	0.1	0	0.0	5	0.4	0	0.0	3	0.2	0	0.0	2	0.2
B	Brucellosis	1	0.1	1	0.1	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0	2	0.2
B	Chikungunya	0	0.0	0	0.0	1	0.1	1	0.1	0	0.0	0	0.0	1	0.1	1	0.1
B	Dengue	2	0.2	2	0.2	2	0.2	3	0.2	2	0.2	2	0.2	3	0.2	5	0.4
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	0	0.0	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	5	0.4
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	1	0.1
B	La Crosse virus disease (other California serogroup virus disease)	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	Leptospirosis	0	0.0	0	0.0	1	0.1	1	0.1	1	0.1	1	0.1	0	0.0	0	0.0
B	Lyme disease	19	1.5	51	4.0	16	1.2	76	5.9	16	1.2	42	3.2	16	1.2	44	3.3
B	Malaria	28	2.2	28	2.2	23	1.8	23	1.8	29	2.2	29	2.2	27	2.1	27	2.1
B	Other arthropod-borne disease*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1	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	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	1	0.1
B	Q fever	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	1	0.1	2	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)	2	0.2	6	0.5	5	0.4	9	0.7	2	0.2	11	0.8	3	0.2	7	0.5
B	St. Louis 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
A	Tularemia	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	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	2	0.2	3	0.2	1	0.1	1	0.1	2	0.2	3	0.2	0	0.0	0	0.0
B	Western 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
A	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	14	1.1	16	1.3	2	0.2	4	0.3	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.

TABLE 10: OTHER REPORTABLE INFECTIOUS DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2016-2019

OTHER REPORTABLE INFECTIOUS DISEASES																	
Year:		2016				2017				2018				2019			
Population:		1,264,518				1,291,981				1,310,300				1,316,756			
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 [†]
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	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	Botulism, infant	1	0.1	1	0.1	0	0.0	0	0.0	1	0.1	1	0.1	2	0.2	2	0.2
B	Botulism, wound	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>Candida auris</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0.0	0	0.0
B	Carbapenemase-producing carbapenem-resistant <i>Enterobacteriaceae</i> (CP-CRE)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	24	1.8	25	1.9	37	2.8	38	2.9
B	Coccidioidomycosis	2	0.2	6	0.5	7	0.5	22	1.7	5	0.4	13	1.0	6	0.5	18	1.4
B	Creutzfeldt-Jakob disease	2	0.2	2	0.2	1	0.1	1	0.1	0	0.0	0	0.0	2	0.2	2	0.2
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	106	8.4	111	8.8	129	10.0	129	10.0	213	16.3	213	16.3	143	10.9	144	10.9
B	Leprosy (Hansen's disease)	0	0.0	0	0.0	2	0.2	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0
B	Meningitis, aseptic (viral)	85	6.7	86	6.8	32	2.5	32	2.5	89	6.8	89	6.8	115	8.7	115	8.7
B	Meningitis, bacterial (not <i>N. meningitidis</i>)	11	0.9	12	0.9	17	1.3	18	1.4	18	1.4	21	1.6	27	2.1	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
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	0	0.0	0	0.0

Table continued on next page.

TABLE 10: OTHER REPORTABLE DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2016–2019, *continued*

OTHER REPORTABLE DISEASES																	
Year:		2016				2017				2018				2019			
Population:		1,264,518				1,291,981				1,310,300				1,316,756			
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	Streptococcal disease, group A, invasive (IGAS)	51	4.0	55	4.3	103	8.0	107	8.3	135	10.3	141	10.8	137	10.4	142	10.8
B	Streptococcal disease, group B, in newborn	12	0.6	12	0.6	8	0.4	8	0.4	10	0.5	10	0.5	15	0.8	16	0.9
B	Streptococcal toxic shock syndrome (STSS)	5	0.4	5	0.4	5	0.4	5	0.4	21	1.6	21	1.6	15	1.1	15	1.1
B	Toxic shock syndrome (TSS)	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	Tuberculosis (TB), including multi-drug resistant TB (MDR-TB)	50	4.0	50	4.0	53	4.1	53	4.1	78	6.0	78	6.0	47	3.6	47	3.6

[†] Rate per 100,000 population for all diseases except "streptococcal disease, group B, in newborn," which is per 1,000 live births.²

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

DEATHS ASSOCIATED WITH DISEASE

In 2019, a total of 77 deaths occurred among confirmed and probable cases of reportable diseases in Franklin County. Nine of these deaths were associated with multiple reportable diseases. Influenza-associated hospitalization was associated with the most deaths (n=16), followed by *Streptococcus pneumoniae* invasive disease (n=13), and Legionnaires' disease (n=12) and Streptococcal disease, group A, invasive (IGAS) (n=12). The greatest number of deaths occurred among individuals aged 65 years and older. Three deaths occurred among cases less than 18 years old.

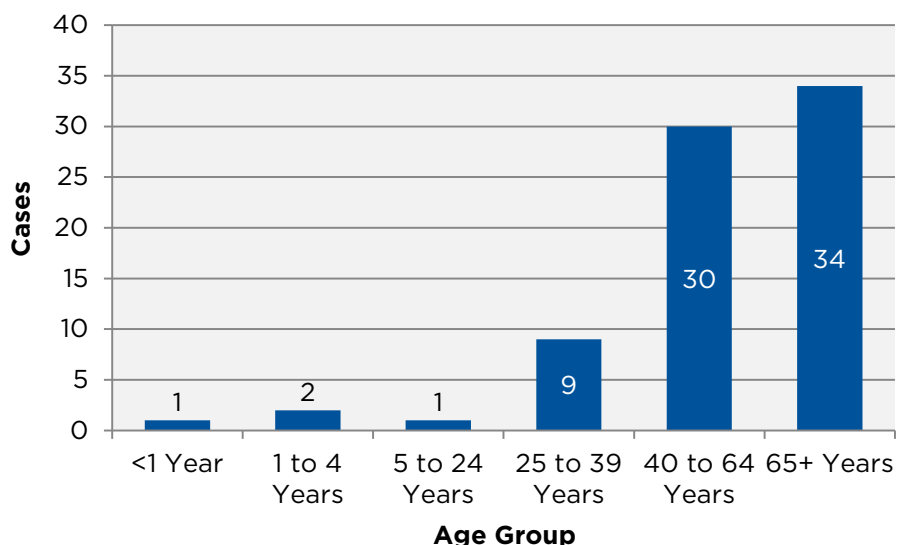
Death data were obtained from the Ohio Disease Reporting System (ODRS) and are subject to several limitations. A death is only captured in the ODRS record if the person dies during the course of a case or outbreak investigation. If a person dies after the investigation has ended, the record is not necessarily 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, 2019

REPORTABLE DISEASE	DEATHS*
Creutzfeldt-Jakob Disease (CJD)	1
Coccidioidomycosis	1
Carbapenemase-producing carbapenem-resistant <i>Enterobacteriaceae</i> (CP-CRE)	2
<i>Cryptosporidiosis</i>	1
E. Coli	1
<i>Haemophilus influenzae</i> (invasive disease)	4
Hepatitis A	4
Hepatitis B, chronic	3
Hepatitis C, chronic	1
Influenza-associated hospitalization	16
Influenza-associated pediatric mortality	1
Legionnaires' disease	12
Meningitis, bacterial (not <i>N. meningitidis</i>)	2
Q fever, acute	1
<i>Shigellosis</i>	2
Streptococcal disease, group B, in newborn	1
Streptococcal disease, group A, invasive (IGAS)	12
<i>Streptococcus pneumoniae</i> , invasive disease (ISP)	13
Streptococcal toxic shock syndrome (STSS)	4
Tuberculosis	4

*The number of deaths is specific to the reportable disease category. In total, 77 deaths were identified; 9 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, 2019 (N=77)



OUTBREAKS IN FRANKLIN COUNTY

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: community, foodborne, health care-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, 2016-2019

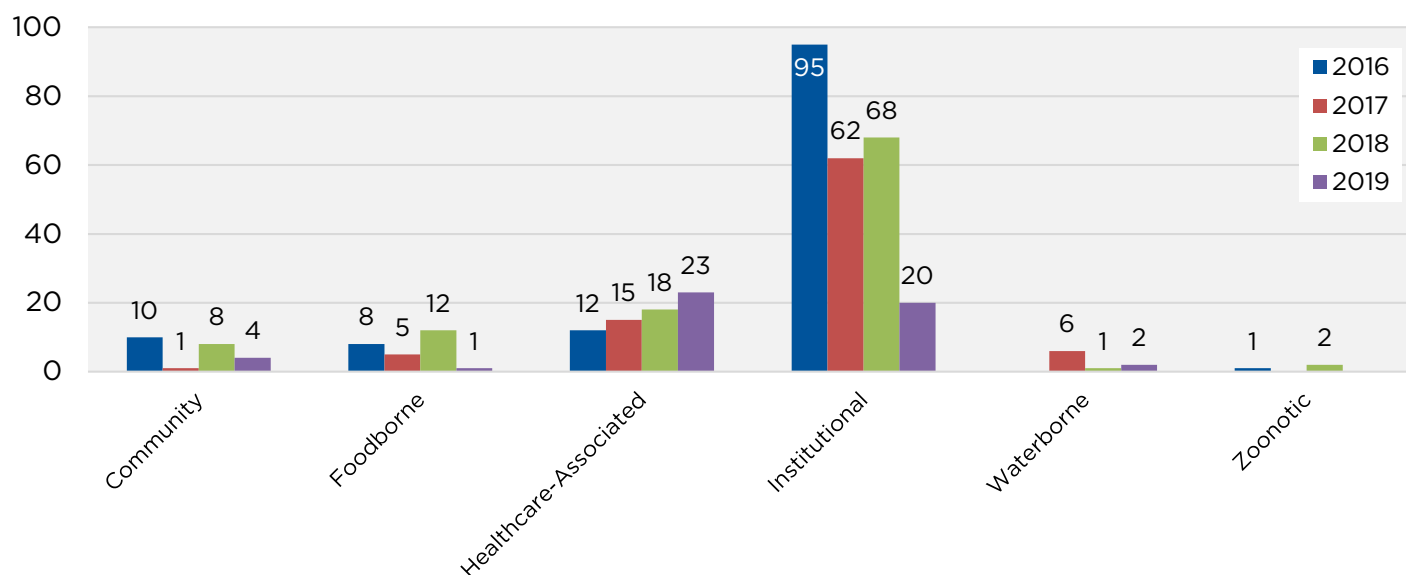


TABLE 12: NUMBER OF CONFIRMED AND PROBABLE OUTBREAKS, MOST COMMON SETTING, AND MOST COMMON ETIOLOGY, BY TYPE OF OUTBREAK, FRANKLIN COUNTY, 2019

OUTBREAK TYPE	NUMBER OF OUTBREAKS	MOST COMMON SETTING	MOST COMMON ETIOLOGY
Community	4	Household	<i>Bordetella pertussis</i> (1), <i>Salmonella</i> (1), <i>Shigella</i> (1), Mumps virus (1)
Foodborne	1	Restaurant	<i>Norovirus</i> (1)
Health care-associated	23	Long term care facility	<i>Norovirus</i> (10)
Institutional	20	Childcare center & School	<i>Bordetella pertussis</i> (6)
Waterborne	2	Drinking water & Recreational water	<i>Legionella pneumophila</i> (1), <i>Cryptosporidium</i> (1)

In Columbus and Franklin County in 2019:

- A total of 50 confirmed and probable outbreaks were reported; Health care-associated outbreaks were the most common type (46% of outbreaks), followed by institutional (40%).
- Overall, long term care facilities were the most common setting with 10 outbreaks (20%), and *Norovirus* was the most common etiology with 13 outbreaks (26%).
- The largest outbreak was caused by *Norovirus* and involved 92 cases.
- In total, 636 cases were associated with an outbreak.

TIMELINESS OF DISEASE REPORTING

As part of reportable disease surveillance, Columbus Public Health (CPH) and Franklin County Public Health (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 health care 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 1 business day for Class A diseases (immediately reportable) and less than 2 business days for Class B diseases (reportable by end of next business day). Values that meet the lag time goal are shown in green; values that do not meet the goal are shown 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/2018-public-health-quality-indicators-report>.

TABLE 13: REPORTING LAG TIME* FOR CONFIRMED & PROBABLE CASES OF SELECTED REPORTABLE DISEASES, FRANKLIN COUNTY, 2019

REPORTABLE CONDITION	Reporting Requirement	2019			
		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	108	1.0	1.5	26.9%
Hepatitis A (Class B)	By end of next business day	297	1.0	2.1	3.0%
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	10	2.0	2.6	10.0%
Pertussis (Class B)	By end of next business day	142	1.0	0.95	1.4%
Rubella (Class A)	Immediately	0	N/A	N/A	N/A
Salmonellosis (Class B)	By end of next business day	199	1.0	1.5	24.6%

*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. For sexually transmitted infections, event date is the earliest specimen collection date. 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.

DISEASE COUNTS AND RATES	DATA ARE CURRENT AS OF:
Chlamydia, gonorrhea and syphilis	September 8, 2020
HIV/AIDS data from the Ohio Department of Health	June 30, 2020
Infectious Disease Outbreaks	September 10, 2020
All other reportable conditions	July 07, 2020

CASE AND OUTBREAK CLASSIFICATIONS

Case definitions for nationally notifiable diseases are determined by the Council of State and Territorial Epidemiologists 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 diseases in Ohio are grouped by class. Class definitions in 2019 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.

Technical Notes continued on next page.

REPORTABLE DISEASE CHANGES IN OHIO IN 2019

The following changes took effect on August 1, 2019:

Additions: *Candida auris*; specifically listing *Salmonella* Paratyphi infection under Class B disease; moving Yellow Fever from a Class A disease to a Class B disease; renaming Typhoid Fever as *Salmonella* Typhi infection (Typhoid Fever).

CASE DEFINITION CHANGES FOR NATIONALLY NOTIFIABLE DISEASES IN 2019⁴

Candida auris, *Salmonella* Paratyphi infection, and *Salmonella* Typhi infection.

PERINATAL HEPATITIS B REPORTING

In Annual Summaries prior to 2016, perinatal hepatitis B data included all case statuses (confirmed, probable and suspected) reported by year that the case was created in ODRS. For consistency with surveillance data reported by ODH and CDC, perinatal hepatitis B data in Annual Summaries since 2016 include confirmed cases only, reported according to the date the case was counted by CDC.

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) 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 idrsinfo.org/data.

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