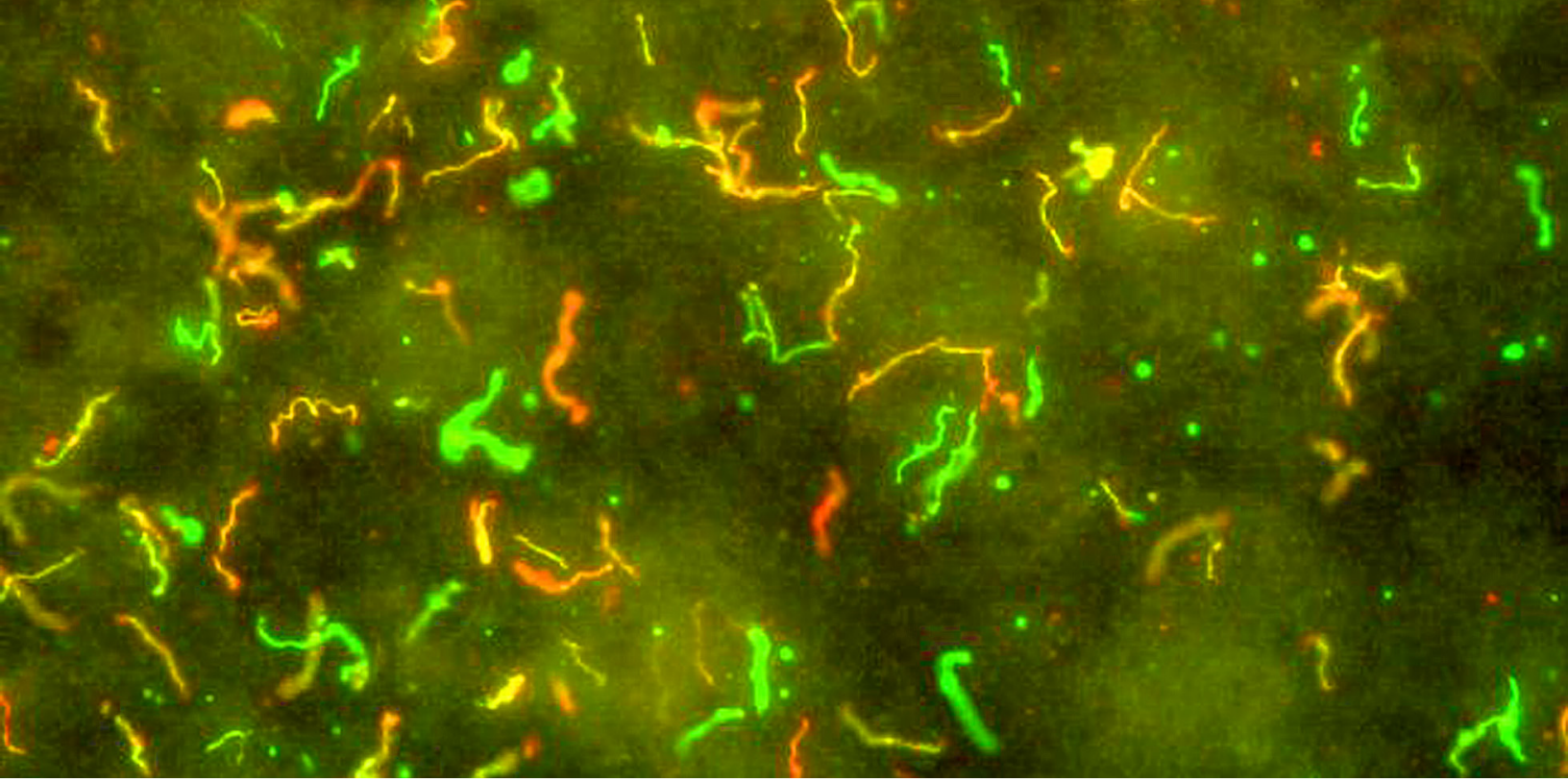

ANNUAL SUMMARY OF

REPORTABLE DISEASES 2014

Columbus & Franklin County, Ohio

THE CITY OF COLUMBUS
MICHAEL B. COLEMAN, MAYOR
COLUMBUS PUBLIC HEALTH

Franklin County Public Health

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REPORTABLE DISEASES 2014

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Cover Image: the Lyme disease spirochete, Borrelia burgdorferi; National Institute of Allergy and Infectious Diseases (NIAID); Image obtained from phil.cdc.gov

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INTRODUCTION

Infectious diseases (also called "communicable diseases") are illnesses caused by microorganisms, such as bacteria, viruses, and parasites, and transmitted from an infected person or animal to another person or animal. The route of transmission varies by disease and may include direct contact with contaminated body fluids (e.g., blood) or respiratory secretions, contact with contaminated objects, inhalation of contaminated airborne particles, ingestion of contaminated food or water, or the bite of an animal or vector (e.g., insect) carrying the microorganism.

According to Ohio Administrative Code 3701-3-02, cases and suspected cases of selected infectious diseases are required to be reported to Ohio 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 by state health departments to the Centers for Disease Control and Prevention (CDC) as part of national public health surveillance of infectious diseases.

For over thirteen 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 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 case follow-up of all reports, and preventive interventions to reduce secondary cases.

The 2014 Annual Summary includes cases of reportable disease that were diagnosed among residents of Columbus City and Franklin County, reported to public health, and found to meet the public health surveillance definition of a confirmed, probable, or suspected case. These data do not represent all cases of reportable infectious disease that occurred in the community, as individuals may not seek medical care for mild or asymptomatic infections. Additionally, a reported case of disease may not meet the surveillance definition of a confirmed, probable, or suspected case. Surveillance definitions are designed to standardize data collection and reporting across public health jurisdictions and may differ slightly from clinical definitions used in patient management. Outbreaks or media coverage of a particular disease can also influence testing and reporting rates. Data in this summary are considered provisional. Please note that data in Tables 4-9 are grouped by type of disease.

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 communicable disease may be obtained by contacting Columbus Public Health or Franklin County Public Health.

KEY FINDINGS ARE SUMMARIZED BELOW:

- In 2014, 2,627 cases of infectious disease* were reported among Columbus City and Franklin County residents, compared to 1,975 cases reported in 2013.
- Franklin County's total rate of infectious disease* increased from 162.9 cases per 100,000 population in 2013 to 213.3 cases per 100,000 in 2014.
- Due to a large mumps outbreak, the rate of mumps in Franklin County increased from 0.3 cases per 100,000 population in 2013 to 37.2 cases per 100,000 in 2014. This was the largest mumps outbreak in Franklin County in 35 years.
- The rate of influenza-associated hospitalizations increased from 28.0 cases per 100,000 population in 2013 to 67.6 cases per 100,000 in 2014. H3N2 influenza virus infections, which tend to cause more severe disease in older adults, were most prevalent during the 2014-2015 influenza season. Additionally, most circulating H3N2 viruses did not match the H3N2 virus strain that was included in the 2014-2015 influenza vaccine.[1]
- Following resolution of the 2012-2013 shigellosis outbreak, the rate of shigellosis decreased from 24.1 cases per 100,000 population in 2013 to 3.7 cases per 100,000 in 2014.
- Rates of giardiasis, varicella, and invasive *Streptococcus pneumoniae* infection decreased for the fourth consecutive year.

**Includes confirmed, probable, and suspected cases of communicable disease, excluding sexually transmitted infections, hepatitis, tuberculosis, and other mycobacterial diseases.*

DEMOGRAPHIC PROFILE OF FRANKLIN COUNTY

FRANKLIN COUNTY POPULATION, 2014[2]

- The population of Franklin County increased 1.5%, from nearly 1.21 million in 2013 to over 1.23 million in 2014.
- In 2014, 51.3% of Franklin County residents were female, and 48.7% were male.
- In 2014, 70.4% of Franklin County residents were White; 22.0% were African American; 4.3% were Asian; 0.3% were American Indian or Alaska Native; and 0.1% were Native Hawaiian or Other Pacific Islanders.

TABLE 1: FRANKLIN COUNTY POPULATION BY GENDER, 2014

GENDER	2014	
	POPULATION	PERCENT
Female	631,705	51.3
Male	599,688	48.7
Total	**1,231,393**	**100**

TABLE 2: FRANKLIN COUNTY POPULATION BY RACE, 2014

RACE	2014	
	POPULATION	PERCENT
White	866,901	70.4
Black or African American	270,907	22.0
Asian	52,950	4.3
American Indian and Alaska Native	3,694	0.3
Native Hawaiian and Other Pacific Islander	1,231	0.1
Other Races	35,710	2.9
Total	**1,231,393**	**100**

TABLE 3: FRANKLIN COUNTY POPULATION BY AGE GROUP, 2014

AGE (YEARS)	2014	
	POPULATION	PERCENT
0-4	88,660	7.2
5-14	158,850	12.9
15-24	185,940	15.1
25-34	206,875	16.8
35-44	166,238	13.5
45-54	166,238	13.5
55-64	132,990	10.8
65-74	68,958	5.6
75-84	38,173	3.1
85+	18,471	1.5
Total	**1,231,393**	**100**

TABLE 4: COUNTS AND RATES OF ENTERIC REPORTABLE DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2011–2014

ENTERIC DISEASES

		Year:	2011				2012				2013				2014			
		Population:	1,178,799				1,195,537				1,212,263				1,231,393			
			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 (2)	Amebiasis		4	0.3	5	0.4	7	0.6	7	0.6	2	0.2	2	0.2	2	0.2	2	0.2
B (2)	Campylobacteriosis		109	9.2	110	9.3	93	7.7	95	7.7	130	10.7	138	11.4	78	6.3	89	7.2
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 (2)	Cryptosporidiosis		62	5.3	81	6.9	16	1.3	17	1.4	24	2.0	30	2.5	35	2.8	37	3.0
B (2)	Cyclosporiasis		0	0.0	0	0.0	0	0.0	0	0.0	3	0.2	3	0.2	0	0.0	0	0.0
B (1)	*E. coli* O157:H7		10	0.8	10	0.8	10	0.8	10	0.8	6	0.5	7	0.5	21	1.7	23	1.9
B (1)	*E. coli,* unspecified		1	0.1	7	0.6	1	0.1	6	0.5	2	0.2	10	0.8	9	0.7	12	1.0
B (1)	*E. coli,* not O157		16	1.4	16	1.4	25	2.1	25	2.1	40	3.3	40	3.3	16	1.3	17	1.4
B (2)	Giardiasis		140	11.9	141	12.0	110	9.2	111	9.3	65	5.4	65	5.4	46	3.7	46	3.7
B (1)	Hemolytic uremic syndrome (HUS)		2	0.2	2	0.2	2	0.2	2	0.2	1	0.1	1	0.1	1	0.1	1	0.1
B (1)	Listeriosis		1	0.1	3	0.3	5	0.4	5	0.4	2	0.2	2	0.2	4	0.3	4	0.3
B (1)	Salmonellosis		119	10.1	121	10.3	130	10.9	133	11.1	147	12.1	149	12.3	148	12.0	158	12.8
B (1)	Shigellosis		13	1.1	13	1.1	1,201	100.5	1,219	102.0	290	23.9	292	24.1	46	3.7	46	3.7
B (2)	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 (2)	Typhoid fever		0	0.0	0	0.0	6	0.5	6	0.5	0	0.0	3	0.2	2	0.2	3	0.2
B (2)	*Vibrio parahaemolyticus* infection		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 (2)	Vibriosis, other (not cholera)		8	0.7	9	0.8	6	0.5	6	0.5	6	0.5	6	0.5	6	0.5	6	0.5
B (2)	Yersiniosis		7	0.6	7	0.6	8	0.7	9	0.8	6	0.5	6	0.5	6	0.5	6	0.5

† Rate per 100,000 population

TABLE 5: COUNTS AND RATES OF REPORTABLE HEPATITIS* AMONG FRANKLIN COUNTY RESIDENTS, 2011–2014

HEPATITIS

	Year:	2011				2012				2013				2014			
	Population:	1,178,799				1,195,537				1,212,263				1,231,393			
		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 A	7	0.6	12	1.0	8	0.7	15	1.3	7	0.6	11	0.9	5	0.4	12	1.0
B	Hepatitis B, perinatal	0	0.0	249	--	0	0.0	76	--	0	0.0	95	--	0	0.0	96	--
B	Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	1	0.1

* Data on acute and chronic hepatitis B and hepatitis C are undergoing quality review and are not included in this report

†Rate per 100,000 population

-- Rates were not calculated because population data were not available for children 0-24 months old

TABLE 6: COUNTS AND RATES OF REPORTABLE SEXUALLY-TRANSMITTED DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2011–2014

SEXUALLY-TRANSMITTED DISEASES

	Year:	2011				2012				2013				2014			
	Population:	1,178,799				1,195,537				1,212,263				1,231,393			
		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*	261	22.1	261	22.1	246	20.6	246	20.6	227	18.7	227	18.7	215	17.5	215	17.5
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	*Chlamydia trachomatis* infections	7,416	629.1	7,416	629.1	7,089	593.0	7,089	593.0	8,110	669.0	8,110	669.0	8,352	678.3	8,352	678.3
B	Gonorrhea *(Neisseria gonorrhoeae)*	2,836	240.6	2,836	240.6	2,600	217.5	2,600	217.5	2,991	247.0	2,991	247.0	2,897	235.3	2,897	235.3
B	Syphilis**	116	9.8	116	9.8	149	12.5	149	12.5	162	13.3	162	13.3	228	18.5	228	18.5

† Rate per 100,000 population

^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) • HIV/AIDS data are provisional and subject to change. Cases of HIV infection include persons with HIV diagnosis (not AIDS), persons with HIV diagnosis and later AIDS diagnosis, and persons with concurrent HIV and AIDS diagnoses. Yearly HIV case counts include all reported cases diagnosed in a given year.

**Syphilis data include primary and secondary cases only.

TABLE 7: COUNTS AND RATES OF REPORTABLE VACCINE-PREVENTABLE DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2011–2014

VACCINE-PREVENTABLE DISEASES																	
	Year:	**2011**				**2012**				**2013**				**2014**			
	Population:	**1,178,799**				**1,195,537**				**1,212,263**				**1,231,393**			
		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†
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	*Haemophilus influenzae*, invasive	10	0.8	10	0.8	10	0.8	10	0.8	10	0.8	10	0.8	14	1.1	15	1.2
B	Influenza-associated hospitalization	274	23.2	274	23.2	359	30.0	360	30.1	339	28.0	340	28.0	829	67.3	833	67.6
B	Influenza-associated pediatric mortality	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	Influenza A novel virus	0	0.0	0	0.0	4	0.3	4	0.3	0	0.0	0	0.0	0	0.0	0	0.0
A	Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	2	0.2
A	Meningococcal disease *(N. meningitidis)*	5	0.4	5	0.4	2	0.2	2	0.2	2	0.2	2	0.2	1	0.1	1	0.1
B	Mumps	0	0.0	0	0.0	1	0.1	3	0.3	3	0.2	4	0.3	415	33.7	458	37.2
B	Pertussis	319	27.1	424	36.0	302	25.3	396	33.1	324	26.7	423	34.9	279	22.7	365	29.6
B	Poliomyelitis	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	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, congenital	0	0.0	1	0.1	0	0.0	2	0.2	1	0.1	1	0.1	0	0.0	0	0.0
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	85	7.2	92	7.8	73	6.1	82	6.9	73	6.0	78	6.4	69	5.6	71	5.7

† Rate per 100,000 population

TABLE 8: COUNTS AND RATES OF REPORTABLE VECTORBORNE AND ZOONOTIC DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2011–2014

VECTORBORNE AND ZOONOTIC DISEASES

		Year:	2011				2012				2013				2014			
		Population:	1,178,799				1,195,537				1,212,263				1,231,393			
			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	Babesiosis		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	Brucellosis		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		0	0.0	0	0.0	1	0.1	1	0.1	2	0.0	3	0.0	2	0.2	2	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		2	0.2	2	0.2	1	0.1	1	0.1	1	0.1	2	0.2	0	0.0	2	0.2
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
B	La Crosse virus disease		0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	2	0.2
B	Leptospirosis		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	Lyme disease		8	0.7	19	1.6	9	0.8	24	2.0	22	1.8	53	4.4	19	1.5	43	3.5
B	Malaria		18	1.5	18	1.5	18	1.5	18	1.5	11	0.9	11	0.9	67	5.4	67	5.4
B	Other arthropod-borne disease		1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	1	0.1	4	0.3	5	0.4
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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
B	Q 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
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)		0	0.0	1	0.1	5	0.4	7	0.6	5	0.4	10	0.8	1	0.1	7	0.6
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
B	Typhus fever		1	0.1	1	0.0	0	0.00	1	0.1	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		0	0.0	0	0.0	6	0.5	6	0.5	2	0.2	2	0.2	0	0.0	0	0.0
B	Western equine encephalitis virus diseases		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

[†] Rate per 100,000 population N/A = not a reportable condition

TABLE 9: COUNTS AND RATES OF OTHER REPORTABLE DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2011–2014

OTHER REPORTABLE DISEASES

		Year:	2011				2012				2013				2014			
		Population:	1,178,799				1,195,537				1,212,263				1,231,393			
			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†
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	Botulism, foodborne		0	0.0	0	0.0	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
B	Botulism, infant		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, 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	Coccidioidomycosis		2	0.2	2	0.2	11	0.9	11	0.9	1	0.1	4	0.3	3	0.2	3	0.2
B	Creutzfeldt-Jakob disease		3	0.3	4	0.3	1	0.1	3	0.3	1	0.1	2	0.2	2	0.2	4	0.3
B	Legionnaires' disease		109	9.2	114	9.7	54	4.5	54	4.5	149	12.3	170	14.0	120	9.7	123	10.0
B	Leprosy (Hansen's disease)		0	0..0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1	1	0.1
B	Meningitis, aseptic (viral)		158	13.4	160	13.6	86	7.2	86	7.2	165	13.6	165	13.6	67	5.4	67	5.4
B	Meningitis, bacterial		5	0.4	5	0.4	6	0.5	6	0.5	4	0.3	4	0.3	12	1.0	13	1.0
B	Mycobacterial disease other than tuberculosis (MOTT)		203	17.2	203	17.2	213	17.8	213	17.8	211	17.4	211	17.4	223	18.1	223	18.1
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	*Staphylococcus aureus*, 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	0	0.0	0	0.0
B	Streptococcal disease, group A, invasive (IGAS)		41	3.5	41	3.5	41	3.4	41	3.4	57	4.7	57	4.7	36	3.0	36	3.0
B	Streptococcal disease, group B, in newborn		12	--	12	--	8	--	8	--	5	--	5	--	8	--	8	--

Table continued on next page...

TABLE 9: COUNTS AND RATES OF OTHER REPORTABLE DISEASES AMONG FRANKLIN COUNTY RESIDENTS, 2011–2014, *continued*

OTHER REPORTABLE DISEASES																	
	Year:	**2011**				**2012**				**2013**				**2014**			
	Population:	**1,178,799**				**1,195,537**				**1,212,263**				**1,231,393**			
		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	Streptococcal toxic shock syndrome (STSS)	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	2	0.2	2	0.2
B	*Streptococcus pneumoniae,* invasive disease (ISP)	169	14.3	170	14.4	152	12.7	152	12.7	126	10.4	126	10.4	96	7.8	96	7.8
B	Toxic shock syndrome	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)	50	4.2	50	4.2	42	3.6	42	3.6	50	4.2	50	4.2	49	4.0	49	4.0

† Rate per 100,000 population

-- Rates were not calculated because population data were not available for children 0-3 months old

Additional Table Notes:

"All Statuses" includes confirmed, probable, and suspected cases. Please see Technical Notes for information on case classification status.

Rate = number of cases/population x 100,000

"Year" is the year that the case record was created in the Ohio Disease Reporting System (ODRS).

Disease categories are not mutually exclusive (e.g., hepatitis A could be categorized as both "hepatitis" and "enteric disease"). For simplicity, each disease is listed in only one table. For more information about a particular disease, please visit www.idrsinfo.org.

DEATHS ASSOCIATED WITH DISEASE

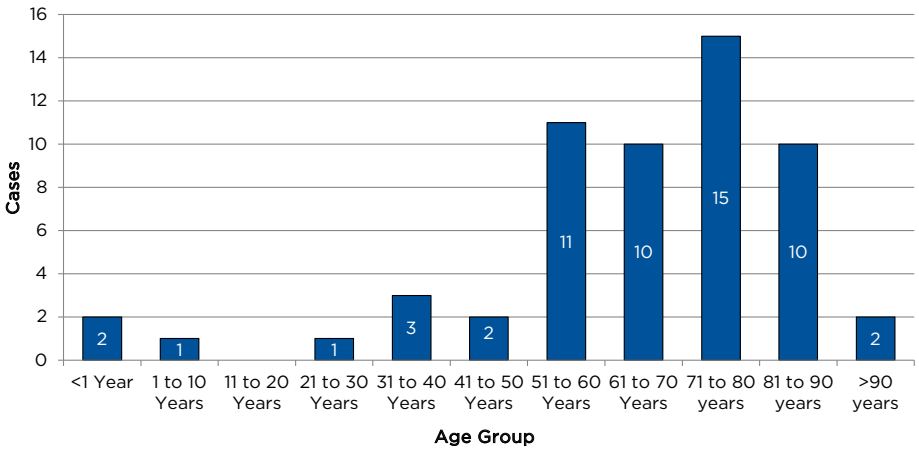
In 2014, 57 deaths occurred among confirmed and probable cases of reportable disease in Franklin County. Influenza-associated hospitalization was associated with the most deaths (n=32), followed by *Streptococcus pneumoniae* invasive disease (n=8). The greatest number of deaths occurred among individuals aged 71-80 years. Three deaths occurred among children, including two deaths in children under one year of age.

Death data were obtained from the Ohio Disease Reporting System (ODRS) and are subject to several limitations. Deaths that are identified during case or outbreak investigation are entered in ODRS, but cases are not followed to determine if death occurred after the investigation ended. Therefore, the number of deaths reported in Table 10 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 the death or medical records.

TABLE 10: NUMBER OF DEATHS AMONG CONFIRMED AND PROBABLE CASES OF REPORTABLE DISEASE, EXCLUDING SEXUALLY TRANSMITTED DISEASES AND TUBERCULOSIS, FRANKLIN COUNTY, 2014

DISEASE	TOTAL
Coccidioidomycosis	1
Creutzfeldt-Jakob disease	2
Haemophilus influenzae, invasive disease	2
Influenza-associated hospitalization	32
Legionnaires' disease	5
Mycobacterial disease other than tuberculosis (MOTT)	2
Streptococcal disease, group A, invasive	2
Streptococcal disease, group B, in newborn	2
Streptococcal toxic shock syndrome (STSS)	1
Streptococcus pneumoniae, invasive disease	8
Total	**57**

AGE DISTRIBUTION OF DEATHS AMONG CONFIRMED AND PROBABLE CASES OF REPORTABLE DISEASE, 2014 (N=57)



OUTBREAKS IN FRANKLIN COUNTY

TABLE 11: NUMBER OF CONFIRMED AND PROBABLE OUTBREAKS REPORTED BY YEAR, FRANKLIN COUNTY, 2011–2014

OUTBREAK TYPE	2011		2012		2013		2014	
	CONFIRMED	PROBABLE	CONFIRMED	PROBABLE	CONFIRMED	PROBABLE	CONFIRMED	PROBABLE
Community	9	4	12	5	11	0	17	7
Foodborne	1	7	7	8	8	2	6	4
Healthcare-Associated	4	1	6	1	3	3	10	3
Institutional	17	10	43	21	33	12	34	15
Unspecified (Class A)	0	0	1	0	0	0	0	0
Unusual Incidence	0	0	0	0	0	1	1	0
Waterborne	2	0	0	0	6	1	3	1
Zoonotic	1	0	0	0	1	0	0	1
Total	**34**	**22**	**69**	**35**	**62**	**19**	**71**	**31**

"Year" is the year that the outbreak record was created in the Ohio Disease Reporting System (ODRS).

OUTBREAK DEFINITIONS[3]

Outbreaks are Class C reportable conditions unless otherwise specified.

Community: Two or more cases of similar illness with a common exposure in the community and not considered a foodborne, waterborne, zoonotic, healthcare-associated, or institutional disease outbreak.

Foodborne: Two or more cases of similar illness resulting from the ingestion of a common food.

Healthcare-Associated: The occurrence of cases of a disease (illness) above the expected or baseline level, usually over a given period of time, as a result of being in a healthcare facility or receiving healthcare-associated products or procedures. The number of cases indicating the presence of an outbreak will vary according to the disease agent, size and type of population exposed, previous exposure to the agent, and the time and place of occurrence.

Institutional: Two or more cases of similar illness with a common exposure at an institution (e.g., correctional facility, day care center, group home, school, assisted-living facility) and not considered a foodborne or waterborne disease outbreak.

Unspecified (Class A reporting): Any unexpected pattern of cases, suspected cases, deaths, or increased incidence of any other disease of major public health concern which, because of the severity of disease or potential for epidemic spread, may indicate a newly recognized infectious agent, outbreak, epidemic, related public health hazard, or act of bioterrorism.

Unusual Incidence: Two or more cases of infectious disease that can be connected by person, place, and time, and do not meet the criteria for another type of outbreak.

Waterborne: Waterborne disease outbreaks are divided into two categories, depending on the type of water implicated in the outbreak. Outbreaks associated with drinking water, water not intended for drinking (excluding recreational water), or water of unknown intent must meet two criteria: 1) two or more persons are epidemiologically linked by location of water exposure, time, and illness, and 2) epidemiologic evidence implicates water as the probable source of illness. Outbreaks associated with recreational water must meet two criteria: 1) two or more persons are epidemiologically linked by location of recreational water exposure, time, and illness, and 2) epidemiologic evidence implicates water or volatilization of water-associated compounds into the air surrounding an aquatic facility as the probable source of illness.

Zoonotic: Two or more cases of similar illness with exposure to the same animal or the same or similar species of animals and with epidemiologic evidence implicating animals as the probable source of illness.

DISEASE SPOTLIGHT:

LYME DISEASE

LYME DISEASE		2014
Number of Cases		43
Franklin County Rate (per 100,000 pop.)		3.5
Ages of Cases (in yrs)	*Mean*	33
	Median	33
	Range	5-79
Female Rate (per 100,000 pop.)		2.5
Male Rate (per 100,000 pop.)		4.4

FACTS:

- The number of infections decreased between 2013 and 2014. In 2014, there were cases 43 of Lyme disease in Franklin County, compared to 53 cases in 2013.
- Over the past few years, cases of Lyme disease have been on the increase in Franklin County, specifically in 2013 and 2014 (19 cases in 2011, 24 cases in 2012, 53 cases in 2013, and 43 cases in 2014).
- The increase in cases coincides with the spread in Ohio of the principal vector, *Ixodes scapularis* (the blacklegged tick), which until recently was not known to be established in Ohio. This tick is now found in at least 65 Ohio counties, and the Lyme disease pathogen, *Borrelia burgdorferi*, is endemic in at least 24 counties, including Franklin County.

EPIDEMIOLOGY:

Infectious agents: *Borrelia burgdorferi*, a spirochete-type bacterium

Case Definition: A systemic, tick-borne disease with variable manifestations, including dermatologic, rheumatologic, neurologic and cardiac abnormalities. The best clinical marker for the disease is the initial "bulls-eye" rash, erythema migrans (EM), which occurs in 60% - 80% of patients

Mode of Transmission: Bite of infected tick

Incubation Period: For EM, 3 to 32 days after tick bite (mean 7 to 10 days); early stages may be unapparent and the patient may present with later manifestations.

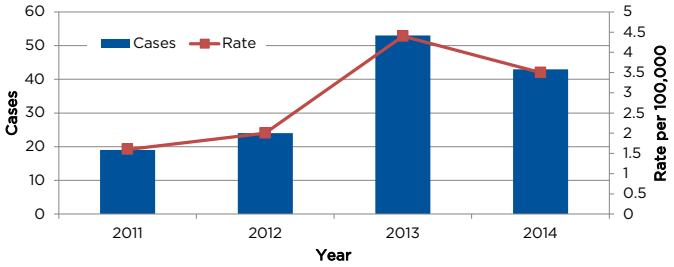
Symptoms: The first sign of infection is often a circular, "bulls-eye" rash called erythema migrans, or EM. This rash begins at the site of a tick bite after a delay of 3-30 days. A distinctive feature of the rash is that it gradually expands over a period of several days, reaching up to 12 inches (30 cm) across. It may be warm but is not usually painful. Some patients develop additional EM lesions in other areas of the body after several days. Patients also experience symptoms of fatigue, chills, fever, headache, muscle and joint aches, and swollen lymph nodes. In some cases, these may be the only symptoms of infection. Untreated, the infection may spread to other parts of the body within a few days to weeks, producing an array of discrete symptoms.

Treatment: Antibiotic therapy is recommended during the acute phase to reduce the incidence and severity of arthritic, neurologic and cardiac manifestations.

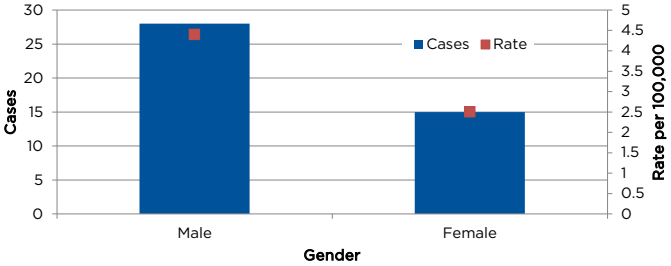
Prevention: Tick avoidance in endemic areas is the best preventive measure at present. Tuck pants cuffs into sock tops, spray insect repellent on pants and socks, and wear light-colored clothing to facilitate frequent checks for crawling ticks when outdoors.

Cases and rates include all statuses (confirmed, probable, and suspected)

LYME DISEASE CASES AND RATES, FRANKLIN COUNTY 2011-2014



GENDER-SPECIFIC LYME DISEASE CASES AND RATES, FRANKLIN COUNTY, 2014



DISEASE SPOTLIGHT:

SHIGA TOXIN-PRODUCING *ESCHERICHIA COLI* (STEC)

STEC		2014
Number of Cases		52
Franklin County Rate (per 100,000 pop.)		4.2
Ages of Cases (in yrs)	*Mean*	19
	Median	11
	Range	6 mo-72 yr
Female Rate (per 100,000 pop.)		4.1
Male Rate (per 100,000 pop.)		4.3

FACTS:

- In 2014, the number of *E. coli* cases decreased from 57 cases in 2013 to 52 cases in 2014.
- The majority of cases of *E. coli* were reported in the spring and summer months from March through September, with a spike in cases reported in November. The spike was due to a small outbreak in a single family home.
- *E. coli* cases are investigated through the Foodborne Diseases Centers for Outbreak Response Enhancement (FoodCORE). Seven FoodCORE centers, including Ohio, receive CDC funding to develop new and better methods to detect, investigate, respond to, and control multistate outbreaks of foodborne diseases. For more information on FoodCORE, please visit www.cdc.gov/foodcore.

EPIDEMIOLOGY:

Infectious agents: *Escherichia coli* O157:H7 and other enterohemorrhagic *E. coli,* also known as Shiga toxin-producing *E. coli* (STEC), all of which are Gram-negative bacteria

Case Definition: An infection of variable severity characterized by diarrhea (often bloody) and abdominal cramps. Illness may be complicated by hemolytic uremic syndrome (HUS) or thrombotic thrombocytopenic purpura (TTP). Asymptomatic infections also may occur and the organism may cause extraintestinal infections.

Mode of Transmission: Direct person-to-person via the fecal-oral route, animal-to-person, or through consumption of contaminated food (e.g., undercooked ground beef).

Incubation Period: 1-10 days, usually 3-4 days on average.

Symptoms: *E. coli* O157:H7 (STEC) infection often causes severe bloody diarrhea and abdominal cramps; sometimes the infection causes non-bloody diarrhea or no symptoms. Usually little or no fever is present, and the illness resolves in 5 to 10 days.

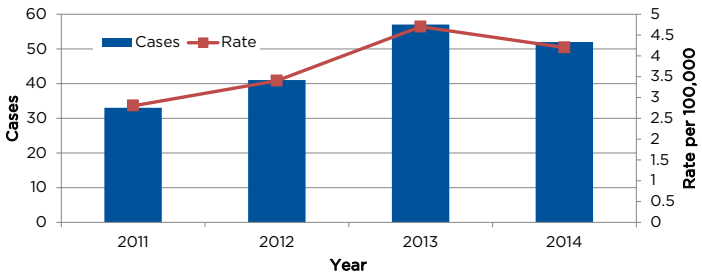
Treatment: No effective antibiotic therapy is recognized for STEC (*E. coli* O157:H7). Some studies suggest that treatment with antibiotics can lead to HUS. Anti-diarrheal medications should be avoided.

Prevention: E. coli is prevented by avoiding unpasteurized dairy products and practicing safe food preparation, cooking, and storage. Cooking ground beef to the proper temperature of 160 degrees F, washing fruits and vegetables, and proper hand washing can also prevent infection.

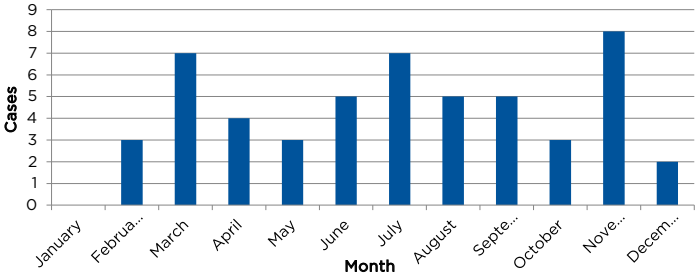
For more information, visit www.idrsinfo.org

Case counts and rates include all statuses (confirmed, probable, and suspected) and all types of E.coli listed in Table 4 (E. coli O157:H7, E. coli not O157:H7, E.coli unknown serotype).

STEC CASES AND RATES, FRANKLIN COUNTY, 2014



STEC CASES BY MONTH OF REPORTED DATE FRANKLIN COUNTY, 2014



DISEASE SPOTLIGHT:

VIRAL HEMORRHAGIC FEVER

EPIDEMIOLOGY:

Infectious agents: The three most common VHFs are Ebola virus disease, Lassa fever, and Marburg hemorrhagic fever. VHFs are caused by RNA viruses from four families: arenaviruses, filoviruses, bunyaviruses, and flaviviruses.

Case Definition: The term "viral hemorrhagic fever" is used to describe a severe syndrome affecting multiple organ systems in the body. Characteristically, the overall vascular system is damaged, and the body's ability to regulate itself is impaired.

Mode of Transmission: Viruses that cause hemorrhagic fevers are initially transmitted to humans by animals or arthropods. Some viruses that cause VHFs can be spread from human to human once an initial person has been infected through contact with an animal or arthropod. Human-to-human transmission occurs through direct contact with an infected person or contact with the infected person's blood or body fluids.

Incubation Period: Incubation periods vary by type of virus. The incubation period for Ebola virus disease ranges from 2 to 21 days after exposure, but the average is 8 to 10 days.

FACTS:

- In 2014, a large outbreak of Ebola virus disease (EVD) began in Liberia, Sierra Leone, and Guinea. In October 2014, the Centers for Disease Control and Prevention (CDC) started a screening program called Check and Report Ebola (CARE) for all travelers arriving to the United States from Ebola-affected countries.
- On October 9, 2014, health departments in Ohio began monitoring travelers from Ebola- affected countries for potential signs and symptoms of EVD. This "active monitoring" required travelers to report their temperature and symptoms by phone twice a day for 21 days (the maximum incubation period of EVD) after arrival in the US.
- On October 31, 2014, health departments in Ohio began "direct active monitoring." The new monitoring guidelines in Ohio require all travelers to report their temperature and symptoms twice a day—once in person, and once by phone—for a total of 21 days after arrival in the US.
- A total of 87 travelers from Ebola-affected countries were monitored by Columbus Public Health and Franklin County Public Health in 2014. None of these travelers developed Ebola virus disease.

Symptoms: Specific signs and symptoms vary by the type of VHF, but initial signs and symptoms often include: high fever, fatigue, dizziness, muscle aches, loss of strength, and exhaustion. Bleeding from body orifices like the mouth, eyes, or ears can also occur. Severe cases may show signs of shock (dizziness, confusion) and brain malfunction (unconsciousness, seizures). Death can occur.

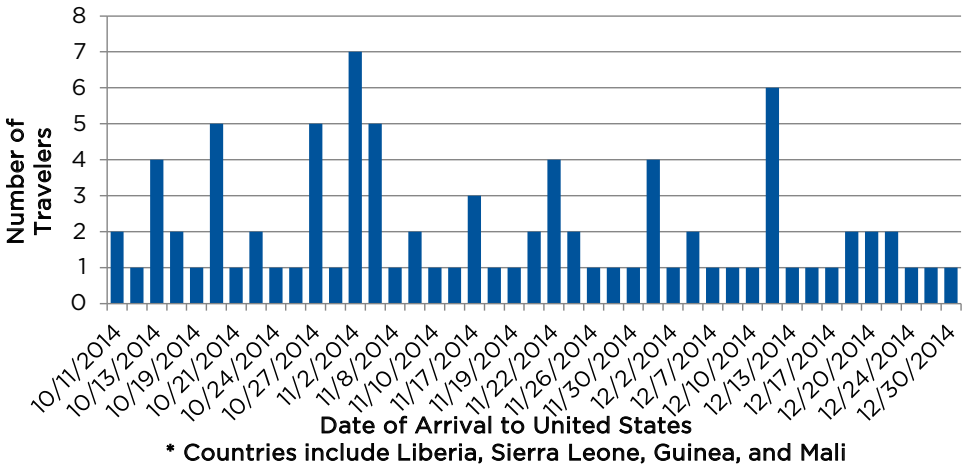
Treatment: Patients receive supportive therapy, but generally speaking, there is no treatment or established cure for VHFs.

Prevention: Currently, no vaccines exist that can protect against these diseases. Prevention efforts must concentrate on avoiding contact with host species and preventing further transmission from person to person if a human case occurs.

For more information, visit www.idrsinfo.org.

Note: Some travelers may have arrived in the US prior to their Ohio monitoring start date.

TRAVELERS FROM EBOLA-AFFECTED COUNTRIES* BY DATE OF ARRIVAL TO THE UNITED STATES – FRANKLIN COUNTY, 2014



* Countries include Liberia, Sierra Leone, Guinea, and Mali

FEATURED OUTBREAK INVESTIGATION:

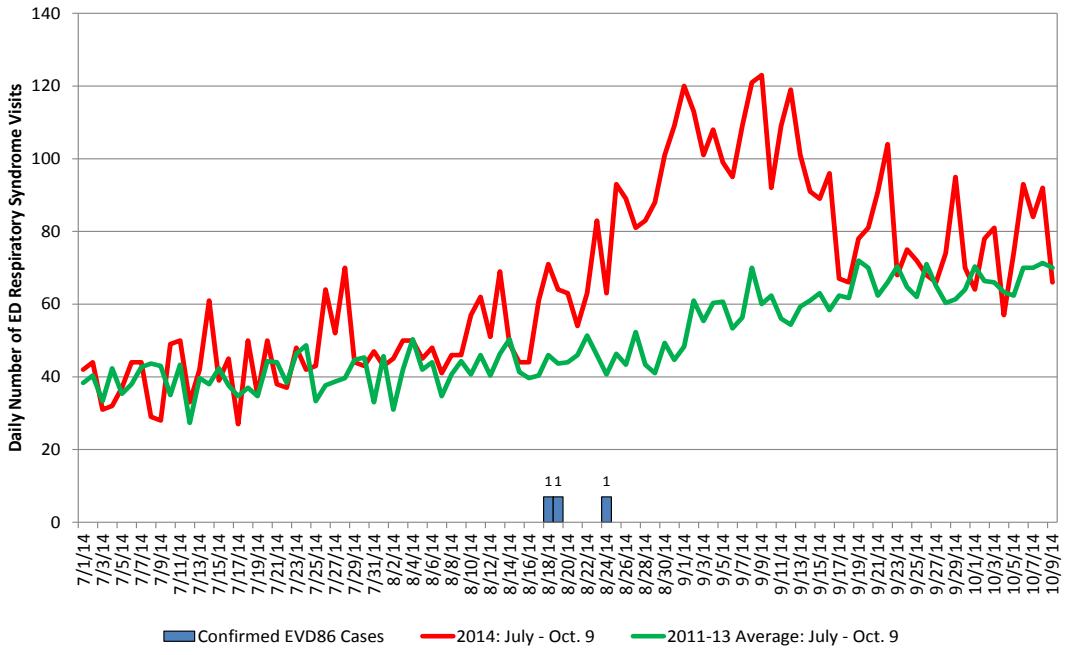
ENTEROVIRUS D68 IN THE COMMUNITY

Enterovirus D68 (EV-D68) is one of more than 100 non-polio enteroviruses characterized by mild or severe respiratory illness. Mild symptoms include runny nose, sneezing, cough and muscle aches. Severe symptoms may include wheezing and difficulty breathing. EV-D68 likely spreads from person to person when an infected person coughs, sneezes, or touches a surface that is then touched by others. Infants, children, and teenagers are most likely to get infected with enteroviruses and become ill, and children with asthma may have a higher risk for severe respiratory illness. There is no specific treatment for people with respiratory illness caused by EV-D68. Small numbers of EV-D68 have been reported regularly to CDC since 1987. However, in 2014 the United States experienced a nationwide outbreak of EV-D68 with severe respiratory illness.

From mid-August through early September 2014, the EpiCenter syndromic surveillance system indicated increases in exacerbation and respiratory medical facility visits in Franklin County. On September 2, a local hospital infectious disease physician notified Columbus Public Health (CPH) of an increase in emergency department (ED) and urgent care visits, as well as inpatient and pediatric intensive care unit (ICU) admissions, due to respiratory illnesses. Initial viral PCR (film array) from the pediatric patients indicated a large number positive for Rhinovirus/Enterovirus. At the same time, outbreaks of EV-D68 were occurring in Missouri and Illinois. Specimens were gathered from the local hospital patients and sent to CDC for further testing. Three Columbus resident patients tested positive for EV-D68. Similar to outbreak characteristics in other locations during this time, the local cases occurred among children; two of the three children had underlying respiratory conditions (e.g., asthma). Additionally, the illness was severe enough to require ICU admission and mechanical ventilation. Public health interventions included public and medical practitioner education and information disseminated using a variety of means, including the CPH & FCPH websites, social media, and public health advisory release for healthcare providers.

To help with situation monitoring and characterize the potential extent of EV-D68 locally, EpiCenter ED visits for respiratory syndromes were tracked in the most affected hospital. During August 23, 2014–September 16, 2014, the daily total ED visit count increased by 27% and respiratory syndrome visits increased by 104% compared to the weeks leading up to this time period. Compared to the same time period in 2011-2013, total ED visits were 13% higher, while respiratory syndrome visits were 84% higher.

HOSPITAL X EPICENTER DAILY RESPIRATORY SYNDROME ED VISITS: 2014 VS. 2011-2013 AVERAGE



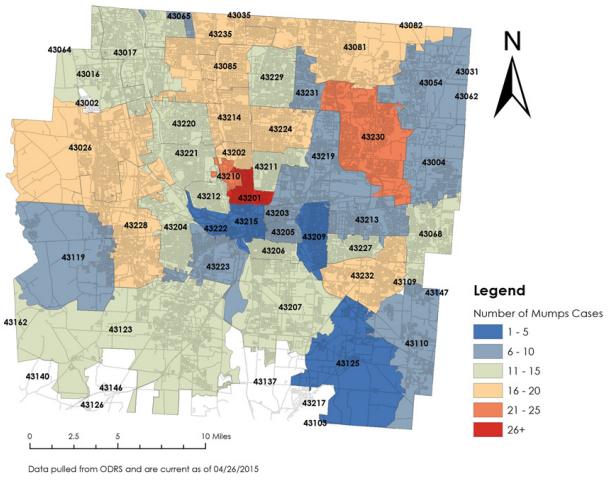
FEATURED OUTBREAK INVESTIGATION:

MUMPS IN A UNIVERSITY & COMMUNITY

Mumps is a contagious viral illness that spreads from person to person via respiratory droplets (e.g., coughs, sneezes). Infected individuals may have symptoms such as fever, headache, fatigue, and salivary gland swelling (parotitis), but 15-20% of infected individuals have no symptoms. Possible complications of mumps include testicular or ovarian swelling, hearing loss, meningitis, and encephalitis. In pregnant women, mumps virus infection in the first trimester can lead to miscarriage. Mumps is a vaccine-preventable disease, and an average of one case per year occurred in Franklin County during 2001–2013.

On February 25, 2014, Columbus Public Health (CPH) was notified of a local university student with mumps. After a second student with mumps was reported less than two weeks later, CPH initiated an outbreak investigation. A mumps outbreak at the university was declared on March 6, 2014. The outbreak spread into the surrounding community, and a multi-county community outbreak was declared on April 11, 2014. Several public health interventions were implemented to control the spread of disease, including isolation of cases, educational campaigns promoted by public health agencies and local universities, and measles-mumps-rubella (MMR) vaccination clinics.

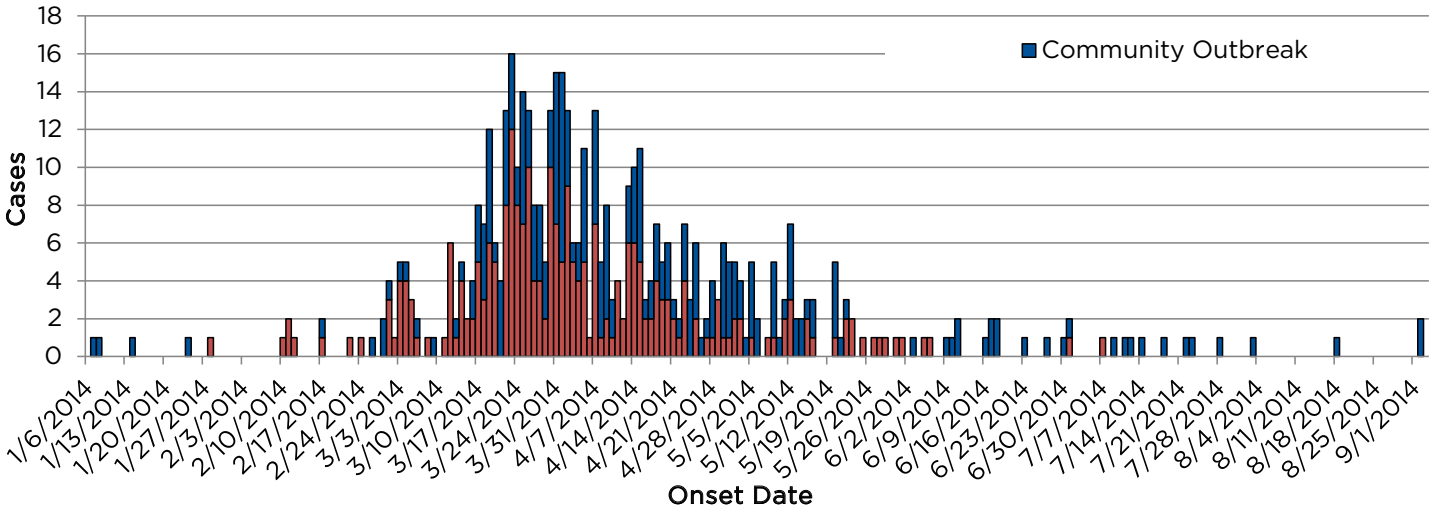
COUNT OF CONFIRMED & PROBABLE MUMPS CASES BY ZIP CODE, FRANKLIN COUNTY & COLUMBUS CITY JURISDICTIONS, OHIO, JAN. 7, 2014–SEPT. 2, 2014 (N=415)



A total of 485 confirmed and probable mumps cases were linked to this outbreak; 415 (85%) were in Columbus City or Franklin County jurisdiction (see map). Cases ranged in age from 4 months to 80 years old, with a mean age of 30 years and a median age of 23 years. Overall, 61% of cases were female, and 76% were white. Membership in a fraternity or sorority was reported by 44% of student cases, compared to 11% of the general student body. Over 90% of all cases reported receiving at least one dose of mumps-containing vaccine prior to becoming infected. Fifteen cases were hospitalized, and no cases died.

This was the largest outbreak of mumps in Ohio since 1979 and the largest in the United States since 2010. Although mumps outbreaks have occurred at colleges and universities across the US in the past 10 years, a unique feature of this outbreak was the extensive spread of mumps from a high-contact setting into the surrounding general population.

MUMPS OUTBREAK CASES (PROBABLE & CONFIRMED) BY ONSET DATE, JAN. 7, 2014–SEPT. 2, 2014



FEATURED OUTBREAK INVESTIGATION:

SALMONELLOSIS IN A SORORITY

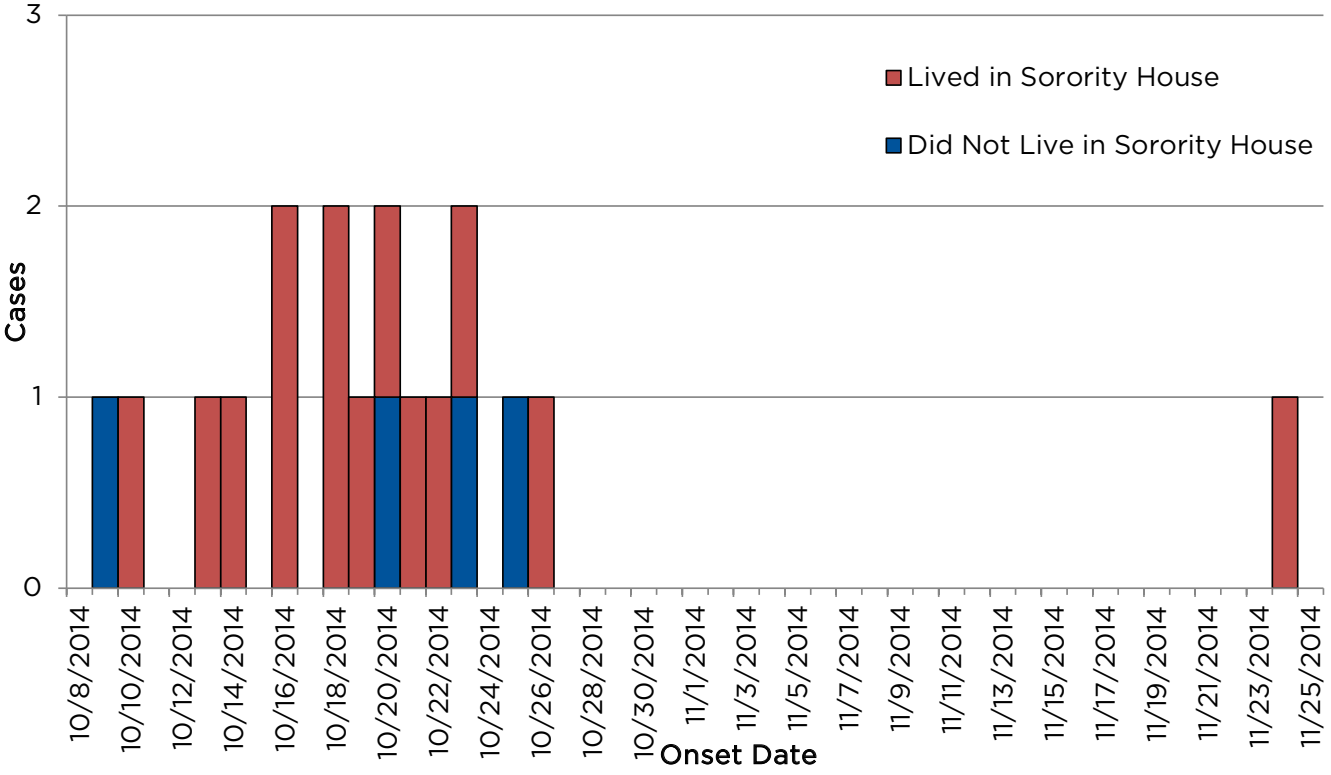
Salmonellosis is a disease caused by *Salmonella* bacteria and characterized by diarrhea, stomach cramps, fever, and sometimes vomiting. Human-to-human or animal-to-human transmission occurs via the fecal-oral route. Transmission can occur through direct contact with feces of an infected person or animal, or through ingestion of contaminated food or water. Salmonellosis can be prevented by thoroughly cooking eggs, poultry, and meat; avoiding cross-contamination of raw and cooked foods during preparation; and frequent and thorough hand washing, especially after contact with animals, after using the bathroom, after changing diapers, and before eating or preparing food. Reptiles and young birds can carry *Salmonella* bacteria and should not be kept as pets for children.

In October 2014, Columbus Public Health was notified of two cases of salmonellosis among members of a sorority at a local university. Public health staff interviewed sorority members and staff about recent illness, residence in the sorority house, and attendance at sorority events. Cases were also interviewed about foods they had eaten.

Overall, 19 salmonellosis cases were identified among sorority members and staff. Three cases tested positive for *Salmonella* Enteritidis. All cases were female, and 74% of cases lived in the sorority house. Illness was not found to be associated with a common meal or social event, and cases occurred over multiple weeks. Inspection of the sorority house kitchen found no critical food safety violations. Therefore, this outbreak was likely caused by person-to-person transmission.

Active case finding, testing, and exclusion were primary methods of controlling the spread of disease. Education on salmonellosis prevention was provided to sorority members and staff.

SALMONELLA ENTERITIDIS OUTBREAK CASES BY DATE OF ONSET* AND SORORITY HOUSE RESIDENCE, COLUMBUS CITY, 2014



**1 case with unknown onset date is not included in this figure*

TIMELINESS OF DISEASE REPORTING

Timeliness of disease reporting is a key part of good public health practice.[4] In order to reduce the burden of disease in our community and to implement appropriate interventions, the public health system relies on healthcare providers and laboratories for identification of infectious diseases. Timeliness requirements for each reportable disease vary based on the communicability and severity of the disease.

In the Ohio Disease Reporting Systems (ODRS) application, it is possible to query the date when a healthcare provider diagnosed an illness and the date when the local health department received notification of the illness (i.e., the date the case was entered into ODRS).

Table 12 lists selected diseases and the corresponding median and mean number of days between healthcare provider diagnosis and reporting to the local health department. As of 2014, *E. coli,* hepatitis A, listeriosis, mumps, pertussis, and salmonellosis are Class B reportable conditions, which are required to be reported by the end of the next business day after a suspected case is identified. Measles, meningococcal disease, and rubella are Class A reportable conditions due to their severity and potential for epidemic spread; Class A reportable conditions are required to be reported immediately via telephone upon recognition of a case, suspected case, or positive laboratory result.

TABLE 12: REPORTING LAG TIME* FOR SELECTED REPORTABLE DISEASES, FRANKLIN COUNTY, 2014.

REPORTABLE CONDITION	REPORTING REQUIREMENT	2014			
		# OF CASES	MEDIAN (DAYS)	MEAN (DAYS)	% OF CASES MISSING DIAGNOSIS DATE
E. coli O157:H7	By end of next business day	21	1.0	4.6	42.9%
Hepatitis A	By end of next business day	5	1.0	1.2	0.0%
Listeriosis	By end of next business day	4	3.0	4.5	25.0%
Measles	Immediately	1	0.0	0.0	0.0%
Meningococcal disease	Immediately	1	0.0	0.0	0.0%
Mumps	By end of next business day	415	1.0	3.6	3.9%
Pertussis	By end of next business day	279	1.0	1.8	3.6%
Rubella	Immediately	0	N/A	N/A	N/A
Salmonellosis	By end of next business day	148	2.0	3.9	45.3%

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

***"Diagnosis Date" in ODRS defaulted to the following date fields (in order) if blank: lab specimen collection date, lab result date, onset date, date reported to Ohio Department of Health, created date. If a diagnosis date occurred after the date reported to the local health department, then the diagnosis date defaulted to the next proxy.*

Timeliness of Disease Reporting continued on next page...

Reporting lag is defined as the difference between the diagnosis date and the date that the case was reported to the local health department. For Class A diseases (immediately reportable), median and mean lag time values should be less than 1. In 2014, mean and median lag time were equal to zero for measles and meningococcal disease, thus meeting the goal. Lag time could not be calculated for rubella because no cases were reported in Franklin County in 2014. For Class B diseases (reportable by end of next business day), mean and median lag time values should be less than 2. The median lag time goal was met for *E. coli* O157:H7, hepatitis A, mumps, and pertussis. The median values for listeriosis (3.0 business days) and salmonellosis (2.0 business days) did not meet the goal. The mean lag time goal was met for hepatitis A and pertussis. The mean lag times for *E. coli* O157:H7 (4.6 business days), listeriosis (4.5 business days), mumps (3.6 business days), and salmonellosis (3.9 business days) did not meet the goal.

If the diagnosis date field was empty, a proxy date was used according to the order listed in the notes for Table 12. A proxy date was needed for 12% of cases in 2014. The need for a proxy varied substantially by disease, with *E. coli* O157:H7 and salmonellosis having the greatest proportion of cases missing diagnosis date (43.6% and 45.5%, respectively). Continued efforts are needed to identify and enter diagnosis date for these diseases in ODRS.

CPH and FCPH will periodically monitor the reporting lag times for these diseases. Regular monitoring will help address two key issues: late reporters and missing data. If specific reporters are found to be contributing to longer lag times, this information will be shared with them, challenges to timely reporting will be identified and addressed, and closer monitoring of reports will follow. Additionally, ensuring completion of missing or incorrect dates will aid in better, timelier interventions and prevention efforts.

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.

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 CDC. Definitions are published in the *Morbidity and Mortality Weekly Report* and posted to CDC's National Notifiable Diseases Surveillance System (NNDSS) website.[5]

In Ohio, case and outbreak definitions can be found in the Infectious Disease Control Manual.[3]

REPORTABLE DISEASE CLASS DEFINITIONS[3]

Reportable diseases in Ohio are grouped by class. Class definitions 2014 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: Diseases 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.

Note: Ohio changed the reporting requirements for reportable diseases, effective January 1, 2014. Class B (1) and Class B (2) were combined into one class (Class B), with requirements to report each disease by the next business day.

REPORTABLE DISEASE CHANGES IN OHIO IN 2014

Additions: babesiosis, Middle East respiratory syndrome coronavirus (MERS).

Name changes: arboviral neuroinvasive and non-neuroinvasive disease; spotted fever rickettsiosis, including Rocky Mountain spotted fever (RMSF); trichenellosis.

CASE DEFINITION CHANGES IN 2014 FOR NATIONALLY NOTIFIABLE DISEASES[5]

Changes in 2014: arboviral neuroinvasive and non-neuroinvasive disease; gonorrhea; influenza A, novel; malaria; pertussis; syphilis; trichinellosis.

NOTES ABOUT REPORTING SYSTEMS

Data are from the Ohio Department of Health and the Infectious Disease Reporting System (IDRS, a joint effort between Columbus Public Health Department and the Franklin County Public Health). Cases of sexually transmitted diseases, tuberculosis, HIV, and AIDS have separate reporting systems. Cases may have been excluded due to reporting time, onset date, or when the supplemental information was received.

The Ohio Disease Reporting System (ODRS)[6] 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 diseases 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 in which to electronically send the report for follow-up and investigation. In addition, some

Technical Notes continued on next page...

laboratories have the ability to electronically up-load batches of reports via Electronic Laboratory Reporting (ELR) from their databases into ODRS, 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 one. 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.

HIV/AIDS DATA

Counts of newly diagnosed HIV/AIDS cases were obtained from Ohio Department of Health HIV Infections Annual Surveillance Statistics.7 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.

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