

OHIO DEPARTMENT OF HEALTH

ANNUAL SUMMARY OF INFECTIOUS DISEASES OHIO 2017

REPORTED INCIDENCE OF SELECTED
NOTIFIABLE DISEASES



PREPARED AND DISTRIBUTED BY:

BUREAU OF INFECTIOUS DISEASES

TABLE OF CONTENTS

Introduction	1
Ohio Notifiable Diseases	2
Ohio County Population Map	4
Tables of Notifiable Diseases	5
Reported Cases of Selected Notifiable Diseases by Year of Onset, Ohio, 2013-2017	6
Reported Cases of Selected Notifiable Diseases by Age in Years, Ohio, 2017	8
Reported Cases of Selected Notifiable Diseases by Sex, Ohio, 2017	12
Reported Cases of Selected Notifiable Diseases by Month of Onset, Ohio, 2017	14
Reported Cases of Selected Notifiable Diseases by County of Residence, Ohio, 2017	18
<i>Escherichia coli</i> , Shiga Toxin-Producing Serogroups by Year of Onset, Ohio, 2013-2017	44
<i>Haemophilus influenzae</i> , Invasive Disease Serotypes in Children <5 Years of Age by Year of Onset, Ohio, 2013-2017	45
Meningococcal Disease Serogroups by Year of Onset, Ohio, 2013-2017	46
<i>Salmonella</i> Serotypes by Year of Onset, Ohio, 2013-2017	47
Graphs of Selected Notifiable Disease Incidence	51
Campylobacteriosis	52
Cryptosporidiosis	53
Cyclosporiasis	54
<i>Escherichia coli</i> , Shiga Toxin-Producing	55
Giardiasis	56
<i>Haemophilus influenzae</i> , Invasive Disease	57
Hepatitis A	58
Influenza-Associated Hospitalization	59
Influenza A, Novel Virus Infection	60
La Crosse Virus Disease	61
Legionellosis	62

TABLE OF CONTENTS

Lyme Disease	63
Malaria	64
Meningitis, Aseptic	65
Meningitis, Other Bacterial	66
Mumps	67
Pertussis	68
Salmonellosis	69
Shigellosis	70
Streptococcal Disease, Group A, Invasive	71
Streptococcal Disease, Group B, in Newborn	72
<i>Streptococcus pneumoniae</i> , Invasive Disease	73
Typhoid Fever	74
Varicella	75
West Nile Virus Infection	76
Yersiniosis	77
Profiles of Selected Notifiable Diseases	78
Lyme Disease and Other Ohio Tickborne Diseases	78
Typhoid Fever	82
Outbreak Summaries	83
Community Outbreaks	83
Foodborne Outbreaks	84
Healthcare-Associated Outbreaks	87
Institutional Outbreaks	88
Waterborne Outbreaks	91
Zoonotic Outbreaks	92

TABLE OF CONTENTS

Technical Notes	94
Specific Diseases	94
Outbreaks	95
Rate Calculations	96
Diseases Not Included in Tables	96
Serotypes and Serogroups	96
References	97

INTRODUCTION

The *Annual Summary of Infectious Diseases, Ohio, 2017* provides an overview of the incidence of selected notifiable infectious diseases. The report includes tables of disease by year of onset, age group, sex, month of onset and county of residence and tables of Shiga toxin-producing *Escherichia coli* serogroups, invasive *Haemophilus influenzae* serotypes in children <5 years of age, meningococcal disease serogroups and *Salmonella* serotypes. In addition, there are graphs of selected disease incidence, profiles of selected diseases and outbreak summaries.

The sources of these data are individual case and laboratory reports submitted to the Ohio Department of Health (ODH) by infection preventionists, healthcare providers, laboratories and city, county and combined health districts throughout the state and entered into the Ohio Disease Reporting System (ODRS). Data reflect disease incidence for Ohio residents only, but include diseases acquired by Ohio residents while traveling out of state or overseas.

This summary includes confirmed and probable cases. For all diseases, the case criteria used are those provided in:

- The [ODH Infectious Disease Control Manual \(IDCM\)](#)
- The Centers for Disease Control and Prevention (CDC) National Notifiable Diseases Surveillance System's [2017 nationally notifiable infectious disease case definitions](#)

[HIV/AIDS](#), [hepatitis B and C](#), [sexually transmitted diseases](#) and [tuberculosis](#) surveillance data are not included in this report. Please refer to each program's Web site for summary reports of these diseases as well as previous annual summaries.

Thanks to all Ohio infection preventionists, healthcare providers, laboratories and local health departments for their hard work and dedication to reporting infectious diseases in the most accurate, complete and timely manner. These efforts are essential in protecting and improving the health of all Ohioans.

Questions or comments regarding this annual summary may be directed to the ODH Bureau of Infectious Diseases at (614) 995-5599.

OHIO NOTIFIABLE DISEASES

Ohio Administrative Code (OAC) 3701-3, effective Sep. 16, 2016

CLASS A

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

- Anthrax
- Botulism, foodborne
- Cholera
- Diphtheria
- Influenza A, novel virus
- Measles
- Meningococcal disease
- Middle East respiratory syndrome
- Plague
- Rabies, human
- Rubella, not congenital
- Severe acute respiratory syndrome
- Smallpox
- Tularemia
- Viral hemorrhagic fever
 - Ebola virus disease
 - Lassa fever
 - Marburg hemorrhagic fever
 - Crimean-Congo hemorrhagic fever
- Yellow fever
- Any unexpected pattern of cases, suspected cases, deaths or increased incidence of any other disease of major public health concern because of the severity of disease or potential for epidemic spread, which may indicate a newly recognized infectious agent, outbreak, epidemic, related public health hazard or act of bioterrorism.

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.

- Amebiasis
- Arboviral neuroinvasive and non-neuroinvasive disease:
 - Chikungunya virus infection
 - Eastern equine encephalitis virus disease
 - La Crosse virus disease
 - Powassan virus disease
 - St. Louis encephalitis virus disease
 - West Nile virus infection
- Western equine encephalitis virus disease
- Zika virus infection
- Other arthropod-borne disease
- Babesiosis
- Botulism, infant
- Botulism, wound
- Brucellosis
- Campylobacteriosis
- Chancroid
- *Chlamydia trachomatis* infection
- Coccidioidomycosis
- Creutzfeldt-Jakob disease
- Cryptosporidiosis
- Cyclosporiasis
- Dengue
- *Escherichia coli*, Shiga toxin-producing
- Ehrlichiosis/Anaplasmosis
- Giardiasis
- Gonorrhea
- *Haemophilus influenzae*, invasive disease
- Hantavirus
- Hemolytic uremic syndrome
- Hepatitis A
- Hepatitis B, non-perinatal
- Hepatitis B, perinatal
- Hepatitis C

OHIO NOTIFIABLE DISEASES

Ohio Administrative Code (OAC) 3701-3, effective Sep. 16, 2016

CLASS B, CONTINUED

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.

- Hepatitis D
- Hepatitis E
- Influenza-associated hospitalization
- Influenza-associated pediatric mortality
- Legionellosis
- Leprosy (Hansen disease)
- Leptospirosis
- Listeriosis
- Lyme disease
- Malaria
- Meningitis, aseptic
- Meningitis, other bacterial
- Mumps
- Pertussis
- Poliomyelitis
- Psittacosis
- Q fever
- Rubella, congenital
- Salmonellosis
- Shigellosis
- Spotted fever rickettsiosis
- *Staphylococcus aureus*, vancomycin resistant or intermediate resistant
- Streptococcal disease, group A, invasive
- Streptococcal disease, group B, in newborn
- Streptococcal toxic shock syndrome
- *Streptococcus pneumoniae*, invasive disease
- Syphilis
- Tetanus
- Toxic shock syndrome
- Trichinellosis
- Tuberculosis
- Typhoid fever
- Varicella
- Vibriosis
- Yersiniosis

CLASS C

Report an outbreak, unusual incidence or epidemic (e.g., histoplasmosis, pediculosis, scabies, staphylococcal infections) by the end of the next business day.

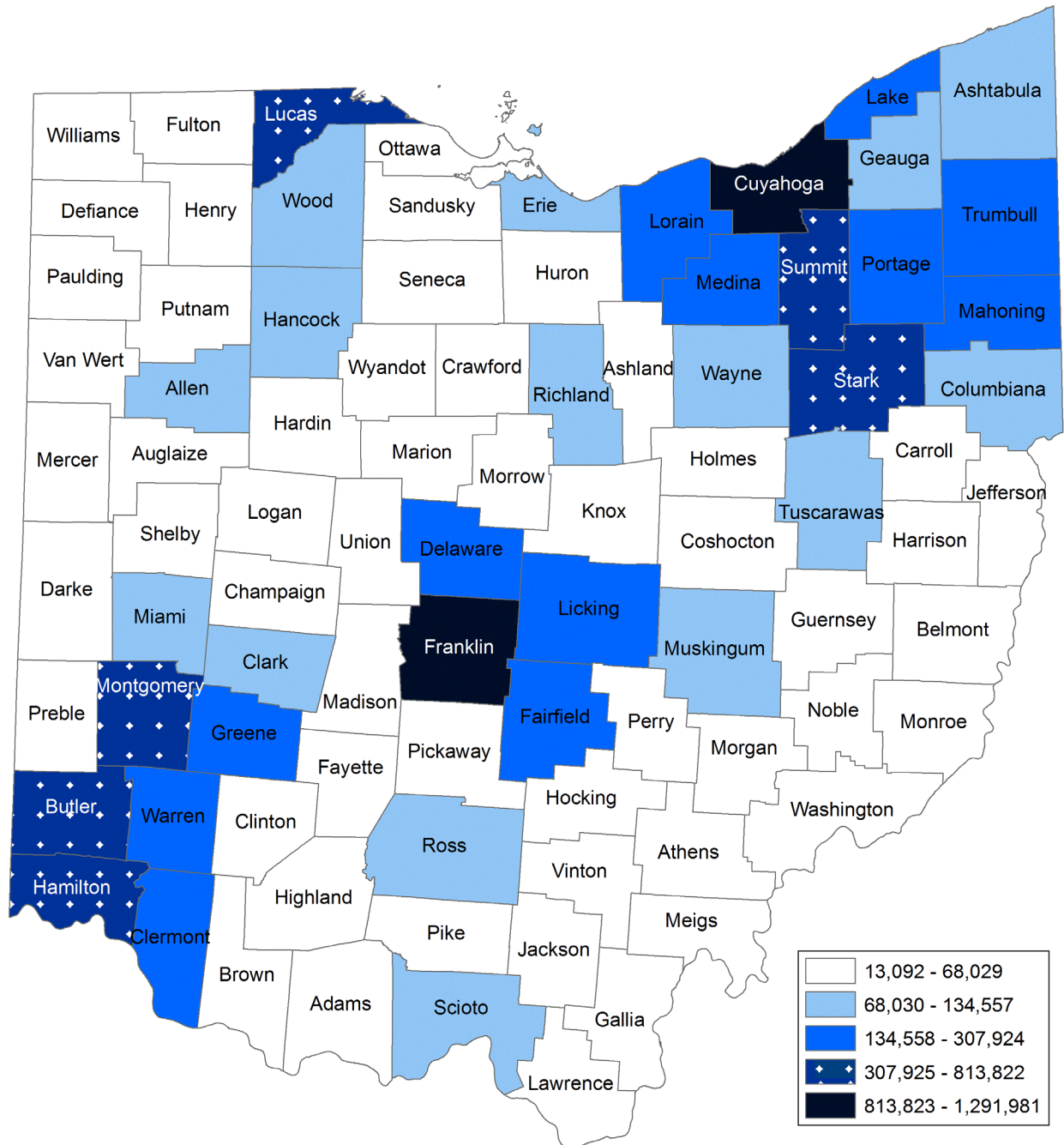
- Community
- Foodborne
- Healthcare-associated
- Institutional
- Waterborne
- Zoonotic

AIDS AND HIV REPORTING

Cases of AIDS (acquired immune deficiency syndrome), AIDS-related conditions, HIV (human immunodeficiency virus) infection, perinatal exposure to HIV, all CD4 T-lymphocyte counts and all tests used to diagnose HIV must be reported on forms and in a manner prescribed by the director.

For the current list of reportable diseases in Ohio, please see [Know Your ABCs: A Quick Guide to Reportable Infectious Diseases in Ohio](#) or OAC [3701-3-02](#) and [3701-3-12](#).

OHIO COUNTY POPULATION MAP



Source of population data: 2017 U.S. Census estimates.

TABLES OF SELECTED NOTIFIABLE DISEASES

BY YEAR OF ONSET TABLE

Pages 6-7

This table displays case counts and rates for five years of data and the median and mean counts and rates during 2013-2017. Medians and means were calculated only when five years of data were available. Population data come from the U.S. Census estimates for each year. Data are by year of onset with the exception of outbreaks, which are shown by date of report for all years.

BY AGE TABLE

Pages 8-11

This table provides case counts and rates by age group (in years) for 2017. Age refers to the patient's age at the earliest known date associated with the case. Population data come from the 2017 U.S. Census estimates. Outbreak data are not included in this table.

BY SEX TABLE

Pages 12-13

This table contains case counts and rates by sex for 2017. Population data come from the 2017 U.S. Census estimates. Outbreak data are not included in this table.

BY MONTH OF ONSET TABLE

Pages 14-17

Case counts and percentages by month of onset for 2017 are presented in this table. Month refers to the month of symptom onset except for outbreaks, which are by month of report, and for influenza-associated pediatric mortality, which is by month of death.

BY COUNTY OF RESIDENCE TABLE

Pages 18-43

This table displays case counts and rates by county for 2017. County refers to the patient's county of residence. If the county of residence is unknown, then the county in which the physician, hospital or local health department is located is used. Population data come from the 2017 U.S. Census estimates.

ESCHERICHIA COLI, SHIGA TOXIN-PRODUCING SEROGROUPS TABLE

Page 44

This table shows Shiga toxin-producing *Escherichia coli* case counts by serogroup during 2013-2017. The bacteriology laboratory at ODH performs serogrouping of Shiga toxin-producing *E. coli* isolates.

HAEMOPHILUS INFLUENZAE, INVASIVE DISEASE SEROTYPES TABLE

Page 45

This table shows invasive *Haemophilus influenzae* case counts in children <5 years of age by serotype during 2013-2017. The meningitis laboratory at CDC performs serogrouping of *H. influenzae* isolates.

MENINGOCOCCAL SEROGROUPS TABLE

Page 46

This table shows meningococcal disease case counts by serogroup during 2013-2017. The bacteriology laboratory at ODH performs serogrouping of *Neisseria meningitidis* isolates.

SALMONELLA SEROTYPES TABLE

Pages 47-50

Salmonella case counts by serotype during 2013-2017 are contained in this table. Serotypes, untyped serogroups and untyped/ungrouped isolates are provided. The bacteriology laboratory at ODH performs serotyping of *Salmonella* isolates.

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2013-2017

GENERAL INFECTIOUS DISEASES	2013		2014		2015		2016		2017		MEDIAN		MEAN	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	7	0.1	9	0.1	16	0.1	19	0.2	6	0.1	9	0.1	11	0.1
Botulism	5	0.0	5	0.0	35	0.3	8	0.1	3	0.0	5	0.0	11	0.1
Foodborne	0	0.0	2	0.0	29	0.2	0	0.0	0	0.0	0	0.0	6	0.0
Infant*	5	*	3	*	5	*	8	*	3	*	5	*	5	*
Wound	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	1,023	8.8	923	8.0	1,786	15.4	1,962	16.9	2,080	17.8	1,786	15.4	1,555	13.4
Coccidioidomycosis	10	0.1	15	0.1	13	0.1	23	0.2	28	0.2	15	0.1	18	0.1
Creutzfeldt-Jakob Disease (CJD)	8	0.1	12	0.1	8	0.1	4	0.0	20	0.2	8	0.1	10	0.1
Cryptosporidiosis	367	3.2	322	2.8	429	3.7	1,949	16.8	643	5.5	429	3.7	742	6.4
Cyclosporiasis	7	0.1	2	0.0	1	0.0	6	0.1	23	0.2	6	0.1	8	0.1
Cytomegalovirus (CMV), Congenital*	29	*	—	n/a	—	n/a	—	n/a	—	n/a	—	*	—	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	223	1.9	203	1.8	265	2.3	263	2.3	287	2.5	263	2.3	248	2.2
O157:H7	76	0.7	92	0.8	105	0.9	77	0.7	60	0.5	77	0.7	82	0.7
Not O157:H7	138	1.2	105	0.9	135	1.2	159	1.4	166	1.4	138	1.2	141	1.2
Unknown Serotype	9	0.1	6	0.1	25	0.2	27	0.2	61	0.5	25	0.2	26	0.2
Giardiasis	505	4.4	380	3.3	376	3.2	395	3.4	427	3.7	395	3.4	417	3.6
<i>Haemophilus influenzae</i> , Invasive Disease	153	1.3	129	1.1	162	1.4	180	1.5	256	2.2	162	1.4	176	1.5
Hemolytic Uremic Syndrome (HUS)	10	0.1	8	0.1	3	0.0	7	0.1	5	0.0	7	0.1	7	0.1
Hepatitis A	55	0.5	27	0.2	36	0.3	38	0.3	51	0.4	38	0.3	41	0.3
Hepatitis E	0	0.0	0	0.0	1	0.0	5	0.0	2	0.0	1	0.0	2	0.0
Legionellosis	496	4.3	409	3.5	566	4.9	510	4.4	583	5.0	510	4.4	513	4.4
Leprosy (Hansen Disease)	1	0.0	1	0.0	1	0.0	0	0.0	0	0.0	1	0.0	1	0.0
Listeriosis	28	0.2	29	0.3	25	0.2	36	0.3	26	0.2	28	0.2	29	0.2
Meningitis, Aseptic	857	7.4	530	4.6	746	6.4	664	5.7	482	4.1	664	5.7	656	5.6
Meningitis, Other Bacterial*	83	0.7	91	0.8	81	0.7	134	1.2	146	1.3	91	0.8	107	0.9
Salmonellosis	1,190	10.3	1,188	10.2	1,373	11.8	1,528	13.2	1,390	11.9	1,373	11.8	1,334	11.5
Shigellosis	645	5.6	591	5.1	748	6.4	1,076	9.3	616	5.3	645	5.6	735	6.3
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	13	0.1	8	0.1	12	0.1	8	0.1	4	0.0	8	0.1	9	0.1
Streptococcal Disease, Group A, Invasive	305	2.6	319	2.8	310	2.7	419	3.6	635	5.4	319	2.8	398	3.4
Streptococcal Disease, Group B, in Newborn*	65	*	63	*	73	*	67	*	62	*	65	*	66	*
Streptococcal Toxic Shock Syndrome (STSS)	9	0.1	9	0.1	6	0.1	11	0.1	10	0.1	9	0.1	9	0.1
Toxic Shock Syndrome (TSS)	2	0.0	9	0.1	1	0.0	3	0.0	1	0.0	2	0.0	3	0.0
Typhoid Fever	5	0.0	7	0.1	8	0.1	11	0.1	37	0.3	8	0.1	14	0.1
Vibriosis	11	0.1	12	0.1	15	0.1	13	0.1	39	0.3	13	0.1	18	0.1
<i>Vibrio parahaemolyticus</i> Infection	7	0.1	7	0.1	9	0.0	6	0.0	13	0.1	7	0.1	8	0.1
<i>Vibrio vulnificus</i> Infection	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
Other (Not Cholera)	3	0.0	5	0.0	6	0.1	7	0.1	25	0.2	6	0.1	9	0.1
Yersiniosis	34	0.3	52	0.4	44	0.4	57	0.5	51	0.4	51	0.4	48	0.4
SUB-TOTAL	6,146	53.1	5,353	46.2	7,140	61.5	9,396	80.9	7,913	67.9	7,140	61.5	7,190	61.9

OUTBREAKS*														
Community*	40	n/a	72	n/a	49	n/a	46	n/a	30	n/a	46	n/a	47	n/a
Foodborne*	76	n/a	75	n/a	81	n/a	83	n/a	65	n/a	76	n/a	76	n/a
Healthcare-Associated*	84	n/a	70	n/a	97	n/a	79	n/a	103	n/a	84	n/a	87	n/a
Institutional*	153	n/a	202	n/a	163	n/a	292	n/a	228	n/a	202	n/a	208	n/a
Waterborne*	14	n/a	14	n/a	8	n/a	20	n/a	9	n/a	14	n/a	13	n/a
Zoonotic*	4	n/a	13	n/a	11	n/a	17	n/a	13	n/a	13	n/a	12	n/a
SUB-TOTAL	371	n/a	446	n/a	409	n/a	537	n/a	448	n/a	446	n/a	442	n/a

N = number of cases reported.

Rates use U.S. Census estimates for each year, and are per 100,000 population.

n/a = not applicable.

(-) indicates a condition not reportable at the time.

* Please see Technical Notes (pp.94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2013-2017

VACCINE-PREVENTABLE	2013		2014		2015		2016		2017		MEDIAN		MEAN	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Diphtheria	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	5	*	2	*	0	*	0	*	3	*	2	*	2	*
Influenza-Associated Hospitalization	4,197	36.3	8,247	71.1	3,799	32.7	4,130	35.6	11,819	101.4	4,197	36.3	6,438	55.4
Influenza-Associated Pediatric Mortality*	6	*	4	*	2	*	1	*	9	*	4	*	4	*
Influenza A Virus, Novel Human Infection*	1	0.0	2	0.0	1	0.0	6	0.1	18	0.2	2	0.0	6	0.0
Measles	0	0.0	382	3.3	1	0.0	0	0.0	1	0.0	1	0.0	77	0.7
Imported	0	0.0	3	0.0	1	0.0	0	0.0	1	0.0	1	0.0	1	0.0
Indigenous	0	0.0	379	3.3	0	0.0	0	0.0	0	0.0	0	0.0	76	0.7
Meningococcal Disease	10	0.1	12	0.1	18	0.2	8	0.1	12	0.1	12	0.1	12	0.1
Mumps	12	0.1	554	4.8	14	0.1	74	0.6	60	0.5	60	0.5	143	1.2
Pertussis	1,667	14.4	1,310	11.3	798	6.9	971	8.4	830	7.1	971	8.4	1,115	9.6
Rubella	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Congenital	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	1,112	9.6	924	8.0	965	8.3	977	8.4	1,235	10.6	977	8.4	1,043	9.0
Ages < 5 Years*	41	*	47	*	56	*	58	*	85	*	56	*	57	*
Drug Resistant, Ages 5+ Years*	277	*	216	*	269	*	249	*	314	*	269	*	265	*
Drug Susceptible, Ages 5+ Years*	794	*	661	*	640	*	670	*	836	*	670	*	720	*
Tetanus	0	0.0	1	0.0	1	0.0	2	0.0	0	0.0	1	0.0	1	0.0
Varicella	648	5.6	513	4.4	494	4.3	450	3.9	471	4.0	494	4.3	515	4.4
SUB-TOTAL	7,659	66.2	11,952	103.1	6,093	52.5	6,619	57.0	14,458	124.0	7,659	66.2	9,356	80.5

ZOOZOSES														
Babesiosis*	—	n/a	0	0.0	1	0.0	0	0.0	1	0.0	—	0.0	—	0.0
Brucellosis	2	0.0	0	0.0	1	0.0	3	0.0	0	0.0	1	0.0	1	0.0
Chikungunya Virus Infection*	—	n/a	43	0.4	10	0.1	4	0.0	4	0.0	—	0.1	—	0.1
Dengue	9	0.1	9	0.1	11	0.1	6	0.1	6	0.1	9	0.1	8	0.1
Ehrlichiosis/Anaplasmosis	15	0.1	6	0.1	19	0.2	13	0.1	20	0.2	15	0.1	15	0.1
<i>Anaplasma phagocytophilum</i> *	4	0.0	1	0.0	1	0.0	5	0.0	3	0.0	3	0.0	3	0.0
<i>Ehrlichia chaffeensis</i> *	9	0.1	4	0.0	17	0.1	8	0.1	17	0.1	9	0.1	11	0.1
Unknown	2	0.0	1	0.0	1	0.0	0	0.0	0	0.0	1	0.0	1	0.0
La Crosse Virus Disease*	16	0.1	31	0.3	24	0.2	9	0.1	13	0.1	16	0.1	19	0.2
Leptospirosis	0	0.0	2	0.0	0	0.0	1	0.0	2	0.0	1	0.0	1	0.0
Lyme Disease	83	0.7	120	1.0	147	1.3	159	1.4	270	2.3	147	1.3	156	1.3
Malaria	33	0.3	39	0.3	36	0.3	63	0.5	60	0.5	39	0.3	46	0.4
Q Fever	5	0.0	2	0.0	4	0.0	3	0.0	1	0.0	3	0.0	3	0.0
Acute	2	0.0	1	0.0	4	0.0	2	0.0	0	0.0	2	0.0	2	0.0
Chronic	3	0.0	1	0.0	0	0.0	1	0.0	1	0.0	1	0.0	1	0.0
Rabies, Animal*	64	n/a	25	n/a	26	n/a	41	n/a	20	n/a	26	n/a	35	n/a
Spotted Fever Rickettsiosis*	23	0.2	10	0.1	13	0.1	23	0.2	39	0.3	23	0.2	22	0.2
Trichinellosis	1	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Tularemia	2	0.0	1	0.0	1	0.0	0	0.0	2	0.0	1	0.0	1	0.0
West Nile Virus Infection	24	0.2	11	0.1	35	0.3	17	0.1	34	0.3	24	0.2	24	0.2
Zika Virus Infection*	—	n/a	—	n/a	—	n/a	95	0.8	4	0.0	—	*	—	*
SUB-TOTAL	277	1.8	299	2.4	328	2.6	438	3.4	476	3.9	328	2.6	364	2.8

GRAND TOTAL	14,453	121.1	18,050	151.6	13,970	116.5	16,990	141.3	23,295	195.8	16,990	141.3	17,352	145.3
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POPULATION	11,570,808	11,594,163	11,613,423	11,614,373	11,658,609	11,613,423	11,610,275
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N = number of cases reported.

Rates use U.S. Census estimates for each year, and are per 100,000 population.

n/a = not applicable.

(-) indicates a condition not reportable at the time.

* Please see Technical Notes (pp.94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2017

GENERAL INFECTIOUS DISEASES	0-4		5-9		10-14		15-19		20-29		30-39	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	1	0.1
Botulism	3	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	3	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	212	30.3	65	9.2	62	8.4	108	14.1	210	13.4	196	13.6
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	1	0.1	5	0.3	2	0.1
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	79	11.3	42	5.9	34	4.6	29	3.8	124	7.9	96	6.7
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	5	0.3
<i>Escherichia coli</i> , Shiga Toxin-Producing	63	9.0	21	3.0	26	3.5	32	4.2	45	2.9	30	2.1
O157:H7	14	2.0	7	1.0	7	0.9	7	0.9	7	0.4	4	0.3
Not O157:H7	34	4.9	12	1.7	12	1.6	19	2.5	31	2.0	20	1.4
Unknown Serotype	15	2.1	2	0.3	7	0.9	6	0.8	7	0.4	6	0.4
Giardiasis	54	7.7	28	3.9	13	1.8	15	2.0	71	4.5	58	4.0
<i>Haemophilus influenzae</i> , Invasive Disease	29	4.2	4	0.6	1	0.1	0	0.0	9	0.6	6	0.4
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1	0	0.0
Hepatitis A	0	0.0	0	0.0	0	0.0	2	0.3	10	0.6	12	0.8
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
Legionellosis	0	0.0	0	0.0	0	0.0	2	0.3	13	0.8	42	2.9
Listeriosis	2	0.3	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0
Meningitis, Aseptic	147	21.0	17	2.4	16	2.2	20	2.6	64	4.1	60	4.2
Meningitis, Other Bacterial*	29	4.2	4	0.6	1	0.1	7	0.9	10	0.6	10	0.7
Salmonellosis	187	26.8	69	9.7	43	5.8	59	7.7	156	10.0	155	10.7
Shigellosis	242	34.6	81	11.4	26	3.5	22	2.9	72	4.6	58	4.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	13	1.9	13	1.8	9	1.2	6	0.8	74	4.7	101	7.0
Streptococcal Disease, Group B, in Newborn*	62	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	1	0.1	2	0.3	0	0.0	0	0.0	2	0.1	1	0.1
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Typhoid Fever	1	0.1	7	1.0	8	1.1	1	0.1	4	0.3	4	0.3
Vibriosis	3	0.4	5	0.7	0	0.0	1	0.1	5	0.3	5	0.3
<i>Vibrio parahaemolyticus</i> Infection	1	0.1	0	0.0	0	0.0	1	0.1	3	0.2	2	0.1
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	2	0.3	5	0.7	0	0.0	0	0.0	2	0.1	3	0.2
Yersiniosis	8	1.1	3	0.4	1	0.1	1	0.1	5	0.3	3	0.2
SUB-TOTAL	1,135	162.4	361	50.9	241	32.7	308	40.1	884	56.6	847	58.7

N = number of cases reported.

Rates use 2015 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2017

VACCINE-PREVENTABLE	0-4		5-9		10-14		15-19		20-29		30-39	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	3	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	511	73.1	195	27.5	102	13.8	127	16.5	362	23.2	390	27.0
Influenza-Associated Pediatric Mortality*	2	*	6	*	0	*	1	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	6	0.9	7	1.0	3	0.4	1	0.1	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	4	0.6	1	0.1	0	0.0	0	0.0	1	0.1	0	0.0
Mumps	2	0.3	7	1.0	7	0.9	9	1.2	8	0.5	10	0.7
Pertussis	299	42.8	132	18.6	150	20.3	121	15.8	29	1.9	26	1.8
<i>Streptococcus pneumoniae</i> , Invasive Disease	85	12.2	22	3.1	14	1.9	8	1.0	35	2.2	57	4.0
Ages < 5 Years*	85	12.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Drug Resistant, Ages 5+ Years*	0	0.0	4	0.6	1	0.1	2	0.3	8	0.5	14	1.0
Drug Susceptible, Ages 5+ Years*	0	0.0	18	2.5	13	1.8	6	0.8	27	1.7	43	3.0
Varicella	147	21.0	150	21.2	54	7.3	47	6.1	24	1.5	22	1.5
SUB-TOTAL	1,059	151.5	520	73.3	330	44.7	314	40.9	459	29.4	505	35.0

ZOOZOSES												
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	2	0.1
Dengue	0	0.0	1	0.1	0	0.0	1	0.1	1	0.1	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2
La Crosse Virus Disease*	1	0.1	7	1.0	2	0.3	2	0.3	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Lyme Disease	6	0.9	29	4.1	25	3.4	11	1.4	30	1.9	31	2.1
Malaria	3	0.4	6	0.8	5	0.7	4	0.5	12	0.8	8	0.6
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	1	0.1	2	0.3	1	0.1	2	0.3	1	0.1	9	0.6
Tularemia	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	1	0.1	0	0.0	0	0.0	1	0.1	4	0.3
Zika Virus Infection*	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	2	0.1
SUB-TOTAL	11	1.6	46	6.5	35	4.7	21	2.7	47	3.0	60	4.2

GRAND TOTAL	2,205	315.5	927	0.0	606	82.1	643	83.8	1,390	89.0	1,412	97.9
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POPULATION	698,780	709,211	737,946	767,484	1,561,821	1,442,373
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N = number of cases reported.

Rates use 2015 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2017

GENERAL INFECTIOUS DISEASES	40-49		50-59		60 +		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	2	0.1	0	0.0	1	0.0	0	n/a	6	0.1
Botulism	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
Infant*	0	*	0	*	0	*	0	n/a	3	*
Campylobacteriosis	218	15.5	375	23.3	633	23.3	1	n/a	2,080	17.8
Coccidioidomycosis	7	0.5	3	0.2	10	0.4	0	n/a	28	0.2
Creutzfeldt-Jakob Disease (CJD)	3	0.2	5	0.3	12	0.4	0	n/a	20	0.2
Cryptosporidiosis	75	5.3	69	4.3	93	3.4	2	n/a	643	5.5
Cyclosporiasis	8	0.6	5	0.3	3	0.1	0	n/a	23	0.2
<i>Escherichia coli</i> , Shiga Toxin-Producing	21	1.5	12	0.7	37	1.4	0	n/a	287	2.5
O157:H7	4	0.3	2	0.1	8	0.3	0	n/a	60	0.5
Not O157:H7	13	0.9	7	0.4	18	0.7	0	n/a	166	1.4
Unknown Serotype	4	0.3	3	0.2	11	0.4	0	n/a	61	0.5
Giardiasis	55	3.9	57	3.5	76	2.8	0	n/a	427	3.7
<i>Haemophilus influenzae</i> , Invasive Disease	15	1.1	37	2.3	155	5.7	0	n/a	256	2.2
Hemolytic Uremic Syndrome (HUS)	2	0.1	0	0.0	1	0.0	0	n/a	5	0.0
Hepatitis A	9	0.6	7	0.4	11	0.4	0	n/a	51	0.4
Hepatitis E	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Legionellosis	71	5.0	141	8.7	314	11.5	0	n/a	583	5.0
Listeriosis	2	0.1	5	0.3	16	0.6	0	n/a	26	0.2
Meningitis, Aseptic	47	3.3	45	2.8	66	2.4	0	n/a	482	4.1
Meningitis, Other Bacterial*	17	1.2	22	1.4	46	1.7	0	n/a	146	1.3
Salmonellosis	139	9.9	196	12.2	386	14.2	0	n/a	1,390	11.9
Shigellosis	40	2.8	35	2.2	38	1.4	2	n/a	616	5.3
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	2	0.1	1	0.1	1	0.0	0	n/a	4	0.0
Streptococcal Disease, Group A, Invasive	69	4.9	102	6.3	247	9.1	1	n/a	635	5.4
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	n/a	62	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	1	0.1	3	0.1	0	n/a	10	0.1
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Typhoid Fever	4	0.3	6	0.4	2	0.1	0	n/a	37	0.3
Vibriosis	3	0.2	5	0.3	12	0.4	0	n/a	39	0.3
<i>Vibrio parahaemolyticus</i> Infection	2	0.1	1	0.1	3	0.1	0	n/a	13	0.1
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	1	0.0	0	n/a	1	0.0
Other (Not Cholera)	1	0.1	4	0.2	8	0.3	0	n/a	25	0.2
Yersiniosis	3	0.2	8	0.5	19	0.7	0	n/a	51	0.4
SUB-TOTAL	812	57.6	1,137	70.5	2,182	80.3	6	n/a	7,913	67.9

N = number of cases reported.

Rates use 2015 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2017

VACCINE-PREVENTABLE	40-49		50-59		60 +		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	n/a	3	*
Influenza-Associated Hospitalization	586	41.6	1,481	91.9	8,050	296.1	15	n/a	11,819	101.4
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	n/a	9	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	1	0.0	0	n/a	18	0.2
Measles	1	0.1	0	0.0	0	0.0	0	n/a	1	0.0
Imported	1	0.1	0	0.0	0	0.0	0	n/a	1	0.0
Meningococcal Disease	0	0.0	3	0.2	3	0.1	0	n/a	12	0.1
Mumps	8	0.6	6	0.4	3	0.1	0	n/a	60	0.5
Pertussis	28	2.0	20	1.2	25	0.9	0	n/a	830	7.1
<i>Streptococcus pneumoniae</i> , Invasive Disease	91	6.5	236	14.6	687	25.3	0	n/a	1,235	10.6
Ages < 5 Years*	0	0.0	0	0.0	0	0.0	0	n/a	85	12.2
Drug Resistant, Ages 5+ Years*	20	1.4	67	4.2	198	7.3	0	n/a	314	2.9
Drug Susceptible, Ages 5+ Years*	71	5.0	169	10.5	489	18.0	0	n/a	836	7.6
Varicella	12	0.9	11	0.7	4	0.1	0	n/a	471	4.0
SUB-TOTAL	726	51.5	1,757	109.0	8,773	322.7	15	n/a	14,458	124.0

ZOO NOSES										
Babesiosis*	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	1	0.0	0	n/a	4	0.0
Dengue	0	0.0	1	0.1	2	0.1	0	n/a	6	0.1
Ehrlichiosis/Anaplasmosis	2	0.1	7	0.4	8	0.3	0	n/a	20	0.2
<i>Anaplasma phagocytophilum</i> *	0	0.0	1	0.1	2	0.1	0	n/a	3	0.0
<i>Ehrlichia chaffeensis</i> *	2	0.1	6	0.4	6	0.2	0	n/a	17	0.1
La Crosse Virus Disease*	0	0.0	0	0.0	1	0.0	0	n/a	13	0.1
Leptospirosis	0	0.0	1	0.1	0	0.0	0	n/a	2	0.0
Lyme Disease	31	2.2	47	2.9	60	2.2	0	n/a	270	2.3
Malaria	12	0.9	5	0.3	5	0.2	0	n/a	60	0.5
Q Fever	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	20	n/a	20	n/a
Spotted Fever Rickettsiosis*	8	0.6	7	0.4	8	0.3	0	n/a	39	0.3
Tularemia	0	0.0	1	0.1	0	0.0	0	n/a	2	0.0
West Nile Virus Infection	4	0.3	8	0.5	16	0.6	0	n/a	34	0.3
Zika Virus Infection*	0	0.0	1	0.1	0	0.0	0	n/a	4	0.0
SUB-TOTAL	57	4.0	78	4.8	101	3.7	20	n/a	476	3.9

GRAND TOTAL	1,595	113.1	2,972	184.4	11,056	406.6	41	n/a	22,847	195.8
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POPULATION	1,410,341	1,611,730	2,718,923	0	11,658,609
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N = number of cases reported.

Rates use 2015 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY SEX, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Female		Male		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	1	0.0	5	0.1	0	n/a	6	0.1
Botulism	1	0.0	2	0.0	0	n/a	3	0.0
Infant*	1	*	2	*	0	n/a	3	*
Campylobacteriosis	1,056	17.8	1,022	17.9	2	n/a	2,080	17.8
Coccidioidomycosis	8	0.1	20	0.4	0	n/a	28	0.2
Creutzfeldt-Jakob Disease (CJD)	8	0.1	9	0.2	3	n/a	20	0.2
Cryptosporidiosis	344	5.8	297	5.2	2	n/a	643	5.5
Cyclosporiasis	18	0.3	5	0.1	0	n/a	23	0.2
<i>Escherichia coli</i> , Shiga Toxin-Producing	167	2.8	119	2.1	1	n/a	287	2.5
O157:H7	34	0.6	26	0.5	0	n/a	60	0.5
Not O157:H7	99	1.7	66	1.2	1	n/a	166	1.4
Unknown Serotype	34	0.6	27	0.5	0	n/a	61	0.5
Giardiasis	160	2.7	267	4.7	0	n/a	427	3.7
<i>Haemophilus influenzae</i> , Invasive Disease	157	2.6	99	1.7	0	n/a	256	2.2
Hemolytic Uremic Syndrome (HUS)	4	0.1	1	0.0	0	n/a	5	0.0
Hepatitis A	18	0.3	33	0.6	0	n/a	51	0.4
Hepatitis E	2	0.0	0	0.0	0	n/a	2	0.0
Legionellosis	223	3.8	360	6.3	0	n/a	583	5.0
Listeriosis	12	0.2	14	0.2	0	n/a	26	0.2
Meningitis, Aseptic	243	4.1	234	4.1	5	n/a	482	4.1
Meningitis, Other Bacterial*	62	1.0	83	1.5	1	n/a	146	1.3
Salmonellosis	787	13.2	602	10.5	1	n/a	1,390	11.9
Shigellosis	311	5.2	305	5.3	0	n/a	616	5.3
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	2	0.0	2	0.0	0	n/a	4	0.0
Streptococcal Disease, Group A, Invasive	331	5.6	302	5.3	2	n/a	635	5.4
Streptococcal Disease, Group B, in Newborn*	29	*	32	*	1	n/a	62	*
Streptococcal Toxic Shock Syndrome (STSS)	6	0.1	4	0.1	0	n/a	10	0.1
Toxic Shock Syndrome (TSS)	1	0.0	0	0.0	0	n/a	1	0.0
Typhoid Fever	21	0.4	16	0.3	0	n/a	37	0.3
Vibriosis	14	0.2	25	0.4	0	n/a	39	0.3
<i>Vibrio parahaemolyticus</i> Infection	3	0.1	10	0.2	0	n/a	13	0.1
<i>Vibrio vulnificus</i> Infection	0	0.0	1	0.0	0	n/a	1	0.0
Other (Not Cholera)	11	0.2	14	0.2	0	n/a	25	0.2
Yersiniosis	31	0.5	19	0.3	1	n/a	51	0.4
SUB-TOTAL	4,017	67.6	3,877	67.9	19	n/a	7,913	67.9

VACCINE-PREVENTABLE

Hepatitis B, Perinatal Infection*	0	*	3	*	0	n/a	3	*
Influenza-Associated Hospitalization	6,537	109.9	5,168	90.5	114	n/a	11,819	101.4
Influenza-Associated Pediatric Mortality*	4	*	5	*	0	n/a	9	*
Influenza A Virus, Novel Human Infection*	9	0.2	9	0.2	0	n/a	18	0.2
Measles	0	0.0	1	0.0	0	n/a	1	0.0
Imported	0	0.0	1	0.0	0	n/a	1	0.0
Meningococcal Disease	9	0.2	3	0.1	0	n/a	12	0.1
Mumps	24	0.4	36	0.6	0	n/a	60	0.5
Pertussis	447	7.5	383	6.7	0	n/a	830	7.1
<i>Streptococcus pneumoniae</i> , Invasive Disease	622	10.5	613	10.7	0	n/a	1,235	10.6
Ages < 5 Years*	33	*	52	*	0	n/a	85	*
Drug Resistant, Ages 5+ Years*	163	*	151	*	0	n/a	314	*
Drug Susceptible, Ages 5+ Years*	426	*	410	*	0	n/a	836	*
Varicella	207	3.5	264	4.6	0	n/a	471	4.0
SUB-TOTAL	7,859	132.2	6,485	113.5	114	n/a	14,458	124.0

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY SEX, OHIO, 2017

ZOO NOSES	Female		Male		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate
Babesiosis*	1	0.0	0	0.0	0	n/a	1	0.0
Chikungunya Virus Infection*	2	0.0	2	0.0	0	n/a	4	0.0
Dengue	2	0.0	4	0.1	0	n/a	6	0.1
Ehrlichiosis/Anaplasmosis	9	0.2	11	0.2	0	n/a	20	0.2
<i>Anaplasma phagocytophilum</i> *	2	0.0	1	0.0	0	n/a	3	0.0
<i>Ehrlichia chaffeensis</i> *	7	0.1	10	0.2	0	n/a	17	0.1
La Crosse Virus Disease*	6	0.1	7	0.1	0	n/a	13	0.1
Leptospirosis	1	0.0	1	0.0	0	n/a	2	0.0
Lyme Disease	112	1.9	158	2.8	0	n/a	270	2.3
Malaria	25	0.4	35	0.6	0	n/a	60	0.5
Q Fever	1	0.0	0	0.0	0	n/a	1	0.0
Chronic	1	0.0	0	0.0	0	n/a	1	0.0
Rabies, Animal*	0	n/a	0	n/a	20	n/a	20	n/a
Spotted Fever Rickettsiosis*	16	0.3	23	0.4	0	n/a	39	0.3
Tularemia	0	0.0	2	0.0	0	n/a	2	0.0
West Nile Virus Infection	19	0.3	15	0.3	0	n/a	34	0.3
Zika Virus Infection*	2	0.0	2	0.0	0	n/a	4	0.0
SUB-TOTAL	196	3.3	260	4.6	20	n/a	476	3.9

GRAND TOTAL	12,072	203.0	10,622	185.9	153	n/a	22,847	195.8
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POPULATION	5,945,509	5,713,100	0	11,658,609
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N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2017

GENERAL INFECTIOUS DISEASES	January		February		March		April		May		June		July	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Amebiasis	1	17%	1	17%	0	0%	0	0%	0	0%	1	17%	1	17%
Botulism	0	0%	0	0%	0	0%	1	33%	1	33%	0	0%	0	0%
Infant*	0	0%	0	0%	0	0%	1	33%	1	33%	0	0%	0	0%
Campylobacteriosis	117	6%	123	6%	128	6%	132	6%	163	8%	212	10%	254	12%
Coccidioidomycosis	4	14%	0	0%	2	7%	3	11%	1	4%	3	11%	4	14%
Creutzfeldt-Jakob Disease (CJD)	1	5%	2	10%	0	0%	2	10%	2	10%	0	0%	1	5%
Cryptosporidiosis	16	2%	25	4%	41	6%	30	5%	34	5%	53	8%	76	12%
Cyclosporiasis	0	0%	0	0%	0	0%	0	0%	2	9%	4	17%	10	43%
<i>Escherichia coli</i> , Shiga Toxin-Producing	6	2%	9	3%	15	5%	14	5%	20	7%	37	13%	53	18%
O157:H7	2	3%	4	7%	2	3%	2	3%	5	8%	11	18%	13	22%
Not O157:H7	3	2%	5	3%	11	7%	8	5%	12	7%	19	11%	32	19%
Unknown Serotype	1	2%	0	0%	2	3%	4	7%	3	5%	7	11%	8	13%
Giardiasis	27	6%	27	6%	25	6%	32	7%	27	6%	50	12%	46	11%
<i>Haemophilus influenzae</i> , Invasive Disease	15	6%	14	5%	18	7%	24	9%	18	7%	24	9%	11	4%
Hemolytic Uremic Syndrome (HUS)	1	20%	1	20%	0	0%	0	0%	1	20%	0	0%	0	0%
Hepatitis A	1	2%	1	2%	1	2%	5	10%	3	6%	3	6%	5	10%
Hepatitis E	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Legionellosis	28	5%	17	3%	17	3%	22	4%	56	10%	72	12%	139	24%
Listeriosis	1	4%	1	4%	3	12%	2	8%	3	12%	1	4%	4	15%
Meningitis, Aseptic	33	7%	23	5%	20	4%	24	5%	29	6%	40	8%	58	12%
Meningitis, Other Bacterial*	9	6%	11	8%	8	5%	14	10%	16	11%	14	10%	16	11%
Salmonellosis	65	5%	52	4%	81	6%	118	8%	134	10%	198	14%	180	13%
Shigellosis	74	12%	51	8%	39	6%	34	6%	36	6%	38	6%	66	11%
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	1	25%	0	0%	0	0%	0	0%	1	25%	0	0%	1	25%
Streptococcal Disease, Group A, Invasive	61	10%	65	10%	77	12%	68	11%	64	10%	40	6%	37	6%
Streptococcal Disease, Group B, in Newborn*	3	5%	3	5%	9	15%	7	11%	7	11%	3	5%	9	15%
Streptococcal Toxic Shock Syndrome (STSS)	0	0%	0	0%	3	30%	1	10%	1	10%	3	30%	0	0%
Toxic Shock Syndrome (TSS)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Typhoid Fever	2	5%	0	0%	0	0%	1	3%	2	5%	0	0%	2	5%
Vibriosis	1	3%	4	10%	1	3%	4	10%	1	3%	2	5%	6	15%
<i>Vibrio parahaemolyticus</i> Infection	1	8%	0	0%	0	0%	0	0%	0	0%	2	15%	3	23%
<i>Vibrio vulnificus</i> Infection	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Other (Not Cholera)	0	0%	4	16%	1	4%	4	16%	1	4%	0	0%	3	12%
Yersiniosis	3	6%	4	8%	3	6%	5	10%	3	6%	6	12%	6	12%
SUB-TOTAL	470	6%	434	5%	491	6%	543	7%	625	8%	804	10%	986	12%

OUTBREAKS*

Community*	2	7%	5	17%	2	7%	1	3%	4	13%	2	7%	2	7%
Foodborne*	2	3%	3	5%	7	11%	10	15%	8	12%	4	6%	5	8%
Healthcare-Associated*	19	18%	21	20%	17	17%	4	4%	2	2%	4	4%	1	1%
Institutional*	25	11%	25	11%	22	10%	9	4%	16	7%	5	2%	9	4%
Waterborne*	2	22%	2	22%	0	0%	0	0%	0	0%	1	11%	2	22%
Zoonotic*	2	15%	0	0%	1	8%	2	15%	1	8%	2	15%	1	8%
SUB-TOTAL	52	12%	56	13%	49	11%	26	6%	31	7%	18	4%	20	4%

N = number of cases reported.

% = percentage of cases occurring in the month for the disease.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2017

VACCINE-PREVENTABLE	January		February		March		April		May		June		July	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Hepatitis B, Perinatal Infection*	0	0%	0	0%	0	0%	1	33%	1	33%	0	0%	0	0%
Influenza-Associated Hospitalization	1,664	14%	3,008	25%	2,540	21%	729	6%	56	0%	11	0%	9	0%
Influenza-Associated Pediatric Mortality*	1	11%	5	56%	0	0%	0	0%	1	11%	0	0%	0	0%
Influenza A Virus, Novel Human Infection*	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	15	83%
Measles	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Imported	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Meningococcal Disease	4	33%	0	0%	2	17%	0	0%	2	17%	0	0%	0	0%
Mumps	8	13%	20	33%	12	20%	5	8%	4	7%	1	2%	0	0%
Pertussis	91	11%	73	9%	59	7%	57	7%	67	8%	64	8%	68	8%
<i>Streptococcus pneumoniae</i> , Invasive Disease	138	11%	95	8%	136	11%	120	10%	91	7%	73	6%	42	3%
Ages < 5 Years*	8	9%	7	8%	9	11%	9	11%	5	6%	3	4%	1	1%
Drug Resistant, Ages 5+ Years*	32	10%	25	8%	39	12%	26	8%	32	10%	24	8%	12	4%
Drug Susceptible, Ages 5+ Years*	98	12%	63	8%	88	11%	85	10%	54	6%	46	6%	29	3%
Varicella	49	10%	45	10%	43	9%	33	7%	34	7%	22	5%	15	3%
SUB-TOTAL	1,955	14%	3,246	22%	2,792	19%	945	7%	256	2%	171	1%	150	1%

ZOO NOSES														
Babesiosis*	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%
Chikungunya Virus Infection*	0	0%	0	0%	0	0%	0	0%	0	0%	1	25%	1	25%
Dengue	2	33%	1	17%	0	0%	0	0%	0	0%	0	0%	0	0%
Ehrlichiosis/Anaplasmosis	0	0%	0	0%	1	5%	3	15%	4	20%	6	30%	4	20%
<i>Anaplasma phagocytophilum</i> *	0	0%	0	0%	0	0%	0	0%	1	33%	1	33%	1	33%
<i>Ehrlichia chaffeensis</i> *	0	0%	0	0%	1	6%	3	18%	3	18%	5	29%	3	18%
La Crosse Virus Disease*	0	0%	0	0%	0	0%	0	0%	0	0%	2	15%	5	38%
Leptospirosis	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	50%
Lyme Disease	3	1%	4	1%	2	1%	6	2%	39	14%	77	29%	73	27%
Malaria	4	7%	0	0%	6	10%	5	8%	3	5%	5	8%	9	15%
Q Fever	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%
Chronic	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%
Rabies, Animal*	0	0%	1	5%	0	0%	2	10%	1	5%	3	15%	3	15%
Spotted Fever Rickettsiosis*	1	3%	0	0%	0	0%	3	8%	3	8%	5	13%	7	18%
Tularemia	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	50%
West Nile Virus Infection	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	6%
Zika Virus Infection*	2	50%	0	0%	0	0%	1	25%	0	0%	1	25%	0	0%
SUB-TOTAL	12	3%	6	1%	9	2%	21	4%	51	11%	100	21%	106	22%

N = number of cases reported.

% = percentage of cases occurring in the month for the disease.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2017

GENERAL INFECTIOUS DISEASES	August		September		October		November		December		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%
Amebiasis	0	0%	0	0%	0	0%	1	17%	1	17%	6	100%
Botulism	0	0%	0	0%	1	33%	0	0%	0	0%	3	100%
Infant*	0	0%	0	0%	1	33%	0	0%	0	0%	3	100%
Campylobacteriosis	221	11%	221	11%	198	10%	204	10%	107	5%	2,080	100%
Coccidioidomycosis	2	7%	2	7%	5	18%	1	4%	1	4%	28	100%
Creutzfeldt-Jakob Disease (CJD)	0	0%	4	20%	1	5%	2	10%	5	25%	20	100%
Cryptosporidiosis	117	18%	91	14%	85	13%	41	6%	34	5%	643	100%
Cyclosporiasis	7	30%	0	0%	0	0%	0	0%	0	0%	23	100%
<i>Escherichia coli</i> , Shiga Toxin-Producing	43	15%	25	9%	23	8%	26	9%	16	6%	287	100%
O157:H7	7	12%	5	8%	3	5%	6	10%	0	0%	60	100%
Not O157:H7	29	17%	15	9%	12	7%	9	5%	11	7%	166	100%
Unknown Serotype	7	11%	5	8%	8	13%	11	18%	5	8%	61	100%
Giardiasis	51	12%	36	8%	30	7%	42	10%	34	8%	427	100%
<i>Haemophilus influenzae</i> , Invasive Disease	15	6%	15	6%	28	11%	35	14%	39	15%	256	100%
Hemolytic Uremic Syndrome (HUS)	1	20%	0	0%	0	0%	0	0%	1	20%	5	100%
Hepatitis A	2	4%	10	20%	2	4%	8	16%	10	20%	51	100%
Hepatitis E	0	0%	0	0%	1	50%	1	50%	0	0%	2	100%
Legionellosis	45	8%	52	9%	82	14%	40	7%	13	2%	583	100%
Listeriosis	4	15%	1	4%	3	12%	1	4%	2	8%	26	100%
Meningitis, Aseptic	56	12%	59	12%	69	14%	51	11%	20	4%	482	100%
Meningitis, Other Bacterial*	9	6%	14	10%	13	9%	11	8%	11	8%	146	100%
Salmonellosis	164	12%	112	8%	123	9%	104	7%	59	4%	1,390	100%
Shigellosis	67	11%	31	5%	40	6%	71	12%	69	11%	616	100%
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0%	0	0%	0	0%	0	0%	1	25%	4	100%
Streptococcal Disease, Group A, Invasive	29	5%	38	6%	43	7%	38	6%	75	12%	635	100%
Streptococcal Disease, Group B, in Newborn*	2	3%	5	8%	6	10%	3	5%	5	8%	62	100%
Streptococcal Toxic Shock Syndrome (STSS)	0	0%	1	10%	1	10%	0	0%	0	0%	10	100%
Toxic Shock Syndrome (TSS)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Typhoid Fever	0	0%	25	68%	4	11%	0	0%	1	3%	37	100%
Vibriosis	9	23%	3	8%	3	8%	3	8%	2	5%	39	100%
<i>Vibrio parahaemolyticus</i> Infection	3	23%	3	23%	1	8%	0	0%	0	0%	13	100%
<i>Vibrio vulnificus</i> Infection	1	100%	0	0%	0	0%	0	0%	0	0%	1	100%
Other (Not Cholera)	5	20%	0	0%	2	8%	3	12%	2	8%	25	100%
Yersiniosis	8	16%	2	4%	3	6%	4	8%	4	8%	51	100%
SUB-TOTAL	852	11%	747	9%	764	10%	687	9%	510	6%	7,913	100%

OUTBREAKS*												
Community*	4	13%	0	0%	3	10%	0	0%	5	17%	30	100%
Foodborne*	10	15%	2	3%	7	11%	3	5%	4	6%	65	100%
Healthcare-Associated*	5	5%	4	4%	5	5%	4	4%	17	17%	103	100%
Institutional*	18	8%	12	5%	28	12%	29	13%	30	13%	228	100%
Waterborne*	1	11%	0	0%	0	0%	1	11%	0	0%	9	100%
Zoonotic*	2	15%	2	15%	0	0%	0	0%	0	0%	13	100%
SUB-TOTAL	40	9%	20	4%	43	10%	37	8%	56	13%	448	100%

N = number of cases reported.

% = percentage of cases occurring in the month for the disease.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2017

VACCINE-PREVENTABLE	August		September		October		November		December		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%
Hepatitis B, Perinatal Infection*	0	0%	1	33%	0	0%	0	0%	0	0%	3	100%
Influenza-Associated Hospitalization	16	0%	39	0%	74	1%	205	2%	3,468	29%	11,819	100%
Influenza-Associated Pediatric Mortality*	0	0%	0	0%	0	0%	0	0%	2	22%	9	100%
Influenza A Virus, Novel Human Infection*	3	17%	0	0%	0	0%	0	0%	0	0%	18	100%
Measles	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Imported	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Meningococcal Disease	0	0%	0	0%	1	8%	2	17%	1	8%	12	100%
Mumps	1	2%	0	0%	1	2%	4	7%	4	7%	60	100%
Pertussis	55	7%	66	8%	83	10%	92	11%	55	7%	830	100%
<i>Streptococcus pneumoniae</i> , Invasive Disease	48	4%	84	7%	84	7%	122	10%	202	16%	1,235	100%
Ages < 5 Years*	5	6%	8	9%	8	9%	8	9%	14	16%	85	100%
Drug Resistant, Ages 5+ Years*	12	4%	17	5%	25	8%	33	11%	37	12%	314	100%
Drug Susceptible, Ages 5+ Years*	31	4%	59	7%	51	6%	81	10%	151	18%	836	100%
Varicella	22	5%	35	7%	41	9%	52	11%	80	17%	471	100%
SUB-TOTAL	145	1%	225	2%	284	2%	477	3%	3,812	26%	14,458	100%

ZOOSES												
Babesiosis*	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Chikungunya Virus Infection*	1	25%	1	25%	0	0%	0	0%	0	0%	4	100%
Dengue	0	0%	0	0%	2	33%	1	17%	0	0%	6	100%
Ehrlichiosis/Anaplasmosis	0	0%	0	0%	1	5%	0	0%	1	5%	20	100%
<i>Anaplasma phagocytophilum</i> *	0	0%	0	0%	0	0%	0	0%	0	0%	3	100%
<i>Ehrlichia chaffeensis</i> *	0	0%	0	0%	1	6%	0	0%	1	6%	17	100%
La Crosse Virus Disease*	5	38%	0	0%	1	8%	0	0%	0	0%	13	100%
Leptospirosis	0	0%	0	0%	1	50%	0	0%	0	0%	2	100%
Lyme Disease	25	9%	14	5%	13	5%	9	3%	5	2%	270	100%
Malaria	12	20%	2	3%	9	15%	2	3%	3	5%	60	100%
Q Fever	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Chronic	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Rabies, Animal*	3	15%	4	20%	3	15%	0	0%	0	0%	20	100%
Spotted Fever Rickettsiosis*	6	15%	4	10%	4	10%	4	10%	2	5%	39	100%
Tularemia	0	0%	0	0%	1	50%	0	0%	0	0%	2	100%
West Nile Virus Infection	16	47%	12	35%	4	12%	0	0%	0	0%	34	100%
Zika Virus Infection*	0	0%	0	0%	0	0%	0	0%	0	0%	4	100%
SUB-TOTAL	68	14%	37	8%	39	8%	16	3%	11	2%	476	100%

GRAND TOTAL	1,105	5%	1,029	4%	1,130	5%	1,217	5%	4,389	19%	23,295	100%
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N = number of cases reported.

% = percentage of cases occurring in the month for the disease.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Adams		Allen		Ashland		Ashtabula		Athens		Auglaize		Belmont	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	12	43.3	38	36.8	20	37.3	3	3.1	16	24.0	15	32.8	6	8.8
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	1	3.6	4	3.9	6	11.2	3	3.1	1	1.5	13	28.4	1	1.5
Cyclosporiasis	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	0	0.0	1	1.0	9	16.8	0	0.0	5	7.5	1	2.2	1	1.5
O157:H7	0	0.0	0	0.0	1	1.9	0	0.0	2	3.0	0	0.0	0	0.0
Not O157:H7	0	0.0	1	1.0	6	11.2	0	0.0	3	4.5	1	2.2	0	0.0
Unknown Serotype	0	0.0	0	0.0	2	3.7	0	0.0	0	0.0	0	0.0	1	1.5
Giardiasis	2	7.2	4	3.9	7	13.1	2	2.0	4	6.0	1	2.2	0	0.0
<i>Haemophilus influenzae</i> , Invasive Disease	2	7.2	2	1.9	2	3.7	5	5.1	1	1.5	0	0.0	4	5.9
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Hepatitis A	0	0.0	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	1	3.6	3	2.9	0	0.0	5	5.1	1	1.5	2	4.4	1	1.5
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	0	0.0
Meningitis, Aseptic	1	3.6	14	13.6	3	5.6	0	0.0	2	3.0	6	13.1	1	1.5
Meningitis, Other Bacterial*	0	0.0	0	0.0	1	1.9	0	0.0	1	1.5	1	2.2	1	1.5
Salmonellosis	0	0.0	18	17.4	10	18.6	13	13.3	10	15.0	5	10.9	8	11.8
Shigellosis	0	0.0	6	5.8	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	1	3.6	3	2.9	2	3.7	2	2.0	1	1.5	0	0.0	6	8.8
Streptococcal Disease, Group B, in Newborn*	0	*	1	*	0	*	2	*	1	*	1	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Vibriosis	0	0.0	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	2	3.7	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	20	72.1	100	96.9	62	115.6	35	35.8	46	69.1	46	100.5	30	44.1

OUTBREAKS*

Community*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Foodborne*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Healthcare-Associated*	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	1	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
SUB-TOTAL	0	n/a	2	n/a	2	n/a	1	n/a	1	n/a	2	n/a	2	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Adams		Allen		Ashland		Ashtabula		Athens		Auglaize		Belmont	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	5	18.0	200	193.8	41	76.5	80	81.8	49	73.6	44	96.1	20	29.4
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Pertussis	0	0.0	9	8.7	4	7.5	0	0.0	1	1.5	0	0.0	1	1.5
<i>Streptococcus pneumoniae</i> , Invasive Disease	2	7.2	14	13.6	2	3.7	21	21.5	8	12.0	5	10.9	7	10.3
Ages < 5 Years*	0	*	0	*	0	*	0	*	0	*	1	*	1	*
Drug Resistant, Ages 5+ Years*	1	*	2	*	1	*	3	*	1	*	2	*	1	*
Drug Susceptible, Ages 5+ Years*	1	*	12	*	1	*	18	*	7	*	2	*	5	*
Varicella	0	0.0	3	2.9	2	3.7	1	1.0	2	3.0	3	6.6	6	8.8
SUB-TOTAL	7	25.2	226	219.0	49	91.4	103	105.3	61	91.6	52	113.6	34	50.0

ZOOZOSES														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	1	1.9	1	1.0	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	1	1.9	1	1.0	0	0.0	0	0.0	0	0.0
La Crosse Virus Disease*	0	0.0	1	1.0	2	3.7	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	1	3.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	23	33.8
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	1	1.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	3.6	2	1.9	3	5.6	2	2.0	2	3.0	0	0.0	24	35.3

GRAND TOTAL	28	101.0	330	317.8	116	212.6	141	143.1	110	163.7	100	214.1	90	129.4
POPULATION	27,726		103,198		53,628		97,807		66,597		45,778		68,029	

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Brown		Butler		Carroll		Champaign		Clark		Clermont		Clinton	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	2	4.6	41	10.8	11	40.2	2	5.1	27	20.1	20	9.8	12	28.6
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	0	0.0	9	2.4	3	11.0	3	7.7	7	5.2	7	3.4	1	2.4
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	2	4.6	8	2.1	2	7.3	0	0.0	0	0.0	1	0.5	1	2.4
O157:H7	1	2.3	2	0.5	1	3.7	0	0.0	0	0.0	0	0.0	0	0.0
Not O157:H7	1	2.3	5	1.3	1	3.7	0	0.0	0	0.0	1	0.5	0	0.0
Unknown Serotype	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4
Giardiasis	0	0.0	9	2.4	2	7.3	1	2.6	6	4.5	7	3.4	2	4.8
<i>Haemophilus influenzae</i> , Invasive Disease	2	4.6	6	1.6	0	0.0	0	0.0	4	3.0	8	3.9	1	2.4
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis A	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	4	9.2	8	2.1	0	0.0	1	2.6	4	3.0	3	1.5	1	2.4
Listeriosis	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	0	0.0	25	6.6	5	18.3	1	2.6	3	2.2	10	4.9	2	4.8
Meningitis, Other Bacterial*	0	0.0	9	2.4	0	0.0	1	2.6	0	0.0	2	1.0	3	7.1
Salmonellosis	3	6.9	39	10.2	7	25.6	3	7.7	23	17.1	28	13.7	6	14.3
Shigellosis	0	0.0	77	20.2	1	3.7	1	2.6	0	0.0	1	0.5	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4
Streptococcal Disease, Group A, Invasive	1	2.3	33	8.7	6	21.9	1	2.6	6	4.5	15	7.3	1	2.4
Streptococcal Disease, Group B, in Newborn*	0	*	1	*	0	*	0	*	1	*	2	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.0	0	0.0
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Yersiniosis	0	0.0	0	0.0	2	7.3	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	14	32.1	268	70.4	39	142.4	15	38.6	82	60.9	107	52.4	31	73.8

OUTBREAKS*

Community*	0	n/a	0	n/a	1	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	2	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	1	n/a	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a
Institutional*	0	n/a	12	n/a	1	n/a	1	n/a	2	n/a	2	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
SUB-TOTAL	0	n/a	15	n/a	2	n/a	1	n/a	6	n/a	2	n/a	1	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Brown		Butler		Carroll		Champaign		Clark		Clermont		Clinton	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	1	*	0	*	0	*	0	*	1	*	0	*
Influenza-Associated Hospitalization	11	25.2	344	90.4	41	149.7	55	141.6	173	128.6	178	87.2	30	71.4
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7	0	0.0	8	19.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	1	2.3	2	0.5	0	0.0	1	2.6	0	0.0	0	0.0	0	0.0
Pertussis	1	2.3	28	7.4	1	3.7	0	0.0	8	5.9	13	6.4	1	2.4
<i>Streptococcus pneumoniae</i> , Invasive Disease	4	9.2	50	13.1	3	11.0	6	15.4	21	15.6	22	10.8	2	4.8
Ages < 5 Years*	0	*	4	*	0	*	0	*	2	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	2	*	10	*	1	*	0	*	3	*	9	*	1	*
Drug Susceptible, Ages 5+ Years*	2	*	36	*	2	*	6	*	16	*	12	*	1	*
Varicella	0	0.0	11	2.9	0	0.0	1	2.6	11	8.2	4	2.0	0	0.0
SUB-TOTAL	17	39.0	437	114.8	45	164.3	63	162.2	214	159.0	218	106.8	41	97.6

ZOOZOSES														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
La Crosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	3	0.8	6	21.9	0	0.0	0	0.0	2	1.0	0	0.0
Malaria	0	0.0	2	0.5	0	0.0	0	0.0	0	0.0	3	1.5	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
West Nile Virus Infection	0	0.0	1	0.3	0	0.0	0	0.0	1	0.7	2	1.0	0	0.0
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7	0	0.0	0	0.0
SUB-TOTAL	0	0.0	6	1.6	6	21.9	0	0.0	2	1.5	11	4.9	0	0.0

GRAND TOTAL	31	71.1	726	186.8	92	328.6	79	200.8	304	221.5	338	164.0	73	171.4
POPULATION	43,576		380,604		27,385		38,840		134,557		204,214		42,009	

N = number of cases reported.
Rates use 2017 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.
* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Columbiana		Coshocton		Crawford		Cuyahoga		Darke		Defiance		Delaware	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	1	*	0	*	0	*	0	*
Campylobacteriosis	12	11.6	4	10.9	5	12.0	218	17.5	30	58.2	4	10.5	25	12.5
Coccidioidomycosis	1	1.0	2	5.5	0	0.0	1	0.1	0	0.0	0	0.0	4	2.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	2	0.2	1	1.9	0	0.0	0	0.0
Cryptosporidiosis	3	2.9	1	2.7	6	14.4	22	1.8	7	13.6	2	5.2	7	3.5
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	1	1.0	0	0.0	2	4.8	23	1.8	4	7.8	0	0.0	17	8.5
O157:H7	0	0.0	0	0.0	0	0.0	9	0.7	2	3.9	0	0.0	2	1.0
Not O157:H7	0	0.0	0	0.0	2	4.8	14	1.1	2	3.9	0	0.0	10	5.0
Unknown Serotype	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	2.5
Giardiasis	6	5.8	1	2.7	1	2.4	35	2.8	2	3.9	2	5.2	5	2.5
<i>Haemophilus influenzae</i> , Invasive Disease	0	0.0	0	0.0	0	0.0	35	2.8	0	0.0	1	2.6	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis A	0	0.0	0	0.0	0	0.0	4	0.3	1	1.9	0	0.0	0	0.0
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5
Legionellosis	9	8.7	4	10.9	1	2.4	109	8.7	0	0.0	1	2.6	8	4.0
Listeriosis	1	1.0	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	5	4.9	0	0.0	0	0.0	60	4.8	1	1.9	3	7.9	5	2.5
Meningitis, Other Bacterial*	2	1.9	0	0.0	0	0.0	9	0.7	0	0.0	0	0.0	1	0.5
Salmonellosis	12	11.6	1	2.7	1	2.4	135	10.8	14	27.2	3	7.9	22	11.0
Shigellosis	1	1.0	1	2.7	0	0.0	20	1.6	0	0.0	6	15.7	2	1.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	5	4.9	2	5.5	0	0.0	75	6.0	3	5.8	3	7.9	7	3.5
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	9	*	1	*	0	*	3	*
Streptococcal Toxic Shock Syndrome (STSS)	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	3.0
Vibriosis	0	0.0	0	0.0	0	0.0	8	0.6	0	0.0	0	0.0	2	1.0
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	5	0.4	0	0.0	0	0.0	1	0.5
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	3	0.2	0	0.0	0	0.0	1	0.5
Yersiniosis	0	0.0	1	2.7	0	0.0	5	0.4	0	0.0	0	0.0	3	1.5
SUB-TOTAL	59	57.2	17	46.5	16	38.3	776	62.2	64	124.2	26	68.1	118	58.9

OUTBREAKS*

Community*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	2	n/a
Foodborne*	0	n/a	0	n/a	1	n/a	4	n/a	0	n/a	0	n/a	4	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	7	n/a	1	n/a	1	n/a	1	n/a
Institutional*	0	n/a	0	n/a	2	n/a	10	n/a	0	n/a	3	n/a	9	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	0	n/a	3	n/a	21	n/a	1	n/a	4	n/a	16	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Columbiana		Coshocton		Crawford		Cuyahoga		Darke		Defiance		Delaware	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	127	123.2	13	35.6	49	117.4	1,820	145.8	55	106.7	21	55.0	88	43.9
Influenza-Associated Pediatric Mortality*	2	*	0	*	0	*	2	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Mumps	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	2	1.0
Pertussis	3	2.9	0	0.0	0	0.0	10	0.8	3	5.8	0	0.0	25	12.5
<i>Streptococcus pneumoniae</i> , Invasive Disease	7	6.8	5	13.7	3	7.2	142	11.4	3	5.8	2	5.2	12	6.0
Ages < 5 Years*	0	*	1	*	0	*	4	*	1	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	3	*	2	*	2	*	55	*	1	*	1	*	4	*
Drug Susceptible, Ages 5+ Years*	4	*	2	*	1	*	83	*	1	*	1	*	7	*
Varicella	2	1.9	1	2.7	2	4.8	15	1.2	6	11.6	4	10.5	24	12.0
SUB-TOTAL	142	137.8	19	52.0	54	129.4	1,991	159.5	67	130.0	28	73.4	151	75.3

ZOO NOSES														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
La Crosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	9	8.7	6	16.4	0	0.0	16	1.3	0	0.0	0	0.0	3	1.5
Malaria	0	0.0	0	0.0	0	0.0	13	1.0	0	0.0	0	0.0	1	0.5
Q Fever	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	1	0.5
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	5	0.4	0	0.0	1	2.6	0	0.0
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
SUB-TOTAL	10	8.7	6	16.4	0	0.0	40	3.2	0	0.0	1	2.6	6	3.0

GRAND TOTAL	211	203.7	42	114.9	73	167.7	2,828	224.8	132	254.2	59	144.1	291	137.2
POPULATION	103,077		36,544		41,746		1,248,514		51,536		38,156		200,464	

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Erie		Fairfield		Fayette		Franklin		Fulton		Gallia		Geauga	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	3	0.2	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	15	20.0	21	13.6	12	41.7	216	16.7	14	33.1	16	53.4	20	21.3
Coccidioidomycosis	0	0.0	2	1.3	0	0.0	7	0.5	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	1	0.1	1	2.4	0	0.0	0	0.0
Cryptosporidiosis	1	1.3	6	3.9	2	7.0	58	4.5	10	23.6	0	0.0	2	2.1
Cyclosporiasis	0	0.0	0	0.0	0	0.0	6	0.5	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	0	0.0	4	2.6	1	3.5	55	4.3	1	2.4	0	0.0	0	0.0
O157:H7	0	0.0	0	0.0	0	0.0	13	1.0	0	0.0	0	0.0	0	0.0
Not O157:H7	0	0.0	4	2.6	1	3.5	26	2.0	0	0.0	0	0.0	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	16	1.2	1	2.4	0	0.0	0	0.0
Giardiasis	4	5.3	9	5.8	0	0.0	92	7.1	3	7.1	1	3.3	6	6.4
<i>Haemophilus influenzae</i> , Invasive Disease	2	2.7	2	1.3	0	0.0	20	1.5	1	2.4	1	3.3	1	1.1
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Hepatitis A	0	0.0	0	0.0	0	0.0	8	0.6	0	0.0	0	0.0	1	1.1
Hepatitis E	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Legionellosis	3	4.0	6	3.9	2	7.0	123	9.5	1	2.4	1	3.3	0	0.0
Listeriosis	0	0.0	1	0.6	1	3.5	2	0.2	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	3	4.0	2	1.3	0	0.0	30	2.3	0	0.0	1	3.3	0	0.0
Meningitis, Other Bacterial*	0	0.0	1	0.6	0	0.0	16	1.2	0	0.0	0	0.0	0	0.0
Salmonellosis	9	12.0	21	13.6	3	10.4	143	11.1	5	11.8	3	10.0	13	13.8
Shigellosis	1	1.3	6	3.9	0	0.0	203	15.7	1	2.4	0	0.0	1	1.1
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	1	1.3	7	4.5	0	0.0	96	7.4	0	0.0	0	0.0	2	2.1
Streptococcal Disease, Group B, in Newborn*	0	*	2	*	0	*	6	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0
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
Typhoid Fever	0	0.0	2	1.3	0	0.0	23	1.8	0	0.0	0	0.0	0	0.0
Vibriosis	1	1.3	0	0.0	0	0.0	6	0.5	1	2.4	0	0.0	0	0.0
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	1	1.3	0	0.0	0	0.0	5	0.4	1	2.4	0	0.0	0	0.0
Yersiniosis	0	0.0	1	0.6	0	0.0	3	0.2	0	0.0	0	0.0	0	0.0
SUB-TOTAL	40	53.5	94	60.7	21	73.0	1,124	87.0	38	89.9	23	76.7	46	49.0

OUTBREAKS*

Community*	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a
Foodborne*	1	n/a	1	n/a	0	n/a	4	n/a	0	n/a	1	n/a	2	n/a
Healthcare-Associated*	4	n/a	1	n/a	0	n/a	16	n/a	1	n/a	0	n/a	0	n/a
Institutional*	1	n/a	6	n/a	0	n/a	62	n/a	3	n/a	1	n/a	0	n/a
Waterborne*	0	n/a	1	n/a	0	n/a	6	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	7	n/a	9	n/a	0	n/a	89	n/a	4	n/a	2	n/a	3	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Erie		Fairfield		Fayette		Franklin		Fulton		Gallia		Geauga	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	47	62.8	62	40.1	6	20.9	820	63.5	38	89.9	38	126.8	66	70.3
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	1	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	1	0.6	0	0.0	5	0.4	1	2.4	0	0.0	0	0.0
Pertussis	4	5.3	18	11.6	0	0.0	261	20.2	1	2.4	0	0.0	5	5.3
<i>Streptococcus pneumoniae</i> , Invasive Disease	10	13.4	26	16.8	2	7.0	154	11.9	5	11.8	3	10.0	7	7.5
Ages < 5 Years*	1	*	4	*	1	*	17	*	0	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	5	*	6	*	0	*	16	*	2	*	1	*	1	*
Drug Susceptible, Ages 5+ Years*	4	*	16	*	1	*	121	*	3	*	2	*	5	*
Varicella	5	6.7	9	5.8	0	0.0	65	5.0	5	11.8	0	0.0	3	3.2
SUB-TOTAL	66	88.2	116	75.0	8	27.8	1,306	101.1	51	120.6	41	136.8	81	86.2

ZOO NOSES														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	1	3.3	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	1	3.3	0	0.0
La Crosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	12	7.8	0	0.0	15	1.2	0	0.0	2	6.7	1	1.1
Malaria	0	0.0	0	0.0	0	0.0	20	1.5	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	3	n/a	0	n/a	0	n/a	1	n/a
Spotted Fever Rickettsiosis*	0	0.0	1	0.6	0	0.0	5	0.4	0	0.0	1	3.3	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	13	8.4	0	0.0	49	3.6	0	0.0	4	13.3	2	1.1

GRAND TOTAL	113	141.7	232	144.1	29	100.9	2,568	191.6	93	210.5	70	226.9	132	136.3
POPULATION	74,817		154,733		28,752		1,291,981		42,289		29,973		93,918	

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Greene		Guernsey		Hamilton		Hancock		Hardin		Harrison		Henry	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	18	10.8	10	25.6	78	9.6	7	9.2	12	38.3	4	26.3	5	18.4
Coccidioidomycosis	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	5	3.0	4	10.2	25	3.1	6	7.9	1	3.2	1	6.6	6	22.1
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	4	2.4	2	5.1	13	1.6	1	1.3	4	12.8	1	6.6	0	0.0
O157:H7	1	0.6	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Not O157:H7	3	1.8	1	2.6	7	0.9	1	1.3	3	9.6	0	0.0	0	0.0
Unknown Serotype	0	0.0	1	2.6	4	0.5	0	0.0	1	3.2	1	6.6	0	0.0
Giardiasis	4	2.4	2	5.1	18	2.2	2	2.6	1	3.2	0	0.0	0	0.0
<i>Haemophilus influenzae</i> , Invasive Disease	3	1.8	1	2.6	26	3.2	2	2.6	0	0.0	0	0.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis A	1	0.6	0	0.0	0	0.0	9	11.9	1	3.2	0	0.0	0	0.0
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	9	5.4	3	7.7	28	3.4	1	1.3	5	15.9	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0
Meningitis, Aseptic	4	2.4	2	5.1	53	6.5	6	7.9	0	0.0	0	0.0	1	3.7
Meningitis, Other Bacterial*	2	1.2	0	0.0	14	1.7	1	1.3	2	6.4	0	0.0	0	0.0
Salmonellosis	7	4.2	5	12.8	89	10.9	12	15.8	6	19.1	3	19.7	4	14.7
Shigellosis	9	5.4	0	0.0	55	6.8	1	1.3	1	3.2	0	0.0	5	18.4
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	11	6.6	4	10.2	61	7.5	2	2.6	1	3.2	1	6.6	0	0.0
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	5	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
Typhoid Fever	0	0.0	0	0.0	5	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	1	0.6	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	1	3.7
<i>Vibrio parahaemolyticus</i> Infection	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	1	3.7
Yersiniosis	1	0.6	0	0.0	0	0.0	0	0.0	1	3.2	1	6.6	0	0.0
SUB-TOTAL	79	47.4	33	84.4	475	58.4	50	66.0	36	114.8	11	72.3	22	80.9

OUTBREAKS*

Community*	1	n/a	0	n/a	1	n/a	1	n/a	1	n/a	0	n/a	1	n/a
Foodborne*	0	n/a	0	n/a	9	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	1	n/a	0	n/a	6	n/a	1	n/a	1	n/a	0	n/a	0	n/a
Institutional*	2	n/a	0	n/a	23	n/a	4	n/a	1	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
SUB-TOTAL	4	n/a	0	n/a	39	n/a	6	n/a	3	n/a	0	n/a	2	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Greene		Guernsey		Hamilton		Hancock		Hardin		Harrison		Henry	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	220	131.9	47	120.2	609	74.8	47	62.0	37	118.0	15	98.6	28	103.0
Influenza-Associated Pediatric Mortality*	0	*	0	*	1	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	7.4
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	3	0.4	0	0.0	0	0.0	0	0.0	1	3.7
Pertussis	8	4.8	1	2.6	14	1.7	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	15	9.0	6	15.3	73	9.0	5	6.6	1	3.2	2	13.1	2	7.4
Ages < 5 Years*	1	*	0	*	3	*	2	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	1	*	23	*	0	*	1	*	2	*	1	*
Drug Susceptible, Ages 5+ Years*	14	*	5	*	47	*	3	*	0	*	0	*	1	*
Varicella	15	9.0	0	0.0	8	1.0	0	0.0	1	3.2	0	0.0	3	11.0
SUB-TOTAL	258	154.7	54	138.1	709	87.1	52	68.6	39	124.3	17	111.7	36	132.4

ZOOONOSES														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	3	0.4	0	0.0	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	3	0.4	0	0.0	0	0.0	0	0.0	0	0.0
La Crosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	3	1.8	7	17.9	12	1.5	0	0.0	0	0.0	29	190.6	0	0.0
Malaria	0	0.0	0	0.0	6	0.7	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	5	0.6	0	0.0	0	0.0	1	6.6	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	1	0.6	0	0.0	4	0.5	2	2.6	0	0.0	0	0.0	0	0.0
Zika Virus Infection*	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	4	2.4	7	17.9	35	4.1	2	2.6	0	0.0	30	197.2	0	0.0

GRAND TOTAL	345	204.5	94	240.5	1,258	149.5	110	137.3	78	239.1	58	381.2	60	213.4
POPULATION	166,752		39,093		813,822		75,754		31,364		15,216		27,185	

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Highland		Hocking		Holmes		Huron		Jackson		Jefferson		Knox	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	11	25.6	3	10.5	7	15.9	6	10.3	16	49.3	15	22.6	14	22.9
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	4	9.3	0	0.0	1	2.3	2	3.4	2	6.2	3	4.5	14	22.9
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	3	7.0	3	10.5	0	0.0	1	1.7	0	0.0	0	0.0	6	9.8
O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not O157:H7	3	7.0	2	7.0	0	0.0	1	1.7	0	0.0	0	0.0	4	6.5
Unknown Serotype	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0	2	3.3
Giardiasis	0	0.0	1	3.5	0	0.0	3	5.1	1	3.1	1	1.5	5	8.2
<i>Haemophilus influenzae</i> , Invasive Disease	3	7.0	1	3.5	0	0.0	0	0.0	0	0.0	2	3.0	1	1.6
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	4	14.0	0	0.0	5	8.5	1	3.1	1	1.5	4	6.5
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	2	4.7	1	3.5	1	2.3	1	1.7	2	6.2	3	4.5	2	3.3
Meningitis, Other Bacterial*	0	0.0	0	0.0	1	2.3	1	1.7	1	3.1	0	0.0	0	0.0
Salmonellosis	5	11.6	7	24.6	4	9.1	14	23.9	9	27.7	9	13.6	11	18.0
Shigellosis	0	0.0	2	7.0	0	0.0	2	3.4	2	6.2	1	1.5	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	2	4.7	1	3.5	0	0.0	2	3.4	0	0.0	2	3.0	3	4.9
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	1	*	0	*	0	*	0	*	1	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	1	2.3	0	0.0	0	0.0	0	0.0	2	3.3
SUB-TOTAL	30	69.8	23	80.8	16	36.4	37	63.3	34	104.8	38	57.3	64	104.5

OUTBREAKS*

Community*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	1	n/a	0	n/a	0	n/a	4	n/a	2	n/a	0	n/a	0	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Highland		Hocking		Holmes		Huron		Jackson		Jefferson		Knox	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	1	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	34	79.1	18	63.2	22	50.0	85	145.3	51	157.2	146	220.0	40	65.3
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	1	1.7	0	0.0	1	1.5	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	1	2.3	3	10.5	2	4.5	1	1.7	0	0.0	1	1.5	7	11.4
<i>Streptococcus pneumoniae</i> , Invasive Disease	6	14.0	5	17.6	1	2.3	8	13.7	2	6.2	23	34.7	1	1.6
Ages < 5 Years*	0	*	1	*	0	*	0	*	1	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	4	*	1	*	0	*	3	*	1	*	9	*	0	*
Drug Susceptible, Ages 5+ Years*	2	*	3	*	1	*	5	*	0	*	13	*	1	*
Varicella	8	18.6	5	17.6	2	4.5	7	12.0	1	3.1	4	6.0	1	1.6
SUB-TOTAL	50	116.4	32	112.4	27	61.4	102	174.4	54	166.4	175	263.7	49	80.0

ZOO NOSES														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
La Crosse Virus Disease*	0	0.0	0	0.0	1	2.3	0	0.0	0	0.0	0	0.0	1	1.6
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	1	3.5	8	18.2	0	0.0	0	0.0	14	21.1	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	2.3	1	3.5	9	20.5	1	1.7	0	0.0	14	21.1	1	1.6

GRAND TOTAL	82	188.5	56	196.7	52	118.3	144	239.3	90	271.2	227	342.1	114	186.1
POPULATION	42,971		28,474		43,957		58,494		32,449		66,359		61,261	

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Lake		Lawrence		Licking		Logan		Lorain		Lucas		Madison	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
Campylobacteriosis	47	20.4	18	29.9	25	14.4	13	28.7	62	20.1	82	19.0	9	20.4
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	1	2.3
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6	2	0.5	0	0.0
Cryptosporidiosis	0	0.0	2	3.3	6	3.5	4	8.8	8	2.6	157	36.4	1	2.3
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	11	2.6	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	2	0.9	1	1.7	4	2.3	1	2.2	6	1.9	18	4.2	2	4.5
O157:H7	1	0.4	0	0.0	1	0.6	0	0.0	1	0.3	2	0.5	1	2.3
Not O157:H7	1	0.4	1	1.7	3	1.7	0	0.0	4	1.3	10	2.3	1	2.3
Unknown Serotype	0	0.0	0	0.0	0	0.0	1	2.2	1	0.3	6	1.4	0	0.0
Giardiasis	8	3.5	0	0.0	7	4.0	3	6.6	6	1.9	23	5.3	1	2.3
<i>Haemophilus influenzae</i> , Invasive Disease	2	0.9	1	1.7	3	1.7	0	0.0	8	2.6	7	1.6	2	4.5
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6	5	1.2	0	0.0
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	18	7.8	1	1.7	6	3.5	2	4.4	17	5.5	14	3.2	0	0.0
Listeriosis	2	0.9	0	0.0	0	0.0	1	2.2	1	0.3	2	0.5	0	0.0
Meningitis, Aseptic	2	0.9	1	1.7	4	2.3	1	2.2	7	2.3	25	5.8	0	0.0
Meningitis, Other Bacterial*	6	2.6	0	0.0	0	0.0	0	0.0	4	1.3	7	1.6	0	0.0
Salmonellosis	23	10.0	4	6.6	18	10.4	7	15.4	36	11.7	62	14.4	12	27.3
Shigellosis	1	0.4	0	0.0	2	1.2	1	2.2	7	2.3	67	15.5	3	6.8
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	8	3.5	0	0.0	4	2.3	0	0.0	9	2.9	17	3.9	5	11.4
Streptococcal Disease, Group B, in Newborn*	0	*	1	*	0	*	0	*	3	*	4	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	1	0.6	0	0.0	1	0.3	0	0.0	0	0.0
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
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.9	0	0.0
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.7	0	0.0
Yersiniosis	2	0.9	0	0.0	1	0.6	0	0.0	1	0.3	2	0.5	0	0.0
SUB-TOTAL	121	52.6	29	48.1	81	46.7	33	72.8	180	58.5	512	118.8	36	81.8

OUTBREAKS*

Community*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Foodborne*	1	n/a	0	n/a	0	n/a	0	n/a	1	n/a	9	n/a	0	n/a
Healthcare-Associated*	4	n/a	0	n/a	0	n/a	1	n/a	0	n/a	6	n/a	0	n/a
Institutional*	1	n/a	1	n/a	2	n/a	5	n/a	0	n/a	8	n/a	1	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	6	n/a	1	n/a	3	n/a	6	n/a	1	n/a	24	n/a	1	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Lake		Lawrence		Licking		Logan		Lorain		Lucas		Madison	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	159	69.1	40	66.4	100	57.7	30	66.2	194	63.0	475	110.2	56	127.2
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Meningococcal Disease	0	0.0	1	1.7	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0
Mumps	1	0.4	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2	0	0.0
Pertussis	6	2.6	3	5.0	18	10.4	2	4.4	4	1.3	8	1.9	9	20.4
<i>Streptococcus pneumoniae</i> , Invasive Disease	24	10.4	4	6.6	16	9.2	1	2.2	22	7.1	34	7.9	4	9.1
Ages < 5 Years*	1	*	1	*	1	*	1	*	2	*	3	*	0	*
Drug Resistant, Ages 5+ Years*	5	*	2	*	4	*	0	*	9	*	10	*	0	*
Drug Susceptible, Ages 5+ Years*	18	*	1	*	11	*	0	*	11	*	21	*	4	*
Varicella	5	2.2	1	1.7	6	3.5	0	0.0	9	2.9	12	2.8	2	4.5
SUB-TOTAL	195	84.7	49	81.3	140	80.7	33	72.8	231	75.0	531	123.2	71	161.2

ZOOZOSES														
Babesiosis*	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
La Crosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	4	1.7	2	3.3	9	5.2	0	0.0	0	0.0	4	0.9	0	0.0
Malaria	2	0.9	0	0.0	0	0.0	0	0.0	1	0.3	2	0.5	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	1	0.4	0	0.0	1	0.6	0	0.0	1	0.3	1	0.2	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	1	0.4	0	0.0	0	0.0	1	2.2	0	0.0	2	0.5	0	0.0
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	9	3.5	3	5.0	12	6.3	1	2.2	2	0.6	11	2.6	0	0.0

GRAND TOTAL	331	140.8	82	134.4	236	133.8	73	147.8	414	134.1	1,078	244.6	108	243.0
POPULATION	230,117		60,249		173,448		45,325		307,924		430,887		44,036	

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Mahoning		Marion		Medina		Meigs		Mercer		Miami		Monroe	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	13	5.7	13	20.0	30	16.8	16	69.3	33	80.7	21	20.0	2	14.3
Coccidioidomycosis	0	0.0	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	9	3.9	12	18.5	4	2.2	0	0.0	16	39.1	2	1.9	0	0.0
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	4	1.7	1	1.5	4	2.2	1	4.3	2	4.9	0	0.0	0	0.0
O157:H7	0	0.0	0	0.0	1	0.6	0	0.0	1	2.4	0	0.0	0	0.0
Not O157:H7	4	1.7	0	0.0	3	1.7	1	4.3	1	2.4	0	0.0	0	0.0
Unknown Serotype	0	0.0	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	8	3.5	1	1.5	5	2.8	1	4.3	5	12.2	3	2.9	0	0.0
<i>Haemophilus influenzae</i> , Invasive Disease	5	2.2	4	6.2	4	2.2	0	0.0	2	4.9	1	1.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	14	6.1	1	1.5	11	6.2	0	0.0	1	2.4	3	2.9	0	0.0
Listeriosis	1	0.4	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	8	3.5	1	1.5	5	2.8	2	8.7	7	17.1	1	1.0	0	0.0
Meningitis, Other Bacterial*	1	0.4	1	1.5	3	1.7	0	0.0	0	0.0	11	10.5	0	0.0
Salmonellosis	29	12.6	8	12.3	19	10.7	0	0.0	2	4.9	40	38.1	1	7.2
Shigellosis	1	0.4	4	6.2	1	0.6	0	0.0	8	19.6	2	1.9	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	9	3.9	6	9.2	5	2.8	1	4.3	2	4.9	10	9.5	0	0.0
Streptococcal Disease, Group B, in Newborn*	2	*	1	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	1	1.5	3	1.7	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	104	45.3	56	86.2	95	53.3	21	91.0	78	190.8	95	90.4	3	21.5

OUTBREAKS*

Community*	0	n/a	1	n/a	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a
Foodborne*	3	n/a	0	n/a	2	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	2	n/a	3	n/a	0	n/a	3	n/a	8	n/a	0	n/a
Institutional*	2	n/a	1	n/a	1	n/a	0	n/a	4	n/a	2	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	5	n/a	5	n/a	6	n/a	1	n/a	9	n/a	10	n/a	0	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Mahoning		Marion		Medina		Meigs		Mercer		Miami		Monroe	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	426	185.4	151	232.4	134	75.1	18	78.0	53	129.7	96	91.3	8	57.4
Influenza-Associated Pediatric Mortality*	0	*	1	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	25	61.2	0	0.0	0	0.0
Pertussis	12	5.2	3	4.6	2	1.1	0	0.0	3	7.3	9	8.6	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	30	13.1	9	13.9	11	6.2	1	4.3	5	12.2	15	14.3	0	0.0
Ages < 5 Years*	3	*	0	*	0	*	0	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	9	*	2	*	4	*	0	*	2	*	5	*	0	*
Drug Susceptible, Ages 5+ Years*	18	*	7	*	7	*	1	*	3	*	9	*	0	*
Varicella	15	6.5	1	1.5	11	6.2	0	0.0	6	14.7	8	7.6	0	0.0
SUB-TOTAL	483	210.2	165	254.0	158	88.6	19	82.3	92	225.1	128	121.8	8	57.4

ZOO NOSES														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	1	4.3	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	1	4.3	0	0.0	0	0.0	0	0.0
La Crosse Virus Disease*	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	6	2.6	0	0.0	3	1.7	0	0.0	0	0.0	0	0.0	1	7.2
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	1	1.5	1	0.6	2	8.7	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	1	4.3	0	0.0	0	0.0	0	0.0
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	7	2.6	1	1.5	6	2.8	4	17.3	0	0.0	0	0.0	1	7.2

GRAND TOTAL	599	258.1	227	341.7	265	144.6	45	190.6	179	415.9	233	212.1	12	86.0
POPULATION	229,796		64,967		178,371		23,080		40,873		105,122		13,946	

N = number of cases reported.
Rates use 2017 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.
* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Montgomery		Morgan		Morrow		Muskingum		Noble		Ottawa		Paulding	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	5.3
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	52	9.8	2	13.6	6	17.1	30	34.8	2	13.9	8	19.7	3	15.9
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	1	6.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	18	3.4	0	0.0	6	17.1	4	4.6	0	0.0	3	7.4	2	10.6
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	5	0.9	0	0.0	0	0.0	3	3.5	1	6.9	2	4.9	0	0.0
O157:H7	2	0.4	0	0.0	0	0.0	1	1.2	0	0.0	1	2.5	0	0.0
Not O157:H7	2	0.4	0	0.0	0	0.0	2	2.3	1	6.9	1	2.5	0	0.0
Unknown Serotype	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	15	2.8	1	6.8	2	5.7	7	8.1	0	0.0	2	4.9	2	10.6
<i>Haemophilus influenzae</i> , Invasive Disease	15	2.8	2	13.6	0	0.0	4	4.6	0	0.0	0	0.0	1	5.3
Hemolytic Uremic Syndrome (HUS)	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis A	1	0.2	1	6.8	1	2.9	0	0.0	0	0.0	1	2.5	0	0.0
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	24	4.5	2	13.6	1	2.9	3	3.5	1	6.9	1	2.5	1	5.3
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	23	4.3	3	20.4	2	5.7	9	10.4	1	6.9	1	2.5	2	10.6
Meningitis, Other Bacterial*	14	2.6	0	0.0	1	2.9	1	1.2	1	6.9	1	2.5	0	0.0
Salmonellosis	56	10.5	3	20.4	6	17.1	12	13.9	0	0.0	14	34.4	0	0.0
Shigellosis	44	8.3	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	44	8.3	1	6.8	1	2.9	6	7.0	0	0.0	1	2.5	0	0.0
Streptococcal Disease, Group B, in Newborn*	2	*	1	*	0	*	0	*	1	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0
SUB-TOTAL	315	59.3	17	115.6	26	74.3	80	92.9	7	48.6	35	86.1	12	63.7

OUTBREAKS*

Community*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Healthcare-Associated*	2	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a
Institutional*	11	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	13	n/a	0	n/a	0	n/a	2	n/a	0	n/a	1	n/a	1	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Montgomery		Morgan		Morrow		Muskingum		Noble		Ottawa		Paulding	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	915	172.1	9	61.2	21	60.0	88	102.1	14	97.2	36	88.5	28	148.6
Influenza-Associated Pediatric Mortality*	1	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	6	1.1	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
Pertussis	102	19.2	0	0.0	1	2.9	3	3.5	0	0.0	0	0.0	1	5.3
<i>Streptococcus pneumoniae</i> , Invasive Disease	60	11.3	5	34.0	8	22.9	19	22.1	1	6.9	6	14.8	2	10.6
Ages < 5 Years*	5	*	0	*	0	*	1	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	19	*	1	*	1	*	0	*	0	*	2	*	0	*
Drug Susceptible, Ages 5+ Years*	36	*	4	*	7	*	18	*	1	*	4	*	2	*
Varicella	18	3.4	0	0.0	2	5.7	4	4.6	1	6.9	2	4.9	4	21.2
SUB-TOTAL	1,102	207.3	14	95.2	32	91.4	115	133.5	16	111.1	44	108.2	35	185.7
ZOONOSES														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
La Crosse Virus Disease*	0	0.0	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	8	1.5	0	0.0	0	0.0	3	3.5	1	6.9	0	0.0	0	0.0
Malaria	7	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	18	3.2	0	0.0	0	0.0	4	4.6	1	6.9	0	0.0	0	0.0
GRAND TOTAL	1,448	269.8	31	210.8	58	165.7	201	231.0	24	166.6	80	194.3	48	249.4
POPULATION	531,542		14,709		34,994		86,149		14,406		40,657		18,845	

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Perry		Pickaway		Pike		Portage		Preble		Putnam		Richland	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	1	*
Campylobacteriosis	6	16.7	6	10.4	3	10.6	17	10.5	5	12.2	6	17.7	11	9.1
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	1	0.8
Cryptosporidiosis	4	11.1	2	3.5	2	7.1	8	4.9	0	0.0	5	14.8	3	2.5
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	1	2.8	1	1.7	0	0.0	0	0.0	1	2.4	2	5.9	2	1.7
O157:H7	1	2.8	1	1.7	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
Not O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	5.9	2	1.7
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	1	2.8	1	1.7	0	0.0	1	0.6	0	0.0	1	3.0	2	1.7
<i>Haemophilus influenzae</i> , Invasive Disease	1	2.8	2	3.5	5	17.7	0	0.0	0	0.0	1	3.0	1	0.8
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.0	1	0.8
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	1	2.8	4	6.9	0	0.0	12	7.4	0	0.0	0	0.0	5	4.1
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	2.5
Meningitis, Aseptic	1	2.8	2	3.5	1	3.5	1	0.6	2	4.9	2	5.9	4	3.3
Meningitis, Other Bacterial*	0	0.0	1	1.7	2	7.1	3	1.8	1	2.4	0	0.0	2	1.7
Salmonellosis	8	22.2	3	5.2	2	7.1	14	8.6	5	12.2	8	23.6	8	6.6
Shigellosis	0	0.0	1	1.7	1	3.5	2	1.2	1	2.4	0	0.0	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	1	2.8	6	10.4	2	7.1	5	3.1	0	0.0	0	0.0	6	5.0
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	1	*	1	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	1	2.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	1	2.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	1	1.7	0	0.0	2	1.2	0	0.0	0	0.0	0	0.0
SUB-TOTAL	25	69.4	30	51.9	19	67.2	66	40.7	16	38.9	27	79.7	50	41.5

OUTBREAKS*

Community*	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	2	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	2	n/a
Institutional*	0	n/a	5	n/a	0	n/a	2	n/a	0	n/a	0	n/a	4	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	5	n/a	2	n/a	4	n/a	0	n/a	0	n/a	8	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Perry		Pickaway		Pike		Portage		Preble		Putnam		Richland	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	19	52.7	37	64.0	26	92.0	146	90.0	28	68.1	40	118.1	112	92.9
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Pertussis	1	2.8	61	105.5	1	3.5	9	5.5	1	2.4	3	8.9	7	5.8
<i>Streptococcus pneumoniae</i> , Invasive Disease	7	19.4	13	22.5	4	14.1	7	4.3	4	9.7	2	5.9	14	11.6
Ages < 5 Years*	1	*	1	*	0	*	0	*	0	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	0	*	2	*	0	*	1	*	2	*	1	*	1	*
Drug Susceptible, Ages 5+ Years*	6	*	10	*	4	*	6	*	2	*	1	*	12	*
Varicella	2	5.6	8	13.8	4	14.1	6	3.7	3	7.3	1	3.0	4	3.3
SUB-TOTAL	29	80.5	119	205.8	35	123.8	169	104.1	36	87.5	46	135.8	137	113.6

ZOO NOSES														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	3	10.6	0	0.0	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	3	10.6	0	0.0	0	0.0	0	0.0	0	0.0
La Crosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	1	0.8
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	2	5.6	0	0.0	1	3.5	7	4.3	0	0.0	0	0.0	1	0.8
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	1	1.7	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	1	2.8	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	1	0.8
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	3	8.3	1	1.7	5	17.7	9	4.9	1	2.4	0	0.0	4	3.3

GRAND TOTAL	57	158.2	155	259.4	61	208.7	248	149.7	53	128.9	73	215.5	199	158.4
POPULATION	36,024		57,830		28,270		162,277		41,120		33,878		120,589	

N = number of cases reported.
Rates use 2017 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.
* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Ross		Sandusky		Scioto		Seneca		Shelby		Stark		Summit	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	18	23.3	10	16.9	31	40.8	12	21.7	19	39.0	88	23.6	54	10.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	1	0.2
Cryptosporidiosis	3	3.9	4	6.8	3	4.0	3	5.4	0	0.0	32	8.6	12	2.2
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	4	5.2	3	5.1	0	0.0	1	1.8	2	4.1	8	2.1	7	1.3
O157:H7	1	1.3	0	0.0	0	0.0	0	0.0	2	4.1	2	0.5	2	0.4
Not O157:H7	2	2.6	2	3.4	0	0.0	0	0.0	0	0.0	3	0.8	3	0.6
Unknown Serotype	1	1.3	1	1.7	0	0.0	1	1.8	0	0.0	3	0.8	2	0.4
Giardiasis	0	0.0	1	1.7	0	0.0	2	3.6	0	0.0	17	4.6	17	3.1
<i>Haemophilus influenzae</i> , Invasive Disease	2	2.6	4	6.8	1	1.3	2	3.6	1	2.1	8	2.1	11	2.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Hepatitis A	0	0.0	0	0.0	0	0.0	2	3.6	0	0.0	0	0.0	4	0.7
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	2	2.6	3	5.1	0	0.0	1	1.8	2	4.1	14	3.8	29	5.4
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2
Meningitis, Aseptic	0	0.0	2	3.4	3	4.0	4	7.2	1	2.1	38	10.2	26	4.8
Meningitis, Other Bacterial*	0	0.0	2	3.4	0	0.0	1	1.8	0	0.0	3	0.8	4	0.7
Salmonellosis	8	10.3	9	15.2	11	14.5	5	9.1	4	8.2	39	10.5	54	10.0
Shigellosis	0	0.0	3	5.1	2	2.6	2	3.6	2	4.1	25	6.7	8	1.5
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	10	12.9	2	3.4	2	2.6	1	1.8	1	2.1	21	5.6	31	5.7
Streptococcal Disease, Group B, in Newborn*	1	*	0	*	0	*	0	*	0	*	1	*	6	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.4
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
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0	2	0.5	2	0.4
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0	2	0.5	2	0.4
Yersiniosis	0	0.0	1	1.7	0	0.0	0	0.0	1	2.1	3	0.8	0	0.0
SUB-TOTAL	48	62.1	44	74.3	53	69.8	38	68.8	33	67.7	304	81.6	271	50.1

OUTBREAKS*

Community*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a
Foodborne*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a
Healthcare-Associated*	1	n/a	1	n/a	1	n/a	0	n/a	0	n/a	5	n/a	3	n/a
Institutional*	3	n/a	1	n/a	1	n/a	0	n/a	0	n/a	12	n/a	4	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	4	n/a	3	n/a	2	n/a	0	n/a	0	n/a	22	n/a	7	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Ross		Sandusky		Scioto		Seneca		Shelby		Stark		Summit	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	68	88.0	48	81.1	81	106.7	38	68.8	30	61.5	458	122.9	718	132.7
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Mumps	1	1.3	0	0.0	0	0.0	0	0.0	1	2.1	1	0.3	0	0.0
Pertussis	4	5.2	3	5.1	1	1.3	2	3.6	1	2.1	23	6.2	31	5.7
<i>Streptococcus pneumoniae</i> , Invasive Disease	10	12.9	4	6.8	10	13.2	2	3.6	4	8.2	51	13.7	39	7.2
Ages < 5 Years*	0	*	0	*	1	*	0	*	0	*	5	*	2	*
Drug Resistant, Ages 5+ Years*	3	*	1	*	1	*	0	*	2	*	16	*	10	*
Drug Susceptible, Ages 5+ Years*	7	*	3	*	8	*	2	*	2	*	30	*	27	*
Varicella	9	11.6	1	1.7	2	2.6	2	3.6	5	10.3	15	4.0	4	0.7
SUB-TOTAL	92	119.0	56	94.6	94	123.8	44	79.6	41	84.1	548	147.1	793	146.5

ZOOONOSES														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	2	2.6	0	0.0	1	1.3	0	0.0	1	2.1	0	0.0	2	0.4
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.4
<i>Ehrlichia chaffeensis</i> *	2	2.6	0	0.0	1	1.3	0	0.0	1	2.1	0	0.0	0	0.0
La Crosse Virus Disease*	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Leptospirosis	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0	0	0.0
Lyme Disease	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	10	2.7	15	2.8
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.4
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	4	n/a	1	n/a
Spotted Fever Rickettsiosis*	0	0.0	1	1.7	2	2.6	0	0.0	0	0.0	2	0.5	1	0.2
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	4	5.2	1	1.7	3	4.0	1	1.8	1	2.1	17	3.5	23	4.1

GRAND TOTAL	148	186.3	104	170.6	152	197.6	83	150.2	75	153.8	891	232.2	1,094	200.7
POPULATION	77,313		59,195		75,929		55,243		48,759		372,542		541,228	

N = number of cases reported.
Rates use 2017 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.
* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Trumbull		Tuscarawas		Union		Van Wert		Vinton		Warren		Washington	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	16	8.0	20	21.7	14	24.7	13	46.1	5	38.2	29	12.7	50	82.8
Coccidioidomycosis	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0
Cryptosporidiosis	4	2.0	3	3.3	7	12.3	8	28.4	0	0.0	8	3.5	0	0.0
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	0	0.0	4	4.3	1	1.8	2	7.1	1	7.6	4	1.7	2	3.3
O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not O157:H7	0	0.0	2	2.2	1	1.8	2	7.1	0	0.0	3	1.3	1	1.7
Unknown Serotype	0	0.0	2	2.2	0	0.0	0	0.0	1	7.6	1	0.4	1	1.7
Giardiasis	6	3.0	7	7.6	3	5.3	0	0.0	0	0.0	5	2.2	0	0.0
<i>Haemophilus influenzae</i> , Invasive Disease	4	2.0	1	1.1	2	3.5	0	0.0	0	0.0	5	2.2	1	1.7
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	9	4.5	0	0.0	4	7.0	0	0.0	0	0.0	5	2.2	0	0.0
Listeriosis	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	5	2.5	7	7.6	0	0.0	2	7.1	0	0.0	8	3.5	1	1.7
Meningitis, Other Bacterial*	2	1.0	1	1.1	1	1.8	0	0.0	0	0.0	1	0.4	0	0.0
Salmonellosis	16	8.0	12	13.0	12	21.1	5	17.7	1	7.6	24	10.5	8	13.2
Shigellosis	0	0.0	1	1.1	1	1.8	2	7.1	0	0.0	7	3.1	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	17	8.5	4	4.3	1	1.8	3	10.6	0	0.0	9	3.9	2	3.3
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0	2	0.9	0	0.0
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0	2	0.9	0	0.0
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	2	1.0	3	3.3	1	1.8	0	0.0	0	0.0	2	0.9	0	0.0
SUB-TOTAL	82	40.9	63	68.3	49	86.4	35	124.0	7	53.5	111	48.5	64	105.9

OUTBREAKS*

Community*	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	1	n/a	1	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	3	n/a	1	n/a
Institutional*	1	n/a	0	n/a	3	n/a	1	n/a	0	n/a	1	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	2	n/a	2	n/a	6	n/a	2	n/a	0	n/a	5	n/a	1	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Trumbull		Tuscarawas		Union		Van Wert		Vinton		Warren		Washington	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza-Associated Hospitalization	306	152.7	66	71.5	25	44.1	19	67.3	10	76.4	165	72.1	101	167.2
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	3	5.3	0	0.0	0	0.0	3	1.3	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	9	4.5	4	4.3	5	8.8	7	24.8	0	0.0	14	6.1	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	21	10.5	6	6.5	2	3.5	1	3.5	2	15.3	23	10.0	15	24.8
Ages < 5 Years*	0	*	0	*	0	*	0	*	0	*	1	*	2	*
Drug Resistant, Ages 5+ Years*	6	*	2	*	0	*	1	*	1	*	4	*	0	*
Drug Susceptible, Ages 5+ Years*	15	*	4	*	2	*	0	*	1	*	18	*	13	*
Varicella	12	6.0	6	6.5	1	1.8	6	21.3	1	7.6	12	5.2	5	8.3
SUB-TOTAL	349	174.2	82	88.8	36	63.4	33	117.0	13	99.3	218	95.2	121	200.3

ZONOTIC DISEASES														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0
La Crosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	7	3.5	6	6.5	0	0.0	0	0.0	1	7.6	1	0.4	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	1	1.1	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	7	3.5	7	7.6	1	0.0	1	3.5	1	7.6	2	0.9	0	0.0

GRAND TOTAL	440	218.6	154	164.7	92	149.8	71	244.5	21	160.4	336	144.6	186	306.2
POPULATION	200,380		92,297		56,741		28,217		13,092		228,882		60,418	

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

GENERAL INFECTIOUS DISEASES	Wayne		Williams		Wood		Wyandot		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	6	0.1
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
Infant*	0	*	0	*	0	*	0	*	0	n/a	3	*
Campylobacteriosis	44	37.9	13	35.3	28	21.5	32	145.3	0	n/a	2,080	17.8
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	28	0.2
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	20	0.2
Cryptosporidiosis	5	4.3	2	5.4	10	7.7	1	4.5	0	n/a	643	5.5
Cyclosporiasis	0	0.0	0	0.0	2	1.5	0	0.0	0	n/a	23	0.2
<i>Escherichia coli</i> , Shiga Toxin-Producing	2	1.7	0	0.0	4	3.1	1	4.5	0	n/a	287	2.5
O157:H7	0	0.0	0	0.0	2	1.5	0	0.0	0	n/a	60	0.5
Not O157:H7	2	1.7	0	0.0	2	1.5	1	4.5	0	n/a	166	1.4
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	61	0.5
Giardiasis	7	6.0	0	0.0	3	2.3	1	4.5	0	n/a	427	3.7
<i>Haemophilus influenzae</i> , Invasive Disease	2	1.7	0	0.0	2	1.5	0	0.0	0	n/a	256	2.2
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	5	0.0
Hepatitis A	0	0.0	0	0.0	2	1.5	0	0.0	0	n/a	51	0.4
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Legionellosis	5	4.3	1	2.7	2	1.5	0	0.0	0	n/a	583	5.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	26	0.2
Meningitis, Aseptic	4	3.4	2	5.4	0	0.0	0	0.0	0	n/a	482	4.1
Meningitis, Other Bacterial*	0	0.0	1	2.7	0	0.0	0	0.0	0	n/a	146	1.3
Salmonellosis	14	12.1	5	13.6	18	13.8	2	9.1	0	n/a	1,390	11.9
Shigellosis	1	0.9	2	5.4	5	3.8	1	4.5	0	n/a	616	5.3
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	4	0.0
Streptococcal Disease, Group A, Invasive	5	4.3	1	2.7	6	4.6	1	4.5	0	n/a	635	5.4
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	0	n/a	62	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	10	0.1
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	37	0.3
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	39	0.3
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	13	0.1
<i>Vibrio vulnificus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	25	0.2
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	51	0.4
SUB-TOTAL	89	76.7	27	73.4	82	62.8	39	177.0	0	n/a	7,913	67.9
OUTBREAKS*												
Community*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	29	n/a
Foodborne*	1	n/a	0	n/a	1	n/a	0	n/a	0	n/a	60	n/a
Healthcare-Associated*	3	n/a	0	n/a	2	n/a	0	n/a	0	n/a	103	n/a
Institutional*	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a	228	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	9	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	8	n/a
SUB-TOTAL	6	n/a	0	n/a	4	n/a	0	n/a	0	n/a	437	n/a

N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2017

VACCINE-PREVENTABLE	Wayne		Williams		Wood		Wyandot		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	n/a	3	*
Influenza-Associated Hospitalization	149	128.4	26	70.7	105	80.5	27	122.6	0	n/a	11,819	101.4
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	n/a	9	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	18	0.2
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	12	0.1
Mumps	0	0.0	1	2.7	0	0.0	0	0.0	0	n/a	60	0.5
Pertussis	10	8.6	4	10.9	7	5.4	1	4.5	0	n/a	830	7.1
<i>Streptococcus pneumoniae</i> , Invasive Disease	12	10.3	2	5.4	2	1.5	3	13.6	0	n/a	1,235	10.6
Ages < 5 Years*	1	*	1	*	0	*	1	*	0	n/a	85	*
Drug Resistant, Ages 5+ Years*	2	*	0	*	0	*	1	*	0	n/a	314	*
Drug Susceptible, Ages 5+ Years*	9	*	1	*	2	*	1	*	0	n/a	836	*
Varicella	6	5.2	3	8.2	6	4.6	0	0.0	0	n/a	471	4.0
SUB-TOTAL	177	152.5	36	97.9	120	92.0	31	140.7	0	n/a	14,458	124.0

ZONOSSES												
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	4	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	6	0.1
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	20	0.2
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	17	0.1
La Crosse Virus Disease*	0	0.0	1	2.7	0	0.0	0	0.0	0	n/a	13	0.1
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Lyme Disease	3	2.6	0	0.0	1	0.8	0	0.0	0	n/a	270	2.3
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	60	0.5
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	20	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	2	1.5	0	0.0	0	n/a	39	0.3
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
West Nile Virus Infection	2	1.7	0	0.0	0	0.0	0	0.0	0	n/a	34	0.3
Zika Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	4	0.0
SUB-TOTAL	5	4.3	1	2.7	3	2.3	0	0.0	0	n/a	476	3.9

GRAND TOTAL	277	233.5	64	174.0	209	157.1	70	317.8	0	n/a	23,284	195.8
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POPULATION	116,038		36,784		130,492		22,029		0		11,658,609	
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N = number of cases reported.

Rates use 2017 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 94-97).

**ESCHERICHIA COLI, SHIGA TOXIN-PRODUCING
SEROGROUPS BY YEAR OF ONSET, OHIO, 2013-2017**

SEROGROUP	2013	2014	2015	2016	2017
O1	0	0	0	1	1
O5	4	1	3	3	3
O8	0	1	0	2	2
O15	0	0	0	0	1
O22	0	0	0	1	0
O23	0	0	0	0	1
O26*	27	21	32	30	28
O28	1	0	0	0	0
O36	1	0	0	0	0
O39	0	1	1	0	0
O45*	15	10	3	8	6
O55	0	0	0	1	0
O61	0	0	1	0	0
O69	2	0	0	1	0
O71	4	7	9	2	4
O76	2	1	2	1	1
O77	0	1	1	1	1
O79	0	0	0	2	0
O80	0	0	1	1	0
O84	0	1	0	2	0
O91	0	2	3	1	3
O93	0	0	0	1	0
O100	0	0	0	1	0
O103*	25	27	35	49	43
O111*	21	11	13	21	29
O113	0	0	0	0	3
O117	0	0	0	0	1
O118	1	0	8	4	7
O119	0	0	0	2	0
O121*	10	2	2	6	5
O123	0	1	0	0	0
O124	0	1	0	1	2
O128	1	0	1	0	0
O136	0	0	0	1	0
O141	0	0	0	1	0
O145*	2	2	6	2	5
O146	0	2	0	0	3
O153	0	0	0	0	1
O156	0	0	0	0	2
O157	75	89	105	77	60
O158	0	0	0	0	1
O159	1	0	0	0	0
O165	2	1	1	1	0
O166	0	0	1	0	0
O168	0	0	0	1	0
O174	0	1	0	0	1
O177	0	0	0	1	0
O178	1	1	1	0	0
O180	0	1	0	0	0
O181	0	0	2	0	0
O182	0	0	0	0	1
O185	0	1	0	0	0
O186	0	5	5	4	2
O Rough	2	1	1	0	3
O Undetermined	3	2	3	6	6
Unknown	23	9	25	27	61
TOTAL	223	203	265	263	287

* ODH Lab began testing the top 6 non-O157 STEC isolates in 2011; prior to 2011, all non-O157 isolates were sent to CDC for typing.

**HAEMOPHILUS INFLUENZAE , INVASIVE DISEASE
SEROTYPES IN CHILDREN <5 YEARS OF AGE
BY YEAR OF ONSET, OHIO, 2013-2017**

SEROTYPE	2013	2014	2015	2016	2017
Type A	5	0	1	3	6
Type B	1	0	2	2	2
Type C	0	0	0	0	0
Type E	0	0	0	0	1
Type F	2	4	2	2	1
Non-Typeable	21	13	12	12	17
Unknown	0	2	0	1	2
TOTAL	29	19	17	20	29

**MENINGOCOCCAL DISEASE SEROGROUPS BY
YEAR OF ONSET, OHIO, 2013-2017**

SEROGROUP	2013	2014	2015	2016	2017
Group A	0	2	0	0	0
Group B	3	2	13	6	8
Group C	0	0	2	0	1
Group W	2	5	0	0	0
Group Y	4	1	1	2	2
Not Groupable	0	0	2	0	1
Unknown	1	2	0	0	0
TOTAL	10	12	18	8	12

**SALMONELLA SEROTYPES BY YEAR OF ONSET,
OHIO, 2013-2017**

SEROTYPE	2013	2014	2015	2016	2017
Abony	0	1	0	0	1
Adelaide	0	0	0	0	2
Agbeni	9	7	9	15	26
Agona	8	10	5	10	12
Agoueve	2	0	0	0	0
Alachua	1	1	0	0	0
Albert	0	0	2	0	0
Altona	2	1	1	0	0
Anatum	6	4	4	10	5
Antsalova	0	0	0	0	1
Apapa	0	2	1	0	0
Baildon	0	5	6	2	2
Bareilly	3	7	10	6	20
Barranquilla	0	0	0	0	1
Benin	0	0	0	0	1
Bere	1	0	0	0	0
Berta	10	6	6	22	11
Blijdorp	1	0	0	0	0
Blockley	0	1	0	0	1
Bodjonogoro	1	0	0	0	0
Bonariensis	0	0	0	1	0
Bongori	0	0	2	0	0
Bovis-morbificans	2	3	9	9	6
Braenderup	20	28	24	40	61
Brandenburg	0	2	1	2	2
Bredeney	2	1	0	1	1
Buzu	0	0	0	1	0
Cannstatt	0	0	0	0	1
Cerro	0	1	0	0	3
Chailey	1	0	3	0	0
Chandans	0	0	0	0	1
Chester	1	3	3	0	5
Choleraesuis	0	0	0	1	0
Corvallis	0	0	0	2	2
Cotham	0	2	3	1	2
Cubana	0	1	0	0	2
Derby	1	4	0	4	2
Dublin	3	2	11	11	6
Durban	0	2	0	1	0
Ealing	2	0	1	0	1
Eastbourne	0	0	0	4	1
Enteritidis	289	305	397	412	328
Fluntern	1	0	0	0	0
Fresno	0	1	0	0	0
Gaminara	4	0	2	3	2
Gatuni	0	0	0	0	1
Gera	2	0	0	0	0
Give	1	0	1	2	2
Glostrup	0	0	0	1	1
Goldcoast	0	0	0	0	1
Grumpensis	0	0	0	0	1
Guinea	0	0	0	1	1
Hadar	2	4	6	2	24
Haifa	0	0	0	2	1
Hartford	11	12	15	37	31
Hato	0	0	0	2	0
Havana	2	0	0	1	1
Heidelberg	27	32	44	35	16
Holcomb	1	1	1	1	1
Hvittingfoss	2	2	1	2	1
Indiana	0	0	1	1	0
Infantis	42	40	33	40	35
Inverness	0	0	0	0	1
Irumu	0	0	1	0	0
Isangi	0	0	2	0	0
Javiana	26	35	35	40	28
Johannesburg	1	0	2	1	2

**SALMONELLA SEROTYPES BY YEAR OF ONSET,
OHIO, 2013-2017**

SEROTYPE	2013	2014	2015	2016	2017
Kentucky	1	0	6	0	2
Kiambu	1	1	1	2	0
Kingston	0	1	0	0	0
Kintambo	0	0	2	0	0
Kokomlemle	0	1	0	0	0
Kottbus	0	0	1	0	0
Larochelle	0	0	0	0	1
Lagon	0	0	1	0	0
Lexington	0	1	0	0	0
Lille	2	0	0	0	0
Litchfield	3	4	6	4	15
Loma Linda	2	0	0	1	0
Lome	0	1	0	1	0
London	1	0	0	2	2
Madelia	0	0	1	0	0
Manhattan	2	0	1	1	1
Matadi	0	1	0	1	0
Mbandaka	13	5	2	15	8
Miami	6	5	2	2	2
Michigan	0	1	0	0	0
Mikawasima	0	0	1	0	0
Minnesota	1	1	1	0	0
Mississippi	2	12	3	1	1
Monschau	2	2	2	0	2
Montevideo	20	19	20	29	28
Muenchen	25	15	27	24	13
Muenster	1	3	4	9	7
Muenster, var 15 +	0	0	0	0	0
Napoli	0	1	4	2	1
New Mexico	0	1	0	0	0
Newport	61	62	60	98	87
Norwich	1	2	9	2	0
Nottingham	0	0	1	0	0
Nyanza	0	0	1	0	0
Offa	0	1	0	0	0
Ohio	1	2	2	1	0
Okatie	0	0	0	1	1
Onderstepoort	0	0	1	0	0
Oranienburg	21	25	39	49	34
Oslo	0	1	2	3	2
Pakistan	0	0	1	0	0
Panama	3	2	5	0	4
Paratyphi A	2	6	1	1	3
Paratyphi B	0	0	0	0	2
Paratyphi B, var L - Tartrate +	51	38	17	12	9
Paratyphi B, var Tartrate +	1	0	0	0	0
Pensacola	0	1	0	0	0
Pomona	1	2	3	0	1
Poona	5	6	8	7	6
Potsdam	1	0	0	0	0
Putten	0	1	0	0	0
Reading	2	1	4	2	1
Rissen	1	2	1	0	0
Roodepoort	1	0	0	0	0
Rubislaw	1	1	2	1	1
Saarbruecken	0	0	1	0	0
Saint Paul	19	27	13	18	26
San Diego	4	4	5	3	3
Schwartzengrund	2	2	9	10	5
Senftenberg	1	1	3	1	2
Shubra	0	0	1	0	1
Singapore	1	0	0	2	0
Skansen	0	1	0	0	0
Southbank	0	0	0	0	1
Stanley	10	5	14	3	4
Stanleyville	0	1	0	0	0
Suelldorf	1	0	0	0	0

**SALMONELLA SEROTYPES BY YEAR OF ONSET,
OHIO, 2013-2017**

SEROTYPE	2013	2014	2015	2016	2017
Takoradi	0	0	1	0	0
Tallahassee	0	0	1	0	0
Tarshyne	0	2	0	0	0
Teddington	0	0	1	0	0
Telelkebir	0	0	2	3	2
Tennessee	0	1	1	7	0
Thompson	13	15	18	38	29
Toucra	0	0	0	1	0
Tudu	0	0	1	0	0
Typhimurium	196	155	194	195	145
Typhimurium, var Copenhagen	1	0	0	1	0
Uganda	2	4	1	4	2
Uganda, var 15 +	1	0	0	0	0
Urbana	3	3	2	1	1
Uzaramo	0	1	0	0	0
Virchow	3	2	3	6	2
Wandsworth	1	0	0	0	0
Waycross	0	1	1	0	0
Weltevreden	1	2	4	2	4
Wien	0	0	1	0	1
Woodinville	0	0	0	0	1
Worthington	0	0	1	3	4
(I) 1,3,19:Non-motile	0	0	0	0	1
(I) 3,10:-:1,5	1	0	0	0	0
(I) 3,10:-:l,w	1	0	0	0	0
(I) 3,10:Non-motile	0	1	0	0	0
(I) 4,5:b:-	1	0	0	0	0
(I) 4,5,12:-:1,2	0	1	0	0	0
(I) 4,5,12:-:2	0	1	0	0	0
(I) 4,5,12:b:-	0	0	3	13	1
(I) 4,5,12:b:-, var L + Tartrate +	0	1	0	0	0
(I) 4,5,12:b:-, var L - Tartrate +	0	0	21	21	22
(I) 4,5,12:d:-	0	1	0	0	0
(I) 4,5,12:i:-	118	72	85	82	74
(I) 4,5,12:Non-motile	1	1	1	0	0
(I) 4:i:-	0	0	0	0	1
(I) 6,7:-:1,5	0	1	0	0	0
(I) 6,7:-:5	0	3	0	0	0
(I) 6,7:-:l,w	1	0	0	0	0
(I) 6,7:k:-	1	1	0	0	0
(I) 6,7:Non-motile	0	1	1	0	0
(I) 6,8:Non-motile	0	1	1	0	0
(I) 9,12:g,z51:-	0	1	0	0	0
(I) 9,12:Non-motile	2	1	1	1	0
(I) 16:l,v:-	0	0	0	0	1
(I) 18:Non-motile	0	0	0	0	0
(I) 47:b:-	0	0	1	0	0
(I) 47:m,t:-	1	0	0	0	0
(I) Rough Os:e,h:e,n,z15	1	0	0	1	0
(I) Rough Os:g,m:-	1	1	0	0	0
(I) Rough Os:i:2	0	1	0	0	0
(I) Rough Os:m,t:-	0	0	1	1	0
(I) Rough Os:Non-motile	0	0	1	0	0
(II) 21:z10:z6	0	0	0	0	0
(II) 58:l,z13,z28:z6	0	0	0	1	2
(III) Arizona	0	1	0	0	0
(IIIa) 13,23:z4,z23:-	0	0	0	1	0
(IIIa) 50:z4,z23:-	0	0	0	1	0
(IIIa) 56:z4:-	0	0	0	0	1
(IIIb) 16:Non-motile	1	0	0	0	0
(IIIb) 47:k:-	0	1	0	0	0
(IIIb) 47:k:z53	0	0	1	0	0
(IIIb) 47:Non-motile	0	1	0	0	0
(IIIb) 48:i:z	1	1	0	0	2
(IIIb) 48:z52:z	0	0	2	1	0
(IIIb) 48:Non-motile	1	0	0	0	0
(IIIb) 50:k:-	0	0	0	0	0

**SALMONELLA SEROTYPES BY YEAR OF ONSET,
OHIO, 2013-2017**

SEROTYPE	2013	2014	2015	2016	2017
(IIIb) 50:k:e,n,x	0	0	1	0	0
(IIIb) 50:k:z	1	0	0	0	1
(IIIb) 50:r:z	0	0	1	0	0
(IIIb) 50:Non-motile	1	0	0	0	0
(IIIb) 60:i:e,n,x,z15	0	0	0	1	0
(IIIb) 60:r:e,n,x,z15	0	1	1	1	2
(IIIb) 60:r:z	2	0	0	0	0
(IIIb) 60:z52:z53	0	0	0	1	0
(IIIb) 61:-:1,5,7	0	0	0	1	0
(IIIb) 61:-:z53	0	1	0	0	0
(IIIb) 61:c:z35	0	0	1	0	0
(IIIb) 61:i:z53	0	0	0	0	1
(IIIb) 61:l,v,z13:1,5	0	1	0	0	0
(IIIb) 61:l,v,z13:1,5,7	0	0	0	1	0
(IIIb) 61:l,z13:1,5	2	0	0	0	0
(IIIb) 61:z52:z53	0	0	1	0	0
(IIIb) 65:k:-	0	1	0	0	0
(IIIb) Rough Os:k:-	0	0	0	0	1
(IIIb) Rough Os:k:z35	0	0	0	1	0
(IIIb) Rough Os:Undetermined	0	0	0	0	1
(IIIb) Rough Os:Non-motile	0	1	0	0	0
(IV) 1,40:z4,z32:-	1	0	0	0	0
(IV) 17:z29:-	0	1	0	0	0
(IV) 40:z4,z24:-	0	0	0	0	1
(IV) 44:z4,z23:-	0	1	2	1	0
(IV) 44:z4,z32:-	1	0	0	0	0
(IV) 45:g,z51:-	0	1	0	2	0
(IV) 48:g,z51:- (Marina)	0	1	0	0	1
(IV) 50:g,z51:- (Vassenaar)	0	1	1	0	3
(IV) 50:z4,z23:- (Flint)	0	1	0	0	0
Rough Os:e,h:1,6	1	0	0	0	0
Rough Os:f,g:-	0	0	0	1	0
Rough Os:g,m,s:-	1	1	0	0	1
Rough Os:i:1,2	0	1	0	0	0
Rough Os:i:2	0	1	0	0	0
Rough Os:m,t:-	0	0	0	1	0
Rough Os:r:1,5	0	0	0	0	1
Rough Os:z:1,6	1	0	0	0	0
Rough Os:Non-motile	0	0	1	0	0
SUB-TOTAL	1,124	1,088	1,290	1,429	1,242

SEROGROUP					
Group A	0	0	1	0	0
Group B	7	5	4	1	1
Group C	3	4	0	5	2
Group C1	0	1	0	0	0
Group D	1	7	1	3	3
Group E	0	0	0	0	1
Group G	0	0	0	1	0
Group H	0	0	0	1	0
SUB-TOTAL	11	17	6	11	7

UNGROUPEd, UNTYPED	55	83	77	88	141
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GRAND TOTAL	1,190	1,188	1,373	1,528	1,390
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GRAPHS OF SELECTED NOTIFIABLE DISEASE INCIDENCE

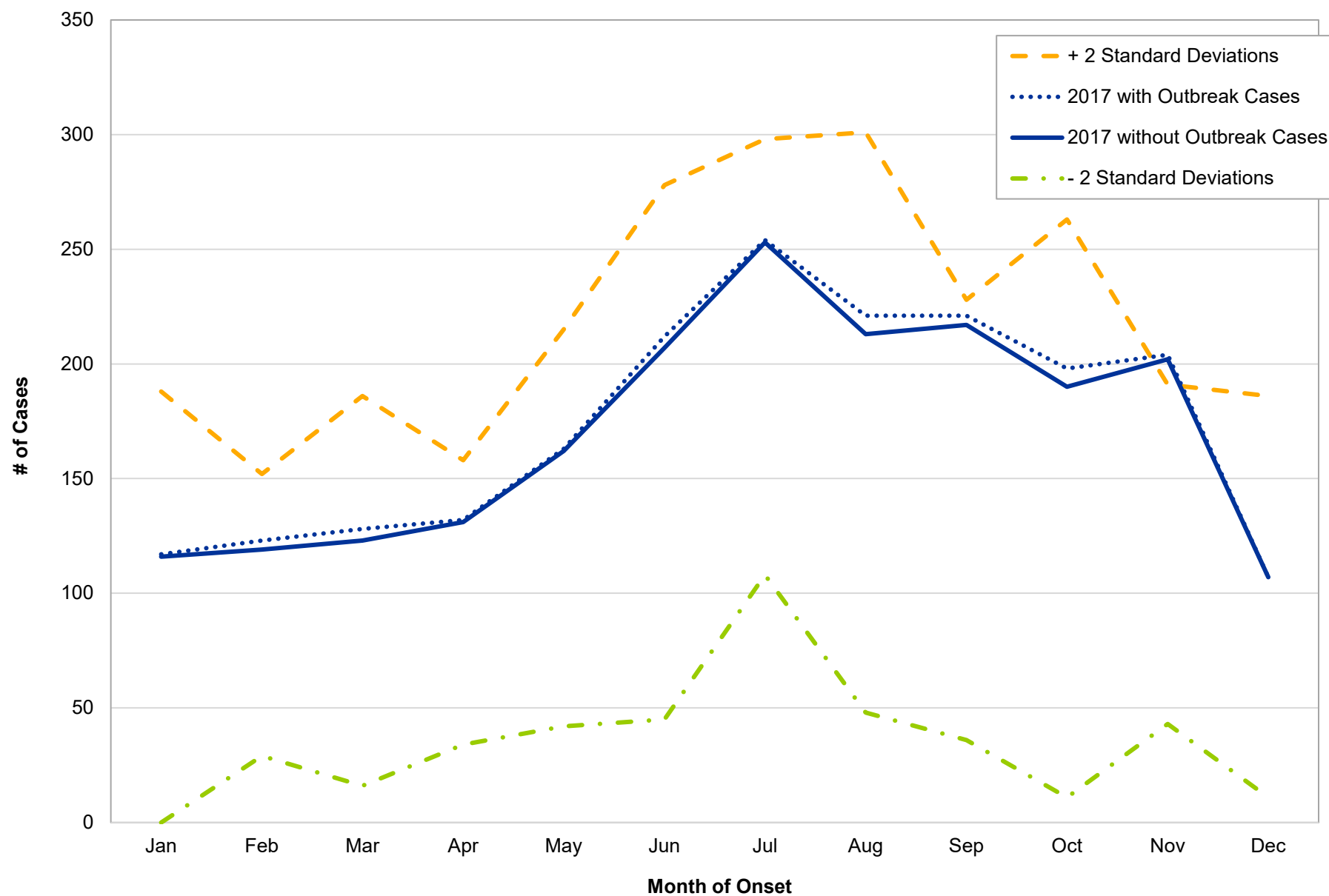
Disease incidence from 2017 is graphically presented to demonstrate general trends in surveillance data for selected Ohio reportable infectious diseases, including any statistically significant changes in the incidence observed. The trend graphs compare disease incidence from 2017 (i.e., observed cases) to baseline disease incidence (i.e., expected cases) by month. Baseline disease incidence was determined by calculating the average disease incidence, excluding outbreak- and cluster-associated cases, throughout the previous three years, 2014-2016. Statistically significant changes in incidence are demonstrated by graphing two standard deviations above and below the average baseline disease incidence. A statistically significant difference in 2017 disease incidence compared to baseline disease incidence suggests the difference is unlikely to have occurred by chance.

General surveillance trends are graphed statewide. The 2017 data represent confirmed and probable cases of selected reportable diseases. In many instances, two trend lines can be seen graphed for 2017 incidence data: one for all cases, including those linked to a known outbreak or cluster, and one for cases not linked to a known outbreak or cluster. It should be noted that not every graph will include a trend line for cases linked to a known outbreak or cluster as not all cases are outbreak- or cluster-associated. For statistical reliability/stability purposes, only diseases for which 10 or more cases were reported in a given month are included in the statewide trends.

Disease data for 2017 and data used in the calculation of the baseline (2014-2016) average are finalized. All data are by month and year of illness onset. The source of the data is the Ohio Disease Reporting System.

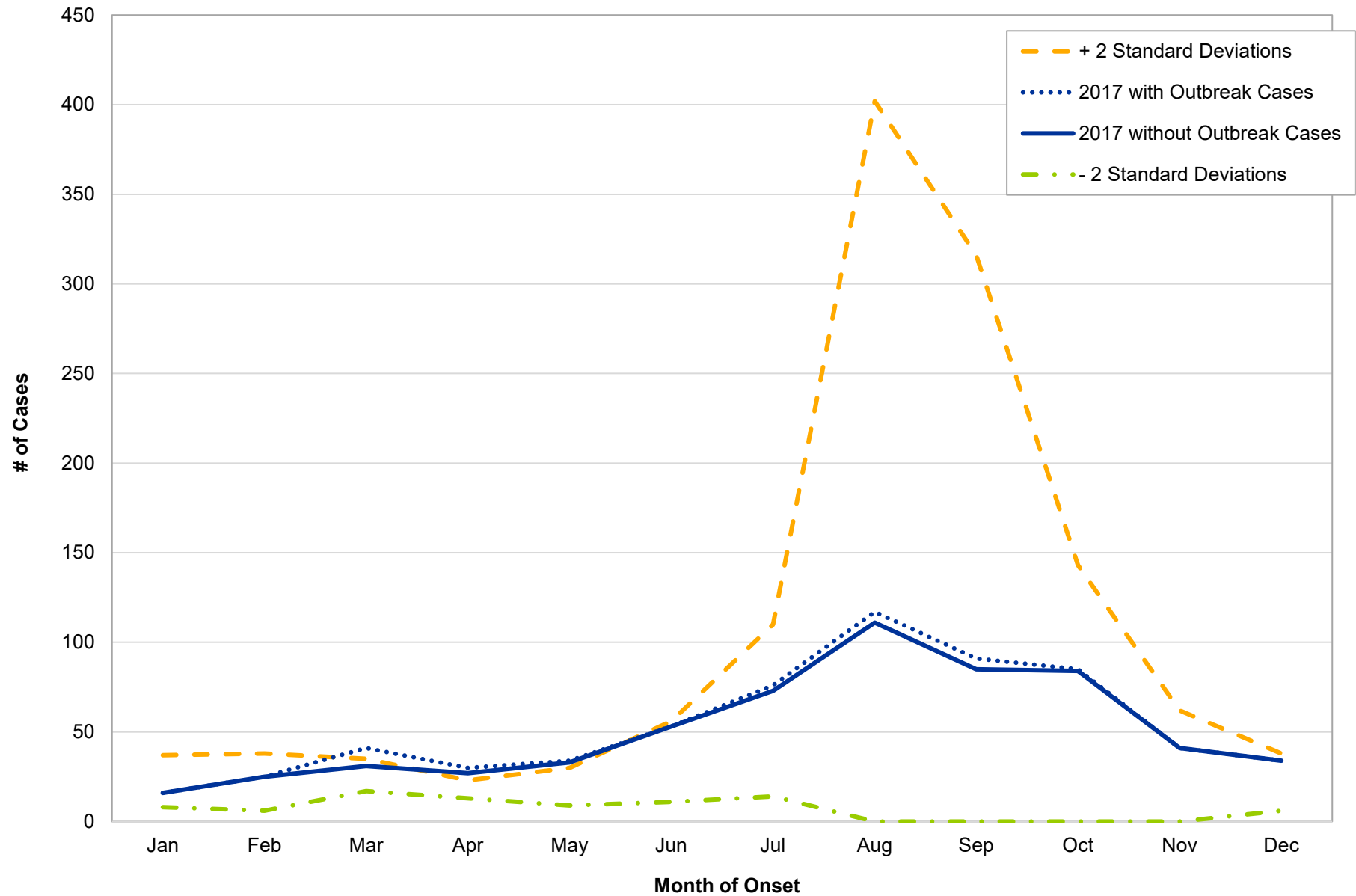
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Campylobacteriosis



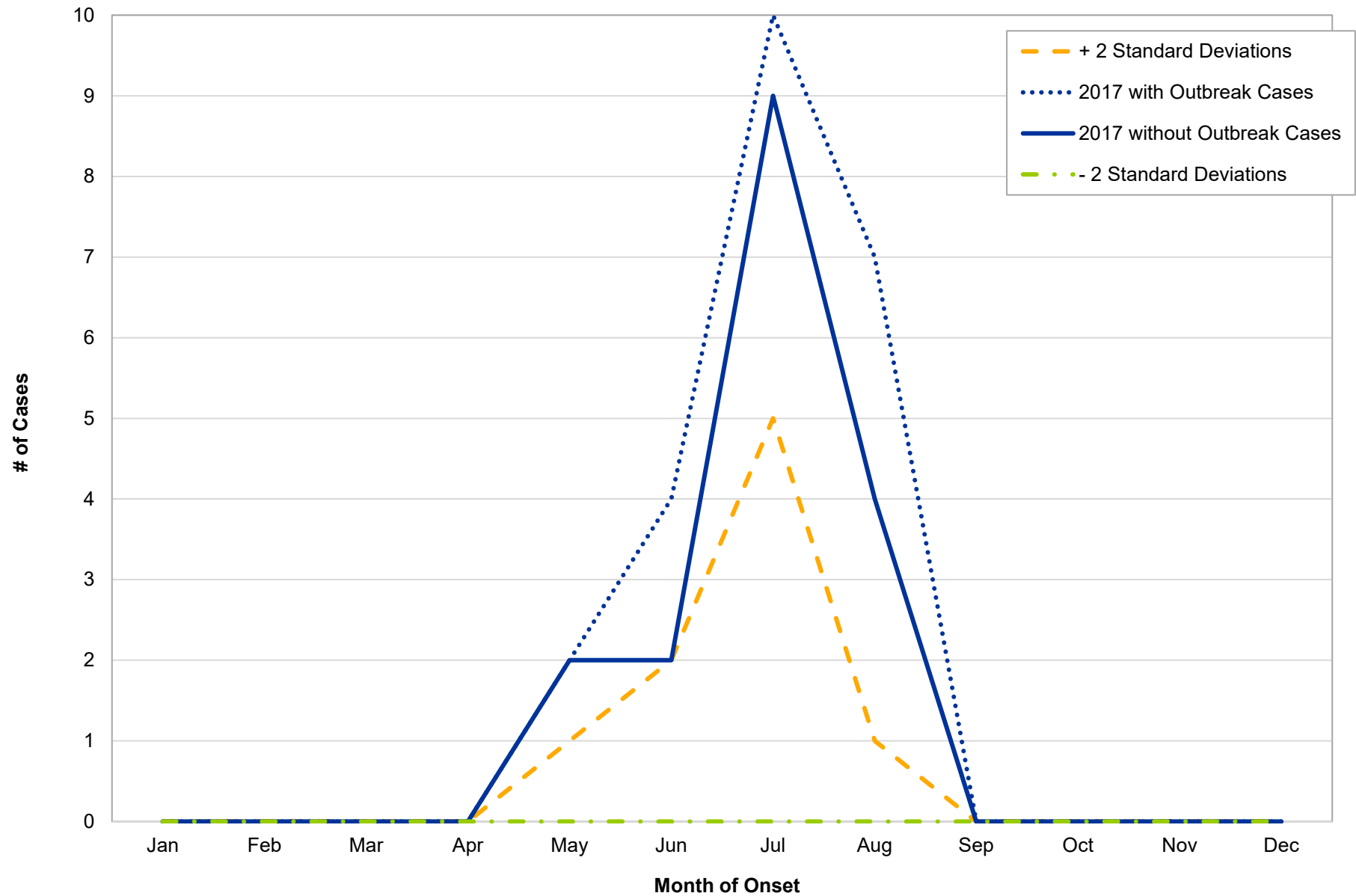
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Cryptosporidiosis



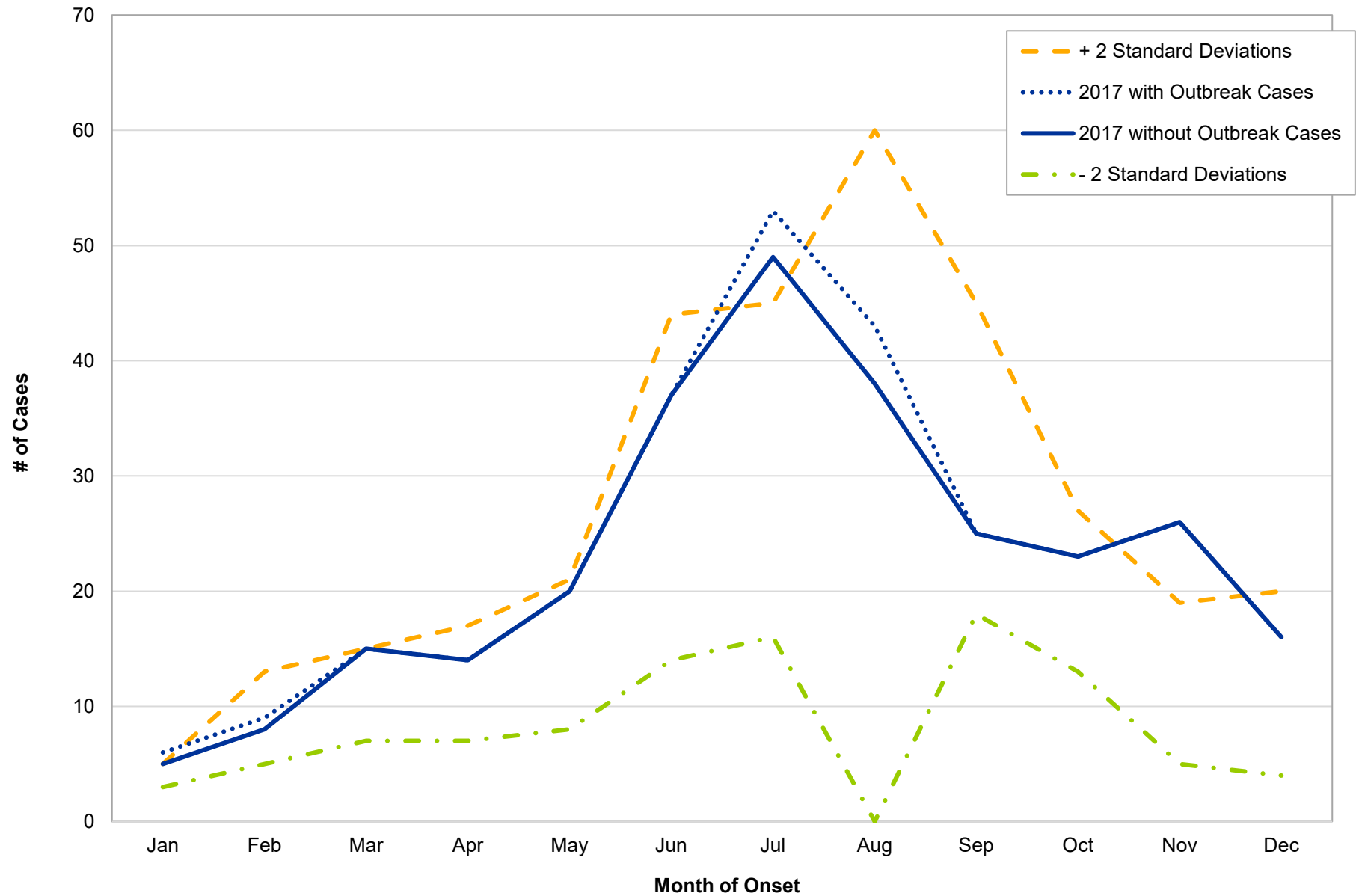
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Cyclosporiasis



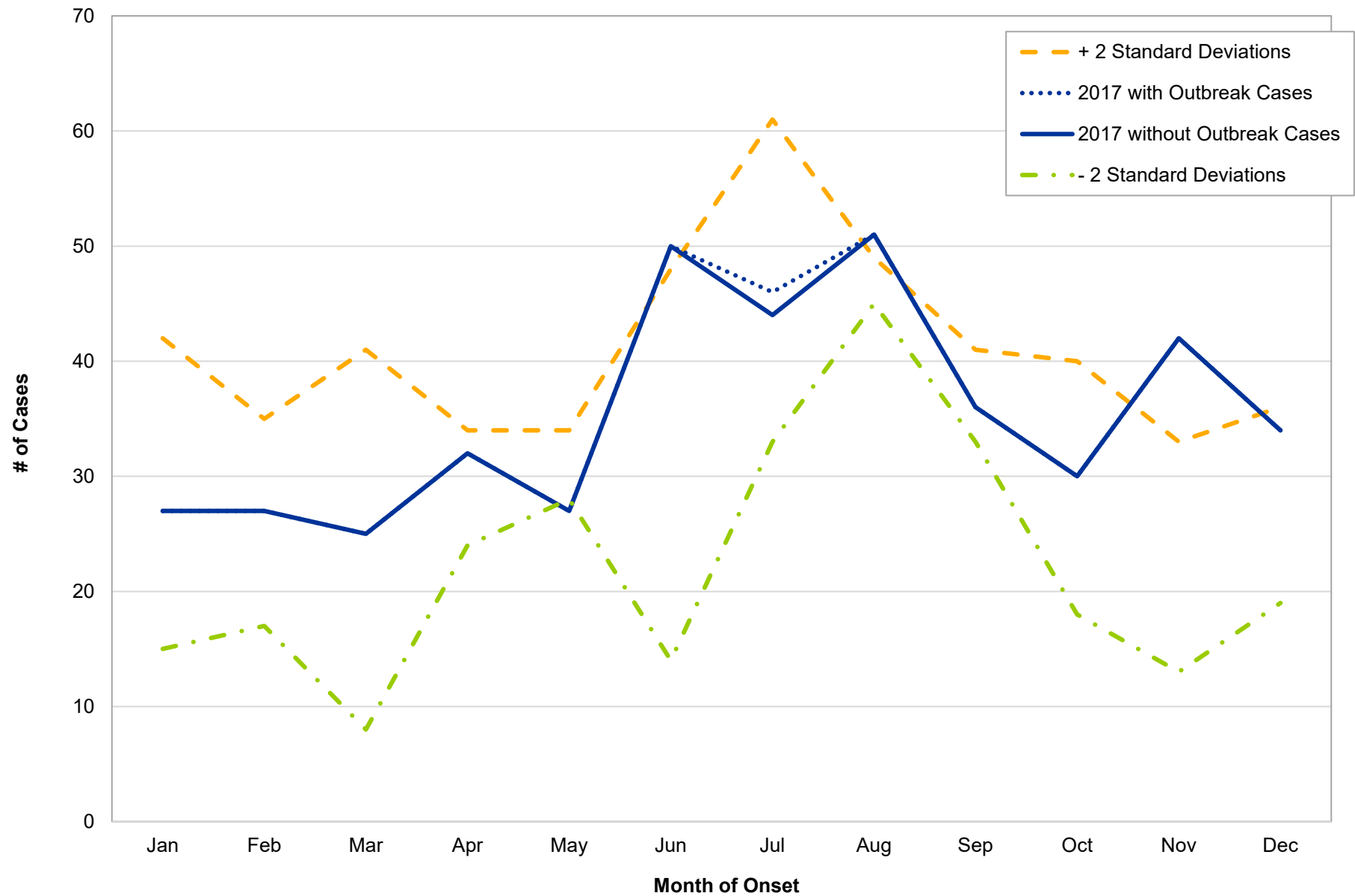
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Escherichia coli, Shiga Toxin-Producing



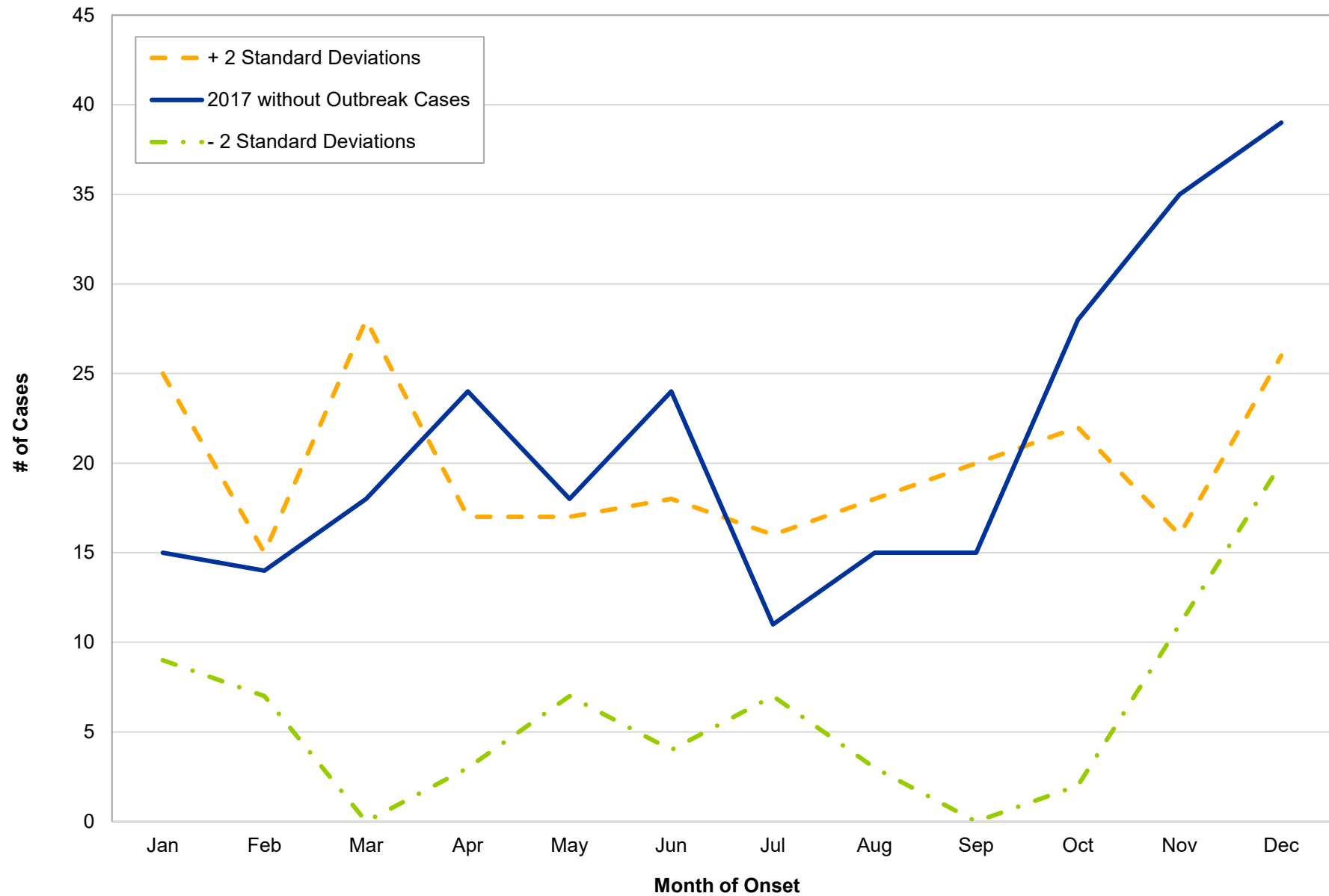
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Giardiasis



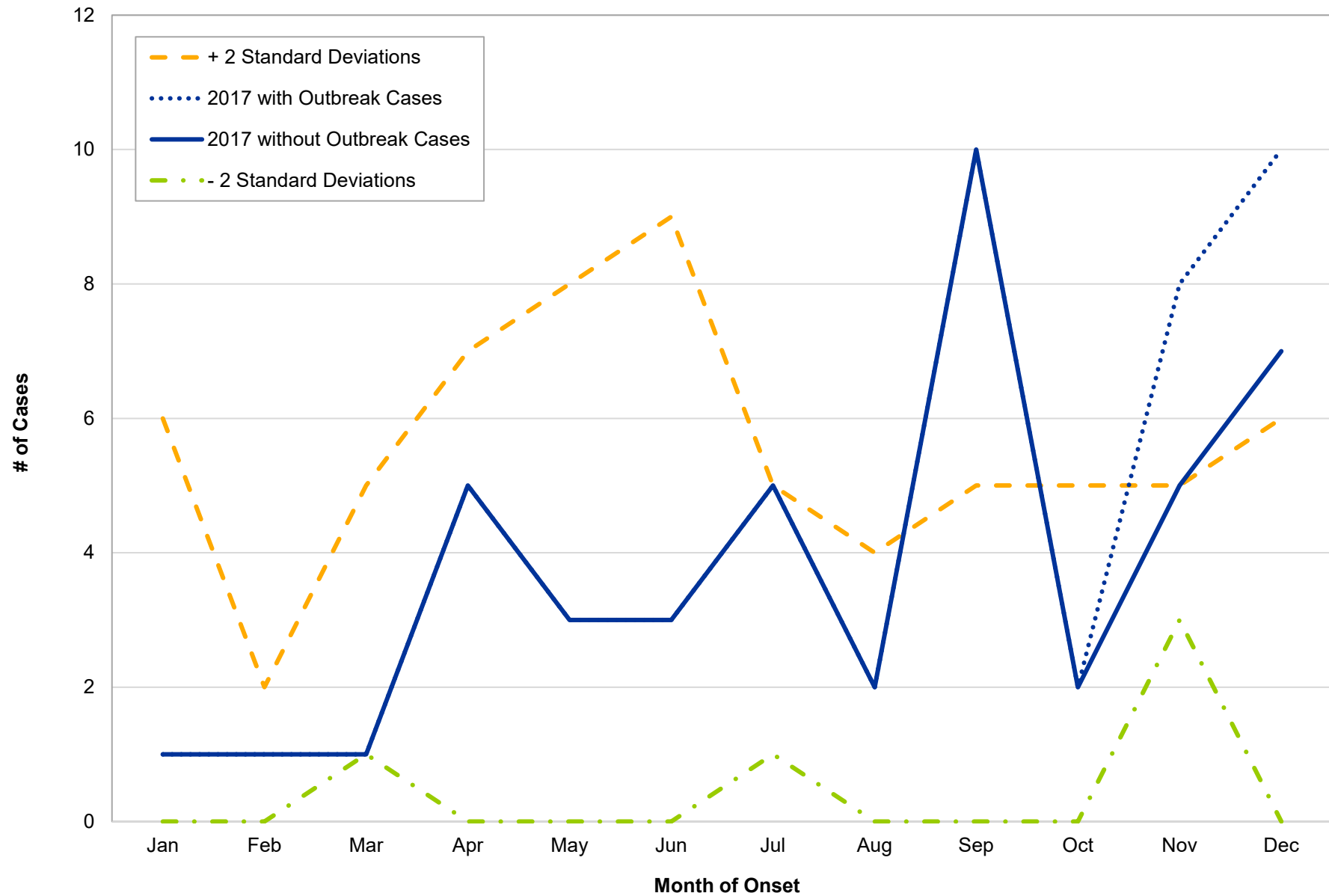
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Haemophilus influenzae, Invasive Disease



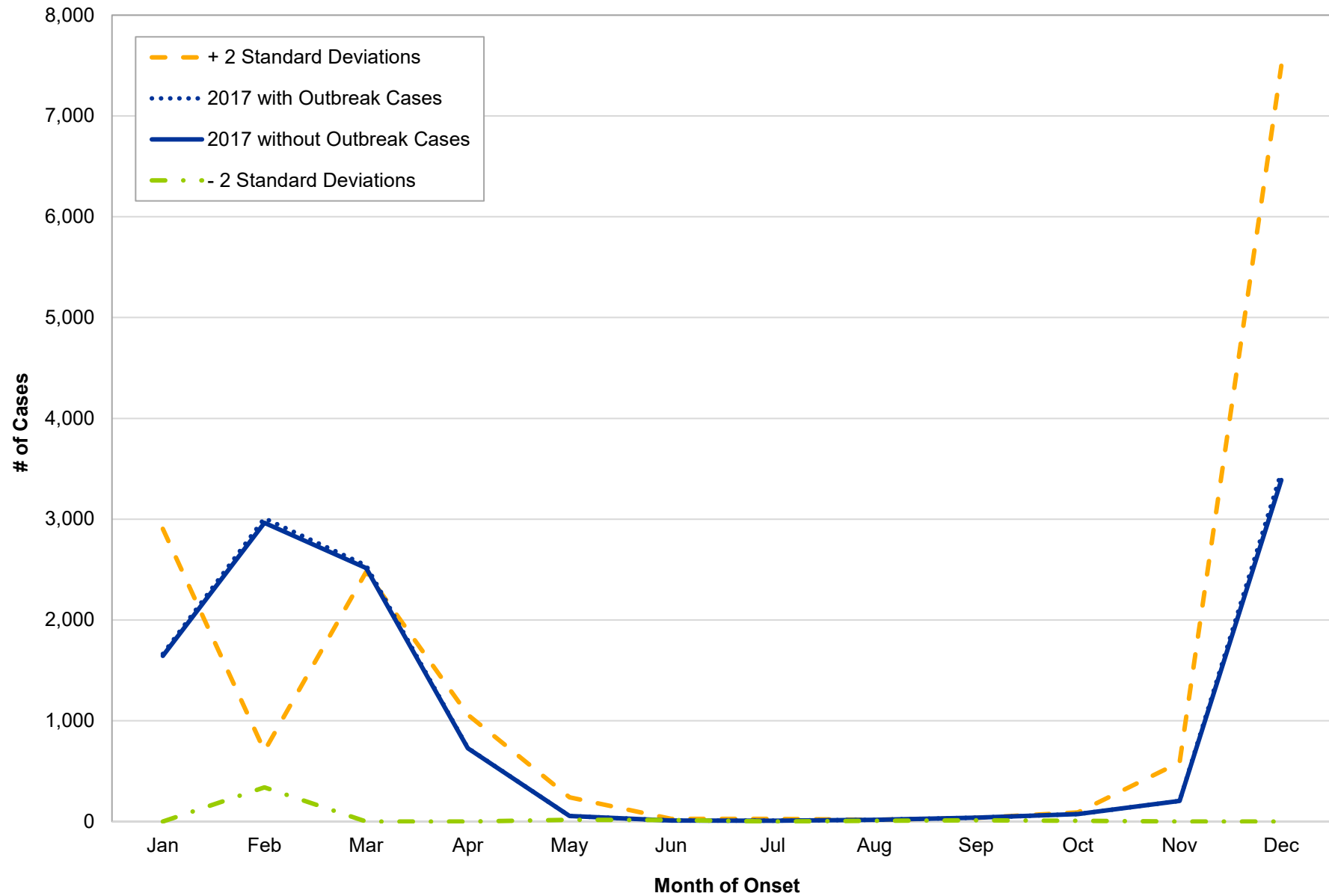
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Hepatitis A



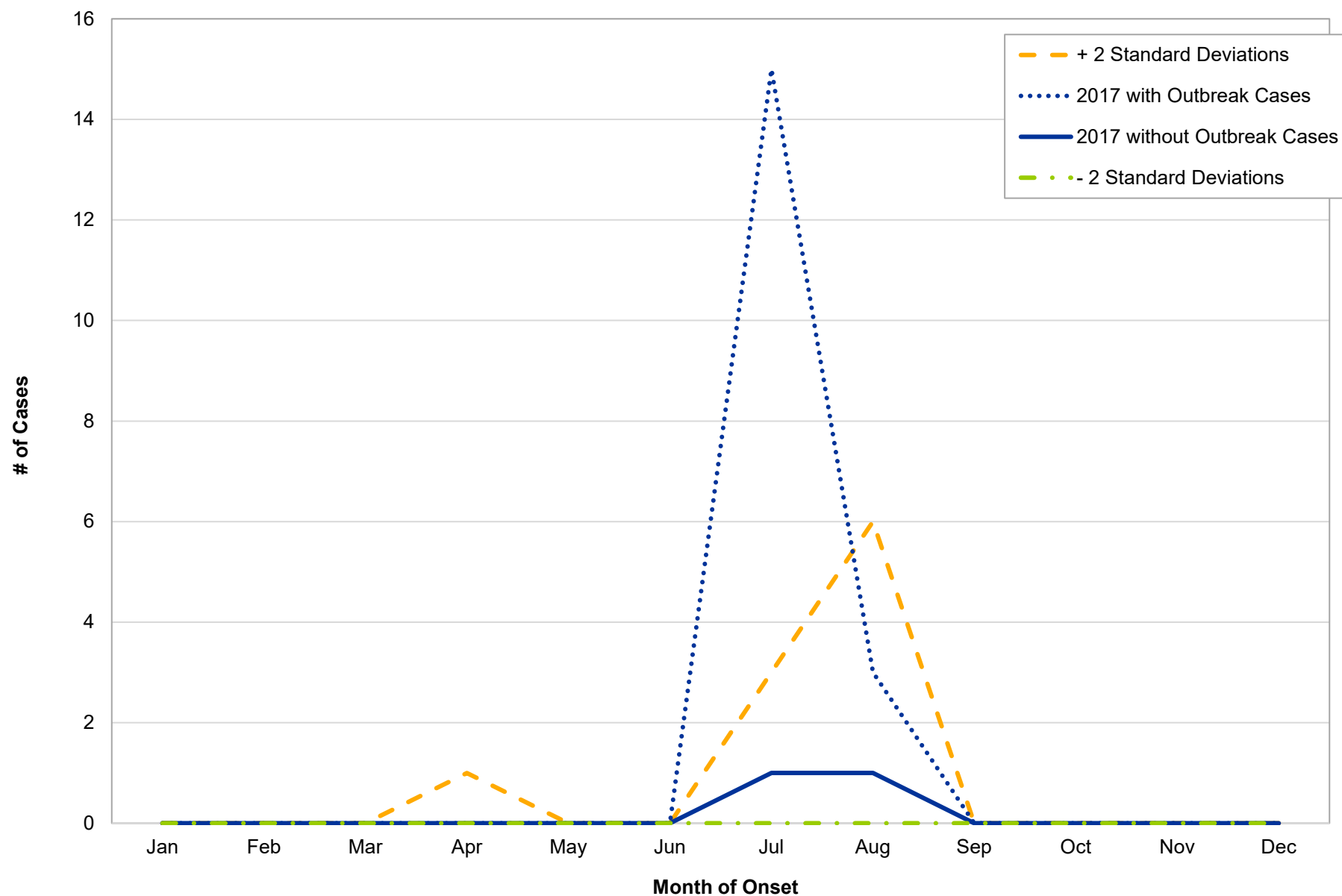
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Influenza-Associated Hospitalization



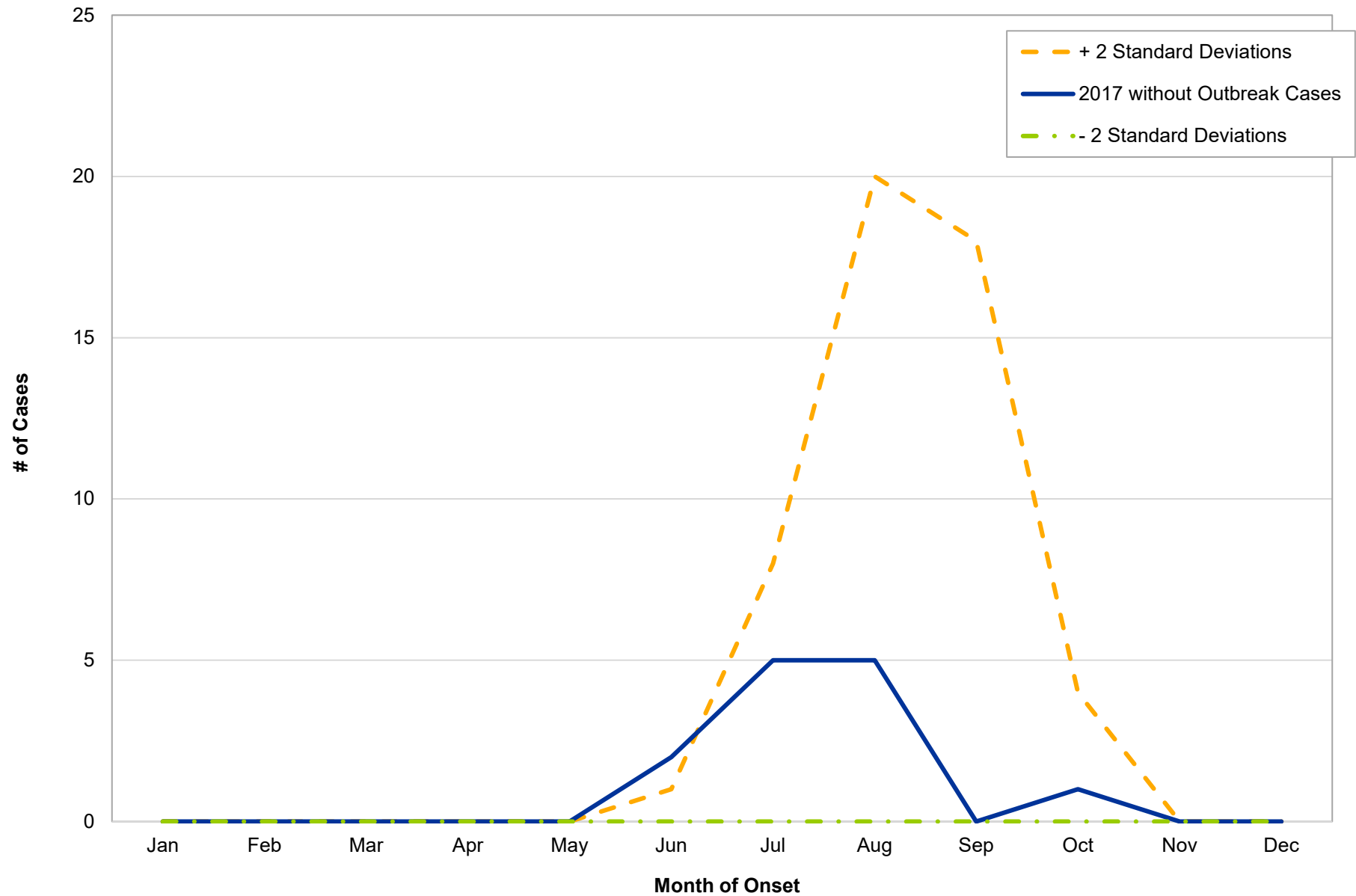
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Influenza A, Novel Virus Infection



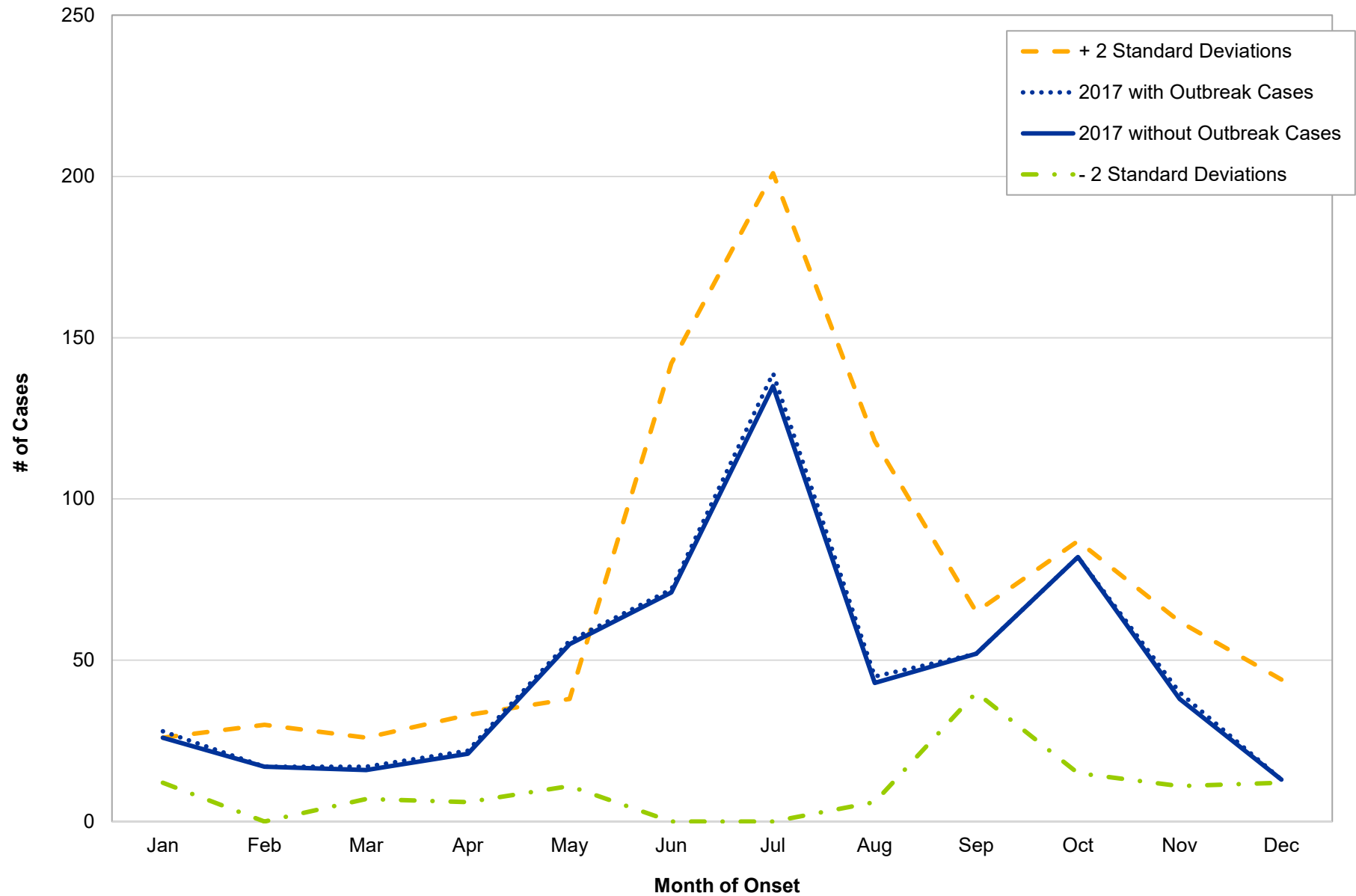
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

La Crosse Virus Disease

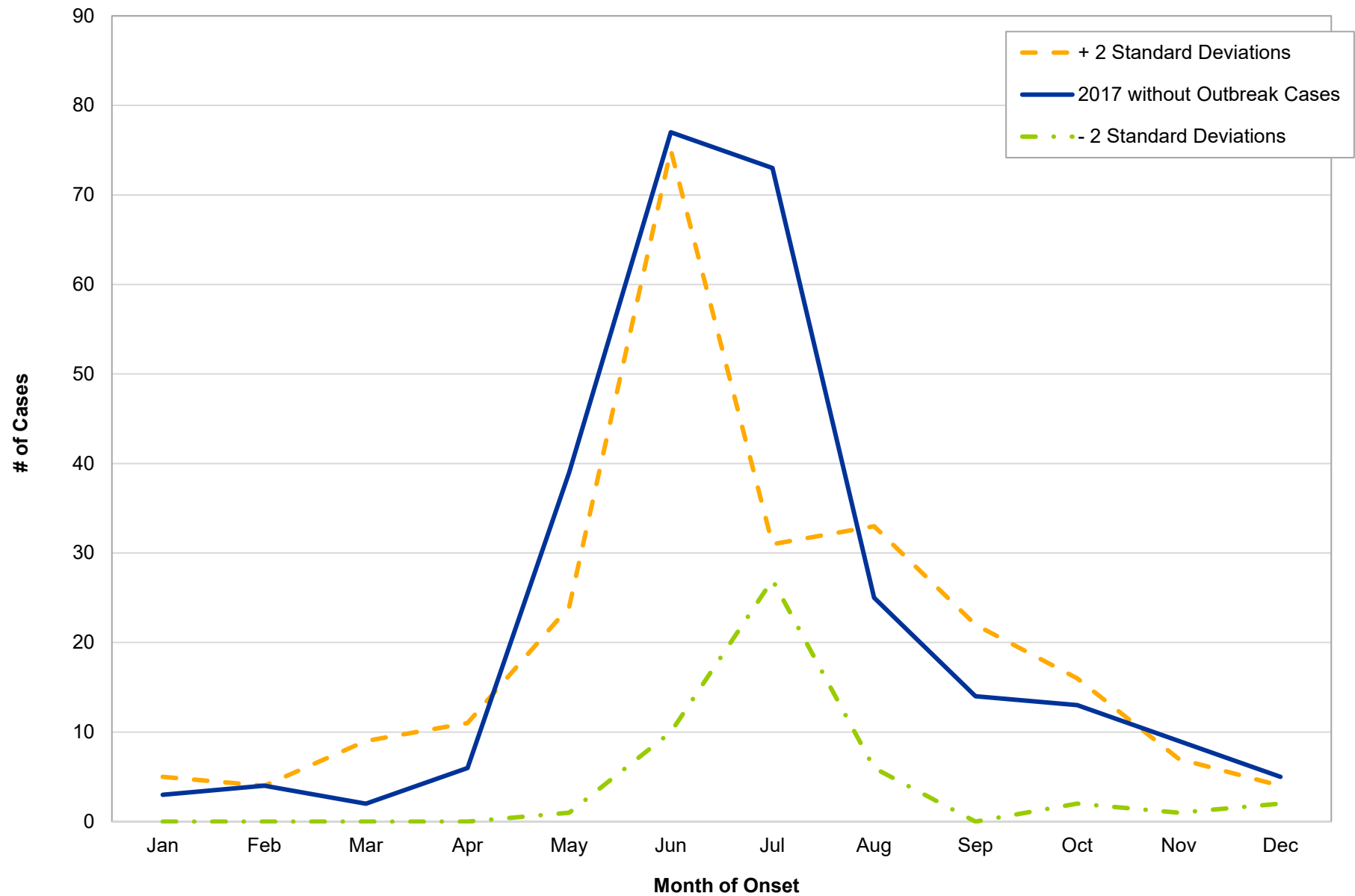


INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Legionellosis

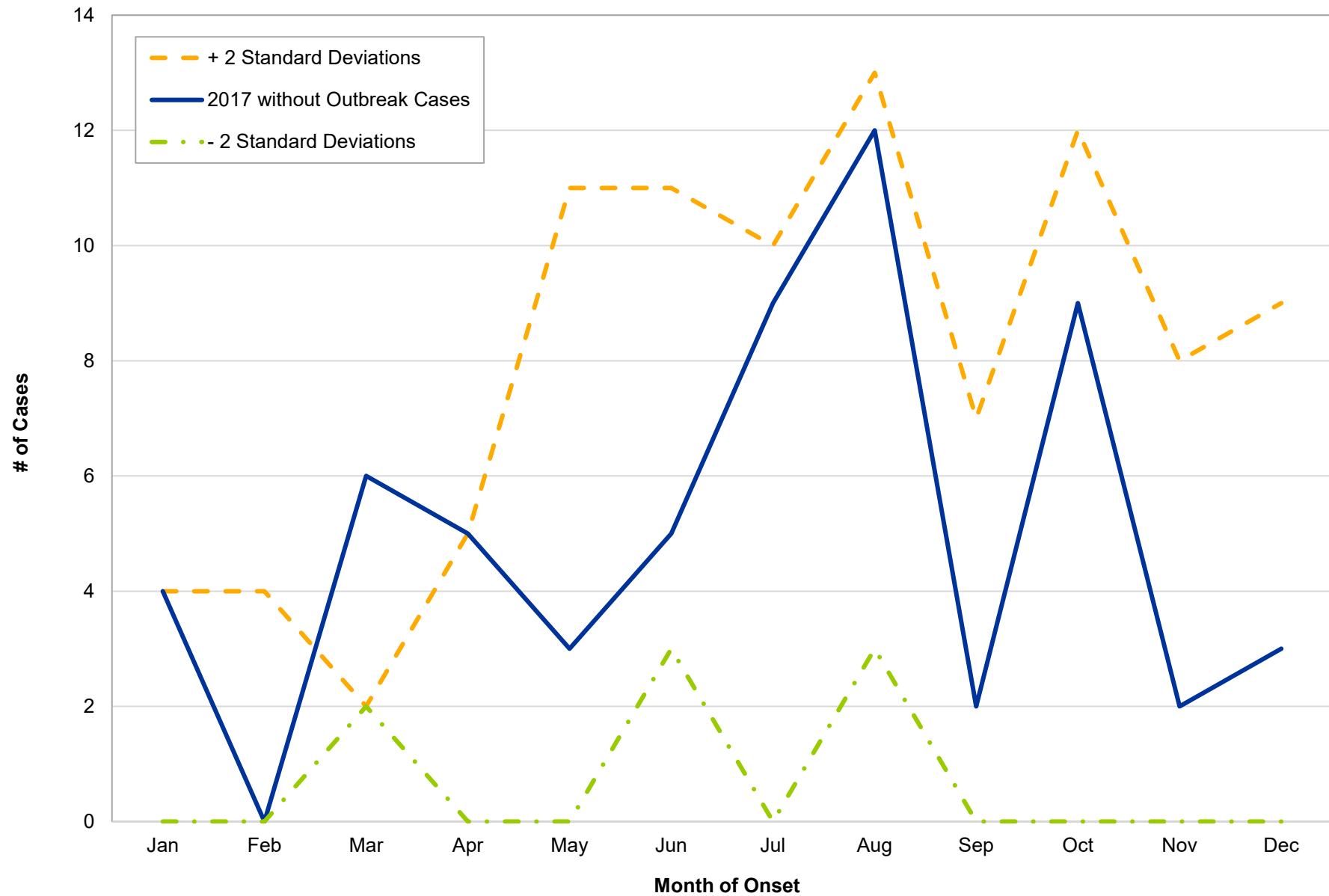


INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017 Lyme Disease



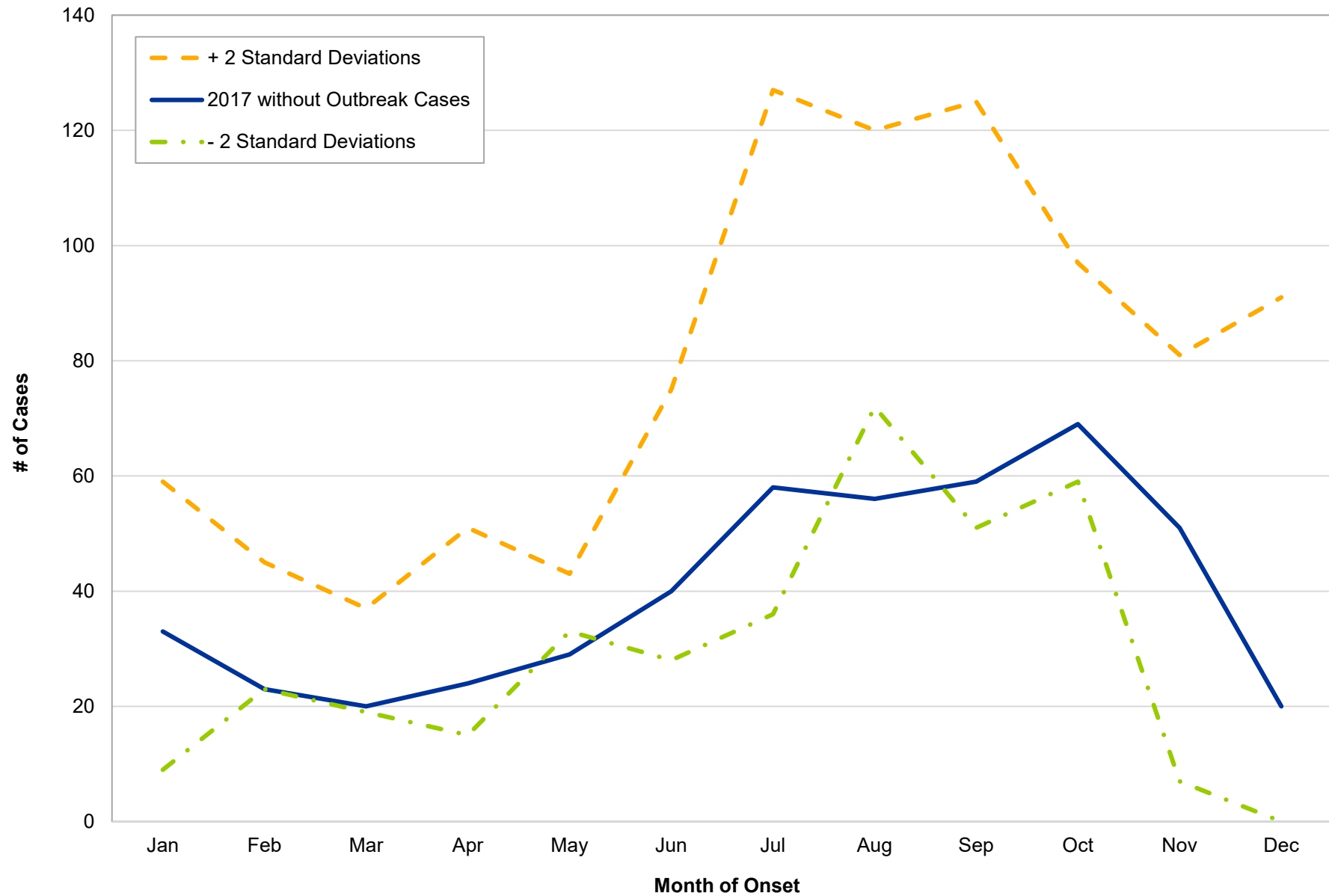
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Malaria



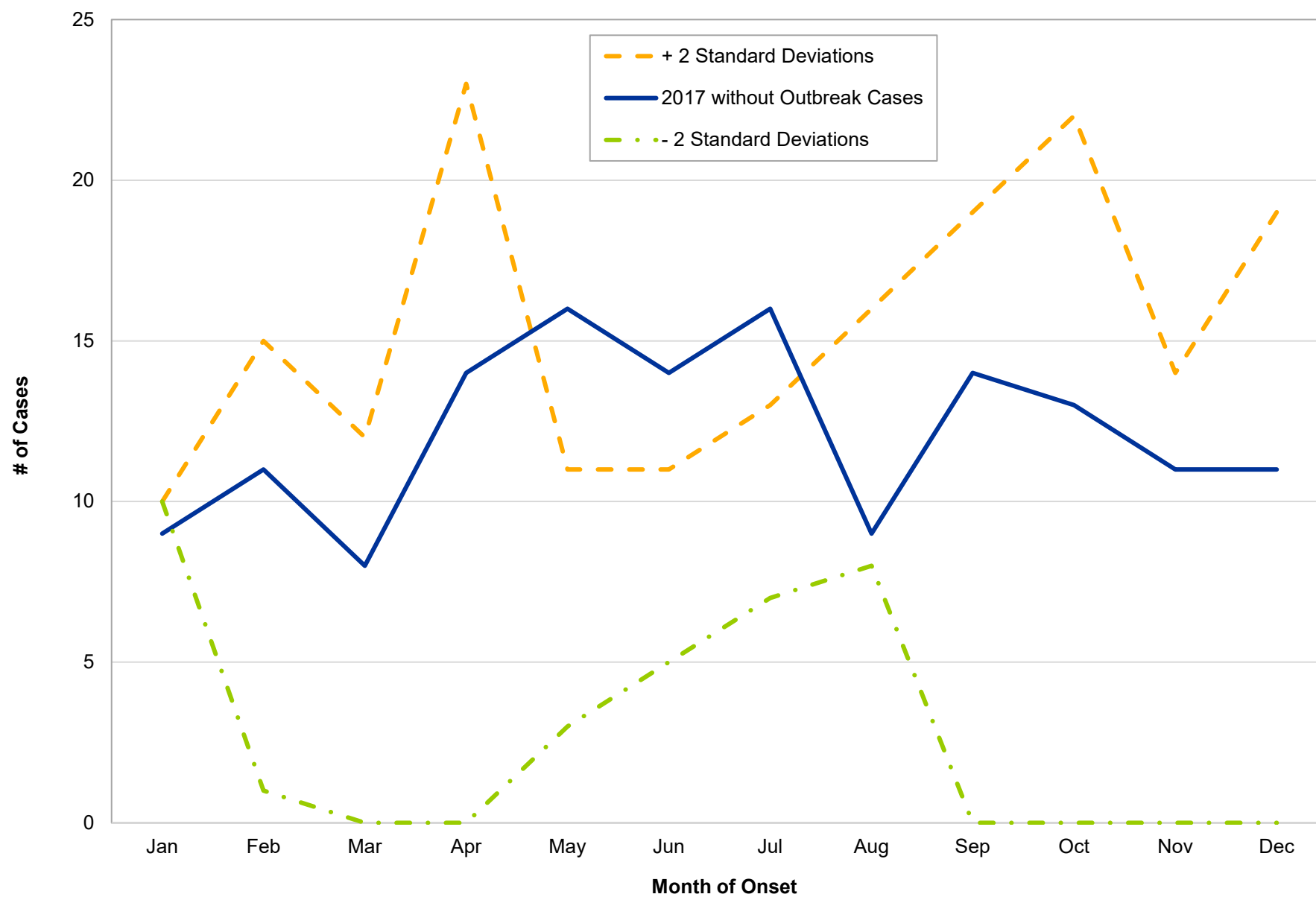
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Meningitis, Aseptic



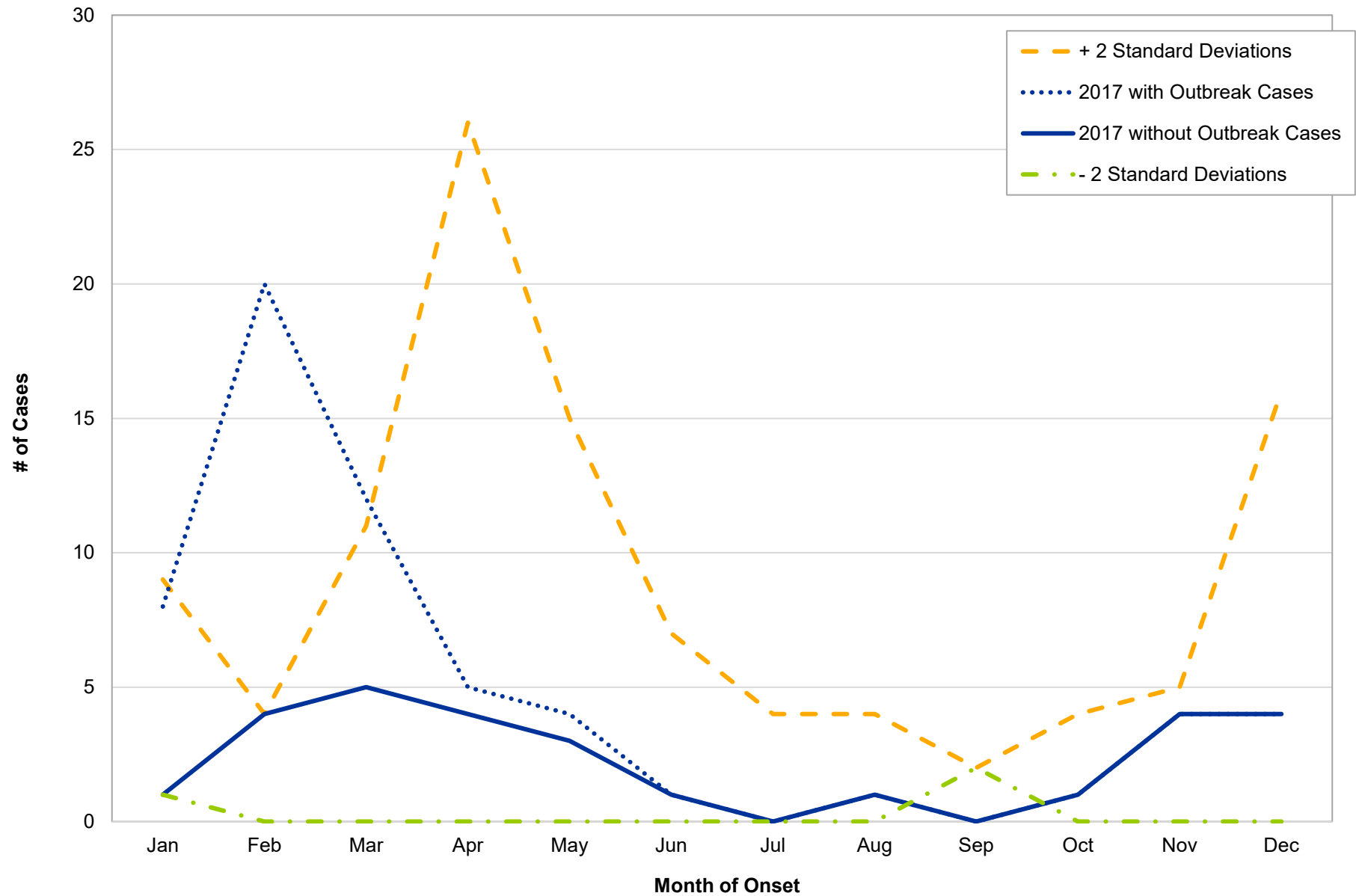
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Meningitis, Other Bacterial



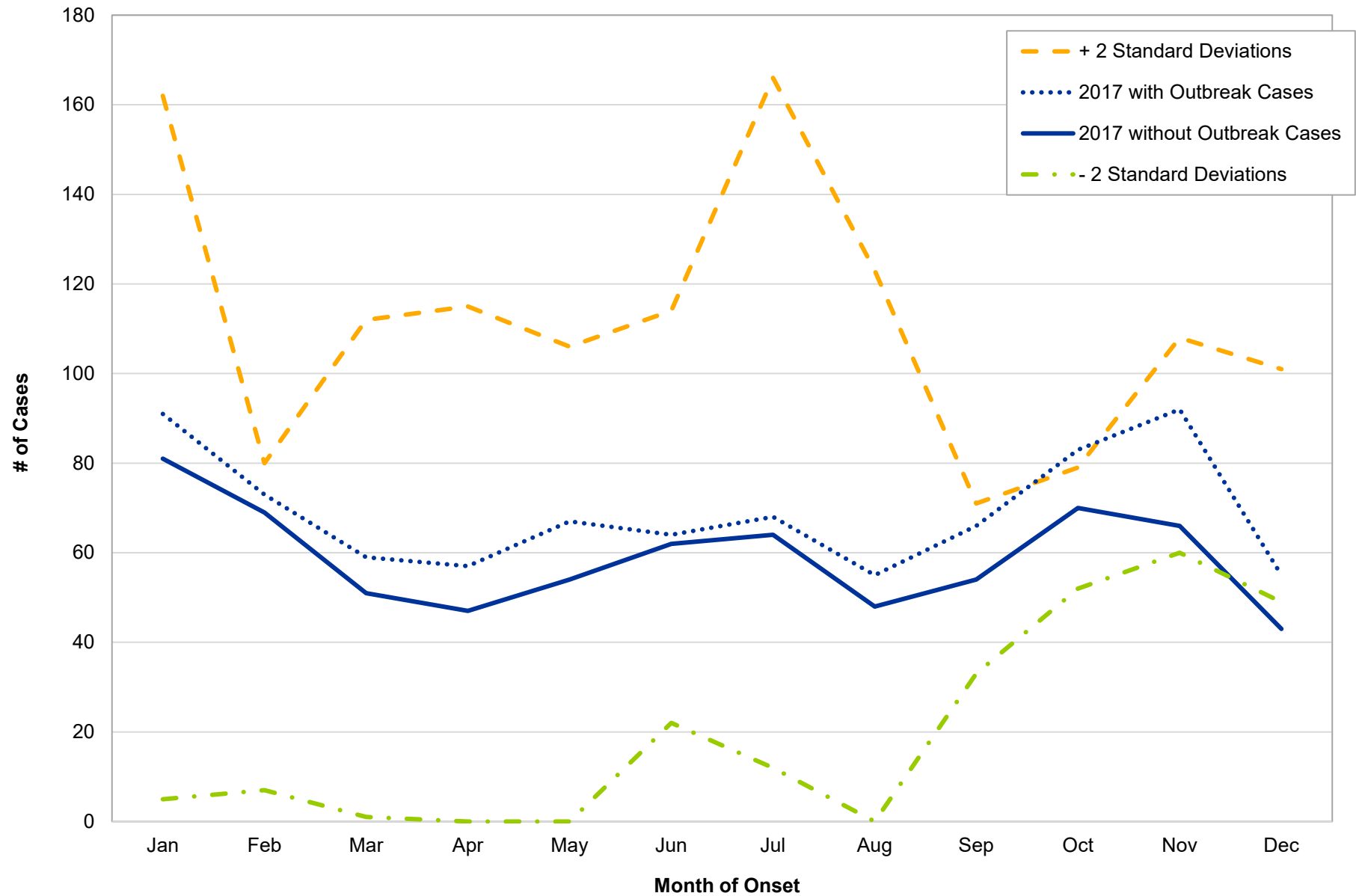
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Mumps



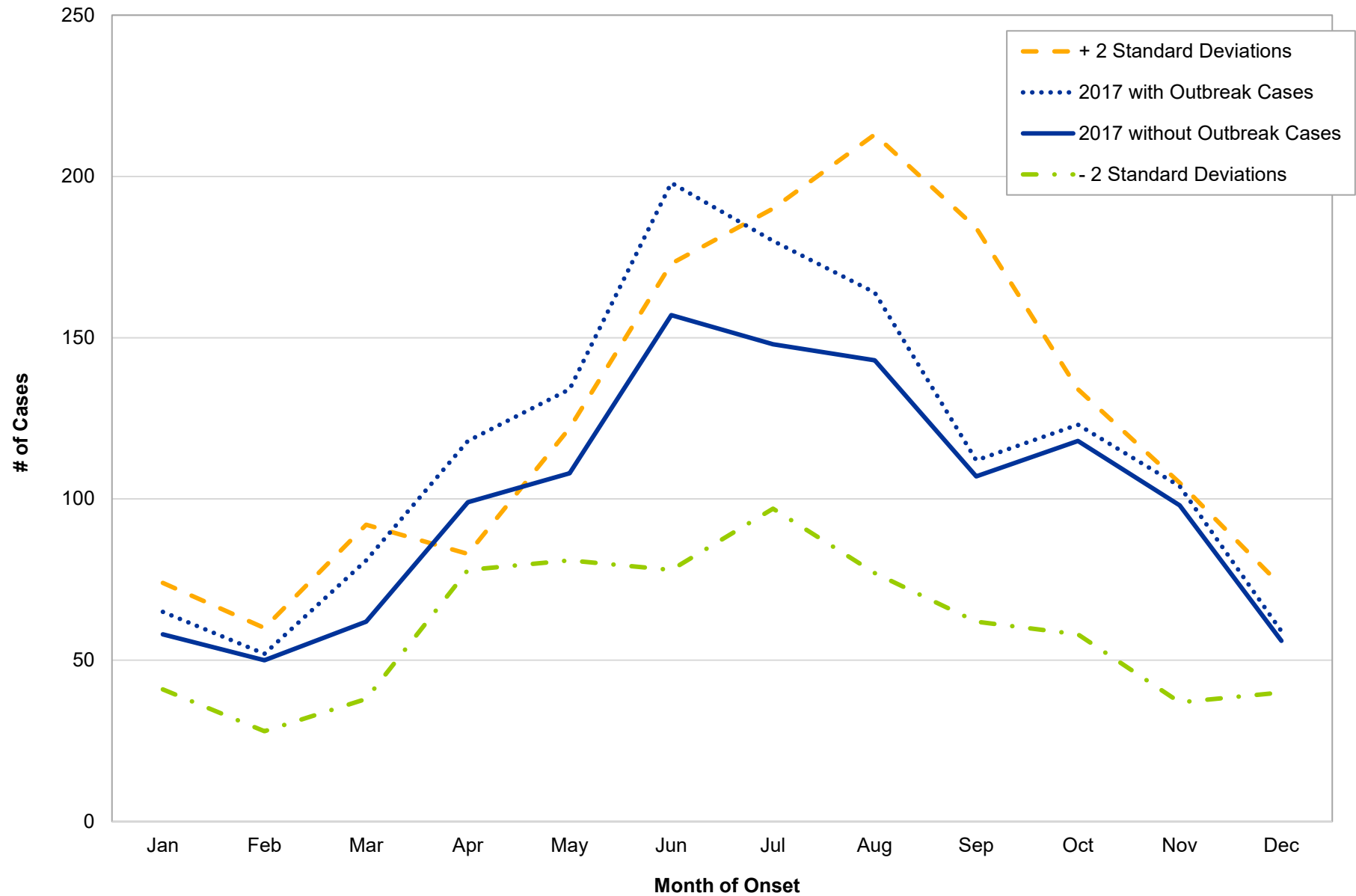
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Pertussis



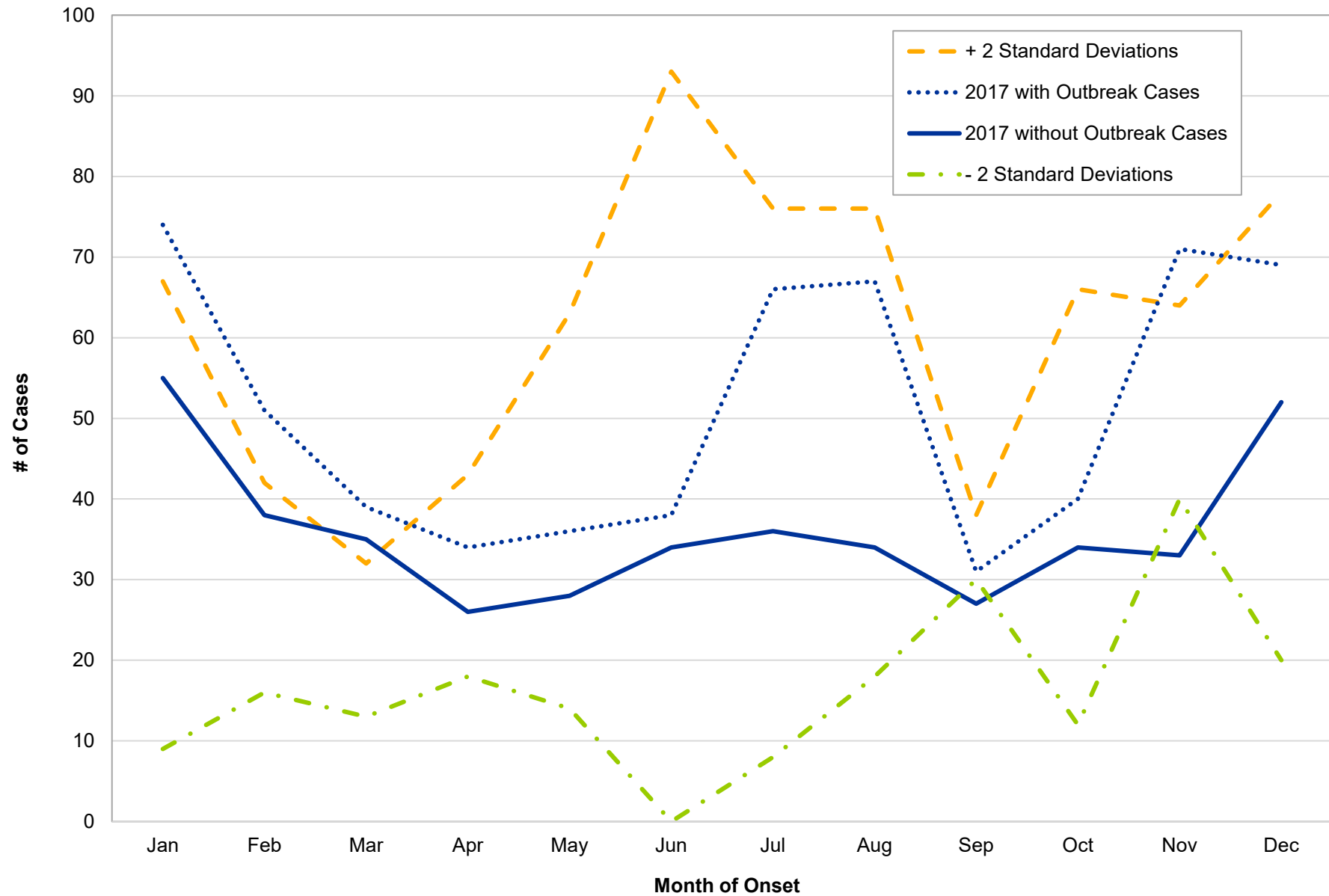
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Salmonellosis



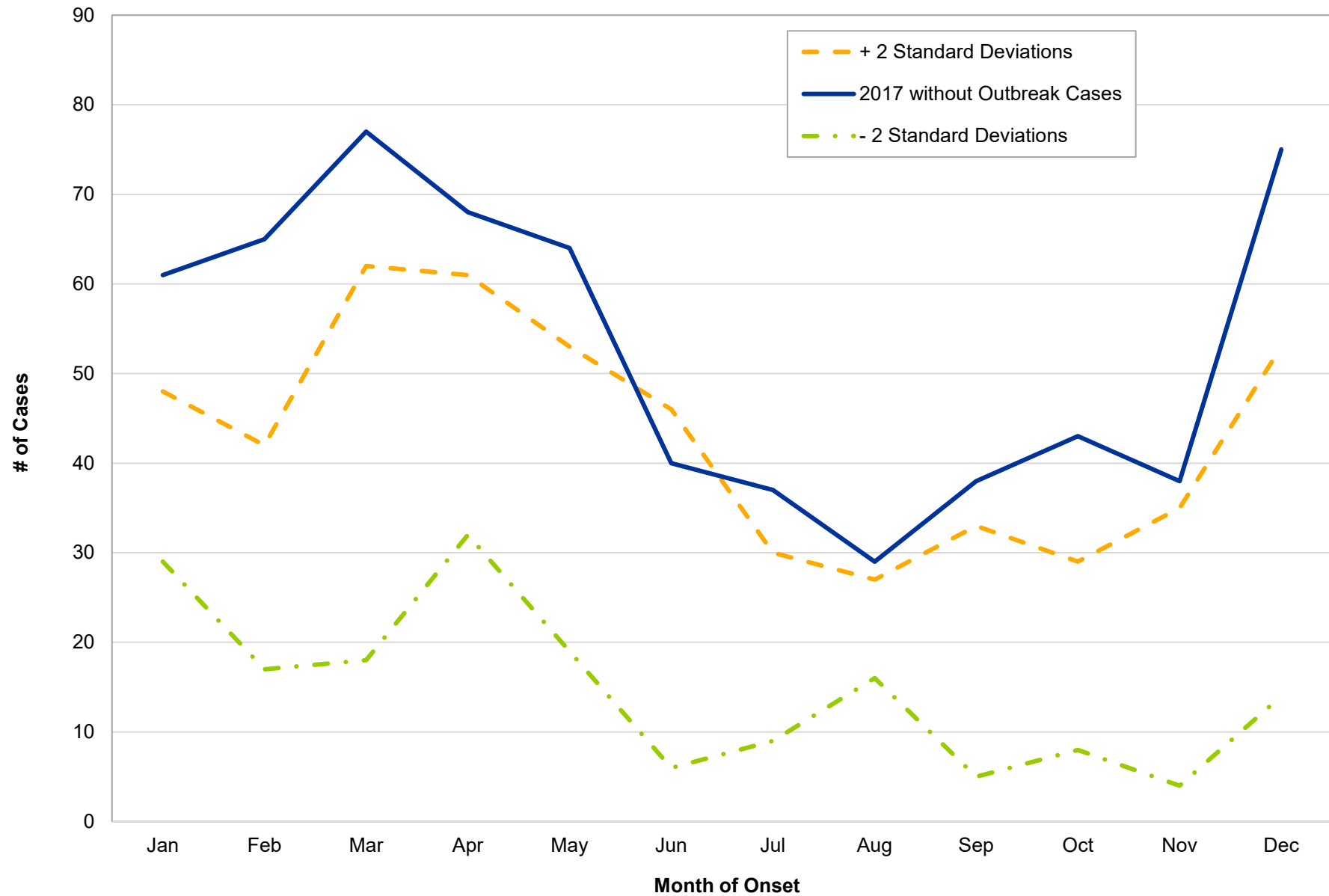
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Shigellosis



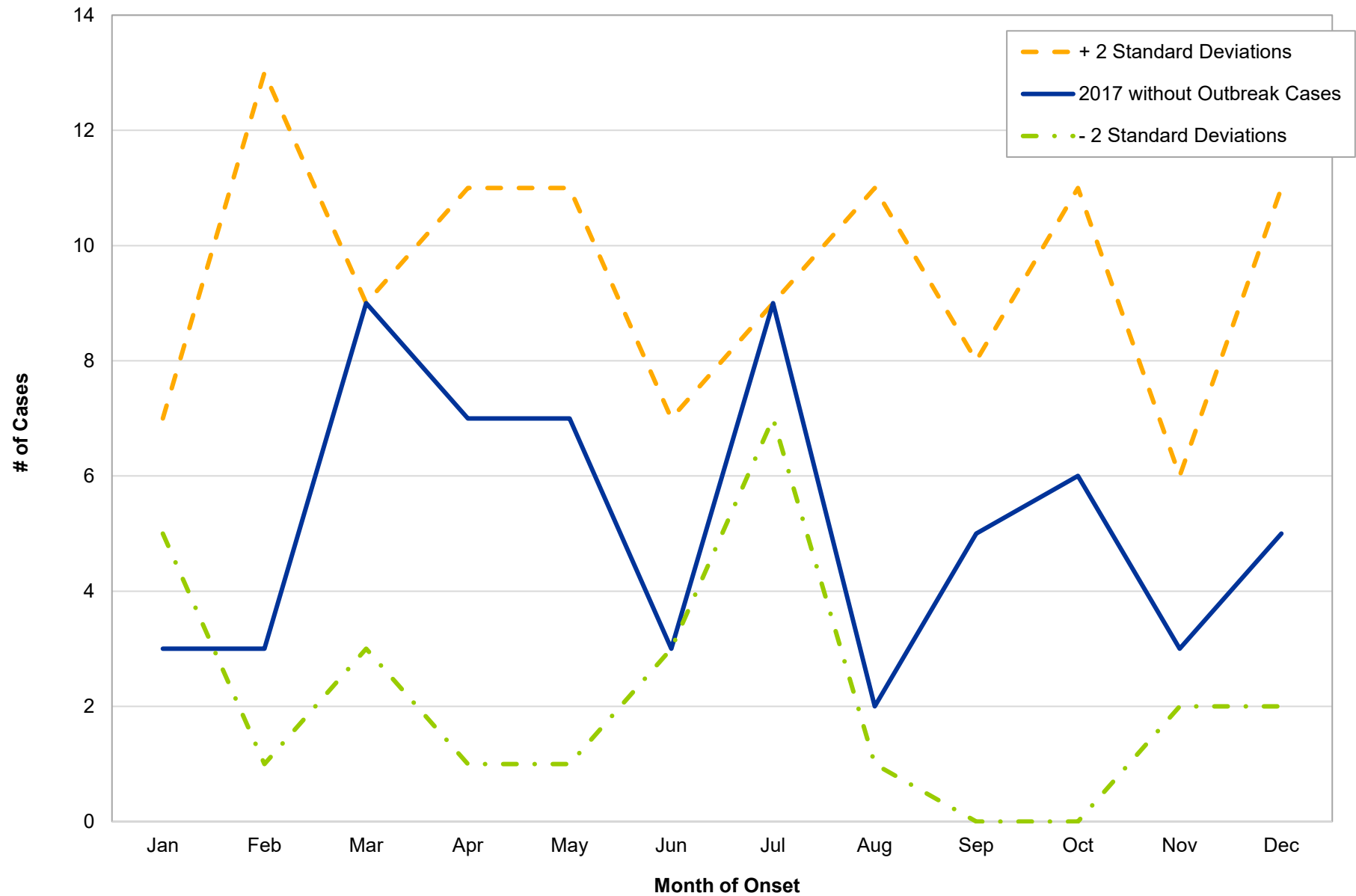
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Streptococcal Disease, Group A, Invasive



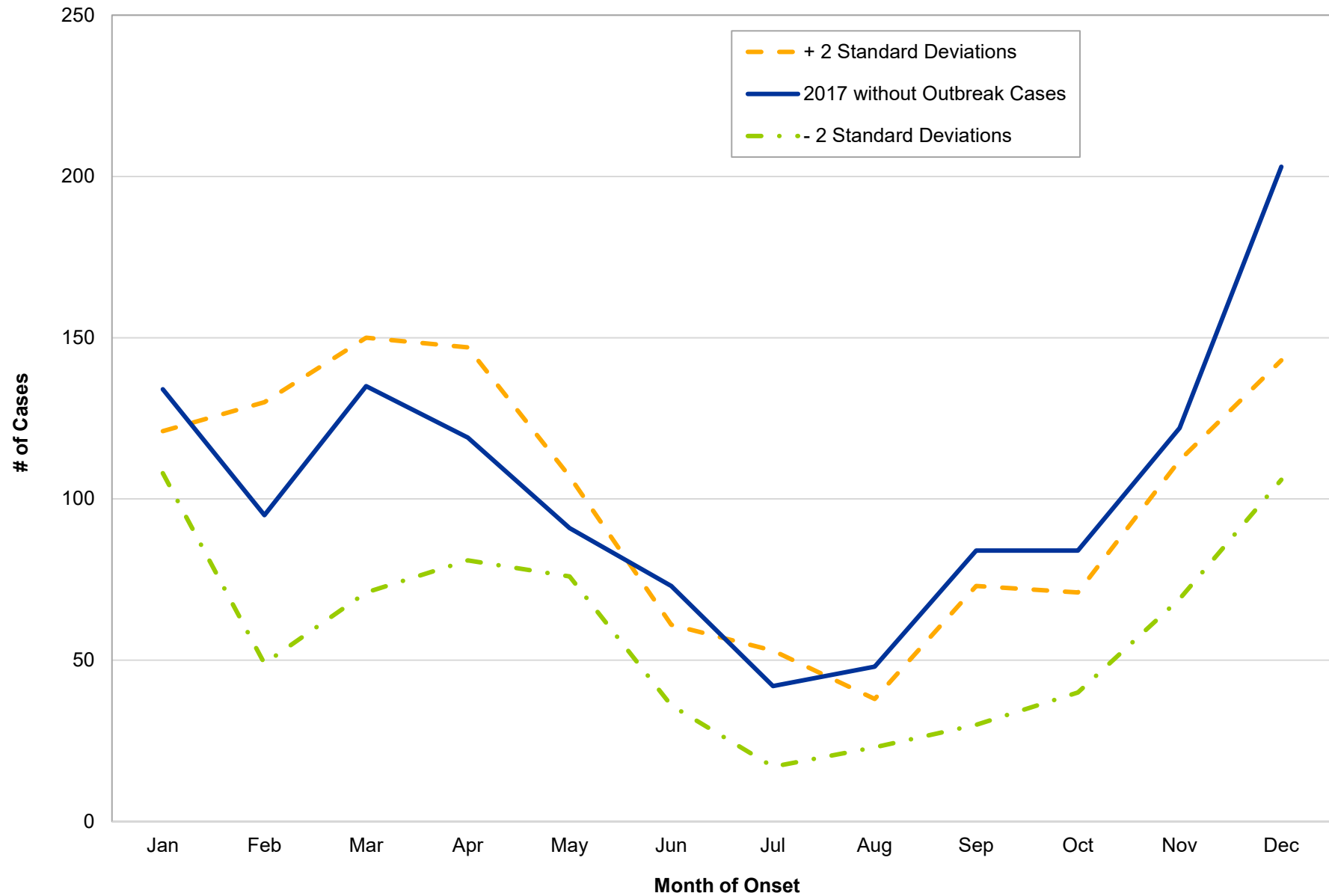
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Streptococcal Disease, Group B, in Newborn

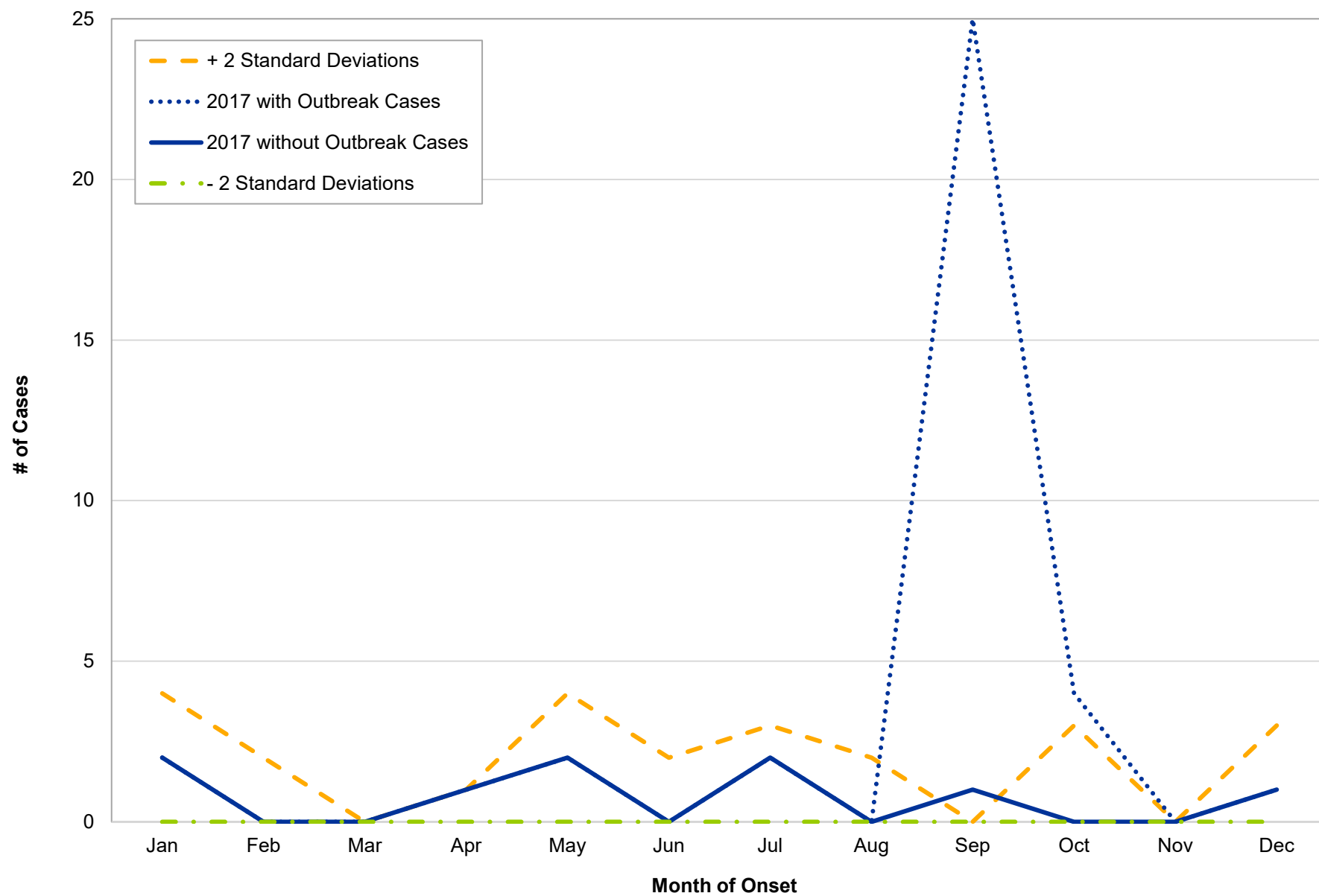


INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Streptococcus pneumoniae, Invasive Disease

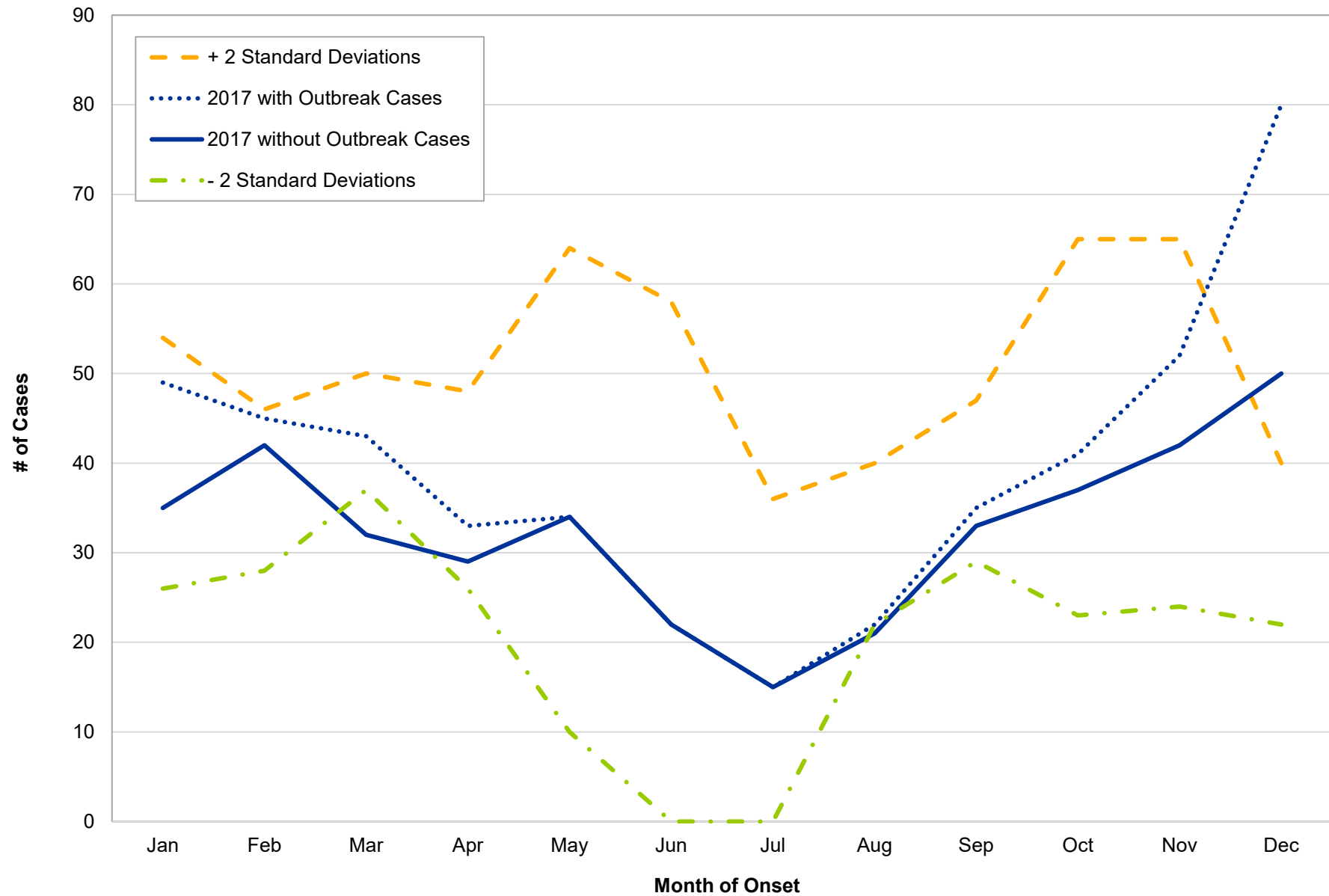


INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017 Typhoid Fever

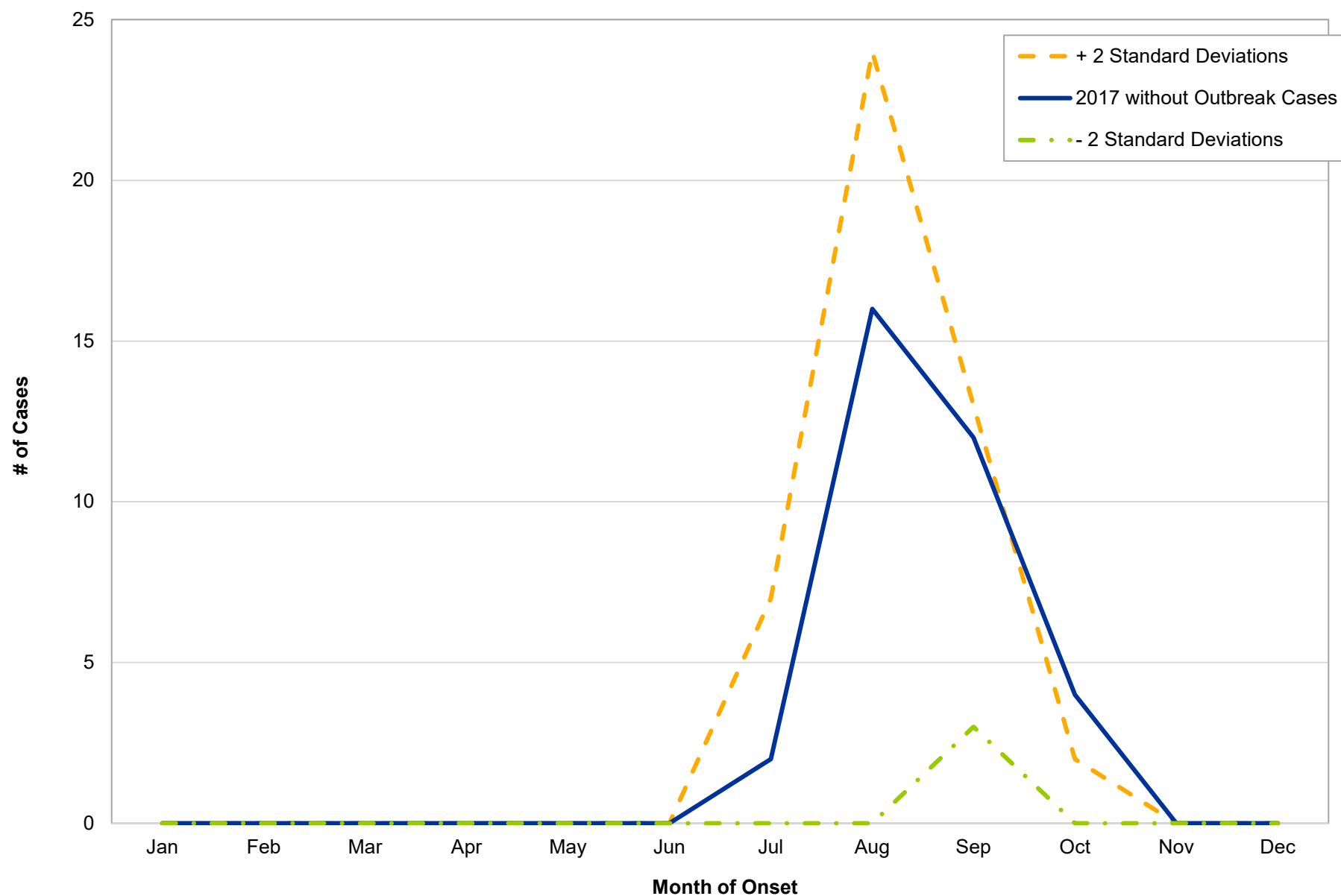


INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Varicella

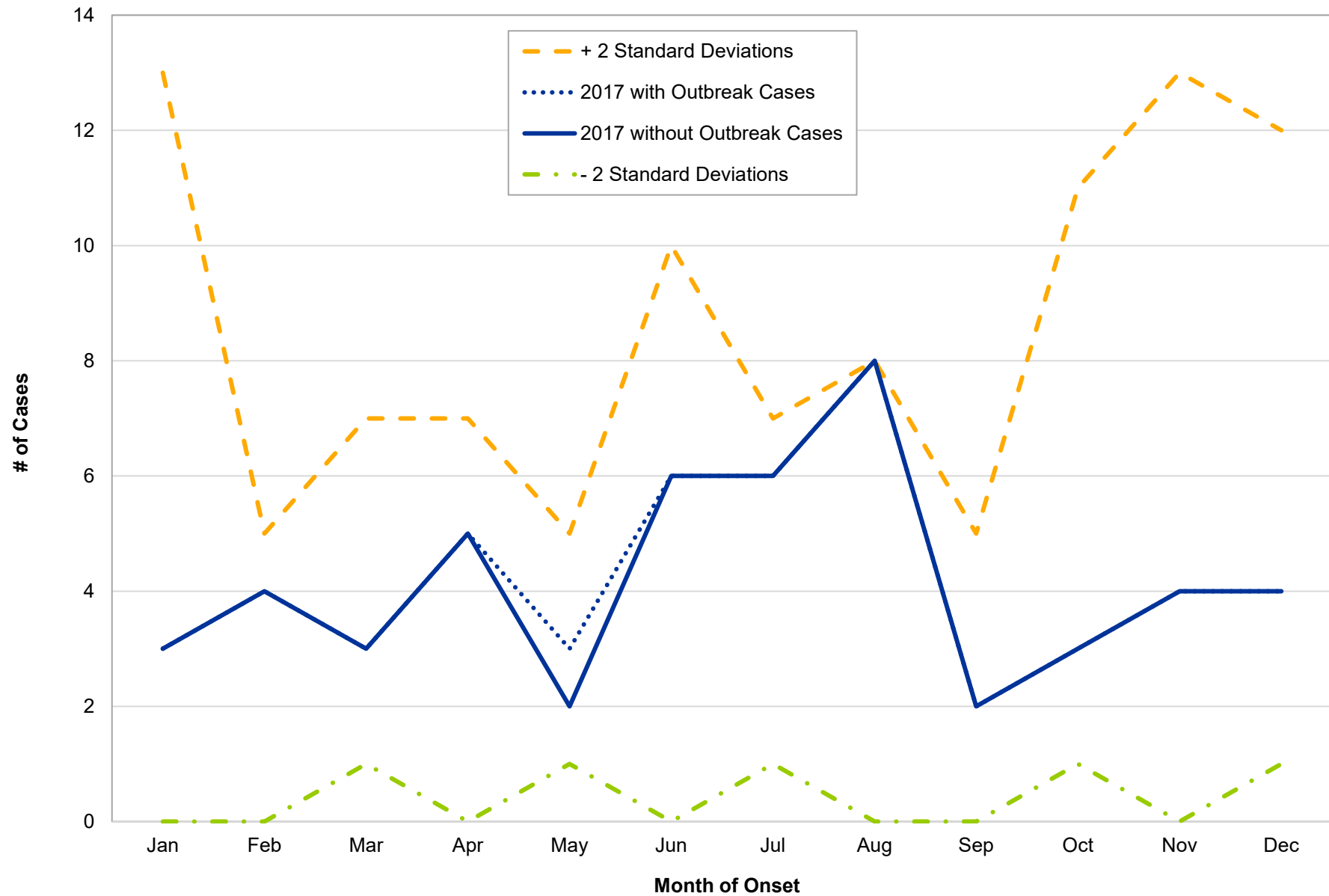


INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017 West Nile Virus Infection



INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2017

Yersiniosis



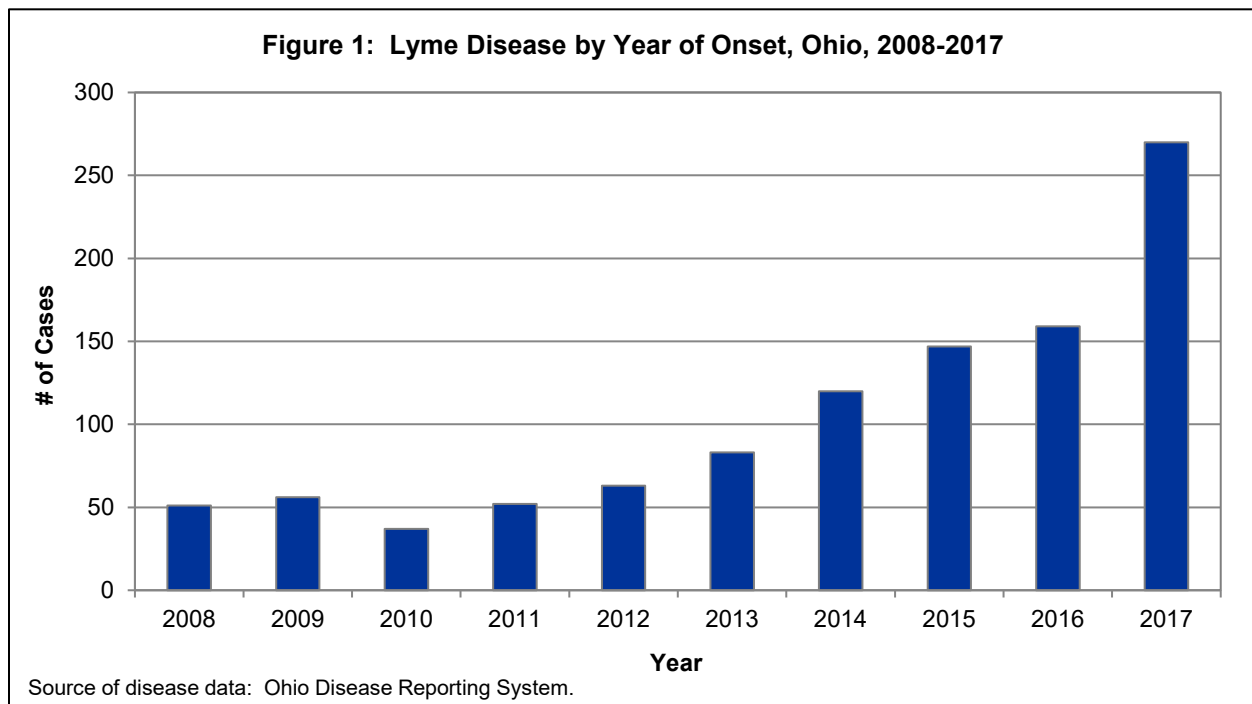
PROFILES OF SELECTED NOTIFIABLE DISEASES

LYME DISEASE AND OTHER OHIO TICKBORNE DISEASES

<i>Number of cases in 2017:</i>	270	<i>Rate in 2017:</i>	2.3
<i>Number of cases in 2016:</i>	159	<i>Rate in 2016:</i>	1.4

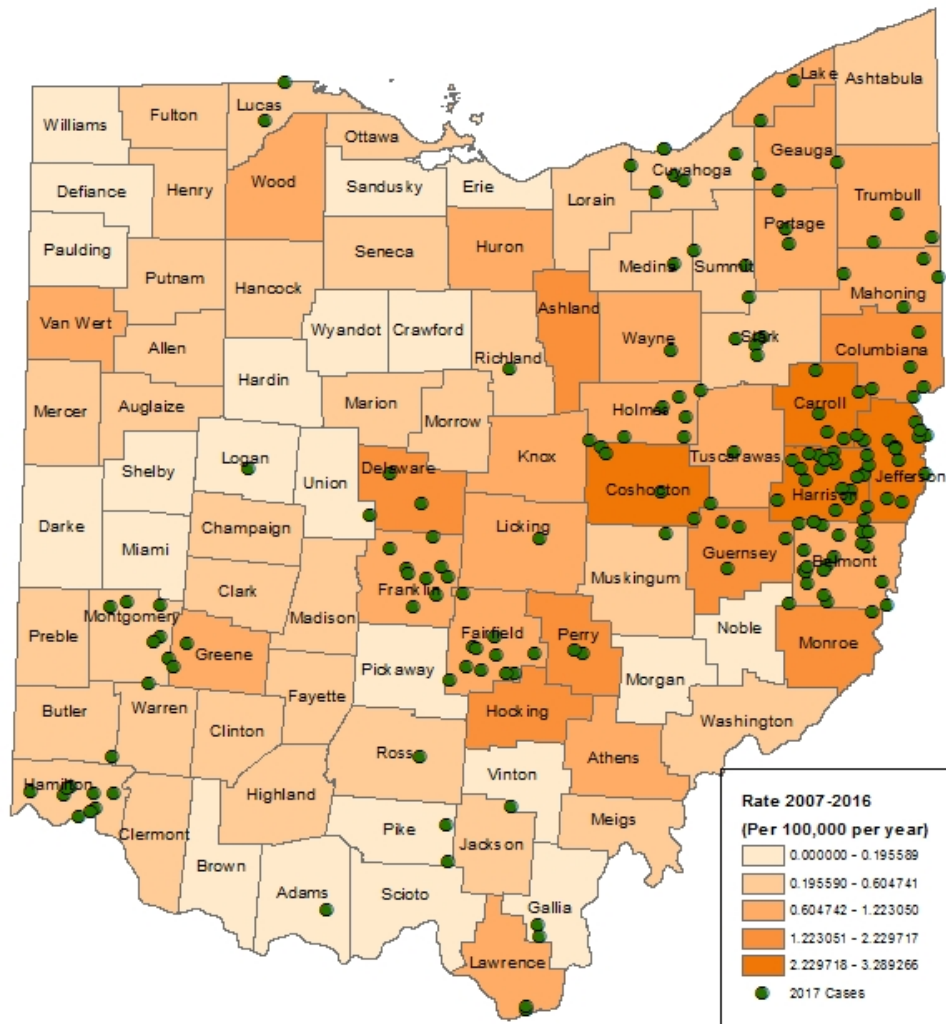
* Rates are based on the 2016 and 2017 U.S. Census estimates and are per 100,000 population.

Lyme disease is an emerging disease in Ohio and cases have continued to increase over the past several years, from 45 in 2008 to 270 in 2017 (Figure 1). This increase coincides with the spread and increase of the principal vector, *Ixodes scapularis* (the blacklegged tick), throughout the state. Black-legged ticks, which can carry the agents for Lyme disease, anaplasmosis and babesiosis, are most commonly found in the eastern and southern areas of the state but are likely to occur in suitable wooded habitat throughout most or all of Ohio. This distribution is similar to the distribution of human cases in Ohio. Figure 2 below shows distribution of cases (green dots) by county of residence (Note: the location of a dot does not necessarily mean that Lyme disease was acquired in that county or even in Ohio). The map below shows the geographic relationship of 2017 cases with the incidence over the previous 10 years.



The incidence of Lyme disease during 2016 was highest in the eastern part of Ohio (Figure 7).

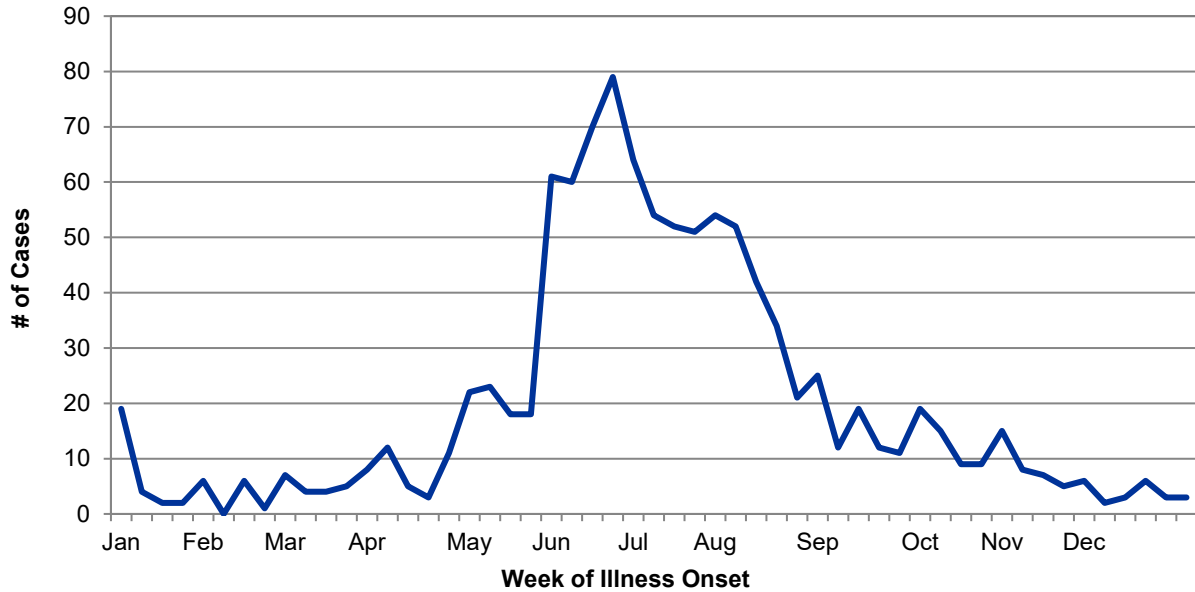
Figure 2: Lyme Disease in Ohio, 2017 Cases Compared to Incidence 2007-2016



Source of disease data: Ohio Disease Reporting System.

Lyme disease is contracted throughout most of the year in Ohio when blacklegged tick adults and nymphs are active, but most cases occur in the late spring and summer when the nymphs are active (Fig. 3). Most cases reported 2008-2017 had onset from June through August. It can take anywhere from three to 30 days following a tick bite for symptoms to appear.

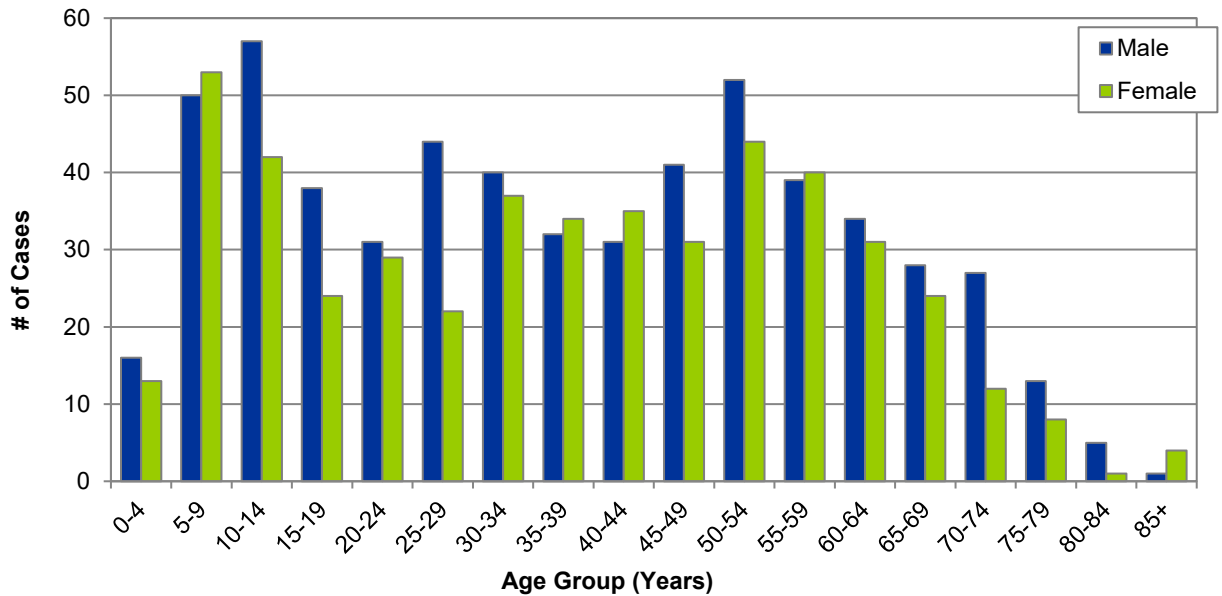
Figure 3: Lyme Disease by Week of Illness Onset, Ohio, 2008-2017



Source of disease data: Ohio Disease Reporting System.

All ages are at risk for becoming infected with the bacteria that causes Lyme disease. However, children aged 5-9 years was the largest age group with cases reported in Ohio 2008-2017 (Figure 4).

Figure 4: Lyme Disease by Age and Sex, Ohio, 2008-2017



Source of disease data: Ohio Disease Reporting System.

Diseases spread by ticks are an increasing concern in Ohio and are being reported to the Ohio Department of Health more frequently than in the past decade, with Lyme disease and Rocky Mountain spotted fever being the most common (Table 1).

**Table 1: Ohio Tickborne Diseases Reported to the Ohio Department of Health,
2017**

Tickborne Disease	Vector	# Cases
Anaplasmosis	Blacklegged tick	3
Babesiosis	Blacklegged tick	1
Ehrlichiosis	Lone Star tick	17
Lyme disease	Blacklegged tick	270
Rocky Mountain spotted fever	American dog tick	39

Source of disease data: Ohio Disease Reporting System.

TYPHOID FEVER

<i>Number of cases in 2017:</i>	<i>37</i>	<i>Rate in 2017:</i>	<i>0.3</i>
<i>Number of cases in 2016:</i>	<i>11</i>	<i>Rate in 2016:</i>	<i>0.1</i>

* Rates are based on the 2016 and 2017 U.S. Census estimates and are per 100,000 population.

Typhoid fever is caused by *Salmonella* serotype Typhi and is spread person-to-person usually through contaminated food or water; no animals are involved in the transmission of typhoid fever. Each year, approximately 350 people in the United States are diagnosed with typhoid fever, the majority of which acquired their infections while traveling outside of the country ([CDC Typhoid Fever website](#)).

The incidence of typhoid fever for 2017 in Ohio was more than three times than that of 2016 and was the highest recorded since 1962 when 41 cases reported. Most of the cases (76 percent) were linked to an outbreak at a Franklin County event where an asymptomatic food handler who had prepared most of the food was suspected of being a chronic carrier (Table 2). The rest of the cases reported during 2017 were acquired during international travel (7 cases) and from a household contact who was a carrier (1 case). One case was lost to follow-up, so exposures are unknown.

Table 2: Typhoid Fever by Exposure Type, Ohio, 2017

Exposure	# Cases
International travel	7
Franklin County, OH event	28
Household contact (carrier)	1
Unknown	1
Total	37

Source of disease data: Ohio Disease Reporting System.

OUTBREAK SUMMARIES

Starting in 2009, the categories for outbreak reporting changed (see Ohio Administrative Code [Chapter 3701-03](#)). These are referred to as “Class C: Report an outbreak, unusual incidence or epidemic by the end of the next business day.” The categories for outbreak reporting are: community outbreak, foodborne outbreak, healthcare-associated outbreak, institutional outbreak, waterborne outbreak and zoonotic outbreak.

In 2017, the Bureau of Infectious Diseases (BID) assisted local health jurisdictions in Ohio in the investigation of 448 outbreaks. These outbreaks were detected in 65 of 88 counties throughout the state. The number of Ohioans known to be ill from these outbreaks was 8,699 (median 10, range 1-431). The outbreaks were classified as: community (30), foodborne (65), healthcare-associated (103), institutional (228), waterborne (9) and zoonotic (13). Causative agents identified during the outbreak investigations included: *Bordetella pertussis*, *Campylobacter* spp., *Clostridium perfringens*, coxsackievirus, *Cryptosporidium* spp., *Cyclospora cayetanensis*, *Escherichia coli* (various serotypes), *Giardia* spp., hepatitis A virus, influenza virus, *Legionella pneumophila*, lice, molluscum contagiosum virus, mumps virus, norovirus genotypes GI and GII, parvovirus, *Pseudomonas aeruginosa*, respiratory syncytial virus, rotavirus, *Salmonella* (various serotypes), sapovirus, *Sarcoptes scabiei* (scabies mite), scombroid poisoning, *Serratia marcescens*, *Shigella sonnei*, *Staphylococcus aureus* (various strains), *Streptococcus* spp. and varicella-zoster virus.

This is the eighth year that norovirus sequencing data has been available in the annual summary. Viral sequencing, as well as most serotyping, was performed at the Ohio Department of Health Laboratory.

Details on the types of 2017 outbreaks are discussed below.

COMMUNITY OUTBREAKS

In 2017, 30 community outbreaks were reported from a variety of settings. Eighteen of these outbreaks were confirmed, with the causative agent as follows: *B. pertussis* (4), *Campylobacter* spp. (1), *Cryptosporidium* spp. (2), *Giardia* spp. (1), hepatitis A virus (1), lice (1), mumps virus (1), norovirus (3), *S. sonnei* (1), *Streptococcus* spp. (2) and varicella-zoster virus (1).

The confirmed community outbreaks of 2017 are listed in Table 1.

Table 1: Confirmed Community Outbreaks, Ohio, 2017

Month of Onset	Causative Agent	County	# Ill
December 2016	<i>Bordetella pertussis</i>	Licking	7
December 2016	<i>Streptococcus</i> spp.	Richland	59
January 2017	Mumps virus	Fulton, Henry, Mercer, Williams	28
January 2017	<i>Streptococcus</i> spp.	Union	203
February 2017	Lice	Hamilton	2
March 2017	<i>Cryptosporidium</i> spp.	Mercer	5
March 2017	Varicella-zoster virus	Delaware	6
April 2017	<i>Shigella sonnei</i>	Franklin	5

Month of Onset	Causative Agent	County	# Ill
May 2017	<i>Bordetella pertussis</i>	Richland	4
May 2017	Norovirus GI.P3-GI.3	Carroll	22
July 2017	<i>Campylobacter jejuni</i>	Marion	8
July 2017	<i>Cryptosporidium</i> spp.	Henry	3
July 2017	<i>Giardia</i> spp.	Ashland	5
July 2017	Norovirus GI or GII	Tuscarawas	15
July 2017	Norovirus GI.P3-GI.3	Portage	9
September 2017	<i>Bordetella pertussis</i>	Geauga	2
November 2017	<i>Bordetella pertussis</i>	Stark	3
November 2017	Hepatitis A virus	Hancock	7

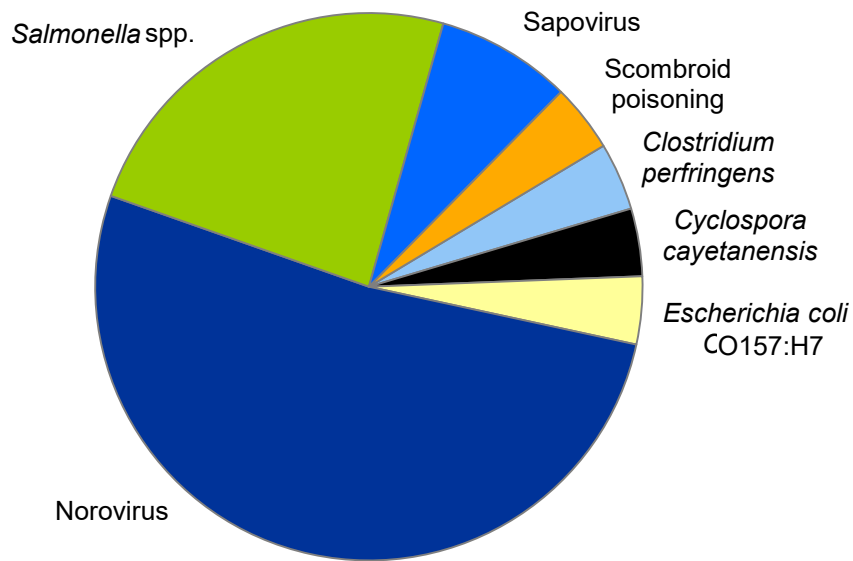
Source of outbreak data: Ohio Disease Reporting System.

In late May 2017, local public health staff in Belmont and Carroll counties reported and investigated a suspected norovirus outbreak that occurred at a school camp in Carroll County. Of 22 sixth grade students who were ill, 3 were confirmed by ODH Lab as having the GI.P3-GI.3 strain of norovirus. Transmission was believed to have been person-to-person due to vomiting of the index case in close quarters. No secondary cases were reported.

FOODBORNE OUTBREAKS

In 2017, 25 of the 65 foodborne outbreaks reported were confirmed. These 65 outbreaks in Ohio met the general [definition of a foodborne outbreak](#): “An incident in which two or more persons experience a similar illness after ingestion of a common food, and epidemiologic analysis implicates the food as the source of the illness.” (Some outbreaks with one person ill are multistate outbreaks.) The 25 confirmed outbreaks also met the agent-specific [criteria for confirmation](#) of outbreaks. As shown in Figure 1, for these 25 foodborne outbreaks, the causative agent was distributed as follows: *C. perfringens* (1), *C. cayetanensis* (1), *E. coli* O157:H7 (1), norovirus (13), *Salmonella* spp. (6), sapovirus (2) and scombroid poisoning (1).

Figure 1: Confirmed Foodborne Outbreaks by Etiologic Agent, Ohio, 2017



Source of outbreak data: Ohio Disease Reporting System.

There were no individual cases of foodborne botulism in Ohio in 2017.

The 25 confirmed foodborne outbreaks are detailed in Table 2.

Table 2: Confirmed Foodborne Outbreaks, Ohio, 2017

Month of Onset	Causative Agent	County	# Ill	Suspected Food Vehicle	Event / Setting
January 2017	Norovirus GI.P7-GI.7	Wayne	58	Unknown	Banquet facility
February 2017	Norovirus GII.P16-GII.4 Sydney	Franklin	3	Unknown	Restaurant
February 2017	Norovirus GII.P7-GII.14	Gallia	45	Unknown	Long-term care facility
March 2017	Norovirus GII.P16-GII.4 Sydney	Erie	27	Salad	Catered meal at workplace
April 2017	Norovirus GI.P7-GI.7	Franklin	4	Unknown	Restaurant
April 2017	Norovirus GI or GII	Geauga	47	Unknown	Banquet facility
April 2017	Norovirus GI.7A	Franklin	6	Unknown	Restaurant
April 2017	Norovirus GII.P16-GII.4 Sydney	Wood	3	French fries, onions, tomatoes	Restaurant
April 2017	<i>Salmonella</i> Enteritidis	Multistate	2	Romaine lettuce	Private home, restaurant
April 2017	Scombroid poisoning	Cuyahoga	4	Tuna	Restaurant
May 2017	Norovirus GII.P16-GII.2	Lake	100	Unknown	Banquet facility
May 2017	Norovirus GII.P4 New Orleans-GII.4 Sydney	Mahoning	27	Unknown	Catered meal at private home

Month of Onset	Causative Agent	County	# Ill	Suspected Food Vehicle	Event / Setting
June 2017	<i>Cyclospora cayetanensis</i>	Lucas	6	Unknown	Restaurant
June 2017	<i>Salmonella</i> Newport	Multistate	1	Ground beef	Private home
June 2017	<i>Salmonella</i> Newport	Multistate	1	Watermelon	Private home
June 2017	Sapovirus	Hamilton	4	Unknown	Restaurant
July 2017	<i>Clostridium perfringens</i> type A	Delaware	2	Pepperoni pizza	Restaurant
July 2017	<i>Escherichia coli</i> O157:H7	Geauga	37	Unknown	Camp
July 2017	<i>Salmonella</i> Gaminara, <i>Salmonella</i> Thompson	Multistate	2	Papayas	Private home
August 2017	Norovirus GI.P3-GI.3	Lucas	431	Donuts	Restaurant
August 2017	Norovirus GII.P16-GII.13	Butler	35	Unknown	Catered meal at school event
August 2017	<i>Salmonella</i> Infantis	Multistate	1	Mangoes	Private home
September 2017	<i>Salmonella</i> Typhi	Franklin	28	Unknown	Catered meal at banquet facility
October 2017	Norovirus GII.P16-GII.2	Clark	26	Unknown	Restaurant
November 2017	Sapovirus	Crawford	3	Unknown	Restaurant

Source of outbreak data: Ohio Disease Reporting System.

An unusual foodborne norovirus outbreak was reported in early August 2017 from Lucas County. Cases consumed donuts from a small shop in Lucas County. Over 400 cases were identified from Ohio and five other states (381 primary cases and 50 secondary cases). The Ohio cases were from eight counties, mostly in the Toledo area. Fourteen sought medical attention with four being hospitalized. There were no deaths. Onset dates ranged from August 5, 2017 to August 16, 2017, with about two-thirds of cases having onset on August 6, 2017. Slightly more than half were male (56%). Sixty-three percent were adults aged 18 years or older. Symptom history was obtained for 379 primary cases. Vomiting (85%) and diarrhea (73%) were predominant, followed by nausea (25%), abdominal cramps (22%), chills (21%) and fever (18%). Investigation by the Toledo-Lucas County Health Department found that 4,818 donuts and other baked goods were sold at the shop and to 12 wholesale accounts over the five-day period of August 4 to August 8, 2017. The virus sequence was identified at the Ohio Department of Health Laboratory as norovirus GI.P3-GI.3. After closing for deep cleaning, the shop was permitted to re-open. The exact source of the virus could not be identified.

For more information on the typhoid fever outbreak, please see the typhoid fever write-up in the [Disease Profiles](#).

Here is the link to the outbreak report for one foodborne multistate outbreak:

[Multistate Outbreak of Salmonella Infections Linked to Imported Maradol Papayas](#)

HEALTHCARE-ASSOCIATED OUTBREAKS

There were 103 healthcare-associated outbreaks reported in 2017, 62 of which were confirmed as shown in Table 3.

Table 3: Confirmed Healthcare-Associated Outbreaks, Ohio, 2017

Month of Onset	Causative Agent	# Ill	Setting
October 2016	<i>Sarcoptes scabiei</i>	41	Long-term care facility
October 2016	<i>Sarcoptes scabiei</i>	5	Long-term care facility
November 2016	<i>Sarcoptes scabiei</i>	7	Assisted living facility, long-term care facility
January 2017	Influenza A(H3) virus	28	Long-term care facility
January 2017	Influenza A(H3) virus	24	Long-term care facility
January 2017	Influenza virus	18	Long-term care facility
January 2017	Influenza virus	10	Long-term care facility
January 2017	Influenza virus	7	Long-term care facility
January 2017	Influenza virus	6	Long-term care facility
January 2017	Norovirus GII untypeable	35	Assisted living facility, long-term care facility
January 2017	Norovirus GII.P16-GII.4 Sydney	52	Assisted living facility, memory unit
January 2017	Norovirus GII.P16-GII.4 Sydney	55	Long-term care facility
January 2017	Norovirus GII.P16-GII.4 Sydney	36	Long-term care facility
January 2017	Norovirus GII.P16-GII.4 Sydney	14	Long-term care facility
January 2017	Norovirus GII.P16-GII.4 Sydney	31	Long-term care facility, memory unit
February 2017	Influenza A(H3) virus	21	Assisted living facility, group home, long-term care facility
February 2017	Influenza A(H3) virus	35	Long-term care facility
February 2017	Influenza virus	10	Long-term care facility
February 2017	Influenza virus	6	Long-term care facility
February 2017	Influenza virus	4	Long-term care facility
February 2017	Influenza virus	23	Long-term care facility, rehab facility
February 2017	Norovirus	12	Hospital
February 2017	Norovirus GII.P16-GII.4 Sydney	25	Long-term care facility
February 2017	Norovirus GII.P17-GII.17	7	Hospital
February 2017	Norovirus GII.P7-GII.14	14	Long-term care facility
March 2017	Influenza virus	24	Long-term care facility
March 2017	Influenza virus	9	Long-term care facility
March 2017	Influenza virus	7	Long-term care facility
March 2017	Influenza virus	7	Long-term care facility
March 2017	Influenza virus	4	Long-term care facility
March 2017	Influenza virus	29	Long-term care facility, memory unit
March 2017	Influenza virus	2	Long-term care facility, rehab facility

Month of Onset	Causative Agent	# Ill	Setting
March 2017	Lice	5	MRDD facility
March 2017	Norovirus	17	Hospital, rehab facility
March 2017	Norovirus GII	46	Long-term care facility
March 2017	Norovirus GII.P16-GII.4 Sydney	30	Hospital
April 2017	Influenza virus	13	Long-term care facility
April 2017	Methicillin-resistant <i>Staphylococcus aureus</i>	5	Long-term care facility
May 2017	Rotavirus type A G12P[8]	38	Long-term care facility
June 2017	Norovirus GI.P Untypeable-GI.3B	84	Hospital
June 2017	Norovirus GII.P7-GII.6	68	Long-term care facility
June 2017	<i>Pseudomonas aeruginosa</i>	2	Hospital
June 2017	<i>Salmonella</i> Braenderup	43	Long-term care facility
July 2017	<i>Salmonella</i> Enteritidis	11	Physician's office
September 2017	Norovirus	6	Urgent care
October 2017	Methicillin-sensitive <i>Staphylococcus aureus</i>	2	Hospital
October 2017	<i>Serratia marcescens</i>	3	Hospital
November 2017	Norovirus GII	29	Hospital
December 2017	Influenza A(H3) virus	7	Assisted living facility, long-term care facility
December 2017	Influenza A(H3) virus	32	Long-term care facility
December 2017	Influenza A(H3) virus	26	Long-term care facility
December 2017	Influenza virus	38	Long-term care facility
December 2017	Influenza virus	32	Long-term care facility
December 2017	Influenza virus	31	Long-term care facility
December 2017	Influenza virus	23	Long-term care facility
December 2017	Influenza virus	10	Long-term care facility
December 2017	Influenza virus	10	Long-term care facility
December 2017	Influenza virus	9	Long-term care facility
December 2017	Influenza virus	6	Long-term care facility
December 2017	Influenza virus	3	Long-term care facility
December 2017	Influenza virus	24	Long-term care facility, rehab facility
December 2017	Norovirus GII.P12-GII.3	29	Assisted living facility, long-term care facility, memory unit

Source of outbreak data: Ohio Disease Reporting System.

INSTITUTIONAL OUTBREAKS

In 2017, 228 institutional outbreaks were reported. Of these, 103 were confirmed. See Table 4 below for the confirmed institutional outbreaks.

Table 4: Confirmed Institutional Outbreaks, Ohio, 2017

Month of Onset	Causative Agent	County	# Ill	Setting
November 2016	<i>Bordetella pertussis</i>	Franklin	7	School
December 2016	<i>Bordetella pertussis</i>	Franklin	5	School
December 2016	Norovirus GII, Rotavirus, <i>Shigella sonnei</i>	Lucas	9	Day care center
December 2016	Norovirus GII.P7-GII.6	Franklin	35	Assisted living facility, memory unit
December 2016	<i>Shigella sonnei</i>	Franklin	15	Day care center
January 2017	<i>Bordetella pertussis</i>	Pickaway	3	School
January 2017	<i>Escherichia coli</i> O157:H7	Franklin	4	Group home
January 2017	Influenza virus	Cuyahoga	21	Assisted living facility
January 2017	Influenza virus	Fairfield	94	School
January 2017	Influenza virus	Richland	17	Assisted living facility
January 2017	Influenza virus	Richland	20	Day care center, Rehab facility
January 2017	Norovirus GI.P7-GI.7A	Hamilton	21	Residential facility
January 2017	Norovirus GII Untypeable, Rotavirus	Stark	32	Day care center
January 2017	Norovirus GII, Sapovirus	Franklin	23	School
January 2017	Respiratory syncytial virus (RSV)	Miami	4	Day care center
January 2017	Rotavirus G2P[4]	Franklin	17	Assisted living facility
January 2017	<i>Streptococcus</i> spp.	Franklin	38	School
January 2017	<i>Streptococcus</i> spp.	Franklin	9	School
January 2017	<i>Streptococcus</i> spp.	Franklin	6	School
January 2017	<i>Streptococcus</i> , group A	Franklin	10	School
January 2017	Varicella-zoster virus	Mahoning	7	Correctional facility
February 2017	Influenza virus	Defiance	51	School
February 2017	Influenza virus	Franklin	24	School
February 2017	Influenza virus	Franklin	22	School
February 2017	Influenza virus	Mercer	18	Assisted living facility
February 2017	Influenza virus	Summit	24	Assisted living facility
February 2017	Lice	Clermont	43	School
February 2017	Mumps virus	Montgomery	4	College, university
February 2017	Norovirus GI	Erie	16	School
February 2017	Norovirus GII.P16-GII.4 Sydney	Defiance	51	Assisted living facility
February 2017	Norovirus GII.P7-GII.14	Stark	63	Assisted living facility
February 2017	Parvovirus B19	Lucas	4	School
February 2017	<i>Streptococcus</i> spp.	Cuyahoga	32	School
February 2017	<i>Streptococcus</i> spp.	Franklin	55	School
February 2017	<i>Streptococcus</i> , group A	Franklin	23	Day care center
February 2017	Varicella-zoster virus	Ross	5	Day care center
March 2017	<i>Bordetella pertussis</i>	Franklin	5	School
March 2017	<i>Bordetella pertussis</i>	Franklin	4	School
March 2017	Influenza A(H3) virus	Franklin	5	Day care center
March 2017	Influenza A(H3) virus	Richland	4	Assisted living facility
March 2017	Influenza virus	Summit	30	Assisted living facility

Month of Onset	Causative Agent	County	# Ill	Setting
March 2017	Norovirus GII.P16-GII.4 Sydney	Franklin	17	Assisted living facility
March 2017	Parvovirus B19	Hancock	7	School
March 2017	Respiratory syncytial virus (RSV)	Franklin	8	Day care center
March 2017	<i>Salmonella</i> Heidelberg	Ross	2	Group home
March 2017	<i>Sarcoptes scabiei</i>	Licking	6	Group home
March 2017	<i>Shigella sonnei</i>	Lucas	3	Day care center
April 2017	<i>Bordetella pertussis</i>	Franklin	6	School
April 2017	<i>Bordetella pertussis</i>	Franklin	4	School
April 2017	<i>Bordetella pertussis</i>	Stark	2	Day care center
April 2017	<i>Shigella sonnei</i>	Franklin	8	Day care center
May 2017	<i>Bordetella pertussis</i>	Delaware	2	School
May 2017	Norovirus GI.P7-GI.7A	Delaware	17	School
May 2017	Norovirus GII.P12-GII.3	Muskingum	140	School
May 2017	Parvovirus B19	Hancock	11	School
May 2017	Sapovirus	Stark	136	School
May 2017	<i>Shigella sonnei</i>	Mercer	9	Day care center
June 2017	<i>Bordetella pertussis</i>	Butler	2	Sports team
June 2017	<i>Shigella sonnei</i>	Defiance	6	Day care center
June 2017	<i>Shigella sonnei</i>	Franklin	13	Day care center
July 2017	<i>Bordetella pertussis</i>	Franklin	4	Camp
July 2017	Coxsackievirus	Montgomery	6	Day care center
July 2017	Influenza virus	Warren	11	Memory unit
July 2017	Molluscum contagiosum virus	Fulton	3	Day care center
July 2017	Norovirus GI.P3-GI.3	Crawford	8	Camp, group home
July 2017	Norovirus GI.P3-GI.3	Delaware	44	Camp
July 2017	Norovirus GI.P7-GI.7	Franklin	20	Workplace
July 2017	Norovirus GII	Champaign	13	Day care center
July 2017	Norovirus GII.P12-GII.3	Franklin	26	Day care center
July 2017	Norovirus GII.P12-GII.3	Summit	11	Assisted living facility
July 2017	<i>Shigella sonnei</i>	Franklin	7	Day care center
August 2017	<i>Bordetella pertussis</i>	Marion	2	Religious facility
August 2017	<i>Bordetella pertussis</i>	Montgomery	3	College, university
August 2017	<i>Bordetella pertussis</i>	Montgomery	2	School
August 2017	<i>Escherichia coli</i> O103	Delaware	4	Day care center
August 2017	<i>Shigella sonnei</i>	Franklin	17	Day care center
August 2017	<i>Shigella sonnei</i>	Franklin	3	Day care center
September 2017	<i>Bordetella pertussis</i>	Franklin	6	School
September 2017	<i>Bordetella pertussis</i>	Pickaway	8	School
September 2017	<i>Cryptosporidium</i> spp.	Lucas	4	Day care center
September 2017	Lice	Union	20	School
October 2017	<i>Bordetella pertussis</i>	Franklin	15	School
October 2017	<i>Bordetella pertussis</i>	Franklin	3	School
October 2017	<i>Bordetella pertussis</i>	Pickaway	5	School
October 2017	<i>Bordetella pertussis</i>	Pickaway	2	School
October 2017	<i>Campylobacter</i> spp.	Van Wert	5	Rehab facility

Month of Onset	Causative Agent	County	# Ill	Setting
October 2017	Coxsackievirus	Ashtabula	22	Day care center
October 2017	Norovirus GI.P7-GI.7	Montgomery	180	School
October 2017	Norovirus GII.P16-GII.2	Stark	42	Day care center, school
October 2017	<i>Sarcoptes scabiei</i>	Madison	42	Correctional facility
October 2017	<i>Shigella sonnei</i>	Franklin	4	Day care center
October 2017	<i>Shigella sonnei</i>	Greene	9	Day care center
November 2017	<i>Bordetella pertussis</i>	Franklin	5	School
November 2017	<i>Bordetella pertussis</i>	Montgomery	2	School
November 2017	Norovirus GII.P16-GII.4 Sydney	Hamilton	36	Assisted living facility
November 2017	Sapovirus GII.3	Franklin	81	School
November 2017	<i>Shigella sonnei</i>	Butler	43	School
December 2017	Influenza virus	Hamilton	32	Assisted living facility
December 2017	Influenza virus	Portage	18	Assisted living facility, memory unit
December 2017	Norovirus GII.P16-GII.4 Sydney	Summit	36	Assisted living facility, memory unit
December 2017	Parvovirus B19	Hardin	17	School
December 2017	<i>Shigella sonnei</i>	Stark	11	Day care center
December 2017	Varicella-zoster virus	Trumbull	11	Correctional facility

Source of outbreak data: Ohio Disease Reporting System.

WATERBORNE OUTBREAKS

In 2017, 7 confirmed and probable waterborne outbreaks were reported. These are detailed in Table 5.

Table 5: Confirmed and Probable Waterborne Outbreaks, Ohio, 2017

Month of Onset	Causative Agent	County	# Ill	Setting
June 2004	<i>Legionella pneumophila</i>	Franklin	8	Long-term care facility
March 2016	<i>Legionella pneumophila</i>	Franklin	5	Apartment building
November 2016	<i>Legionella pneumophila</i>	Fairfield	2	Long-term care facility
May 2017	<i>Legionella pneumophila</i>	Franklin	3	Hospital
July 2017	<i>Legionella pneumophila</i>	Franklin	2	Church
July 2017	<i>Legionella pneumophila</i>	Franklin	2	Long-term care facility
October 2017	<i>Campylobacter jejuni</i>	Athens	5	Spring

Source of outbreak data: Ohio Disease Reporting System.

ZOONOTIC OUTBREAKS

In 2017, 13 confirmed and probable zoonotic outbreaks were reported, as seen in Table 6.

Table 6: Confirmed and Probable Zoonotic Outbreaks, Ohio, 2017

Month of Onset	Causative Agent	County	# Ill	Type of Animal	Setting
August 2015	<i>Salmonella</i> Agbeni	Multistate	5	Turtles	Private home
September 2016	<i>Campylobacter jejuni</i>	Multistate	32	Puppies	Pet store, private home
March 2017	<i>Cryptosporidium</i> spp.	Auglaize	6	Calves	Day care center, private home
March 2017	<i>Cryptosporidium</i> spp.	Huron	6	Goat	Private home
March 2017	<i>Salmonella</i> Braenderup, <i>Salmonella</i> Enteritidis, <i>Salmonella</i> Hadar, <i>Salmonella</i> Infantis, <i>Salmonella</i> Litchfield, <i>Salmonella</i> Mbandaka	Multistate	54	Live poultry	Farm, feed store, private home
April 2017	<i>Cryptosporidium parvum</i>	Marion	3	Dogs, goats, sheep, guinea pigs	Trade show
May 2017	<i>Salmonella</i> Agbeni	Multistate	5	Turtles	Private home
June 2017	<i>Salmonella</i> Heidelberg	Multistate	4	Dairy cattle	Farm
July 2017	Influenza virus	Clinton	16	Swine	County fair
July 2017	Influenza virus	Union	3	Swine	County fair
August 2017	<i>Cryptosporidium parvum</i> IIaA15G2R1	Van Wert	6	Calf	Farm, private home
August 2017	Influenza virus	Henry	2	Swine	County fair
September 2017	<i>Cryptosporidium</i> spp.	Highland	5	Calves	Farm

Source of outbreak data: Ohio Disease Reporting System.

During county fair season in 2017, there were three influenza outbreaks in humans. All three were associated with swine. These were in July and August in Clinton, Henry and Union counties. Two were due to Influenza A(H3N2v), and one was due to Influenza A(H1N2v). Agricultural fair attendees who are at high risk of serious flu complications should avoid pigs and swine barns. Food and drinks as well as toys, pacifiers, cups, baby bottles, strollers or similar items should not be taken into areas where swine are housed at fairs. Washing hands often with soap and running water before and after exposure to pigs is important to prevent the spread of swine variant influenza. If soap and water are not available, use an alcohol-based hand rub.

Here are the links to outbreak reports for some multistate zoonotic outbreaks:

[Multistate Outbreak of *Salmonella* Agbeni Infections Linked to Pet Turtles, 2017](#)

[Multistate Outbreak of Multidrug-Resistant *Campylobacter* Infections Linked to Contact with Pet Store Puppies](#)

[Multistate Outbreaks of Human *Salmonella* Infections Linked to Live Poultry in Backyard Flocks, 2017](#)

[Multistate Outbreak of Multidrug-Resistant *Salmonella* Heidelberg Infections Linked to Contact with Dairy Calves](#)

Please refer to the [Technical Notes](#) for additional information on the outbreak data.

Acknowledgements: These outbreak investigations were performed by local public health personnel (nurses, sanitarians, epidemiologists) and healthcare professionals in the medical community. Laboratory analysis was done in local clinical labs, the Ohio Department of Health Laboratory and the Ohio Department of Agriculture Laboratory. Our thanks to all these partners for their work in the investigation of outbreaks and the prevention of disease.

TECHNICAL NOTES

SPECIFIC DISEASES

Anaplasmosis: formerly known as human granulocytic ehrlichiosis (HGE).

Babesiosis: became reportable in Ohio Jan. 1, 2014.

Chikungunya Virus Infection: not explicitly reportable in Ohio until May 1, 2015, but prior reporting was captured under “Other Arthropod-borne Diseases.” Case reporting prior to 2015 may not be complete since this was not listed by name on Ohio’s reportable disease list at that time.

Cytomegalovirus (CMV), Congenital: no longer reportable in Ohio starting Jan. 1, 2014.

Ehrlichiosis: formerly known as human monocytic ehrlichiosis (HME).

Hepatitis B, Perinatal Infection: shown by date of confirmatory testing.

Influenza-Associated Pediatric Mortality: includes cases for children less than 18 years of age. Data in the “Month of Onset” table are by the month of death.

Influenza A Virus, Novel Human Infection: listed in the Vaccine-Preventable Diseases tables as it is an influenza A virus infection, even though in all likelihood there will not be a readily available vaccine for a novel virus infection.

La Crosse Virus Disease: also known as California serogroup virus disease.

Meningitis, Other Bacterial: includes cases of bacterial meningitis for which the agent was specified, excluding group A *Streptococcus*, group B *Streptococcus* (in newborns less than three months of age), *Haemophilus influenzae*, *Listeria monocytogenes*, *Mycobacterium tuberculosis*, *Neisseria meningitidis* and *Streptococcus pneumoniae*. Cases of meningitis due to these agents are reported as those specific conditions.

Rabies, Animal: refers only to cases among animal species. The last reported case of human rabies in Ohio occurred in 1971.

Spotted Fever Rickettsiosis: includes Rocky Mountain Spotted Fever (RMSF) and other spotted fever group *Rickettsia*.

***Streptococcus pneumoniae*, Invasive Disease, Ages <5 Years:** numbers include cases for all children less than five years of age, regardless of drug-resistance pattern.

***Streptococcus pneumoniae*, Invasive Disease, Drug Resistant, Ages 5+ Years:** numbers include cases five years of age and older with intermediate resistance or resistance to one or more antimicrobial agents.

***Streptococcus pneumoniae*, Invasive Disease, Drug Susceptible, Ages 5+ Years:** numbers include cases five years of age and older with invasive *Streptococcus pneumoniae* that are susceptible or of unknown susceptibility to all antimicrobial agents tested.

Zika Virus Infection: became explicitly reportable in Ohio Sep. 16, 2016. Reporting prior to Sep. 16, 2016 was facilitated under “Other Arthropod-borne Diseases.”

OUTBREAKS

Numbers indicate the number of outbreaks reported and do not reflect the number of cases involved in the outbreak, except as noted. Outbreak data for vaccine-preventable diseases (i.e., influenza, pertussis, varicella-zoster virus) only include confirmed outbreaks. All other outbreaks are confirmed, probable or suspected.

Outbreak data are not included in the “Age in Years” and “Sex” tables, and rates were not calculated in any table. Outbreak data are by year of report, so “Month” refers to the month of report, except as noted. The source of outbreak data is the ODH Bureau of Infectious Diseases, the Ohio Disease Reporting System and local health jurisdictions. ***Eleven multistate and multicounty outbreaks are not included in the “County” table; thus, county totals do not match totals. (There were one community, five foodborne and five zoonotic outbreaks that were multistate or multicounty.)*** A multistate outbreak is an outbreak where the exposure occurred in more than one state while a multicounty outbreak is an outbreak where the exposure occurred in more than one county.

Cases in the non-influenza vaccine-preventable outbreaks (i.e., pertussis, varicella-zoster virus) are either confirmed or probable status. Cases in all other outbreaks are confirmed, probable or suspected.

Definitions for the six categories of outbreaks are from the ODH [Infectious Disease Control Manual](#) (IDCM). Foodborne outbreaks and waterborne outbreaks are also defined on the CDC’s Nationally Notifiable Disease Surveillance System’s [website](#). Outbreak definitions for vaccine-preventable diseases are located in the [disease-specific chapters](#) of the IDCM.

Community: defined as two or more cases of similar illness with a common exposure in the community and not considered a foodborne or waterborne disease outbreak.

Foodborne: an incident in which two or more persons experience a similar illness after ingestion of a common food, and epidemiologic analysis implicates the food as the source of the illness. In addition, there are [agent-specific criteria](#) to confirm foodborne outbreaks.

Healthcare-associated: defined as the occurrence 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 (e.g., hospital, long-term care 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: defined as two or more cases of similar illness with a common exposure at an institution (e.g., correctional facility, day care center, group home, school) and not considered a foodborne or waterborne disease outbreak.

Waterborne: defined as any outbreak of an infectious disease, chemical poisoning or toxin-mediated illness where water is indicated as the source by an epidemiological investigation.

Zoonotic: defined as the occurrence of two or more cases of a similar illness with a common exposure to an animal source and not considered a foodborne or waterborne disease outbreak.

RATE CALCULATIONS

Population estimates for rates in the “Age in Years,” “Sex” and “County of Residence” tables come from the 2017 U.S. Census estimates. Population data for rates in the “Year of Onset” table come from the U.S. Census estimates for each year. Rates were not calculated for the following conditions because they pertain to selected age populations and not the entire population. Rates were calculated in the “Age in Years” table only for the conditions below containing an asterisk (*) because appropriate population data were available for the denominator:

- Botulism, infant
- Hepatitis B, perinatal infection
- Influenza-associated pediatric mortality
- Streptococcal disease, group B, in newborn
- *Streptococcus pneumoniae*, invasive disease, ages < 5 years*
- *Streptococcus pneumoniae*, invasive disease, drug resistant, ages 5+ years*
- *Streptococcus pneumoniae*, invasive disease, drug susceptible, ages 5+ years*

DISEASES NOT INCLUDED IN TABLES

There were no known cases in Ohio of the following reportable diseases during at least the past five years; thus, they are not included in the 2013-2017 disease tables (pp. 6-7):

- | | |
|---|---|
| • Anthrax | • Rubella, congenital |
| • Cholera | • Severe acute respiratory syndrome |
| • Eastern equine encephalitis virus disease | • Smallpox |
| • Hantavirus | • St. Louis encephalitis virus disease |
| • Middle East respiratory syndrome | • <i>Staphylococcus aureus</i> , resistant to Vancomycin (VRSA) |
| • Plague | • Typhus fever, murine* |
| • Poliomyelitis | • Viral hemorrhagic fever |
| • Powassan virus disease | • Western equine encephalitis virus disease |
| • Psittacosis | • Yellow fever |
| • Rabies, human | |

* no longer reportable Sept. 16, 2016

Reportable diseases not included in the “Age in Years,” “Sex,” “Month of Onset” and “County of Residence” tables (pp. 8-43) had no known cases reported in 2017.

SEROTYPES AND SEROGROUPS

The ODH Laboratory (ODHL), Microbiology Section performs serogrouping of Shiga toxin-producing *Escherichia coli* isolates, serogrouping of *Neisseria meningitidis* isolates and serotyping of *Salmonella* isolates. Hospital and other clinical laboratories are encouraged to send *Salmonella*, *Neisseria meningitidis* and Shiga toxin-producing *Escherichia coli* isolates to ODH for serotyping and serogrouping. ODH also requests *Listeria* and *Vibrio* isolates. *Haemophilus influenzae* (in children under 5 years of age) and Vancomycin-resistant *Staphylococcus aureus* isolates with a minimum inhibitory concentration (MIC) of 8 or greater are requested to be sent directly to the Centers for Disease Control and Prevention (CDC) Laboratory. For further information on the submission of isolates, please contact ODHL at (614) 644-4656.

REFERENCES

Ohio Department of Health. *Infectious Disease Control Manual*. Columbus, OH: Ohio Department of Health; 2017. Available at: <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/infectious-disease-control-manual/section3/>.