

OHIO DEPARTMENT OF HEALTH

ANNUAL SUMMARY OF INFECTIOUS DISEASES

OHIO

2011

REPORTED INCIDENCE OF SELECTED
NOTIFIABLE DISEASES



PREPARED AND DISTRIBUTED BY:

BUREAU OF INFECTIOUS DISEASES

DIVISION OF PREVENTION AND HEALTH
PROMOTION

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, 2007-2011	6
Reported Cases of Selected Notifiable Diseases by Age in Years, Ohio, 2011	9
Reported Cases of Selected Notifiable Diseases by Sex, Ohio, 2011	13
Reported Cases of Selected Notifiable Diseases by Month of Onset, Ohio, 2011	15
Reported Cases of Selected Notifiable Diseases by County of Residence, Ohio, 2011	19
<i>Salmonella</i> Serotypes by Year of Onset, Ohio, 2007-2011	45
Meningococcal Disease Serogroups by Year of Onset, Ohio, 2007-2011	49
Graphs of Selected Notifiable Disease Incidence	50
Campylobacteriosis	51
Cryptosporidiosis	52
<i>Escherichia coli</i> , Shiga Toxin-Producing	53
Giardiasis	54
<i>Haemophilus influenzae</i> , Invasive Disease	55
LaCrosse Virus Disease	56
Legionellosis	57
Lyme Disease	58
Meningitis, Aseptic	59
Meningitis, Other Bacterial	60
Pertussis	61
Rocky Mountain Spotted Fever	62
Salmonellosis	63

TABLE OF CONTENTS

Shigellosis	64
Streptococcal Disease, Group A, Invasive	65
Streptococcal Disease, Group B, in Newborn	66
<i>Streptococcus pneumoniae</i> , Invasive Disease	67
Varicella	68
West Nile Virus Infection	69
Profiles of Selected Notifiable Diseases	70
LaCrosse Virus Disease	70
Lyme Disease	72
Salmonellosis	73
Streptococcal Disease, Group B, in Newborn	74
Outbreak Summaries	76
Community Outbreaks	76
Foodborne Outbreaks	77
Healthcare-Associated Outbreaks	79
Institutional Outbreaks	81
Waterborne Outbreaks	83
Zoonotic Outbreaks	83
Profiles of Selected Health Events Detected in EpiCenter	85
Tracking of Seasonal Trends	88
Technical Notes	90
Specific Diseases	90
Outbreaks	91
Rate Calculations	92
Diseases Not Included in Tables	93

TABLE OF CONTENTS

<i>Salmonella</i> Serotypes and Meningococcal Disease Serogroups	93
References	93

INTRODUCTION

The *Annual Summary of Infectious Diseases, Ohio, 2011* 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, county of residence, *Salmonella* serotypes and meningococcal disease serogroups. In addition, there are graphs of selected disease incidence, profiles of selected diseases, outbreak summaries and profiles of health events detected in EpiCenter that feature recent epidemiologic trends.

The sources of these data are individual case and laboratory reports submitted to the Ohio Department of Health (ODH) by infection preventionists, health care 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 and diseases diagnosed in non-United States citizens while visiting Ohio.

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), available online at <http://www.odh.ohio.gov/pdf/IDCM/sect3TOC.pdf>, and
- The Centers for Disease Control and Prevention (CDC) Division of Integrated Surveillance Systems and Services' nationally notifiable infectious disease case definitions, available online at <http://www.cdc.gov/NNDSS/script/ConditionList.aspx?Type=0&Yr=2011>.

HIV/AIDS, sexually transmitted diseases and tuberculosis surveillance data are not included in this report. Please refer to the ODH Web site for summary reports of these diseases as well as previous annual summaries at <http://www.odh.ohio.gov/healthStats/disease/id1.aspx>.

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 Jan. 1, 2009

The following infectious diseases were reportable to the Ohio Department of Health Jan. 1, 2011 through Dec. 31, 2011:

CLASS A

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

- Anthrax
- Botulism, foodborne
- Cholera
- Diphtheria
- Influenza A, novel virus
- Measles
- 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.
- Meningococcal disease
- Plague
- Rabies, human
- Rubella, not congenital
- Severe acute respiratory syndrome
- Smallpox
- Tularemia
- Viral hemorrhagic fever
- Yellow fever

CLASS B(1)

Diseases of public health concern needing a timely response because of the 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.

- Arboviral neuroinvasive and non-neuroinvasive disease:
 - Eastern equine encephalitis virus disease
 - LaCrosse virus disease
 - Powassan virus disease
 - St. Louis encephalitis virus disease
 - West Nile virus infection
 - Western equine encephalitis virus disease
 - Other arthropod-borne disease
- Chancroid
- Coccidioidomycosis
- Cyclosporiasis
- Dengue
- *Escherichia coli*, Shiga toxin-producing
- Granuloma inguinale
- *Haemophilus influenzae*, invasive disease
- Hantavirus
- Hemolytic uremic syndrome
- Hepatitis A
- Hepatitis B, perinatal
- Influenza-associated pediatric mortality
- Legionellosis
- Listeriosis
- Malaria
- Meningitis, aseptic
- Meningitis, other bacterial
- Mumps
- Pertussis
- Poliomyelitis
- Psittacosis
- Q fever
- Rubella, congenital
- Salmonellosis
- Shigellosis
- *Staphylococcus aureus*, vancomycin resistant or intermediate resistant
- Syphilis
- Tetanus
- Tuberculosis
- Typhoid fever

OHIO NOTIFIABLE DISEASES

Ohio Administrative Code (OAC) 3701-3, effective Jan. 1, 2009

CLASS B(2)

Diseases of significant public health concern. Report by the end of the work week after the existence of a case, a suspected case or a positive laboratory result is known.

- Amebiasis
- Botulism, infant
- Botulism, wound
- Brucellosis
- Campylobacteriosis
- Chlamydia infections
- Creutzfeldt-Jakob disease
- Cryptosporidiosis
- Cytomegalovirus, congenital
- Ehrlichiosis/Anaplasmosis
- Giardiasis
- Gonococcal infections
- Hepatitis B, non-perinatal
- Hepatitis C
- Hepatitis D
- Hepatitis E
- Herpes, congenital
- Influenza-associated hospitalization
- Leprosy
- Leptospirosis
- Lyme disease
- Mycobacterial disease, other than tuberculosis
- Rocky Mountain spotted fever
- Streptococcal disease, group A, invasive
- Streptococcal disease, group B, in newborn
- Streptococcal toxic shock syndrome
- *Streptococcus pneumoniae*, invasive disease
- Toxic shock syndrome
- Trichinosis
- Typhus fever
- Varicella
- Vibriosis
- Yersiniosis

CLASS C

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

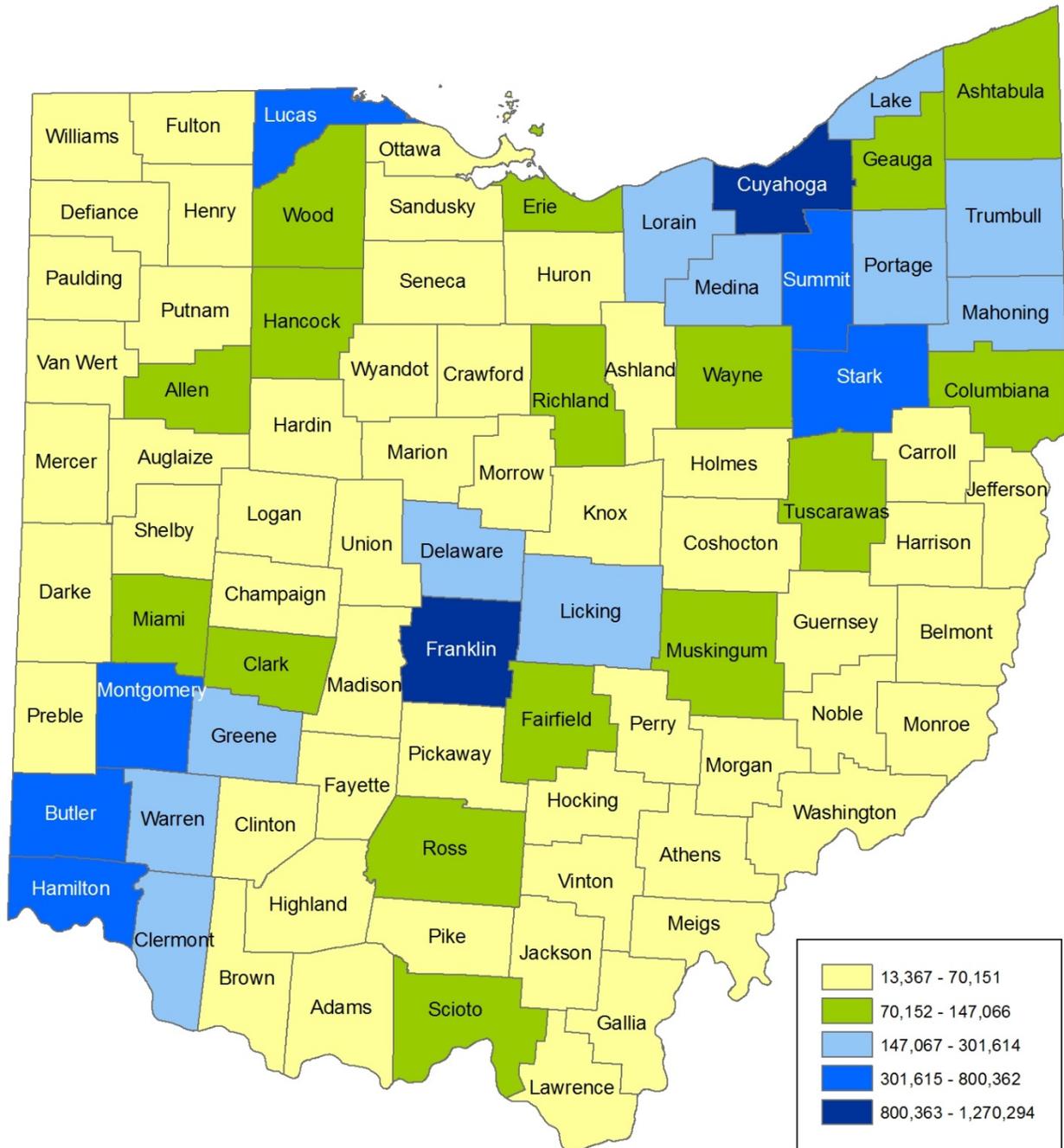
- Community
- Foodborne
- Healthcare-associated
- Institutional
- Waterborne
- Zoonotic

AIDS AND HIV REPORTING

Cases of AIDS (acquired immune deficiency syndrome), AIDS-related conditions, HIV (human immunodeficiency virus) infection, perinatal exposure to HIV and CD4 T-lymphocyte counts less than 200 or 14 percent must be reported on forms and in a manner prescribed by the director.

For the current list of reportable diseases in Ohio, please see <http://www.odh.ohio.gov/odhPrograms/dis/orbitdis/repid1.aspx> or OAC 3701-3-02 and 3701-3-13.

OHIO COUNTY POPULATION MAP



Source of population data: 2011 U.S. Census estimates.

TABLES OF SELECTED NOTIFIABLE DISEASES

BY YEAR OF ONSET TABLE

Pages 6-8

This table displays case counts and rates for five years of data in addition to the median and mean counts and rates during 2007-2011. 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 except 2010, which uses the actual count. Data are by year of onset with the exception of hepatitis B and C conditions and outbreaks, which are shown by date of report for all years. Please refer to the technical notes for limitations on hepatitis B and C data. Data in 1992-2003 annual summaries were by date of report.

BY AGE TABLE

Pages 9-12

This table provides case counts and rates by age group (in years) for 2011. Age refers to the patient's age at the earliest known date associated with the case. Population data come from the 2011 U.S. Census estimates. Outbreak data are not included in this table.

BY SEX TABLE

Pages 13-14

This table contains case counts and rates by sex for 2011. Population data come from the 2011 U.S. Census estimates. Outbreak data are not included in this table.

BY MONTH OF ONSET TABLE

Pages 15-18

Case counts and percents by month of onset for 2011 are presented in this table. Month refers to the month of symptom onset except for hepatitis B and C conditions and all outbreaks, which are by month of report, and for influenza-associated pediatric mortality, which is by month of death. Population data are not available by month, so rates were not calculated.

BY COUNTY OF RESIDENCE TABLE

Pages 19-44

This table displays case counts and rates by county for 2011. 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 2011 U.S. Census estimates.

SALMONELLA SEROTYPES TABLE

Pages 45-48

Salmonella case counts by serotype during 2007-2011 are contained in this table. Serotypes, untyped serogroups and untyped/ungrouped isolates are provided. The bacteriology laboratory at ODH performs serotyping of *Salmonella* isolates.

MENINGOCOCCAL SEROGROUPS TABLE

Page 49

This table shows meningococcal disease case counts by serogroup during 2007-2011. The bacteriology laboratory at ODH performs serogrouping of *Neisseria meningitidis* isolates.

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2007-2011

GENERAL INFECTIOUS DISEASES	2007		2008		2009		2010		2011		MEDIAN		MEAN	
	N	Rate												
Amebiasis	33	0.3	34	0.3	22	0.2	29	0.3	10	0.1	29	0.3	26	0.2
Botulism	4	0.0	4	0.0	6	0.1	3	0.0	2	0.0	4	0.0	4	0.0
Foodborne	3	0.0	3	0.0	1	0.0	0	0.0	1	0.0	1	0.0	2	0.0
Infant*	1	*	1	*	5	*	2	*	1	*	1	*	2	*
Wound	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	1,083	9.4	1,215	10.6	1,262	10.9	1,124	9.7	1,191	10.3	1,191	10.3	1,175	10.2
Cholera	1	0.0	0	0.0	0	0.0	3	0.0	0	0.0	0	0.0	1	0.0
Coccidioidomycosis	11	0.1	14	0.1	18	0.2	17	0.1	20	0.2	17	0.1	16	0.1
Creutzfeldt-Jakob Disease (CJD)	10	0.1	5	0.0	12	0.1	12	0.1	12	0.1	12	0.1	10	0.1
Cryptosporidiosis	611	5.3	704	6.1	386	3.3	477	4.1	1,113	9.6	611	5.3	658	5.7
Cyclosporiasis	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cytomegalovirus (CMV), Congenital*	16	*	15	*	19	*	28	*	10	*	16	*	18	*
Encephalitis	29	0.3	15	0.1	-	-	-	-	-	-	-	-	-	-
Post Other Infection*	5	0.0	3	0.0	-	-	-	-	-	-	-	-	-	-
Primary Viral	24	0.2	12	0.1	-	-	-	-	-	-	-	-	-	-
<i>Escherichia coli</i> , Shiga Toxin-Producing	138	1.2	209	1.8	128	1.1	138	1.2	182	1.6	138	1.2	159	1.4
O157:H7	80	0.7	161	1.4	87	0.8	75	0.7	95	0.8	87	0.8	100	0.9
Not O157:H7	19	0.2	20	0.2	26	0.2	43	0.4	72	0.6	26	0.2	36	0.3
Unknown Serotype	39	0.3	28	0.2	15	0.1	20	0.2	15	0.1	20	0.2	23	0.2
Giardiasis	833	7.3	891	7.8	816	7.1	863	7.5	781	6.8	833	7.3	837	7.3
<i>Haemophilus influenzae</i> , Invasive Disease	114	1.0	128	1.1	98	0.8	125	1.1	178	1.5	125	1.1	129	1.1
Hemolytic Uremic Syndrome (HUS)	12	0.1	8	0.1	14	0.1	1	0.0	5	0.0	8	0.1	8	0.1
Kawasaki Disease	38	0.3	27	0.2	-	-	-	-	-	-	-	-	-	-
Legionellosis	231	2.0	248	2.2	274	2.4	230	2.0	390	3.4	248	2.2	275	2.4
Leprosy (Hansen Disease)	1	0.0	2	0.0	2	0.0	1	0.0	1	0.0	1	0.0	1	0.0
Listeriosis	33	0.3	29	0.3	29	0.3	29	0.3	29	0.3	29	0.3	30	0.3
Meningitis, Aseptic	816	7.1	770	6.7	828	7.2	810	7.0	1,329	11.5	816	7.1	911	7.9
Meningitis, Other Bacterial*	49	0.4	59	0.5	68	0.6	82	0.7	84	0.7	68	0.6	68	0.6
Meningococcal Disease	32	0.3	42	0.4	42	0.4	35	0.3	24	0.2	35	0.3	35	0.3
Rheumatic Fever	4	0.0	2	0.0	-	-	-	-	-	-	-	-	-	-
Salmonellosis	1,323	11.5	1,378	12.0	1,377	11.9	1,309	11.3	1,183	10.2	1,323	11.5	1,314	11.4
Shigellosis	1,277	11.1	1,954	17.0	1,050	9.1	304	2.6	338	2.9	1,050	9.1	985	8.5
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	2	0.0	4	0.0	3	0.0	10	0.1	3	0.0	3	0.0	4	0.0
Streptococcal Disease, Group A, Invasive	226	2.0	265	2.3	208	1.8	248	2.1	322	2.8	248	2.1	254	2.2
Streptococcal Disease, Group B, in Newborn*	49	*	51	*	63	*	41	*	71	*	51	*	55	*
Streptococcal Toxic Shock Syndrome (STSS)	12	0.1	12	0.1	11	0.1	12	0.1	18	0.2	12	0.1	13	0.1
<i>Streptococcus pneumoniae</i> , Invasive Disease	1,155	10.1	1,240	10.8	1,358	11.8	1,220	10.6	1,261	10.9	1,240	10.8	1,247	10.8
Ages < 5 Years*	117	*	123	*	139	*	97	*	84	*	117	*	112	*
Drug Resistant, Ages 5+ Years*	302	*	338	*	343	*	320	*	304	*	320	*	321	*
Drug Susceptible, Ages 5+ Years*	736	*	779	*	876	*	803	*	873	*	803	*	813	*
Toxic Shock Syndrome (TSS)	2	0.0	4	0.0	2	0.0	4	0.0	0	0.0	2	0.0	2	0.0
Typhoid Fever	11	0.1	10	0.1	11	0.1	9	0.1	5	0.0	10	0.1	9	0.1
Vibriosis	6	0.1	9	0.1	6	0.1	11	0.1	7	0.1	7	0.1	8	0.1
<i>Vibrio parahaemolyticus</i> Infection	3	0.0	4	0.0	0	0.0	5	0.0	3	0.0	3	0.0	3	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)	3	0.0	5	0.0	6	0.1	6	0.1	4	0.0	5	0.0	5	0.0
Yersiniosis	52	0.5	48	0.4	44	0.4	42	0.4	31	0.3	44	0.4	43	0.4
SUB-TOTAL	8,214	71.6	9,397	81.8	8,157	70.7	7,217	62.6	8,600	74.5	8,214	71.6	8,317	72.2

N = number of cases reported.

Rates use U.S. Census estimates, except 2010, and are per 100,000 population.

n/a = not applicable.

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

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2007-2011

HEPATITIS	2007		2008		2009		2010		2011		MEDIAN		MEAN	
	N	Rate												
Hepatitis A	69	0.6	54	0.5	34	0.3	49	0.4	34	0.3	49	0.4	48	0.4
Hepatitis B, Acute*	124	1.1	131	1.1	213	1.8	123	1.1	106	0.9	124	1.1	139	1.2
Hepatitis B, Perinatal Infection*	0	*	1	*	0	*	3	*	4	*	1	*	2	*
Hepatitis C, Acute*	19	0.2	41	0.4	64	0.6	12	0.1	6	0.1	19	0.2	28	0.2
Hepatitis E	3	0.0	2	0.0	0	0.0	1	0.0	0	0.0	1	0.0	1	0.0
SUB-TOTAL	215	1.9	229	2.0	311	2.7	188	1.6	150	1.3	215	1.9	219	1.9

OUTBREAKS*	2007		2008		2009		2010		2011		MEDIAN		MEAN	
	N	Rate												
Community*	-	-	-	-	26	n/a	47	n/a	32	n/a	-	-	-	-
Conjunctivitis*	2	n/a	1	n/a	-	-	-	-	-	-	-	-	-	-
Foodborne*	87	n/a	92	n/a	56	n/a	69	n/a	61	n/a	69	n/a	73	n/a
Healthcare-Associated*	-	-	-	-	55	n/a	68	n/a	37	n/a	-	-	-	-
Institutional*	-	-	-	-	64	n/a	82	n/a	104	n/a	-	-	-	-
Nosocomial*	8	n/a	12	n/a	-	-	-	-	-	-	-	-	-	-
Pediculosis*	1	n/a	4	n/a	-	-	-	-	-	-	-	-	-	-
Scabies*	18	n/a	14	n/a	-	-	-	-	-	-	-	-	-	-
Staphylococcal Skin Infections*	39	n/a	21	n/a	-	-	-	-	-	-	-	-	-	-
Unspecified*	28	n/a	69	n/a	-	-	-	-	-	-	-	-	-	-
Unusual Incidence of Non-Class A, Class B or Class C Disease*	117	n/a	73	n/a	-	-	-	-	-	-	-	-	-	-
Waterborne*	9	n/a	4	n/a	2	n/a	10	n/a	17	n/a	9	n/a	8	n/a
Zoonotic*	-	-	-	-	9	n/a	2	n/a	4	n/a	-	-	-	-
SUB-TOTAL	309	n/a	290	n/a	212	n/a	278	n/a	255	n/a	278	n/a	269	n/a

VACCINE-PREVENTABLE	2007		2008		2009		2010		2011		MEDIAN		MEAN	
	N	Rate												
Influenza-Associated Hospitalization*	-	-	-	-	3,818	33.1	259	2.2	2,410	20.9	-	-	-	-
Influenza-Associated Pediatric Mortality*	2	*	1	*	15	*	0	*	1	*	1	*	4	*
Influenza A Virus, Novel Human Infection*	-	-	-	-	240	2.1	0	0.0	0	0.0	-	-	-	-
Measles	0	0.0	0	0.0	1	0.0	2	0.0	0	0.0	0	0.0	1	0.0
Imported	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Mumps	26	0.2	17	0.1	6	0.1	27	0.2	13	0.1	17	0.1	18	0.2
Pertussis	837	7.3	628	5.5	1,100	9.5	1,858	16.1	690	6.0	837	7.3	1,023	8.9
Tetanus	0	0.0	0	0.0	2	0.0	1	0.0	1	0.0	1	0.0	1	0.0
Varicella	4,364	38.1	2,392	20.8	1,829	15.8	1,337	11.6	1,040	9.0	1,829	15.8	2,192	19.1
SUB-TOTAL	5,229	45.6	3,038	26.4	7,011	60.7	3,484	30.2	4,155	36.0	4,155	36.0	4,583	39.8

N = number of cases reported.

Rates use U.S. Census estimates, except 2010, and are per 100,000 population.

n/a = not applicable.

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

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2007-2011

ZOOSES	2007		2008		2009		2010		2011		MEDIAN		MEAN	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Brucellosis	0	0.0	0	0.0	4	0.0	1	0.0	0	0.0	0	0.0	1	0.0
Dengue	11	0.1	7	0.1	3	0.0	16	0.1	2	0.0	7	0.1	8	0.1
Ehrlichiosis/Anaplasmosis	3	0.0	12	0.1	13	0.1	10	0.1	14	0.1	12	0.1	10	0.1
<i>Anaplasma phagocytophilum</i> *	2	0.0	1	0.0	1	0.0	2	0.0	8	0.1	2	0.0	3	0.0
<i>Ehrlichia chaffeensis</i> *	1	0.0	11	0.1	11	0.1	8	0.1	5	0.0	8	0.1	7	0.1
<i>Ehrlichia ewingii</i> *	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	9	0.1	6	0.1	5	0.0	24	0.2	50	0.4	9	0.1	19	0.1
Leptospirosis	0	0.0	1	0.0	1	0.0	0	0.0	1	0.0	1	0.0	1	0.0
Lyme Disease	34	0.3	45	0.4	56	0.5	37	0.3	52	0.5	45	0.4	45	0.4
Malaria	28	0.2	31	0.3	36	0.3	44	0.4	41	0.4	36	0.3	36	0.3
Psittacosis	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Q Fever	2	0.0	1	0.0	0	0.0	1	0.0	1	0.0	1	0.0	1	0.0
Rabies, Animal*	86	n/a	64	n/a	47	n/a	47	n/a	51	n/a	51	n/a	59	n/a
Rocky Mountain Spotted Fever (RMSF)	9	0.1	31	0.3	17	0.1	16	0.1	21	0.2	17	0.1	19	0.1
Toxoplasmosis, Congenital*	1	*	0	*	-	-	-	-	-	-	-	-	-	-
Tularemia	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0
Typhus Fever, Murine	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	23	0.2	15	0.1	2	0.0	5	0.0	21	0.2	15	0.1	13	0.1
SUB-TOTAL	206	1.0	213	1.3	186	1.2	202	1.3	255	1.8	206	1.3	212	1.3
GRAND TOTAL	14,173	120.2	13,167	111.6	15,877	135.3	11,369	95.7	13,415	113.5	13,415	113.5	13,600	115.3
POPULATION	11,466,917		11,485,910		11,542,645		11,536,504		11,544,951		11,536,504		11,515,385	

N = number of cases reported.

Rates use U.S. Census estimates, except 2010, and are per 100,000 population.

n/a = not applicable.

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

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2011

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	2	0.3	0	0.0	0	0.0	0	0.0
Botulism	1	0.1	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Infant*	1	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	118	16.7	53	7.1	50	6.6	65	8.1	159	10.7	114	8.2
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	1	0.1	2	0.1	3	0.2
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Cryptosporidiosis	270	38.1	121	16.1	93	12.2	64	8.0	140	9.4	123	8.8
Cytomegalovirus (CMV), Congenital*	10	*	0	*	0	*	0	*	0	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	40	5.6	22	2.9	13	1.7	24	3.0	32	2.1	14	1.0
O157:H7	28	4.0	13	1.7	7	0.9	9	1.1	15	1.0	5	0.4
Not O157:H7	10	1.4	8	1.1	4	0.5	14	1.7	13	0.9	7	0.5
Unknown Serotype	2	0.3	1	0.1	2	0.3	1	0.1	4	0.3	2	0.1
Giardiasis	158	22.3	77	10.3	46	6.1	46	5.7	93	6.2	88	6.3
<i>Haemophilus influenzae</i> , Invasive Disease	19	2.7	3	0.4	0	0.0	2	0.2	6	0.4	3	0.2
Hemolytic Uremic Syndrome (HUS)	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	0	0.0	0	0.0	0	0.0	7	0.5	27	1.9
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Listeriosis	1	0.1	0	0.0	0	0.0	0	0.0	3	0.2	0	0.0
Meningitis, Aseptic	326	46.0	101	13.5	111	14.6	104	13.0	232	15.6	147	10.5
Meningitis, Other Bacterial*	9	1.3	1	0.1	3	0.4	1	0.1	7	0.5	9	0.6
Meningococcal Disease	5	0.7	0	0.0	0	0.0	3	0.4	3	0.2	1	0.1
Salmonellosis	198	27.9	85	11.3	60	7.9	76	9.5	115	7.7	98	7.0
Shigellosis	137	19.3	77	10.3	12	1.6	5	0.6	38	2.5	21	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
Streptococcal Disease, Group A, Invasive	21	3.0	11	1.5	4	0.5	3	0.4	13	0.9	25	1.8
Streptococcal Disease, Group B, in Newborn*	71	*	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	2	0.1
<i>Streptococcus pneumoniae</i> , Invasive Disease	84	11.9	20	2.7	12	1.6	8	1.0	41	2.8	60	4.3
Ages < 5 Years*	84	11.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Drug Resistant, Ages 5+ Years*	0	0.0	4	0.5	0	0.0	3	0.4	11	0.7	13	0.9
Drug Susceptible, Ages 5+ Years*	0	0.0	16	2.1	12	1.6	5	0.6	30	2.0	47	3.4
Typhoid Fever	2	0.3	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0
Vibriosis	0	0.0	1	0.1	0	0.0	0	0.0	2	0.1	2	0.1
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
Other (Not Cholera)	0	0.0	1	0.1	0	0.0	0	0.0	1	0.1	1	0.1
Yersiniosis	11	1.6	0	0.0	1	0.1	1	0.1	5	0.3	1	0.1
SUB-TOTAL	1,483	209.3	572	76.3	407	53.5	405	50.5	900	60.4	739	53.0
HEPATITIS												
Hepatitis A	1	0.1	0	0.0	1	0.1	4	0.5	7	0.5	3	0.2
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	2	0.2	23	1.5	42	3.0
Hepatitis B, Perinatal Infection*	4	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	1	0.1	0	0.0	0	0.0	0	0.0	2	0.1	2	0.1
SUB-TOTAL	6	0.8	0	0.0	1	0.1	6	0.7	32	2.1	47	3.4

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2011

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
Influenza-Associated Hospitalization*	416	58.7	147	19.6	47	6.2	62	7.7	195	13.1	175	12.6
Influenza-Associated Pediatric Mortality*	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	2	0.3	4	0.5	0	0.0	0	0.0	1	0.1	1	0.1
Pertussis	195	27.5	164	21.9	176	23.2	31	3.9	22	1.5	30	2.2
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	196	27.7	347	46.3	345	45.4	95	11.8	28	1.9	14	1.0
SUB-TOTAL	810	114.3	662	88.3	568	74.7	188	23.4	246	16.5	220	15.8

ZONOSSES

Dengue	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	2	0.2	1	0.1	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	14	2.0	21	2.8	14	1.8	0	0.0	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	0	0.0	4	0.5	2	0.3	5	0.6	10	0.7	8	0.6
Malaria	1	0.1	4	0.5	1	0.1	1	0.1	10	0.7	10	0.7
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a										
Rocky Mountain Spotted Fever (RMSF)	0	0.0	3	0.4	1	0.1	4	0.5	2	0.1	2	0.1
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	0	0.0	1	0.1	2	0.2	0	0.0	0	0.0
SUB-TOTAL	15	2.1	32	4.3	20	2.6	14	1.7	24	1.6	20	1.4

GRAND TOTAL	2,314	326.6	1,266	168.8	996	131.0	613	76.4	1,202	80.6	1,026	73.6
--------------------	--------------	--------------	--------------	--------------	------------	--------------	------------	-------------	--------------	-------------	--------------	-------------

POPULATION	708,443	750,037	760,141	802,732	1,490,404	1,394,307
-------------------	----------------	----------------	----------------	----------------	------------------	------------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2011

GENERAL INFECTIOUS DISEASES	40-49		50-59		60 +		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	5	0.3	0	0.0	3	0.1	0	n/a	10	0.1
Botulism	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Infant*	0	*	0	*	0	*	0	n/a	1	*
Campylobacteriosis	177	11.1	195	11.6	260	11.0	0	n/a	1,191	10.3
Coccidioidomycosis	2	0.1	2	0.1	10	0.4	0	n/a	20	0.2
Creutzfeldt-Jakob Disease (CJD)	0	0.0	1	0.1	10	0.4	0	n/a	12	0.1
Cryptosporidiosis	82	5.2	67	4.0	151	6.4	2	n/a	1,113	9.6
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	n/a	10	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	9	0.6	8	0.5	20	0.8	0	n/a	182	1.6
O157:H7	3	0.2	5	0.3	10	0.4	0	n/a	95	0.8
Not O157:H7	4	0.3	3	0.2	9	0.4	0	n/a	72	0.6
Unknown Serotype	2	0.1	0	0.0	1	0.0	0	n/a	15	0.1
Giardiasis	82	5.2	82	4.9	109	4.6	0	n/a	781	6.8
<i>Haemophilus influenzae</i> , Invasive Disease	9	0.6	27	1.6	109	4.6	0	n/a	178	1.5
Hemolytic Uremic Syndrome (HUS)	1	0.1	1	0.1	1	0.0	0	n/a	5	0.0
Legionellosis	61	3.8	99	5.9	196	8.3	0	n/a	390	3.4
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Listeriosis	0	0.0	5	0.3	20	0.8	0	n/a	29	0.3
Meningitis, Aseptic	114	7.2	86	5.1	107	4.5	1	n/a	1,329	11.5
Meningitis, Other Bacterial*	9	0.6	15	0.9	30	1.3	0	n/a	84	0.7
Meningococcal Disease	1	0.1	6	0.4	5	0.2	0	n/a	24	0.2
Salmonellosis	152	9.6	155	9.2	242	10.2	2	n/a	1,183	10.2
Shigellosis	15	0.9	20	1.2	13	0.5	0	n/a	338	2.9
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	1	0.1	0	0.0	2	0.1	0	n/a	3	0.0
Streptococcal Disease, Group A, Invasive	28	1.8	49	2.9	167	7.1	1	n/a	322	2.8
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	n/a	71	*
Streptococcal Toxic Shock Syndrome (STSS)	2	0.1	2	0.1	12	0.5	0	n/a	18	0.2
<i>Streptococcus pneumoniae</i> , Invasive Disease	160	10.1	259	15.4	614	26.0	3	n/a	1,261	10.9
Ages < 5 Years*	0	0.0	0	0.0	0	0.0	0	n/a	84	11.9
Drug Resistant, Ages 5+ Years*	39	2.5	72	4.3	162	6.9	0	n/a	304	2.8
Drug Susceptible, Ages 5+ Years*	121	7.6	187	11.1	452	19.1	3	n/a	873	8.1
Typhoid Fever	0	0.0	0	0.0	1	0.0	0	n/a	5	0.0
Vibriosis	1	0.1	0	0.0	1	0.0	0	n/a	7	0.1
<i>Vibrio parahaemolyticus</i> Infection	1	0.1	0	0.0	0	0.0	0	n/a	3	0.0
Other (Not Cholera)	0	0.0	0	0.0	1	0.0	0	n/a	4	0.0
Yersiniosis	2	0.1	3	0.2	7	0.3	0	n/a	31	0.3
SUB-TOTAL	913	57.5	1,082	64.1	2,090	88.4	9	n/a	8,600	74.5

HEPATITIS

Hepatitis A	5	0.3	5	0.3	8	0.3	0	n/a	34	0.3
Hepatitis B, Acute*	23	1.4	8	0.5	8	0.3	0	n/a	106	0.9
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	n/a	4	*
Hepatitis C, Acute*	0	0.0	1	0.1	0	0.0	0	n/a	6	0.1
SUB-TOTAL	28	1.8	14	0.8	16	0.7	0	n/a	150	1.3

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 93-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2011

VACCINE-PREVENTABLE	40-49		50-59		60 +		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Influenza-Associated Hospitalization*	229	14.4	401	23.8	735	31.1	3	n/a	2,410	20.9
Influenza-Associated Pediatric Mortality*	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Mumps	2	0.1	2	0.1	1	0.0	0	n/a	13	0.1
Pertussis	24	1.5	23	1.4	25	1.1	0	n/a	690	6.0
Tetanus	0	0.0	0	0.0	1	0.0	0	n/a	1	0.0
Varicella	10	0.6	2	0.1	2	0.1	1	n/a	1,040	9.0
SUB-TOTAL	265	16.7	428	25.4	764	32.3	4	n/a	4,155	36.0

ZOOZOSES										
Dengue	0	0.0	1	0.1	1	0.0	0	n/a	2	0.0
Ehrlichiosis/Anaplasmosis	2	0.1	3	0.2	6	0.3	0	n/a	14	0.1
<i>Anaplasma phagocytophilum</i> *	1	0.1	2	0.1	3	0.1	0	n/a	8	0.1
<i>Ehrlichia chaffeensis</i> *	1	0.1	0	0.0	3	0.1	0	n/a	5	0.0
Unknown	0	0.0	1	0.1	0	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	0	0.0	1	0.1	0	0.0	0	n/a	50	0.4
Leptospirosis	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Lyme Disease	8	0.5	10	0.6	5	0.2	0	n/a	52	0.5
Malaria	4	0.3	6	0.4	4	0.2	0	n/a	41	0.4
Q Fever	0	0.0	0	0.0	1	0.0	0	n/a	1	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	51	n/a	51	n/a
Rocky Mountain Spotted Fever (RMSF)	2	0.1	3	0.2	4	0.2	0	n/a	21	0.2
Tularemia	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
West Nile Virus Infection	4	0.3	7	0.4	7	0.3	0	n/a	21	0.2
SUB-TOTAL	20	1.3	31	1.8	28	1.2	51	n/a	255	1.8

GRAND TOTAL	1,226	77.2	1,555	92.2	2,898	122.6	64	n/a	13,160	113.5
--------------------	--------------	-------------	--------------	-------------	--------------	--------------	-----------	------------	---------------	--------------

POPULATION	1,587,859	1,686,932	2,364,096	0	11,544,951
-------------------	------------------	------------------	------------------	----------	-------------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 93-97).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY SEX, OHIO, 2011

GENERAL INFECTIOUS DISEASES	Female		Male		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	4	0.1	6	0.1	0	n/a	10	0.1
Botulism	1	0.0	1	0.0	0	n/a	2	0.0
Foodborne	0	0.0	1	0.0	0	n/a	1	0.0
Infant*	1	*	0	*	0	n/a	1	*
Campylobacteriosis	557	9.4	630	11.2	4	n/a	1,191	10.3
Coccidioidomycosis	13	0.2	7	0.1	0	n/a	20	0.2
Creutzfeldt-Jakob Disease (CJD)	5	0.1	6	0.1	1	n/a	12	0.1
Cryptosporidiosis	605	10.2	504	8.9	4	n/a	1,113	9.6
Cytomegalovirus (CMV), Congenital*	5	*	5	*	0	n/a	10	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	108	1.8	74	1.3	0	n/a	182	1.6
O157:H7	50	0.8	45	0.8	0	n/a	95	0.8
Not O157:H7	47	0.8	25	0.4	0	n/a	72	0.6
Unknown Serotype	11	0.2	4	0.1	0	n/a	15	0.1
Giardiasis	352	6.0	428	7.6	1	n/a	781	6.8
<i>Haemophilus influenzae</i> , Invasive Disease	96	1.6	82	1.5	0	n/a	178	1.5
Hemolytic Uremic Syndrome (HUS)	5	0.1	0	0.0	0	n/a	5	0.0
Legionellosis	145	2.5	243	4.3	2	n/a	390	3.4
Leprosy (Hansen Disease)	1	0.0	0	0.0	0	n/a	1	0.0
Listeriosis	10	0.2	19	0.3	0	n/a	29	0.3
Meningitis, Aseptic	668	11.3	656	11.6	5	n/a	1,329	11.5
Meningitis, Other Bacterial*	37	0.6	47	0.8	0	n/a	84	0.7
Meningococcal Disease	12	0.2	12	0.2	0	n/a	24	0.2
Salmonellosis	641	10.9	540	9.6	2	n/a	1,183	10.2
Shigellosis	183	3.1	155	2.7	0	n/a	338	2.9
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	3	0.1	0	0.0	0	n/a	3	0.0
Streptococcal Disease, Group A, Invasive	162	2.7	156	2.8	4	n/a	322	2.8
Streptococcal Disease, Group B, in Newborn*	41	*	29	*	1	n/a	71	*
Streptococcal Toxic Shock Syndrome (STSS)	12	0.2	6	0.1	0	n/a	18	0.2
<i>Streptococcus pneumoniae</i> , Invasive Disease	607	10.3	640	11.3	14	n/a	1,261	10.9
Ages < 5 Years*	30	*	53	*	1	n/a	84	*
Drug Resistant, Ages 5+ Years*	143	*	159	*	2	n/a	304	*
Drug Susceptible, Ages 5+ Years*	434	*	428	*	11	n/a	873	*
Typhoid Fever	0	0.0	5	0.1	0	n/a	5	0.0
Vibriosis	2	0.0	5	0.1	0	n/a	7	0.1
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	3	0.1	0	n/a	3	0.0
Other (Not Cholera)	2	0.0	2	0.0	0	n/a	4	0.0
Yersiniosis	16	0.3	15	0.3	0	n/a	31	0.3
SUB-TOTAL	4,291	72.7	4,271	75.7	38	n/a	8,600	74.5

HEPATITIS

Hepatitis A	10	0.2	24	0.4	0	n/a	34	0.3
Hepatitis B, Acute*	50	0.8	56	1.0	0	n/a	106	0.9
Hepatitis B, Perinatal Infection*	3	*	1	*	0	n/a	4	*
Hepatitis C, Acute*	4	0.1	2	0.0	0	n/a	6	0.1
SUB-TOTAL	67	1.1	83	1.5	0	n/a	150	1.3

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	1,315	22.3	1,094	19.4	1	n/a	2,410	20.9
Influenza-Associated Pediatric Mortality*	0	*	1	*	0	n/a	1	*
Mumps	6	0.1	7	0.1	0	n/a	13	0.1
Pertussis	371	6.3	318	5.6	1	n/a	690	6.0
Tetanus	0	0.0	1	0.0	0	n/a	1	0.0
Varicella	522	8.8	510	9.0	8	n/a	1,040	9.0
SUB-TOTAL	2,214	37.5	1,931	34.2	10	n/a	4,155	36.0

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY SEX, OHIO, 2011

ZONNOSES	Female		Male		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate
Dengue	1	0.0	1	0.0	0	n/a	2	0.0
Ehrlichiosis/Anaplasmosis	3	0.1	11	0.2	0	n/a	14	0.1
<i>Anaplasma phagocytophilum</i> *	2	0.0	6	0.1	0	n/a	8	0.1
<i>Ehrlichia chaffeensis</i> *	0	0.0	5	0.1	0	n/a	5	0.0
Unknown	1	0.0	0	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	14	0.2	36	0.6	0	n/a	50	0.4
Leptospirosis	0	0.0	1	0.0	0	n/a	1	0.0
Lyme Disease	31	0.5	21	0.4	0	n/a	52	0.5
Malaria	15	0.3	26	0.5	0	n/a	41	0.4
Q Fever	0	0.0	1	0.0	0	n/a	1	0.0
Rabies, Animal*	0	0.0	0	0.0	51	n/a	51	n/a
Rocky Mountain Spotted Fever (RMSF)	7	0.1	14	0.2	0	n/a	21	0.2
Tularemia	1	0.0	0	0.0	0	n/a	1	0.0
West Nile Virus Infection	10	0.2	11	0.2	0	n/a	21	0.2
SUB-TOTAL	82	1.4	122	2.2	51	n/a	255	1.8
GRAND TOTAL	6,654	112.7	6,407	113.6	99	n/a	13,160	113.5
POPULATION	5,903,423		5,641,528		0		11,544,951	

N = number of cases reported.
 Rates use 2011 U.S. Census estimates and are per 100,000 population.
 n/a = not applicable.
 * Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2011

GENERAL INFECTIOUS DISEASES	January		February		March		April		May		June		July	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Amebiasis	0	0%	1	10%	1	10%	1	10%	2	20%	2	20%	1	10%
Botulism	1	50%	0	0%	0	0%	0	0%	0	0%	1	50%	0	0%
Foodborne	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Infant*	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
Campylobacteriosis	58	5%	46	4%	69	6%	72	6%	96	8%	160	13%	149	13%
Coccidioidomycosis	1	5%	2	10%	1	5%	0	0%	1	5%	5	25%	2	10%
Creutzfeldt-Jakob Disease (CJD)	0	0%	1	8%	1	8%	2	17%	1	8%	1	8%	0	0%
Cryptosporidiosis	43	4%	19	2%	36	3%	41	4%	54	5%	67	6%	129	12%
Cytomegalovirus (CMV), Congenital*	1	10%	0	0%	1	10%	2	20%	1	10%	1	10%	1	10%
<i>Escherichia coli</i> , Shiga Toxin-Producing	9	5%	11	6%	8	4%	10	5%	13	7%	20	11%	26	14%
O157:H7	4	4%	11	12%	4	4%	3	3%	5	5%	11	12%	11	12%
Not O157:H7	5	7%	0	0%	2	3%	6	8%	6	8%	8	11%	13	18%
Unknown Serotype	0	0%	0	0%	2	13%	1	7%	2	13%	1	7%	2	13%
Giardiasis	58	7%	50	6%	86	11%	64	8%	62	8%	45	6%	88	11%
<i>Haemophilus influenzae</i> , Invasive Disease	17	10%	13	7%	19	11%	6	3%	21	12%	13	7%	9	5%
Hemolytic Uremic Syndrome (HUS)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Legionellosis	12	3%	18	5%	14	4%	12	3%	16	4%	67	17%	53	14%
Leprosy (Hansen Disease)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Listeriosis	1	3%	1	3%	0	0%	2	7%	3	10%	2	7%	4	14%
Meningitis, Aseptic	51	4%	36	3%	48	4%	40	3%	62	5%	121	9%	179	13%
Meningitis, Other Bacterial*	5	6%	7	8%	6	7%	4	5%	7	8%	9	11%	12	14%
Meningococcal Disease	3	13%	1	4%	6	25%	1	4%	5	21%	1	4%	2	8%
Salmonellosis	65	5%	52	4%	74	6%	87	7%	82	7%	148	13%	162	14%
Shigellosis	25	7%	13	4%	6	2%	9	3%	33	10%	74	22%	36	11%
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0%	0	0%	0	0%	1	33%	0	0%	0	0%	0	0%
Streptococcal Disease, Group A, Invasive	49	15%	47	15%	56	17%	28	9%	30	9%	19	6%	15	5%
Streptococcal Disease, Group B, in Newborn*	6	8%	4	6%	7	10%	3	4%	10	14%	7	10%	6	8%
Streptococcal Toxic Shock Syndrome (STSS)	1	6%	3	17%	4	22%	1	6%	1	6%	2	11%	2	11%
<i>Streptococcus pneumoniae</i> , Invasive Disease	136	11%	145	11%	160	13%	124	10%	116	9%	66	5%	35	3%
Ages < 5 Years*	8	10%	5	6%	11	13%	17	20%	9	11%	4	5%	3	4%
Drug Resistant, Ages 5+ Years*	33	11%	38	13%	35	12%	27	9%	28	9%	14	5%	13	4%
Drug Susceptible, Ages 5+ Years*	95	11%	102	12%	114	13%	80	9%	79	9%	48	5%	19	2%
Typhoid Fever	0	0%	0	0%	0	0%	2	40%	0	0%	0	0%	0	0%
Vibriosis	0	0%	0	0%	0	0%	1	14%	0	0%	1	14%	1	14%
<i>Vibrio parahaemolyticus</i> Infection	0	0%	0	0%	0	0%	1	33%	0	0%	0	0%	1	33%
Other (Not Cholera)	0	0%	0	0%	0	0%	0	0%	0	0%	1	25%	0	0%
Yersiniosis	3	10%	2	6%	3	10%	3	10%	6	19%	3	10%	2	6%
SUB-TOTAL	545	6%	472	5%	606	7%	516	6%	622	7%	835	10%	915	11%

HEPATITIS

Hepatitis A	4	12%	4	12%	4	12%	4	12%	1	3%	1	3%	2	6%
Hepatitis B, Acute*	10	9%	10	9%	13	12%	12	11%	3	3%	7	7%	8	8%
Hepatitis B, Perinatal Infection*	0	0%	1	25%	1	25%	0	0%	1	25%	0	0%	0	0%
Hepatitis C, Acute*	0	0%	0	0%	3	50%	0	0%	0	0%	1	17%	0	0%
SUB-TOTAL	14	9%	15	10%	21	14%	16	11%	5	3%	9	6%	10	7%

N = number of cases reported.

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

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2011

OUTBREAKS*	January		February		March		April		May		June		July	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Community*	1	3%	2	6%	3	9%	2	6%	3	9%	2	6%	2	6%
Foodborne*	8	13%	4	7%	6	10%	5	8%	2	3%	4	7%	4	7%
Healthcare-Associated*	7	19%	6	16%	3	8%	4	11%	3	8%	2	5%	4	11%
Institutional*	16	15%	4	4%	13	13%	4	4%	7	7%	7	7%	2	2%
Waterborne*	1	6%	1	6%	0	0%	0	0%	0	0%	1	6%	0	0%
Zoonotic*	0	0%	0	0%	1	25%	1	25%	0	0%	0	0%	0	0%
SUB-TOTAL	33	13%	17	7%	26	10%	16	6%	15	6%	16	6%	12	5%

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	615	26%	1,109	46%	495	21%	79	3%	7	0%	9	0%	6	0%
Influenza-Associated Pediatric Mortality*	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%
Mumps	2	15%	1	8%	1	8%	1	8%	1	8%	0	0%	0	0%
Pertussis	93	13%	33	5%	57	8%	40	6%	43	6%	49	7%	49	7%
Tetanus	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Varicella	140	13%	89	9%	107	10%	82	8%	85	8%	29	3%	22	2%
SUB-TOTAL	850	20%	1,233	30%	660	16%	202	5%	136	3%	87	2%	77	2%

ZOOLOSES

Dengue	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Ehrlichiosis/Anaplasmosis	0	0%	0	0%	0	0%	0	0%	3	21%	5	36%	2	14%
<i>Anaplasma phagocytophilum</i> *	0	0%	0	0%	0	0%	0	0%	2	25%	1	13%	1	13%
<i>Ehrlichia chaffeensis</i> *	0	0%	0	0%	0	0%	0	0%	1	20%	3	60%	1	20%
Unknown	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
LaCrosse Virus Disease*	0	0%	0	0%	0	0%	0	0%	0	0%	1	2%	15	30%
Leptospirosis	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Lyme Disease	3	6%	0	0%	0	0%	3	6%	5	10%	15	29%	8	15%
Malaria	4	10%	2	5%	2	5%	4	10%	4	10%	4	10%	5	12%
Q Fever	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Rabies, Animal*	1	2%	3	6%	1	2%	2	4%	9	18%	5	10%	1	2%
Rocky Mountain Spotted Fever (RMSF)	0	0%	0	0%	1	5%	0	0%	4	19%	4	19%	2	10%
Tularemia	1	100%	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%
SUB-TOTAL	9	4%	5	2%	4	2%	9	4%	25	10%	34	13%	33	13%

N = number of cases reported.

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

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2011

GENERAL INFECTIOUS DISEASES	August		September		October		November		December		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%
Amebiasis	0	0%	0	0%	1	10%	1	10%	0	0%	10	100%
Botulism	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Foodborne	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Infant*	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Campylobacteriosis	135	11%	104	9%	118	10%	89	7%	95	8%	1,191	100%
Coccidioidomycosis	0	0%	1	5%	3	15%	3	15%	1	5%	20	100%
Creutzfeldt-Jakob Disease (CJD)	2	17%	2	17%	1	8%	0	0%	1	8%	12	100%
Cryptosporidiosis	370	33%	202	18%	63	6%	53	5%	36	3%	1,113	100%
Cytomegalovirus (CMV), Congenital*	2	20%	1	10%	0	0%	0	0%	0	0%	10	100%
<i>Escherichia coli</i> , Shiga Toxin-Producing	32	18%	28	15%	9	5%	11	6%	5	3%	182	100%
O157:H7	16	17%	17	18%	7	7%	5	5%	1	1%	95	100%
Not O157:H7	13	18%	9	13%	2	3%	5	7%	3	4%	72	100%
Unknown Serotype	3	20%	2	13%	0	0%	1	7%	1	7%	15	100%
Giardiasis	104	13%	65	8%	51	7%	51	7%	57	7%	781	100%
<i>Haemophilus influenzae</i> , Invasive Disease	8	4%	11	6%	16	9%	20	11%	25	14%	178	100%
Hemolytic Uremic Syndrome (HUS)	1	20%	3	60%	1	20%	0	0%	0	0%	5	100%
Legionellosis	46	12%	37	9%	64	16%	20	5%	31	8%	390	100%
Leprosy (Hansen Disease)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Listeriosis	1	3%	6	21%	3	10%	4	14%	2	7%	29	100%
Meningitis, Aseptic	270	20%	255	19%	147	11%	67	5%	53	4%	1,329	100%
Meningitis, Other Bacterial*	7	8%	9	11%	8	10%	4	5%	6	7%	84	100%
Meningococcal Disease	0	0%	0	0%	3	13%	1	4%	1	4%	24	100%
Salmonellosis	168	14%	137	12%	91	8%	67	6%	50	4%	1,183	100%
Shigellosis	32	9%	18	5%	30	9%	18	5%	44	13%	338	100%
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	1	33%	0	0%	0	0%	1	33%	0	0%	3	100%
Streptococcal Disease, Group A, Invasive	14	4%	21	7%	14	4%	14	4%	15	5%	322	100%
Streptococcal Disease, Group B, in Newborn*	6	8%	7	10%	6	8%	8	11%	1	1%	71	100%
Streptococcal Toxic Shock Syndrome (STSS)	0	0%	0	0%	1	6%	1	6%	2	11%	18	100%
<i>Streptococcus pneumoniae</i> , Invasive Disease	33	3%	62	5%	101	8%	145	11%	138	11%	1,261	100%
Ages < 5 Years*	1	1%	6	7%	5	6%	6	7%	9	11%	84	100%
Drug Resistant, Ages 5+ Years*	9	3%	17	6%	25	8%	35	12%	30	10%	304	100%
Drug Susceptible, Ages 5+ Years*	23	3%	39	4%	71	8%	104	12%	99	11%	873	100%
Typhoid Fever	1	20%	0	0%	0	0%	0	0%	2	40%	5	100%
Vibriosis	2	29%	1	14%	1	14%	0	0%	0	0%	7	100%
<i>Vibrio parahaemolyticus</i> Infection	0	0%	0	0%	1	33%	0	0%	0	0%	3	100%
Other (Not Cholera)	2	50%	1	25%	0	0%	0	0%	0	0%	4	100%
Yersiniosis	0	0%	2	6%	1	3%	1	3%	5	16%	31	100%
SUB-TOTAL	1,235	14%	972	11%	733	9%	579	7%	570	7%	8,600	100%

HEPATITIS

Hepatitis A	5	15%	4	12%	1	3%	4	12%	0	0%	34	100%
Hepatitis B, Acute*	10	9%	12	11%	7	7%	6	6%	8	8%	106	100%
Hepatitis B, Perinatal Infection*	0	0%	0	0%	1	25%	0	0%	0	0%	4	100%
Hepatitis C, Acute*	0	0%	1	17%	1	17%	0	0%	0	0%	6	100%
SUB-TOTAL	15	10%	17	11%	10	7%	10	7%	8	5%	150	100%

N = number of cases reported.

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

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2011

OUTBREAKS*	August		September		October		November		December		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%
Community*	3	9%	4	13%	0	0%	4	13%	6	19%	32	100%
Foodborne*	4	7%	9	15%	5	8%	5	8%	5	8%	61	100%
Healthcare-Associated*	1	3%	0	0%	0	0%	4	11%	3	8%	37	100%
Institutional*	5	5%	10	10%	11	11%	11	11%	14	13%	104	100%
Waterborne*	1	6%	12	71%	0	0%	1	6%	0	0%	17	100%
Zoonotic*	0	0%	0	0%	1	25%	1	25%	0	0%	4	100%
SUB-TOTAL	14	5%	35	14%	17	7%	26	10%	28	11%	255	100%

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	3	0%	9	0%	20	1%	29	1%	29	1%	2,410	100%
Influenza-Associated Pediatric Mortality*	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Mumps	2	15%	1	8%	1	8%	1	8%	2	15%	13	100%
Pertussis	61	9%	49	7%	75	11%	74	11%	67	10%	690	100%
Tetanus	0	0%	0	0%	0	0%	1	100%	0	0%	1	100%
Varicella	49	5%	104	10%	125	12%	120	12%	88	8%	1,040	100%
SUB-TOTAL	115	3%	163	4%	221	5%	225	5%	186	4%	4,155	100%

ZOOSES

Dengue	2	100%	0	0%	0	0%	0	0%	0	0%	2	100%
Ehrlichiosis/Anaplasmosis	1	7%	1	7%	1	7%	1	7%	0	0%	14	100%
<i>Anaplasma phagocytophilum</i> *	1	13%	1	13%	1	13%	1	13%	0	0%	8	100%
<i>Ehrlichia chaffeensis</i> *	0	0%	0	0%	0	0%	0	0%	0	0%	5	100%
Unknown	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
LaCrosse Virus Disease*	14	28%	15	30%	5	10%	0	0%	0	0%	50	100%
Leptospirosis	1	100%	0	0%	0	0%	0	0%	0	0%	1	100%
Lyme Disease	9	17%	2	4%	0	0%	4	8%	3	6%	52	100%
Malaria	4	10%	3	7%	3	7%	4	10%	2	5%	41	100%
Q Fever	0	0%	1	100%	0	0%	0	0%	0	0%	1	100%
Rabies, Animal*	10	20%	10	20%	7	14%	2	4%	0	0%	51	100%
Rocky Mountain Spotted Fever (RMSF)	6	29%	2	10%	2	10%	0	0%	0	0%	21	100%
Tularemia	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
West Nile Virus Infection	11	52%	10	48%	0	0%	0	0%	0	0%	21	100%
SUB-TOTAL	58	23%	44	17%	18	7%	11	4%	5	2%	255	100%

GRAND TOTAL	1,437	11%	1,231	9%	999	7%	851	6%	797	6%	13,415	100%
--------------------	--------------	------------	--------------	-----------	------------	-----------	------------	-----------	------------	-----------	---------------	-------------

N = number of cases reported.

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

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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
Foodborne	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	1	3.5	13	12.3	6	11.3	10	9.9	1	1.5	10	21.8	8	11.4
Coccidioidomycosis	0	0.0	1	0.9	0	0.0	0	0.0	1	1.5	1	2.2	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	1	3.5	7	6.6	4	7.5	1	1.0	0	0.0	12	26.2	0	0.0
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	0	0.0	3	2.8	2	3.8	0	0.0	2	3.1	7	15.3	0	0.0
O157:H7	0	0.0	1	0.9	2	3.8	0	0.0	0	0.0	6	13.1	0	0.0
Not O157:H7	0	0.0	2	1.9	0	0.0	0	0.0	2	3.1	1	2.2	0	0.0
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	3.5	7	6.6	2	3.8	7	6.9	3	4.6	0	0.0	6	8.6
<i>Haemophilus influenzae</i> , Invasive Disease	0	0.0	4	3.8	0	0.0	1	1.0	1	1.5	1	2.2	2	2.9
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
Legionellosis	0	0.0	3	2.8	1	1.9	1	1.0	4	6.2	1	2.2	1	1.4
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	0.9	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Meningitis, Aseptic	1	3.5	28	26.4	1	1.9	10	9.9	6	9.3	4	8.7	14	20.0
Meningitis, Other Bacterial*	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4
Meningococcal Disease	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Salmonellosis	6	21.1	15	14.1	3	5.6	14	13.8	2	3.1	3	6.5	8	11.4
Shigellosis	0	0.0	0	0.0	1	1.9	0	0.0	1	1.5	0	0.0	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	1	3.5	2	1.9	1	1.9	4	3.9	0	0.0	1	2.2	1	1.4
Streptococcal Disease, Group B, in Newborn*	1	*	2	*	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	1	1.4
<i>Streptococcus pneumoniae</i> , Invasive Disease	0	0.0	15	14.1	0	0.0	8	7.9	6	9.3	5	10.9	11	15.7
Ages < 5 Years*	0	*	1	*	0	*	0	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	2	*	0	*	2	*	3	*	1	*	4	*
Drug Susceptible, Ages 5+ Years*	0	*	12	*	0	*	6	*	3	*	4	*	7	*
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
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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	13	45.7	101	95.2	21	39.5	58	57.2	28	43.2	45	98.2	53	75.6

HEPATITIS

Hepatitis A	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	2	7.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4
SUB-TOTAL	2	7.0	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4

N = number of cases reported.
 Rates use 2011 U.S. Census estimates and are per 100,000 population.
 n/a = not applicable.
 * Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Adams		Allen		Ashland		Ashtabula		Athens		Auglaize		Belmont	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	1	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	5	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	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	2	n/a	6	n/a	2	n/a	1	n/a	2	n/a	1	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	1	3.5	64	60.3	5	9.4	11	10.9	10	15.4	14	30.5	4	5.7
Influenza-Associated Pediatric Mortality*	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	0	0.0	12	11.3	11	20.7	13	12.8	5	7.7	4	8.7	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	3	10.5	6	5.7	13	24.5	32	31.6	7	10.8	9	19.6	7	10.0
SUB-TOTAL	4	14.1	82	77.3	29	54.6	56	55.3	22	34.0	27	58.9	11	15.7

ZOOLOSES

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	1	1.5	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	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
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	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	0	0.0	0	0.0	2	2.0	0	0.0	1	2.2	2	2.9
Malaria	0	0.0	1	0.9	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
Rabies, Animal*	0	n/a	0	n/a	0	n/a	3	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	1	0.9	0	0.0	5	2.0	3	4.6	1	2.2	2	2.9

GRAND TOTAL	19	66.8	188	175.3	56	94.1	121	114.5	54	81.8	75	159.3	68	95.5
--------------------	-----------	-------------	------------	--------------	-----------	-------------	------------	--------------	-----------	-------------	-----------	--------------	-----------	-------------

POPULATION	28,456	106,094	53,153	101,345	64,769	45,838	70,151
-------------------	---------------	----------------	---------------	----------------	---------------	---------------	---------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	1	*	0	*	0	*	0	*	0	*
Campylobacteriosis	1	2.2	26	7.0	2	6.9	3	7.5	11	8.0	14	7.0	4	9.5
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	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	2	4.5	42	11.4	2	6.9	0	0.0	0	0.0	50	25.1	9	21.5
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	0	0.0	7	1.9	1	3.5	0	0.0	1	0.7	5	2.5	0	0.0
O157:H7	0	0.0	5	1.4	0	0.0	0	0.0	0	0.0	4	2.0	0	0.0
Not O157:H7	0	0.0	2	0.5	1	3.5	0	0.0	1	0.7	1	0.5	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	2	4.5	15	4.1	6	20.8	5	12.6	0	0.0	20	10.0	4	9.5
<i>Haemophilus influenzae</i> , Invasive Disease	0	0.0	9	2.4	1	3.5	1	2.5	2	1.5	6	3.0	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
Legionellosis	0	0.0	6	1.6	1	3.5	1	2.5	3	2.2	1	0.5	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	1	2.2	36	9.7	2	6.9	1	2.5	13	9.4	29	14.6	0	0.0
Meningitis, Other Bacterial*	0	0.0	1	0.3	0	0.0	0	0.0	3	2.2	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
Salmonellosis	4	9.0	27	7.3	2	6.9	2	5.0	22	16.0	16	8.0	3	7.2
Shigellosis	0	0.0	23	6.2	0	0.0	0	0.0	0	0.0	16	8.0	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	0	0.0	7	1.9	3	10.4	1	2.5	8	5.8	2	1.0	1	2.4
Streptococcal Disease, Group B, in Newborn*	0	*	1	*	1	*	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
<i>Streptococcus pneumoniae</i> , Invasive Disease	2	4.5	39	10.5	1	3.5	1	2.5	23	16.7	25	12.6	8	19.1
Ages < 5 Years*	1	*	1	*	0	*	0	*	2	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	9	*	0	*	1	*	1	*	10	*	4	*
Drug Susceptible, Ages 5+ Years*	1	*	29	*	1	*	0	*	20	*	15	*	4	*
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	0.5	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
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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	12	26.9	242	65.4	23	79.9	15	37.7	86	62.5	186	93.4	30	71.6

HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	3	0.8	0	0.0	0	0.0	4	2.9	5	2.5	0	0.0
Hepatitis B, Perinatal Infection*	0	*	1	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	4	1.1	0	0.0	0	0.0	5	3.6	5	2.5	0	0.0

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Brown		Butler		Carroll		Champaign		Clark		Clermont		Clinton	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
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	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	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Institutional*	0	n/a	2	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	0	n/a	3	n/a	0	n/a	1	n/a	0	n/a	1	n/a	1	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	1	2.2	67	18.1	11	38.2	2	5.0	34	24.7	24	12.1	3	7.2
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	1	2.2	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	0	0.0	9	2.4	0	0.0	0	0.0	3	2.2	12	6.0	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	7	15.7	21	5.7	2	6.9	7	17.6	5	3.6	18	9.0	0	0.0
SUB-TOTAL	9	20.1	98	26.5	13	45.2	9	22.6	42	30.5	54	27.1	3	7.2

ZOOLOSES

Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	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
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse 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	0	0.0	0	0.0	0	0.0	0	0.0	2	1.0	0	0.0
Malaria	0	0.0	3	0.8	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
Rabies, Animal*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	2	0.5	0	0.0	1	2.5	0	0.0	1	0.5	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
SUB-TOTAL	0	0.0	5	1.4	1	0.0	1	2.5	0	0.0	5	2.0	0	0.0

GRAND TOTAL	21	47.0	352	94.3	37	125.1	26	62.8	133	96.6	251	125.0	34	78.7
--------------------	-----------	-------------	------------	-------------	-----------	--------------	-----------	-------------	------------	-------------	------------	--------------	-----------	-------------

POPULATION	44,687	369,999	28,782	39,795	137,691	199,139	41,927
-------------------	---------------	----------------	---------------	---------------	----------------	----------------	---------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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	1	2.7	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
Foodborne	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	14	13.0	10	27.1	0	0.0	151	11.9	4	7.6	15	38.6	19	10.7
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	0	0.0	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	5	4.6	1	2.7	5	11.5	40	3.1	5	9.5	3	7.7	13	7.3
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	3	*	0	*	0	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	4	3.7	1	2.7	0	0.0	9	0.7	3	5.7	0	0.0	2	1.1
O157:H7	3	2.8	1	2.7	0	0.0	6	0.5	2	3.8	0	0.0	1	0.6
Not O157:H7	1	0.9	0	0.0	0	0.0	3	0.2	0	0.0	0	0.0	1	0.6
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	1	1.9	0	0.0	0	0.0
Giardiasis	4	3.7	3	8.1	3	6.9	110	8.7	1	1.9	1	2.6	10	5.6
<i>Haemophilus influenzae</i> , Invasive Disease	1	0.9	0	0.0	1	2.3	12	0.9	0	0.0	1	2.6	1	0.6
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
Legionellosis	4	3.7	0	0.0	0	0.0	46	3.6	1	1.9	1	2.6	7	3.9
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	2.7	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	5	4.6	6	16.2	0	0.0	127	10.0	6	11.4	0	0.0	11	6.2
Meningitis, Other Bacterial*	1	0.9	0	0.0	0	0.0	10	0.8	0	0.0	0	0.0	1	0.6
Meningococcal Disease	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Salmonellosis	19	17.7	4	10.8	2	4.6	132	10.4	14	26.5	9	23.1	18	10.1
Shigellosis	0	0.0	0	0.0	0	0.0	30	2.4	3	5.7	0	0.0	2	1.1
<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	4	3.7	0	0.0	0	0.0	34	2.7	2	3.8	1	2.6	1	0.6
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	17	*	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
<i>Streptococcus pneumoniae</i> , Invasive Disease	19	17.7	3	8.1	5	11.5	102	8.0	2	3.8	7	18.0	15	8.4
Ages < 5 Years*	1	*	0	*	1	*	5	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	5	*	1	*	1	*	31	*	0	*	1	*	5	*
Drug Susceptible, Ages 5+ Years*	13	*	2	*	3	*	66	*	2	*	5	*	10	*
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	3	0.2	0	0.0	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
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	1	0.6
SUB-TOTAL	80	74.4	30	81.2	17	39.2	838	66.0	41	77.6	38	97.7	101	56.6

HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	9	0.7	0	0.0	0	0.0	2	1.1
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	1	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.6
SUB-TOTAL	0	0.0	0	0.0	0	0.0	13	1.0	0	0.0	0	0.0	4	2.2

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Columbiana		Coshocton		Crawford		Cuyahoga		Darke		Defiance		Delaware	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	0	n/a	2	n/a	2	n/a	0	n/a	0	n/a	1	n/a
Foodborne*	0	n/a	0	n/a	2	n/a	4	n/a	0	n/a	0	n/a	2	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	9	n/a	0	n/a	0	n/a	2	n/a
Institutional*	0	n/a	1	n/a	0	n/a	6	n/a	1	n/a	0	n/a	5	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	1	n/a	4	n/a	23	n/a	1	n/a	0	n/a	11	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	15	13.9	4	10.8	2	4.6	505	39.8	4	7.6	2	5.1	10	5.6
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	6	0.5	1	1.9	0	0.0	0	0.0
Pertussis	1	0.9	2	5.4	0	0.0	29	2.3	0	0.0	0	0.0	51	28.6
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	4	3.7	12	32.5	3	6.9	77	6.1	5	9.5	19	48.9	16	9.0
SUB-TOTAL	20	18.6	18	48.7	5	11.5	617	48.6	10	18.9	21	54.0	77	43.2

ZOOLOSES

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
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	2	1.1
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	0.9	2	5.4	0	0.0	3	0.2	0	0.0	0	0.0	2	1.1
Malaria	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	3	1.7
Q Fever	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	1	n/a	3	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	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	0	0.0	0	0.0	7	0.6	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	0.9	2	5.4	1	0.0	17	1.1	0	0.0	0	0.0	7	3.9

GRAND TOTAL	101	93.9	51	135.3	27	50.7	1,508	116.7	52	96.6	59	151.7	200	106.0
--------------------	------------	-------------	-----------	--------------	-----------	-------------	--------------	--------------	-----------	-------------	-----------	--------------	------------	--------------

POPULATION	107,570	36,955	43,389	1,270,294	52,809	38,884	178,341
-------------------	----------------	---------------	---------------	------------------	---------------	---------------	----------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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	2	1.4	0	0.0	4	0.3	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
Foodborne	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	4	5.2	13	8.8	1	3.5	108	9.2	8	18.8	4	12.9	18	19.3
Coccidioidomycosis	0	0.0	1	0.7	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	1	1.3	12	8.2	0	0.0	54	4.6	6	14.1	0	0.0	4	4.3
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	3	*	0	*	0	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	0	0.0	0	0.0	0	0.0	27	2.3	3	7.1	0	0.0	0	0.0
O157:H7	0	0.0	0	0.0	0	0.0	10	0.8	2	4.7	0	0.0	0	0.0
Not O157:H7	0	0.0	0	0.0	0	0.0	16	1.4	0	0.0	0	0.0	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	1	0.1	1	2.4	0	0.0	0	0.0
Giardiasis	1	1.3	5	3.4	2	6.9	139	11.8	3	7.1	0	0.0	5	5.4
<i>Haemophilus influenzae</i> , Invasive Disease	2	2.6	0	0.0	0	0.0	10	0.8	0	0.0	0	0.0	5	5.4
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	2	0.2	1	2.4	0	0.0	0	0.0
Legionellosis	2	2.6	2	1.4	0	0.0	110	9.3	0	0.0	0	0.0	2	2.1
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	2	2.6	0	0.0	0	0.0	3	0.3	0	0.0	0	0.0	1	1.1
Meningitis, Aseptic	3	3.9	18	12.2	8	27.6	154	13.1	6	14.1	2	6.5	4	4.3
Meningitis, Other Bacterial*	1	1.3	1	0.7	0	0.0	6	0.5	1	2.4	0	0.0	1	1.1
Meningococcal Disease	0	0.0	0	0.0	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0
Salmonellosis	11	14.3	15	10.2	3	10.4	122	10.3	9	21.2	1	3.2	8	8.6
Shigellosis	0	0.0	0	0.0	0	0.0	14	1.2	0	0.0	0	0.0	1	1.1
<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	2.6	0	0.0	0	0.0	40	3.4	0	0.0	1	3.2	1	1.1
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	11	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	8	10.4	8	5.4	0	0.0	162	13.7	4	9.4	3	9.7	9	9.7
Ages < 5 Years*	1	*	1	*	0	*	12	*	1	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	4	*	1	*	0	*	44	*	1	*	1	*	0	*
Drug Susceptible, Ages 5+ Years*	3	*	6	*	0	*	106	*	2	*	1	*	9	*
Typhoid Fever	0	0.0	0	0.0	0	0.0	1	0.1	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
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	0	0.0	7	0.6	1	2.4	0	0.0	0	0.0
SUB-TOTAL	37	48.2	77	52.4	14	48.3	987	83.7	42	98.8	11	35.5	59	63.3

HEPATITIS

Hepatitis A	1	1.3	0	0.0	1	3.5	7	0.6	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	0	0.0	1	3.5	28	2.4	0	0.0	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	1.3	0	0.0	2	6.9	35	3.0	0	0.0	0	0.0	0	0.0

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Erie		Fairfield		Fayette		Franklin		Fulton		Gallia		Geauga	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	0	n/a	0	n/a	12	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	7	n/a	2	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	6	n/a	0	n/a	1	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	35	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	0	n/a	1	n/a	62	n/a	2	n/a	1	n/a	0	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	5	6.5	14	9.5	3	10.4	254	21.5	14	32.9	7	22.6	23	24.7
Influenza-Associated Pediatric Mortality*	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	2	2.6	10	6.8	2	6.9	292	24.8	1	2.4	0	0.0	1	1.1
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	3	3.9	34	23.1	1	3.5	80	6.8	8	18.8	0	0.0	3	3.2
SUB-TOTAL	10	13.0	58	39.4	6	20.7	626	53.1	23	54.1	7	22.6	27	29.0

ZOOLOSES

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	0.1	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
Unknown	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	3	2.0	0	0.0	2	0.2	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	1	0.7	0	0.0	6	0.5	0	0.0	0	0.0	1	1.1
Malaria	0	0.0	0	0.0	0	0.0	17	1.4	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
Rabies, Animal*	0	n/a	1	n/a	0	n/a	6	n/a	1	n/a	0	n/a	1	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	1	0.1	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
SUB-TOTAL	0	0.0	5	2.7	0	0.0	34	2.4	1	0.0	0	0.0	2	1.1

GRAND TOTAL	48	62.5	140	94.5	23	75.9	1,744	142.2	68	152.9	19	58.1	88	93.3
--------------------	-----------	-------------	------------	-------------	-----------	-------------	--------------	--------------	-----------	--------------	-----------	-------------	-----------	-------------

POPULATION	76,751	147,066	28,985	1,178,799	42,510	30,970	93,228
-------------------	---------------	----------------	---------------	------------------	---------------	---------------	---------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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	1	0.1	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
Foodborne	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	6	3.7	9	22.5	58	7.2	4	5.3	3	9.4	2	12.6	5	17.8
Coccidioidomycosis	0	0.0	0	0.0	1	0.1	1	1.3	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	0	0.0	0	0.0
Cryptosporidiosis	4	2.5	0	0.0	389	48.6	10	13.3	5	15.6	0	0.0	1	3.6
Cytomegalovirus (CMV), Congenital*	1	*	0	*	1	*	0	*	0	*	0	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	3	1.8	0	0.0	23	2.9	0	0.0	0	0.0	0	0.0	0	0.0
O157:H7	0	0.0	0	0.0	18	2.2	0	0.0	0	0.0	0	0.0	0	0.0
Not O157:H7	3	1.8	0	0.0	4	0.5	0	0.0	0	0.0	0	0.0	0	0.0
Unknown Serotype	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	5	3.1	3	7.5	77	9.6	1	1.3	0	0.0	3	18.9	1	3.6
<i>Haemophilus influenzae</i> , Invasive Disease	3	1.8	1	2.5	12	1.5	0	0.0	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
Legionellosis	5	3.1	2	5.0	16	2.0	0	0.0	0	0.0	0	0.0	1	3.6
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	18	11.1	6	15.0	91	11.4	3	4.0	0	0.0	1	6.3	2	7.1
Meningitis, Other Bacterial*	2	1.2	0	0.0	4	0.5	0	0.0	0	0.0	1	6.3	1	3.6
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	12	7.4	5	12.5	80	10.0	8	10.7	1	3.1	2	12.6	8	28.5
Shigellosis	0	0.0	0	0.0	172	21.5	0	0.0	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	6	3.7	2	5.0	28	3.5	2	2.7	1	3.1	1	6.3	1	3.6
Streptococcal Disease, Group B, in Newborn*	2	*	0	*	5	*	1	*	0	*	0	*	1	*
Streptococcal Toxic Shock Syndrome (STSS)	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	18	11.1	3	7.5	109	13.6	3	4.0	2	6.2	2	12.6	2	7.1
Ages < 5 Years*	1	*	0	*	9	*	0	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	3	*	0	*	30	*	1	*	1	*	0	*	0	*
Drug Susceptible, Ages 5+ Years*	14	*	3	*	70	*	2	*	1	*	2	*	2	*
Typhoid Fever	0	0.0	0	0.0	1	0.1	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
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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	86	52.8	31	77.6	1,068	133.4	33	44.0	12	37.5	12	75.7	23	82.0

HEPATITIS

Hepatitis A	0	0.0	0	0.0	5	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	2	1.2	0	0.0	11	1.4	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	2	1.2	0	0.0	17	2.1	0	0.0	0	0.0	0	0.0	0	0.0

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Greene		Guernsey		Hamilton		Hancock		Hardin		Harrison		Henry	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
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	2	n/a	0	n/a	0	n/a	0	n/a	2	n/a
Healthcare-Associated*	1	n/a	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Institutional*	1	n/a	0	n/a	16	n/a	2	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	11	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	2	n/a	0	n/a	31	n/a	2	n/a	0	n/a	0	n/a	2	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	27	16.6	7	17.5	145	18.1	7	9.3	4	12.5	0	0.0	5	17.8
Influenza-Associated Pediatric Mortality*	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	1	0.6	0	0.0	69	8.6	0	0.0	0	0.0	0	0.0	3	10.7
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	12	7.4	10	25.0	23	2.9	12	16.0	2	6.2	1	6.3	9	32.1
SUB-TOTAL	40	24.6	17	42.6	237	29.6	19	25.3	6	18.7	1	6.3	17	60.6

ZOOLOSES

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	3	0.4	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
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	1	2.5	1	0.1	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	5	3.1	1	2.5	5	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	1	0.6	0	0.0	5	0.6	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
Rabies, Animal*	2	n/a	2	n/a	3	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	1	0.1	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
SUB-TOTAL	8	3.7	4	5.0	18	1.9	0	0.0	0	0.0	0	0.0	0	0.0

GRAND TOTAL	138	82.3	52	125.2	1,371	167.0	54	69.3	18	56.2	13	82.0	42	142.5
--------------------	------------	-------------	-----------	--------------	--------------	--------------	-----------	-------------	-----------	-------------	-----------	-------------	-----------	--------------

POPULATION	162,846		39,927		800,362		75,056		32,020		15,850		28,064	
-------------------	----------------	--	---------------	--	----------------	--	---------------	--	---------------	--	---------------	--	---------------	--

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

GENERAL INFECTIOUS DISEASES	Highland		Hocking		Holmes		Huron		Jackson		Jefferson		Knox	
	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
Foodborne	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	5	17.0	9	21.1	12	20.2	2	6.0	5	7.3	6	9.8
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	3.4	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	2	4.6	2	6.8	1	2.3	1	1.7	1	3.0	1	1.5	31	50.6
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	1	1.6
O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6
Not O157:H7	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0
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	2.3	1	3.4	5	11.7	1	1.7	0	0.0	1	1.5	6	9.8
<i>Haemophilus influenzae</i> , Invasive Disease	0	0.0	1	3.4	0	0.0	0	0.0	0	0.0	2	2.9	2	3.3
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
Legionellosis	0	0.0	4	13.6	3	7.0	0	0.0	1	3.0	3	4.4	1	1.6
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0
Meningitis, Aseptic	5	11.5	1	3.4	8	18.7	11	18.5	2	6.0	9	13.1	3	4.9
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	0	0.0	1	3.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0
Salmonellosis	5	11.5	1	3.4	1	2.3	9	15.1	3	9.0	10	14.5	12	19.6
Shigellosis	1	2.3	0	0.0	0	0.0	1	1.7	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	0	0.0	0	0.0	1	2.3	1	1.7	0	0.0	0	0.0	1	1.6
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	2	3.3
<i>Streptococcus pneumoniae</i> , Invasive Disease	4	9.2	0	0.0	0	0.0	1	1.7	1	3.0	14	20.3	9	14.7
Ages < 5 Years*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	3	*	0	*	0	*	0	*	0	*	2	*	2	*
Drug Susceptible, Ages 5+ Years*	1	*	0	*	0	*	1	*	1	*	11	*	7	*
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
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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	21	48.4	16	54.4	29	67.8	37	62.2	11	33.1	48	69.7	74	120.8

HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	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	0	0.0										

N = number of cases reported.
 Rates use 2011 U.S. Census estimates and are per 100,000 population.
 n/a = not applicable.
 * Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Highland		Hocking		Holmes		Huron		Jackson		Jefferson		Knox	
	N	Rate	N	Rate	N	Rate								
Community*	0	n/a	0	n/a	0	n/a								
Foodborne*	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	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								
Zoonotic*	0	n/a	0	n/a	0	n/a								
SUB-TOTAL	0	n/a	0	n/a	1	n/a	1	n/a	1	n/a	0	n/a	0	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	3	6.9	2	6.8	1	2.3	3	5.0	9	27.1	13	18.9	11	18.0
Influenza-Associated Pediatric Mortality*	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	0	0.0	1	3.4	9	21.1	1	1.7	0	0.0	4	5.8	1	1.6
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	6	13.8	2	6.8	6	14.0	9	15.1	11	33.1	2	2.9	6	9.8
SUB-TOTAL	9	20.7	5	17.0	16	37.4	13	21.9	20	60.3	19	27.6	18	29.4

ZOOLOSES

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	2	6.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	2	6.0	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
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	1	2.3	1	3.4	1	2.3	0	0.0	2	6.0	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	1	3.4	1	2.3	0	0.0	0	0.0	0	0.0	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
Rabies, Animal*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	2.3	3	6.8	2	4.7	0	0.0	4	12.1	0	0.0	0	0.0

GRAND TOTAL	32	73.7	24	78.2	48	110.0	51	84.0	36	105.5	67	97.3	92	150.1
--------------------	-----------	-------------	-----------	-------------	-----------	--------------	-----------	-------------	-----------	--------------	-----------	-------------	-----------	--------------

POPULATION	43,433	29,394	42,746	59,496	33,186	68,828	61,275
-------------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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	0	0.0	0	0.0
Foodborne	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	30	13.1	4	6.4	40	23.9	6	13.1	35	11.6	31	7.0	2	4.6
Coccidioidomycosis	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	1	0.2	0	0.0
Creutzfeldt-Jakob Disease (CJD)	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	7	3.0	2	3.2	3	1.8	1	2.2	38	12.6	19	4.3	0	0.0
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	2	0.9	2	3.2	5	3.0	1	2.2	2	0.7	3	0.7	0	0.0
O157:H7	0	0.0	1	1.6	0	0.0	0	0.0	1	0.3	1	0.2	0	0.0
Not O157:H7	1	0.4	1	1.6	4	2.4	0	0.0	1	0.3	2	0.5	0	0.0
Unknown Serotype	1	0.4	0	0.0	1	0.6	1	2.2	0	0.0	0	0.0	0	0.0
Giardiasis	8	3.5	1	1.6	3	1.8	1	2.2	9	3.0	14	3.2	3	6.9
<i>Haemophilus influenzae</i> , Invasive Disease	4	1.7	2	3.2	4	2.4	1	2.2	1	0.3	15	3.4	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	5	2.2	2	3.2	5	3.0	1	2.2	12	4.0	7	1.6	3	6.9
Leprosy (Hansen Disease)	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	2	1.2	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	10	4.4	45	72.0	25	14.9	1	2.2	9	3.0	49	11.1	3	6.9
Meningitis, Other Bacterial*	1	0.4	1	1.6	1	0.6	0	0.0	1	0.3	2	0.5	0	0.0
Meningococcal Disease	0	0.0	0	0.0	1	0.6	1	2.2	0	0.0	1	0.2	0	0.0
Salmonellosis	30	13.1	7	11.2	25	14.9	3	6.6	29	9.6	51	11.6	2	4.6
Shigellosis	2	0.9	0	0.0	1	0.6	0	0.0	0	0.0	22	5.0	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	11	4.8	0	0.0	4	2.4	2	4.4	3	1.0	17	3.9	2	4.6
Streptococcal Disease, Group B, in Newborn*	0	*	1	*	1	*	0	*	1	*	3	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.9	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	13	5.7	10	16.0	21	12.6	3	6.6	19	6.3	44	10.0	4	9.2
Ages < 5 Years*	0	*	1	*	2	*	1	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	1	*	4	*	8	*	0	*	3	*	11	*	3	*
Drug Susceptible, Ages 5+ Years*	12	*	5	*	11	*	2	*	16	*	32	*	1	*
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
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	1.6	0	0.0	0	0.0	0	0.0	2	0.5	1	2.3
SUB-TOTAL	124	53.9	78	124.8	144	86.1	21	46.0	159	52.7	286	65.0	20	46.1

HEPATITIS

Hepatitis A	3	1.3	0	0.0	2	1.2	0	0.0	0	0.0	1	0.2	0	0.0
Hepatitis B, Acute*	0	0.0	2	3.2	1	0.6	0	0.0	0	0.0	1	0.2	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	1	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	3	1.3	2	3.2	4	2.4	0	0.0	0	0.0	2	0.5	0	0.0

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Lake		Lawrence		Licking		Logan		Lorain		Lucas		Madison	
	N	Rate	N	Rate	N	Rate								
Community*	0	n/a	1	n/a	0	n/a	2	n/a	0	n/a	2	n/a	2	n/a
Foodborne*	5	n/a	0	n/a	0	n/a	1	n/a	1	n/a	2	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	3	n/a	0	n/a
Institutional*	0	n/a	0	n/a	1	n/a	1	n/a	1	n/a	5	n/a	2	n/a
Waterborne*	0	n/a	0	n/a	0	n/a								
Zoonotic*	0	n/a	0	n/a	0	n/a								
SUB-TOTAL	5	n/a	1	n/a	3	n/a	4	n/a	2	n/a	12	n/a	4	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	32	13.9	5	8.0	31	18.5	9	19.7	61	20.2	118	26.8	10	23.0
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Pertussis	3	1.3	1	1.6	12	7.2	1	2.2	2	0.7	6	1.4	16	36.9
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	46	20.0	1	1.6	12	7.2	3	6.6	32	10.6	16	3.6	6	13.8
SUB-TOTAL	82	35.7	7	11.2	55	32.9	13	28.5	95	31.5	141	32.0	32	73.7

ZOOLOSES

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	2	3.2	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	2	3.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	1	0.4	0	0.0	3	1.8	1	2.2	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	2	0.9	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	1	2.3
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	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
Rabies, Animal*	11	n/a	0	n/a	1	n/a								
Rocky Mountain Spotted Fever (RMSF)	0	0.0	1	1.6	0	0.0	0	0.0	0	0.0	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	0	0.0	1	0.3	5	1.1	0	0.0
SUB-TOTAL	15	1.7	3	4.8	3	1.8	1	2.2	1	0.3	9	2.0	2	2.3

GRAND TOTAL	229	92.7	91	144.0	209	123.2	39	76.6	257	84.5	450	99.5	58	122.1
--------------------	------------	-------------	-----------	--------------	------------	--------------	-----------	-------------	------------	-------------	------------	-------------	-----------	--------------

POPULATION	229,885	62,489	167,248	45,688	301,614	440,005	43,401
-------------------	----------------	---------------	----------------	---------------	----------------	----------------	---------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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
Foodborne	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	17	7.2	2	3.0	31	17.9	0	0.0	6	14.7	14	13.6	2	13.7
Coccidioidomycosis	1	0.4	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	7	3.0	11	16.6	7	4.0	0	0.0	34	83.3	0	0.0	0	0.0
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	0	0.0	1	1.5	3	1.7	0	0.0	5	12.2	1	1.0	0	0.0
O157:H7	0	0.0	0	0.0	1	0.6	0	0.0	3	7.3	1	1.0	0	0.0
Not O157:H7	0	0.0	0	0.0	1	0.6	0	0.0	2	4.9	0	0.0	0	0.0
Unknown Serotype	0	0.0	1	1.5	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	9	3.8	4	6.0	10	5.8	2	8.4	5	12.2	6	5.8	0	0.0
<i>Haemophilus influenzae</i> , Invasive Disease	3	1.3	1	1.5	4	2.3	0	0.0	0	0.0	2	1.9	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
Legionellosis	4	1.7	2	3.0	5	2.9	0	0.0	1	2.4	5	4.9	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	1.5	0	0.0	0	0.0	2	4.9	0	0.0	0	0.0
Meningitis, Aseptic	17	7.2	8	12.1	15	8.7	1	4.2	3	7.3	10	9.7	0	0.0
Meningitis, Other Bacterial*	2	0.8	0	0.0	1	0.6	0	0.0	3	7.3	1	1.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Salmonellosis	22	9.3	9	13.6	25	14.4	0	0.0	10	24.5	9	8.8	1	6.9
Shigellosis	0	0.0	3	4.5	0	0.0	0	0.0	1	2.4	1	1.0	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	5	2.1	1	1.5	4	2.3	0	0.0	1	2.4	1	1.0	1	6.9
Streptococcal Disease, Group B, in Newborn*	1	*	0	*	1	*	0	*	0	*	1	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	28	11.8	2	3.0	12	6.9	3	12.7	7	17.1	12	11.7	4	27.4
Ages < 5 Years*	1	*	0	*	1	*	0	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	10	*	0	*	3	*	0	*	1	*	4	*	1	*
Drug Susceptible, Ages 5+ Years*	17	*	2	*	8	*	3	*	6	*	7	*	3	*
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
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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	117	49.3	45	68.0	118	68.1	6	25.3	80	195.9	65	63.2	8	54.9

HEPATITIS

Hepatitis A	0	0.0	1	1.5	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Hepatitis B, Acute*	1	0.4	0	0.0	0	0.0	1	4.2	0	0.0	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	0.4	1	1.5	0	0.0	1	4.2	0	0.0	1	1.0	0	0.0

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Mahoning		Marion		Medina		Meigs		Mercer		Miami		Monroe	
	N	Rate												
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	1	n/a	2	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Healthcare-Associated*	0	n/a												
Institutional*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	2	n/a	0	n/a
Waterborne*	0	n/a												
Zoonotic*	0	n/a												
SUB-TOTAL	1	n/a	1	n/a	4	n/a	0	n/a	0	n/a	4	n/a	0	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	35	14.8	7	10.6	29	16.7	7	29.6	9	22.0	14	13.6	0	0.0
Influenza-Associated Pediatric Mortality*	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	8	3.4	0	0.0	9	5.2	0	0.0	0	0.0	3	2.9	3	20.6
Tetanus	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	19	8.0	4	6.0	24	13.9	0	0.0	3	7.3	15	14.6	1	6.9
SUB-TOTAL	63	26.6	11	16.6	62	35.8	7	29.6	12	29.4	32	31.1	4	27.4

ZOOZOSES

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
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	1	0.4	1	1.5	1	0.6	0	0.0	0	0.0	1	1.0	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	2	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	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
Rabies, Animal*	1	n/a	1	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	1	0.4	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	1	1.0	0	0.0
SUB-TOTAL	5	1.7	2	1.5	2	0.6	0	0.0	0	0.0	2	1.9	0	0.0

GRAND TOTAL	187	78.0	60	87.6	186	104.5	14	59.1	92	225.3	104	97.2	12	82.3
--------------------	------------	-------------	-----------	-------------	------------	--------------	-----------	-------------	-----------	--------------	------------	-------------	-----------	-------------

POPULATION	237,270	66,212	173,262	23,680	40,838	102,857	14,585
-------------------	----------------	---------------	----------------	---------------	---------------	----------------	---------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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	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
Foodborne	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	34	6.3	4	26.6	5	14.3	7	8.1	1	6.8	8	19.3	2	10.3
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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	16	3.0	0	0.0	7	20.1	11	12.8	0	0.0	6	14.5	1	5.1
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	6	1.1	0	0.0	1	2.9	0	0.0	0	0.0	3	7.2	2	10.3
O157:H7	4	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	5.1
Not O157:H7	2	0.4	0	0.0	1	2.9	0	0.0	0	0.0	2	4.8	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	1	5.1
Giardiasis	17	3.2	0	0.0	2	5.7	12	13.9	0	0.0	0	0.0	4	20.6
<i>Haemophilus influenzae</i> , Invasive Disease	17	3.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	5.1
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
Legionellosis	25	4.7	0	0.0	2	5.7	8	9.3	0	0.0	0	0.0	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	2	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	91	16.9	1	6.7	4	11.5	10	11.6	1	6.8	3	7.2	1	5.1
Meningitis, Other Bacterial*	10	1.9	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0
Meningococcal Disease	1	0.2	3	20.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	40	7.4	0	0.0	2	5.7	5	5.8	1	6.8	10	24.2	1	5.1
Shigellosis	15	2.8	0	0.0	1	2.9	0	0.0	0	0.0	0	0.0	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	2	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	27	5.0	1	6.7	0	0.0	3	3.5	0	0.0	4	9.7	0	0.0
Streptococcal Disease, Group B, in Newborn*	3	*	0	*	0	*	0	*	0	*	2	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	5	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	106	19.7	2	13.3	6	17.2	7	8.1	4	27.2	3	7.2	3	15.4
Ages < 5 Years*	8	*	0	*	1	*	0	*	0	*	1	*	1	*
Drug Resistant, Ages 5+ Years*	19	*	0	*	0	*	2	*	1	*	1	*	1	*
Drug Susceptible, Ages 5+ Years*	79	*	2	*	5	*	5	*	3	*	1	*	1	*
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
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	1	6.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	418	77.8	12	79.8	30	86.1	63	73.1	7	47.6	40	96.6	15	77.2

HEPATITIS

Hepatitis A	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	8	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	9	1.7	0	0.0										

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Montgomery		Morgan		Morrow		Muskingum		Noble		Ottawa		Paulding	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
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*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Institutional*	4	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	1	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	5	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	115	21.4	1	6.7	3	8.6	11	12.8	3	20.4	7	16.9	2	10.3
Influenza-Associated Pediatric Mortality*	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	5	0.9	0	0.0	1	2.9	1	1.2	0	0.0	1	2.4	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	35	6.5	0	0.0	5	14.3	9	10.4	2	13.6	2	4.8	3	15.4
SUB-TOTAL	155	28.8	1	6.7	9	25.8	21	24.4	5	34.0	10	24.2	5	25.7

ZOOZOSES

Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	1	0.2	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
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	1	6.7	3	8.6	3	3.5	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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	4	0.7	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
Rabies, Animal*	3	n/a	0	n/a	1	n/a								
Rocky Mountain Spotted Fever (RMSF)	2	0.4	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	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	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	11	1.5	1	6.7	3	8.6	3	3.5	0	0.0	1	2.4	1	0.0

GRAND TOTAL	598	109.7	14	93.1	42	120.5	87	100.9	12	81.6	52	123.2	21	103.0
--------------------	------------	--------------	-----------	-------------	-----------	--------------	-----------	--------------	-----------	-------------	-----------	--------------	-----------	--------------

POPULATION	537,602		15,034		34,855		86,237		14,702		41,396		19,420	
-------------------	----------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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	1	0.6	0	0.0	0	0.0	0	0.0
Botulism	1	2.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	1	2.8	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	8	22.0	4	7.1	2	7.0	13	8.0	3	7.1	9	26.2	8	6.5
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.6
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	2	1.2	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	3	8.3	1	1.8	3	10.5	33	20.4	2	4.8	1	2.9	12	9.7
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	1	2.8	1	1.8	0	0.0	2	1.2	2	4.8	0	0.0	1	0.8
O157:H7	0	0.0	1	1.8	0	0.0	1	0.6	1	2.4	0	0.0	1	0.8
Not O157:H7	1	2.8	0	0.0	0	0.0	1	0.6	1	2.4	0	0.0	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	3	8.3	1	1.8	3	10.5	3	1.9	1	2.4	1	2.9	2	1.6
<i>Haemophilus influenzae</i> , Invasive Disease	0	0.0	0	0.0	1	3.5	1	0.6	1	2.4	2	5.8	2	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
Legionellosis	1	2.8	2	3.6	0	0.0	3	1.9	1	2.4	1	2.9	3	2.4
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	5	13.8	2	3.6	3	10.5	17	10.5	3	7.1	8	23.3	21	17.0
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	1	0.6	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	0.8
Salmonellosis	3	8.3	4	7.1	2	7.0	10	6.2	6	14.3	6	17.5	10	8.1
Shigellosis	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	1	0.8
<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	1	2.8	2	3.6	0	0.0	1	0.6	1	2.4	1	2.9	4	3.2
Streptococcal Disease, Group B, in Newborn*	1	*	1	*	0	*	1	*	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
<i>Streptococcus pneumoniae</i> , Invasive Disease	1	2.8	10	17.9	9	31.4	18	11.1	5	11.9	4	11.7	4	3.2
Ages < 5 Years*	0	*	0	*	1	*	1	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	2	*	4	*	6	*	2	*	0	*	0	*
Drug Susceptible, Ages 5+ Years*	1	*	8	*	4	*	11	*	3	*	4	*	4	*
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	0.6	0	0.0	0	0.0	0	0.0
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	1	0.6	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	1.8	0	0.0	0	0.0	1	2.4	0	0.0	1	0.8
SUB-TOTAL	28	77.1	29	51.8	23	80.3	108	66.8	26	61.8	33	96.2	72	58.3

HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	1	1.8	0	0.0	1	0.6	0	0.0	0	0.0	2	1.6
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	1	1.8	0	0.0	1	0.6	0	0.0	0	0.0	2	1.6

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Perry		Pickaway		Pike		Portage		Preble		Putnam		Richland	
	N	Rate												
Community*	0	n/a												
Foodborne*	0	n/a	1	n/a										
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	2	n/a
Institutional*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	4	n/a
Waterborne*	0	n/a	1	n/a										
Zoonotic*	0	n/a												
SUB-TOTAL	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	8	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	2	5.5	12	21.4	4	14.0	17	10.5	4	9.5	16	46.7	22	17.8
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	1	0.6	1	2.4	0	0.0	0	0.0
Pertussis	0	0.0	5	8.9	0	0.0	3	1.9	0	0.0	1	2.9	9	7.3
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	0	0.0	9	16.1	12	41.9	11	6.8	3	7.1	1	2.9	7	5.7
SUB-TOTAL	2	5.5	26	46.4	16	55.9	32	19.8	8	19.0	18	52.5	38	30.8

ZOOZOSES

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	0.6	0	0.0	0	0.0	1	0.8
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	2	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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	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
Rabies, Animal*	0	n/a												
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.6
Tularemia	0	0.0	0	0.0	1	3.5	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	2.9	0	0.0
SUB-TOTAL	0	0.0	0	0.0	2	7.0	1	0.6	0	0.0	1	2.9	5	4.0

GRAND TOTAL	30	82.6	56	100.0	41	143.2	144	87.9	34	80.8	52	151.6	125	94.7
--------------------	-----------	-------------	-----------	--------------	-----------	--------------	------------	-------------	-----------	-------------	-----------	--------------	------------	-------------

POPULATION	36,303	55,990	28,628	161,624	42,083	34,294	123,510
-------------------	---------------	---------------	---------------	----------------	---------------	---------------	----------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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	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
Foodborne	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	15.3	14	23.1	1	1.3	4	7.1	6	12.2	41	10.9	55	10.2
Coccidioidomycosis	1	1.3	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	1	0.3	0	0.0
Cryptosporidiosis	5	6.4	22	36.2	1	1.3	3	5.3	3	6.1	15	4.0	41	7.6
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	0	0.0	1	1.6	2	2.5	0	0.0	4	8.1	4	1.1	3	0.6
O157:H7	0	0.0	1	1.6	2	2.5	0	0.0	1	2.0	2	0.5	0	0.0
Not O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	2	4.1	2	0.5	2	0.4
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	1	2.0	0	0.0	1	0.2
Giardiasis	1	1.3	4	6.6	0	0.0	2	3.5	4	8.1	60	16.0	59	10.9
<i>Haemophilus influenzae</i> , Invasive Disease	4	5.1	0	0.0	0	0.0	0	0.0	0	0.0	8	2.1	7	1.3
Hemolytic Uremic Syndrome (HUS)	0	0.0	1	1.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	2	2.6	1	1.6	3	3.8	0	0.0	2	4.1	9	2.4	24	4.4
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	1	0.2
Meningitis, Aseptic	6	7.7	2	3.3	23	29.0	4	7.1	3	6.1	61	16.3	98	18.2
Meningitis, Other Bacterial*	0	0.0	1	1.6	0	0.0	0	0.0	0	0.0	4	1.1	1	0.2
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2
Salmonellosis	1	1.3	11	18.1	12	15.1	5	8.9	2	4.1	30	8.0	43	8.0
Shigellosis	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	5	0.9
<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	0	0.0	2	3.3	2	2.5	1	1.8	2	4.1	20	5.3	18	3.3
Streptococcal Disease, Group B, in Newborn*	1	*	1	*	1	*	0	*	1	*	3	*	2	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	2	0.4
<i>Streptococcus pneumoniae</i> , Invasive Disease	18	23.0	2	3.3	0	0.0	3	5.3	10	20.3	54	14.4	63	11.7
Ages < 5 Years*	1	*	0	*	0	*	0	*	2	*	2	*	8	*
Drug Resistant, Ages 5+ Years*	1	*	0	*	0	*	0	*	2	*	18	*	12	*
Drug Susceptible, Ages 5+ Years*	16	*	2	*	0	*	3	*	6	*	34	*	43	*
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.4
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Yersiniosis	0	0.0	1	1.6	0	0.0	0	0.0	0	0.0	1	0.3	3	0.6
SUB-TOTAL	52	66.5	63	103.7	45	56.8	22	39.0	37	75.0	317	84.5	430	79.7

HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2
Hepatitis B, Acute*	0	0.0	1	1.6	8	10.1	0	0.0	0	0.0	0	0.0	6	1.1
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	2	2.6	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
SUB-TOTAL	2	2.6	1	1.6	8	10.1	0	0.0	0	0.0	2	0.5	7	1.3

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Ross		Sandusky		Scioto		Seneca		Shelby		Stark		Summit	
	N	Rate	N	Rate										
Community*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Foodborne*	1	n/a	0	n/a	7	n/a								
Healthcare-Associated*	0	n/a	2	n/a	3	n/a								
Institutional*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	1	n/a	2	n/a
Waterborne*	0	n/a	0	n/a										
Zoonotic*	0	n/a	0	n/a										
SUB-TOTAL	1	n/a	2	n/a	0	n/a	0	n/a	0	n/a	3	n/a	13	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	13	16.6	22	36.2	10	12.6	3	5.3	7	14.2	134	35.7	115	21.3
Influenza-Associated Pediatric Mortality*	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	3	3.8	1	1.6	2	2.5	0	0.0	0	0.0	2	0.5	6	1.1
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	5	6.4	11	18.1	10	12.6	5	8.9	7	14.2	34	9.1	25	4.6
SUB-TOTAL	21	26.8	34	56.0	22	27.8	8	14.2	14	28.4	170	45.3	146	27.0

ZOO NOSES

Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Ehrlichiosis/Anaplasmosis	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	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> *	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	3	3.8	0	0.0	1	1.3	0	0.0	0	0.0	1	0.3	1	0.2
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	0	0.0	0	0.0	0	0.0	0	0.0	4	1.1	1	0.2
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	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
Rabies, Animal*	0	n/a	1	n/a	3	n/a								
Rocky Mountain Spotted Fever (RMSF)	1	1.3	0	0.0	2	2.5	0	0.0	0	0.0	1	0.3	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	0	0.0	2	0.4
SUB-TOTAL	5	6.4	0	0.0	3	3.8	0	0.0	0	0.0	10	2.4	8	0.9

GRAND TOTAL	81	102.2	100	161.4	78	98.4	30	53.1	51	103.4	502	132.8	604	108.9
--------------------	-----------	--------------	------------	--------------	-----------	-------------	-----------	-------------	-----------	--------------	------------	--------------	------------	--------------

POPULATION	78,249	60,734	79,277	56,469	49,307	375,087	539,832
-------------------	---------------	---------------	---------------	---------------	---------------	----------------	----------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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
Foodborne	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	5.3	19	20.5	4	7.6	5	17.5	1	7.5	18	8.4	0	0.0
Coccidioidomycosis	1	0.5	1	1.1	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	1	1.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	26	12.4	3	3.2	9	17.1	1	3.5	2	15.0	21	9.8	1	1.6
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	1	0.5	1	1.1	1	1.9	1	3.5	0	0.0	2	0.9	2	3.2
O157:H7	0	0.0	1	1.1	1	1.9	1	3.5	0	0.0	0	0.0	1	1.6
Not O157:H7	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6
Giardiasis	11	5.3	11	11.9	2	3.8	2	7.0	1	7.5	11	5.1	5	8.1
<i>Haemophilus influenzae</i> , Invasive Disease	4	1.9	4	4.3	0	0.0	0	0.0	0	0.0	3	1.4	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
Legionellosis	7	3.3	1	1.1	2	3.8	0	0.0	1	7.5	3	1.4	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	1	0.5	1	1.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	31	14.8	8	8.6	4	7.6	1	3.5	0	0.0	25	11.6	4	6.5
Meningitis, Other Bacterial*	12	5.7	0	0.0	1	1.9	0	0.0	0	0.0	2	0.9	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
Salmonellosis	15	7.2	9	9.7	6	11.4	5	17.5	2	15.0	20	9.3	7	11.3
Shigellosis	0	0.0	1	1.1	0	0.0	0	0.0	0	0.0	10	4.7	4	6.5
<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	2	1.0	2	2.2	0	0.0	1	3.5	0	0.0	3	1.4	0	0.0
Streptococcal Disease, Group B, in Newborn*	2	*	0	*	0	*	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
<i>Streptococcus pneumoniae</i> , Invasive Disease	25	11.9	11	11.9	1	1.9	0	0.0	4	29.9	24	11.2	3	4.9
Ages < 5 Years*	4	*	0	*	0	*	0	*	1	*	1	*	2	*
Drug Resistant, Ages 5+ Years*	3	*	1	*	0	*	0	*	0	*	3	*	0	*
Drug Susceptible, Ages 5+ Years*	18	*	10	*	1	*	0	*	3	*	20	*	1	*
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	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
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	3	3.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	150	71.7	76	82.2	30	56.9	17	59.4	11	82.3	143	66.5	27	43.7

HEPATITIS

Hepatitis A	0	0.0	1	1.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	0.5	1	1.1	0	0.0	0	0.0	0	0.0	2	0.9	0	0.0

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Trumbull		Tuscarawas		Union		Van Wert		Vinton		Warren		Washington	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	1	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	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	0	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	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	23	11.0	34	36.8	9	17.1	9	31.5	2	15.0	30	14.0	14	22.7
Influenza-Associated Pediatric Mortality*	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	20	9.6	1	1.1	4	7.6	2	7.0	0	0.0	9	4.2	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	25	11.9	15	16.2	5	9.5	19	66.4	4	29.9	20	9.3	2	3.2
SUB-TOTAL	68	32.5	50	54.0	18	34.1	30	104.9	6	44.9	59	27.5	16	25.9

ZOO NOSES

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
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	2	1.0	1	1.1	2	3.8	0	0.0	1	7.5	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	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	1	3.5	0	0.0	1	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
Rabies, Animal*	1	n/a	0	n/a										
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	1	1.9	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	2	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	5	1.9	1	1.1	3	5.7	2	7.0	1	7.5	1	0.5	1	1.6

GRAND TOTAL	225	106.6	128	138.4	51	96.7	49	171.3	18	134.7	205	95.4	44	71.2
--------------------	------------	--------------	------------	--------------	-----------	-------------	-----------	--------------	-----------	--------------	------------	-------------	-----------	-------------

POPULATION	209,264	92,508	52,764	28,601	13,367	214,910	61,755
-------------------	----------------	---------------	---------------	---------------	---------------	----------------	---------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

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	10	0.1
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Infant*	0	*	0	*	0	*	0	*	0	n/a	1	*
Campylobacteriosis	32	27.9	5	13.3	16	12.7	12	52.9	0	n/a	1,191	10.3
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	20	0.2
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	12	0.1
Cryptosporidiosis	5	4.4	1	2.7	2	1.6	0	0.0	0	n/a	1,113	9.6
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	n/a	10	*
<i>Escherichia coli</i> , Shiga Toxin-Producing	5	4.4	2	5.3	1	0.8	2	8.8	0	n/a	182	1.6
O157:H7	4	3.5	1	2.7	0	0.0	1	4.4	0	n/a	95	0.8
Not O157:H7	1	0.9	1	2.7	0	0.0	1	4.4	0	n/a	72	0.6
Unknown Serotype	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	15	0.1
Giardiasis	9	7.9	1	2.7	4	3.2	0	0.0	0	n/a	781	6.8
<i>Haemophilus influenzae</i> , Invasive Disease	1	0.9	0	0.0	2	1.6	0	0.0	0	n/a	178	1.5
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	5	0.0
Legionellosis	2	1.7	0	0.0	0	0.0	1	4.4	0	n/a	390	3.4
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Listeriosis	2	1.7	0	0.0	0	0.0	0	0.0	0	n/a	29	0.3
Meningitis, Aseptic	22	19.2	0	0.0	12	9.5	3	13.2	0	n/a	1,329	11.5
Meningitis, Other Bacterial*	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	84	0.7
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	24	0.2
Salmonellosis	19	16.6	1	2.7	17	13.5	4	17.6	0	n/a	1,183	10.2
Shigellosis	1	0.9	1	2.7	1	0.8	0	0.0	0	n/a	338	2.9
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
Streptococcal Disease, Group A, Invasive	5	4.4	0	0.0	5	4.0	0	0.0	0	n/a	322	2.8
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	0	n/a	71	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	18	0.2
<i>Streptococcus pneumoniae</i> , Invasive Disease	7	6.1	0	0.0	9	7.1	4	17.6	0	n/a	1,261	10.9
Ages < 5 Years*	1	*	0	*	1	*	0	*	0	n/a	84	*
Drug Resistant, Ages 5+ Years*	0	*	0	*	3	*	0	*	0	n/a	304	*
Drug Susceptible, Ages 5+ Years*	6	*	0	*	5	*	4	*	0	n/a	873	*
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	5	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	7	0.1
<i>Vibrio parahaemolyticus</i> Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	4	0.0
Yersiniosis	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	31	0.3
SUB-TOTAL	111	96.8	11	29.3	71	56.2	26	114.6	0	n/a	8,600	74.5
HEPATITIS												
Hepatitis A	1	0.9	0	0.0	1	0.8	0	0.0	0	n/a	34	0.3
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	1	4.4	0	n/a	106	0.9
Hepatitis B, Perinatal Infection*	0	*	0	*	1	*	0	*	0	n/a	4	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	6	0.1
SUB-TOTAL	1	0.9	0	0.0	2	1.6	1	4.4	0	n/a	150	1.3

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2011

OUTBREAKS*	Wayne		Williams		Wood		Wyandot		Unknown		TOTAL	
	N	Rate	N	Rate								
Community*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	32	n/a
Foodborne*	1	n/a	1	n/a	0	n/a	1	n/a	0	n/a	55	n/a
Healthcare-Associated*	0	n/a	37	n/a								
Institutional*	0	n/a	104	n/a								
Waterborne*	0	n/a	17	n/a								
Zoonotic*	0	n/a	2	n/a								
SUB-TOTAL	1	n/a	1	n/a	1	n/a	1	n/a	0	n/a	247	n/a

VACCINE-PREVENTABLE

Influenza-Associated Hospitalization*	14	12.2	7	18.6	25	19.8	3	13.2	0	n/a	2,410	20.9
Influenza-Associated Pediatric Mortality*	0	*	0	*	1	*	0	*	0	n/a	1	*
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	13	0.1
Pertussis	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	690	6.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Varicella	32	27.9	0	0.0	12	9.5	15	66.1	0	n/a	1,040	9.0
SUB-TOTAL	47	41.0	7	18.6	38	30.1	18	79.3	0	n/a	4,155	36.0

ZONOOSES

Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	14	0.1
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	8	0.1
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	5	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	1	0.9	0	0.0	1	0.8	0	0.0	0	n/a	50	0.4
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Lyme Disease	1	0.9	0	0.0	2	1.6	0	0.0	0	n/a	52	0.5
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	41	0.4
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Rabies, Animal*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	51	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	21	0.2
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	21	0.2
SUB-TOTAL	3	1.7	0	0.0	4	3.2	0	0.0	0	n/a	255	1.8

GRAND TOTAL	163	140.5	19	47.9	116	91.0	46	198.3	0	n/a	13,407	113.5
--------------------	------------	--------------	-----------	-------------	------------	-------------	-----------	--------------	----------	------------	---------------	--------------

POPULATION	114,611	37,597	126,355	22,692	0	11,544,951
-------------------	----------------	---------------	----------------	---------------	----------	-------------------

N = number of cases reported.

Rates use 2011 U.S. Census estimates and are per 100,000 population.

n/a = not applicable.

* Please see Technical Notes (pp. 90-93).

**SALMONELLA SEROTYPES BY YEAR OF ONSET,
OHIO, 2007-2011**

SEROTYPE	2007	2008	2009	2010	2011
Abaetetuba	0	0	1	0	0
Abony	0	0	0	1	0
Adelaide	1	0	1	2	2
Agama	0	0	1	0	0
Agbeni	3	3	3	6	9
Ago	0	0	1	0	1
Agona	22	19	8	7	13
Agoueve	0	0	0	0	1
Ajiobo	0	0	1	0	0
Alachua	0	0	0	1	0
Albany	1	1	1	3	0
Altona	0	1	0	1	12
Amager	0	1	0	0	0
Anatum	5	5	6	4	6
Anatum, var 15 +	0	0	2	0	1
Apapa	1	1	0	0	0
Baildon	0	2	0	8	1
Bardo	0	0	0	0	1
Bareilly	3	2	3	9	3
Barranquilla	1	0	0	0	1
Benin	0	0	1	0	0
Berta	10	9	15	11	16
Blockley	0	1	2	2	0
Bovis-morbificans	2	7	7	7	3
Braenderup	12	18	11	16	17
Brandenburg	3	1	0	0	3
Brazzaville	0	1	0	0	0
Bredeney	0	1	0	0	0
Carmel	0	1	0	0	0
Carrau	0	0	0	1	0
Cerro	0	0	0	1	1
Chester	3	1	1	1	1
Choleraesuis	0	1	1	2	1
Colindale	0	0	0	0	1
Corvallis	0	1	1	0	0
Cotham	0	0	0	1	0
Cubana	1	0	2	1	0
Dahra	0	0	0	0	1
Derby	5	6	6	3	0
Dublin	5	6	3	5	5
Durban	2	0	0	0	1
Duval	0	0	1	0	0
Ealing	1	0	2	2	2
Eastbourne	1	1	1	0	1
Enteritidis	268	293	379	431	277
Fluntern	0	1	0	1	0
Gallinarum	0	0	1	0	0
Gaminara	0	1	1	4	2
Georgia	0	1	0	0	0
Give	1	2	4	2	3
Give, var 15 +	1	0	0	0	0
Glostrup	0	1	0	0	0
Guinea	1	0	0	0	0
Hadar	6	9	4	2	5
Haifa	1	0	0	0	0
Hannover	0	0	1	0	0
Hartford	25	12	22	36	17
Havana	0	3	2	2	1
Heidelberg	47	57	50	35	27
Hermannswerder	0	0	1	0	0
Herston	0	0	1	0	0
Holcomb	1	0	0	1	0
Hull	0	1	0	0	0
Hvittingfoss	1	0	2	0	5
Infantis	12	7	15	17	26
Inverness	0	1	0	0	0
Irumu	1	0	0	0	0
Isangi	0	1	0	0	0

**SALMONELLA SEROTYPES BY YEAR OF ONSET,
OHIO, 2007-2011**

SEROTYPE	2007	2008	2009	2010	2011
Jangwani	0	1	0	0	0
Javiana	15	11	36	36	33
Johannesburg	2	1	0	0	4
Kedougou	0	1	0	0	0
Kentucky	0	2	1	3	0
Kiambu	0	1	4	3	4
Kingabwa	2	0	1	0	0
Kintambo	0	0	1	0	1
Kottbus	0	0	1	0	1
Labadi	2	0	1	0	0
Lexington	0	1	0	0	0
Litchfield	10	6	2	6	12
Liverpool	1	0	0	1	0
Livingstone	0	0	2	3	3
Loma Linda	1	0	0	0	0
London	1	1	0	0	1
Madelia	0	0	0	1	0
Manhattan	3	0	1	1	1
Matadi	1	0	0	0	0
Mbandaka	6	1	5	6	2
Meleagridis	4	1	0	0	0
Miami	0	2	1	2	4
Michigan	0	1	0	0	1
Minnesota	1	1	0	0	0
Mississippi	3	2	1	3	3
Molade	0	0	0	1	0
Monschau	0	0	2	1	1
Montevideo	19	15	25	20	12
Muenchen	17	56	11	15	17
Muenster	1	0	1	1	2
Muenster, var 15 +	0	0	1	0	0
Narashino	0	0	0	0	1
Newport	58	52	72	72	87
Norwich	0	0	0	1	5
Nottingham	0	0	0	0	1
Oakland	0	1	0	0	0
Obogu	0	0	0	1	0
Ohio	5	1	1	0	2
Oranienburg	51	34	56	26	33
Orion	0	0	0	0	1
Orion, var 15 +	0	0	1	0	0
Oslo	0	2	1	0	0
Ouakam	0	0	1	0	0
Panama	12	4	2	4	5
Paratyphi A	7	4	3	3	5
Paratyphi B	1	2	2	1	0
Paratyphi B, var D - Tartrate +	0	0	0	1	0
Paratyphi B, var L - Tartrate +	11	41	54	42	44
Paratyphi B, var Tartrate +	40	3	1	0	0
Paratyphi C	0	0	1	0	0
Pomona	1	0	0	2	2
Poona	10	21	7	10	9
Potsdam	1	1	2	0	2
Putten	0	0	1	1	0
Reading	2	2	0	1	0
Rissen	0	0	0	1	2
Romanby	0	0	0	1	0
Rubislaw	0	0	0	0	2
Saarbruecken	0	0	0	1	0
Saint Paul	9	22	26	33	14
San Diego	3	5	6	4	1
Saphra	0	1	0	1	0
Schwartzengrund	13	4	6	4	2
Senftenberg	6	6	3	1	3
Shubra	0	2	1	0	0
Singapore	0	1	0	3	1
Sinstorf	1	1	0	0	0
Stanley	12	10	5	7	4

**SALMONELLA SEROTYPES BY YEAR OF ONSET,
OHIO, 2007-2011**

SEROTYPE	2007	2008	2009	2010	2011
Stoneferry	0	0	1	0	0
Suelldorf	0	0	2	0	0
Sundsvall	0	1	0	0	0
Takoradi	0	1	0	0	0
Teitelkebir	0	1	1	2	0
Tennessee	20	4	3	1	0
Thompson	28	18	17	13	19
Typhimurium	182	229	212	123	150
Typhimurium, var Copenhagen	37	55	51	61	40
Urbana	1	2	1	1	2
Uzaramo	1	0	0	1	0
Virchow	2	5	7	4	0
Weltevreden	1	2	2	2	0
Worthington	1	4	1	3	0
(I) 1,9,12:-	0	0	1	2	2
(I) 1,9,12:-5	0	0	2	0	1
(I) 1,9,12:l,z28:-	0	1	0	0	0
(I) 3,10:-	0	0	1	0	0
(I) 4,5,12:-	0	0	1	1	0
(I) 4,5,12:b:-	0	0	0	0	1
(I) 4,5,12:i:-	88	91	46	38	44
(I) 4,5,12:r:-	0	0	0	0	1
(I) 4,5,12:2:-	0	0	1	0	0
(I) 6,7:-	0	0	1	1	1
(I) 6,7:-1,5	0	0	0	1	0
(I) 6,7:-5	4	0	3	0	0
(I) 6,7:b:-	1	0	0	0	0
(I) 6,8:d:-	1	0	0	0	0
(I) 13,23:-	0	0	0	1	0
(I) Mucoid:b:e,n,x	0	0	0	1	0
(I) Rough Os:b:-	0	0	0	1	0
(I) Rough Os:z10:e,n,z15	0	0	0	0	1
(I) Rough Os:z38:-	0	0	0	0	1
(II) 21:z10:-	1	0	0	0	0
(II) 21:z10:z6	0	0	0	0	1
(II) 50:b:z6	0	0	1	0	0
(III) Arizona	0	5	1	0	0
(IIIa) 13,23:z4:-	1	0	1	0	0
(IIIa) 41:z4,z23:-	1	2	0	0	0
(IIIa) 44:z4,z23:-	0	0	0	0	1
(IIIa) 44:z4,z24:-	0	0	1	0	0
(IIIb) 48:i:z	0	0	2	0	0
(IIIb) 50:k:z	0	0	1	1	0
(IIIb) 50:z:z52	0	1	1	0	0
(IIIb) 57:c:e,n,x,z15	0	0	0	1	0
(IIIb) 61:-:1,5	1	0	0	1	2
(IIIb) 61:i:z53	0	0	1	1	0
(IIIb) 61:l,v,z13:z35	0	0	1	0	0
(IIIb) 61:l,v,z13:1,5	0	0	0	0	1
(IIIb) 61:r:z	0	0	1	0	0
(IIIb) 61:z52:z53	0	0	1	0	0
(IIIb) 65:(k):z	0	0	1	0	0
(IV) 16:z4,z32:- (Chameleon)	1	0	0	0	0
(IV) 40:z4,z24:-	0	0	0	0	1
(IV) 44:z4,z23:-	1	2	2	2	1
(IV) 44:z4,z32:-	1	0	0	0	0
(IV) 45:g,z51:-	1	2	1	0	0
(IV) 48:g,z51:- (Marina)	4	3	0	1	0
(IV) 50:g,z51:- (Wassenaar)	2	0	0	0	0
(IV) 50:z4,z23:- (Flint)	0	2	1	0	3
(VI) 41:b:1,7	0	0	0	0	1
Rough Os:-	0	4	2	2	2
Rough Os:d,x	0	2	0	0	0
Rough Os:d:1,2	0	0	1	0	0
Rough Os:e,h:l,w	0	1	0	0	0
Rough Os:e,h:z15	0	0	1	1	0
Rough Os:f,g:-	1	0	0	0	0
Rough Os:g,m:-	0	1	0	1	1

**SALMONELLA SEROTYPES BY YEAR OF ONSET,
OHIO, 2007-2011**

SEROTYPE	2007	2008	2009	2010	2011
Rough Os:g,m,s:-	1	1	0	1	0
Rough Os:i:2	0	0	0	0	1
Rough Os:l,z28:5	0	0	0	1	0
Rough Os:m,t:-	0	3	0	0	0
Rough Os:z:6	0	1	0	0	0
Rough Os:z4,z23:-	1	0	0	0	0
SUB-TOTAL	1,163	1,248	1,289	1,220	1,073

SEROGROUP	2007	2008	2009	2010	2011
Group A	2	0	0	0	0
Group B	11	20	13	11	7
Group C	8	4	3	7	8
Group C1	4	1	1	1	1
Group C2	2	2	0	2	0
Group D	11	16	11	9	5
Group G	1	0	0	0	0
SUB-TOTAL	39	43	28	30	21

UNGROUPED, UNTYPED	121	87	60	59	89
---------------------------	-----	----	----	----	----

GRAND TOTAL	1,323	1,378	1,377	1,309	1,183
--------------------	--------------	--------------	--------------	--------------	--------------

**MENINGOCOCCAL DISEASE SEROGROUPS BY
YEAR OF ONSET, OHIO, 2007-2011**

SEROGROUP	2007	2008	2009	2010	2011
Group A	0	0	0	0	0
Group B	6	11	13	12	7
Group C	7	6	4	7	8
Group W-135	2	0	1	0	0
Group Y	10	17	10	6	5
Not Groupable	0	1	0	0	2
Unknown	7	7	14	10	2
TOTAL	32	42	42	35	24

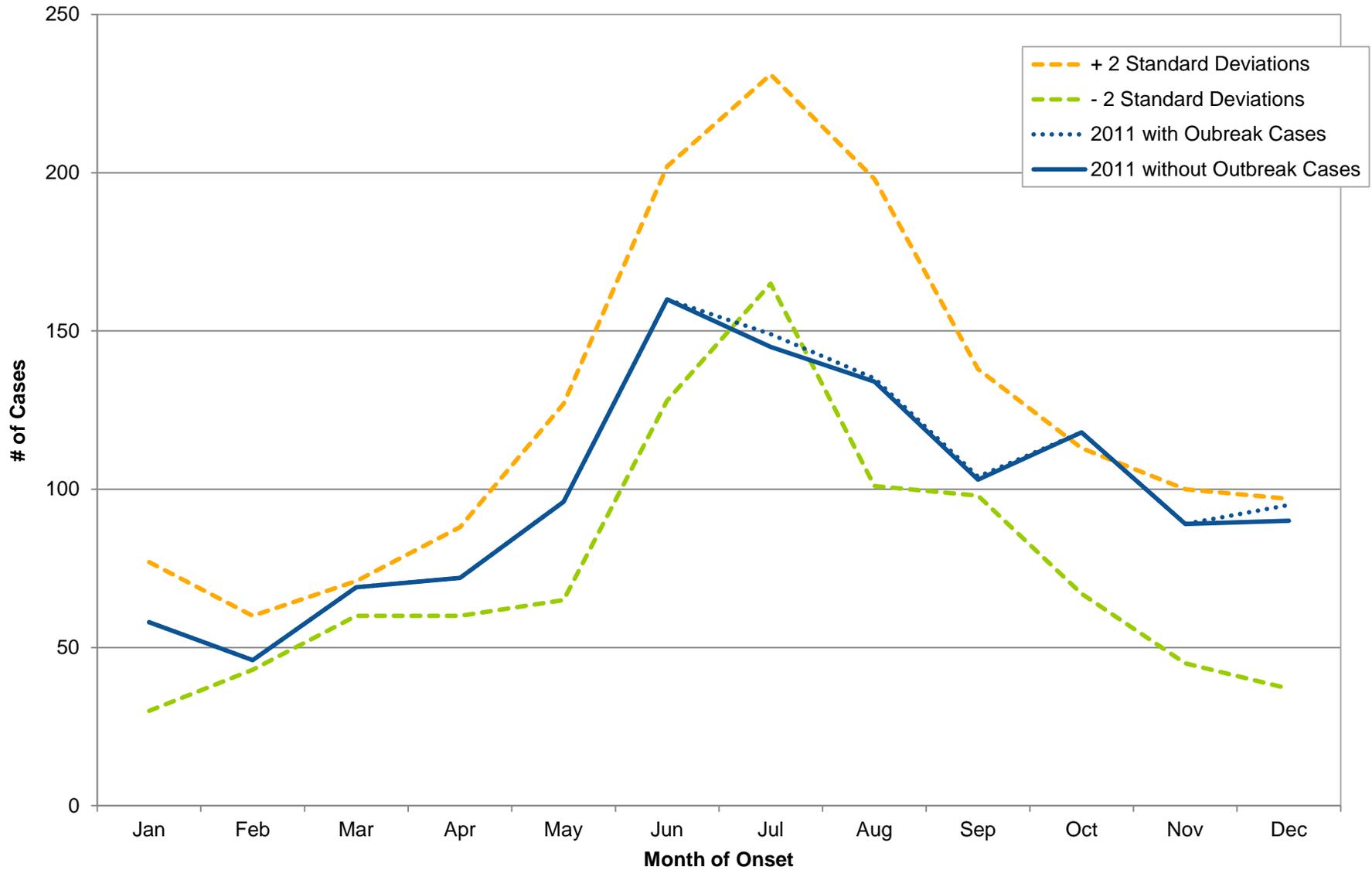
GRAPHS OF SELECTED NOTIFIABLE DISEASE INCIDENCE

Disease incidence from 2011 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 2011 (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 over the previous three years, 2008-2010. Statistically significant changes in incidence are demonstrated by graphing 2 standard deviations above and below the average baseline disease incidence. A statistically significant difference in 2011 disease incidence compared to baseline disease incidence suggests the difference is unlikely to have occurred by chance.

General surveillance trends are graphed statewide. The 2011 data represent confirmed and probable cases of selected reportable diseases. In many instances, two trend lines can be seen graphed for 2011 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.

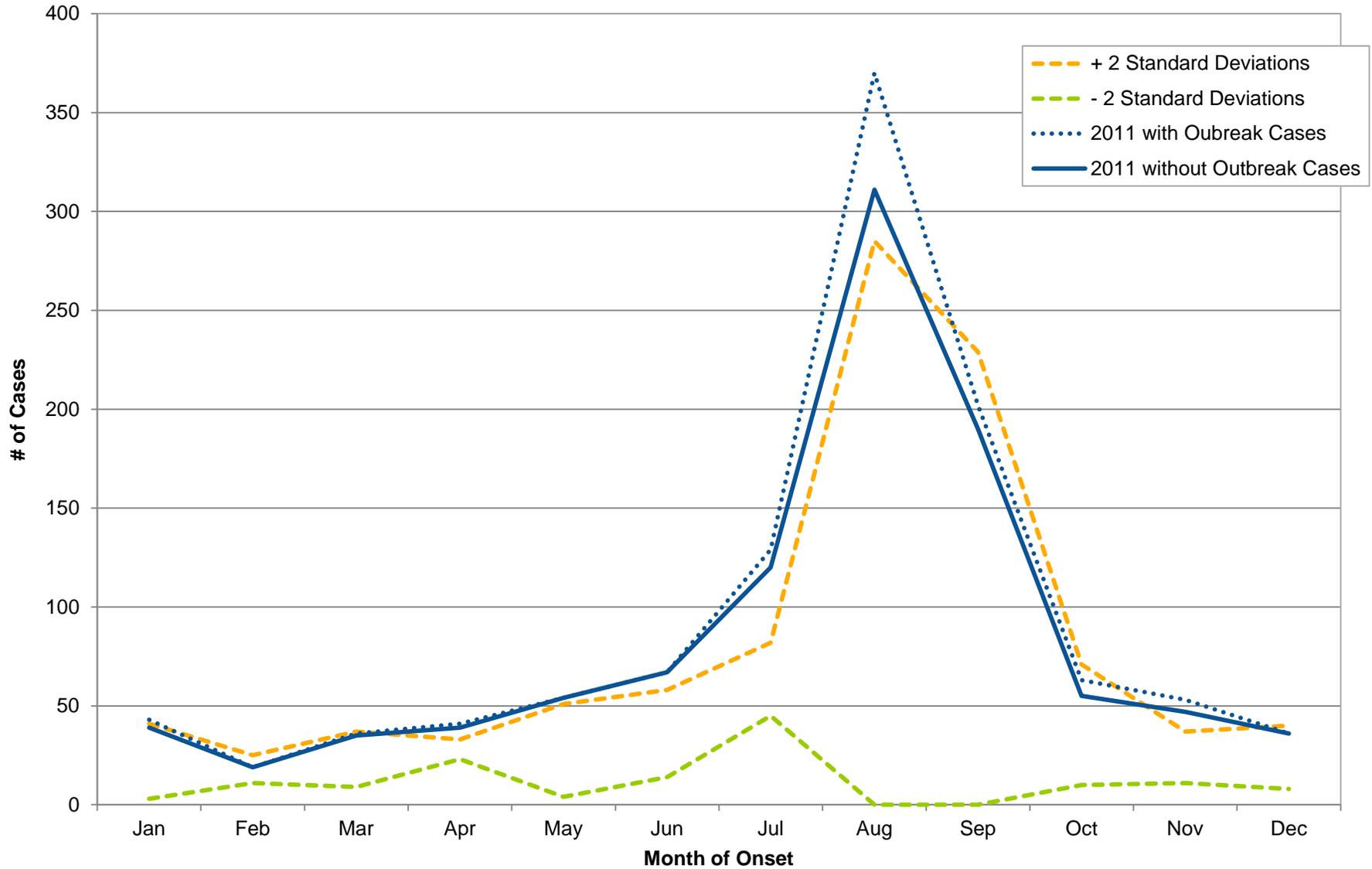
Disease data for 2011 and data used in the calculation of the baseline (2008-2010) average are finalized. All data are by month and year of illness onset. The source of the data is the Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Campylobacteriosis



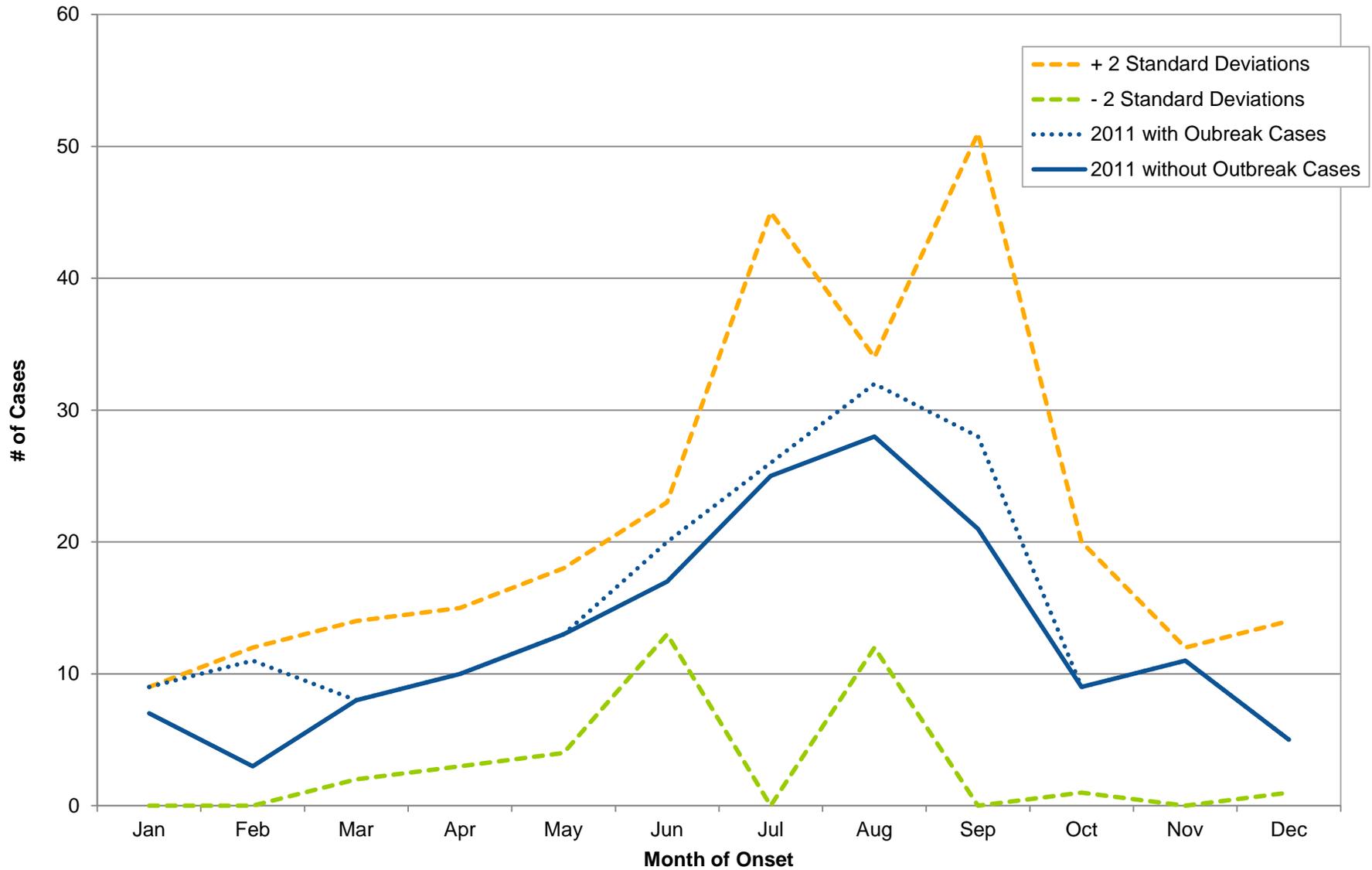
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Cryptosporidiosis



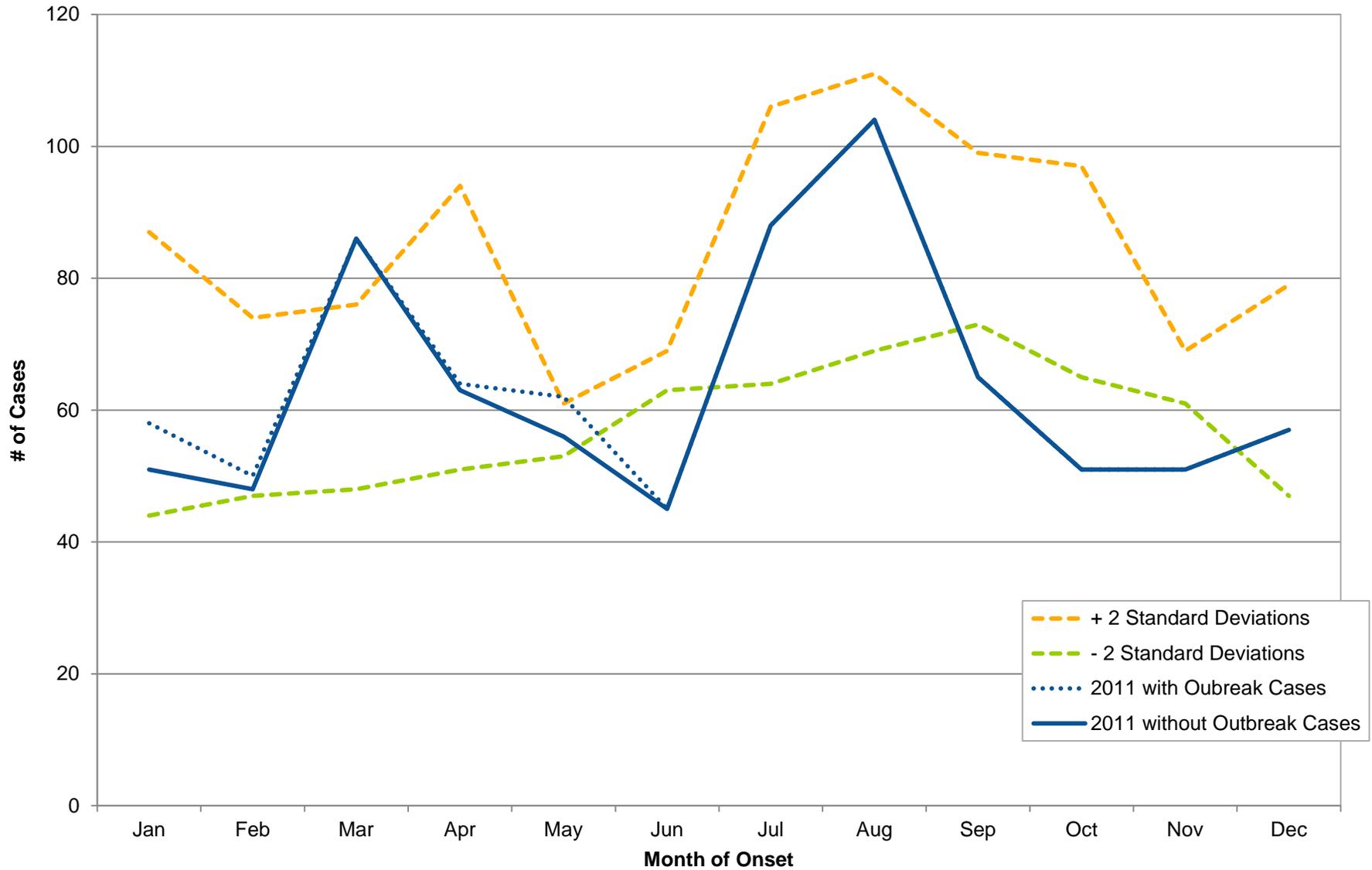
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 *Escherichia coli*, Shiga Toxin-Producing



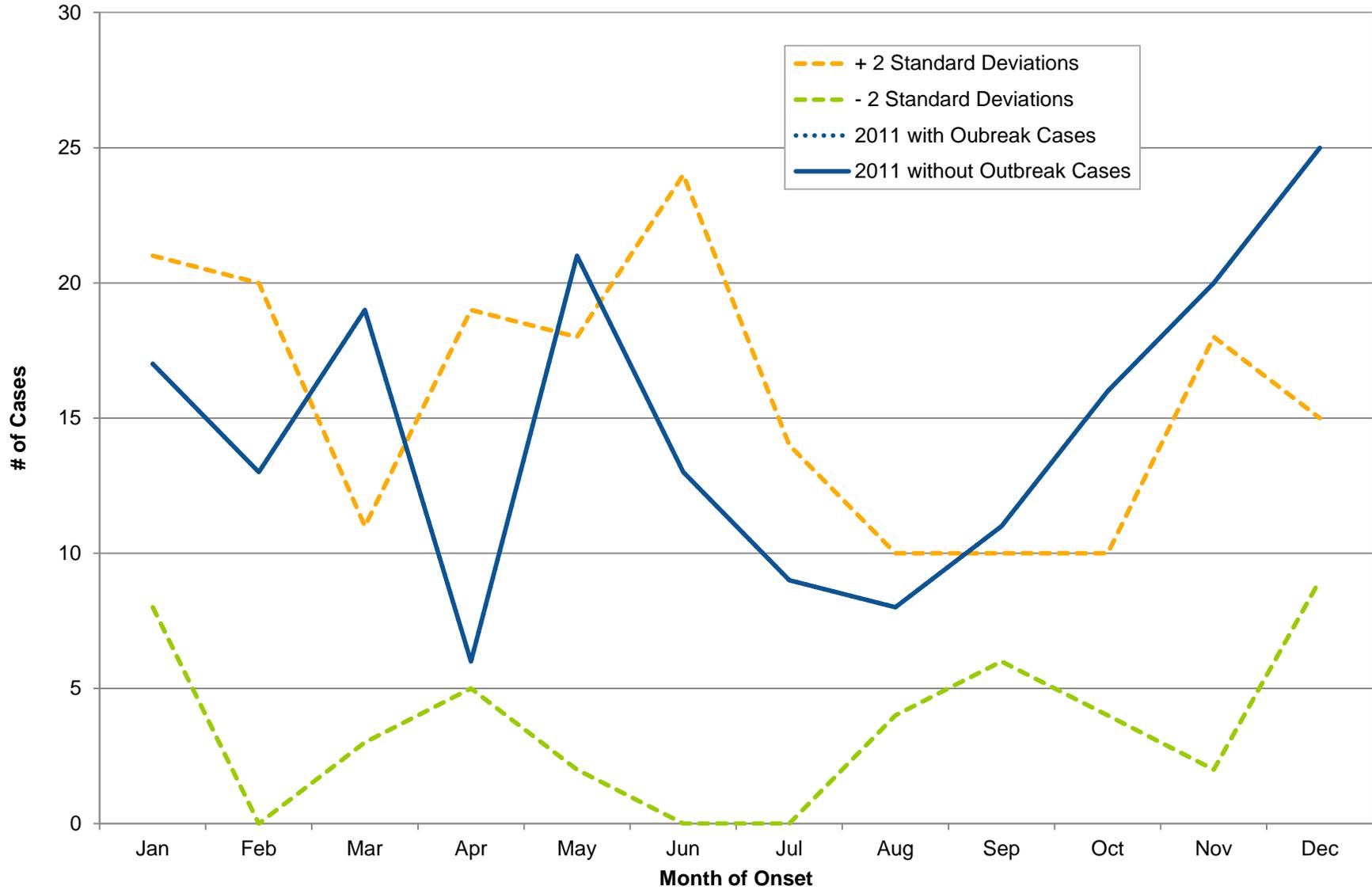
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Giardiasis



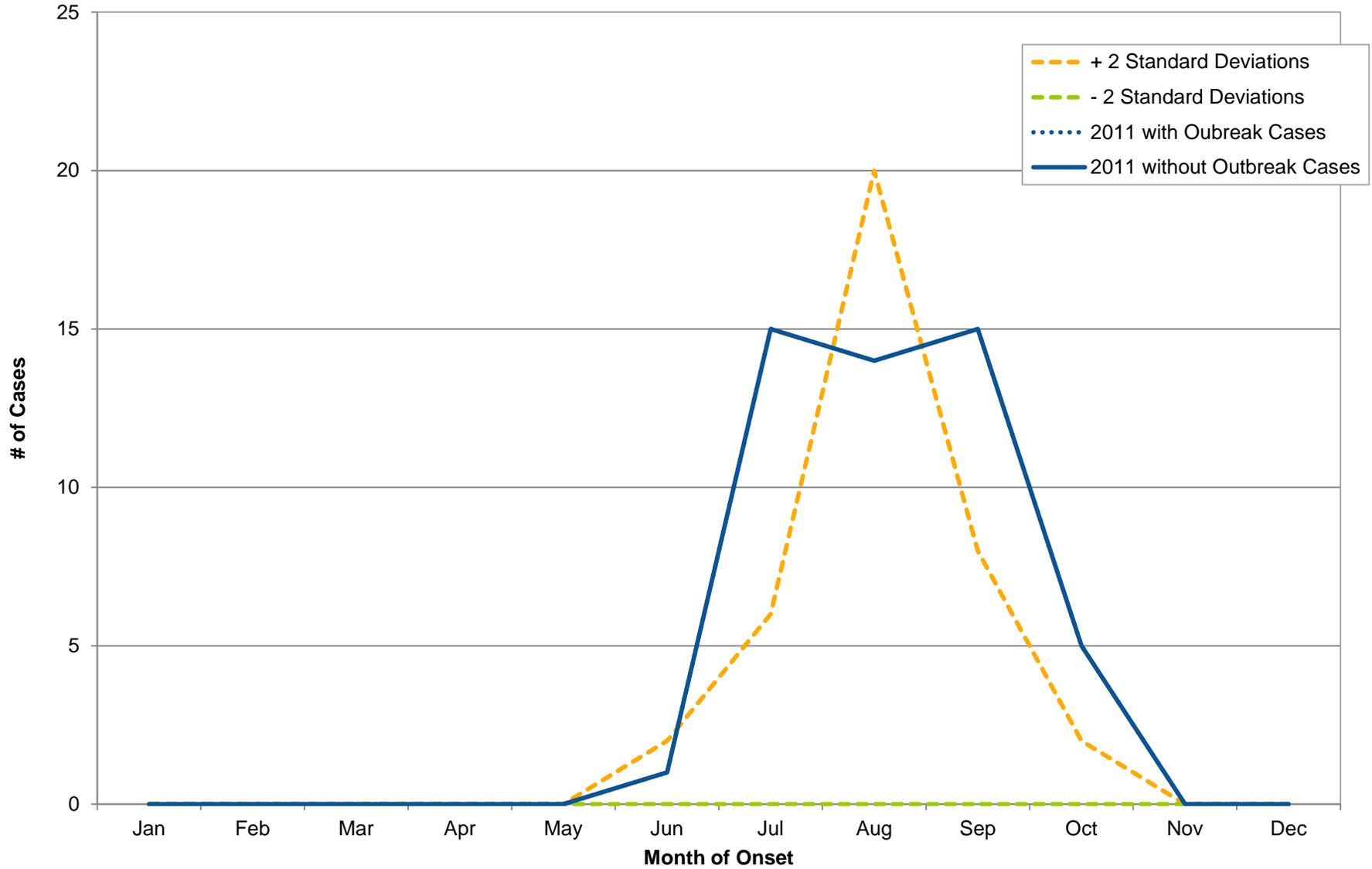
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 *Haemophilus influenzae*, Invasive Disease



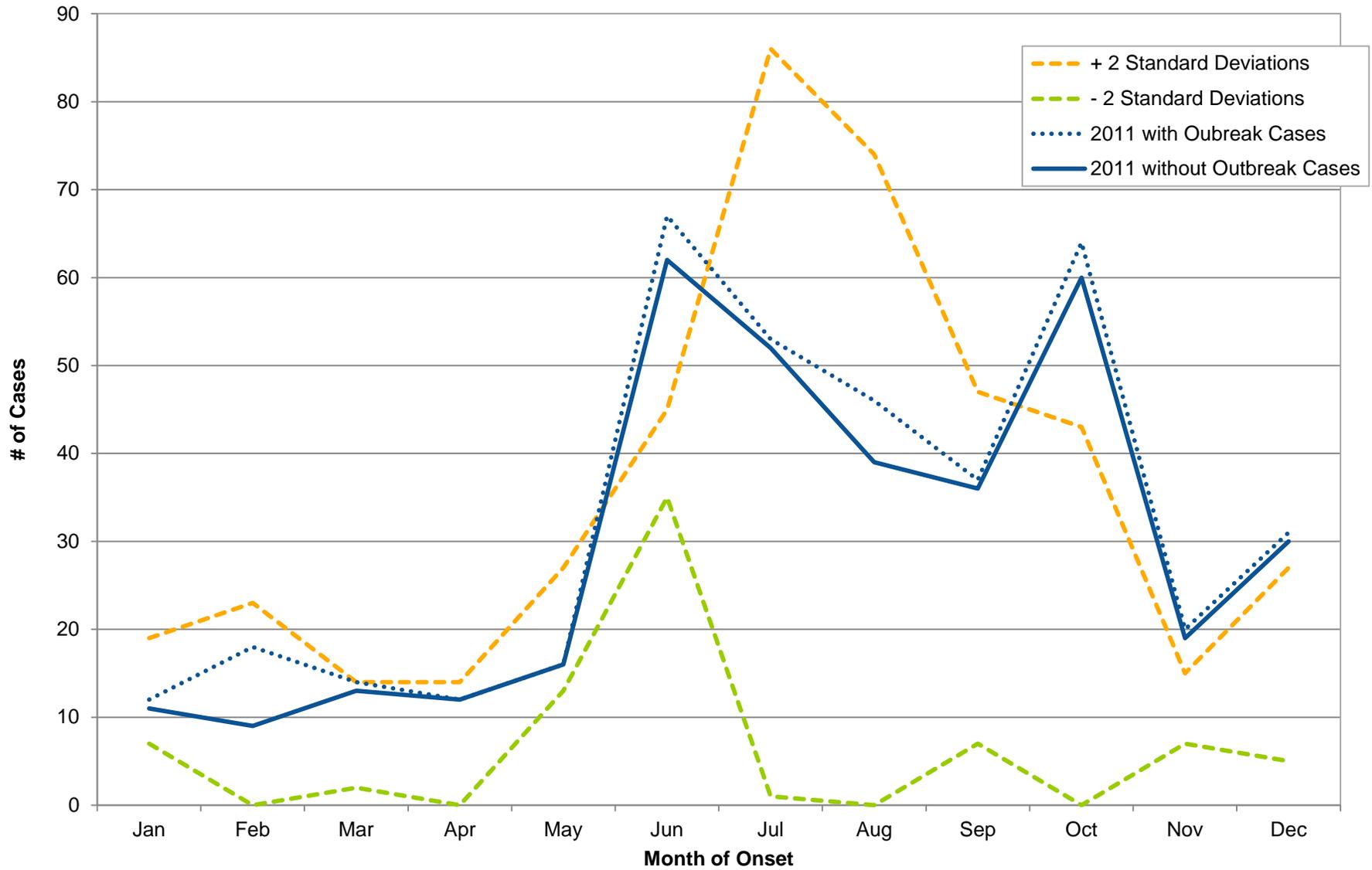
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 LaCrosse Virus Disease



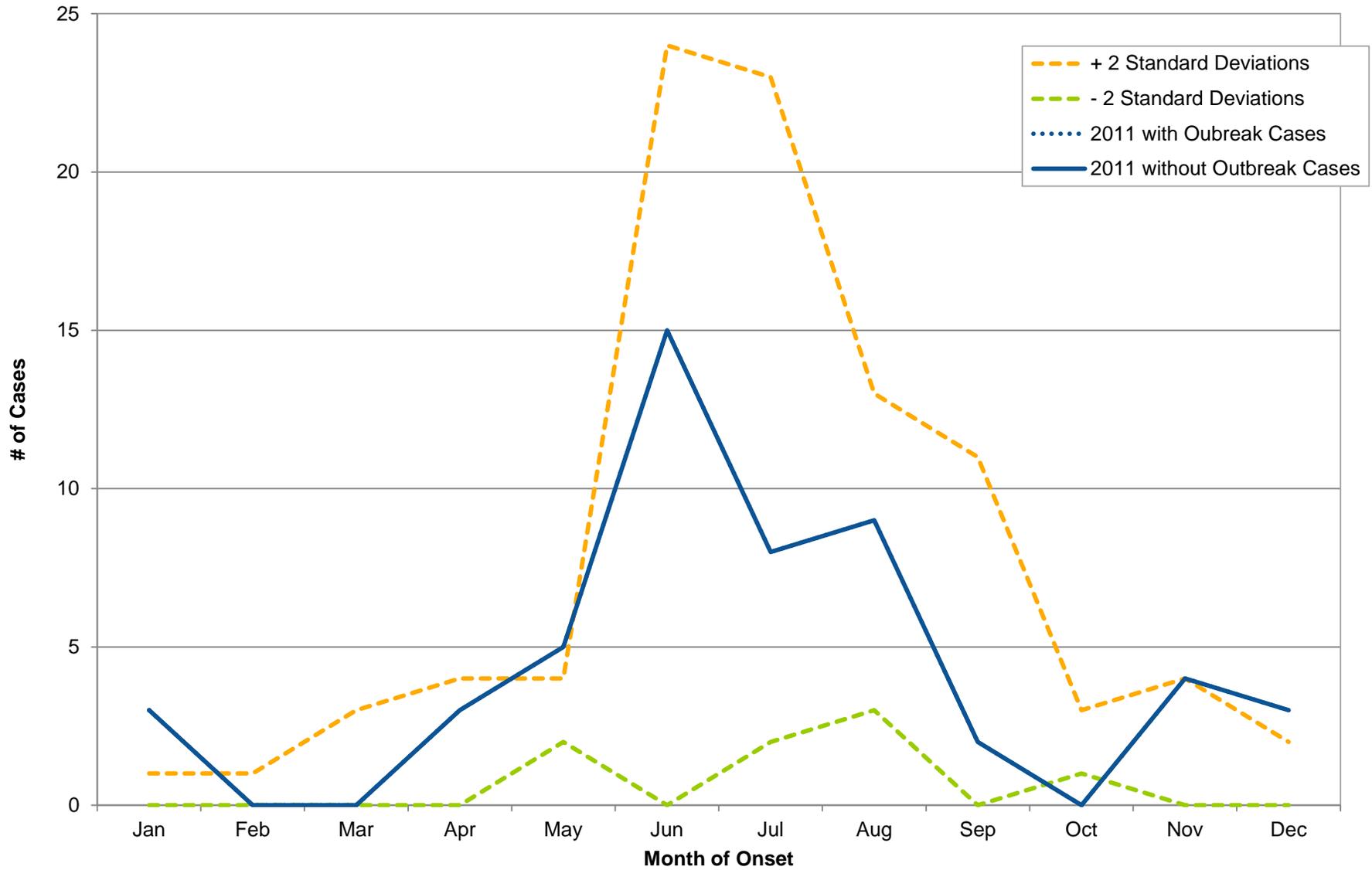
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Legionellosis



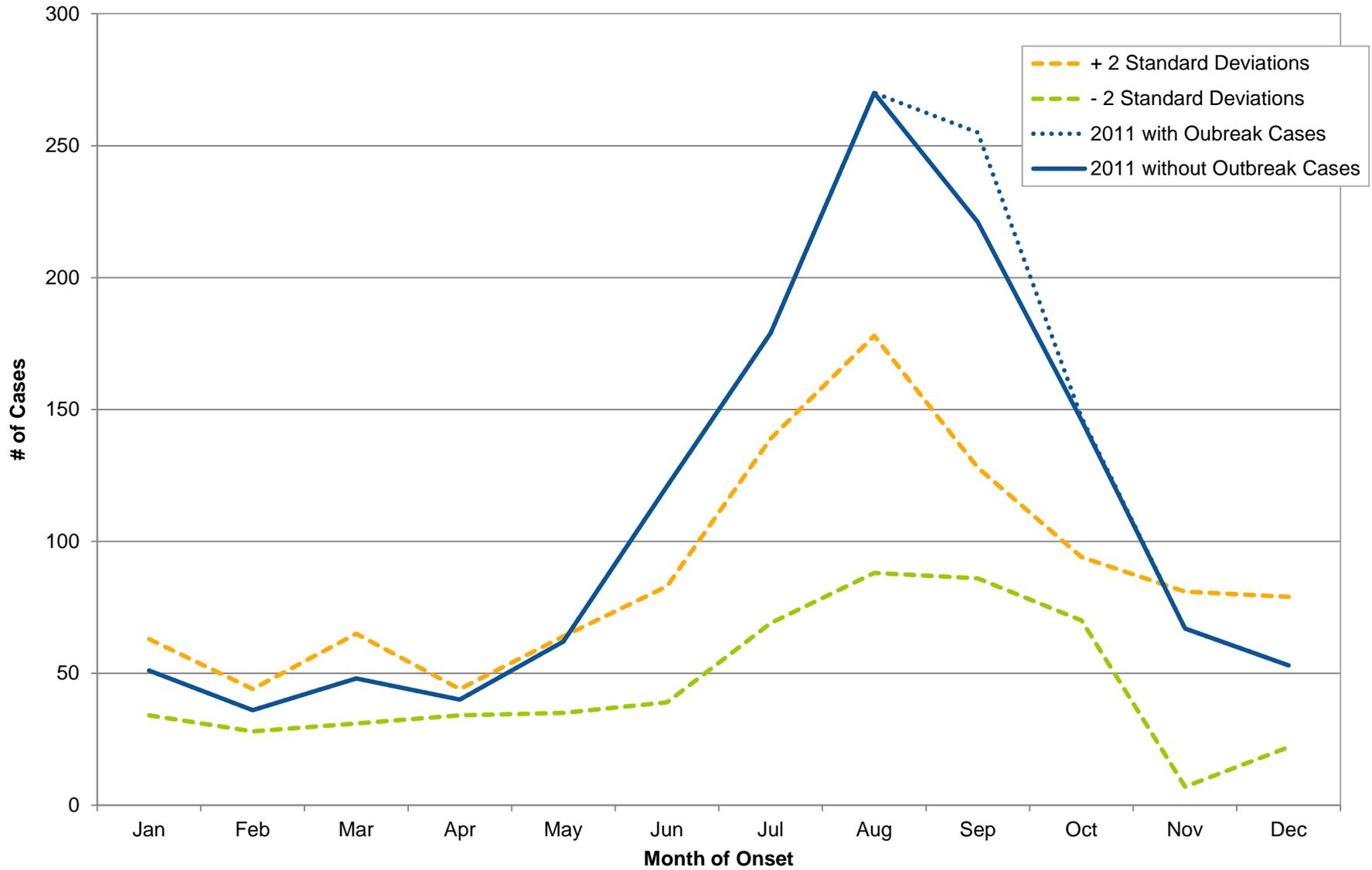
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Lyme Disease



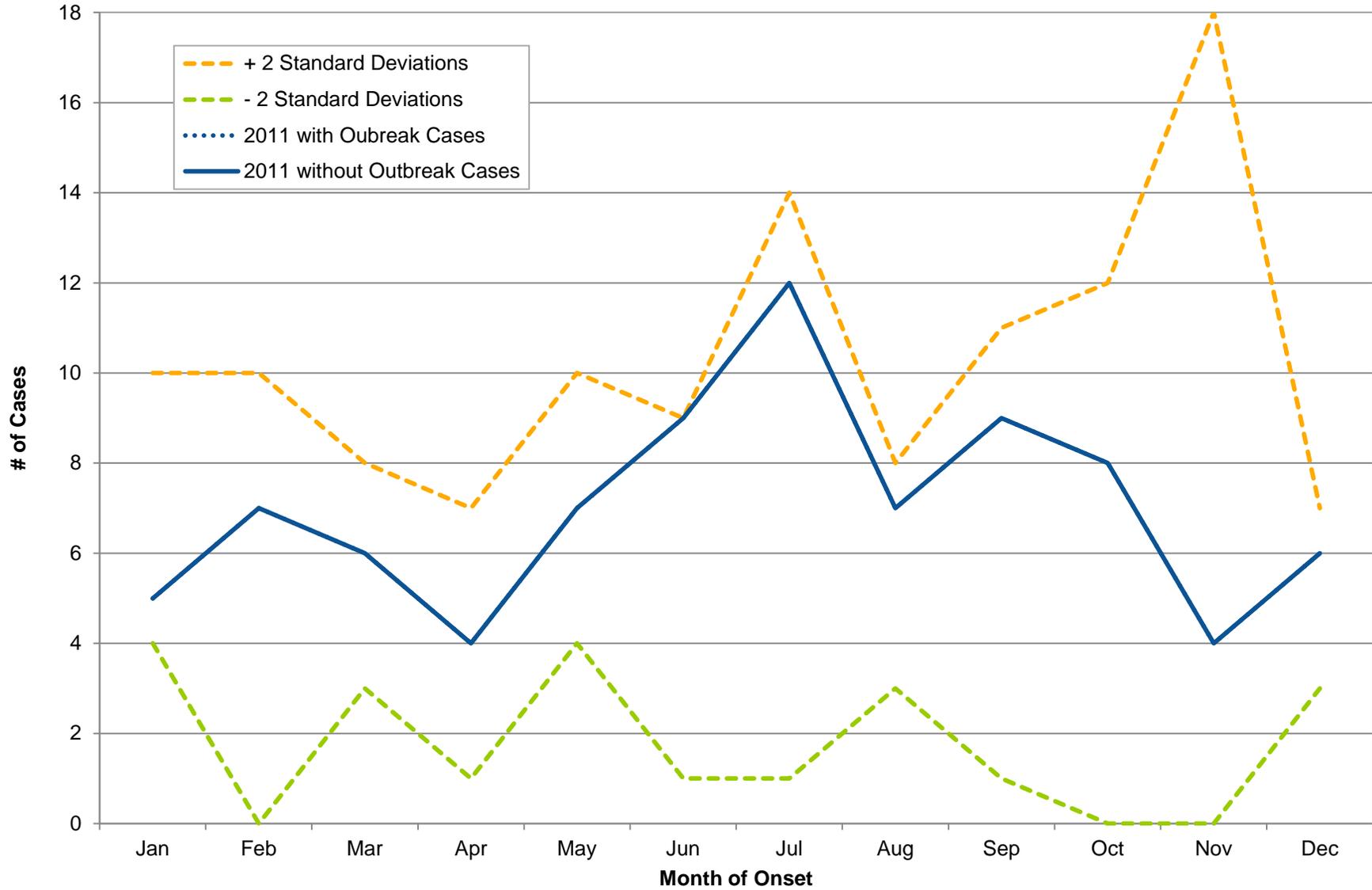
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Meningitis, Aseptic



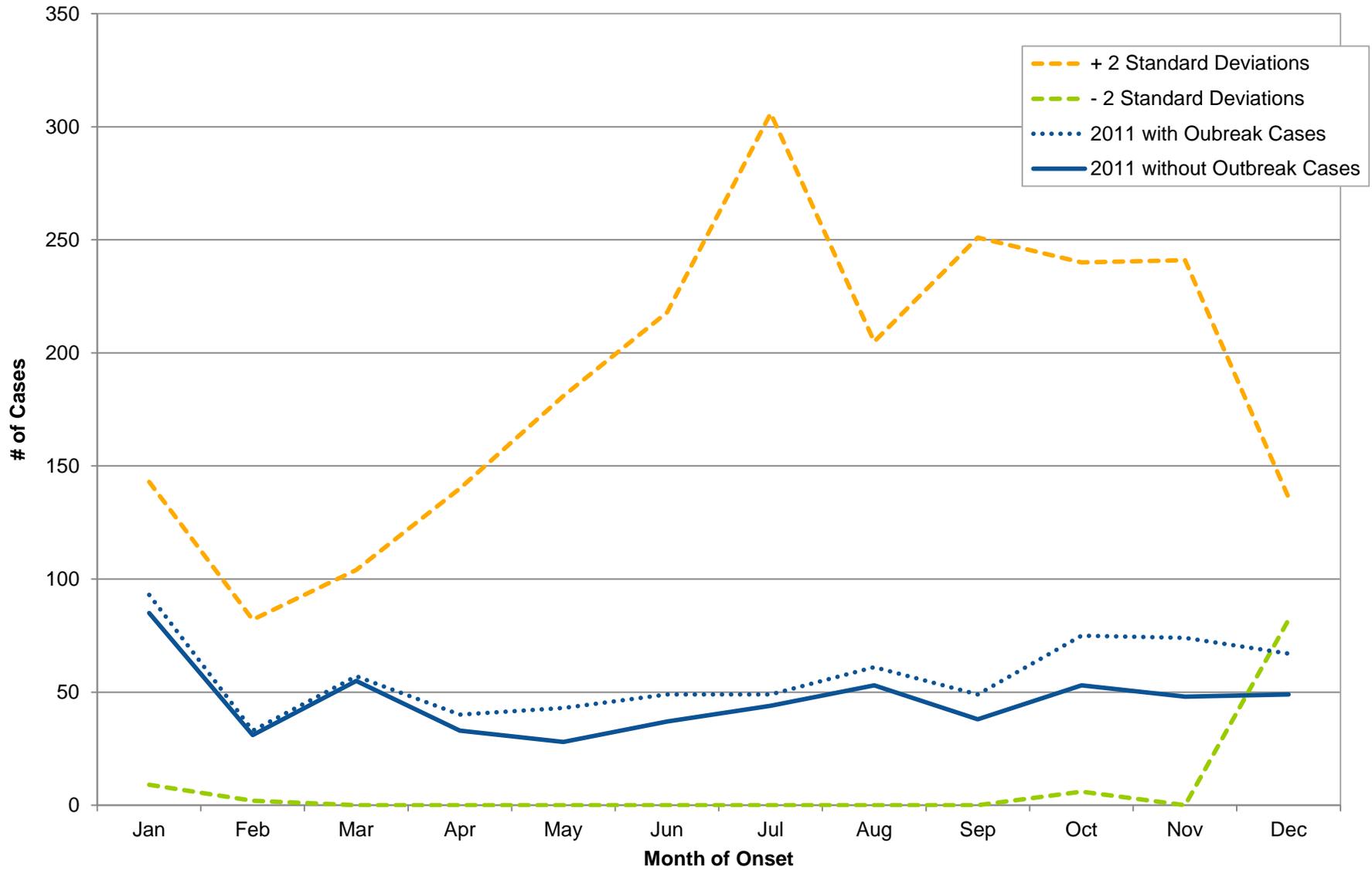
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Meningitis, Other Bacterial



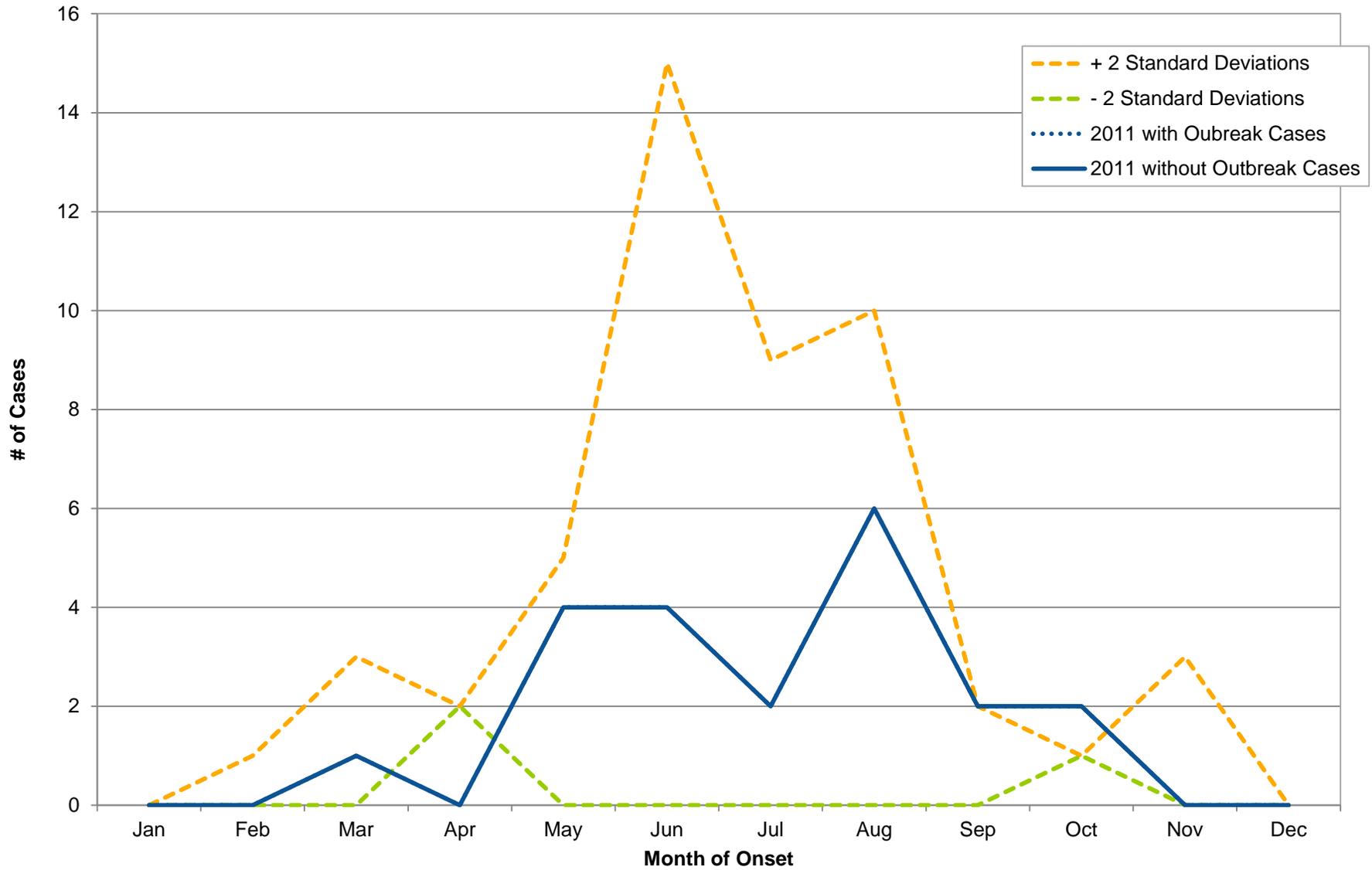
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Pertussis



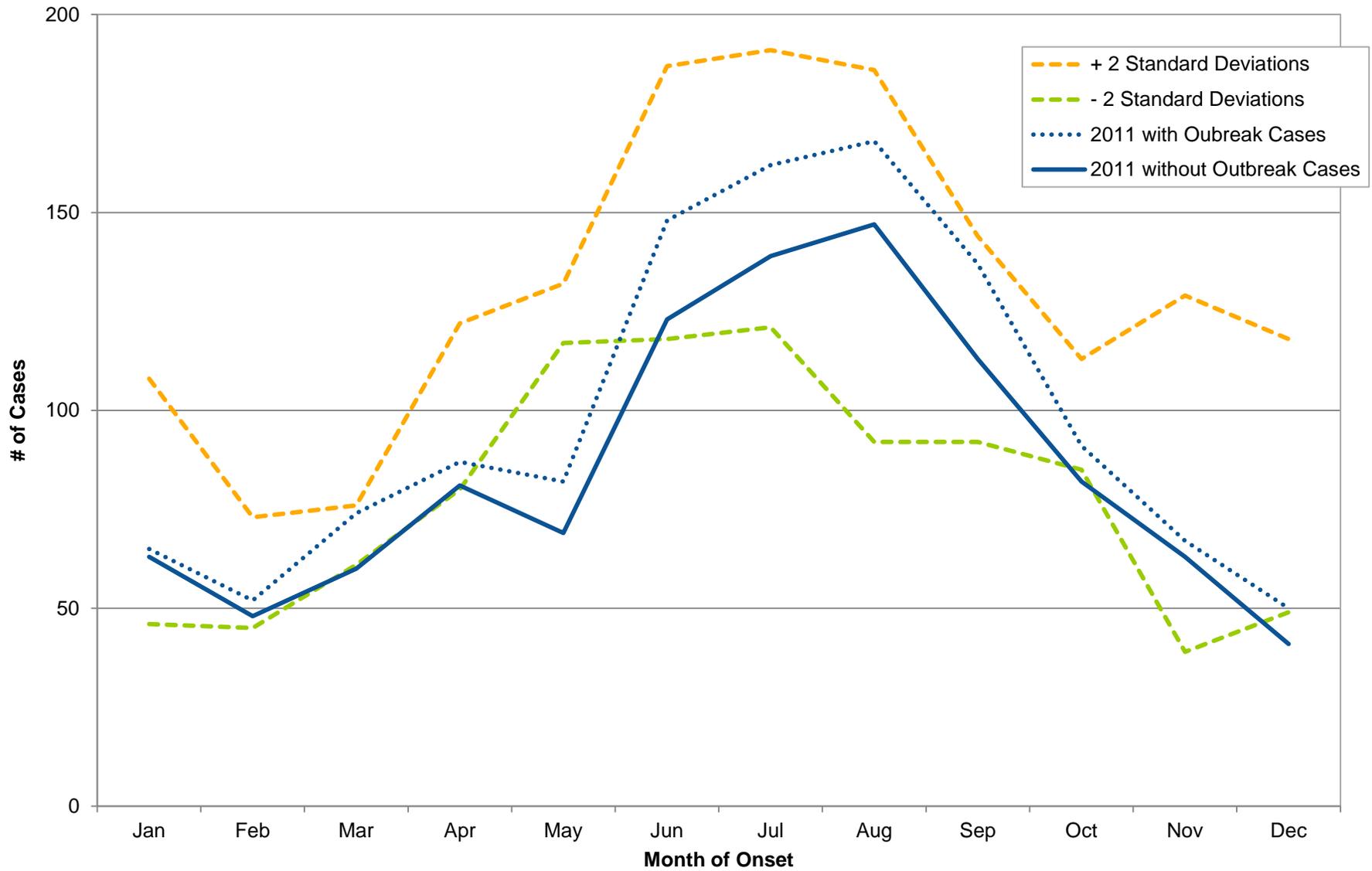
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Rocky Mountain Spotted Fever (RMSF)



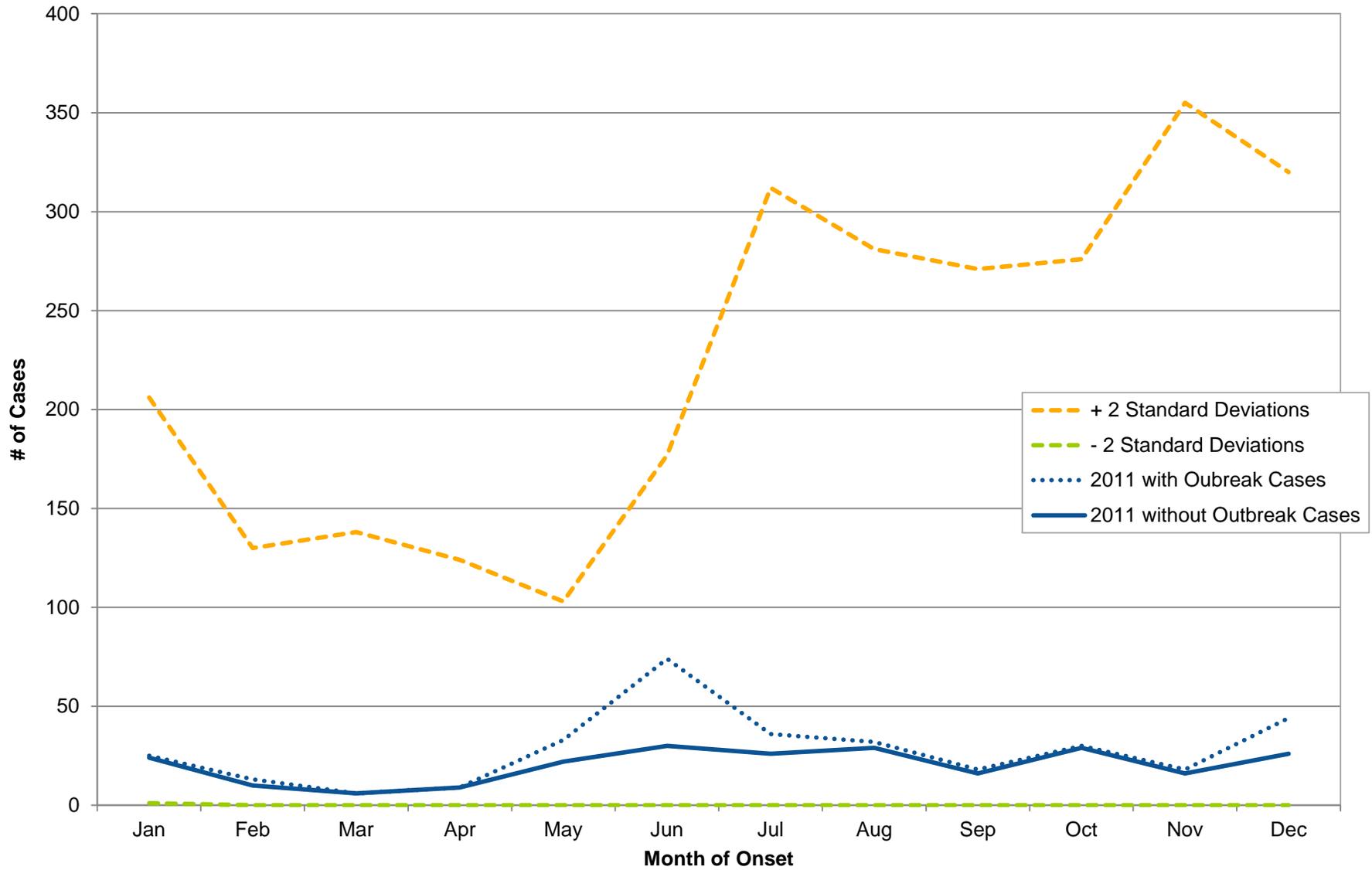
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Salmonellosis



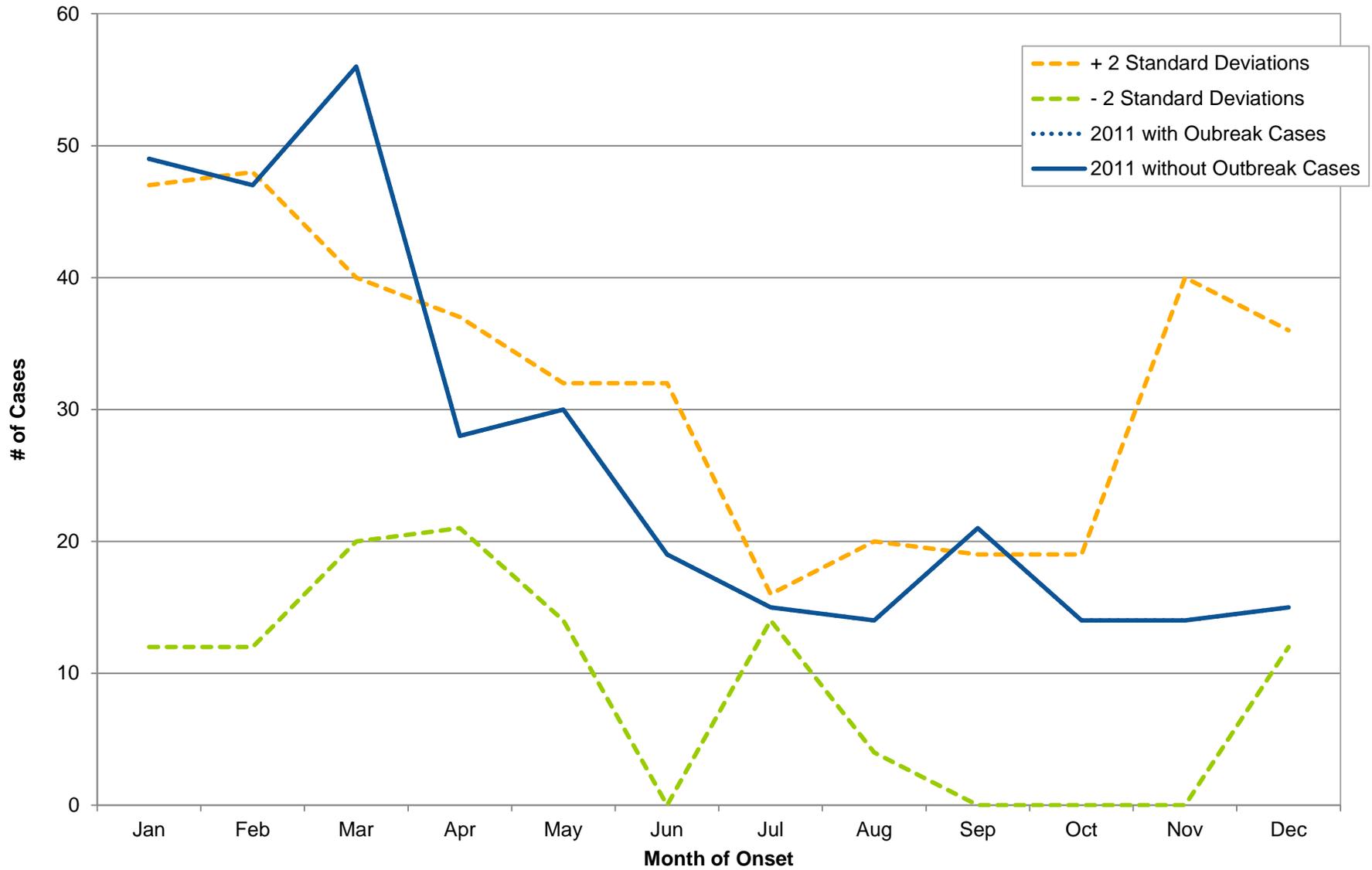
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Shigellosis



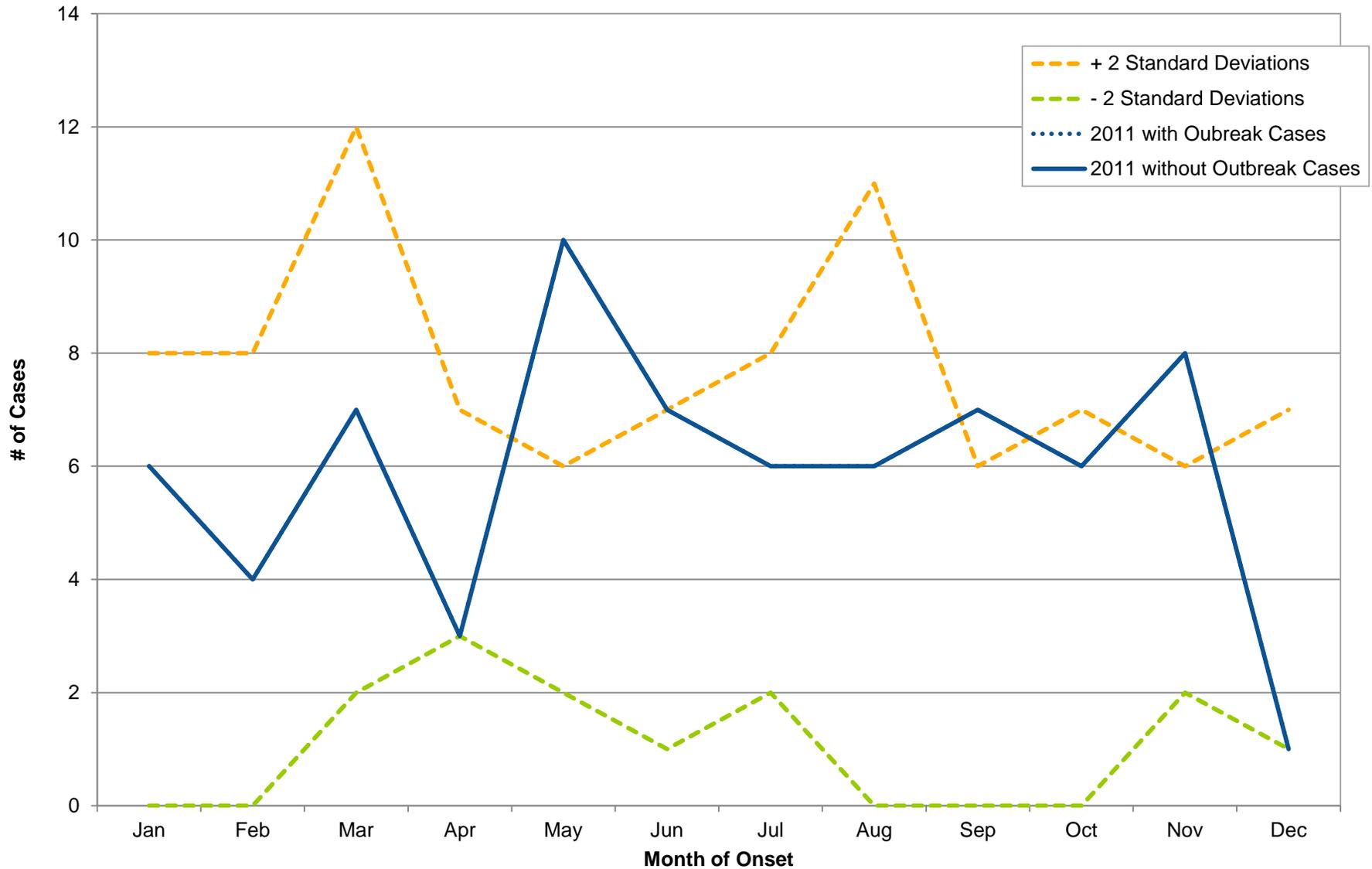
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Streptococcal Disease, Group A, Invasive



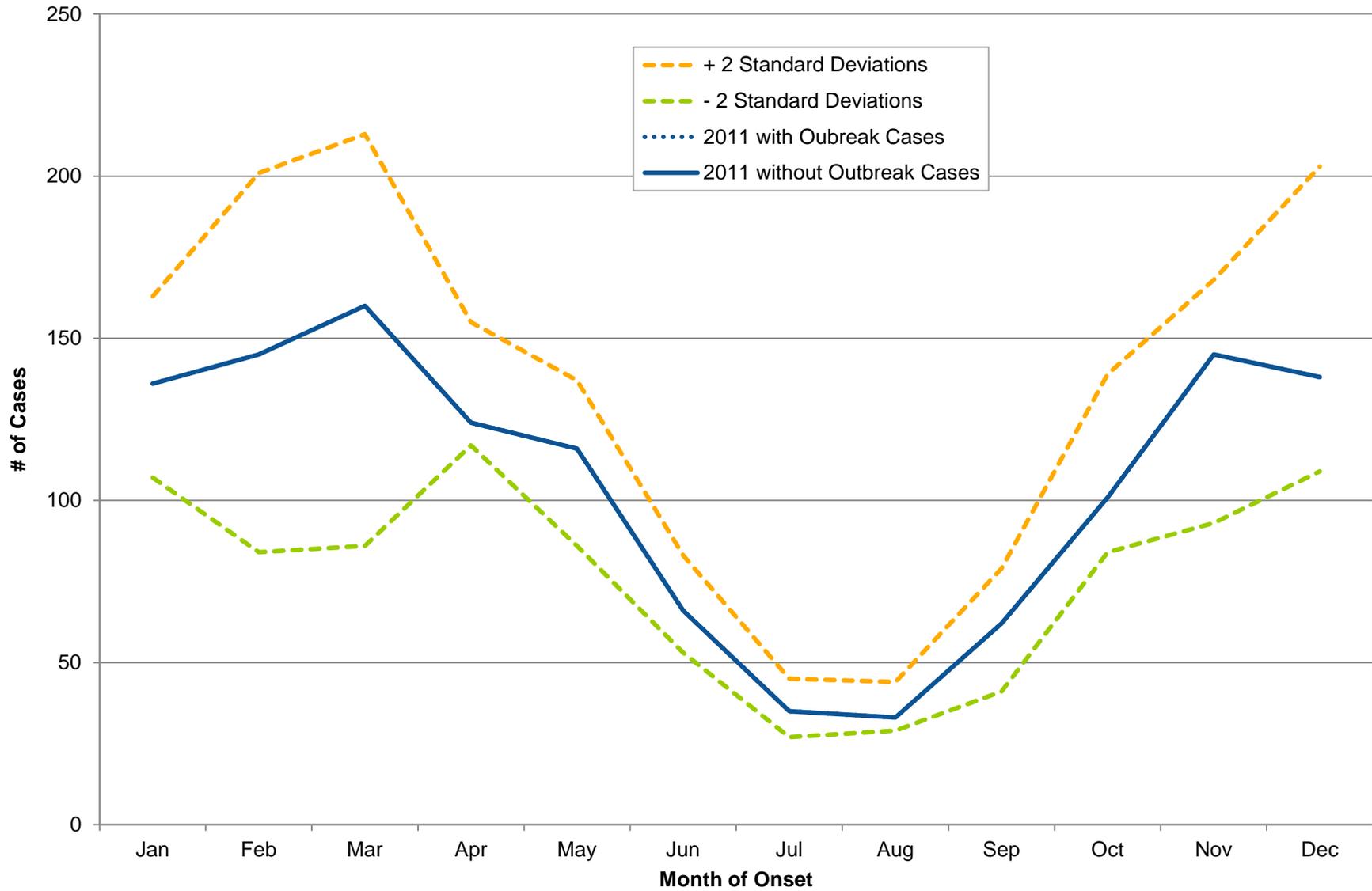
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Streptococcal Disease, Group B, in Newborn



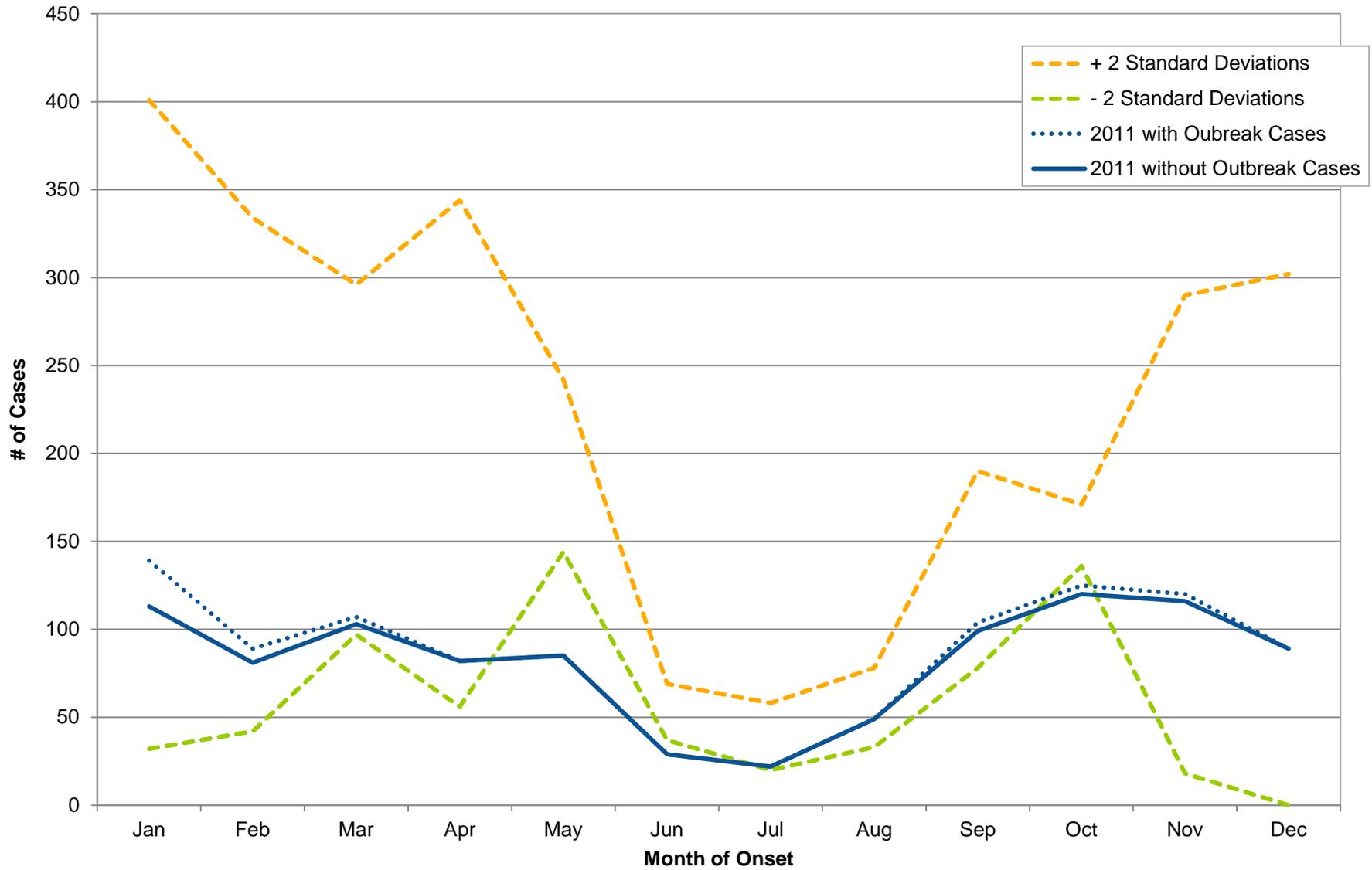
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 *Streptococcus pneumoniae*, Invasive Disease



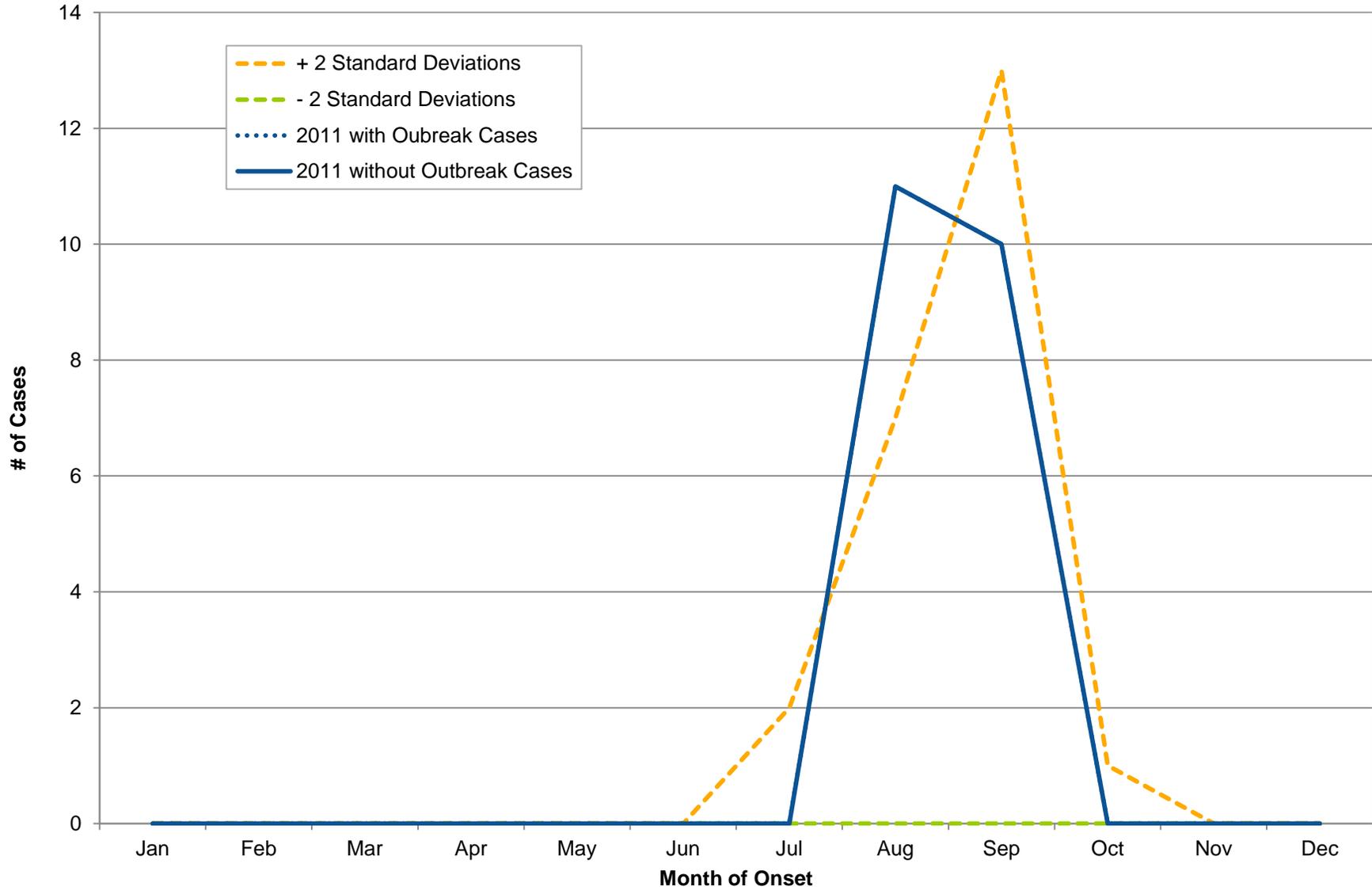
Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Varicella



Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 West Nile Virus Infection



Baseline trends are 2 standard deviations of mean counts from 2008-2010.
Source of disease data: Ohio Disease Reporting System.

PROFILES OF SELECTED NOTIFIABLE DISEASES

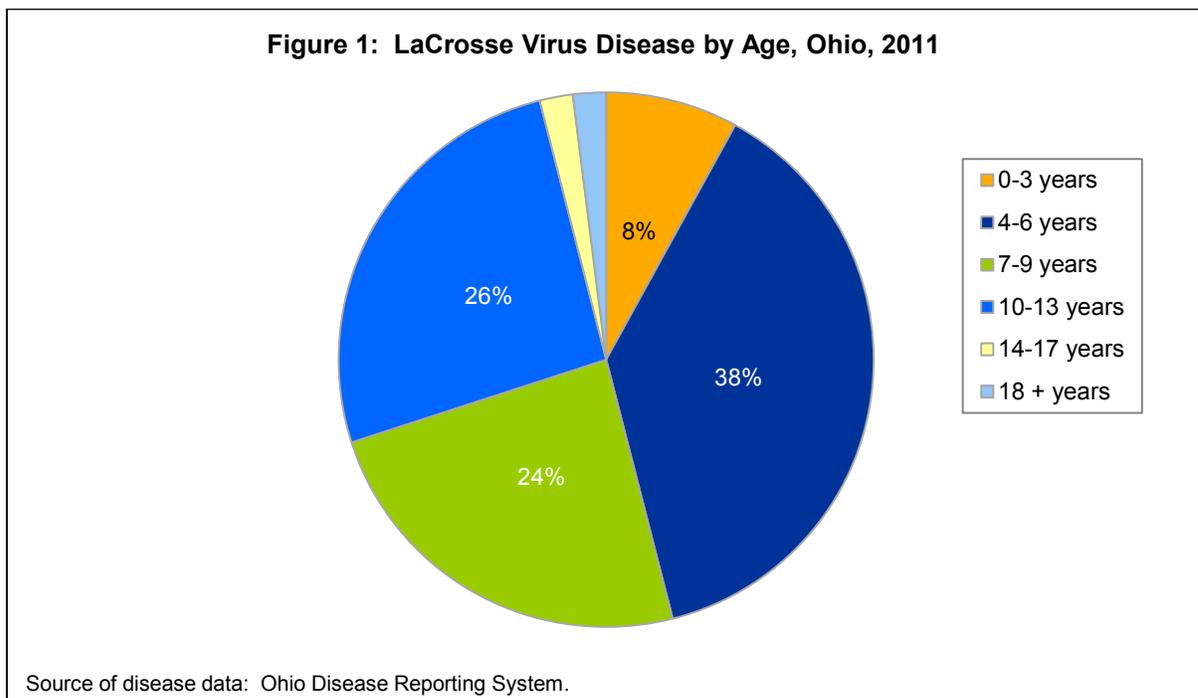
LACROSSE VIRUS DISEASE

<i>Number of cases in 2011:</i>	50	<i>Rate in 2011:</i>	0.4
<i>Number of cases in 2010:</i>	24	<i>Rate in 2010:</i>	0.2

* Rates are based on the U.S. Census 2010 count and the 2011 estimate and are per 100,000 population.

LaCrosse virus disease is a viral illness transmitted through the bite of an infected mosquito, specifically the eastern treehole mosquito, *Aedes triseriatus*. People infected with LaCrosse virus disease usually experience fever, headache, nausea, vomiting and lethargy; however, severe disease can occur in children less than 16 years of age and include seizures, coma, paralysis and neurological complications after resolution of illness.¹ In Ohio, cases occur during the summer and fall, usually from July through October, coinciding with mosquito activity.¹ More cases have been reported in Ohio than any other state in the U.S.,¹ where 1,100 cases have been recorded since 1963.

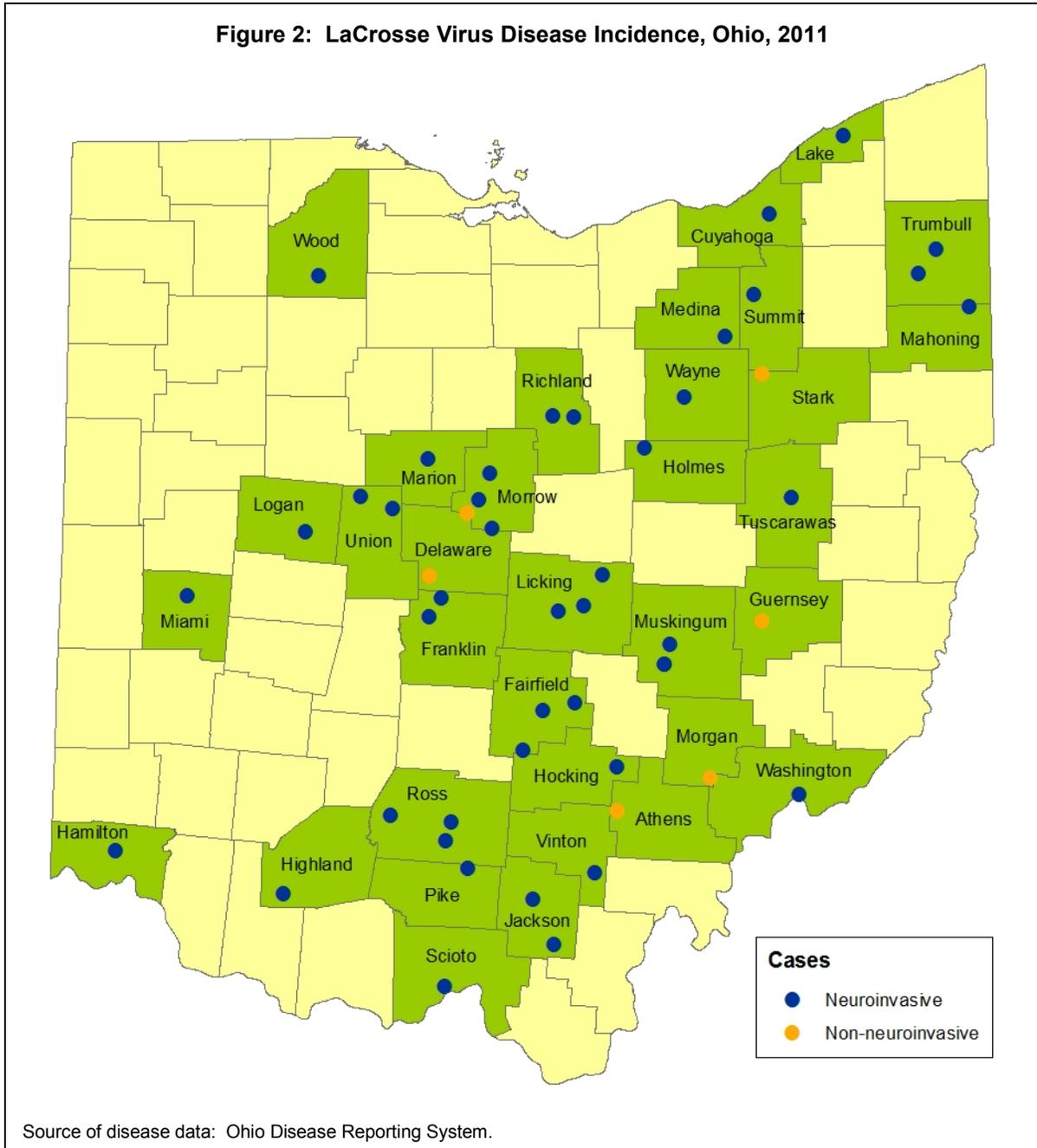
Incidence of LaCrosse virus disease significantly increased in Ohio from five cases in 2009 to 24 cases in 2010 ($p = 0.0004$) to 50 cases in 2011 ($p = 0.0024$). In fact, 2011 was one of the highest years for LaCrosse virus disease incidence in Ohio, second only to 1975 when 52 cases were reported. The greatest proportion of cases in 2011 occurred in children aged 4-6 years, followed by children aged 10-13 years and children aged 7-9 years (see Figure 1). Cases also occurred among children 0-3 years, 14-17 years and in one adult.



As seen in Figure 2, most LaCrosse virus disease cases in 2011 occurred in central, northeastern and southeastern Ohio, in contrast to 2010 where the majority of cases occurred in the northeastern

part of the state. Nearly 90 percent of all LaCrosse cases in 2011 were neuroinvasive, meaning the affected individuals had neurological symptoms associated with their infections, such as meningitis, encephalitis or seizures. Non-neuroinvasive manifestations of LaCrosse virus disease include fever, headache, myalgia, arthralgia and/or rash. All 50 cases were hospitalized for their illness, and no deaths were reported.

Figure 2: LaCrosse Virus Disease Incidence, Ohio, 2011



LYME DISEASE

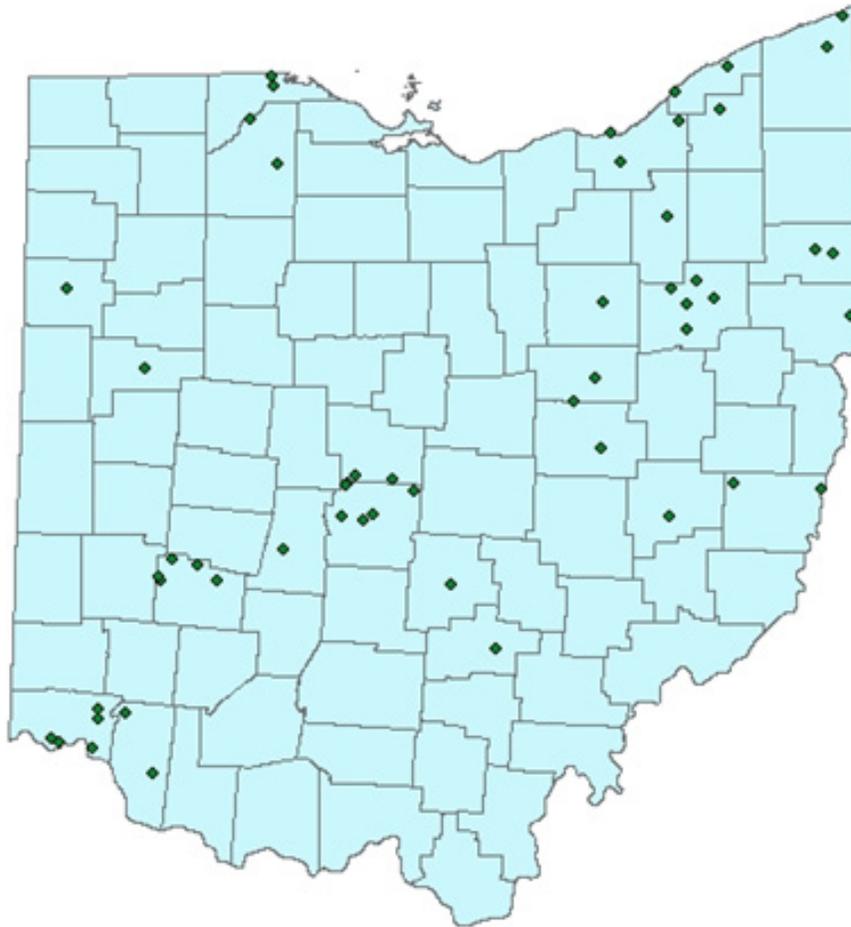
<i>Number of cases in 2011:</i>	52	<i>Rate in 2011:</i>	0.5
<i>Number of cases in 2010:</i>	37	<i>Rate in 2010:</i>	0.3

* Rates are based on the U.S. Census 2010 count and the 2011 estimate and are per 100,000 population.

Lyme disease is caused by bacteria called *Borrelia burgdorferi*. The bacteria are transmitted through the bite of an infected tick, *Ixodes scapularis*, also called the black-legged tick or deer tick. Black-legged ticks were once considered rare in Ohio; however, the tick is now believed to be established in 26 Ohio counties. Criteria to be considered an established population is based on tick distribution of at least six ticks reported or more than one life stage of the tick identified in a given county.

Figure 3 displays the county of residence for Ohio cases diagnosed with Lyme disease in 2011. Most cases occur in the upper Midwest and North Atlantic states. Many of Ohio's cases are still acquired out of state.

Figure 3: Lyme Disease Incidence, Ohio, 2011



Source of disease data: Ohio Disease Reporting System.

SALMONELLOSIS

<i>Number of cases in 2011:</i>	1,183	<i>Rate in 2011:</i>	10.2
<i>Number of cases in 2010:</i>	1,309	<i>Rate in 2010:</i>	11.3

* Rates are based on the U.S. Census 2010 count and the 2011 estimate and are per 100,000 population.

Table 1 demonstrates the proportion of salmonellosis cases linked to a known outbreak or cluster 2007-2011. From 2007-2010, 4 to 9 percent of cases were linked to a known outbreak or cluster; however this increased in 2011 to 13 percent. The increase is likely due to funding provided to the Ohio Department of Health (ODH) Laboratory to perform pulsed-field gel electrophoresis (PFGE) on all *Salmonella* isolates beginning in October 2010. PFGE analysis allows the lab to identify matching clusters of isolates within the state and also throughout the U.S. using a national database. Prior to receipt of this funding, only the top 5 *Salmonella* serotypes were analyzed with PFGE at ODH Lab.

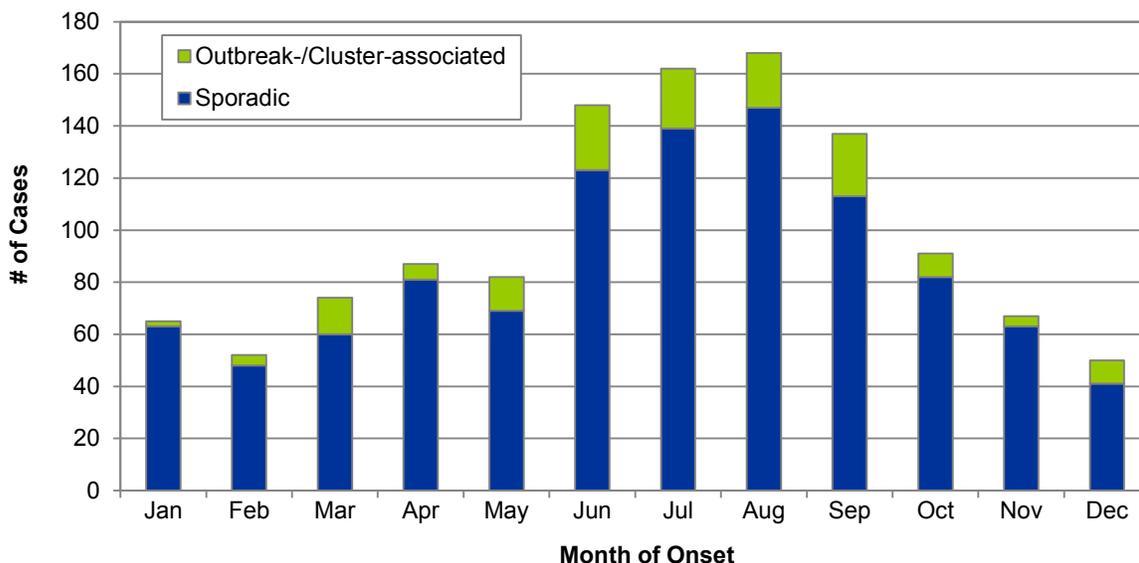
Table 1: Salmonellosis by Outbreak/Cluster Status, Ohio 2007-2011

Year	Outbreak-/Cluster-associated		Sporadic		Total
2007	77	6%	1,246	94%	1,323
2008	129	9%	1,249	91%	1,378
2009	49	4%	1,328	96%	1,377
2010	102	8%	1,207	92%	1,309
2011	154	13%	1,029	87%	1,183

Source of disease data: Ohio Disease Reporting System.

As seen in Figure 4, cases of salmonellosis peaked June-September during 2011. The proportion of cases linked to known outbreaks and clusters ranged from 3 to 19 percent each month, with a median of 14 percent of cases outbreak- or cluster-associated per month.

Figure 4: Salmonellosis by Month of Onset and Outbreak/Cluster Status , Ohio, 2011



Source of disease data: Ohio Disease Reporting System.

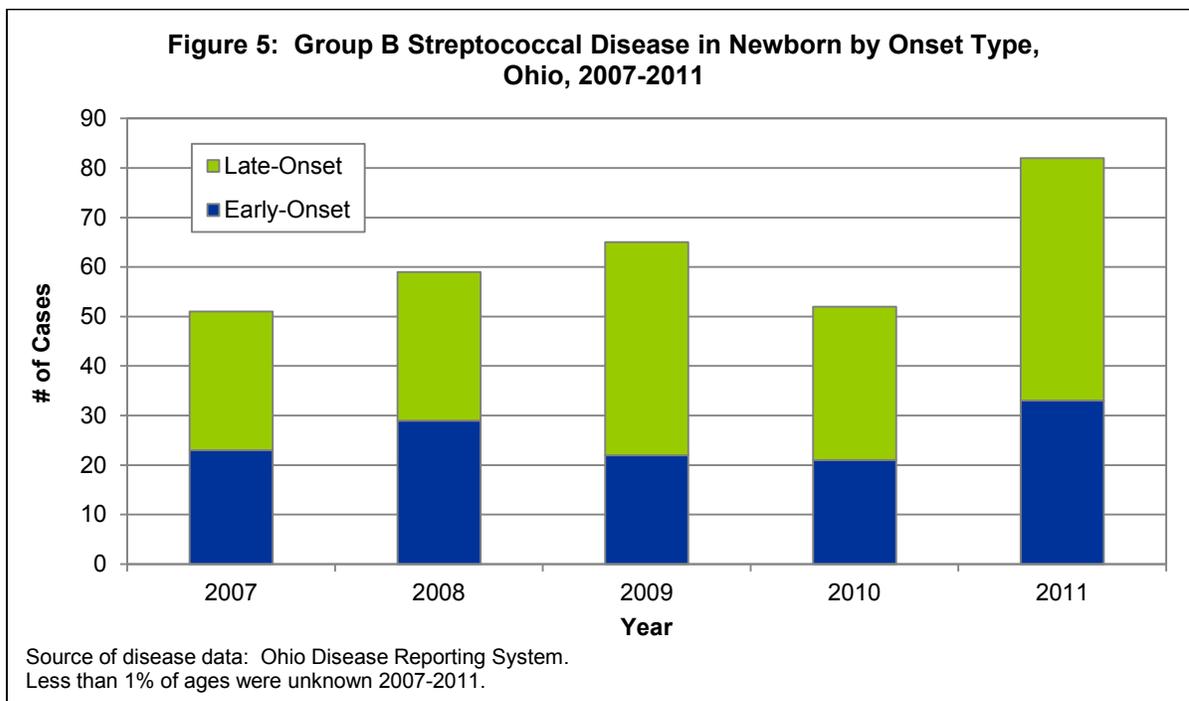
STREPTOCOCCAL DISEASE, GROUP B, IN NEWBORN

<i>Number of cases in 2011:</i>	<i>71</i>	<i>Rate in 2011:</i>	<i>0.6</i>
<i>Number of cases in 2010:</i>	<i>41</i>	<i>Rate in 2010:</i>	<i>0.4</i>

* Rates are based on the U.S. Census births reported for Ohio and are per 1,000 population.

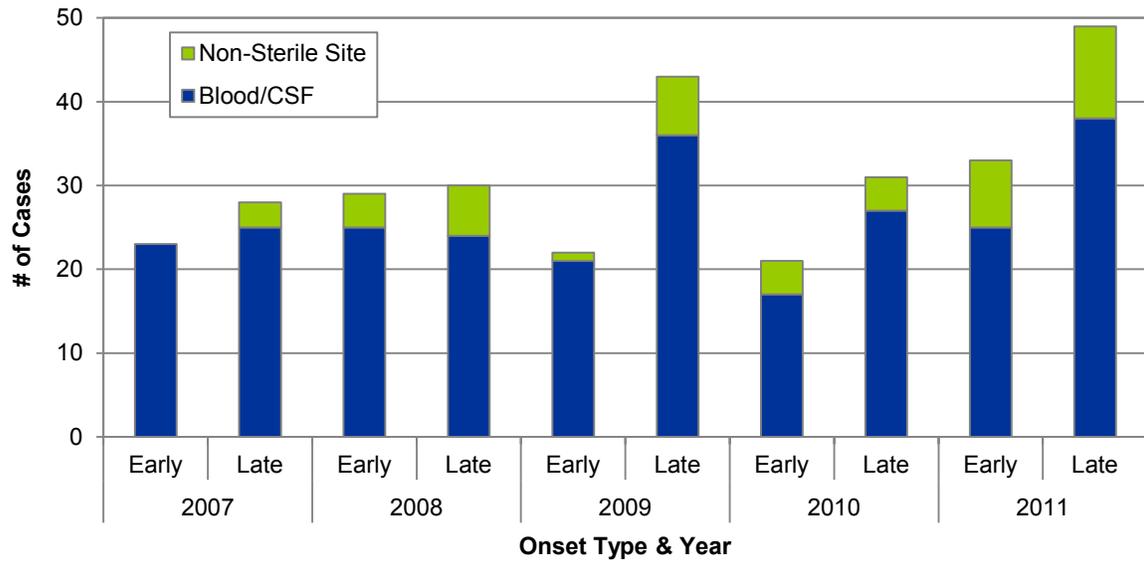
Group B streptococci are bacteria commonly found in the digestive tract and birth canal of pregnant women. Group B streptococci can cause systemic and focal infections in infants from birth until three months of age. Disease in young infants is categorized on the basis of chronologic age at onset. Early-onset disease usually occurs within the first 24 hours of life (range 0-6 days). Late-onset disease occurs between seven days and three months.

Figure 5 demonstrates the burden of group B streptococcal infections in Ohio newborns over the past five years by onset type. Over the past five years, higher incidence of infection was observed among infants older than six days of age than infants six days old or less.



Early-onset infections of group B streptococcal infections may present as signs of systemic infection, respiratory distress, apnea, shock, pneumonia and, less often, meningitis. Late-onset infections commonly manifest as occult bacteremia or meningitis; other focal infections such as osteomyelitis, septic arthritis, adenitis and cellulitis can occur. Figure 6 demonstrates the number of cases of early-onset and late-onset infections occurring in blood or cerebrospinal fluid (CSF) and non-sterile sites.

Figure 6: Group B Streptococcal Disease in Newborn by Specimen Type and Onset Type, Ohio, 2007-2011



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 2011, the Bureau of Infectious Diseases (ODH) assisted local health jurisdictions in Ohio in the investigation of 255 outbreaks.* These outbreaks were detected in 50 of 88 counties throughout the state. The number of Ohioans known to be ill from these outbreaks was 4,106 (median 6, range 2-206). The outbreaks were classified as: community (32), foodborne (61), healthcare-associated (37), institutional (104), waterborne (17) and zoonotic (4). Causative agents identified during the outbreak investigations included: *Acinetobacter baumannii*, *Bordetella pertussis*, *Clostridium perfringens*, *Cryptosporidium* spp., Enterovirus, *Escherichia coli* O111, *Escherichia coli* O157, *Giardia* spp., Hepatitis A virus, *Histoplasma capsulatum*, Influenza A virus, *Legionella pneumophila*, *Microsporium canis*, Norovirus, *Pediculus capitis* (head louse), *Pseudomonas aeruginosa*, *Ralstonia pickettii*, *Salmonella* spp., *Sarcoptes scabiei* (scabies mite), scombroid (histamine) poisoning, *Shigella sonnei*, *Staphylococcus aureus*, *Streptococcus pyogenes*, *Tinea* spp. and Varicella Zoster virus.

This is the second 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 2011 outbreaks are discussed below.

COMMUNITY OUTBREAKS

In 2011, 32 community outbreaks* were reported from a variety of settings. Twenty-three of these outbreaks were confirmed, with the causative agent as follows: *B. pertussis* (7), Enterovirus (1), *E. coli* O157 (1), *Giardia* spp. (1), *H. capsulatum* (1), Norovirus genotype GI (1), Norovirus genotype GII (5), *P. aeruginosa* (1), *S. scabiei* (2), *S. sonnei* (1) and methicillin-resistant *S. aureus* (2).

The confirmed community outbreaks of 2011 are listed in Table 1.

Table 1: Confirmed Community Outbreaks, Ohio, 2011

Month of Onset	Causative Agent	County	# Ill
November 2010	<i>Giardia</i> spp.	Franklin	9
December 2010	Methicillin-resistant <i>Staphylococcus aureus</i>	Franklin	3
December 2010	Norovirus GII.1 Hawaii	Delaware	4
February 2011	Norovirus GII.1	Franklin	135
March 2011	Norovirus GII.4 New Orleans	Miami	66
April 2011	<i>Sarcoptes scabiei</i>	Crawford	4
April 2011	<i>Histoplasma capsulatum</i>	Logan	3
April 2011	<i>Bordetella pertussis</i>	Franklin	3

Month of Onset	Causative Agent	County	# Ill
May 2011	<i>Bordetella pertussis</i>	Franklin	4
May 2011	<i>Bordetella pertussis</i>	Franklin	5
June 2011	<i>Bordetella pertussis</i>	Franklin	3
June 2011	<i>Escherichia coli</i> O157	Auglaize	3
July 2011	Methicillin-resistant <i>Staphylococcus aureus</i>	Franklin	4
July 2011	<i>Bordetella pertussis</i>	Athens	3
July 2011	<i>Bordetella pertussis</i>	Madison	5
September 2011	Enterovirus	Lawrence	31
September 2011	<i>Bordetella pertussis</i>	Franklin	3
September 2011	<i>Shigella sonnei</i>	Cuyahoga	2
November 2011	Norovirus GI.2	Lucas	2
December 2011	<i>Sarcoptes scabiei</i>	Crawford	7
December 2011	<i>Pseudomonas aeruginosa</i>	Medina	2
December 2011	Norovirus GII.1	Lucas	4
December 2011	Norovirus GII.6A	Summit	4

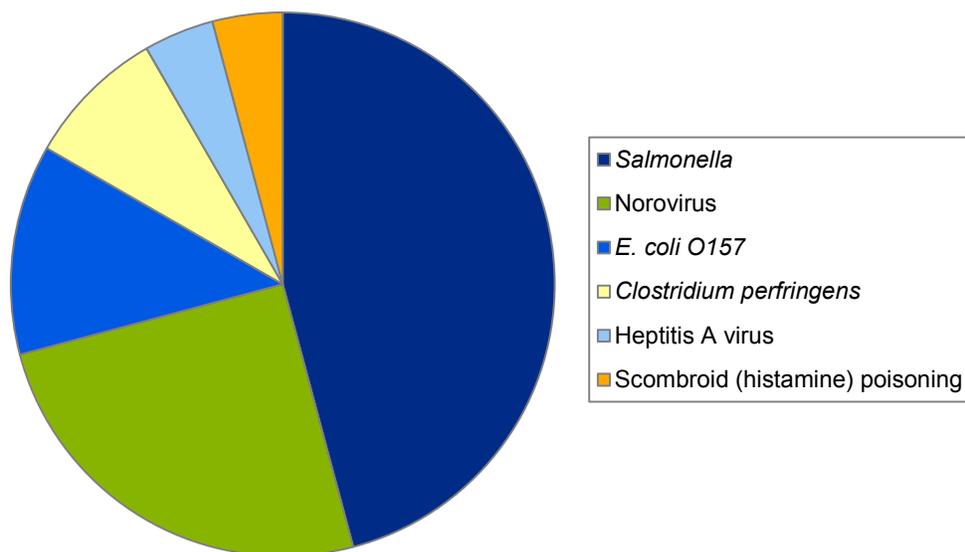
Source of outbreak data: Ohio Disease Reporting System.

FOODBORNE OUTBREAKS

In 2011, 24 of the 61 foodborne outbreaks reported in Ohio were confirmed. These 61 outbreaks 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.” The 24 confirmed outbreaks also met the agent-specific [criteria for confirmation](#) of outbreaks. As shown in Figure 1, for these 24 foodborne outbreaks, the causative agent was distributed as follows: *Salmonella* spp. (11), Norovirus (6), *E. coli* O157 (3), *Clostridium perfringens* (2), Hepatitis A virus (1) and scombroid (histamine) poisoning (1).

A single case of foodborne botulism (type A) was reported in January 2011. Commercially-produced potato soup was implicated (see [Morbidity and Mortality Weekly Report \(MMWR\) July 8, 2011, Vol. 60 \(26\); 890](#)). This was a single case in Ohio; it was not an outbreak.

Figure 1: Confirmed Foodborne Outbreaks by Etiologic Agent, Ohio, 2011



Source of outbreak data: Ohio Disease Reporting System.

The 24 confirmed foodborne outbreaks are detailed in Table 2.

Table 2: Confirmed Foodborne Outbreaks, Ohio, 2011

Month of Onset	Causative Agent	County	# Ill	Suspected Food Vehicle	Event / Setting
January 2011	Norovirus GII.4 New Orleans	Crawford	2	Unknown	Home
January 2011	Norovirus GII.4 New Orleans	Wyandot	2	Chicken	Grocery store
January 2011	<i>Escherichia coli</i> O157	Multistate	2	Lebanon bologna	Commercial product: recalled
January 2011	Hepatitis A virus	Lake	4	Cold cuts, cheese, deli food	Home
February 2011	<i>Salmonella</i> Hadar	Multistate	2	Turkey burger	Commercial product: recalled
February 2011	Norovirus GII.4 New Orleans	Crawford	3	Unknown	Home
March 2011	<i>Salmonella</i> Agona	Multistate	1	Papaya	Commercial product: recalled
April 2011	<i>Salmonella</i> Heidelberg	Multistate	14	Ground turkey	Commercial product: recalled
May 2011	<i>Salmonella</i> Enteritidis	Miami	11	Chicken sandwich	Party
June 2011	<i>Salmonella</i> Typhimurium	Ottawa	14	Cake	Party
June 2011	<i>Salmonella</i> Enteritidis	Lake	41	Unknown	Wedding reception

Month of Onset	Causative Agent	County	# Ill	Suspected Food Vehicle	Event / Setting
June 2011	<i>Salmonella</i> Typhimurium	Multistate	5	Ground beef	Commercial product
July 2011	<i>Salmonella</i> Enteritidis	Hamilton	4	Unknown	Restaurant
July 2011	<i>Salmonella</i> Newport	Multistate	3	Tomatoes	Restaurant
August 2011	<i>Escherichia coli</i> O157	Fulton	3	Unknown	Home
September 2011	Norovirus GII	Belmont	115	Salad	Wedding reception
September 2011	<i>Salmonella</i> Enteritidis	Cuyahoga	37	Cross-contaminated chicken	Restaurant
September 2011	<i>Escherichia coli</i> O157	Butler	4	Ground beef	Commercial product
October 2011	<i>Salmonella</i> Oranienburg	Lucas	4	Unknown	Home
October 2011	Scombroid (histamine) poisoning	Medina	2	Tuna fish	Restaurant
November 2011	<i>Clostridium perfringens</i>	Henry	101	Turkey	Church dinner
November 2011	Norovirus GI.6A	Ashtabula	3	Unknown	Restaurant
December 2011	Norovirus GI.6A	Summit	11	Sandwiches	Restaurant
December 2011	<i>Clostridium perfringens</i>	Summit	17	Turkey	Potluck

Source of outbreak data: Ohio Disease Reporting System.

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

[Multistate Outbreak of *E. coli* O157:H7 Infections Associated with Lebanon Bologna](#)

[Multistate Outbreak of Human *Salmonella* Hadar Infections Associated with Turkey Burgers](#)

[Multistate Outbreak of Human *Salmonella* Agona Infections Linked to Whole, Fresh Imported Papayas](#)

[Multistate Outbreak of Human *Salmonella* Heidelberg Infections Linked to Ground Turkey](#)

HEALTHCARE-ASSOCIATED OUTBREAKS

There were 37 healthcare-associated outbreaks* reported in 2011, all of which were confirmed as shown in Table 3.

Table 3: Confirmed Healthcare-Associated Outbreaks, Ohio, 2011

Month of Onset	Causative Agent	# Ill	Setting
November 2010	<i>Acinetobacter baumannii</i>	18	Long term care facility
December 2010	Methicillin-sensitive <i>Staphylococcus aureus</i>	3	Hospital
December 2010	Norovirus GII.4 New Orleans	56	Assisted living
December 2010	Norovirus GII.4 New Orleans	19	Hospital
January 2011	Norovirus genotype unknown	45	Hospital
January 2011	Norovirus genotype unknown	52	Hospital
January 2011	Norovirus GII.4 New Orleans	105	Long term care facility
January 2011	Influenza A virus	7	Long term care facility
January 2011	Influenza A virus	20	Long term care facility
February 2011	Influenza A virus	84	Long term care facility
February 2011	Norovirus GII.4 New Orleans	28	Hospital
February 2011	Norovirus GII.4 New Orleans	73	Long term care facility
February 2011	Norovirus GII.4 New Orleans	75	Long term care facility
February 2011	Norovirus genotype unknown	57	Long term care facility
February 2011	<i>Salmonella</i> Javiana	2	Long term care facility
March 2011	Influenza A virus	28	Long term care facility
March 2011	Norovirus GII.4 New Orleans	63	Long term care facility
March 2011	<i>Acinetobacter baumannii</i>	7	Hospital
March 2011	Norovirus GII.4 New Orleans	46	Long term care facility
March 2011	<i>Sarcoptes scabiei</i>	7	Long term care facility
March 2011	Methicillin-sensitive <i>Staphylococcus aureus</i>	5	Hospital
April 2011	<i>Sarcoptes scabiei</i>	18	Hospital
April 2011	<i>Sarcoptes scabiei</i>	45	Long term care facility
April 2011	<i>Ralstonia pickettii</i>	4	Dialysis center
May 2011	<i>Sarcoptes scabiei</i>	4	Long term care facility
May 2011	Methicillin-sensitive <i>Staphylococcus aureus</i>	3	Hospital
June 2011	<i>Sarcoptes scabiei</i>	11	Long term care facility
July 2011	<i>Ralstonia pickettii</i>	2	Dialysis center
July 2011	<i>Sarcoptes scabiei</i>	30	Long term care facility
August 2011	<i>Sarcoptes scabiei</i>	14	Long term care facility
September 2011	Methicillin-sensitive <i>Staphylococcus aureus</i>	4	Hospital
November 2011	Methicillin-resistant <i>Staphylococcus aureus</i>	4	Outpatient clinic
November 2011	<i>Sarcoptes scabiei</i>	3	Long term care facility
November 2011	<i>Sarcoptes scabiei</i>	6	Long term care facility
November 2011	<i>Sarcoptes scabiei</i>	3	Long term care facility
November 2011	<i>Sarcoptes scabiei</i>	12	Long term care facility
December 2011	Norovirus GII.4 New Orleans	18	Long term care facility

Source of outbreak data: Ohio Disease Reporting System.

INSTITUTIONAL OUTBREAKS

In 2011, 104 institutional outbreaks* were reported. Of these, 72 were confirmed. See Table 4 below for the confirmed institutional outbreaks.

Month of Onset	Causative Agent	County	# Ill	Setting
October 2010	Varicella Zoster virus	Delaware	13	Day care center
November 2010	Varicella Zoster virus	Hancock	14	School
December 2010	Varicella Zoster virus	Ashtabula	27	School
December 2010	<i>Streptococcus pyogenes</i>	Lucas	13	Day care center
January 2011	<i>Bordetella pertussis</i>	Franklin	4	School
January 2011	<i>Bordetella pertussis</i>	Franklin	2	Day care center
January 2011	<i>Bordetella pertussis</i>	Franklin	2	School
January 2011	<i>Streptococcus pyogenes</i>	Lucas	22	School
January 2011	<i>Sarcoptes scabiei</i>	Champaign	29	Assisted living
January 2011	Norovirus GII.4 Minerva	Franklin	43	Assisted living
January 2011	Norovirus GII.4 New Orleans	Darke	14	Assisted living
January 2011	Norovirus GII.4 Appeldorne	Franklin	9	Assisted living
January 2011	Norovirus GII.4 New Orleans	Sandusky	65	Assisted living
January 2011	Norovirus GI.3B	Montgomery	15	Assisted living
January 2011	<i>Shigella sonnei</i>	Hamilton	17	Day care center
January 2011	Methicillin-resistant <i>Staphylococcus aureus</i>	Jackson	6	College/university
February 2011	<i>Bordetella pertussis</i>	Franklin	2	Day care center
February 2011	<i>Escherichia coli</i> O157	Hamilton	10	Day care center
February 2011	Group A <i>Streptococcus</i>	Richland	10	School
February 2011	Norovirus GII.4 New Orleans	Hancock	43	Assisted living
February 2011	<i>Tinea</i> spp.	Stark	5	Day care center
March 2011	<i>Bordetella pertussis</i>	Franklin	4	School
March 2011	Methicillin-resistant <i>Staphylococcus aureus</i>	Franklin	4	School
March 2011	Norovirus GI.3B	Summit	33	Independent living
March 2011	Methicillin-resistant <i>Staphylococcus aureus</i>	Madison	22	Correctional facility
March 2011	<i>Sarcoptes scabiei</i>	Auglaize	11	Assisted living
April 2011	<i>Bordetella pertussis</i>	Franklin	4	School
April 2011	<i>Bordetella pertussis</i>	Franklin	3	School
April 2011	<i>Shigella sonnei</i>	Hamilton	6	Day care center
May 2011	<i>Bordetella pertussis</i>	Franklin	5	Day care center
May 2011	<i>Bordetella pertussis</i>	Franklin	3	School
May 2011	<i>Pediculus capitis</i>	Ashland	8	School
May 2011	<i>Shigella sonnei</i>	Hamilton	13	Day care center
June 2011	<i>Shigella sonnei</i>	Hamilton	15	Day care center
June 2011	<i>Shigella sonnei</i>	Hamilton	28	Day care center
June 2011	<i>Shigella sonnei</i>	Hamilton	13	Day care center

Month of Onset	Causative Agent	County	# Ill	Setting
June 2011	<i>Sarcoptes scabiei</i>	Montgomery	7	Group home
June 2011	<i>Shigella sonnei</i>	Hamilton	6	Day care center
June 2011	<i>Bordetella pertussis</i>	Franklin	4	School
July 2011	<i>Bordetella pertussis</i>	Franklin	2	Day care center
July 2011	<i>Cryptosporidium</i> spp.	Hamilton	4	Day care center
July 2011	<i>Shigella sonnei</i>	Hamilton	6	Day care center
July 2011	<i>Cryptosporidium</i> spp.	Hamilton	9	Day care center
July 2011	<i>Escherichia coli</i> O111	Logan	2	Summer camp
August 2011	<i>Bordetella pertussis</i>	Franklin	2	School
August 2011	<i>Bordetella pertussis</i>	Hamilton	3	School
August 2011	<i>Cryptosporidium</i> spp.	Hamilton	30	Day care center
August 2011	<i>Cryptosporidium</i> spp.	Hamilton	3	Day care center
September 2011	<i>Bordetella pertussis</i>	Ashland	6	School
September 2011	<i>Bordetella pertussis</i>	Delaware	3	School
September 2011	<i>Bordetella pertussis</i>	Franklin	3	School
September 2011	<i>Bordetella pertussis</i>	Franklin	5	School
September 2011	<i>Sarcoptes scabiei</i>	Licking	5	School
September 2011	<i>Escherichia coli</i> O157	Franklin	3	Assisted living
September 2011	<i>Pediculus capitis</i>	Ashland	8	Correctional facility
September 2011	Norovirus GII.6C	Delaware	52	School
September 2011	<i>Sarcoptes scabiei</i>	Medina	3	School
September 2011	Varicella Zoster virus	Ashland	5	MRDD facility
October 2011	<i>Bordetella pertussis</i>	Delaware	9	School
October 2011	<i>Bordetella pertussis</i>	Delaware	12	School
October 2011	Varicella Zoster virus	Franklin	6	School
October 2011	<i>Sarcoptes scabiei</i>	Cuyahoga	3	School
October 2011	<i>Cryptosporidium</i> spp.	Hamilton	8	Day care center
October 2011	<i>Shigella sonnei</i>	Butler	3	Day care center
November 2011	Norovirus GII.4 New Orleans	Butler	36	Assisted living
November 2011	<i>Bordetella pertussis</i>	Ashland	2	School
November 2011	<i>Bordetella pertussis</i>	Franklin	4	School
November 2011	<i>Bordetella pertussis</i>	Franklin	4	School
November 2011	<i>Bordetella pertussis</i>	Franklin	2	School
November 2011	<i>Bordetella pertussis</i>	Franklin	2	School
November 2011	<i>Bordetella pertussis</i>	Franklin	2	School
December 2011	<i>Sarcoptes scabiei</i>	Coshocton	9	School

Source of outbreak data: Ohio Disease Reporting System.

WATERBORNE OUTBREAKS

In 2011, 17 confirmed and probable waterborne outbreaks were reported. These outbreaks are detailed in Table 5.

Table 5: Confirmed and Probable Waterborne Outbreaks, Ohio, 2011

Month of Onset	Causative Agent	County	# Ill	Setting
January 2011	<i>Cryptosporidium</i> spp.	Richland	87	Hotel pool
January 2011	<i>Legionella pneumophila</i>	Montgomery	11	Hospital
March 2011	<i>Legionella pneumophila</i>	Cuyahoga	8	Long term care facility
July 2011	<i>Cryptosporidium</i> spp.	Hamilton	7	Spray park
July 2011	<i>Cryptosporidium</i> spp.	Hamilton	3	Pool
July 2011	<i>Cryptosporidium</i> spp.	Hamilton	2	Pool
July 2011	<i>Cryptosporidium</i> spp.	Hamilton	19	Pool
August 2011	<i>Cryptosporidium</i> spp.	Hamilton	7	Pool
August 2011	<i>Cryptosporidium</i> spp.	Delaware	2	Water park
August 2011	<i>Cryptosporidium</i> spp.	Hamilton	4	Pool
August 2011	<i>Cryptosporidium</i> spp.	Hamilton	4	Spray park
August 2011	<i>Legionella pneumophila</i>	Franklin	10	Long term care facility
August 2011	<i>Cryptosporidium</i> spp.	Hamilton	3	Spray park
August 2011	<i>Cryptosporidium</i> spp.	Hamilton	2	Pool
August 2011	<i>Cryptosporidium</i> spp.	Hamilton	2	Pool
September 2011	<i>Legionella pneumophila</i>	Hamilton	5	Work site
September 2011	<i>Pseudomonas aeruginosa</i>	Fayette	7	Hotel hot tub

Source of outbreak data: Ohio Disease Reporting System.

ZOOONOTIC OUTBREAKS

In 2011, four confirmed zoonotic outbreaks were reported, as seen in Table 6.

Table 6: Confirmed Zoonotic Outbreaks, Ohio, 2011

Month of Onset	Causative Agent	County	# Ill	Type of Animal
January 2011	<i>Salmonella</i> (I) 4,5,12:i:-	Multistate	3	Snakes, mice
March 2011	<i>Salmonella</i> Altona, <i>Salmonella</i> Johannesburg	Multistate	16	Chicks, ducklings
September 2011	<i>Salmonella</i> Paratyphi B	Cuyahoga	2	Aquarium fish
November 2011	<i>Microsporium canis</i> , var <i>canis</i>	Franklin	16	Kittens

Source of outbreak data: Ohio Disease Reporting System.

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

[Multistate Outbreak of Human Salmonella I 4,5,12:i:-Infections Associated with Frozen Rodents](#)

[Multistate Outbreak of Human *Salmonella* Altona and *Salmonella* Johannesburg Infections Linked to Chicks and Ducklings](#)

* Please see Technical Notes (pp. 90-93).

PROFILES OF SELECTED HEALTH EVENTS DETECTED IN EPICENTER

The Situational Monitoring and Event Detection (SMED) Unit at ODH manages the EpiCenter system, Ohio's statewide syndromic surveillance system. EpiCenter collects, classifies and monitors emergency department and urgent care center chief complaint data. Additionally, poison control center call data and reportable disease data from the Ohio Disease Reporting System (ODRS) are collected, analyzed and displayed in EpiCenter. It provides local public health and hospital users with the analytical and spatial tools needed for the early detection and tracking of important health events (e.g., outbreaks, seasonal illness, bioterrorism, environmental exposures, etc.) and real-time monitoring for situational awareness or "health intelligence."

Local health department epidemiologists and nurses conduct investigations of the anomalies detected by the EpiCenter system when visit levels within a given jurisdiction are statistically, significantly higher than normal for a 24-hour period. Approximately 40 percent (1,771) of all EpiCenter anomalies detected during 2011 were resolved as health events related to seasonal illness, naturally occurring diseases, unknown causes or due to other environmental exposures, after an initial assessment by local public health. The percentage of total anomalies resolved as health events for 2011 (40 percent) exceeded that from 2010 (25 percent) but was much less than observed in 2009 (70 percent), which was attributed to the Pandemic Influenza H1N1 outbreak. This year is likely more typical of what Ohio normally observes and represents increased utility of the EpiCenter system and an improved completion rate of anomaly investigations. Seasonal illness health events attributed for 71 percent of all anomalies resolved as health events in 2011. Anomalies characterized as seasonal illness health events are when an anomaly can be directly or indirectly related to a disease or illness that follows a typical seasonal pattern (i.e., fever and cough illness during cold and influenza season, rash illness over the Memorial Day holiday, gastrointestinal illness during Thanksgiving and Christmas holidays or during norovirus season, etc.). Anomalies characterized as naturally occurring disease outbreaks are when an anomaly can be directly or indirectly related to a disease outbreak as defined in the Infectious Disease Control Manual (IDCM) (i.e., commonly observed for enteric disease outbreaks due to *Shigella*, norovirus, *Salmonella* and respiratory/flu outbreaks such as pertussis, H1N1, H3N2v, etc.). Anomalies characterized as environmental health events are when an anomaly can be directly or indirectly related to an environmental cause or agent (i.e., chemical exposure, poisoning, extreme heat/cold exposure, etc.). Often, these anomalies present as a cluster of cases.

A breakdown of these events by type of health event and by jurisdiction is displayed in Table 1 and Table 2, respectively.

Table 1: Distribution of EpiCenter Health Events by Type, Ohio, 2011

Disposition	# of Health Events	% of Health Events
Environmental health event	12	1%
Naturally occurring disease outbreak	116	7%
Seasonal illness health event	1,264	71%
Unknown health event	379	21%
Total	1,771	100%

Source of health event data: Ohio Department of Health Situational Monitoring and Event Detection Unit.

Table 2: Distribution of EpiCenter Health Events by Jurisdiction, Ohio, 2011

County	Environmental Health Event		Naturally Occurring Disease Outbreak		Seasonal Illness Health Event		Unknown Health Event		Total	
	N	%	N	%	N	%	N	%	N	%
Adams	0	0%	0	0%	1	100%	0	0%	1	< 1%
Allen	0	0%	1	3%	36	97%	0	0%	37	2%
Ashland	0	0%	0	0%	1	100%	0	0%	1	< 1%
Ashtabula	0	0%	0	0%	12	100%	0	0%	12	1%
Athens	0	0%	0	0%	8	89%	1	11%	9	1%
Auglaize	0	0%	0	0%	6	100%	0	0%	6	< 1%
Belmont	0	0%	0	0%	0	0%	0	0%	0	0%
Brown	0	0%	0	0%	10	100%	0	0%	10	1%
Butler	0	0%	0	0%	23	100%	0	0%	23	1%
Carroll	0	0%	0	0%	0	0%	0	0%	0	0%
Champaign	0	0%	0	0%	12	100%	0	0%	12	1%
Clark	0	0%	0	0%	17	100%	0	0%	17	1%
Clermont	0	0%	0	0%	22	88%	3	12%	25	1%
Clinton	0	0%	0	0%	16	100%	0	0%	16	1%
Columbiana	0	0%	1	1%	18	21%	68	78%	87	5%
Coshocton	0	0%	0	0%	0	0%	0	0%	0	0%
Crawford	0	0%	0	0%	7	100%	0	0%	7	< 1%
Cuyahoga	0	0%	4	2%	88	38%	141	61%	233	13%
Darke	0	0%	0	0%	0	0%	0	0%	0	0%
Defiance	0	0%	0	0%	15	100%	0	0%	15	1%
Delaware	0	0%	0	0%	29	100%	0	0%	29	2%
Erie	0	0%	0	0%	24	96%	1	4%	25	1%
Fairfield	0	0%	1	100%	0	0%	0	0%	1	< 1%
Fayette	0	0%	0	0%	0	0%	0	0%	0	0%
Franklin	0	0%	0	0%	27	100%	0	0%	27	2%
Fulton	0	0%	0	0%	3	100%	0	0%	3	< 1%
Gallia	0	0%	2	100%	0	0%	0	0%	2	< 1%
Geauga	0	0%	0	0%	0	0%	0	0%	0	0%
Greene	5	16%	8	26%	18	58%	0	0%	31	2%
Guernsey	0	0%	0	0%	0	0%	0	0%	0	0%
Hamilton	1	1%	0	0%	74	99%	0	0%	75	4%
Hancock	0	0%	0	0%	12	100%	0	0%	12	1%
Hardin	0	0%	0	0%	0	0%	0	0%	0	0%
Harrison	0	0%	0	0%	0	0%	0	0%	0	0%
Henry	0	0%	0	0%	0	0%	0	0%	0	0%
Highland	1	8%	0	0%	12	92%	0	0%	13	1%
Hocking	2	10%	3	14%	15	71%	1	5%	21	1%
Holmes	0	0%	0	0%	3	100%	0	0%	3	< 1%
Huron	0	0%	2	7%	27	93%	0	0%	29	2%
Jackson	0	0%	0	0%	8	100%	0	0%	8	< 1%

County	Environmental Health Event		Naturally Occurring Disease Outbreak		Seasonal Illness Health Event		Unknown Health Event		Total	
	N	%	N	%	N	%	N	%	N	%
Jefferson	0	0%	1	5%	21	95%	0	0%	22	1%
Knox	0	0%	1	50%	1	50%	0	0%	2	< 1%
Lake	0	0%	0	0%	49	94%	3	6%	52	3%
Lawrence	0	0%	0	0%	0	0%	0	0%	0	0%
Licking	0	0%	55	86%	9	14%	0	0%	64	4%
Logan	0	0%	0	0%	23	100%	0	0%	23	1%
Lorain	0	0%	3	21%	11	79%	0	0%	14	1%
Lucas	1	1%	7	8%	60	65%	25	27%	93	5%
Madison	2	8%	1	4%	21	88%	0	0%	24	1%
Mahoning	0	0%	0	0%	17	100%	0	0%	17	1%
Marion	0	0%	0	0%	34	85%	6	15%	40	2%
Medina	0	0%	0	0%	33	92%	3	8%	36	2%
Meigs	0	0%	0	0%	0	0%	0	0%	0	0%
Mercer	0	0%	0	0%	4	100%	0	0%	4	< 1%
Miami	0	0%	0	0%	9	100%	0	0%	9	1%
Monroe	0	0%	0	0%	0	0%	0	0%	0	0%
Montgomery	0	0%	0	0%	13	81%	3	19%	16	1%
Morgan	0	0%	0	0%	0	0%	0	0%	0	0%
Morrow	0	0%	0	0%	0	0%	0	0%	0	0%
Muskingum	0	0%	0	0%	5	100%	0	0%	5	< 1%
Noble	0	0%	0	0%	0	0%	0	0%	0	0%
Ottawa	0	0%	0	0%	16	100%	0	0%	16	1%
Paulding	0	0%	0	0%	0	0%	0	0%	0	0%
Perry	0	0%	0	0%	0	0%	0	0%	0	0%
Pickaway	0	0%	0	0%	1	100%	0	0%	1	< 1%
Pike	0	0%	0	0%	0	0%	0	0%	0	0%
Portage	0	0%	0	0%	3	100%	0	0%	3	< 1%
Preble	0	0%	2	33%	3	50%	1	17%	6	< 1%
Putnam	0	0%	0	0%	10	100%	0	0%	10	1%
Richland	0	0%	6	75%	2	25%	0	0%	8	< 1%
Ross	0	0%	2	6%	26	76%	6	18%	34	2%
Sandusky	0	0%	0	0%	6	100%	0	0%	6	< 1%
Scioto	0	0%	0	0%	3	11%	24	89%	27	2%
Seneca	0	0%	0	0%	24	67%	12	33%	36	2%
Shelby	0	0%	4	67%	1	17%	1	17%	6	< 1%
Stark	0	0%	0	0%	48	96%	2	4%	50	3%
Summit	0	0%	0	0%	43	88%	6	12%	49	3%
Trumbull	0	0%	0	0%	55	44%	71	56%	126	7%
Tuscarawas	0	0%	5	71%	2	29%	0	0%	7	< 1%
Union	0	0%	0	0%	5	83%	1	17%	6	< 1%
Van Wert	0	0%	0	0%	30	100%	0	0%	30	2%
Vinton	0	0%	0	0%	0	0%	0	0%	0	0%

County	Environmental Health Event		Naturally Occurring Disease Outbreak		Seasonal Illness Health Event		Unknown Health Event		Total	
	N	%	N	%	N	%	N	%	N	%
Warren	0	0%	7	19%	29	81%	0	0%	36	2%
Washington	0	0%	0	0%	0	0%	0	0%	0	0%
Wayne	0	0%	0	0%	11	100%	0	0%	11	1%
Williams	0	0%	0	0%	0	0%	0	0%	0	0%
Wood	0	0%	0	0%	20	100%	0	0%	20	1%
Wyandot	0	0%	0	0%	0	0%	0	0%	0	0%
State of Ohio	0	0%	0	0%	82	100%	0	0%	82	5%
Total	12	1%	116	7%	1,264	71%	379	21%	1,771	100%

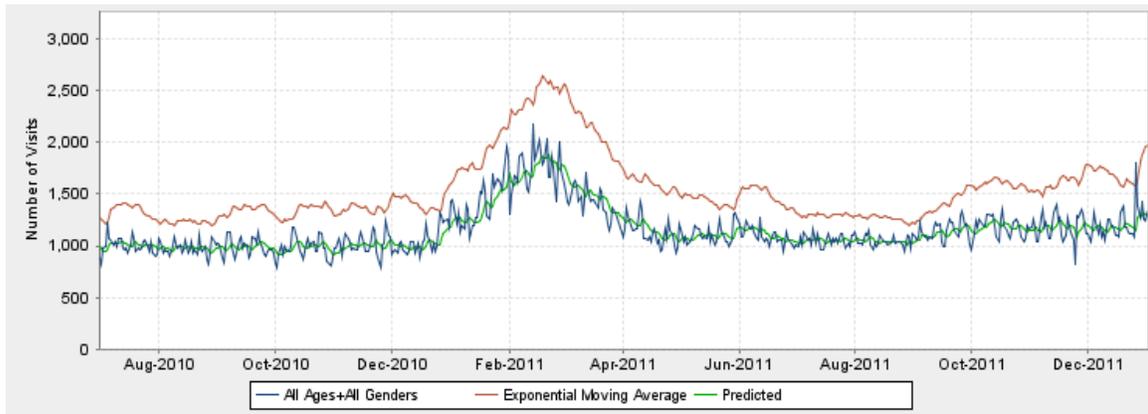
Data based on anomalies generated in the EpiCenter system 01/01/11 to 12/31/11.
Source of health event data: Ohio Department of Health Situational Monitoring and Event Detection Unit.

TRACKING OF SEASONAL TRENDS

While EpiCenter provides the analytic platform and functional capabilities to detect large-scale health events (e.g., bioterrorism and large-scale outbreaks), its utility on a daily basis is to provide leadership and key public health partners with real-time situational monitoring of trends and patterns observed in the data. Some common examples of seasonal trends that are observed annually include the following: seasonal influenza (typically from October to April), seasonal respiratory illness at the commencement of the school year (late August/early September) and seasonal rash illness over Memorial Day weekend. In each of the three charts below (Figures 1-3), the exponential moving average algorithm was used for threshold calculations, which includes a 17-day training window for predictions as well as a 17-day training window for thresholds for a total of 34 days of historical data.

As illustrated in Figure 1, constitutional symptoms returned to its typical peak in mid- to late February

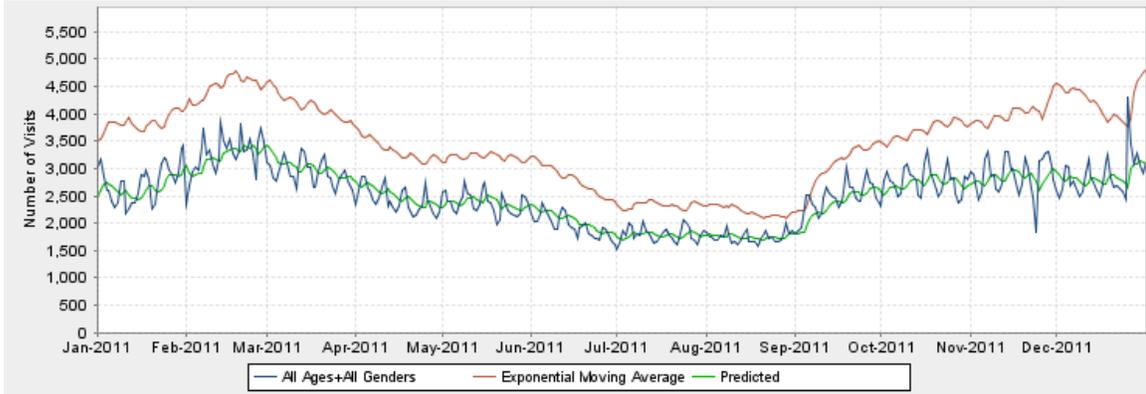
Figure 1: Seasonal Influenza Illness (Constitutional Syndrome) Trends in EpiCenter, Ohio, July 2010 – December 2011



Source of data: Ohio Department of Health Situational Monitoring and Event Detection Unit.

As shown in Figure 2, respiratory illness generally remained elevated throughout the entire cough/cold/flu season, afterward returning to normal baseline levels during the summer months. Then it began to increase at the commencement of the school year (late August into early September) and continued to elevate with the incidence of influenza season.

Figure 2: Seasonal Respiratory Illness Trends in EpiCenter, Ohio, January 2011 – December 2011



Source of data: Ohio Department of Health Situational Monitoring and Event Detection Unit.

As illustrated in Figure 3, rash illness peaked on Memorial Day weekend (it typically reaches its highest peak on Memorial Day Monday) and remained elevated throughout the summer months. The general trends showed a slight increase early in the week (Sunday-Tuesday) followed by a decline through the end of the week and into the weekend. The Memorial Day holiday is significant as this tends to mark the start of outdoor summer activities (e.g., hiking, camping, boating, fishing), which increases environmental exposures and contact with poison ivy and biting insects. The trends observed in 2011 were very similar to those observed in 2010 and 2009.

Figure 3: Seasonal Rash Illness Trends in EpiCenter, Ohio January 2011 – December 2011



Source of data: Ohio Department of Health Situational Monitoring and Event Detection Unit.

TECHNICAL NOTES

NOTES ON SPECIFIC DISEASES:

Anaplasma phagocytophilum: formerly known as human granulocytic ehrlichiosis (HGE).

Ehrlichia chaffeensis: formerly known as human monocytic ehrlichiosis (HME).

Ehrlichia ewingii: formerly known as other human ehrlichiosis.

Encephalitis, Post Other Infection: includes encephalitis following a non-central nervous system viral illness or after vaccine was administered.

Hepatitis B and C: due to the chronic nature of hepatitis B and C, all conditions associated with hepatitis B and C are shown by date of report to better capture and describe disease incidence. Data in the "Month of Onset" table are by the month the case was reported to the Centers for Disease Control and Prevention (CDC). There is no staff person at the ODH who verifies that cases meet the CDC/Council of State and Territorial Epidemiologists (CSTE) case definitions. Algorithms in the electronic reporting system have been developed for this purpose but it is unknown how accurate they are. In addition, duplicate cases and case completeness are not able to be verified or corrected. Therefore, chronic hepatitis B and past or present hepatitis C data are not published although they are reportable in Ohio.

Influenza-Associated Hospitalization: became a reportable condition in Ohio on Jan. 1, 2009.

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: became a reportable condition in Ohio on Jan. 1, 2009.

LaCrosse 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 3 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.

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

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

NOTES ON OUTBREAKS:

Data indicate the number of suspected, probable and confirmed outbreaks reported and do not reflect the number of cases involved in the outbreak, except as noted. Outbreak data for vaccine-preventable diseases (VPDs), including influenza, only include confirmed outbreaks.

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 and the Ohio Disease Reporting System. ***Eight multistate outbreaks are not included in the "County" table; thus, county totals do not match totals.*** A multistate outbreak is an outbreak where the exposure occurred in more than one state.

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 VPDs are located in the [disease-specific chapters](#) of the IDCM.

Community: became a Class C reportable outbreak on Jan. 1, 2009. A community outbreak is 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.

Conjunctivitis: outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included conjunctivitis outbreaks of bacterial, viral or unknown etiology.

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. Agent-specific criteria to confirm foodborne outbreaks can be found at: http://www.cdc.gov/outbreaknet/references/resources/guide_confirming_diagnosis.html.

Healthcare-associated: became a Class C reportable outbreak on Jan. 1, 2009. The definition of a healthcare-associated outbreak is the occurrence of cases of a disease (illness) above the expected or baseline level, usually over a given period of time, as a result of being in a healthcare facility. 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: became a Class C reportable outbreak on Jan. 1, 2009. An institutional outbreak is 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.

Nosocomial: outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included hospital-acquired outbreaks of all etiologies.

Pediculosis: outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included louse-associated outbreaks of all origins (head, body and pubic or crab lice).

Scabies: outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included scabies outbreaks, both confirmed and suspected.

Staphylococcal Skin Infections: outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included staphylococcal outbreaks in which isolates were antibiotic-susceptible as well as outbreaks in which isolates were methicillin-resistant *Staphylococcus aureus* (MRSA).

Unspecified: outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included outbreaks of reportable disease agents that were neither foodborne, waterborne nor nosocomial.

Unusual Incidence of Non-Class A, Class B or Class C Disease: outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included outbreaks in which the causative agent was not a Class A, B or C disease. Most of these were outbreaks of norovirus that were point-source or person-to-person spread.

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

Zoonotic: became a Class C reportable outbreak on Jan. 1, 2009. The definition of a zoonotic outbreak is 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.

NOTES ON RATE CALCULATIONS:

Population estimates for rates in the "Age in Years," "Sex" and "County of Residence" tables come from the 2011 U.S. Census estimates. Population data for rates in the "Year of Onset" table come from the U.S. Census estimates for each year except 2010, which uses the actual count. 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
- Cytomegalovirus (CMV), congenital
- 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*
- Toxoplasmosis, congenital

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 2007-2011 disease tables (pp. 6-8):

- Anthrax
- Diphtheria
- Eastern equine encephalitis virus disease
- Encephalitis, post mumps
- Encephalitis, post chickenpox
- Hantavirus
- Plague
- Poliomyelitis
- Powassan virus disease
- Rabies, human
- Reye syndrome
- Rubella, congenital and not congenital
- Severe acute respiratory syndrome
- Smallpox
- St. Louis encephalitis virus disease
- *Staphylococcus aureus*, resistant to Vancomycin (VRSA)
- Trichinosis
- Viral hemorrhagic fever
- Western equine encephalitis virus disease
- Yellow fever

There were no outbreaks of the following reported 2007-2008:

- Blastomycosis
- Histoplasmosis
- Sporotrichosis
- Toxoplasmosis

Reportable diseases not included in the “Age in Years,” “Sex,” “Month of Onset” and “County of Residence” tables (pp. 9-44) had no known cases reported in 2011.

NOTE ON SALMONELLA SEROTYPES AND MENINGOCOCCAL DISEASE SEROGROUPS:

The bacteriology laboratory at ODH performs serotyping of *Salmonella* isolates and serogrouping of *Neisseria meningitidis* isolates. Hospital and other clinical laboratories are encouraged to send *Salmonella* and *Neisseria meningitidis* isolates to the ODH Laboratory for serotyping and serogrouping. The ODH Laboratory also requests Shiga toxin-producing *Escherichia coli*, *Listeria* and *Vibrio*. *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 the bacteriology laboratory at (614) 644-4656.

REFERENCES

1. Ohio Department of Health. LaCrosse Virus Disease. In: *Infectious Disease Control Manual*. Columbus, OH: Ohio Department of Health; 2012: 1-8. Available at: <http://www.odh.ohio.gov/pdf/IDCM/lac.pdf>. Accessed January 2, 2013.