

OHIO DEPARTMENT OF HEALTH

# ANNUAL SUMMARY OF INFECTIOUS DISEASES

## OHIO

### 2015

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REPORTED INCIDENCE OF SELECTED  
NOTIFIABLE DISEASES



PREPARED AND DISTRIBUTED BY:

BUREAU OF INFECTIOUS DISEASES

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# INTRODUCTION

The *Annual Summary of Infectious Diseases, Ohio, 2015* provides an overview of the incidence of selected notifiable infectious diseases. The report includes tables of disease by year of onset, age group, sex, month of onset and county of residence and tables of Shiga toxin-producing *Escherichia coli* serogroups, invasive *Haemophilus influenzae* serotypes in children <5 years of age, meningococcal disease serogroups and *Salmonella* serotypes. In addition, there are graphs of selected disease incidence, profiles of selected diseases, and outbreak summaries.

The sources of these data are individual case and laboratory reports submitted to the Ohio Department of Health (ODH) by infection preventionists, healthcare providers, laboratories and city, county and combined health districts throughout the state and entered into the Ohio Disease Reporting System (ODRS). Data reflect disease incidence for Ohio residents only, but include diseases acquired by Ohio residents while traveling out of state or overseas 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 \(IDCM\)](#)
- The Centers for Disease Control and Prevention (CDC) Division of Health Informatics and Surveillance's [2015 nationally notifiable infectious disease case definitions](#)

HIV/AIDS, sexually transmitted diseases and tuberculosis surveillance data are not included in this report. Please refer to the [ODH infectious disease statistics](#) Web site for summary reports of these diseases as well as previous annual summaries.

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

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

# OHIO NOTIFIABLE DISEASES

Ohio Administrative Code (OAC) 3701-3, effective May 1, 2015

A list of Ohio's notifiable diseases follows this introduction. While the effective date is shown as May 1, 2015, the list is retroactive to Jan. 1, 2015. Chikungunya and Middle East respiratory syndrome were added as reportable diseases in 2015, and diseases previously grouped together as viral hemorrhagic fevers were made reportable under specific disease names: Ebola virus disease, Lassa fever, Marburg hemorrhagic fever and Crimean-Congo hemorrhagic fever.

## CLASS A

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

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

## CLASS B

Diseases of public health concern needing timely response because of potential for epidemic spread. Report by the end of the next business day after the existence of a case, a suspected case or a positive laboratory result is known.

- Amebiasis
- Arboviral neuroinvasive and non-neuroinvasive disease:
  - Chikungunya virus infection
  - Eastern equine encephalitis virus disease
  - LaCrosse virus disease
  - Powassan virus disease
- St. Louis encephalitis virus disease
- West Nile virus infection
- Western equine encephalitis virus disease
- Other arthropod-borne disease
- Babesiosis
- Botulism, infant
- Botulism, wound
- Brucellosis
- Campylobacteriosis
- Chancroid
- *Chlamydia trachomatis* infections
- Coccidioidomycosis
- Creutzfeldt-Jakob disease
- Cryptosporidiosis
- Cyclosporiasis
- Dengue
- *Escherichia coli*, Shiga toxin-producing

# OHIO NOTIFIABLE DISEASES

Ohio Administrative Code (OAC) 3701-3, effective May 1, 2015

## CLASS B, CONTINUED

Diseases of public health concern needing timely response because of potential for epidemic spread. Report by the end of the next business day after the existence of a case, a suspected case or a positive laboratory result is known.

- Ehrlichiosis/Anaplasmosis
- Giardiasis
- Gonorrhea
- *Haemophilus influenzae*, invasive disease
- Hantavirus
- Hemolytic uremic syndrome
- Hepatitis A
- Hepatitis B, non-perinatal
- Hepatitis B, perinatal
- Hepatitis C
- Hepatitis D
- Hepatitis E
- Influenza-associated hospitalization
- Influenza-associated pediatric mortality
- Legionellosis
- Leprosy (Hansen disease)
- Leptospirosis
- Listeriosis
- Lyme disease
- Malaria
- Meningitis, aseptic
- Meningitis, other bacterial
- Mumps
- Mycobacterial disease, other than tuberculosis
- Pertussis
- Poliomyelitis
- Psittacosis
- Q fever
- Rubella, congenital
- Salmonellosis
- Shigellosis
- Spotted fever rickettsiosis
- *Staphylococcus aureus*, vancomycin resistant or intermediate resistant
- Streptococcal disease, group A, invasive
- Streptococcal disease, group B, in newborn
- Streptococcal toxic shock syndrome
- *Streptococcus pneumoniae*, invasive disease
- Syphilis
- Tetanus
- Toxic shock syndrome
- Trichinellosis
- Tuberculosis
- Typhoid fever
- Typhus fever
- Varicella
- Vibriosis
- Yersiniosis

## CLASS C

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

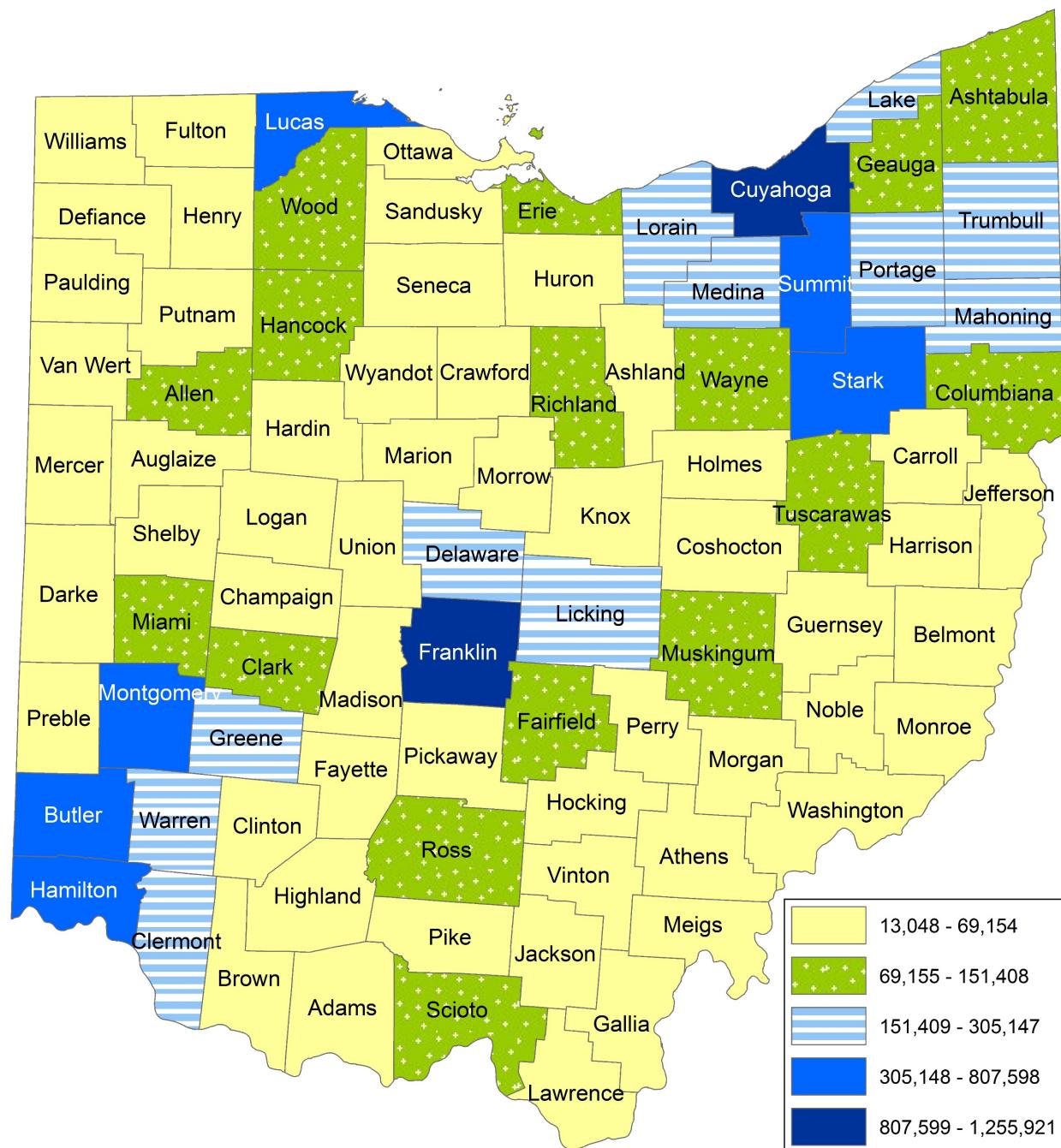
- Community
- Foodborne
- Healthcare-associated
- Institutional
- Waterborne
- Zoonotic

## AIDS AND HIV REPORTING

Cases of AIDS (acquired immune deficiency syndrome), AIDS-related conditions, HIV (human immunodeficiency virus) infection, perinatal exposure to HIV 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 [Ohio's reportable infectious diseases](#) Web page or OAC [3701-3-02](#) and [3701-3-12](#).

# OHIO COUNTY POPULATION MAP



Source of population data: 2015 U.S. Census estimates.

# TABLES OF SELECTED NOTIFIABLE DISEASES

## BY YEAR OF ONSET TABLE

Pages 6-7

This table displays case counts and rates for five years of data and the median and mean counts and rates during 2011-2015. Medians and means were calculated only when five years of data were available. Population data come from the U.S. Census estimates for each year. Data are by year of onset with the exception of 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.

## BY AGE TABLE

Pages 8-11

This table provides case counts and rates by age group (in years) for 2015. Age refers to the patient's age at the earliest known date associated with the case. Population data come from the 2015 U.S. Census estimates. Outbreak data are not included in this table.

## BY SEX TABLE

Pages 12-13

This table contains case counts and rates by sex for 2015. Population data come from the 2015 U.S. Census estimates. Outbreak data are not included in this table.

## BY MONTH OF ONSET TABLE

Pages 14-17

Case counts and percentages by month of onset for 2015 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 18-43

This table displays case counts and rates by county for 2015. 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 2015 U.S. Census estimates.

## ESCHERICHIA COLI, SHIGA TOXIN-PRODUCING SEROGROUPS TABLE

Page 44

This table shows Shiga toxin-producing *Escherichia coli* case counts by serogroup during 2011-2015. The bacteriology laboratory at ODH performs serogrouping of Shiga toxin-producing *E. coli* isolates.

## HAEMOPHILUS INFLUENZAE, INVASIVE DISEASE SEROTYPES TABLE

Page 45

This table shows invasive *Haemophilus influenzae* case counts in children < 5 years of age by serotype during 2011-2015. The meningitis laboratory at CDC performs serogrouping of *H. influenzae* isolates.

## MENINGOCOCCAL SEROGROUPS TABLE

Page 46

This table shows meningococcal disease case counts by serogroup during 2011-2015. The bacteriology laboratory at ODH performs serogrouping of *Neisseria meningitidis* isolates.

## SALMONELLA SEROTYPES TABLE

Pages 47-50

*Salmonella* case counts by serotype during 2011-2015 are contained in this table. Serotypes, untyped serogroups and untyped/ungrouped isolates are provided. The bacteriology laboratory at ODH performs serotyping of *Salmonella* isolates.

**REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2011-2015**

GENERAL INFECTIOUS DISEASES	2011		2012		2013		2014		2015		MEDIAN	MEAN
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	10	0.1	11	0.1	7	0.1	9	0.1	16	0.1	10	0.1
Botulism	2	0.0	6	0.1	5	0.0	5	0.0	35	0.3	5	0.0
Foodborne	1	0.0	2	0.0	0	0.0	2	0.0	29	0.2	2	0.0
Infant*	1	*	4	*	5	*	3	*	5	*	4	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0
Campylobacteriosis	1,191	10.3	1,129	9.8	1,023	8.8	923	8.0	1,786	15.4	1,129	9.8
Coccidioidomycosis	20	0.2	17	0.1	10	0.1	15	0.1	13	0.1	15	0.1
Creutzfeldt-Jakob Disease (CJD)	12	0.1	13	0.1	8	0.1	12	0.1	8	0.1	12	0.1
Cryptosporidiosis	1,113	9.6	550	4.8	367	3.2	322	2.8	429	3.7	429	3.7
Cyclosporiasis	0	0.0	0	0.0	7	0.1	2	0.0	1	0.0	1	0.0
Cytomegalovirus (CMV), Congenital*	10	*	31	*	29	*	—	n/a	—	n/a	—	*
Escherichia coli, Shiga Toxin-Producing	182	1.6	240	2.1	223	1.9	203	1.8	265	2.3	223	1.9
O157:H7	95	0.8	122	1.1	76	0.7	92	0.8	105	0.9	95	0.8
Not O157:H7	72	0.6	105	0.9	138	1.2	105	0.9	135	1.2	105	0.9
Unknown Serotype	15	0.1	13	0.1	9	0.1	6	0.1	25	0.2	13	0.1
Giardiasis	781	6.8	571	4.9	505	4.4	380	3.3	376	3.2	505	4.4
Haemophilus influenzae, Invasive Disease	178	1.5	152	1.3	153	1.3	129	1.1	162	1.4	153	1.3
Hemolytic Uremic Syndrome (HUS)	5	0.0	10	0.1	10	0.1	8	0.1	3	0.0	8	0.1
Legionellosis	390	3.4	288	2.5	496	4.3	409	3.5	566	4.9	409	3.5
Leprosy (Hansen Disease)	1	0.0	0	0.0	1	0.0	1	0.0	1	0.0	1	0.0
Listeriosis	29	0.3	28	0.2	28	0.2	29	0.3	25	0.2	28	0.2
Meningitis, Aseptic	1,329	11.5	701	6.1	857	7.4	530	4.6	746	6.4	746	6.4
Meningitis, Other Bacterial*	84	0.7	95	0.8	83	0.7	91	0.8	81	0.7	84	0.7
Salmonellosis	1,183	10.2	1,270	11.0	1,190	10.3	1,188	10.2	1,373	11.8	1,190	10.3
Shigellosis	338	2.9	1,812	15.7	645	5.6	591	5.1	748	6.4	645	5.6
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	3	0.0	9	0.1	13	0.1	8	0.1	12	0.1	9	0.1
Streptococcal Disease, Group A, Invasive	322	2.8	286	2.5	305	2.6	319	2.8	310	2.7	310	2.7
Streptococcal Disease, Group B, in Newborn*	71	*	79	*	65	*	63	*	73	*	71	*
Streptococcal Toxic Shock Syndrome (STSS)	18	0.2	11	0.1	9	0.1	9	0.1	6	0.1	9	0.1
Streptococcus pneumoniae, Invasive Disease	1,261	10.9	1,188	10.3	1,112	9.6	924	8.0	965	8.3	1,112	9.6
Ages < 5 Years*	84	*	81	*	41	*	47	*	56	*	56	*
Drug Resistant, Ages 5+ Years*	304	*	321	*	277	*	216	*	269	*	277	*
Drug Susceptible, Ages 5+ Years*	873	*	786	*	794	*	661	*	640	*	786	*
Toxic Shock Syndrome (TSS)	0	0.0	2	0.0	2	0.0	9	0.1	1	0.0	2	0.0
Typhoid Fever	5	0.0	13	0.1	5	0.0	7	0.1	8	0.1	7	0.1
Vibriosis	7	0.1	11	0.1	11	0.1	12	0.1	15	0.1	11	0.1
Vibrio parahaemolyticus Infection	3	0.0	6	0.1	7	0.1	7	0.1	0	0.0	6	0.1
Vibrio vulnificus Infection	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	4	0.0	4	0.0	3	0.0	5	0.0	15	0.1	4	0.0
Yersiniosis	31	0.3	43	0.4	34	0.3	52	0.4	44	0.4	43	0.4
<b>SUB-TOTAL</b>	<b>8,600</b>	<b>74.5</b>	<b>8,590</b>	<b>74.4</b>	<b>7,213</b>	<b>62.3</b>	<b>6,250</b>	<b>53.9</b>	<b>8,068</b>	<b>69.5</b>	<b>8,068</b>	<b>69.5</b>
<b>HEPATITIS</b>												
Hepatitis A	34	0.3	45	0.4	55	0.5	27	0.2	36	0.3	36	0.3
Hepatitis B, Acute*	106	0.9	170	1.5	232	2.0	170	1.5	404	3.5	170	1.5
Hepatitis B, Chronic*	*	*	*	*	*	*	*	*	2,522	21.7	*	*
Hepatitis B, Perinatal Infection*	4	*	1	*	5	*	2	*	0	*	2	*
Hepatitis C, Acute*	6	0.1	7	0.1	113	1.0	106	0.9	123	1.1	106	0.9
Hepatitis C, Past or Present*	*	*	*	*	*	*	15,772	136.0	19,178	165.1	*	*
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>150</b>	<b>1.3</b>	<b>223</b>	<b>1.9</b>	<b>405</b>	<b>3.5</b>	<b>16,077</b>	<b>138.7</b>	<b>22,264</b>	<b>191.7</b>	<b>405</b>	<b>3.5</b>
N = number of cases reported.												
Rates use U.S. Census estimates for each year, and are per 100,000 population.												
n/a = not applicable.												
(-) indicates a condition not reportable at the time.												
* Please see Technical Notes (pp. 89-91).												

**REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2011-2015**

OUTBREAKS*	2011		2012		2013		2014		2015		MEDIAN	MEAN
	N	Rate										
Community*	32	n/a	55	n/a	40	n/a	72	n/a	49	n/a	49	n/a
Foodborne*	61	n/a	85	n/a	76	n/a	75	n/a	81	n/a	76	n/a
Healthcare-Associated*	37	n/a	94	n/a	84	n/a	70	n/a	97	n/a	84	n/a
Institutional*	104	n/a	170	n/a	153	n/a	202	n/a	163	n/a	163	n/a
Waterborne*	17	n/a	5	n/a	14	n/a	14	n/a	8	n/a	14	n/a
Zoonotic*	4	n/a	18	n/a	4	n/a	13	n/a	11	n/a	11	n/a
<b>SUB-TOTAL</b>	<b>255</b>	<b>n/a</b>	<b>427</b>	<b>n/a</b>	<b>371</b>	<b>n/a</b>	<b>446</b>	<b>n/a</b>	<b>409</b>	<b>n/a</b>	<b>409</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>												
Diphtheria	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	2,410	20.9	2,961	25.6	4,197	36.3	8,247	71.1	3,799	32.7	3,799	32.7
Influenza-Associated Pediatric Mortality*	1	*	2	*	6	*	4	*	2	*	2	*
Influenza A Virus, Novel Human Infection*	0	0.0	107	0.9	1	0.0	2	0.0	1	0.0	1	0.0
Measles	0	0.0	1	0.0	0	0.0	382	3.3	1	0.0	1	0.0
Imported	0	0.0	1	0.0	0	0.0	3	0.0	1	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	379	3.3	0	0.0	0	0.0
Meningococcal Disease	24	0.2	24	0.2	10	0.1	12	0.1	18	0.2	18	0.2
Mumps	13	0.1	8	0.1	12	0.1	554	4.8	14	0.1	13	0.1
Pertussis	690	6.0	905	7.8	1,667	14.4	1,310	11.3	798	6.9	905	7.8
Rubella	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Not Congenital	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Tetanus	1	0.0	2	0.0	0	0.0	1	0.0	1	0.0	1	0.0
Varicella	1,040	9.0	811	7.0	648	5.6	513	4.4	494	4.3	648	5.6
<b>SUB-TOTAL</b>	<b>4,155</b>	<b>36.0</b>	<b>4,797</b>	<b>41.6</b>	<b>6,532</b>	<b>56.5</b>	<b>11,026</b>	<b>95.1</b>	<b>5,128</b>	<b>44.2</b>	<b>5,128</b>	<b>44.2</b>
<b>ZOONOSES</b>												
Babesiosis*	—	n/a	—	n/a	—	n/a	0	0.0	1	0.0	—	0.0
Brucellosis	0	0.0	0	0.0	2	0.0	0	0.0	1	0.0	0	0.0
Chikungunya Virus Infection*	—	n/a	—	n/a	—	n/a	43	0.4	10	0.1	—	0.3
Dengue	2	0.0	6	0.1	9	0.1	9	0.1	11	0.1	9	0.1
Ehrlichiosis/Anaplasmosis	14	0.1	6	0.1	15	0.1	6	0.1	19	0.2	14	0.1
<i>Anaplasma phagocytophilum</i> * <i>Ehrlichia chaffeensis</i> *	8	0.1	1	0.0	4	0.0	1	0.0	1	0.0	5	0.0
Unknown	5	0.0	4	0.0	9	0.1	4	0.0	17	0.1	1	0.0
LaCrosse Virus Disease*	50	0.4	14	0.1	16	0.1	31	0.3	24	0.2	24	0.2
Leptospirosis	1	0.0	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0
Lyme Disease	52	0.5	63	0.5	83	0.7	120	1.0	147	1.3	83	0.7
Malaria	41	0.4	40	0.3	33	0.3	39	0.3	36	0.3	39	0.3
Q Fever	1	0.0	3	0.0	5	0.0	2	0.0	4	0.0	3	0.0
Acute	1	0.0	3	0.0	2	0.0	1	0.0	4	0.0	2	0.0
Chronic	0	0.0	0	0.0	3	0.0	1	0.0	0	0.0	0	0.0
Rabies, Animal*	51	n/a	41	n/a	64	n/a	25	n/a	26	n/a	41	n/a
Spotted Fever Rickettsiosis*	21	0.2	23	0.2	23	0.2	10	0.1	13	0.1	21	0.2
Trichinellosis	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Tularemia	1	0.0	0	0.0	2	0.0	1	0.0	1	0.0	1	0.0
West Nile Virus Infection	21	0.2	122	1.1	24	0.2	11	0.1	35	0.3	24	0.2
<b>SUB-TOTAL</b>	<b>255</b>	<b>1.8</b>	<b>318</b>	<b>2.4</b>	<b>277</b>	<b>1.8</b>	<b>299</b>	<b>2.4</b>	<b>328</b>	<b>2.6</b>	<b>299</b>	<b>2.4</b>
<b>GRAND TOTAL</b>	<b>13,415</b>	<b>113.6</b>	<b>14,355</b>	<b>120.3</b>	<b>14,798</b>	<b>124.1</b>	<b>34,098</b>	<b>290.0</b>	<b>36,197</b>	<b>307.9</b>	<b>14,798</b>	<b>124.1</b>
<b>POPULATION</b>	<b>11,541,007</b>		<b>11,544,225</b>		<b>11,570,808</b>		<b>11,594,163</b>		<b>11,613,423</b>		<b>11,570,808</b>	<b>11,572,725</b>

N = number of cases reported.

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

n/a = not applicable.

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

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2015

GENERAL INFECTIOUS DISEASES	0-4		5-9		10-14		15-19		20-29		30-39	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2	3	0.2
Botulism	5	0.7	1	0.1	0	0.0	0	0.0	0	0.0	2	0.1
Foodborne	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	1	0.1
Infant*	5	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Campylobacteriosis	202	29.1	66	9.1	53	7.1	78	10.1	182	11.8	191	13.5
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	3	0.2
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	82	11.8	32	4.4	34	4.6	32	4.1	65	4.2	64	4.5
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	60	8.7	32	4.4	26	3.5	26	3.4	44	2.8	28	2.0
O157:H7	24	3.5	15	2.1	13	1.7	11	1.4	12	0.8	9	0.6
Not O157:H7	32	4.6	15	2.1	11	1.5	13	1.7	25	1.6	17	1.2
Unknown Serotype	4	0.6	2	0.3	2	0.3	2	0.3	7	0.5	2	0.1
Giardiasis	44	6.3	31	4.3	8	1.1	12	1.6	63	4.1	45	3.2
<i>Haemophilus influenzae</i> , Invasive Disease	17	2.5	2	0.3	0	0.0	1	0.1	6	0.4	7	0.5
Hemolytic Uremic Syndrome (HUS)	2	0.3	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	0	0.0	0	0.0	0	0.0	14	0.9	30	2.1
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0
Listeriosis	5	0.7	0	0.0	0	0.0	0	0.0	3	0.2	2	0.1
Meningitis, Aseptic	223	32.2	41	5.7	43	5.8	34	4.4	113	7.3	80	5.7
Meningitis, Other Bacterial*	15	2.2	4	0.6	1	0.1	2	0.3	17	1.1	5	0.4
Salmonellosis	183	26.4	75	10.4	51	6.8	63	8.2	164	10.6	126	8.9
Shigellosis	336	48.5	139	19.3	27	3.6	20	2.6	82	5.3	68	4.8
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	1	0.1
Streptococcal Disease, Group A, Invasive	17	2.5	15	2.1	3	0.4	6	0.8	24	1.6	28	2.0
Streptococcal Disease, Group B, in Newborn*	73	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	1	0.1	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	56	8.1	20	2.8	5	0.7	4	0.5	31	2.0	49	3.5
Ages < 5 Years*	56	8.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Drug Resistant, Ages 5+ Years*	0	0.0	5	0.7	0	0.0	0	0.0	9	0.6	14	1.0
Drug Susceptible, Ages 5+ Years*	0	0.0	15	2.1	5	0.7	4	0.5	22	1.4	35	2.5
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Typhoid Fever	1	0.1	2	0.3	1	0.1	0	0.0	1	0.1	2	0.1
Vibriosis	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1	0	0.0
Yersiniosis	7	1.0	1	0.1	3	0.4	2	0.3	3	0.2	3	0.2
<b>SUB-TOTAL</b>	<b>1,329</b>	<b>191.8</b>	<b>461</b>	<b>63.9</b>	<b>259</b>	<b>34.7</b>	<b>281</b>	<b>36.4</b>	<b>818</b>	<b>53.0</b>	<b>737</b>	<b>52.1</b>

### HEPATITIS

Hepatitis A	2	0.3	0	0.0	0	0.0	2	0.3	5	0.3	8	0.6
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	2	0.3	60	3.9	155	11.0
Hepatitis B, Chronic*	6	0.9	5	0.7	16	2.1	41	5.3	446	28.9	734	51.9
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	8	1.0	37	2.4	38	2.7
Hepatitis C, Past or Present*	34	4.9	12	1.7	10	1.3	300	38.9	5,931	383.9	4,798	339.4
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
<b>SUB-TOTAL</b>	<b>42</b>	<b>6.1</b>	<b>17</b>	<b>2.4</b>	<b>26</b>	<b>3.5</b>	<b>353</b>	<b>45.7</b>	<b>6,479</b>	<b>419.4</b>	<b>5,734</b>	<b>405.6</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2015

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	240	34.6	88	12.2	30	4.0	46	6.0	101	6.5	140	9.9
Influenza-Associated Pediatric Mortality*	2	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Measles	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Meningococcal Disease	8	1.2	0	0.0	0	0.0	1	0.1	3	0.2	2	0.1
Mumps	3	0.4	0	0.0	0	0.0	1	0.1	2	0.1	3	0.2
Pertussis	254	36.6	129	17.9	141	18.9	161	20.9	22	1.4	22	1.6
Tetanus	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0
Varicella	134	19.3	152	21.1	92	12.3	60	7.8	28	1.8	14	1.0
<b>SUB-TOTAL</b>	<b>641</b>	<b>92.5</b>	<b>369</b>	<b>51.1</b>	<b>264</b>	<b>35.4</b>	<b>270</b>	<b>35.0</b>	<b>157</b>	<b>10.2</b>	<b>181</b>	<b>12.8</b>
<b>ZOONOSES</b>												
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	1	0.1	2	0.3	0	0.0	2	0.1	1	0.1
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	2	0.1
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	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
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	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*	6	0.9	9	1.2	9	1.2	0	0.0	0	0.0	0	0.0
Lyme Disease	7	1.0	13	1.8	9	1.2	9	1.2	20	1.3	14	1.0
Malaria	3	0.4	2	0.3	1	0.1	2	0.3	6	0.4	10	0.7
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	2	0.3	0	0.0	0	0.0	3	0.2	3	0.2
Tularemia	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	1	0.1	0	0.0	3	0.2	3	0.2
<b>SUB-TOTAL</b>	<b>16</b>	<b>2.3</b>	<b>27</b>	<b>3.7</b>	<b>22</b>	<b>2.9</b>	<b>11</b>	<b>1.4</b>	<b>37</b>	<b>2.4</b>	<b>34</b>	<b>2.4</b>
<b>GRAND TOTAL</b>	<b>2,028</b>	<b>292.6</b>	<b>874</b>	<b>121.1</b>	<b>571</b>	<b>76.5</b>	<b>915</b>	<b>118.5</b>	<b>7,491</b>	<b>484.9</b>	<b>6,686</b>	<b>473.0</b>
<b>POPULATION</b>	<b>693,088</b>		<b>721,971</b>		<b>746,771</b>		<b>772,023</b>		<b>1,544,736</b>		<b>1,413,593</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

**REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2015**

GENERAL INFECTIOUS DISEASES	40-49		50-59		60 +		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	4	0.3	2	0.1	4	0.2	0	n/a	16	0.1
Botulism	2	0.1	7	0.4	18	0.7	0	n/a	35	0.3
Foodborne	2	0.1	7	0.4	18	0.7	0	n/a	29	0.2
Infant*	0	*	0	*	0	*	0	n/a	5	*
Wound	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Campylobacteriosis	222	15.3	281	16.7	510	19.7	1	n/a	1,786	15.4
Coccidioidomycosis	3	0.2	1	0.1	5	0.2	0	n/a	13	0.1
Creutzfeldt-Jakob Disease (CJD)	0	0.0	1	0.1	7	0.3	0	n/a	8	0.1
Cryptosporidiosis	33	2.3	34	2.0	53	2.0	0	n/a	429	3.7
Cyclosporiasis	1	0.1	0	0.0	0	0.0	0	n/a	1	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	7	0.5	17	1.0	25	1.0	0	n/a	265	2.3
O157:H7	3	0.2	9	0.5	9	0.3	0	n/a	105	0.9
Not O157:H7	3	0.2	7	0.4	12	0.5	0	n/a	135	1.2
Unknown Serotype	1	0.1	1	0.1	4	0.2	0	n/a	25	0.2
Giardiasis	41	2.8	71	4.2	61	2.4	0	n/a	376	3.2
<i>Haemophilus influenzae</i> , Invasive Disease	7	0.5	19	1.1	103	4.0	0	n/a	162	1.4
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
Legionellosis	69	4.7	145	8.6	308	11.9	0	n/a	566	4.9
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Listeriosis	0	0.0	3	0.2	12	0.5	0	n/a	25	0.2
Meningitis, Aseptic	61	4.2	71	4.2	79	3.1	1	n/a	746	6.4
Meningitis, Other Bacterial*	5	0.3	13	0.8	19	0.7	0	n/a	81	0.7
Salmonellosis	150	10.3	231	13.8	327	12.6	3	n/a	1,373	11.8
Shigellosis	26	1.8	22	1.3	27	1.0	1	n/a	748	6.4
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	1	0.1	6	0.4	3	0.1	0	n/a	12	0.1
Streptococcal Disease, Group A, Invasive	29	2.0	47	2.8	141	5.4	0	n/a	310	2.7
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	n/a	73	*
Streptococcal Toxic Shock Syndrome (STSS)	1	0.1	2	0.1	1	0.0	0	n/a	6	0.1
<i>Streptococcus pneumoniae</i> , Invasive Disease	78	5.4	198	11.8	523	20.2	1	n/a	965	8.3
Ages < 5 Years*	0	0.0	0	0.0	0	0.0	0	n/a	56	8.1
Drug Resistant, Ages 5+ Years*	20	1.4	58	3.5	163	6.3	0	n/a	269	2.5
Drug Susceptible, Ages 5+ Years*	58	4.0	140	8.3	360	13.9	1	n/a	640	5.9
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Typhoid Fever	0	0.0	1	0.1	0	0.0	0	n/a	8	0.1
Vibriosis	2	0.1	4	0.2	7	0.3	0	n/a	15	0.1
Other (Not Cholera)	2	0.1	4	0.2	7	0.3	0	n/a	15	0.1
Yersiniosis	4	0.3	6	0.4	14	0.5	1	n/a	44	0.4
<b>SUB-TOTAL</b>	<b>746</b>	<b>51.3</b>	<b>1,182</b>	<b>70.4</b>	<b>2,247</b>	<b>86.8</b>	<b>8</b>	<b>n/a</b>	<b>8,068</b>	<b>69.5</b>

**HEPATITIS**

Hepatitis A	4	0.3	4	0.2	11	0.4	0	n/a	36	0.3
Hepatitis B, Acute*	98	6.7	70	4.2	19	0.7	0	n/a	404	3.5
Hepatitis B, Chronic*	525	36.1	435	25.9	313	12.1	1	n/a	2,522	21.7
Hepatitis C, Acute*	20	1.4	16	1.0	4	0.2	0	n/a	123	1.1
Hepatitis C, Past or Present*	2,681	184.3	3,300	196.7	2,079	80.3	33	n/a	19,178	165.1
Hepatitis E	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
<b>SUB-TOTAL</b>	<b>3,328</b>	<b>228.7</b>	<b>3,825</b>	<b>227.9</b>	<b>2,426</b>	<b>93.7</b>	<b>34</b>	<b>n/a</b>	<b>22,264</b>	<b>191.7</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE IN YEARS, OHIO, 2015

VACCINE-PREVENTABLE	40-49		50-59		60 +		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Influenza-Associated Hospitalization	231	15.9	450	26.8	2,468	95.4	5	n/a	3,799	32.7
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	n/a	2	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Measles	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Imported	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Meningococcal Disease	0	0.0	1	0.1	3	0.1	0	n/a	18	0.2
Mumps	1	0.1	2	0.1	2	0.1	0	n/a	14	0.1
Pertussis	29	2.0	11	0.7	29	1.1	0	n/a	798	6.9
Tetanus	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Varicella	5	0.3	7	0.4	2	0.1	0	n/a	494	4.3
<b>SUB-TOTAL</b>	<b>266</b>	<b>18.3</b>	<b>471</b>	<b>28.1</b>	<b>2,504</b>	<b>96.7</b>	<b>5</b>	<b>n/a</b>	<b>5,128</b>	<b>44.2</b>
ZOONOSES										
Babesiosis*	0	0.0	0	0.0	1	0.0	0	n/a	1	0.0
Brucellosis	1	0.1	0	0.0	0	0.0	0	n/a	1	0.0
Chikungunya Virus Infection*	3	0.2	1	0.1	0	0.0	0	n/a	10	0.1
Dengue	2	0.1	2	0.1	3	0.1	0	n/a	11	0.1
Ehrlichiosis/Anaplasmosis	6	0.4	1	0.1	11	0.4	0	n/a	19	0.2
<i>Anaplasma phagocytophilum</i> *	1	0.1	0	0.0	0	0.0	0	n/a	1	0.0
<i>Ehrlichia chaffeensis</i> *	5	0.3	1	0.1	10	0.4	0	n/a	17	0.1
Unknown	0	0.0	0	0.0	1	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	n/a	24	0.2
Lyme Disease	14	1.0	29	1.7	32	1.2	0	n/a	147	1.3
Malaria	5	0.3	5	0.3	2	0.1	0	n/a	36	0.3
Q Fever	1	0.1	0	0.0	2	0.1	0	n/a	4	0.0
Acute	1	0.1	0	0.0	2	0.1	0	n/a	4	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	26	n/a	26	n/a
Spotted Fever Rickettsiosis*	1	0.1	1	0.1	3	0.1	0	n/a	13	0.1
Tularemia	0	0.0	0	0.0	1	0.0	0	n/a	1	0.0
West Nile Virus Infection	1	0.1	9	0.5	18	0.7	0	n/a	35	0.3
<b>SUB-TOTAL</b>	<b>34</b>	<b>2.3</b>	<b>48</b>	<b>2.9</b>	<b>73</b>	<b>2.8</b>	<b>26</b>	<b>n/a</b>	<b>328</b>	<b>2.6</b>
<b>GRAND TOTAL</b>	<b>4,374</b>	<b>300.6</b>	<b>5,526</b>	<b>329.3</b>	<b>7,250</b>	<b>280.1</b>	<b>73</b>	<b>n/a</b>	<b>35,788</b>	<b>307.9</b>
<b>POPULATION</b>	<b>1,454,995</b>		<b>1,678,066</b>		<b>2,588,180</b>		<b>0</b>		<b>11,613,423</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY SEX, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Female		Male		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	10	0.2	5	0.1	1	n/a	16	0.1
Botulism	17	0.3	17	0.3	1	n/a	35	0.3
Foodborne	16	0.3	12	0.2	1	n/a	29	0.2
Infant*	1	*	4	*	0	n/a	5	*
Wound	0	0.0	1	0.0	0	n/a	1	0.0
Campylobacteriosis	883	14.9	897	15.8	6	n/a	1,786	15.4
Coccidioidomycosis	6	0.1	7	0.1	0	n/a	13	0.1
Creutzfeldt-Jakob Disease (CJD)	2	0.0	6	0.1	0	n/a	8	0.1
Cryptosporidiosis	207	3.5	221	3.9	1	n/a	429	3.7
Cyclosporiasis	1	0.0	0	0.0	0	n/a	1	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	139	2.3	124	2.2	2	n/a	265	2.3
O157:H7	53	0.9	51	0.9	1	n/a	105	0.9
Not O157:H7	73	1.2	61	1.1	1	n/a	135	1.2
Unknown Serotype	13	0.2	12	0.2	0	n/a	25	0.2
Giardiasis	130	2.2	245	4.3	1	n/a	376	3.2
<i>Haemophilus influenzae</i> , Invasive Disease	81	1.4	81	1.4	0	n/a	162	1.4
Hemolytic Uremic Syndrome (HUS)	0	0.0	3	0.1	0	n/a	3	0.0
Legionellosis	233	3.9	333	5.9	0	n/a	566	4.9
Leprosy (Hansen Disease)	1	0.0	0	0.0	0	n/a	1	0.0
Listeriosis	14	0.2	11	0.2	0	n/a	25	0.2
Meningitis, Aseptic	385	6.5	358	6.3	3	n/a	746	6.4
Meningitis, Other Bacterial*	36	0.6	45	0.8	0	n/a	81	0.7
Salmonellosis	762	12.9	611	10.7	0	n/a	1,373	11.8
Shigellosis	376	6.3	367	6.5	5	n/a	748	6.4
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	6	0.1	6	0.1	0	n/a	12	0.1
Streptococcal Disease, Group A, Invasive	166	2.8	141	2.5	3	n/a	310	2.7
Streptococcal Disease, Group B, in Newborn*	41	*	31	*	1	n/a	73	*
Streptococcal Toxic Shock Syndrome (STSS)	3	0.1	3	0.1	0	n/a	6	0.1
<i>Streptococcus pneumoniae</i> , Invasive Disease	462	7.8	495	8.7	8	n/a	965	8.3
Ages < 5 Years*	26	*	30	*	0	n/a	56	*
Drug Resistant, Ages 5+ Years*	137	*	131	*	1	n/a	269	*
Drug Susceptible, Ages 5+ Years*	299	*	334	*	7	n/a	640	*
Toxic Shock Syndrome (TSS)	0	0.0	1	0.0	0	n/a	1	0.0
Typhoid Fever	1	0.0	7	0.1	0	n/a	8	0.1
Vibriosis	3	0.1	12	0.2	0	n/a	15	0.1
Other (Not Cholera)	3	0.1	12	0.2	0	n/a	15	0.1
Yersiniosis	24	0.4	20	0.4	0	n/a	44	0.4
<b>SUB-TOTAL</b>	<b>3,989</b>	<b>67.3</b>	<b>4,047</b>	<b>71.2</b>	<b>32</b>	<b>n/a</b>	<b>8,068</b>	<b>69.5</b>

### HEPATITIS

Hepatitis A	19	0.3	17	0.3	0	n/a	36	0.3
Hepatitis B, Acute*	173	2.9	231	4.1	0	n/a	404	3.5
Hepatitis B, Chronic*	905	15.3	1,614	28.4	3	n/a	2,522	21.7
Hepatitis C, Acute*	55	0.9	68	1.2	0	n/a	123	1.1
Hepatitis C, Past or Present*	7,496	126.5	11,659	205.0	23	n/a	19,178	165.1
Hepatitis E	1	0.0	0	0.0	0	n/a	1	0.0
<b>SUB-TOTAL</b>	<b>8,649</b>	<b>145.9</b>	<b>13,589</b>	<b>239.0</b>	<b>26</b>	<b>n/a</b>	<b>22,264</b>	<b>191.7</b>

### VACCINE-PREVENTABLE

Influenza-Associated Hospitalization	2,051	34.6	1,748	30.7	0	n/a	3,799	32.7
Influenza-Associated Pediatric Mortality*	0	*	2	*	0	n/a	2	*
Influenza A Virus, Novel Human Infection*	0	0.0	1	0.0	0	n/a	1	0.0
Measles	1	0.0	0	0.0	0	n/a	1	0.0
Imported	1	0.0	0	0.0	0	n/a	1	0.0
Meningococcal Disease	10	0.2	8	0.1	0	n/a	18	0.2
Mumps	11	0.2	3	0.1	0	n/a	14	0.1
Pertussis	437	7.4	360	6.3	1	n/a	798	6.9
Tetanus	0	0.0	1	0.0	0	n/a	1	0.0
Varicella	249	4.2	245	4.3	0	n/a	494	4.3
<b>SUB-TOTAL</b>	<b>2,759</b>	<b>46.6</b>	<b>2,368</b>	<b>41.6</b>	<b>1</b>	<b>n/a</b>	<b>5,128</b>	<b>44.2</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY SEX, OHIO, 2015

ZOOSES	Female		Male		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate
Babesiosis*	0	0.0	1	0.0	0	n/a	1	0.0
Brucellosis	1	0.0	0	0.0	0	n/a	1	0.0
Chikungunya Virus Infection*	6	0.1	4	0.1	0	n/a	10	0.1
Dengue	6	0.1	5	0.1	0	n/a	11	0.1
Ehrlichiosis/Anaplasmosis	8	0.1	11	0.2	0	n/a	19	0.2
<i>Anaplasma phagocytophilum</i> *	0	0.0	1	0.0	0	n/a	1	0.0
<i>Ehrlichia chaffeensis</i> *	7	0.1	10	0.2	0	n/a	17	0.1
Unknown	1	0.0	0	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	10	0.2	14	0.2	0	n/a	24	0.2
Lyme Disease	60	1.0	87	1.5	0	n/a	147	1.3
Malaria	17	0.3	19	0.3	0	n/a	36	0.3
Q Fever	3	0.1	1	0.0	0	n/a	4	0.0
Acute	3	0.1	1	0.0	0	n/a	4	0.0
Rabies, Animal*	0	n/a	0	n/a	26	n/a	26	n/a
Spotted Fever Rickettsiosis*	6	0.1	7	0.1	0	n/a	13	0.1
Tularemia	1	0.0	0	0.0	0	n/a	1	0.0
West Nile Virus Infection	14	0.2	21	0.4	0	n/a	35	0.3
<b>SUB-TOTAL</b>	<b>132</b>	<b>2.2</b>	<b>170</b>	<b>3.0</b>	<b>26</b>	<b>n/a</b>	<b>328</b>	<b>2.6</b>
<b>GRAND TOTAL</b>	<b>15,529</b>	<b>262.0</b>	<b>20,174</b>	<b>354.8</b>	<b>85</b>	<b>n/a</b>	<b>35,788</b>	<b>307.9</b>
<b>POPULATION</b>	<b>5,926,893</b>		<b>5,686,530</b>		<b>0</b>		<b>11,613,423</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2015

GENERAL INFECTIOUS DISEASES	January	February	March	April	May	June	July	
	N	%	N	%	N	%	N	%
Amebiasis	0	0%	1	6%	0	0%	0	0%
Botulism	0	0%	2	6%	0	0%	30	86%
Foodborne	0	0%	0	0%	0	0%	0	0%
Infant*	0	0%	1	20%	0	0%	1	20%
Wound	0	0%	1	100%	0	0%	0	0%
Campylobacteriosis	93	5%	108	6%	128	7%	107	6%
Coccidioidomycosis	3	23%	0	0%	0	0%	0	0%
Creutzfeldt-Jakob Disease (CJD)	1	13%	0	0%	0	0%	0	0%
Cryptosporidiosis	20	5%	13	3%	32	7%	16	4%
Cyclosporiasis	0	0%	0	0%	0	0%	0	0%
<i>Escherichia coli</i> , Shiga Toxin-Producing	6	2%	11	4%	10	4%	16	6%
O157:H7	3	3%	2	2%	3	3%	8	8%
Not O157:H7	3	2%	8	6%	7	5%	7	5%
Unknown Serotype	0	0%	1	4%	0	0%	1	4%
Giardiasis	29	8%	30	8%	27	7%	30	8%
<i>Haemophilus influenzae</i> , Invasive Disease	15	9%	13	8%	14	9%	10	6%
Hemolytic Uremic Syndrome (HUS)	0	0%	0	0%	0	0%	0	0%
Legionellosis	17	3%	20	4%	15	3%	25	4%
Leprosy (Hansen Disease)	0	0%	0	0%	0	0%	0	0%
Listeriosis	2	8%	0	0%	0	0%	1	4%
Meningitis, Aseptic	30	4%	33	4%	23	3%	30	4%
Meningitis, Other Bacterial*	10	12%	8	10%	3	4%	2	2%
Salmonellosis	77	6%	44	3%	91	7%	99	7%
Shigellosis	42	6%	37	5%	20	3%	47	6%
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	1	8%	1	8%	4	33%	0	0%
Streptococcal Disease, Group A, Invasive	36	12%	23	7%	33	11%	41	13%
Streptococcal Disease, Group B, in Newborn*	6	8%	10	14%	6	8%	6	8%
Streptococcal Toxic Shock Syndrome (STSS)	0	0%	2	33%	0	0%	1	17%
<i>Streptococcus pneumoniae</i> , Invasive Disease	112	12%	86	9%	98	10%	124	13%
Ages < 5 Years*	3	5%	2	4%	6	11%	8	14%
Drug Resistant, Ages 5+ Years*	36	13%	18	7%	31	12%	38	14%
Drug Susceptible, Ages 5+ Years*	73	11%	66	10%	61	10%	78	12%
Toxic Shock Syndrome (TSS)	0	0%	0	0%	0	0%	0	0%
Typhoid Fever	0	0%	1	13%	0	0%	0	0%
Vibriosis	0	0%	0	0%	1	7%	2	13%
Other (Not Cholera)	0	0%	0	0%	1	7%	2	13%
Yersiniosis	4	9%	2	5%	6	14%	1	2%
<b>SUB-TOTAL</b>	<b>504</b>	<b>6%</b>	<b>445</b>	<b>6%</b>	<b>511</b>	<b>6%</b>	<b>588</b>	<b>7%</b>
<b>SUB-TOTAL</b>	<b>504</b>	<b>6%</b>	<b>445</b>	<b>6%</b>	<b>511</b>	<b>6%</b>	<b>588</b>	<b>7%</b>

### HEPATITIS

Hepatitis A	4	11%	1	3%	4	11%	5	14%	4	11%	2	6%	3	8%
Hepatitis B, Acute*	18	4%	100	25%	41	10%	28	7%	27	7%	21	5%	26	6%
Hepatitis B, Chronic*	75	3%	258	10%	197	8%	254	10%	234	9%	206	8%	250	10%
Hepatitis C, Acute*	8	7%	10	8%	9	7%	13	11%	9	7%	9	7%	16	13%
Hepatitis C, Past or Present*	1,229	6%	1,609	8%	1,577	8%	1,970	10%	1,420	7%	1,527	8%	1,833	10%
Hepatitis E	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%
<b>SUB-TOTAL</b>	<b>1,334</b>	<b>6%</b>	<b>1,978</b>	<b>9%</b>	<b>1,829</b>	<b>8%</b>	<b>2,270</b>	<b>10%</b>	<b>1,694</b>	<b>8%</b>	<b>1,765</b>	<b>8%</b>	<b>2,128</b>	<b>10%</b>

N = number of cases reported.

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

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2015

OUTBREAKS*	January		February		March		April		May		June		July	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Community*	6	12%	8	16%	2	4%	2	4%	5	10%	1	2%	9	18%
Foodborne*	8	10%	5	6%	12	15%	4	5%	10	12%	5	6%	3	4%
Healthcare-Associated*	20	21%	16	16%	17	18%	11	11%	7	7%	2	2%	5	5%
Institutional*	18	11%	15	9%	14	9%	9	6%	9	6%	4	2%	3	2%
Waterborne*	0	0%	1	13%	0	0%	0	0%	0	0%	0	0%	1	13%
Zoonotic*	1	9%	0	0%	1	9%	1	9%	1	9%	2	18%	0	0%
<b>SUB-TOTAL</b>	<b>53</b>	<b>13%</b>	<b>45</b>	<b>11%</b>	<b>46</b>	<b>11%</b>	<b>27</b>	<b>7%</b>	<b>32</b>	<b>8%</b>	<b>14</b>	<b>3%</b>	<b>21</b>	<b>5%</b>

### VACCINE-PREVENTABLE

Influenza-Associated Hospitalization	1,864	49%	440	12%	601	16%	524	14%	116	3%	20	1%	21	1%
Influenza-Associated Pediatric Mortality*	2	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Influenza A Virus, Novel Human Infection*	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%
Measles	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%
Imported	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%
Meningococcal Disease	2	11%	0	0%	3	17%	5	28%	0	0%	2	11%	0	0%
Mumps	7	50%	1	7%	1	7%	1	7%	2	14%	0	0%	0	0%
Pertussis	86	11%	33	4%	34	4%	53	7%	35	4%	47	6%	67	8%
Tetanus	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
Varicella	47	10%	37	7%	42	9%	50	10%	34	7%	22	4%	20	4%
<b>SUB-TOTAL</b>	<b>2,008</b>	<b>39%</b>	<b>511</b>	<b>10%</b>	<b>681</b>	<b>13%</b>	<b>634</b>	<b>12%</b>	<b>188</b>	<b>4%</b>	<b>92</b>	<b>2%</b>	<b>108</b>	<b>2%</b>

### ZOOSES

Babesiosis*	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%
Brucellosis	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Chikungunya Virus Infection*	1	10%	0	0%	0	0%	1	10%	0	0%	4	40%	1	10%
Dengue	2	18%	0	0%	1	9%	0	0%	0	0%	0	0%	2	18%
Ehrlichiosis/Anaplasmosis	1	5%	1	5%	0	0%	2	11%	3	16%	6	32%	2	11%
<i>Anaplasma phagocytophilum</i> *	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
<i>Ehrlichia chaffeensis</i> *	0	0%	1	6%	0	0%	2	12%	2	12%	6	35%	2	12%
Unknown	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%
LaCrosse Virus Disease*	0	0%	0	0%	0	0%	0	0%	0	0%	1	4%	1	4%
Lyme Disease	2	1%	1	1%	1	1%	1	1%	16	11%	57	39%	28	19%
Malaria	1	3%	1	3%	2	6%	3	8%	1	3%	9	25%	3	8%
Q Fever	1	25%	0	0%	1	25%	0	0%	0	0%	1	25%	0	0%
Acute	1	25%	0	0%	1	25%	0	0%	0	0%	1	25%	0	0%
Rabies, Animal*	1	4%	0	0%	0	0%	1	4%	3	12%	2	8%	10	38%
Spotted Fever Rickettsiosis*	0	0%	1	8%	0	0%	3	23%	1	8%	2	15%	3	23%
Tularemia	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%	5	14%
<b>SUB-TOTAL</b>	<b>9</b>	<b>3%</b>	<b>4</b>	<b>1%</b>	<b>6</b>	<b>2%</b>	<b>11</b>	<b>3%</b>	<b>24</b>	<b>7%</b>	<b>82</b>	<b>25%</b>	<b>55</b>	<b>17%</b>

N = number of cases reported.

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

\* Please see Technical Notes (pp. 89-91).

**REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2015**

GENERAL INFECTIOUS DISEASES	August		September		October		November		December		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%
Amebiasis	3	19%	1	6%	2	13%	3	19%	2	13%	16	100%
Botulism	1	3%	0	0%	1	3%	1	3%	0	0%	35	100%
Foodborne	0	0%	0	0%	0	0%	0	0%	0	0%	29	100%
Infant*	1	20%	0	0%	1	20%	1	20%	0	0%	5	100%
Wound	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Campylobacteriosis	183	10%	156	9%	144	8%	149	8%	126	7%	1,786	100%
Coccidioidomycosis	1	8%	0	0%	2	15%	4	31%	0	0%	13	100%
Creutzfeldt-Jakob Disease (CJD)	1	13%	1	13%	3	38%	2	25%	0	0%	8	100%
Cryptosporidiosis	86	20%	70	16%	39	9%	25	6%	27	6%	429	100%
Cyclosporiasis	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
<i>Escherichia coli</i> , Shiga Toxin-Producing	45	17%	33	12%	27	10%	21	8%	18	7%	265	100%
O157:H7	17	16%	18	17%	13	12%	4	4%	6	6%	105	100%
Not O157:H7	27	20%	12	9%	11	8%	11	8%	8	6%	135	100%
Unknown Serotype	1	4%	3	12%	3	12%	6	24%	4	16%	25	100%
Giardiasis	48	13%	37	10%	23	6%	29	8%	23	6%	376	100%
<i>Haemophilus influenzae</i> , Invasive Disease	9	6%	15	9%	9	6%	14	9%	23	14%	162	100%
Hemolytic Uremic Syndrome (HUS)	1	33%	0	0%	0	0%	0	0%	0	0%	3	100%
Legionellosis	46	8%	59	10%	40	7%	29	5%	21	4%	566	100%
Leprosy (Hansen Disease)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Listeriosis	4	16%	3	12%	0	0%	2	8%	0	0%	25	100%
Meningitis, Aseptic	108	14%	108	14%	78	10%	64	9%	70	9%	746	100%
Meningitis, Other Bacterial*	10	12%	11	14%	8	10%	7	9%	2	2%	81	100%
Salmonellosis	158	12%	118	9%	119	9%	90	7%	82	6%	1,373	100%
Shigellosis	69	9%	73	10%	71	9%	113	15%	165	22%	748	100%
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0%	0	0%	1	8%	0	0%	1	8%	12	100%
Streptococcal Disease, Group A, Invasive	23	7%	26	8%	23	7%	17	5%	27	9%	310	100%
Streptococcal Disease, Group B, in Newborn*	4	5%	6	8%	2	3%	5	7%	9	12%	73	100%
Streptococcal Toxic Shock Syndrome (STSS)	0	0%	1	17%	0	0%	0	0%	1	17%	6	100%
<i>Streptococcus pneumoniae</i> , Invasive Disease	33	3%	63	7%	56	6%	97	10%	119	12%	965	100%
Ages < 5 Years*	0	0%	10	18%	8	14%	6	11%	5	9%	56	100%
Drug Resistant, Ages 5+ Years*	9	3%	19	7%	18	7%	17	6%	27	10%	269	100%
Drug Susceptible, Ages 5+ Years*	24	4%	34	5%	30	5%	74	12%	87	14%	640	100%
Toxic Shock Syndrome (TSS)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Typhoid Fever	1	13%	0	0%	0	0%	0	0%	2	25%	8	100%
Vibriosis	2	13%	2	13%	0	0%	0	0%	0	0%	15	100%
Other (Not Cholera)	2	13%	2	13%	0	0%	0	0%	0	0%	15	100%
Yersiniosis	2	5%	2	5%	9	20%	1	2%	8	18%	44	100%
<b>SUB-TOTAL</b>	<b>838</b>	<b>10%</b>	<b>785</b>	<b>10%</b>	<b>657</b>	<b>8%</b>	<b>673</b>	<b>8%</b>	<b>726</b>	<b>9%</b>	<b>8,068</b>	<b>100%</b>

**HEPATITIS**

Hepatitis A	4	11%	2	6%	2	6%	3	8%	2	6%	36	100%
Hepatitis B, Acute*	16	4%	24	6%	34	8%	32	8%	37	9%	404	100%
Hepatitis B, Chronic*	141	6%	179	7%	208	8%	252	10%	268	11%	2,522	100%
Hepatitis C, Acute*	7	6%	15	12%	9	7%	7	6%	11	9%	123	100%
Hepatitis C, Past or Present*	1,455	8%	1,526	8%	1,777	9%	1,498	8%	1,757	9%	19,178	100%
Hepatitis E	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
<b>SUB-TOTAL</b>	<b>1,623</b>	<b>7%</b>	<b>1,746</b>	<b>8%</b>	<b>2,030</b>	<b>9%</b>	<b>1,792</b>	<b>8%</b>	<b>2,075</b>	<b>9%</b>	<b>22,264</b>	<b>100%</b>

N = number of cases reported.

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

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, OHIO, 2015

OUTBREAKS*	August		September		October		November		December		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%
Community*	1	2%	0	0%	3	6%	7	14%	5	10%	49	100%
Foodborne*	8	10%	6	7%	3	4%	8	10%	9	11%	81	100%
Healthcare-Associated*	5	5%	2	2%	4	4%	3	3%	5	5%	97	100%
Institutional*	8	5%	9	6%	19	12%	27	17%	28	17%	163	100%
Waterborne*	4	50%	2	25%	0	0%	0	0%	0	0%	8	100%
Zoonotic*	0	0%	2	18%	1	9%	2	18%	0	0%	11	100%
<b>SUB-TOTAL</b>	<b>26</b>	<b>6%</b>	<b>21</b>	<b>5%</b>	<b>30</b>	<b>7%</b>	<b>47</b>	<b>11%</b>	<b>47</b>	<b>11%</b>	<b>409</b>	<b>100%</b>
<b>VACCINE-PREVENTABLE</b>												
Influenza-Associated Hospitalization	11	0%	19	1%	66	2%	59	2%	58	2%	3,799	100%
Influenza-Associated Pediatric Mortality*	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Influenza A Virus, Novel Human Infection*	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Measles	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Imported	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Meningococcal Disease	0	0%	1	6%	2	11%	1	6%	2	11%	18	100%
Mumps	0	0%	2	14%	0	0%	0	0%	0	0%	14	100%
Pertussis	37	5%	66	8%	118	15%	139	17%	83	10%	798	100%
Tetanus	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Varicella	33	7%	53	11%	46	9%	59	12%	51	10%	494	100%
<b>SUB-TOTAL</b>	<b>81</b>	<b>2%</b>	<b>141</b>	<b>3%</b>	<b>232</b>	<b>5%</b>	<b>258</b>	<b>5%</b>	<b>194</b>	<b>4%</b>	<b>5,128</b>	<b>100%</b>
<b>ZOOSES</b>												
Babesiosis*	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Brucellosis	1	100%	0	0%	0	0%	0	0%	0	0%	1	100%
Chikungunya Virus Infection*	2	20%	0	0%	0	0%	0	0%	1	10%	10	100%
Dengue	1	9%	1	9%	1	9%	2	18%	1	9%	11	100%
Ehrlichiosis/Anaplasmosis	2	11%	2	11%	0	0%	0	0%	0	0%	19	100%
<i>Anaplasma phagocytophilum</i> *	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
<i>Ehrlichia chaffeensis</i> *	2	12%	2	12%	0	0%	0	0%	0	0%	17	100%
Unknown	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
LaCrosse Virus Disease*	10	42%	12	50%	0	0%	0	0%	0	0%	24	100%
Lyme Disease	14	10%	13	9%	6	4%	6	4%	2	1%	147	100%
Malaria	7	19%	5	14%	3	8%	1	3%	0	0%	36	100%
Q Fever	0	0%	0	0%	0	0%	0	0%	1	25%	4	100%
Acute	0	0%	0	0%	0	0%	0	0%	1	25%	4	100%
Rabies, Animal*	2	8%	5	19%	2	8%	0	0%	0	0%	26	100%
Spotted Fever Rickettsiosis*	0	0%	2	15%	1	8%	0	0%	0	0%	13	100%
Tularemia	1	100%	0	0%	0	0%	0	0%	0	0%	1	100%
West Nile Virus Infection	18	51%	11	31%	1	3%	0	0%	0	0%	35	100%
<b>SUB-TOTAL</b>	<b>58</b>	<b>18%</b>	<b>51</b>	<b>16%</b>	<b>14</b>	<b>4%</b>	<b>9</b>	<b>3%</b>	<b>5</b>	<b>2%</b>	<b>328</b>	<b>100%</b>
<b>GRAND TOTAL</b>	<b>2,626</b>	<b>7%</b>	<b>2,744</b>	<b>8%</b>	<b>2,963</b>	<b>8%</b>	<b>2,779</b>	<b>8%</b>	<b>3,047</b>	<b>8%</b>	<b>36,197</b>	<b>100%</b>

N = number of cases reported.

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

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Adams	Allen	Ashland	Ashtabula	Athens	Auglaize	Belmont	
	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	1	1.0	0	0.0	0	0.0
Botulism	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
Infant*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	5	17.8	34	32.6	19	35.7	10	10.1
Coccidioidomycosis	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
Cryptosporidiosis	0	0.0	1	1.0	2	3.8	4	4.1
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	0	0.0	9	8.6	1	1.9	0	0.0
O157:H7	0	0.0	7	6.7	1	1.9	0	0.0
Not O157:H7	0	0.0	1	1.0	0	0.0	0	0.0
Unknown Serotype	0	0.0	1	1.0	0	0.0	0	0.0
Giardiasis	0	0.0	9	8.6	3	5.6	6	6.1
<i>Haemophilus influenzae</i> , Invasive Disease	0	0.0	2	1.9	0	0.0	2	2.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	3	10.7	6	5.7	0	0.0	7	7.1
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	1	3.6	1	1.0	0	0.0	0	0.0
Meningitis, Aseptic	1	3.6	30	28.7	0	0.0	2	2.0
Meningitis, Other Bacterial*	0	0.0	2	1.9	0	0.0	1	1.0
Salmonellosis	3	10.7	12	11.5	8	15.0	11	11.2
Shigellosis	0	0.0	0	0.0	0	0.0	1	1.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	1	3.6	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	0	0.0	0	0.0	7	7.1
Streptococcal Disease, Group B, in Newborn*	0	*	1	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	4	14.3	11	10.5	7	13.2	12	12.2
Ages < 5 Years*	0	*	1	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	1	*	2	*	3	*	6	*
Drug Susceptible, Ages 5+ Years*	3	*	8	*	3	*	6	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	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
Yersiniosis	0	0.0	1	1.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>18</b>	<b>64.2</b>	<b>120</b>	<b>114.9</b>	<b>40</b>	<b>75.2</b>	<b>63</b>	<b>63.9</b>
<b>SUB-TOTAL</b>	<b>18</b>	<b>64.2</b>	<b>120</b>	<b>114.9</b>	<b>40</b>	<b>75.2</b>	<b>63</b>	<b>63.9</b>

### HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	4	3.8	0	0.0	0	0.0	5	7.6
Hepatitis B, Chronic*	15	53.5	17	16.3	3	5.6	0	0.0	23	34.9
Hepatitis C, Acute*	0	0.0	2	1.9	0	0.0	2	2.0	1	1.5
Hepatitis C, Past or Present*	79	281.9	68	65.1	43	80.8	129	130.8	165	250.4
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>94</b>	<b>335.4</b>	<b>91</b>	<b>87.1</b>	<b>46</b>	<b>86.4</b>	<b>131</b>	<b>132.8</b>	<b>194</b>	<b>294.4</b>
<b>SUB-TOTAL</b>	<b>94</b>	<b>335.4</b>	<b>91</b>	<b>87.1</b>	<b>46</b>	<b>86.4</b>	<b>131</b>	<b>132.8</b>	<b>194</b>	<b>294.4</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

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	1	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a
Healthcare-Associated*	0	n/a	3	n/a	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a
Institutional*	0	n/a	2	n/a	1	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
<b>SUB-TOTAL</b>	<b>0</b>	<b>n/a</b>	<b>7</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>3</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>														
Influenza-Associated Hospitalization	3	10.7	128	122.6	16	30.1	25	25.3	6	9.1	20	43.6	13	18.8
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	1	*	0	*	0	*	1	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	1	3.6	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Mumps	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	1	3.6	3	2.9	1	1.9	3	3.0	0	0.0	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	0	0.0	3	2.9	4	7.5	17	17.2	2	3.0	2	4.4	4	5.8
<b>SUB-TOTAL</b>	<b>5</b>	<b>17.8</b>	<b>135</b>	<b>129.3</b>	<b>21</b>	<b>39.5</b>	<b>46</b>	<b>46.6</b>	<b>9</b>	<b>13.7</b>	<b>26</b>	<b>56.7</b>	<b>18</b>	<b>26.0</b>
<b>ZOOSES</b>														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4
<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	1	1.4
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
Lyme Disease	0	0.0	0	0.0	4	7.5	1	1.0	0	0.0	0	0.0	2	2.9
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	1	1.0	0	0.0	0	0.0	0	0.0
Acute	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	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
<b>SUB-TOTAL</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>4</b>	<b>7.5</b>	<b>2</b>	<b>2.0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>3</b>	<b>4.3</b>
<b>GRAND TOTAL</b>	<b>117</b>	<b>417.5</b>	<b>353</b>	<b>331.3</b>	<b>112</b>	<b>208.6</b>	<b>243</b>	<b>245.4</b>	<b>246</b>	<b>371.9</b>	<b>108</b>	<b>228.9</b>	<b>139</b>	<b>199.6</b>
<b>POPULATION</b>	<b>28,024</b>		<b>104,425</b>		<b>53,213</b>		<b>98,632</b>		<b>65,886</b>		<b>45,876</b>		<b>69,154</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Brown	Butler	Carroll	Champaign	Clark	Clermont	Clinton	
	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	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
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	6	13.7	56	14.9	3	10.8	7	18.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	1	0.3	0	0.0	0	0.0
Cryptosporidiosis	0	0.0	9	2.4	0	0.0	0	0.0
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	0	0.0	4	1.1	0	0.0	0	0.0
O157:H7	0	0.0	3	0.8	0	0.0	0	0.0
Not O157:H7	0	0.0	0	0.0	0	0.0	2	1.5
Unknown Serotype	0	0.0	1	0.3	0	0.0	0	0.0
Giardiasis	0	0.0	8	2.1	0	0.0	0	0.0
<i>Haemophilus influenzae</i> , Invasive Disease	0	0.0	5	1.3	1	3.6	1	2.6
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	1	2.3	10	2.7	2	7.2	2	5.1
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	2	7.2	1	2.6
Meningitis, Aseptic	1	2.3	26	6.9	1	3.6	3	7.7
Meningitis, Other Bacterial*	0	0.0	5	1.3	0	0.0	0	0.0
Salmonellosis	6	13.7	26	6.9	3	10.8	4	10.3
Shigellosis	0	0.0	2	0.5	0	0.0	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	17	4.5	1	3.6	2	5.1
Streptococcal Disease, Group B, in Newborn*	0	*	4	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	1	3.6	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	2	4.6	46	12.2	2	7.2	2	5.1
Ages < 5 Years*	0	*	5	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	0	*	12	*	0	*	0	*
Drug Susceptible, Ages 5+ Years*	2	*	29	*	2	*	12	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	1	0.7
Vibriosis	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
Yersiniosis	1	2.3	0	0.0	0	0.0	1	0.7
<b>SUB-TOTAL</b>	<b>17</b>	<b>38.8</b>	<b>219</b>	<b>58.2</b>	<b>16</b>	<b>57.5</b>	<b>22</b>	<b>56.4</b>
							<b>82</b>	<b>60.3</b>
							<b>109</b>	<b>54.0</b>
							<b>35</b>	<b>83.5</b>

### HEPATITIS

Hepatitis A	0	0.0	2	0.5	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	2	4.6	34	9.0	1	3.6	0	0.0	5	3.7
Hepatitis B, Chronic*	20	45.6	118	31.4	2	7.2	8	20.5	21	15.4
Hepatitis C, Acute*	0	0.0	0	0.0	2	7.2	0	0.0	0	0.0
Hepatitis C, Past or Present*	112	255.5	739	196.4	17	61.1	37	94.9	221	162.5
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>134</b>	<b>305.7</b>	<b>893</b>	<b>237.3</b>	<b>22</b>	<b>79.1</b>	<b>45</b>	<b>115.4</b>	<b>247</b>	<b>181.7</b>
									<b>456</b>	<b>225.8</b>
									<b>100</b>	<b>238.6</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

**REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015**

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	1	n/a	1	n/a	0	n/a	2	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	2	n/a	0	n/a	0	n/a	1	n/a	0	n/a	1	n/a
Healthcare-Associated*	0	n/a	1	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	3	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	1	n/a	0	n/a
<b>SUB-TOTAL</b>	<b>0</b>	<b>n/a</b>	<b>4</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>6</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>														
Influenza-Associated Hospitalization	4	9.1	125	33.2	16	57.5	13	33.3	48	35.3	41	20.3	5	11.9
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	0	0.0	16	4.3	0	0.0	1	2.6	8	5.9	11	5.4	1	2.4
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	14	3.7	0	0.0	1	2.6	10	7.4	10	5.0	1	2.4
<b>SUB-TOTAL</b>	<b>4</b>	<b>9.1</b>	<b>156</b>	<b>41.5</b>	<b>16</b>	<b>57.5</b>	<b>15</b>	<b>38.5</b>	<b>66</b>	<b>48.5</b>	<b>62</b>	<b>30.7</b>	<b>7</b>	<b>16.7</b>
<b>ZOOSES</b>														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCross Virus Disease*	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	5	1.3	2	7.2	0	0.0	0	0.0	1	0.5	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
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	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	1	2.3	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>1</b>	<b>2.3</b>	<b>9</b>	<b>2.4</b>	<b>4</b>	<b>7.2</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>3</b>	<b>1.5</b>	<b>0</b>	<b>0.0</b>
<b>GRAND TOTAL</b>	<b>156</b>	<b>355.8</b>	<b>1,281</b>	<b>339.3</b>	<b>59</b>	<b>201.4</b>	<b>82</b>	<b>210.3</b>	<b>401</b>	<b>290.5</b>	<b>631</b>	<b>311.9</b>	<b>143</b>	<b>338.8</b>
<b>POPULATION</b>	<b>43,839</b>		<b>376,353</b>		<b>27,811</b>		<b>38,987</b>		<b>135,959</b>		<b>201,973</b>		<b>41,917</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Columbiana N	Columbiana Rate	Coshocton N	Coshocton Rate	Crawford N	Crawford Rate	Cuyahoga N	Cuyahoga Rate	Darke N	Darke Rate	Defiance N	Defiance Rate	Delaware N	Delaware Rate
Amebiasis	0	0.0	0	0.0	0	0.0	2	0.2	1	1.9	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5
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	*	1	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	9	8.6	18	49.2	1	2.4	254	20.2	26	49.9	2	5.2	21	10.9
Coccidioidomycosis	0	0.0	0	0.0	1	2.4	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	1	0.1	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	3	2.9	1	2.7	2	4.7	33	2.6	4	7.7	3	7.8	10	5.2
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	1	1.0	0	0.0	2	4.7	20	1.6	1	1.9	1	2.6	3	1.6
O157:H7	0	0.0	0	0.0	1	2.4	9	0.7	1	1.9	0	0.0	1	0.5
Not O157:H7	0	0.0	0	0.0	1	2.4	9	0.7	0	0.0	1	2.6	2	1.0
Unknown Serotype	1	1.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Giardiasis	8	7.6	0	0.0	1	2.4	35	2.8	0	0.0	3	7.8	3	1.6
<i>Haemophilus influenzae</i> , Invasive Disease	1	1.0	1	2.7	1	2.4	15	1.2	0	0.0	1	2.6	1	0.5
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	5	4.8	3	8.2	2	4.7	105	8.4	0	0.0	0	0.0	7	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	5	0.4	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	3	2.9	3	8.2	5	11.8	69	5.5	4	7.7	1	2.6	8	4.1
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	6	0.5	0	0.0	0	0.0	0	0.0
Salmonellosis	17	16.2	4	10.9	14	33.1	138	11.0	4	7.7	3	7.8	23	11.9
Shigellosis	1	1.0	0	0.0	0	0.0	59	4.7	1	1.9	0	0.0	2	1.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	1	2.4	2	0.2	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	3	2.9	0	0.0	0	0.0	50	4.0	1	1.9	0	0.0	7	3.6
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	12	*	0	*	0	*	1	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	13	12.4	3	8.2	1	2.4	80	6.4	4	7.7	4	10.4	8	4.1
Ages < 5 Years*	0	*	0	*	1	*	0	*	0	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	2	*	0	*	0	*	24	*	0	*	0	*	2	*
Drug Susceptible, Ages 5+ Years*	11	*	3	*	0	*	56	*	4	*	4	*	5	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	1	0.5
Vibriosis	0	0.0	0	0.0	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0
Yersiniosis	1	1.0	1	2.7	0	0.0	5	0.4	0	0.0	0	0.0	1	0.5
<b>SUB-TOTAL</b>	<b>65</b>	<b>62.0</b>	<b>34</b>	<b>93.0</b>	<b>31</b>	<b>73.3</b>	<b>899</b>	<b>71.6</b>	<b>46</b>	<b>88.3</b>	<b>18</b>	<b>46.9</b>	<b>97</b>	<b>50.3</b>

### HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	0	0.0	4	9.5	19	1.5	2	3.8	0	0.0	2	1.0
Hepatitis B, Chronic*	4	3.8	4	10.9	19	44.9	256	20.4	16	30.7	2	5.2	24	12.4
Hepatitis C, Acute*	5	4.8	0	0.0	0	0.0	6	0.5	2	3.8	0	0.0	2	1.0
Hepatitis C, Past or Present*	122	116.4	30	82.0	127	300.2	1,493	118.9	52	99.9	31	80.8	92	47.7
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>131</b>	<b>125.0</b>	<b>34</b>	<b>93.0</b>	<b>150</b>	<b>354.6</b>	<b>1,779</b>	<b>141.6</b>	<b>72</b>	<b>138.3</b>	<b>33</b>	<b>86.0</b>	<b>120</b>	<b>62.2</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

OUTBREAKS*	Columbiana N	Columbiana Rate	Coshocton N	Coshocton Rate	Crawford N	Crawford Rate	Cuyahoga N	Cuyahoga Rate	Darke N	Darke Rate	Defiance N	Defiance Rate	Delaware N	Delaware Rate
Community*	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	2	n/a	1	n/a	4	n/a	0	n/a	0	n/a	1	n/a
Healthcare-Associated*	0	n/a	0	n/a	1	n/a	17	n/a	0	n/a	0	n/a	2	n/a
Institutional*	0	n/a	0	n/a	0	n/a	11	n/a	1	n/a	1	n/a	1	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Zoonotic*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
<b>SUB-TOTAL</b>	<b>1</b>	<b>n/a</b>	<b>2</b>	<b>n/a</b>	<b>3</b>	<b>n/a</b>	<b>33</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>5</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>														
Influenza-Associated Hospitalization	36	34.3	6	16.4	8	18.9	499	39.7	19	36.5	11	28.7	39	20.2
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	1	2.4	1	0.1	0	0.0	0	0.0	0	0.0
Pertussis	3	2.9	1	2.7	0	0.0	14	1.1	2	3.8	1	2.6	26	13.5
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	4	3.8	0	0.0	1	2.4	35	2.8	2	3.8	1	2.6	15	7.8
<b>SUB-TOTAL</b>	<b>43</b>	<b>41.0</b>	<b>7</b>	<b>19.1</b>	<b>11</b>	<b>26.0</b>	<b>549</b>	<b>43.7</b>	<b>23</b>	<b>44.2</b>	<b>13</b>	<b>33.9</b>	<b>80</b>	<b>41.4</b>
<b>ZONOSES</b>														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	1	2.6	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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	1	0.5
Lyme Disease	5	4.8	7	19.1	0	0.0	15	1.2	0	0.0	0	0.0	6	3.1
Malaria	0	0.0	0	0.0	0	0.0	4	0.3	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
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	6	0.5	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>5</b>	<b>4.8</b>	<b>7</b>	<b>19.1</b>	<b>0</b>	<b>0.0</b>	<b>30</b>	<b>2.4</b>	<b>0</b>	<b>0.0</b>	<b>1</b>	<b>2.6</b>	<b>8</b>	<b>3.6</b>
<b>GRAND TOTAL</b>	<b>245</b>	<b>232.8</b>	<b>84</b>	<b>224.2</b>	<b>195</b>	<b>453.8</b>	<b>3,290</b>	<b>259.3</b>	<b>142</b>	<b>270.8</b>	<b>66</b>	<b>169.5</b>	<b>310</b>	<b>157.5</b>
<b>POPULATION</b>	<b>104,806</b>		<b>36,569</b>		<b>42,306</b>		<b>1,255,921</b>		<b>52,076</b>		<b>38,352</b>		<b>193,013</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Erie	Fairfield	Fayette	Franklin	Fulton	Gallia	Geauga	
	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	2	0.2
Botulism	0	0.0	28	18.5	0	0.0	0	0.0
Foodborne	0	0.0	27	17.8	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*
Wound	0	0.0	1	0.7	0	0.0	0	0.0
Campylobacteriosis	9	11.9	13	8.6	13	45.3	119	9.5
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	3	0.2
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	1	3.5	1	0.1
Cryptosporidiosis	1	1.3	3	2.0	1	3.5	76	6.1
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	1	1.3	2	1.3	1	3.5	51	4.1
O157:H7	0	0.0	0	0.0	0	0.0	16	1.3
Not O157:H7	1	1.3	2	1.3	1	3.5	26	2.1
Unknown Serotype	0	0.0	0	0.0	0	0.0	9	0.7
Giardiasis	2	2.6	2	1.3	1	3.5	66	5.3
<i>Haemophilus influenzae</i> , Invasive Disease	0	0.0	0	0.0	0	0.0	8	0.6
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	1	0.1
Legionellosis	4	5.3	5	3.3	0	0.0	87	7.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	1	1.3	1	0.7	0	0.0	2	0.2
Meningitis, Aseptic	1	1.3	9	5.9	5	17.4	76	6.1
Meningitis, Other Bacterial*	1	1.3	0	0.0	0	0.0	7	0.6
Salmonellosis	7	9.3	22	14.5	2	7.0	146	11.7
Shigellosis	4	5.3	0	0.0	0	0.0	174	13.9
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	3	4.0	3	2.0	0	0.0	43	3.4
Streptococcal Disease, Group B, in Newborn*	0	*	1	*	0	*	16	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	3	0.2
<i>Streptococcus pneumoniae</i> , Invasive Disease	3	4.0	9	5.9	4	13.9	103	8.2
Ages < 5 Years*	0	*	0	*	3	*	9	*
Drug Resistant, Ages 5+ Years*	1	*	2	*	0	*	28	*
Drug Susceptible, Ages 5+ Years*	2	*	7	*	1	*	66	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	4	0.3
Vibriosis	0	0.0	0	0.0	0	0.0	1	0.1
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	1	0.1
Yersiniosis	0	0.0	2	1.3	0	0.0	3	0.2
<b>SUB-TOTAL</b>	<b>37</b>	<b>49.0</b>	<b>100</b>	<b>66.0</b>	<b>28</b>	<b>97.6</b>	<b>992</b>	<b>79.3</b>
							<b>34</b>	<b>79.9</b>
							<b>27</b>	<b>89.6</b>
							<b>54</b>	<b>57.4</b>

### HEPATITIS

Hepatitis A	1	1.3	0	0.0	1	3.5	6	0.5	0	0.0	0	0.0	3	3.2
Hepatitis B, Acute*	1	1.3	10	6.6	1	3.5	73	5.8	0	0.0	4	13.3	2	2.1
Hepatitis B, Chronic*	6	7.9	31	20.5	15	52.3	510	40.7	2	4.7	16	53.1	1	1.1
Hepatitis C, Acute*	1	1.3	3	2.0	3	10.5	2	0.2	0	0.0	4	13.3	0	0.0
Hepatitis C, Past or Present*	105	139.0	207	136.7	88	306.8	1,632	130.4	20	47.0	113	374.9	45	47.8
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>114</b>	<b>150.9</b>	<b>251</b>	<b>165.8</b>	<b>108</b>	<b>376.6</b>	<b>2,223</b>	<b>177.6</b>	<b>22</b>	<b>51.7</b>	<b>137</b>	<b>454.5</b>	<b>51</b>	<b>54.2</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

**REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015**

OUTBREAKS*	Erie	Fairfield	Fayette	Franklin	Fulton	Gallia	Geauga	
	N	Rate	N	Rate	N	Rate	N	Rate
Community*	2	n/a	1	n/a	0	n/a	13	n/a
Foodborne*	0	n/a	4	n/a	0	n/a	9	n/a
Healthcare-Associated*	0	n/a	1	n/a	0	n/a	26	n/a
Institutional*	0	n/a	5	n/a	0	n/a	66	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	2	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	2	n/a
<b>SUB-TOTAL</b>	<b>2</b>	<b>n/a</b>	<b>11</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>118</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>								
Influenza-Associated Hospitalization	19	25.1	22	14.5	5	17.4	402	32.1
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	4	0.3
Mumps	0	0.0	1	0.7	0	0.0	5	0.4
Pertussis	0	0.0	100	66.0	3	10.5	195	15.6
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	0	0.0	15	9.9	0	0.0	73	5.8
<b>SUB-TOTAL</b>	<b>19</b>	<b>25.1</b>	<b>138</b>	<b>91.1</b>	<b>8</b>	<b>27.9</b>	<b>679</b>	<b>54.2</b>
<b>ZONOSES</b>								
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	0	0.0	2	0.2
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	1	0.1
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	1	0.1
<i>Ehrlichia chaffeensis</i> *	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
LaCrosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	0	0.0	17	1.4
Malaria	0	0.0	0	0.0	0	0.0	17	1.4
Q Fever	0	0.0	1	0.7	0	0.0	0	0.0
Acute	0	0.0	1	0.7	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	2	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	1	0.1
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	1	0.7	0	0.0	7	0.6
<b>SUB-TOTAL</b>	<b>0</b>	<b>0.0</b>	<b>2</b>	<b>1.3</b>	<b>0</b>	<b>0.0</b>	<b>50</b>	<b>3.8</b>
<b>GRAND TOTAL</b>	<b>172</b>	<b>225.0</b>	<b>502</b>	<b>324.3</b>	<b>144</b>	<b>502.1</b>	<b>4,062</b>	<b>314.9</b>
<b>POPULATION</b>	<b>75,550</b>		<b>151,408</b>		<b>28,679</b>		<b>1,251,722</b>	
								<b>42,537</b>
								<b>30,142</b>
								<b>94,102</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Greene	Guernsey	Hamilton	Hancock	Hardin	Harrison	Henry	
	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	2	0.2	0	0.0
Botulism	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
Infant*	0	*	0	*	1	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	28	17.0	5	12.7	81	10.0	3	4.0
Coccidioidomycosis	0	0.0	0	0.0	2	0.2	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	2	1.2	5	12.7	18	2.2	3	4.0
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	6	3.6	0	0.0	13	1.6	2	2.6
O157:H7	5	3.0	0	0.0	6	0.7	0	0.0
Not O157:H7	1	0.6	0	0.0	6	0.7	2	2.6
Unknown Serotype	0	0.0	0	0.0	1	0.1	0	0.0
Giardiasis	2	1.2	3	7.6	24	3.0	0	0.0
<i>Haemophilus influenzae</i> , Invasive Disease	3	1.8	1	2.5	16	2.0	1	1.3
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	7	4.3	2	5.1	14	1.7	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	1	0.1	0	0.0
Listeriosis	0	0.0	0	0.0	3	0.4	0	0.0
Meningitis, Aseptic	13	7.9	6	15.3	69	8.5	5	6.6
Meningitis, Other Bacterial*	1	0.6	0	0.0	8	1.0	2	2.6
Salmonellosis	17	10.3	5	12.7	85	10.5	6	7.9
Shigellosis	2	1.2	0	0.0	317	39.3	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	2	1.2	0	0.0	1	0.1	0	0.0
Streptococcal Disease, Group A, Invasive	4	2.4	0	0.0	34	4.2	1	1.3
Streptococcal Disease, Group B, in Newborn*	3	*	0	*	8	*	1	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	7	4.3	7	17.8	96	11.9	1	1.3
Ages < 5 Years*	0	*	1	*	3	*	0	*
Drug Resistant, Ages 5+ Years*	1	*	5	*	34	*	0	*
Drug Susceptible, Ages 5+ Years*	6	*	1	*	59	*	1	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	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
Yersiniosis	0	0.0	1	2.5	3	0.4	0	0.0
<b>SUB-TOTAL</b>	<b>97</b>	<b>59.0</b>	<b>35</b>	<b>89.2</b>	<b>796</b>	<b>98.6</b>	<b>25</b>	<b>33.1</b>
							<b>15</b>	<b>47.3</b>
							<b>9</b>	<b>58.3</b>
							<b>19</b>	<b>68.3</b>

### HEPATITIS

Hepatitis A	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	1	0.6	2	5.1	33	4.1	1	1.3	1	3.2	0	0.0
Hepatitis B, Chronic*	27	16.4	9	22.9	203	25.1	2	2.6	7	22.1	3	19.4
Hepatitis C, Acute*	0	0.0	3	7.6	6	0.7	2	2.6	1	3.2	0	0.0
Hepatitis C, Past or Present*	173	105.2	78	198.7	1,364	168.9	89	117.8	57	179.9	9	58.3
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>201</b>	<b>122.2</b>	<b>92</b>	<b>234.3</b>	<b>1,608</b>	<b>199.1</b>	<b>94</b>	<b>124.4</b>	<b>66</b>	<b>208.3</b>	<b>12</b>	<b>77.7</b>
									<b>20</b>	<b>71.9</b>		

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

**REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015**

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	2	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Foodborne*	2	n/a	1	n/a	4	n/a	2	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	3	n/a	0	n/a	4	n/a	3	n/a	0	n/a	0	n/a	0	n/a
Institutional*	0	n/a	0	n/a	18	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	1	n/a	0	n/a	0	n/a	0	n/a
<b>SUB-TOTAL</b>	<b>5</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>28</b>	<b>n/a</b>	<b>7</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>

#### VACCINE-PREVENTABLE DISEASES

VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization	58	35.3	16	40.8	192	23.8	8	10.6	13	41.0	1	6.5	6	21.6
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	1	2.5	3	0.4	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	5	3.0	3	7.6	51	6.3	1	1.3	0	0.0	2	12.9	1	3.6
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	3	1.8	3	7.6	15	1.9	3	4.0	1	3.2	0	0.0	1	3.6
SUB-TOTAL	66	40.1	23	58.6	261	32.3	12	15.9	14	44.2	3	19.4	8	28.8

ZOOSES

Zoonoses												
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	3	0.4	0	0.0	0	0.0	0	0.0
Dengue	1	0.6	0	0.0	4	0.5	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	1	0.1	1	1.3	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
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	1	0.1	1	1.3	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*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	2	1.2	1	2.5	2	0.2	1	1.3	0	0.0	3	19.4
Malaria	0	0.0	0	0.0	3	0.4	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	1	2.5	0	0.0	0	0.0	0	0.0	0	0.0
Acute	0	0.0	1	2.5	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	0	n/a	4	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	1	0.6	0	0.0	2	0.2	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
West Nile Virus Infection	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>5</b>	<b>2.4</b>	<b>2</b>	<b>5.1</b>	<b>20</b>	<b>2.0</b>	<b>2</b>	<b>2.6</b>	<b>0</b>	<b>0.0</b>	<b>3</b>	<b>19.4</b>
											<b>0</b>	<b>0.0</b>

N = number of cases reported

N = number of cases reported.  
Rates use 2015 U.S. Census estimates and are per 100,000 population.

n/a = not applicable

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Highland	Hocking	Holmes	Huron	Jackson	Jefferson	Knox	
	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	1	3.5	0	0.0	0	0.0
Foodborne	0	0.0	1	3.5	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	3	7.0	1	3.5	11	25.1	10	17.1
Coccidioidomycosis	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
Cryptosporidiosis	0	0.0	0	0.0	0	0.0	1	3.1
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	2	4.6	0	0.0	3	6.8	1	1.7
O157:H7	0	0.0	0	0.0	3	6.8	0	0.0
Not O157:H7	2	4.6	0	0.0	0	0.0	1	1.7
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	1	2.3	1	3.5	0	0.0	1	1.7
<i>Haemophilus influenzae</i> , Invasive Disease	0	0.0	0	0.0	0	0.0	3	5.1
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	2	4.6	0	0.0
Legionellosis	3	7.0	0	0.0	2	4.6	2	3.4
Leprosy (Hansen Disease)	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
Meningitis, Aseptic	8	18.6	2	7.0	3	6.8	2	3.4
Meningitis, Other Bacterial*	2	4.6	0	0.0	0	0.0	1	1.7
Salmonellosis	5	11.6	2	7.0	8	18.2	8	13.7
Shigellosis	0	0.0	0	0.0	0	0.0	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	2	4.6	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	0	0.0	0	0.0	3	5.1
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	1	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	5	11.6	1	3.5	0	0.0	3	5.1
Ages < 5 Years*	0	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	1	*	1	*	0	*	2	*
Drug Susceptible, Ages 5+ Years*	4	*	0	*	0	*	2	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	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
Yersiniosis	0	0.0	0	0.0	0	0.0	1	3.1
<b>SUB-TOTAL</b>	<b>31</b>	<b>72.0</b>	<b>8</b>	<b>28.1</b>	<b>30</b>	<b>68.3</b>	<b>34</b>	<b>58.2</b>
							<b>26</b>	<b>79.8</b>
							<b>59</b>	<b>87.6</b>
							<b>35</b>	<b>57.3</b>

### HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	2	6.1	0	0.0	0	0.0
Hepatitis B, Acute*	4	9.3	1	3.5	0	0.0	2	3.4	10	30.7	0	0.0
Hepatitis B, Chronic*	4	9.3	13	45.6	2	4.6	2	3.4	17	52.2	5	7.4
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	4	6.8	0	0.0	0	0.0
Hepatitis C, Past or Present*	84	195.2	80	280.8	21	47.8	82	140.2	101	309.9	158	234.6
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>92</b>	<b>213.8</b>	<b>94</b>	<b>329.9</b>	<b>23</b>	<b>52.4</b>	<b>90</b>	<b>153.9</b>	<b>130</b>	<b>398.8</b>	<b>163</b>	<b>242.0</b>
							<b>130</b>	<b>398.8</b>	<b>163</b>	<b>242.0</b>	<b>88</b>	<b>144.1</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

OUTBREAKS*	Highland		Hocking		Holmes		Huron		Jackson		Jefferson		Knox	
	N	Rate												
Community*	0	n/a	2	n/a	2	n/a								
Foodborne*	1	n/a	0	n/a	0	n/a	3	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	1	n/a	0	n/a								
Institutional*	0	n/a	0	n/a	1	n/a	3	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a												
Zoonotic*	0	n/a												
<b>SUB-TOTAL</b>	<b>1</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>6</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>3</b>	<b>n/a</b>	<b>2</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>														
Influenza-Associated Hospitalization	22	51.1	6	21.1	12	27.3	10	17.1	13	39.9	27	40.1	41	67.1
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	1	2.3	0	0.0	7	15.9	0	0.0	1	3.1	2	3.0	9	14.7
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	11	25.6	0	0.0	6	13.7	4	6.8	0	0.0	1	1.5	19	31.1
<b>SUB-TOTAL</b>	<b>35</b>	<b>81.3</b>	<b>6</b>	<b>21.1</b>	<b>25</b>	<b>56.9</b>	<b>14</b>	<b>23.9</b>	<b>14</b>	<b>43.0</b>	<b>30</b>	<b>44.5</b>	<b>69</b>	<b>113.0</b>
<b>ZOOSES</b>														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	1	3.1	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	1	3.1	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	0	0.0
LaCrosse Virus Disease*	0	0.0	1	3.5	0	0.0	0	0.0	2	6.1	0	0.0	1	1.6
Lyme Disease	0	0.0	0	0.0	2	4.6	1	1.7	1	3.1	13	19.3	2	3.3
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
Acute	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												
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	2	6.1	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>0</b>	<b>0.0</b>	<b>1</b>	<b>3.5</b>	<b>2</b>	<b>4.6</b>	<b>2</b>	<b>3.4</b>	<b>6</b>	<b>18.4</b>	<b>13</b>	<b>19.3</b>	<b>4</b>	<b>6.6</b>
<b>GRAND TOTAL</b>	<b>159</b>	<b>367.2</b>	<b>109</b>	<b>382.6</b>	<b>81</b>	<b>182.2</b>	<b>146</b>	<b>239.4</b>	<b>176</b>	<b>539.9</b>	<b>268</b>	<b>393.5</b>	<b>198</b>	<b>321.0</b>
<b>POPULATION</b>	<b>43,026</b>		<b>28,491</b>		<b>43,909</b>		<b>58,469</b>		<b>32,596</b>		<b>67,347</b>		<b>61,061</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Lake	Lawrence	Licking	Logan	Lorain	Lucas	Madison	
	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	1	0.2
Botulism	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
Infant*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	54	23.6	19	31.1	20	11.7	8	17.6
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.5
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	4	1.7	4	6.5	9	5.3	2	4.4
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	2	0.9	2	3.3	9	5.3	4	8.8
O157:H7	0	0.0	0	0.0	2	1.2	2	4.4
Not O157:H7	2	0.9	0	0.0	5	2.9	2	4.4
Unknown Serotype	0	0.0	2	3.3	2	1.2	0	0.0
Giardiasis	4	1.7	2	3.3	7	4.1	0	0.0
<i>Haemophilus influenzae</i> , Invasive Disease	2	0.9	0	0.0	1	0.6	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	5	2.2	2	3.3	2	1.2	4	8.8
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	1	0.4	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	7	3.1	3	4.9	9	5.3	0	0.0
Meningitis, Other Bacterial*	0	0.0	1	1.6	0	0.0	0	0.0
Salmonellosis	36	15.7	8	13.1	17	10.0	6	13.2
Shigellosis	8	3.5	0	0.0	3	1.8	0	0.0
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	3	1.3	1	1.6	1	0.6	0	0.0
Streptococcal Disease, Group B, in Newborn*	1	*	0	*	1	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	15	6.5	12	19.6	12	7.0	2	4.4
Ages < 5 Years*	1	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	3	*	5	*	3	*	1	*
Drug Susceptible, Ages 5+ Years*	11	*	7	*	8	*	1	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	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
Yersiniosis	0	0.0	2	3.3	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>142</b>	<b>61.9</b>	<b>56</b>	<b>91.6</b>	<b>91</b>	<b>53.4</b>	<b>27</b>	<b>59.5</b>
							<b>181</b>	<b>59.3</b>
							<b>307</b>	<b>70.8</b>
							<b>27</b>	<b>61.2</b>

### HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	8	13.1	6	3.5	0	0.0	2	0.7
Hepatitis B, Chronic*	17	7.4	32	52.4	14	8.2	6	13.2	27	8.8
Hepatitis C, Acute*	1	0.4	6	9.8	6	3.5	0	0.0	1	0.3
Hepatitis C, Past or Present*	184	80.3	187	306.0	131	76.8	36	79.3	310	101.6
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>202</b>	<b>88.1</b>	<b>233</b>	<b>381.3</b>	<b>157</b>	<b>92.0</b>	<b>42</b>	<b>92.5</b>	<b>340</b>	<b>111.4</b>
							<b>561</b>	<b>129.4</b>	<b>83</b>	<b>188.2</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

OUTBREAKS*	Lake		Lawrence		Licking		Logan		Lorain		Lucas		Madison	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	10	n/a	1	n/a
Healthcare-Associated*	2	n/a	0	n/a	0	n/a	0	n/a	1	n/a	3	n/a	0	n/a
Institutional*	0	n/a	0	n/a	1	n/a	0	n/a	2	n/a	9	n/a	2	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a
<b>SUB-TOTAL</b>	<b>2</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>4</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>4</b>	<b>n/a</b>	<b>24</b>	<b>n/a</b>	<b>4</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>														
Influenza-Associated Hospitalization	45	19.6	13	21.3	53	31.1	4	8.8	26	8.5	110	25.4	13	29.5
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	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	6	2.6	0	0.0	33	19.3	6	13.2	5	1.6	8	1.8	1	2.3
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	8	3.5	1	1.6	5	2.9	2	4.4	6	2.0	4	0.9	4	9.1
<b>SUB-TOTAL</b>	<b>59</b>	<b>25.7</b>	<b>14</b>	<b>22.9</b>	<b>91</b>	<b>53.4</b>	<b>12</b>	<b>26.4</b>	<b>38</b>	<b>12.5</b>	<b>122</b>	<b>28.1</b>	<b>18</b>	<b>40.8</b>
<b>ZONOSES</b>														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	1	1.6	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	1	1.6	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	1.6	1	0.6	1	2.2	0	0.0	0	0.0	0	0.0
Lyme Disease	5	2.2	1	1.6	3	1.8	0	0.0	0	0.0	3	0.7	1	2.3
Malaria	0	0.0	0	0.0	1	0.6	0	0.0	1	0.3	2	0.5	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	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	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	5	1.2	0	0.0
<b>SUB-TOTAL</b>	<b>6</b>	<b>2.2</b>	<b>3</b>	<b>4.9</b>	<b>5</b>	<b>2.9</b>	<b>1</b>	<b>2.2</b>	<b>3</b>	<b>0.7</b>	<b>11</b>	<b>2.5</b>	<b>1</b>	<b>2.3</b>
<b>GRAND TOTAL</b>	<b>411</b>	<b>178.0</b>	<b>306</b>	<b>500.7</b>	<b>348</b>	<b>201.7</b>	<b>82</b>	<b>180.7</b>	<b>566</b>	<b>183.8</b>	<b>1,025</b>	<b>230.8</b>	<b>133</b>	<b>292.6</b>
<b>POPULATION</b>	229,245		61,109		170,570		45,386		305,147		433,689		44,094	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Mahoning N	Mahoning Rate	Marion N	Marion Rate	Medina N	Medina Rate	Meigs N	Meigs Rate	Mercer N	Mercer Rate	Miami N	Miami Rate	Monroe N	Monroe Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	1	0.4	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*	1	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	14	6.0	6	9.2	30	17.0	14	60.2	38	92.8	12	11.5	3	20.8
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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	2	0.9	1	1.5	6	3.4	0	0.0	25	61.0	1	1.0	0	0.0
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	1	0.4	0	0.0	2	1.1	0	0.0	3	7.3	3	2.9	1	6.9
O157:H7	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	2	1.9	0	0.0
Not O157:H7	0	0.0	0	0.0	2	1.1	0	0.0	3	7.3	0	0.0	1	6.9
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Giardiasis	6	2.6	0	0.0	8	4.5	0	0.0	2	4.9	1	1.0	0	0.0
<i>Haemophilus influenzae</i> , Invasive Disease	4	1.7	1	1.5	6	3.4	0	0.0	1	2.4	4	3.8	1	6.9
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	16	6.9	4	6.1	12	6.8	1	4.3	2	4.9	4	3.8	2	13.9
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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	9	3.9	3	4.6	7	4.0	1	4.3	11	26.9	5	4.8	1	6.9
Meningitis, Other Bacterial*	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	2	1.9	0	0.0
Salmonellosis	27	11.6	5	7.7	24	13.6	4	17.2	6	14.6	8	7.7	1	6.9
Shigellosis	15	6.5	1	1.5	1	0.6	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	5	2.2	4	6.1	1	0.6	0	0.0	0	0.0	1	1.0	0	0.0
Streptococcal Disease, Group B, in Newborn*	2	*	0	*	0	*	0	*	1	*	1	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	15	6.5	7	10.7	20	11.3	1	4.3	2	4.9	11	10.6	1	6.9
Ages < 5 Years*	2	*	0	*	2	*	1	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	8	*	2	*	7	*	0	*	0	*	2	*	0	*
Drug Susceptible, Ages 5+ Years*	5	*	5	*	11	*	0	*	2	*	9	*	1	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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	0.4	0	0.0	0	0.0	0	0.0	1	2.4	1	1.0	0	0.0
<b>SUB-TOTAL</b>	<b>119</b>	<b>51.3</b>	<b>32</b>	<b>49.0</b>	<b>117</b>	<b>66.3</b>	<b>21</b>	<b>90.3</b>	<b>92</b>	<b>224.6</b>	<b>54</b>	<b>51.8</b>	<b>10</b>	<b>69.4</b>

### HEPATITIS

Hepatitis A	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	3	1.3	5	7.7	0	0.0	1	4.3	0	0.0	6	5.8	0	0.0
Hepatitis B, Chronic*	28	12.1	28	42.8	8	4.5	14	60.2	3	7.3	14	13.4	0	0.0
Hepatitis C, Acute*	0	0.0	1	1.5	0	0.0	1	4.3	0	0.0	1	1.0	1	6.9
Hepatitis C, Past or Present*	384	165.6	179	273.9	103	58.4	77	331.1	25	61.0	70	67.2	20	138.8
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>415</b>	<b>179.0</b>	<b>213</b>	<b>325.9</b>	<b>112</b>	<b>63.5</b>	<b>93</b>	<b>399.9</b>	<b>28</b>	<b>68.3</b>	<b>91</b>	<b>87.3</b>	<b>21</b>	<b>145.7</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

OUTBREAKS*	Mahoning N	Mahoning Rate	Marion N	Marion Rate	Medina N	Medina Rate	Meigs N	Meigs Rate	Mercer N	Mercer Rate	Miami N	Miami Rate	Monroe N	Monroe Rate
Community*	0	n/a	0	n/a	1	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Foodborne*	5	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	1	n/a	0	n/a	1	n/a	1	n/a	1	n/a	0	n/a
Institutional*	0	n/a	1	n/a	0	n/a	0	n/a	3	n/a	2	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
<b>SUB-TOTAL</b>	<b>5</b>	<b>n/a</b>	<b>2</b>	<b>n/a</b>	<b>2</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>5</b>	<b>n/a</b>	<b>3</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>														
Influenza-Associated Hospitalization	107	46.1	27	41.3	65	36.8	8	34.4	17	41.5	28	26.9	3	20.8
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	12	5.2	3	4.6	9	5.1	0	0.0	25	61.0	4	3.8	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	5	2.2	5	7.7	9	5.1	0	0.0	4	9.8	8	7.7	0	0.0
<b>SUB-TOTAL</b>	<b>124</b>	<b>53.5</b>	<b>37</b>	<b>56.6</b>	<b>83</b>	<b>47.1</b>	<b>8</b>	<b>34.4</b>	<b>46</b>	<b>112.3</b>	<b>40</b>	<b>38.4</b>	<b>3</b>	<b>20.8</b>
<b>ZONOSES</b>														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	1	0.4	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> *	1	0.4	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
Lyme Disease	5	2.2	0	0.0	3	1.7	0	0.0	0	0.0	0	0.0	1	6.9
Malaria	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	1	0.4	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	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>12</b>	<b>3.9</b>	<b>0</b>	<b>0.0</b>	<b>3</b>	<b>1.7</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>2</b>	<b>0.0</b>	<b>1</b>	<b>6.9</b>
<b>GRAND TOTAL</b>	<b>675</b>	<b>287.6</b>	<b>284</b>	<b>431.5</b>	<b>317</b>	<b>178.6</b>	<b>123</b>	<b>524.6</b>	<b>171</b>	<b>405.2</b>	<b>190</b>	<b>177.5</b>	<b>35</b>	<b>242.9</b>
<b>POPULATION</b>	<b>231,900</b>		<b>65,355</b>		<b>176,395</b>		<b>23,257</b>		<b>40,968</b>		<b>104,224</b>		<b>14,409</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Montgomery	Morgan	Morrow	Muskingum	Noble	Ottawa	Paulding	
	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	1	0.2	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	1	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	55	10.3	8	54.1	3	8.6	20	23.2
Coccidioidomycosis	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
Cryptosporidiosis	10	1.9	1	6.8	0	0.0	13	15.1
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	11	2.1	1	6.8	1	2.9	2	2.3
O157:H7	4	0.8	0	0.0	1	2.9	2	2.3
Not O157:H7	7	1.3	1	6.8	0	0.0	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	10	1.9	0	0.0	0	0.0	7	8.1
<i>Haemophilus influenzae</i> , Invasive Disease	14	2.6	0	0.0	0	0.0	2	2.3
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	51	9.6	0	0.0	1	2.9	6	7.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	1	0.2	0	0.0	0	0.0	1	1.2
Meningitis, Aseptic	49	9.2	0	0.0	1	2.9	5	5.8
Meningitis, Other Bacterial*	9	1.7	0	0.0	0	0.0	0	0.0
Salmonellosis	68	12.8	2	13.5	4	11.4	21	24.3
Shigellosis	23	4.3	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
Streptococcal Disease, Group A, Invasive	20	3.8	0	0.0	2	5.7	0	0.0
Streptococcal Disease, Group B, in Newborn*	5	*	1	*	1	*	1	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	50	9.4	0	0.0	4	11.4	14	16.2
Ages < 5 Years*	3	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	8	*	0	*	0	*	1	*
Drug Susceptible, Ages 5+ Years*	39	*	0	*	4	*	11	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	2	0.4	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	2	0.4	0	0.0	0	0.0	0	0.0
Yersiniosis	1	0.2	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>380</b>	<b>71.4</b>	<b>13</b>	<b>88.0</b>	<b>17</b>	<b>48.5</b>	<b>92</b>	<b>106.6</b>
							<b>6</b>	<b>41.9</b>
							<b>29</b>	<b>70.9</b>
							<b>11</b>	<b>58.0</b>

### HEPATITIS

Hepatitis A	1	0.2	0	0.0	0	0.0	2	2.3	0	0.0	0	0.0
Hepatitis B, Acute*	33	6.2	0	0.0	1	2.9	12	13.9	0	0.0	0	0.0
Hepatitis B, Chronic*	171	32.1	2	13.5	4	11.4	16	18.5	5	34.9	3	7.3
Hepatitis C, Acute*	0	0.0	1	6.8	0	0.0	3	3.5	0	0.0	0	0.0
Hepatitis C, Past or Present*	840	157.8	18	121.8	45	128.3	111	128.6	28	195.4	28	68.5
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>1,045</b>	<b>196.3</b>	<b>21</b>	<b>142.1</b>	<b>50</b>	<b>142.6</b>	<b>144</b>	<b>166.9</b>	<b>33</b>	<b>230.4</b>	<b>31</b>	<b>75.8</b>
									<b>11</b>	<b>58.0</b>		

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

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	0	n/a	0	n/a
Healthcare-Associated*	5	n/a	0	n/a										
Institutional*	6	n/a	0	n/a	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a
Waterborne*	1	n/a	0	n/a										
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
<b>SUB-TOTAL</b>	<b>12</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>														
Influenza-Associated Hospitalization	249	46.8	10	67.7	8	22.8	47	54.5	6	41.9	5	12.2	2	10.5
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	56	10.5	1	6.8	1	2.9	6	7.0	0	0.0	0	0.0	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	22	4.1	1	6.8	1	2.9	3	3.5	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>327</b>	<b>61.4</b>	<b>12</b>	<b>81.2</b>	<b>10</b>	<b>28.5</b>	<b>56</b>	<b>64.9</b>	<b>6</b>	<b>41.9</b>	<b>5</b>	<b>12.2</b>	<b>2</b>	<b>10.5</b>
<b>ZONOSES</b>														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	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> *	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	0.2	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	1	2.9	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	8	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	2	0.4	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
Acute	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	0	n/a										
Spotted Fever Rickettsiosis*	2	0.4	1	6.8	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	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>16</b>	<b>2.6</b>	<b>1</b>	<b>6.8</b>	<b>1</b>	<b>2.9</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>
<b>GRAND TOTAL</b>	<b>1,780</b>	<b>331.8</b>	<b>47</b>	<b>318.1</b>	<b>78</b>	<b>222.4</b>	<b>292</b>	<b>338.4</b>	<b>46</b>	<b>314.1</b>	<b>66</b>	<b>159.0</b>	<b>24</b>	<b>126.5</b>
<b>POPULATION</b>	<b>532,258</b>		<b>14,777</b>		<b>35,074</b>		<b>86,290</b>		<b>14,326</b>		<b>40,877</b>		<b>18,976</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Perry N	Perry Rate	Pickaway N	Pickaway Rate	Pike N	Pike Rate	Portage N	Portage Rate	Preble N	Preble Rate	Putnam N	Putnam Rate	Richland N	Richland Rate
Amebiasis	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	1	2.9	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	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	8	22.2	3	5.3	0	0.0	16	9.9	8	19.4	5	14.7	8	6.6
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.6
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	5.6	1	1.8	0	0.0	7	4.3	3	7.3	3	8.8	8	6.6
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	1	2.8	2	3.5	0	0.0	3	1.8	1	2.4	0	0.0	1	0.8
O157:H7	1	2.8	2	3.5	0	0.0	1	0.6	0	0.0	0	0.0	1	0.8
Not O157:H7	0	0.0	0	0.0	0	0.0	2	1.2	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	1	2.8	2	3.5	1	3.5	3	1.8	2	4.8	2	5.9	4	3.3
<i>Haemophilus influenzae</i> , Invasive Disease	0	0.0	0	0.0	0	0.0	2	1.2	1	2.4	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	1	2.8	3	5.3	3	10.6	6	3.7	0	0.0	3	8.8	5	4.1
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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
Meningitis, Aseptic	0	0.0	0	0.0	1	3.5	9	5.5	1	2.4	7	20.6	5	4.1
Meningitis, Other Bacterial*	0	0.0	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	4	11.1	7	12.3	5	17.7	24	14.8	6	14.5	4	11.8	11	9.0
Shigellosis	0	0.0	0	0.0	1	3.5	1	0.6	1	2.4	1	2.9	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	3.5	0	0.0	3	1.8	0	0.0	0	0.0	5	4.1
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	1	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	3	8.3	6	10.5	4	14.2	20	12.3	7	16.9	3	8.8	12	9.9
Ages < 5 Years*	1	*	0	*	0	*	1	*	1	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	2	*	4	*	1	*	10	*	1	*	0	*	2	*
Drug Susceptible, Ages 5+ Years*	0	*	2	*	3	*	9	*	5	*	3	*	10	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>22</b>	<b>61.1</b>	<b>27</b>	<b>47.4</b>	<b>16</b>	<b>56.7</b>	<b>95</b>	<b>58.5</b>	<b>32</b>	<b>77.4</b>	<b>29</b>	<b>85.2</b>	<b>63</b>	<b>51.8</b>

### HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	2	1.2	1	2.4	1	2.9	0	0.0
Hepatitis B, Acute*	4	11.1	1	1.8	0	0.0	11	6.8	11	26.6	0	0.0	10	8.2
Hepatitis B, Chronic*	15	41.7	15	26.3	13	46.1	24	14.8	17	41.1	1	2.9	29	23.8
Hepatitis C, Acute*	1	2.8	1	1.8	2	7.1	2	1.2	1	2.4	0	0.0	8	6.6
Hepatitis C, Past or Present*	61	169.5	111	194.7	169	598.9	160	98.6	54	130.7	13	38.2	262	215.3
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>81</b>	<b>225.1</b>	<b>128</b>	<b>224.6</b>	<b>184</b>	<b>652.1</b>	<b>199</b>	<b>122.6</b>	<b>84</b>	<b>203.2</b>	<b>15</b>	<b>44.1</b>	<b>309</b>	<b>253.9</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

OUTBREAKS*	Perry N	Perry Rate	Pickaway N	Pickaway Rate	Pike N	Pike Rate	Portage N	Portage Rate	Preble N	Preble Rate	Putnam N	Putnam Rate	Richland N	Richland Rate
Community*	0	n/a	1	n/a	0	n/a	3	n/a	0	n/a	0	n/a	1	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	2	n/a	0	n/a	0	n/a	1	n/a
Institutional*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	1	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	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
<b>SUB-TOTAL</b>	<b>0</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>6</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>2</b>	<b>n/a</b>	<b>2</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>														
Influenza-Associated Hospitalization	9	25.0	12	21.1	14	49.6	29	17.9	12	29.0	15	44.1	33	27.1
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Imported	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	0	0.0
Mumps	0	0.0	2	3.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	1	2.8	5	8.8	1	3.5	3	1.8	0	0.0	0	0.0	7	5.8
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	1	2.8	3	5.3	2	7.1	8	4.9	7	16.9	0	0.0	3	2.5
<b>SUB-TOTAL</b>	<b>11</b>	<b>30.6</b>	<b>22</b>	<b>38.6</b>	<b>17</b>	<b>60.2</b>	<b>41</b>	<b>25.3</b>	<b>19</b>	<b>46.0</b>	<b>15</b>	<b>44.1</b>	<b>43</b>	<b>35.3</b>
<b>ZONOSES</b>														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	3	10.6	0	0.0	0	0.0	0	0.0	0	0.0
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	3	10.6	0	0.0	0	0.0	0	0.0	0	0.0
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	5.6	0	0.0	2	7.1	1	0.6	0	0.0	0	0.0	0	0.0
Lyme Disease	1	2.8	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	3	2.5
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
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	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
<b>SUB-TOTAL</b>	<b>3</b>	<b>8.3</b>	<b>0</b>	<b>0.0</b>	<b>5</b>	<b>17.7</b>	<b>2</b>	<b>1.2</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>3</b>	<b>2.5</b>
<b>GRAND TOTAL</b>	<b>117</b>	<b>325.1</b>	<b>178</b>	<b>310.5</b>	<b>222</b>	<b>786.8</b>	<b>343</b>	<b>207.7</b>	<b>135</b>	<b>326.6</b>	<b>61</b>	<b>173.3</b>	<b>420</b>	<b>343.4</b>
<b>POPULATION</b>	<b>35,985</b>		<b>56,998</b>		<b>28,217</b>		<b>162,275</b>		<b>41,329</b>		<b>34,042</b>		<b>121,707</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

GENERAL INFECTIOUS DISEASES	Ross	Sandusky	Scioto	Seneca	Shelby	Stark	Summit	
	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	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
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	6	7.8	6	10.1	13	16.9	6	10.8
Coccidioidomycosis	0	0.0	1	1.7	1	1.3	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	0	0.0	0	0.0	3	3.9	2	3.6
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	2	2.6	0	0.0	1	1.3	0	0.0
O157:H7	1	1.3	0	0.0	1	1.3	0	0.0
Not O157:H7	1	1.3	0	0.0	0	0.0	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	0	0.0	1	1.7	1	1.3	2	3.6
<i>Haemophilus influenzae</i> , Invasive Disease	2	2.6	3	5.0	1	1.3	1	1.8
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	2	2.6	2	3.4	1	1.3	0	0.0
Leprosy (Hansen Disease)	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
Meningitis, Aseptic	6	7.8	6	10.1	10	13.0	2	3.6
Meningitis, Other Bacterial*	1	1.3	0	0.0	0	0.0	0	0.0
Salmonellosis	4	5.2	13	21.8	3	3.9	6	10.8
Shigellosis	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
Streptococcal Disease, Group A, Invasive	1	1.3	2	3.4	4	5.2	0	0.0
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	5	6.5	7	11.7	1	1.3	0	0.0
Ages < 5 Years*	0	*	0	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	3	*	2	*	1	*	1	*
Drug Susceptible, Ages 5+ Years*	2	*	5	*	0	*	3	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	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
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>29</b>	<b>37.6</b>	<b>41</b>	<b>68.7</b>	<b>39</b>	<b>50.8</b>	<b>19</b>	<b>34.2</b>
							<b>49</b>	<b>100.2</b>
							<b>295</b>	<b>78.6</b>
							<b>302</b>	<b>55.7</b>

### HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	2	0.4
Hepatitis B, Acute*	4	5.2	3	5.0	4	5.2	1	1.8	1	2.0
Hepatitis B, Chronic*	19	24.6	1	1.7	41	53.4	8	14.4	11	22.5
Hepatitis C, Acute*	2	2.6	1	1.7	4	5.2	3	5.4	0	0.0
Hepatitis C, Past or Present*	236	305.8	26	43.6	339	441.3	78	140.3	62	126.8
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>261</b>	<b>338.2</b>	<b>31</b>	<b>51.9</b>	<b>388</b>	<b>505.0</b>	<b>90</b>	<b>161.8</b>	<b>74</b>	<b>151.3</b>
							<b>336</b>	<b>89.6</b>	<b>511</b>	<b>94.3</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

OUTBREAKS*	Ross		Sandusky		Scioto		Seneca		Shelby		Stark		Summit	
	N	Rate	N	Rate	N	Rate								
Community*	0	n/a	0	n/a	3	n/a								
Foodborne*	1	n/a	2	n/a	0	n/a	0	n/a	0	n/a	3	n/a	3	n/a
Healthcare-Associated*	0	n/a	5	n/a	4	n/a								
Institutional*	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a	6	n/a	3	n/a
Waterborne*	0	n/a	1	n/a	0	n/a								
Zoonotic*	0	n/a	0	n/a	0	n/a								
<b>SUB-TOTAL</b>	<b>1</b>	<b>n/a</b>	<b>2</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>15</b>	<b>n/a</b>	<b>13</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>														
Influenza-Associated Hospitalization	40	51.8	11	18.4	12	15.6	18	32.4	11	22.5	257	68.5	197	36.3
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8	0	0.0
Mumps	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	7	9.1	1	1.7	1	1.3	3	5.4	2	4.1	29	7.7	42	7.7
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	6	7.8	2	3.4	2	2.6	4	7.2	3	6.1	23	6.1	10	1.8
<b>SUB-TOTAL</b>	<b>54</b>	<b>70.0</b>	<b>14</b>	<b>23.5</b>	<b>15</b>	<b>19.5</b>	<b>25</b>	<b>45.0</b>	<b>16</b>	<b>32.7</b>	<b>312</b>	<b>83.2</b>	<b>249</b>	<b>45.9</b>
<b>ZONOSES</b>														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Brucellosis	0	0.0	0	0.0	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.4
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	5	6.5	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	4	5.2	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	2	2.6	0	0.0	1	1.3	0	0.0	2	4.1	0	0.0	2	0.4
Lyme Disease	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0	1	0.3	3	0.6
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	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	2	n/a	0	n/a								
Spotted Fever Rickettsiosis*	1	1.3	0	0.0	1	1.3	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	0.3	2	0.4
<b>SUB-TOTAL</b>	<b>3</b>	<b>3.9</b>	<b>0</b>	<b>0.0</b>	<b>8</b>	<b>10.4</b>	<b>1</b>	<b>1.8</b>	<b>2</b>	<b>4.1</b>	<b>5</b>	<b>0.8</b>	<b>10</b>	<b>1.8</b>
<b>GRAND TOTAL</b>	<b>348</b>	<b>449.7</b>	<b>88</b>	<b>144.1</b>	<b>451</b>	<b>585.7</b>	<b>136</b>	<b>242.8</b>	<b>141</b>	<b>288.3</b>	<b>963</b>	<b>252.2</b>	<b>1,085</b>	<b>197.8</b>
<b>POPULATION</b>	<b>77,170</b>		<b>59,679</b>		<b>76,825</b>		<b>55,610</b>		<b>48,901</b>		<b>375,165</b>		<b>541,968</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

**REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015**

GENERAL INFECTIOUS DISEASES	Trumbull N	Trumbull Rate	Tuscarawas N	Tuscarawas Rate	Union N	Union Rate	Van Wert N	Van Wert Rate	Vinton N	Vinton Rate	Warren N	Warren Rate	Washington N	Washington Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	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	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	15	7.4	17	18.3	23	42.4	4	14.0	1	7.7	33	14.7	25	40.9
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	6	2.9	2	2.2	11	20.3	0	0.0	1	7.7	2	0.9	1	1.6
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	3	1.5	2	2.2	3	5.5	2	7.0	0	0.0	6	2.7	1	1.6
O157:H7	0	0.0	0	0.0	1	1.8	2	7.0	0	0.0	2	0.9	0	0.0
Not O157:H7	3	1.5	2	2.2	2	3.7	0	0.0	0	0.0	4	1.8	1	1.6
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	4	2.0	5	5.4	1	1.8	2	7.0	0	0.0	4	1.8	0	0.0
<i>Haemophilus influenzae</i> , Invasive Disease	6	2.9	1	1.1	0	0.0	0	0.0	0	0.0	4	1.8	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	8	3.9	4	4.3	2	3.7	1	3.5	0	0.0	6	2.7	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	0	0.0	0	0.0
Meningitis, Aseptic	3	1.5	8	8.6	2	3.7	2	7.0	0	0.0	20	8.9	4	6.5
Meningitis, Other Bacterial*	0	0.0	2	2.2	0	0.0	0	0.0	0	0.0	3	1.3	1	1.6
Salmonellosis	19	9.3	17	18.3	7	12.9	10	35.0	0	0.0	29	12.9	12	19.6
Shigellosis	18	8.8	1	1.1	3	5.5	0	0.0	0	0.0	4	1.8	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	1	0.4	0	0.0
Streptococcal Disease, Group A, Invasive	3	1.5	0	0.0	4	7.4	0	0.0	0	0.0	3	1.3	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	0	0.0
<i>Streptococcus pneumoniae</i> , Invasive Disease	20	9.8	5	5.4	1	1.8	0	0.0	1	7.7	15	6.7	1	1.6
Ages < 5 Years*	0	*	1	*	0	*	0	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	9	*	1	*	0	*	0	*	1	*	9	*	0	*
Drug Susceptible, Ages 5+ Years*	11	*	3	*	1	*	0	*	0	*	6	*	1	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	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
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	6	6.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>106</b>	<b>52.0</b>	<b>70</b>	<b>75.3</b>	<b>57</b>	<b>105.0</b>	<b>21</b>	<b>73.5</b>	<b>3</b>	<b>23.0</b>	<b>132</b>	<b>58.8</b>	<b>47</b>	<b>76.9</b>

**HEPATITIS**

Hepatitis A	1	0.5	1	1.1	0	0.0	0	0.0	0	0.0	2	0.9	0	0.0
Hepatitis B, Acute*	5	2.5	0	0.0	0	0.0	1	3.5	0	0.0	6	2.7	0	0.0
Hepatitis B, Chronic*	52	25.5	6	6.5	13	24.0	0	0.0	6	46.0	41	18.3	3	4.9
Hepatitis C, Acute*	2	1.0	1	1.1	0	0.0	2	7.0	1	7.7	0	0.0	0	0.0
Hepatitis C, Past or Present*	318	156.1	71	76.4	56	103.2	36	126.0	53	406.2	211	94.0	62	101.5
Hepatitis E	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>378</b>	<b>185.5</b>	<b>79</b>	<b>85.0</b>	<b>70</b>	<b>129.0</b>	<b>39</b>	<b>136.5</b>	<b>60</b>	<b>459.8</b>	<b>260</b>	<b>115.8</b>	<b>65</b>	<b>106.4</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

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	1	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	1	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	3	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
<b>SUB-TOTAL</b>	<b>0</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>3</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>														
Influenza-Associated Hospitalization	56	27.5	45	48.4	16	29.5	6	21.0	2	15.3	57	25.4	48	78.5
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	6	2.9	3	3.2	2	3.7	2	7.0	0	0.0	11	4.9	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	4	2.0	6	6.5	2	3.7	6	21.0	0	0.0	7	3.1	1	1.6
<b>SUB-TOTAL</b>	<b>66</b>	<b>32.4</b>	<b>54</b>	<b>58.1</b>	<b>20</b>	<b>36.8</b>	<b>14</b>	<b>49.0</b>	<b>2</b>	<b>15.3</b>	<b>75</b>	<b>33.4</b>	<b>50</b>	<b>81.8</b>
<b>ZONOSES</b>														
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	2	15.3	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	2	15.3	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	1.8	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	3	1.5	1	1.1	1	1.8	0	0.0	0	0.0	4	1.8	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	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
Acute	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	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SUB-TOTAL</b>	<b>7</b>	<b>2.0</b>	<b>1</b>	<b>1.1</b>	<b>2</b>	<b>3.7</b>	<b>0</b>	<b>0.0</b>	<b>2</b>	<b>15.3</b>	<b>6</b>	<b>2.2</b>	<b>0</b>	<b>0.0</b>
<b>GRAND TOTAL</b>	<b>557</b>	<b>271.9</b>	<b>205</b>	<b>219.6</b>	<b>152</b>	<b>274.5</b>	<b>75</b>	<b>259.1</b>	<b>68</b>	<b>513.5</b>	<b>473</b>	<b>210.3</b>	<b>162</b>	<b>265.1</b>
<b>POPULATION</b>	<b>203,751</b>		<b>92,916</b>		<b>54,277</b>		<b>28,562</b>		<b>13,048</b>		<b>224,469</b>		<b>61,112</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

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	16	0.1
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	35	0.3
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	29	0.2
Infant*	0	*	0	*	0	*	0	*	0	n/a	5	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Campylobacteriosis	27	23.3	4	10.8	20	15.4	16	71.9	0	n/a	1,786	15.4
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	13	0.1
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	8	0.1
Cryptosporidiosis	4	3.4	1	2.7	4	3.1	2	9.0	0	n/a	429	3.7
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
<i>Escherichia coli</i> , Shiga Toxin-Producing	4	3.4	0	0.0	5	3.9	0	0.0	0	n/a	265	2.3
O157:H7	2	1.7	0	0.0	3	2.3	0	0.0	0	n/a	105	0.9
Not O157:H7	2	1.7	0	0.0	2	1.5	0	0.0	0	n/a	135	1.2
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	25	0.2
Giardiasis	4	3.4	0	0.0	1	0.8	0	0.0	0	n/a	376	3.2
<i>Haemophilus influenzae</i> , Invasive Disease	1	0.9	0	0.0	1	0.8	0	0.0	0	n/a	162	1.4
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
Legionellosis	6	5.2	1	2.7	2	1.5	2	9.0	0	n/a	566	4.9
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Listeriosis	0	0.0	1	2.7	0	0.0	0	0.0	0	n/a	25	0.2
Meningitis, Aseptic	5	4.3	0	0.0	10	7.7	0	0.0	0	n/a	746	6.4
Meningitis, Other Bacterial*	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	81	0.7
Salmonellosis	14	12.1	2	5.4	35	27.0	5	22.5	0	n/a	1,373	11.8
Shigellosis	1	0.9	0	0.0	1	0.8	0	0.0	0	n/a	748	6.4
<i>Staphylococcus aureus</i> , Intermediate Resistance to Vancomycin (VISA)	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	12	0.1
Streptococcal Disease, Group A, Invasive	1	0.9	1	2.7	0	0.0	0	0.0	0	n/a	310	2.7
Streptococcal Disease, Group B, in Newborn*	3	*	0	*	0	*	0	*	0	n/a	73	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	6	0.1
<i>Streptococcus pneumoniae</i> , Invasive Disease	5	4.3	0	0.0	6	4.6	3	13.5	0	n/a	965	8.3
Ages < 5 Years*	0	*	0	*	0	*	0	*	0	n/a	56	*
Drug Resistant, Ages 5+ Years*	0	*	0	*	1	*	0	*	0	n/a	269	*
Drug Susceptible, Ages 5+ Years*	5	*	0	*	5	*	3	*	0	n/a	640	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	8	0.1
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	15	0.1
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	15	0.1
Yersiniosis	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	44	0.4
<b>SUB-TOTAL</b>	<b>76</b>	<b>65.5</b>	<b>10</b>	<b>26.9</b>	<b>87</b>	<b>67.1</b>	<b>28</b>	<b>125.9</b>	<b>0</b>	<b>n/a</b>	<b>8,068</b>	<b>69.5</b>

### HEPATITIS

Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	36	0.3
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	1	4.5	0	n/a	403	3.5
Hepatitis B, Chronic*	11	9.5	1	2.7	8	6.2	4	18.0	33	n/a	2,423	20.9
Hepatitis C, Acute*	2	1.7	0	0.0	0	0.0	0	0.0	0	n/a	122	1.1
Hepatitis C, Past or Present*	88	75.8	18	48.5	77	59.4	23	103.4	513	n/a	15,924	137.1
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
<b>SUB-TOTAL</b>	<b>101</b>	<b>87.0</b>	<b>19</b>	<b>51.2</b>	<b>85</b>	<b>65.5</b>	<b>28</b>	<b>125.9</b>	<b>546</b>	<b>n/a</b>	<b>18,909</b>	<b>162.8</b>

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE, OHIO, 2015

OUTBREAKS*	Wayne		Williams		Wood		Wyandot		Unknown		TOTAL	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	48	n/a
Foodborne*	0	n/a	0	n/a	7	n/a	0	n/a	0	n/a	77	n/a
Healthcare-Associated*	0	n/a	1	n/a	5	n/a	0	n/a	0	n/a	97	n/a
Institutional*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	163	n/a
Waterborne*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	8	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	6	n/a
<b>SUB-TOTAL</b>	<b>0</b>	<b>n/a</b>	<b>1</b>	<b>n/a</b>	<b>16</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>399</b>	<b>n/a</b>
<b>VACCINE-PREVENTABLE</b>												
Influenza-Associated Hospitalization	31	26.7	2	5.4	21	16.2	6	27.0	0	n/a	3,799	32.7
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	n/a	2	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Meningococcal Disease	0	0.0	1	2.7	0	0.0	0	0.0	0	n/a	18	0.2
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	14	0.1
Pertussis	17	14.6	0	0.0	0	0.0	1	4.5	0	n/a	798	6.9
Tetanus	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Varicella	12	10.3	0	0.0	1	0.8	2	9.0	0	n/a	494	4.3
<b>SUB-TOTAL</b>	<b>61</b>	<b>52.6</b>	<b>3</b>	<b>8.1</b>	<b>22</b>	<b>17.0</b>	<b>9</b>	<b>40.5</b>	<b>0</b>	<b>n/a</b>	<b>5,128</b>	<b>44.2</b>
<b>ZOONOSES</b>												
Babesiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	10	0.1
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	11	0.1
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	19	0.2
<i>Anaplasma phagocytophilum</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
<i>Ehrlichia chaffeensis</i> *	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	17	0.1
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	0	0.0	0	0.0	0	n/a	24	0.2
Lyme Disease	2	1.7	0	0.0	1	0.8	0	0.0	0	n/a	147	1.3
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	36	0.3
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	4	0.0
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	4	0.0
Rabies, Animal*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	26	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	13	0.1
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	4	10.8	1	0.8	0	0.0	0	n/a	35	0.3
<b>SUB-TOTAL</b>	<b>4</b>	<b>2.6</b>	<b>4</b>	<b>10.8</b>	<b>2</b>	<b>1.5</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>n/a</b>	<b>328</b>	<b>2.6</b>
<b>GRAND TOTAL</b>	<b>242</b>	<b>207.6</b>	<b>37</b>	<b>97.0</b>	<b>212</b>	<b>151.1</b>	<b>65</b>	<b>292.2</b>	<b>546</b>	<b>n/a</b>	<b>32,832</b>	<b>279.0</b>
<b>POPULATION</b>	<b>116,063</b>		<b>37,120</b>		<b>129,730</b>		<b>22,243</b>		<b>0</b>		<b>11,613,423</b>	

N = number of cases reported.

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

n/a = not applicable.

\* Please see Technical Notes (pp. 89-91).

**ESCHERICHIA COLI, SHIGA TOXIN-PRODUCING SEROGROUPS BY YEAR OF ONSET, OHIO, 2011-2015**

SEROGROUP	2011	2012	2013	2014	2015
O1	1	0	0	0	0
O5	0	1	4	1	3
O8	1	0	0	1	0
O26*	14	26	27	21	32
O28	0	0	1	0	0
O36	0	0	1	0	0
O39	0	0	0	1	1
O43	1	0	0	0	0
O45*	9	14	15	10	3
O55	0	1	0	0	0
O61	0	0	0	0	1
O69	0	1	2	0	0
O71	0	2	4	7	9
O76	0	2	2	1	2
O77	0	0	0	1	1
O78	0	1	0	0	0
O80	1	0	0	0	1
O84	0	1	0	1	0
O91	1	1	0	2	3
O103*	14	18	25	27	35
O105	1	0	0	0	0
O111*	12	10	21	11	13
O118	2	1	1	0	8
O121*	5	1	10	2	2
O123	0	1	0	1	0
O124	0	1	0	1	0
O128	0	0	1	0	1
O145*	0	4	2	2	6
O146	1	1	0	2	0
O152	0	1	0	0	0
O157	92	117	75	89	105
O158	1	0	0	0	0
O159	0	0	1	0	0
O163	0	1	0	0	0
O165	0	1	2	1	1
O166	0	0	0	0	1
O168	1	0	0	0	0
O174	0	0	0	1	0
O178	0	0	1	1	1
O180	0	0	0	1	0
O181	0	0	0	0	2
O185	0	0	0	1	0
O186	1	2	0	5	5
O Rough	2	4	2	1	1
O Undetermined	3	2	3	2	3
Unknown	19	25	23	9	25
<b>TOTAL</b>	<b>182</b>	<b>240</b>	<b>223</b>	<b>203</b>	<b>265</b>

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

***HAEMOPHILUS INFLUENZAE*, INVASIVE DISEASE  
SEROTYPES IN CHILDREN <5 YEARS OF AGE  
BY YEAR OF ONSET, OHIO, 2011-2015**

SEROTYPE	2011	2012	2013	2014	2015
Group A	0	0	5	0	1
Group B	2	3	1	0	2
Group C	0	0	0	0	0
Group E	2	3	0	0	0
Group F	3	1	2	4	2
Non-Typeable	12	10	21	13	12
Unknown	0	0	0	2	0
<b>TOTAL</b>	<b>19</b>	<b>17</b>	<b>29</b>	<b>19</b>	<b>17</b>

**MENINGOCOCCAL DISEASE SEROGROUPS BY  
YEAR OF ONSET, OHIO, 2011-2015**

SEROGROUP	2011	2012	2013	2014	2015
Group A	0	0	0	2	0
Group B	7	4	3	2	13
Group C	8	6	0	0	2
Group W	0	0	2	5	0
Group Y	5	8	4	1	1
Not Groupable	2	1	0	0	2
Unknown	2	5	1	2	0
<b>TOTAL</b>	<b>24</b>	<b>24</b>	<b>10</b>	<b>12</b>	<b>18</b>

**SALMONELLA SEROTYPES BY YEAR OF ONSET,  
OHIO, 2011-2015**

SEROTYPE	2011	2012	2013	2014	2015
Abony	0	1	0	1	0
Adelaide	2	1	0	0	0
Agbeni	9	8	9	7	9
Ago	1	0	0	0	0
Agona	13	11	8	10	5
Agoueve	1	0	2	0	0
Alachua	0	0	1	1	0
Albany	0	1	0	0	0
Albert	0	0	0	0	2
Altona	12	1	2	1	1
Anatum	6	6	6	4	4
Anatum, var 15 +	1	0	0	0	0
Apapa	0	0	0	2	1
Bailldon	1	3	0	5	6
Bardo	1	0	0	0	0
Bareilly	3	4	3	7	10
Barranquilla	1	0	0	0	0
Bere	0	0	1	0	0
Berta	16	9	10	6	6
Blijdorp	0	0	1	0	0
Blockley	0	0	0	1	0
Bodjonegoro	0	0	1	0	0
Bongori	0	0	0	0	2
Bovis-morbificans	3	13	2	3	9
Braenderup	17	22	20	28	24
Brandenburg	3	1	0	2	1
Bredeney	0	1	2	1	0
Cerro	1	0	0	1	0
Chailey	0	0	1	0	3
Chester	1	2	1	3	3
Choleraesuis	1	0	0	0	0
Choleraesuis, var Kunzendorf	0	1	0	0	0
Colindale	1	1	0	0	0
Cotham	0	2	0	2	3
Cubana	0	0	0	1	0
Dahra	1	0	0	0	0
Derby	0	1	1	4	0
Dublin	5	2	3	2	11
Durban	1	2	0	2	0
Ealing	2	0	2	0	1
Eastbourne	1	0	0	0	0
Enteritidis	277	264	289	305	397
Fluntern	0	1	1	0	0
Fresno	0	0	0	1	0
Gaminara	2	0	4	0	2
Gera	0	0	2	0	0
Give	3	0	1	0	1
Hadar	5	7	2	4	6
Hartford	17	32	11	12	15
Havana	1	0	2	0	0
Heidelberg	27	25	27	32	44
Holcomb	0	1	1	1	1
Hvittingfoss	5	3	2	2	1
Indiana	0	0	0	0	1
Infantis	26	38	42	40	33
Irumu	0	0	0	0	1
Isangi	0	0	0	0	2
Javiana	33	22	26	35	35
Johannesburg	4	3	1	0	2
Kedougou	0	1	0	0	0
Kentucky	0	2	1	0	6
Kiambu	4	0	1	1	1
Kingabwa	0	1	0	0	0
Kingston	0	0	0	1	0
Kintambo	1	0	0	0	2
Kokomlemle	0	0	0	1	0
Kottbus	1	0	0	0	1
Lagon	0	0	0	0	1

**SALMONELLA SEROTYPES BY YEAR OF ONSET,  
OHIO, 2011-2015**

SEROTYPE	2011	2012	2013	2014	2015
Lexington	0	0	0	1	0
Lille	0	3	2	0	0
Litchfield	12	9	3	4	6
Livingstone	3	0	0	0	0
Loma Linda	0	0	2	0	0
Lome	0	0	0	1	0
London	1	0	1	0	0
Madelia	0	0	0	0	1
Manhattan	1	2	2	0	1
Matadi	0	0	0	1	0
Mbandaka	2	5	13	5	2
Miami	4	1	6	5	2
Michigan	1	0	0	1	0
Mikawasima	0	0	0	0	1
Minnesota	0	0	1	1	1
Mississippi	3	3	2	12	3
Monschau	1	1	2	2	2
Montevideo	12	24	20	19	20
Muenchen	17	20	25	15	27
Muenster	2	5	1	3	4
Muenster, var 15 +	0	1	0	0	0
Napoli	0	0	0	1	4
Narashino	1	0	0	0	0
New Mexico	0	0	0	1	0
Newport	87	117	61	62	60
Nima	0	1	0	0	0
Norwich	5	2	1	2	9
Nottingham	1	0	0	0	1
Nyanza	0	0	0	0	1
Offa	0	0	0	1	0
Ohio	2	0	1	2	2
Ondersteopoort	0	0	0	0	1
Oranienburg	33	37	21	25	39
Orion	1	0	0	0	0
Oslo	0	0	0	1	2
Pakistan	0	0	0	0	1
Panama	5	6	3	2	5
Paratyphi A	5	1	2	6	1
Paratyphi B	0	1	0	0	0
Paratyphi B, var L - Tartrate +	44	59	51	38	17
Paratyphi B, var Tartrate +	0	0	1	0	0
Pensacola	0	0	0	1	0
Pomona	2	3	1	2	3
Poona	9	1	5	6	8
Potsdam	2	2	1	0	0
Putten	0	1	0	1	0
Reading	0	1	2	1	4
Richmond	0	1	0	0	0
Rissen	2	1	1	2	1
Roodepoort	0	0	1	0	0
Rubislaw	2	1	1	1	2
Saarbruecken	0	0	0	0	1
Saint Paul	14	24	19	27	13
San Diego	1	4	4	4	5
Schwartzengrund	2	1	2	2	9
Senftenberg	3	1	1	1	3
Shubra	0	0	0	0	1
Singapore	1	0	1	0	0
Skansen	0	0	0	1	0
Soerenga	0	1	0	0	0
Stanley	4	4	10	5	14
Stanleyville	0	0	0	1	0
Stellingen	0	1	0	0	0
Sueldorf	0	0	1	0	0
Takoradi	0	0	0	0	1
Tallahassee	0	0	0	0	1
Tarshyne	0	0	0	2	0
Teddington	0	0	0	0	1

**SALMONELLA SEROTYPES BY YEAR OF ONSET,  
OHIO, 2011-2015**

SEROTYPE	2011	2012	2013	2014	2015
Telekebir	0	1	0	0	2
Tennessee	0	0	0	1	1
Thompson	19	33	13	15	18
Tudu	0	0	0	0	1
Typhimurium	150	208	196	155	194
Typhimurium, var Copenhagen	40	0	1	0	0
Uganda	0	0	2	4	1
Uganda, var 15 +	0	0	1	0	0
Urbana	2	4	3	3	2
Uzaramo	0	0	0	1	0
Virchow	0	8	3	2	3
Wandsworth	0	0	1	0	0
Waycross	0	0	0	1	1
Weltevreden	0	4	1	2	4
Wien	0	0	0	0	1
Worthington	0	0	0	0	1
(I) 1,9,12:-:5	1	0	0	0	0
(I) 1,9,12:Non-motile	2	1	0	0	0
(I) 3,10:-:1,5	0	0	1	0	0
(I) 3,10:-l,w	0	0	1	0	0
(I) 3,10:Non-motile	0	0	0	1	0
(I) 4,5:b:-	0	0	1	0	0
(I) 4,5,12:-:1,2	0	0	0	1	0
(I) 4,5,12:-:2	0	0	0	1	0
(I) 4,5,12:b:-	1	0	0	0	3
(I) 4,5,12:b:-, var L + Tartrate +	0	0	0	1	0
(I) 4,5,12:b:-, var L - Tartrate +	0	0	0	0	21
(I) 4,5,12:d:-	0	0	0	1	0
(I) 4,5,12:i:-	44	75	118	72	85
(I) 4,5,12:r:-	1	0	0	0	0
(I) 4,5,12:Non-motile	0	0	1	1	1
(I) 6,7:-:1,5	0	0	0	1	0
(I) 6,7:-:5	0	0	0	3	0
(I) 6,7:-l,w	0	0	1	0	0
(I) 6,7:k:-	0	0	1	1	0
(I) 6,7:Non-motile	1	3	0	1	1
(I) 6,8:Non-motile	0	0	0	1	1
(I) 9,12:g,z51:-	0	0	0	1	0
(I) 9,12:Non-motile	0	0	2	1	1
(I) 18:Non-motile	0	1	0	0	0
(I) 47:b:-	0	0	0	0	1
(I) 47:m,t:-	0	0	1	0	0
(I) Rough Os:e,h:e,n,z15	0	0	1	0	0
(I) Rough Os:g,m:-	0	0	1	1	0
(I) Rough Os:i:2	0	0	0	1	0
(I) Rough Os:m,t:-	0	0	0	0	1
(I) Rough Os:z10:e,n,z15	1	0	0	0	0
(I) Rough Os:z38:-	1	0	0	0	0
(I) Rough Os:Non-motile	0	0	0	0	1
(II) 21:z10:z6	1	0	0	0	0
(III) Arizona	0	1	0	1	0
(IIIa) 44:z4,z23:-	1	0	0	0	0
(IIIb) 16:Non-motile	0	0	1	0	0
(IIIb) 47:k:-	0	0	0	1	0
(IIIb) 47:k:z53	0	0	0	0	1
(IIIb) 47:Non-motile	0	0	0	1	0
(IIIb) 48:i:z	0	1	1	1	0
(IIIb) 48:z52:z	0	0	0	0	2
(IIIb) 48:Non-motile	0	0	1	0	0
(IIIb) 50:k:-	0	1	0	0	0
(IIIb) 50:k:e,n,x	0	0	0	0	1
(IIIb) 50:k:z	0	0	1	0	0
(IIIb) 50:r:z	0	0	0	0	1
(IIIb) 50:Non-motile	0	0	1	0	0
(IIIb) 60:r:e,n,x,z15	0	0	0	1	1
(IIIb) 60:r:z	0	0	2	0	0
(IIIb) 61:-1,5	2	0	0	0	0
(IIIb) 61:-z53	0	0	0	1	0

**SALMONELLA SEROTYPES BY YEAR OF ONSET,  
OHIO, 2011-2015**

SEROTYPE	2011	2012	2013	2014	2015
(IIIb) 61:c:z35	0	0	0	0	1
(IIIb) 61:l,v:1,5	0	1	0	0	0
(IIIb) 61:l,v,z13:1,5	1	0	0	1	0
(IIIb) 61:l,z13:1,5	0	0	2	0	0
(IIIb) 61:z52:z53	0	0	0	0	1
(IIIb) 65:k:-	0	0	0	1	0
(IIIb) Rough Os:c:z35	0	1	0	0	0
(IIIb) Rough Os:Non-motile	0	0	0	1	0
(IV) 1,40:z4,z32:-	0	0	1	0	0
(IV) 17:z29:-	0	0	0	1	0
(IV) 40:z4,z24:-	1	0	0	0	0
(IV) 44:z4,z23:-	1	0	0	1	2
(IV) 44:z4,z32:-	0	0	1	0	0
(IV) 45:g,z51:-	0	0	0	1	0
(IV) 48:g,z51:- (Marina)	0	1	0	1	0
(IV) 50:g,z51:- (Wassenaar)	0	0	0	1	1
(IV) 50:z4,z23:- (Flint)	3	1	0	1	0
(VI) 41:b:1,7	1	0	0	0	0
Rough Os:d:1,7	0	1	0	0	0
Rough Os:e,h:1,2	0	1	0	0	0
Rough Os:e,h:1,6	0	0	1	0	0
Rough Os:f,g:-	0	1	0	0	0
Rough Os:g,m:-	1	0	0	0	0
Rough Os:g,m,s:-	0	0	1	1	0
Rough Os:i:1,2	0	0	0	1	0
Rough Os:i:2	1	0	0	1	0
Rough Os:z:1,6	0	0	1	0	0
Rough Os:Non-motile	2	1	0	0	1
<b>SUB-TOTAL</b>	<b>1,073</b>	<b>1,187</b>	<b>1,124</b>	<b>1,088</b>	<b>1,290</b>

**SEROGROUP**

Group A	0	1	0	0	1
Group B	7	4	7	5	4
Group C	8	1	3	4	0
Group C1	1	1	0	1	0
Group D	5	8	1	7	1
<b>SUB-TOTAL</b>	<b>21</b>	<b>15</b>	<b>11</b>	<b>17</b>	<b>6</b>

UNGROUPED, UNTYPED	89	68	55	83	77
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<b>GRAND TOTAL</b>	<b>1,183</b>	<b>1,270</b>	<b>1,190</b>	<b>1,188</b>	<b>1,373</b>
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# GRAPHS OF SELECTED NOTIFIABLE DISEASE INCIDENCE

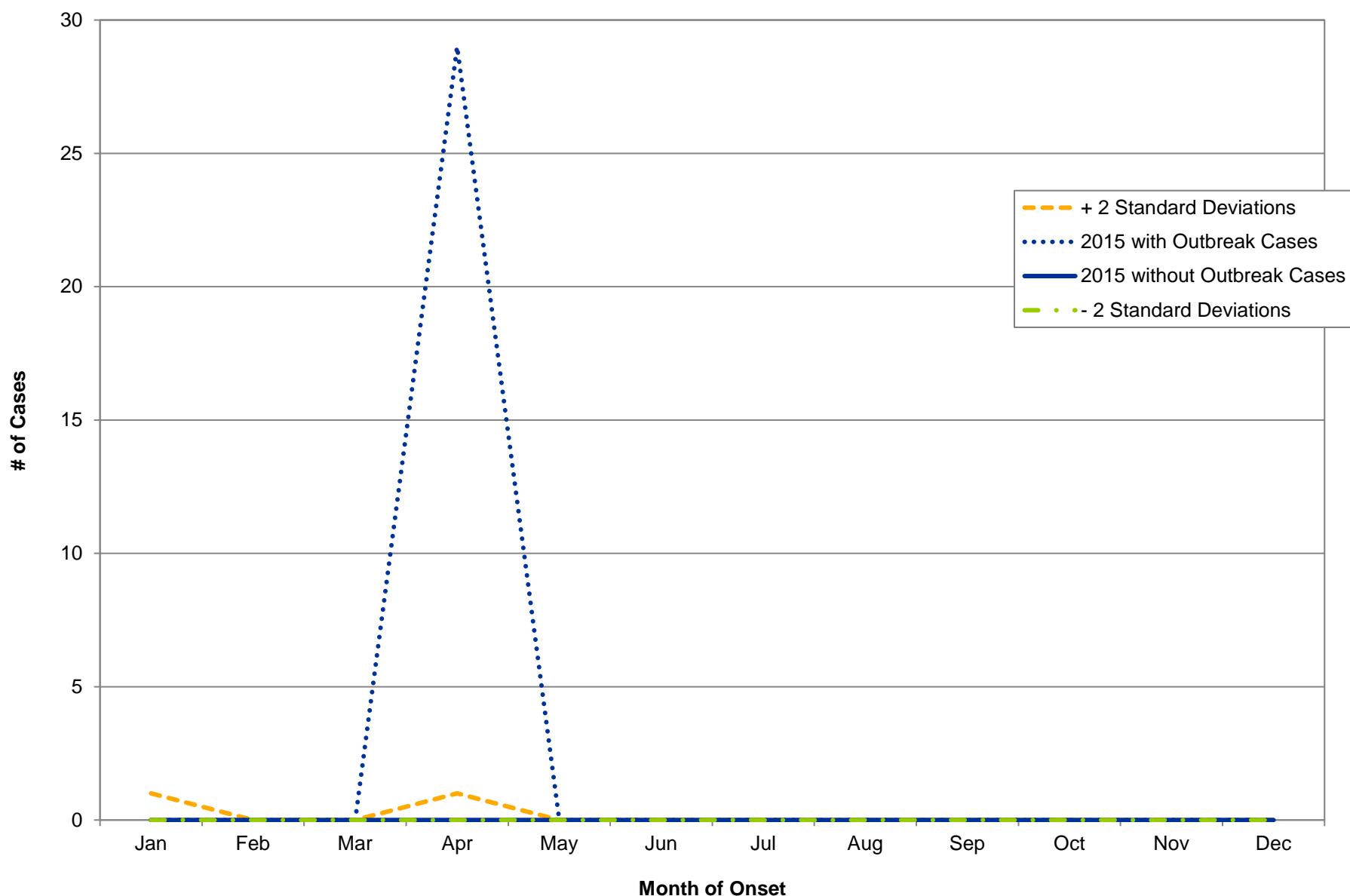
Disease incidence from 2015 is graphically presented to demonstrate general trends in surveillance data for selected Ohio reportable infectious diseases, including any statistically significant changes in the incidence observed. The trend graphs compare disease incidence from 2015 (i.e., observed cases) to baseline disease incidence (i.e., expected cases) by month. Baseline disease incidence was determined by calculating the average disease incidence, excluding outbreak- and cluster-associated cases, throughout the previous three years, 2012-2014. Statistically significant changes in incidence are demonstrated by graphing two standard deviations above and below the average baseline disease incidence. A statistically significant difference in 2015 disease incidence compared to baseline disease incidence suggests the difference is unlikely to have occurred by chance.

General surveillance trends are graphed statewide. The 2015 data represent confirmed and probable cases of selected reportable diseases. In many instances, two trend lines can be seen graphed for 2015 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 2015 and data used in the calculation of the baseline (2012-2014) 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, 2015

### Botulism, Foodborne

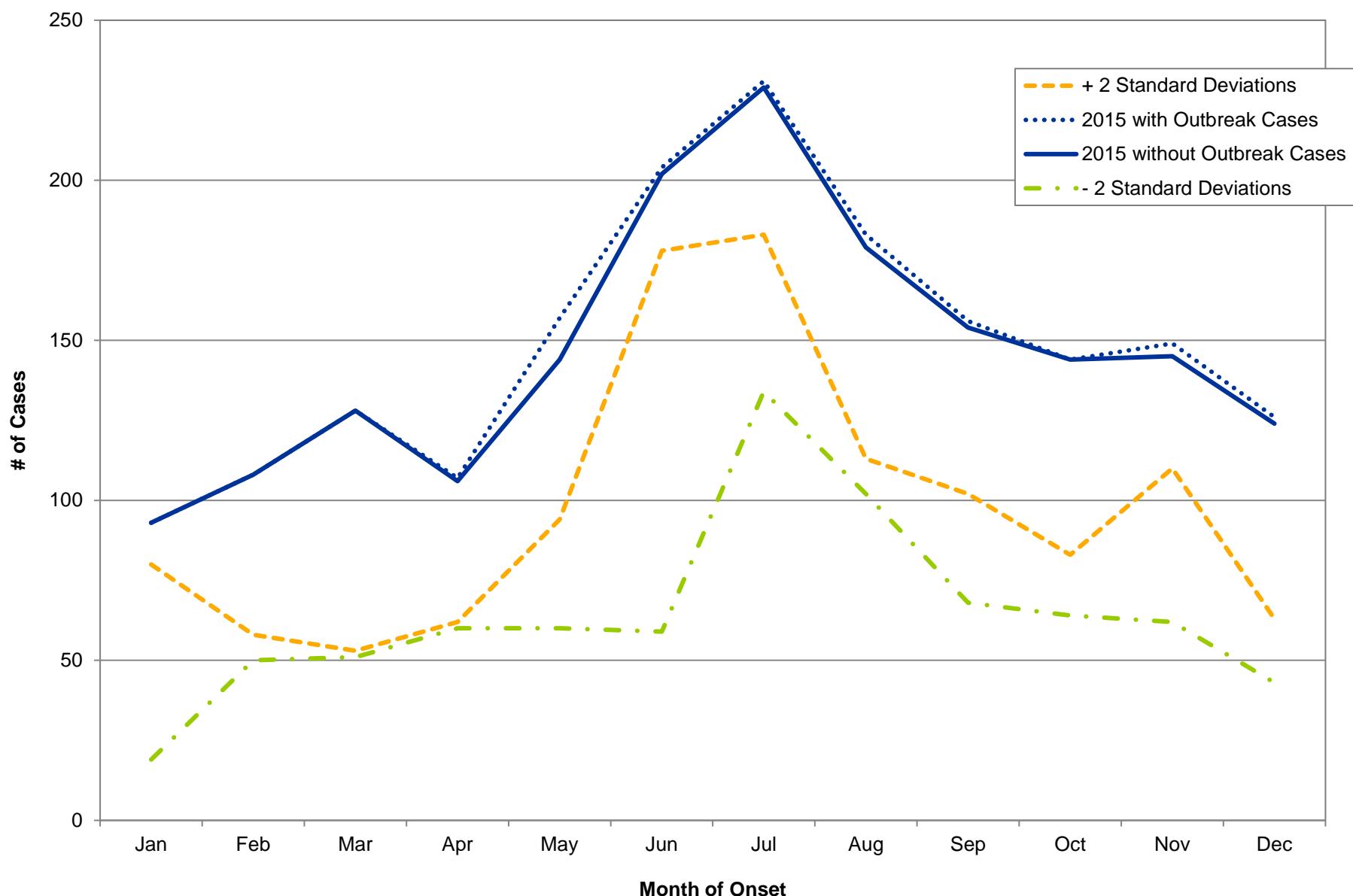


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

### Campylobacteriosis

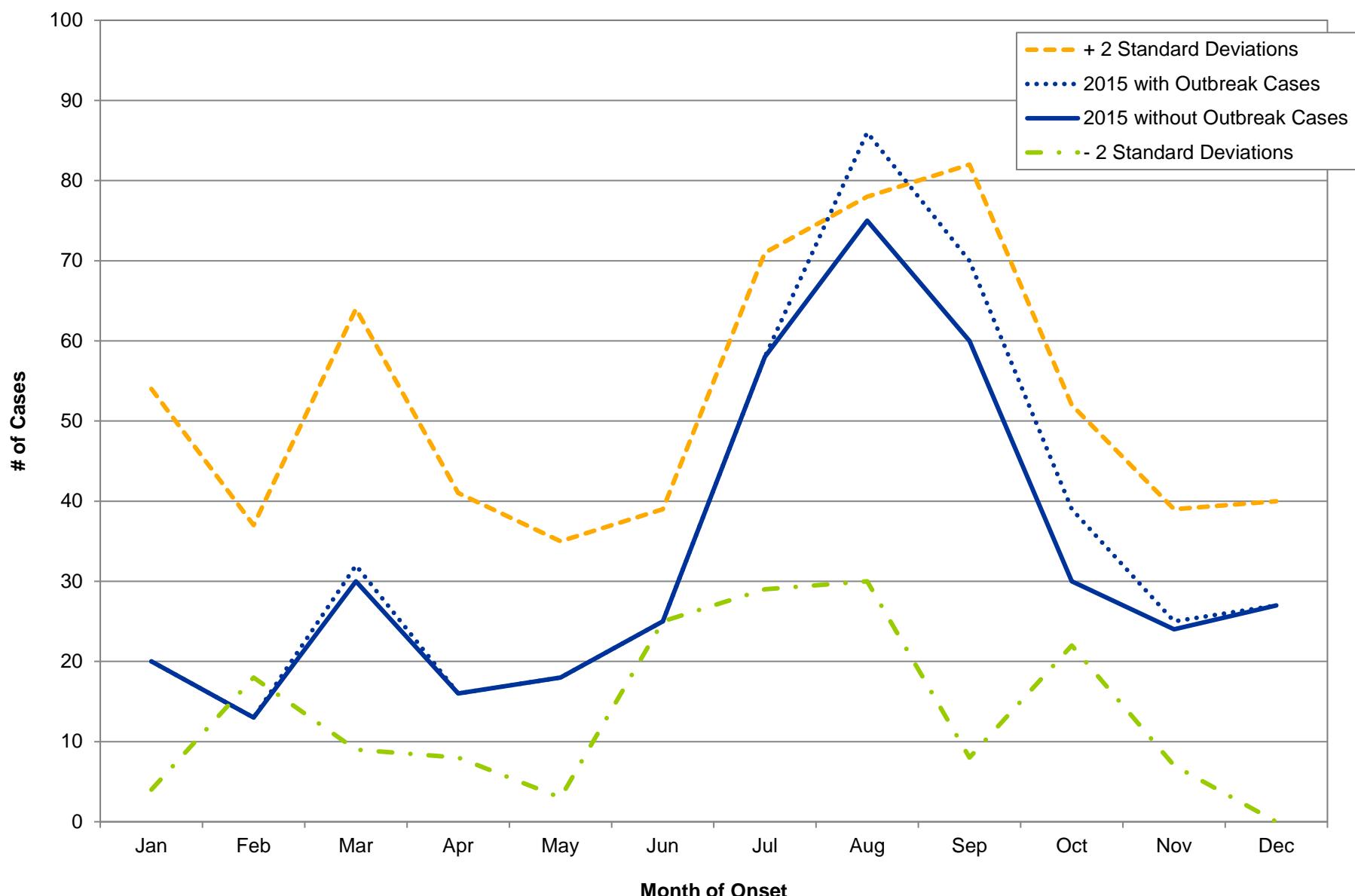


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

### Cryptosporidiosis

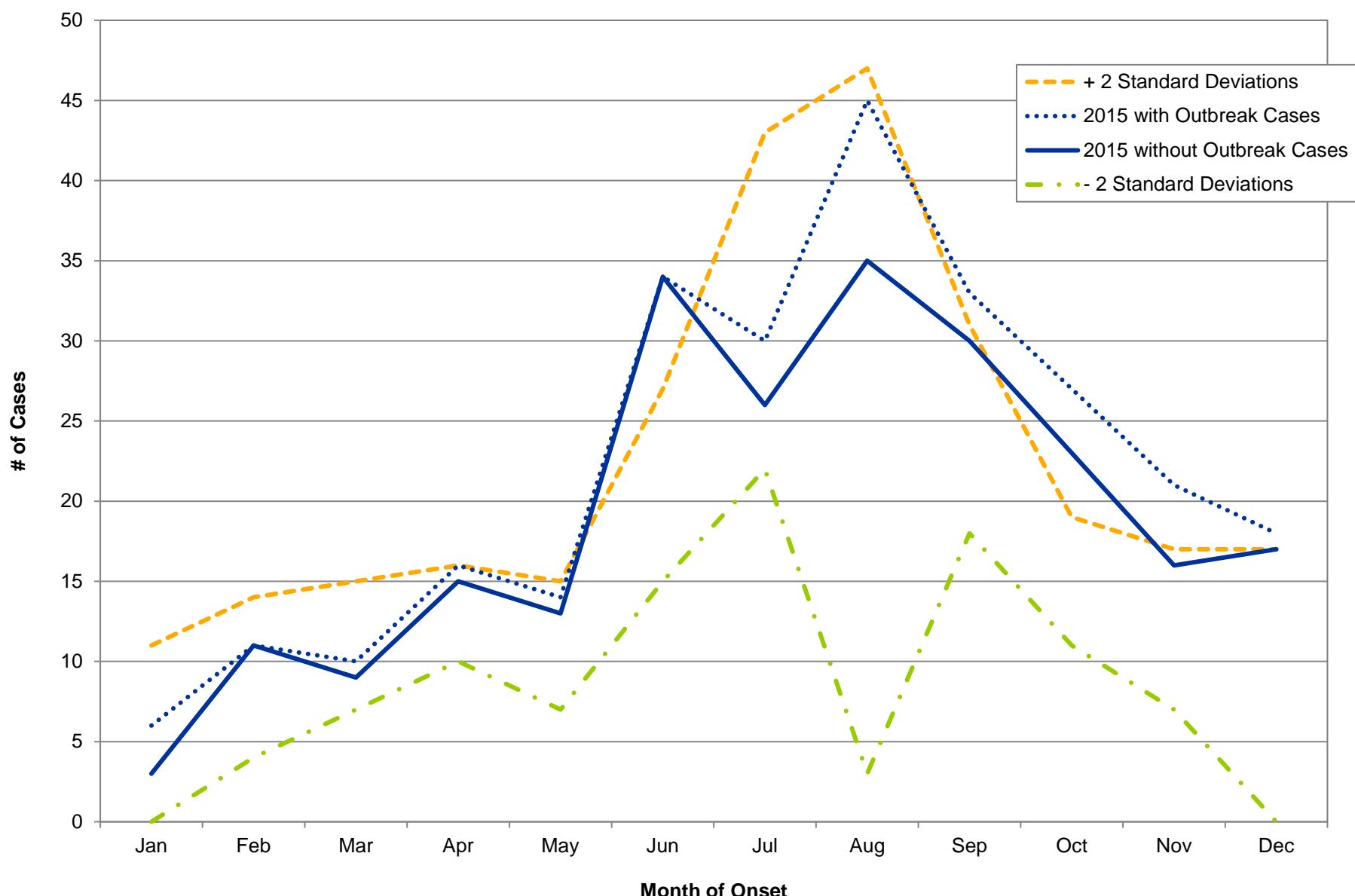


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

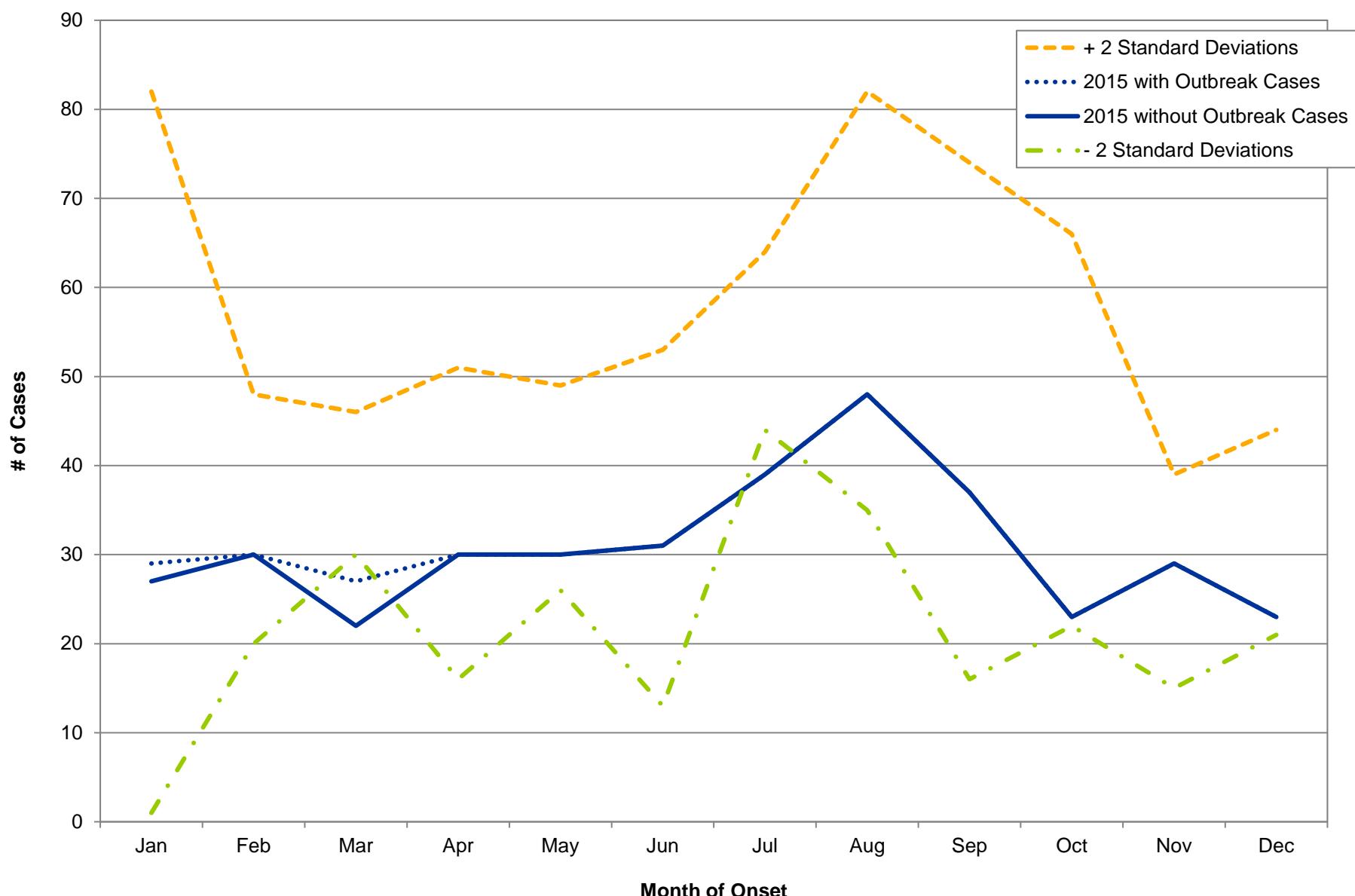
### *Escherichia coli*, Shiga Toxin-Producing



Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015 Giardiasis

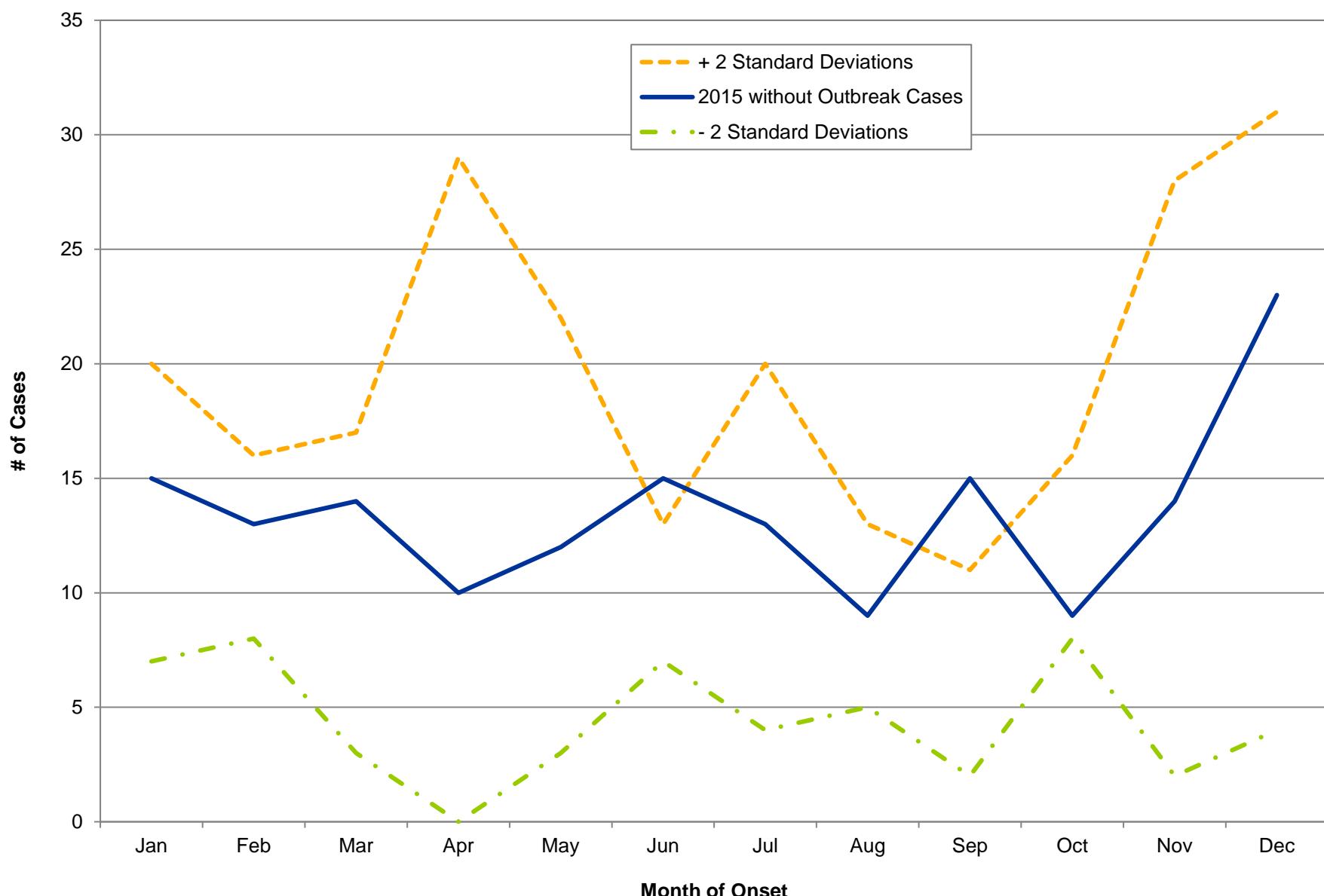


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

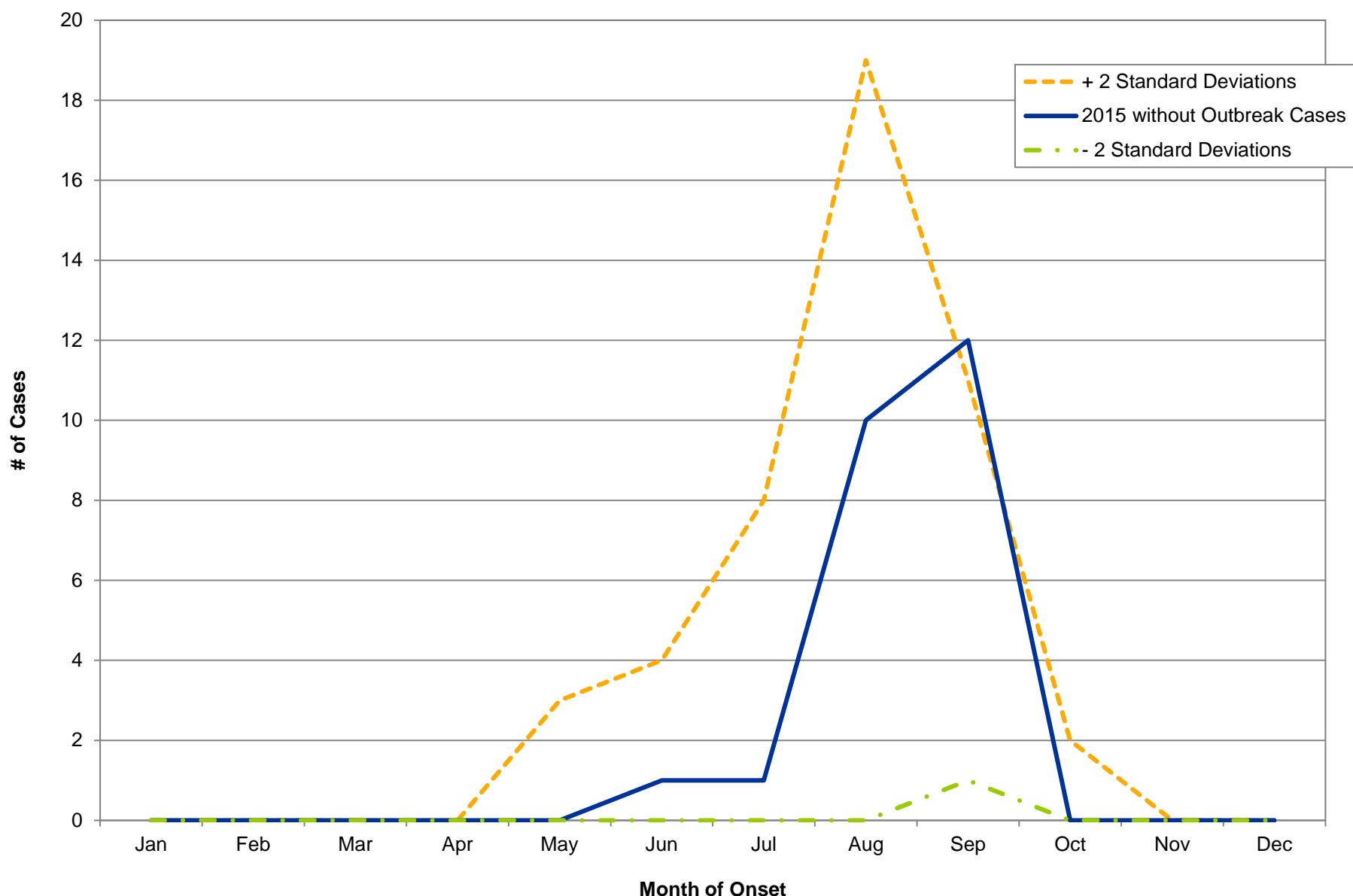
### *Haemophilus influenzae, Invasive Disease*



Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015 LaCrosse Virus Disease

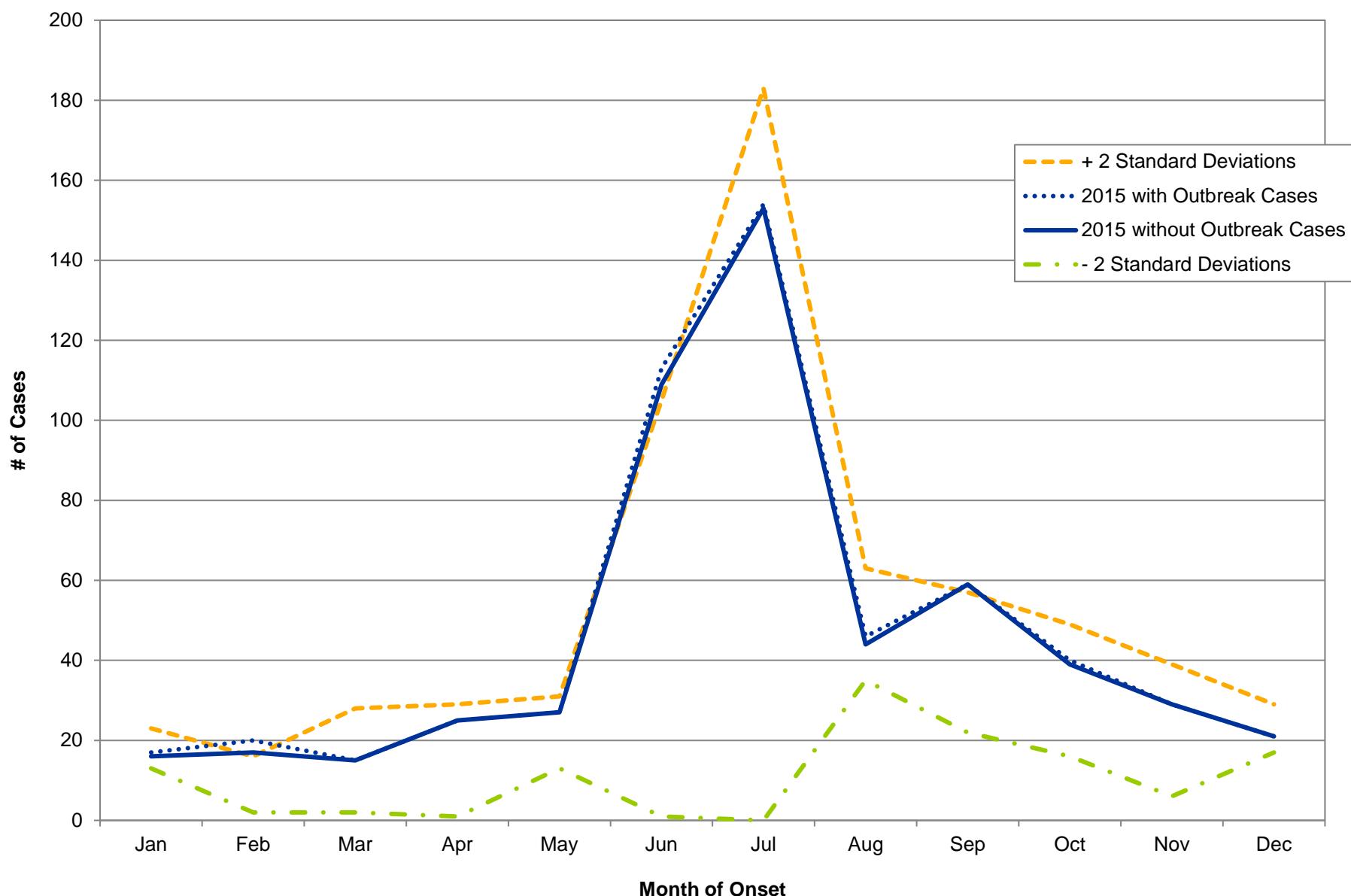


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

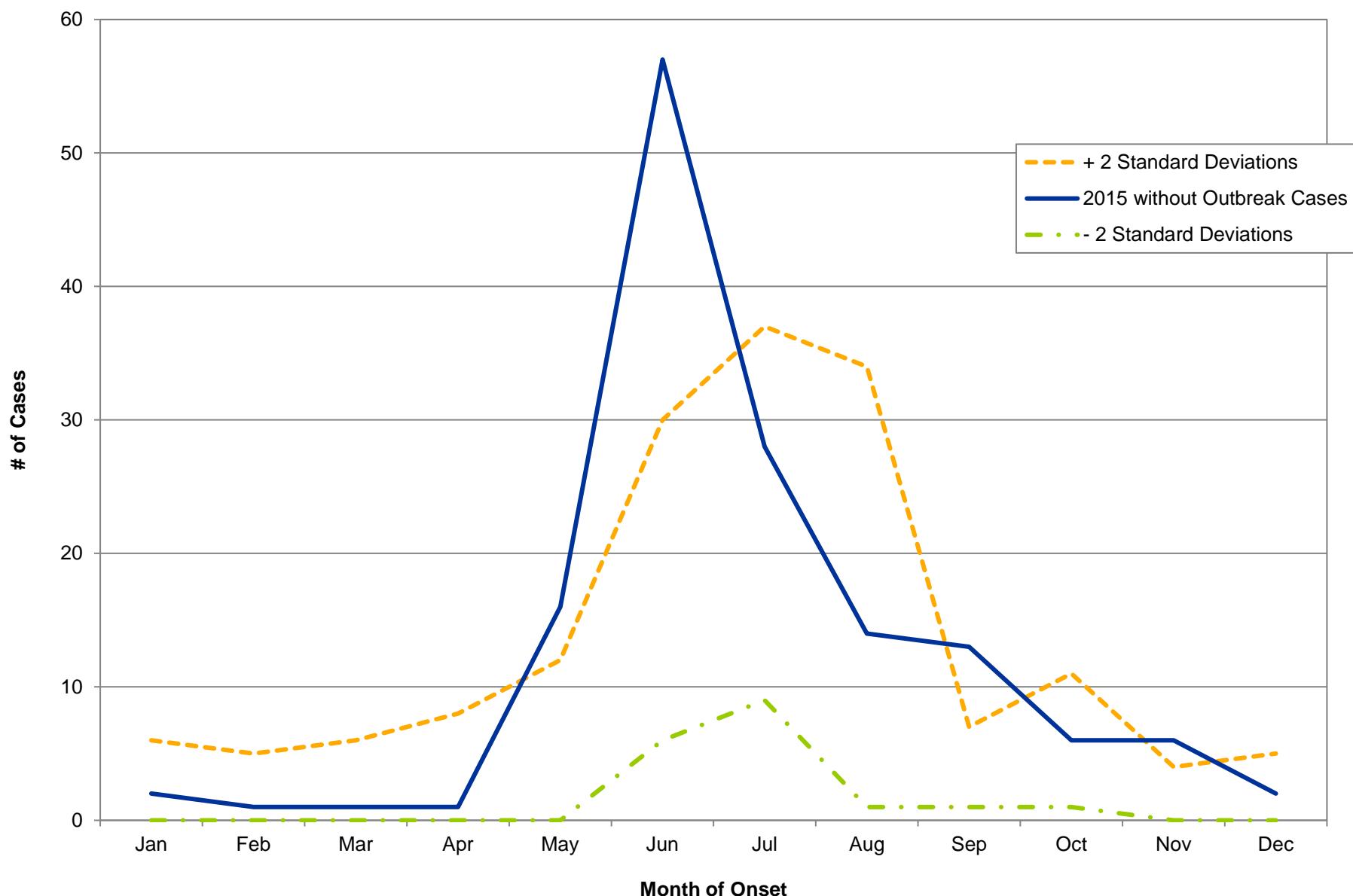
### Legionellosis



Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015 Lyme Disease

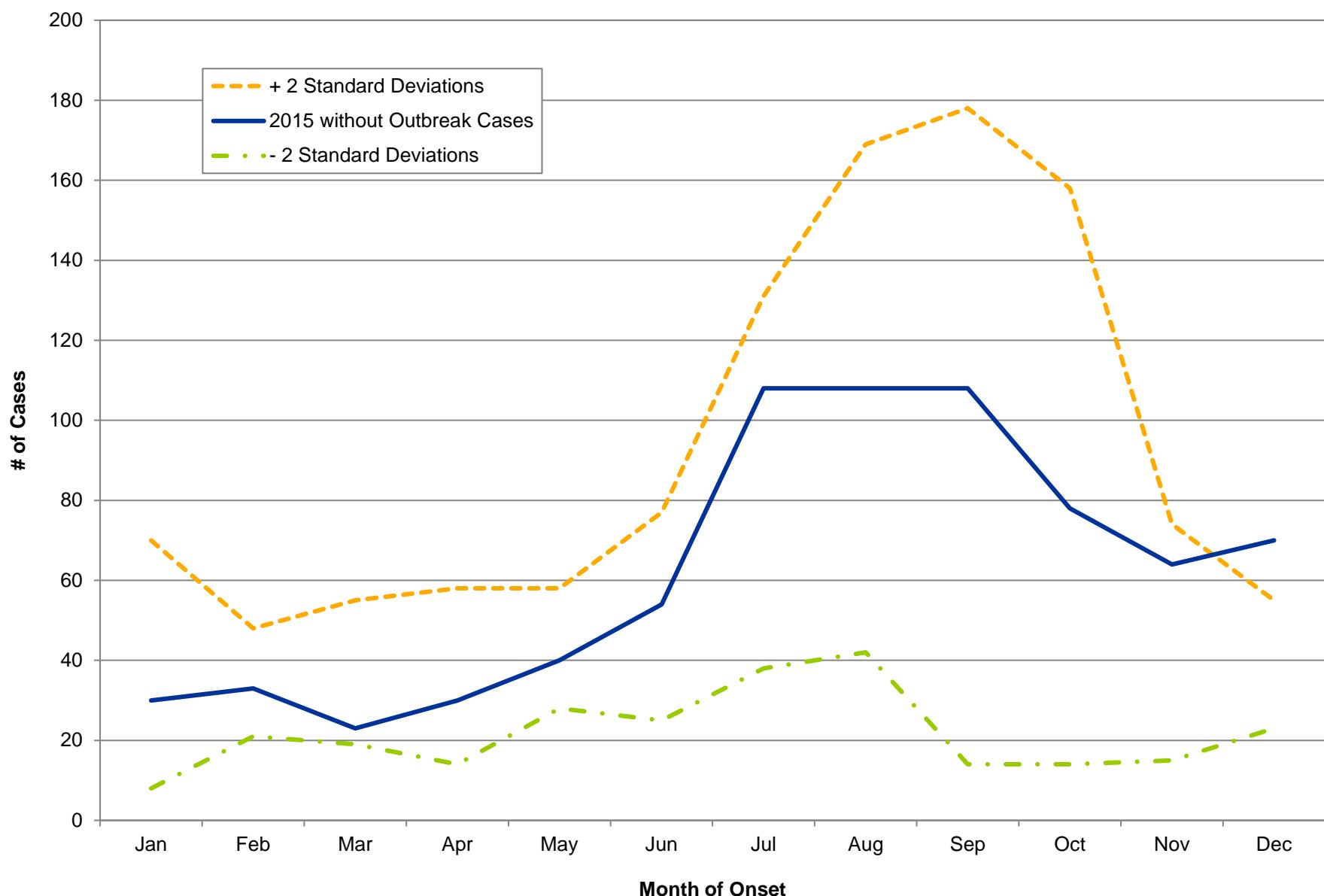


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

### Meningitis, Aseptic

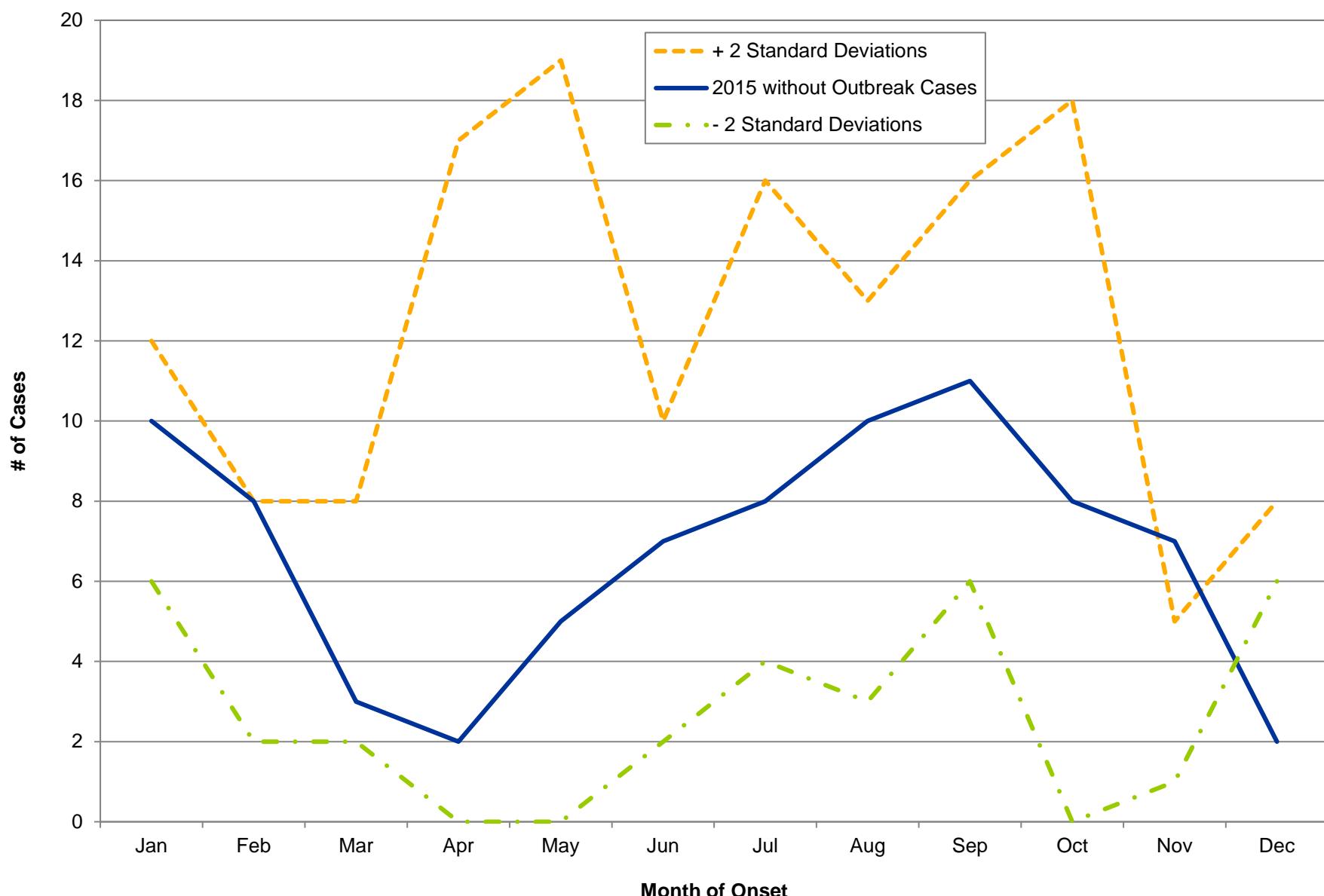


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

### Meningitis, Other Bacterial

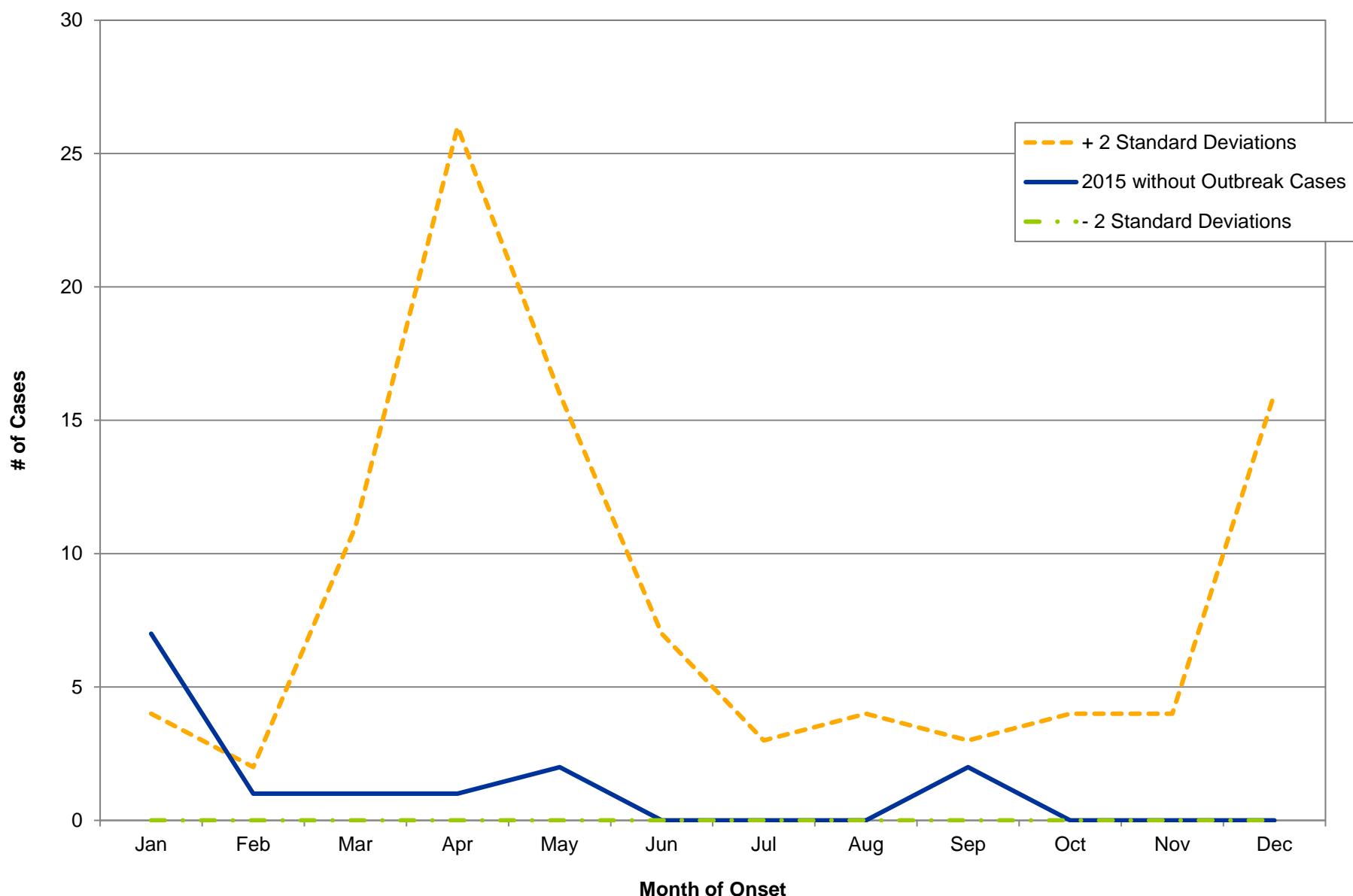


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

### Mumps

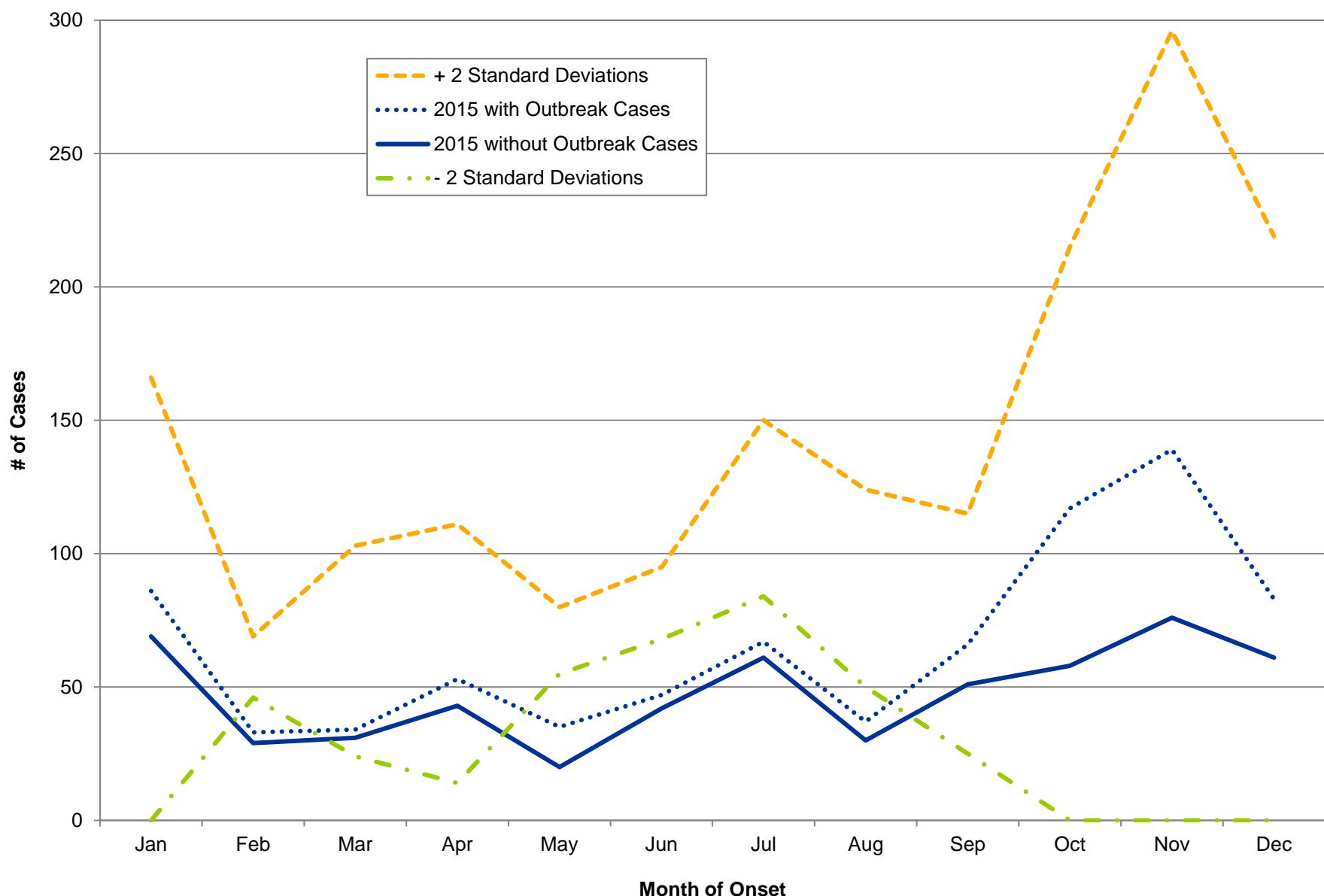


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

### Pertussis

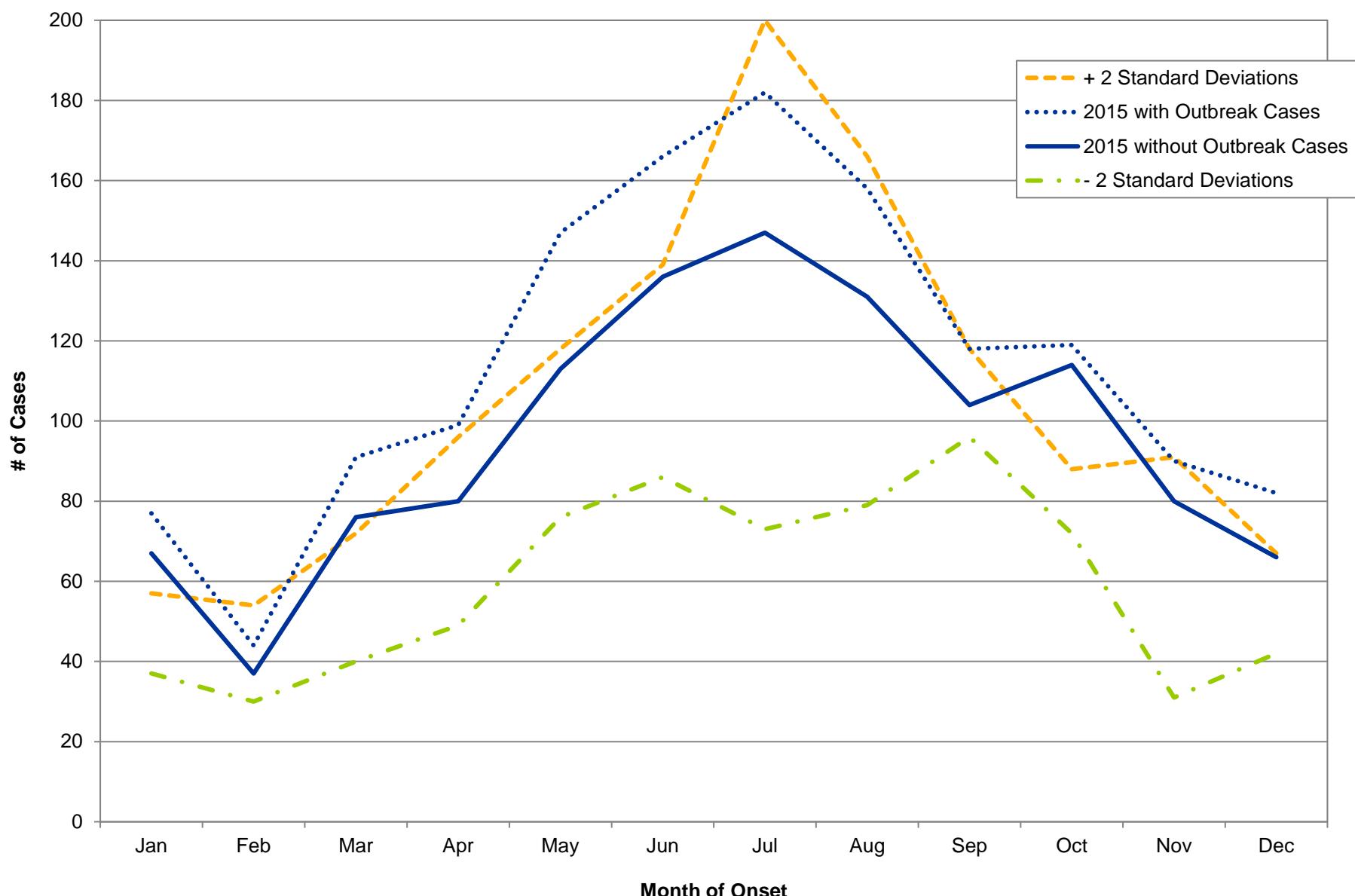


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

### Salmonellosis

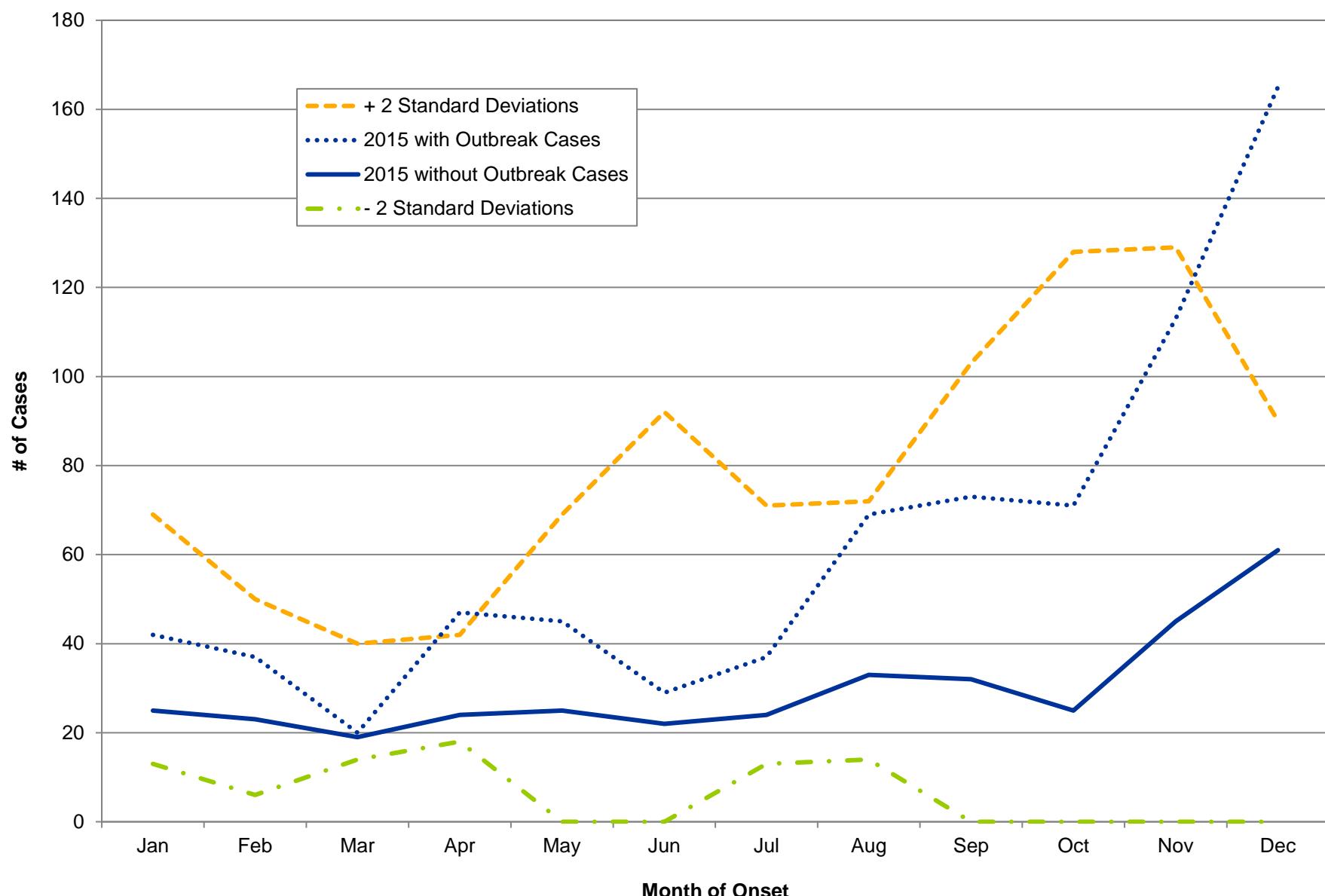


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

### Shigellosis

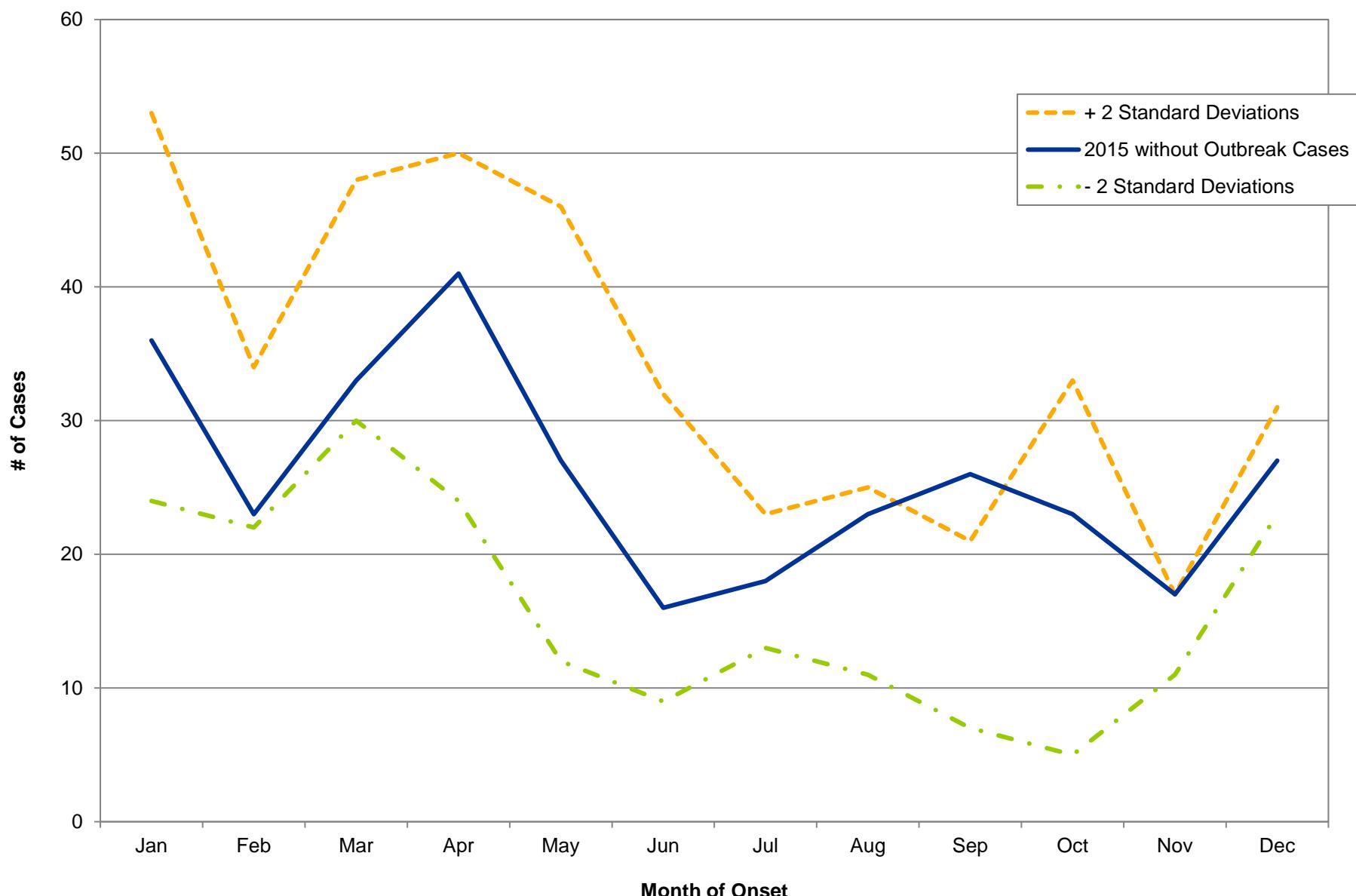


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

### Streptococcal Disease, Group A, Invasive

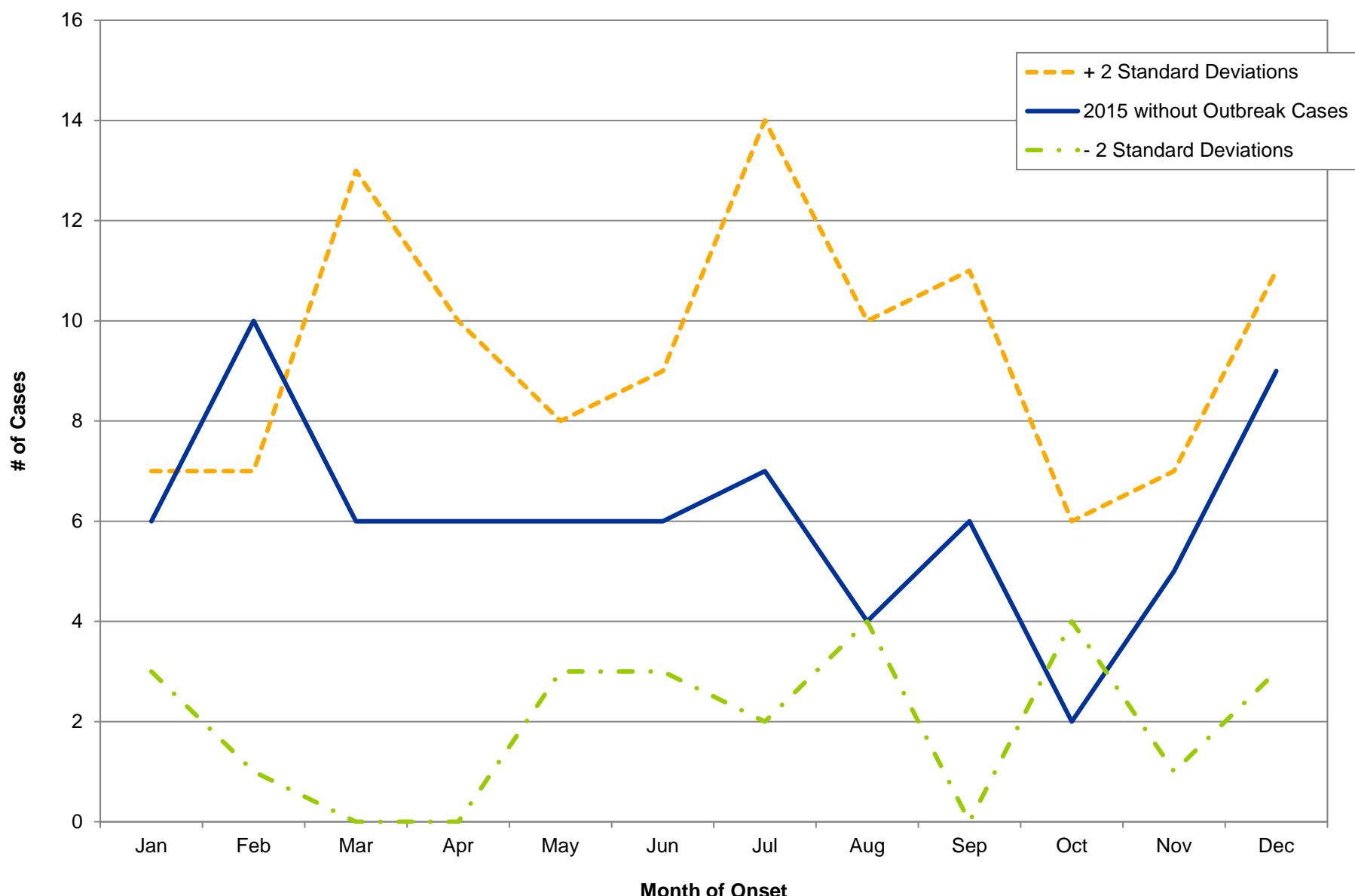


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

### Streptococcal Disease, Group B, in Newborn

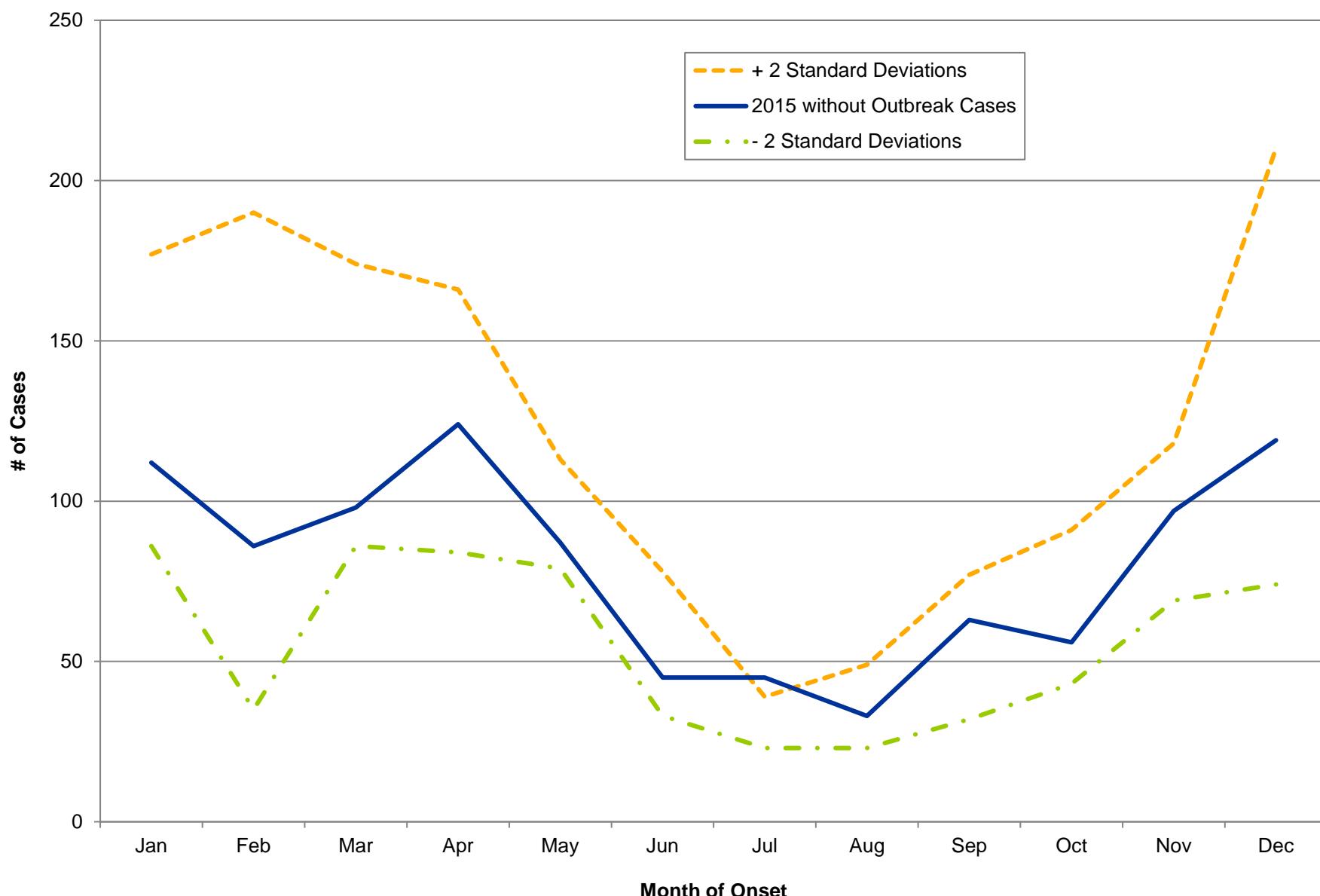


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

### *Streptococcus pneumoniae, Invasive Disease*

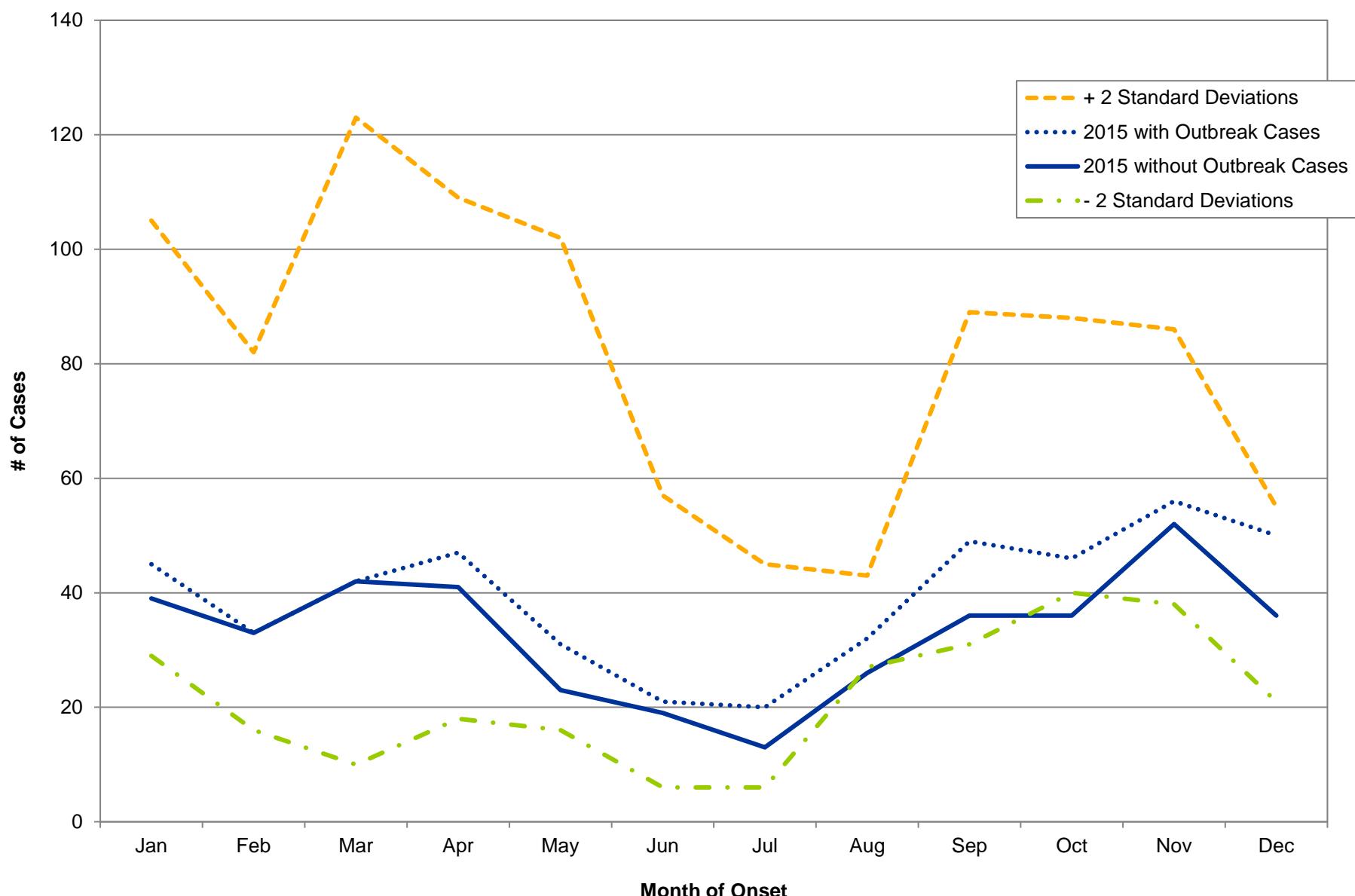


Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015

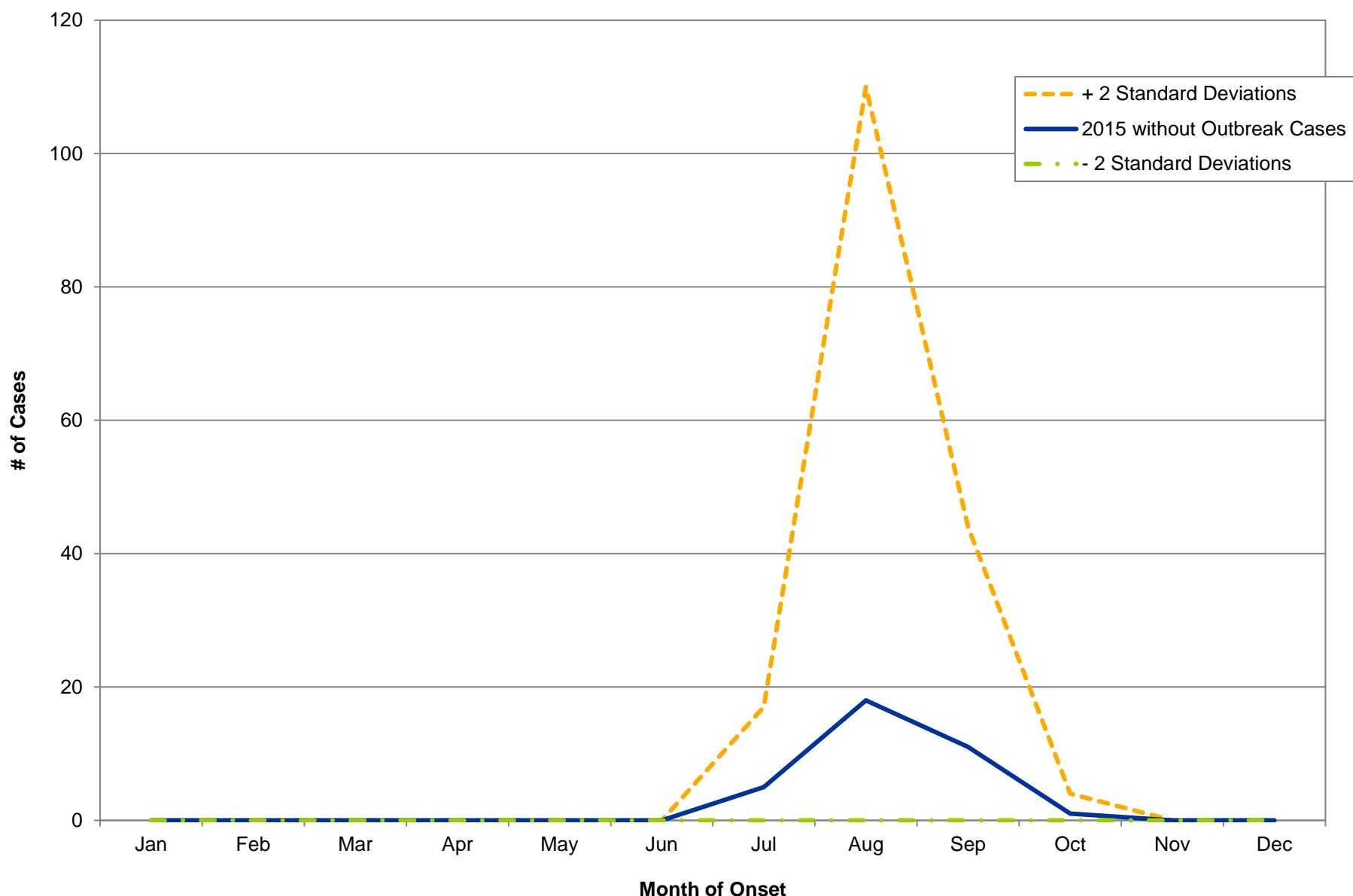
### Varicella



Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

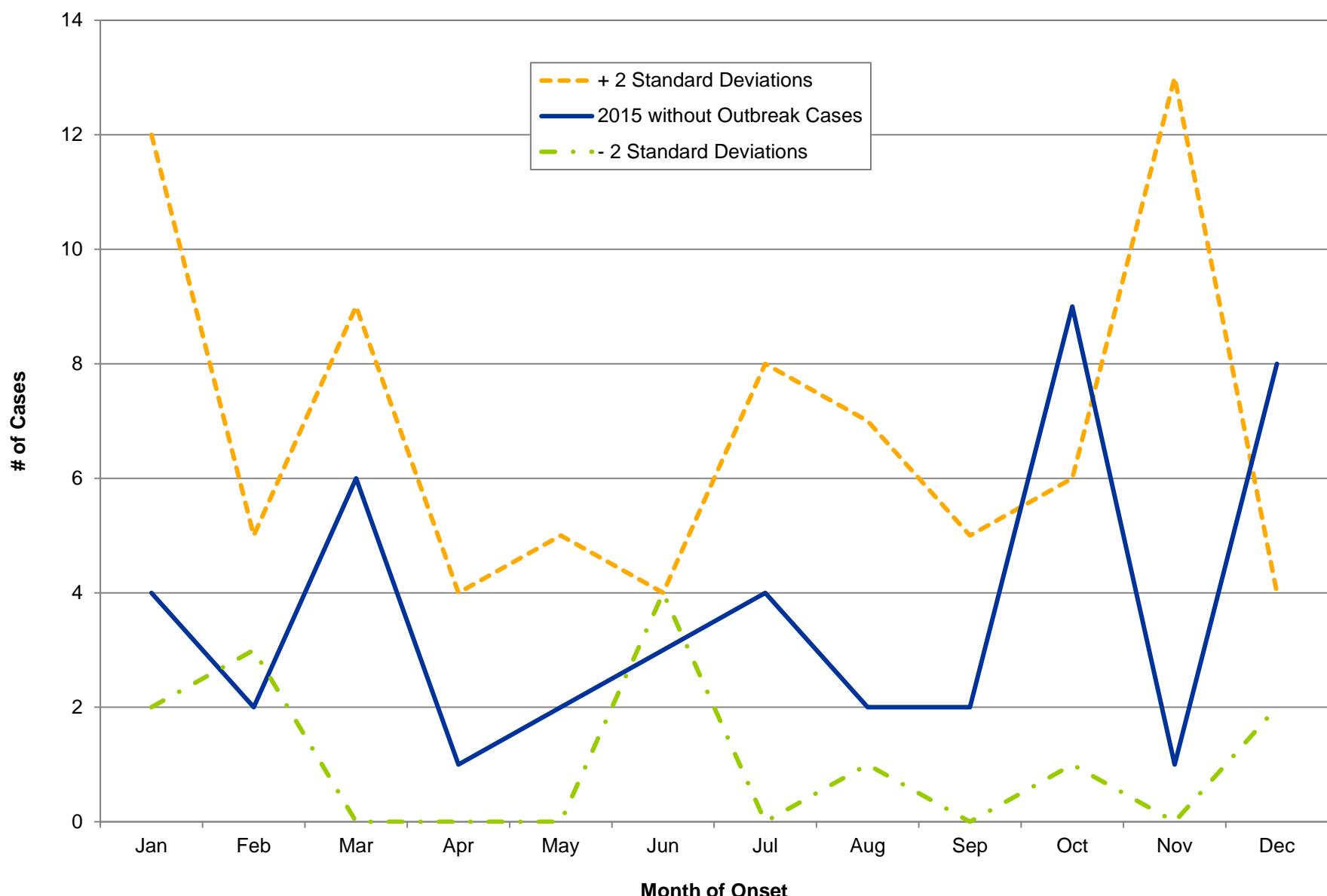
## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015 West Nile Virus Infection



Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

## INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2015 Yersiniosis



Baseline trends are 2 standard deviations of mean counts from 2012-2014 data.

Source of disease data: Ohio Disease Reporting System.

# PROFILES OF SELECTED NOTIFIABLE DISEASES

## EHRLICHIOSIS/ANAPLASMOSIS

*Anaplasma phagocytophilum*:

<i>Number of cases in 2015:</i>	1	<i>Rate in 2015:</i>	0.01
<i>Number of cases in 2014:</i>	1	<i>Rate in 2014:</i>	0.01

\* Rates are based on the 2014 and 2015 U.S. Census estimates and are per 100,000 population.

*Ehrlichia chaffeensis*:

<i>Number of cases in 2015:</i>	17	<i>Rate in 2015:</i>	0.15
<i>Number of cases in 2014:</i>	4	<i>Rate in 2014:</i>	0.03

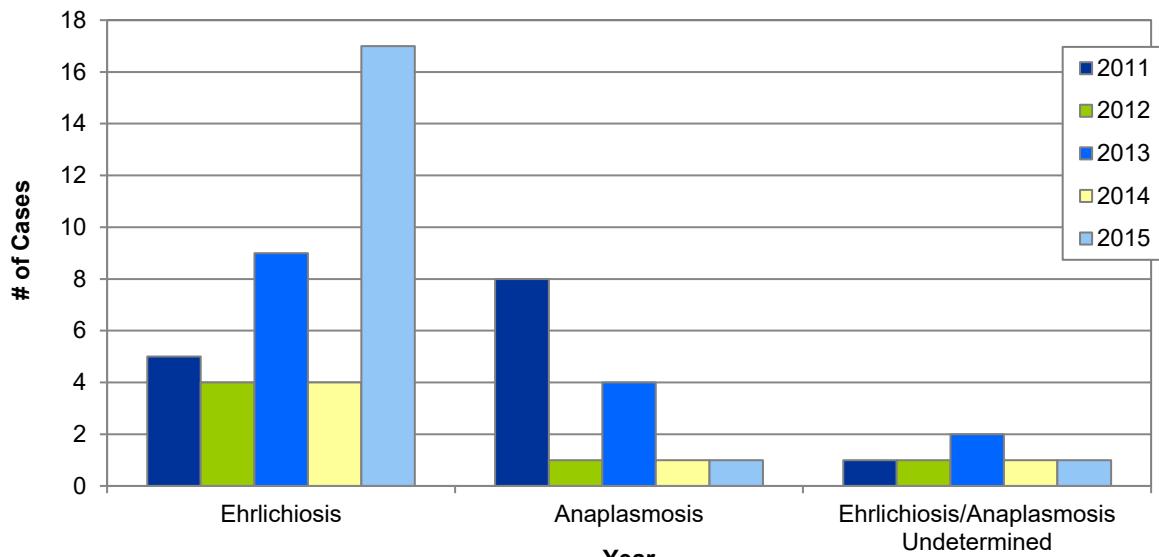
\* Rates are based on the 2014 and 2015 U.S. Census estimates and are per 100,000 population.

Ehrlichiosis and anaplasmosis are bacterial diseases that are spread by ticks. In Ohio, *Ehrlichia chaffeensis* and *Ehrlichia ewingii* are transmitted by the Lone Star tick, *Amblyomma americanum*, which is most commonly found in the southern and southeastern counties of Ohio. *Anaplasma phagocytophilum* is the bacteria that causes anaplasmosis and is transmitted by the black-legged tick, *Ixodes scapularis*, which has been reported from 60 Ohio counties.

People who spend time in the outdoors in tick-infested environments, especially woodlands and brushy areas, are at an increased risk of exposure. Dogs or other pets that frequent these types of areas may also bring infected ticks home. A few human cases of anaplasmosis and ehrlichiosis originate in Ohio each year.

Figure 1 displays the number of human ehrlichiosis and anaplasmosis cases reported to the Ohio Department of Health from 2011 through 2015. For ehrlichiosis/anaplasmosis, an undetermined case occurs when a case has compatible clinical criteria with laboratory evidence to support *Ehrlichia/Anaplasma* infection, but not with sufficient clarity to definitively place it in one of the categories.

**Figure 1: Ehrlichiosis and Anaplasmosis Cases by Year of Onset, Ohio, 2011-2015**



Source of disease data: Ohio Disease Reporting System.

In 2015, 17 cases met the clinical and laboratory requirements for reporting to CDC for ehrlichiosis. This is the most cases of ehrlichiosis that Ohio has reported. Cases were reported from 10 counties: Belmont, Gallia, Hamilton, Hancock, Jackson, Mahoning, Montgomery, Pike, Scioto and Vinton. Only one case each of anaplasmosis and ehrlichiosis/anaplasmosis undetermined met the clinical and laboratory requirements for reporting to CDC.

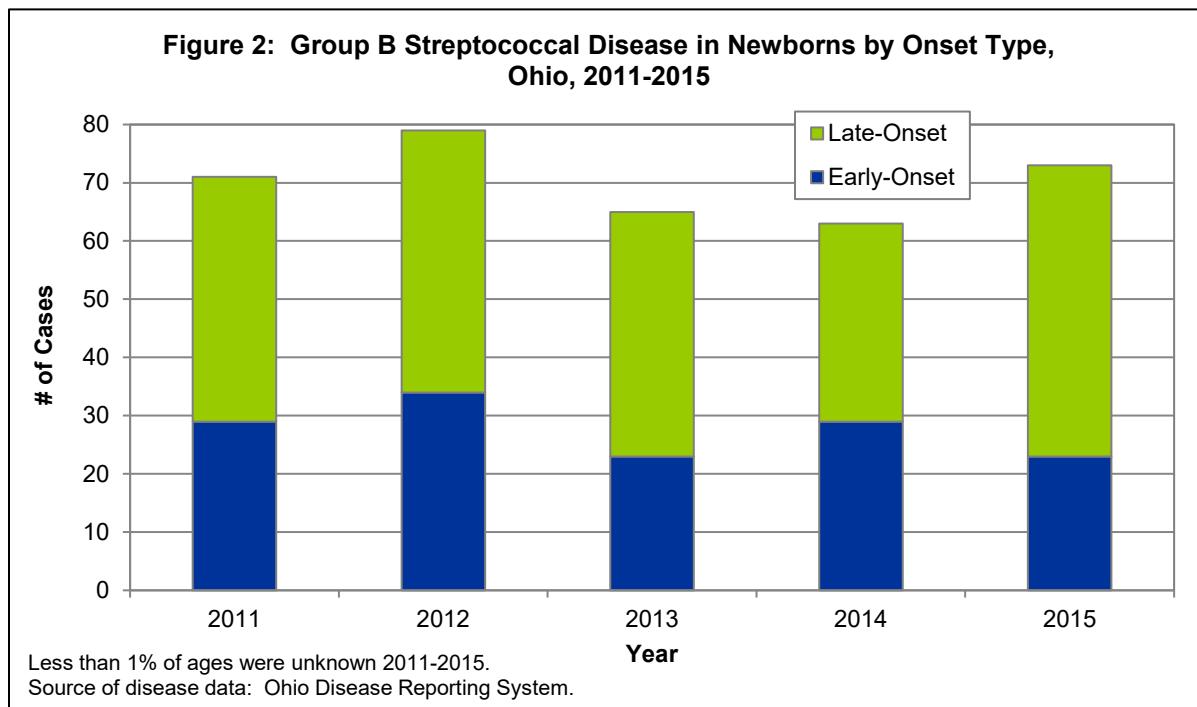
## STREPTOCOCCAL DISEASE, GROUP B, IN NEWBORN

Number of cases in 2015:	73	Rate in 2014:	0.5
Number of cases in 2014:	63	Rate in 2013:	0.5

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

Group B *Streptococcus* is a type of bacteria commonly found in the digestive tract and birth canal of pregnant women. Group B streptococci (GBS) 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 to three months of age.

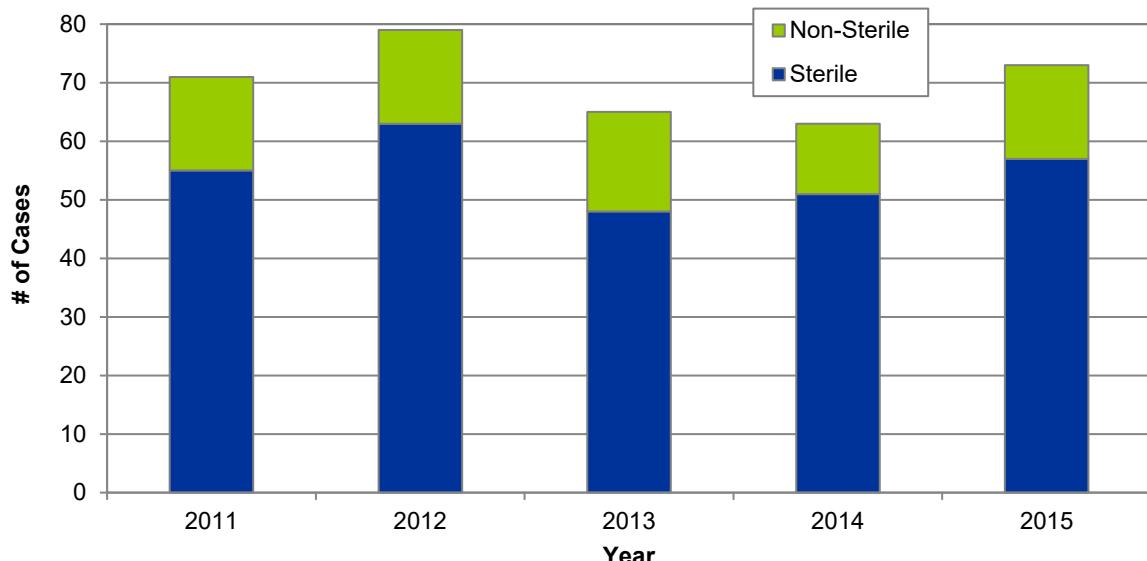
Figure 2 demonstrates the burden of GBS infections in Ohio newborns over the past five years by onset type. During the past five years, higher incidence of infection was observed among infants older than six days of age than among infants six days old or less.



Early-onset infections of GBS 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 3 demonstrates the number of cases occurring in sterile sites (blood or cerebrospinal fluid) and non-sterile sites. During the last five years, 40 percent of cases occurred in infants less than seven days old. Group B *Streptococcus* was isolated from a normally sterile site in 79 percent of early-onset cases. Infections in infants less than seven days old usually occur during the intrapartum period or during delivery. Infections in infants greater than six days of age occur through person-to-person contact.

**Figure 3: Group B Streptococcal Disease in Newborns by Specimen Type, Ohio, 2011-2015**



Source of disease data: Ohio Disease Reporting System.

Group B *Streptococcus* incidence in Ohio infants has remained stable over the past years. The more medically fragile infants, those under seven days old, make up the majority of cases occurring in sterile sites. Routine screening of mothers prior to birth has led to a decrease in cases of group B *Streptococcus* over time, but a review of practices may be necessary to diminish the number of cases occurring in sterile sites.

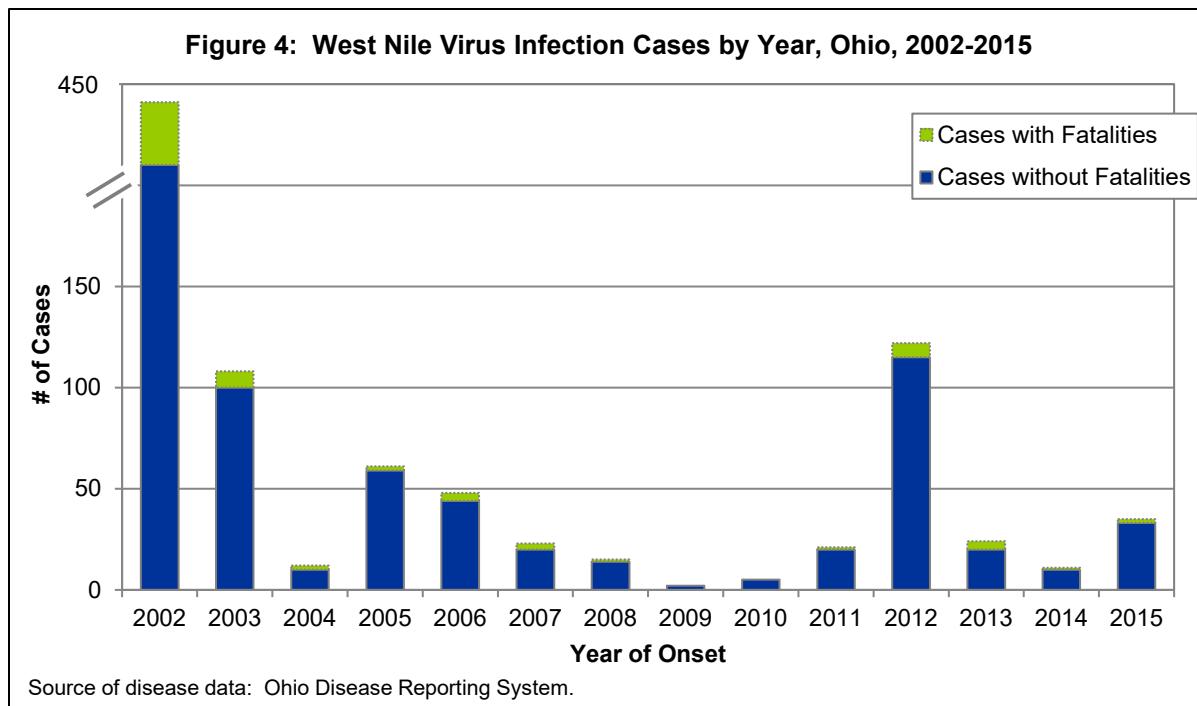
## WEST NILE VIRUS INFECTION

Number of cases in 2015:	35	Rate in 2015:	0.3
Number of cases in 2014:	11	Rate in 2014:	0.1

\* Rates are based on the 2014 and 2015 U.S. Census estimates and are per 100,000 population.

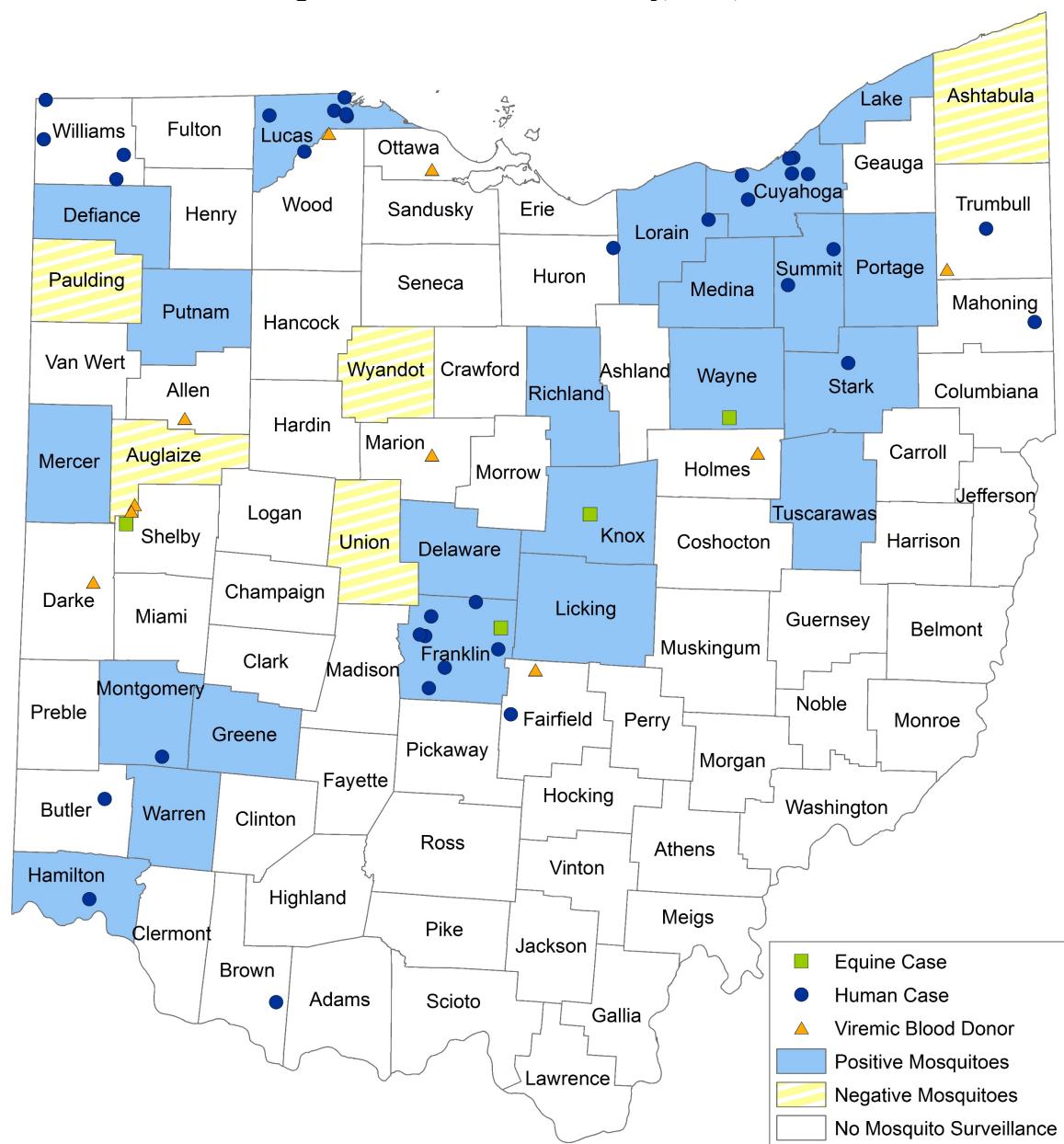
West Nile virus is a mosquito-borne disease transmitted by the northern house mosquito, *Culex pipiens*, in Ohio. West Nile virus was first detected in the United States in New York City in 1999 and quickly spread across the country; it was first identified in Ohio in 2001 and is now established where cases occur during the summer and early fall each year. Seasonal outbreaks can flare up under certain conditions in the summer and continue into the fall; outbreaks of West Nile virus occurred in Ohio in 2002-2003 and 2012. The majority (80 percent) of people infected with West Nile virus do not experience any symptoms. Those people who do experience symptoms most often have a mild febrile illness that resolves in a few days; however, less than 1 percent of those infected will experience a more serious neurologic illness with meningitis, encephalitis or acute flaccid paralysis.

In 2002, 441 human cases with 31 fatalities were reported in Ohio. The number of cases decreased after that inaugural year, but increased again in 2012 with 122 cases and seven fatalities. In 2015, 35 cases were reported, which was an increase in cases from the previous year (11 cases), although not as many as during the 2002 and 2012 epidemic years (see Figure 4).



During 2015, 38 Ohio counties (43 percent) reported some sort of West Nile virus activity (see Figure 5). There were 35 human cases reported in 16 counties, nine asymptomatic viremic blood donors reported in nine counties (not considered human cases), four veterinary cases (equines) reported in four counties and 544 positive mosquito pools reported in 22 counties. The majority of Ohio counties (69 percent) had no surveillance for West Nile virus in mosquitoes during 2015.

**Figure 5: West Nile Virus Activity, Ohio, 2015**



Source of human disease data: Ohio Disease Reporting System.

Source of veterinary disease data: Ohio Department of Agriculture Animal Disease Diagnostic Laboratory.

Source of mosquito data: Ohio Department of Health Zoonotic Disease Program.

# OUTBREAK SUMMARIES

Per Ohio Administrative Code [Chapter 3701-03](#), outbreaks are reported 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 2015, the Bureau of Infectious Diseases (BID) assisted local health jurisdictions in Ohio in the investigation of 409 outbreaks. These outbreaks were detected in 64 of 88 counties throughout the state. The number of Ohioans known to be ill from these outbreaks was 7,558 (median 8, range 1-352). The outbreaks were classified as: community (49), foodborne (81), healthcare-associated (97), institutional (163), waterborne (8) and zoonotic (11). Causative agents identified during the outbreak investigations included: *Acinetobacter baumannii*, adenovirus B3, *Bordetella pertussis*, *Campylobacter* spp., chloramine, *Clostridium botulinum*, *Clostridium difficile*, *Clostridium perfringens*, coxsackievirus, *Cryptosporidium* spp., carbapenem-resistant Enterobacteriaceae, *Giardia* spp., hepatitis A virus, influenza virus, *Legionella pneumophila*, *Mycobacterium chelonae*, *Mycoplasma hominis*, norovirus genotypes GI and GII, parainfluenza virus, parvovirus, *Pediculus capitis* (head louse), rotavirus, rhinovirus, *Salmonella* (various serotypes), *Sarcoptes scabiei* (scabies mite), Shiga-toxin producing *Escherichia coli* (STEC, various serotypes), *Shigella sonnei*, methicillin-resistant and methicillin-sensitive *Staphylococcus aureus* (MRSA, MSSA), staphylococcal enterotoxin, *Streptococcus* spp., *Tinea* spp. and varicella-zoster virus.

This is the sixth 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 2015 outbreaks are discussed below.

## COMMUNITY OUTBREAKS

In 2015, 49 community outbreaks were reported from a variety of settings. Twenty-four of these outbreaks were confirmed, with the causative agent as follows: *B. pertussis* (4), *Campylobacter* spp. (1), hepatitis A virus (1), norovirus (5), *Salmonella* (2), scabies (1), Shiga toxin-producing *E. coli* (1), *S. sonnei* (5), *Streptococcus pyogenes* (1) and varicella-zoster virus (3).

In 2015, Hamilton County experienced a community outbreak of shigellosis. From late September 2015 to June 23, 2016, Hamilton County Public Health and the Cincinnati Health Department investigated a community-wide shigellosis outbreak. The outbreak began as several independent day care-related *Shigella* outbreaks that spread to the community through interaction of day care children with each other and with family members. A total of 352 cases were linked to this outbreak, 157 of them being confirmed cases. The local health departments stressed the importance of hand hygiene and provided guidance on isolation, testing and cleaning to help prevent the further spread of the bacteria. The antimicrobial resistance patterns were received on 20 patients. Of these 20 patients, seven were resistant to ampicillin, two were resistant to ampicillin and streptomycin, one was resistant to ampicillin and trimethoprim-sulfamethoxazole and an additional 10 were resistant to trimethoprim-sulfamethoxazole.

The confirmed community outbreaks of 2015 are listed in Table 1.

**Table 1: Confirmed Community Outbreaks, Ohio, 2015**

Month of Onset	Causative Agent	County	# Ill
December 2014	<i>Bordetella pertussis</i>	Franklin	4
December 2014	<i>Bordetella pertussis</i>	Knox	6
January 2015	<i>Escherichia coli</i> O157:H7	Franklin	3
January 2015	<i>Salmonella</i> Kintambo	Franklin	4
January 2015	Varicella-zoster virus	Cuyahoga	5
February 2015	Norovirus GII.4 Sydney	Vinton	17
February 2015	Norovirus GII.6B	Portage	18
February 2015	<i>Shigella sonnei</i>	Franklin	5
February 2015	<i>Shigella sonnei</i>	Franklin	12
February 2015	<i>Shigella sonnei</i>	Jefferson	19
March 2015	Norovirus GII.4 Sydney	Summit	4
April 2015	<i>Bordetella pertussis</i>	Licking	10
May 2015	Varicella-zoster virus	Knox	17
June 2015	<i>Bordetella pertussis</i>	Multistate	4
June 2015	<i>Campylobacter</i> spp.	Henry	2
June 2015	<i>Salmonella</i> Stanley and Infantis	Summit	11
June 2015	<i>Streptococcus pyogenes</i>	Franklin	13
August 2015	Hepatitis A virus	Geauga	3
September 2015	Varicella-zoster virus	Clark	5
October 2015	<i>Sarcoptes scabiei</i>	Butler	11
October 2015	<i>Shigella sonnei</i>	Franklin	5
October 2015	<i>Shigella sonnei</i>	Hamilton	352
December 2015	Norovirus GII.2	Crawford	26
December 2015	Norovirus GII.3	Portage	2

Source of outbreak data: Ohio Disease Reporting System.

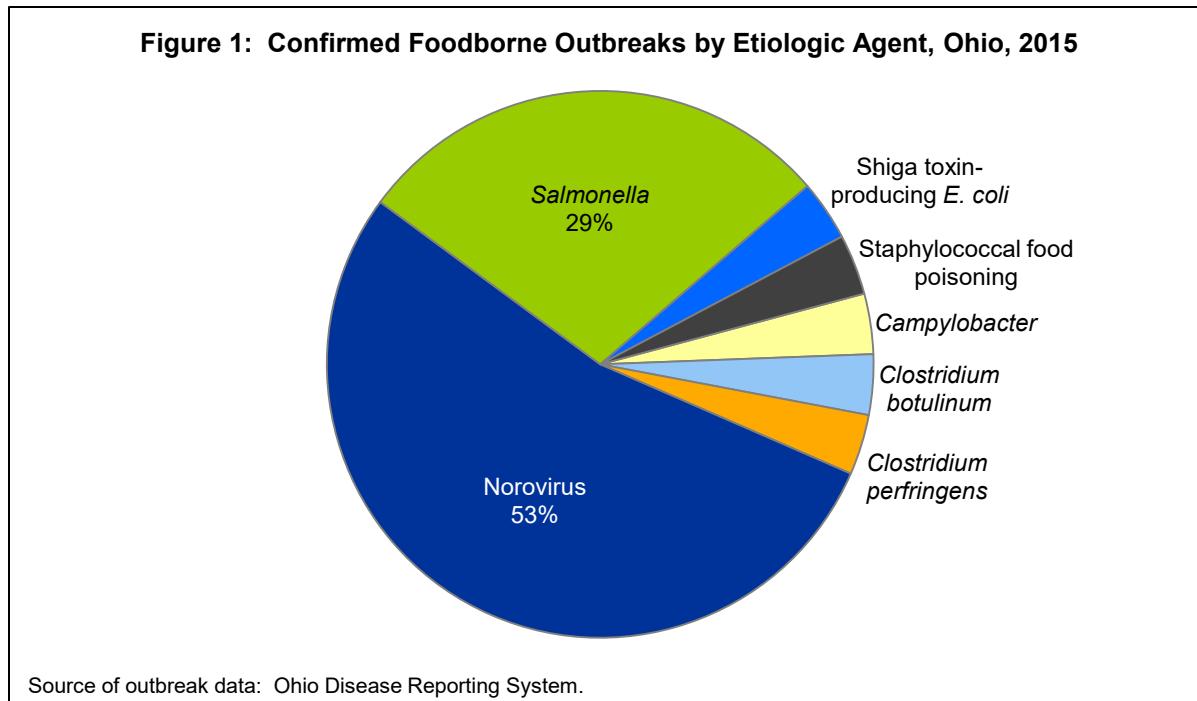
## FOODBORNE OUTBREAKS

In 2015, 28 of the 81 foodborne outbreaks reported were confirmed. These 81 outbreaks in Ohio met the general [definition of a foodborne outbreak](#): “An incident in which two or more persons experience a similar illness after ingestion of a common food, and epidemiologic analysis implicates the food as the source of the illness.” (Some outbreaks with one person ill are multistate outbreaks.) The 28 confirmed outbreaks also met the agent-specific [criteria for confirmation](#) of outbreaks. As shown in Figure 1, for these 28 foodborne outbreaks, the causative agent was distributed as follows: *Campylobacter* spp. (1), *Clostridium botulinum* (1), *Clostridium perfringens* (1), *E. coli* O26 (1), norovirus GI (2), norovirus GII (13), *Salmonella* (8) and staphylococcal food poisoning (1).

In April 2015, the largest foodborne botulism outbreak in the U.S. in nearly 40 years was reported from Fairfield County, Ohio. All affected persons had attended a church potluck on April 19, 2015. CDC’s Strategic National Stockpile sent 50 doses of botulinum antitoxin to Ohio. Of 77 people who consumed potluck food, 25 met the confirmed case definition and four met the probable case definition. The median age was 64 years (range 9-87 years). The median incubation period was two days (range 1-6 days). Two cases were fatal. Serum and stool specimens and discarded potato salad made with home-canned potatoes were positive for *Clostridium botulinum* type A through

testing at ODH Laboratory. The potatoes were canned with a boiling water canner, which does not kill the spores. Through interviews, it was found that consumption of potato salad was significantly associated with illness. The combined evidence implicated potato salad prepared with improperly home-canned potatoes, a known vehicle for botulism. For further details, see "[Notes from the Field: Large Outbreak of Botulism Associated with a Church Potluck Meal – Ohio, 2015](#)," MMWR: July 31, 2015 / 64(29); 802-803.

There were no other cases of foodborne botulism in Ohio in 2015.



The 28 confirmed foodborne outbreaks are detailed in Table 2.

**Table 2: Confirmed Foodborne Outbreaks, Ohio, 2015**

Month of Onset	Causative Agent	County	# Ill	Suspected Food Vehicle	Event / Setting
December 2014	Norovirus GII.6B	Franklin	17	Unknown	Restaurant
January 2015	Norovirus GII.4 Sydney	Stark	21	Unknown	Restaurant
January 2015	Norovirus GII.4 Sydney	Summit	28	Unknown	Restaurant
January 2015	Norovirus GII.6B	Mahoning	4	Unknown	Restaurant
January 2015	Staphylococcal enterotoxin	Hamilton	5	Alfredo sauce	Restaurant
February 2015	Norovirus GII.4 Sydney	Butler	28	Unknown	Caterer
February 2015	Norovirus GII.4 Sydney	Putnam	35	Pineapple, cantaloupe	Restaurant
March 2015	Norovirus GI.2	Coshocton	2	Unknown	Restaurant
March 2015	Norovirus GI.2	Wood	7	Unknown	Restaurant
April 2015	<i>Clostridium botulinum</i> type A	Fairfield	29	Home-canned potatoes	Private home

Month of Onset	Causative Agent	County	# Ill	Suspected Food Vehicle	Event / Setting
April 2015	Norovirus GII.4 Sydney	Franklin	4	Unknown	Restaurant
April 2015	Norovirus GII.4 Sydney	Ross	19	Pizza	Restaurant
May 2015	Norovirus GII.4 Sydney	Allen	5	Unknown	Restaurant
May 2015	Norovirus GII.4 Sydney	Hancock	51	Lettuce/salad	Banquet facility
May 2015	Norovirus GII.4 Sydney	Lucas	4	Salad greens	Restaurant
June 2015	<i>Clostridium perfringens</i>	Clark	57	Ground beef taco meat	Private home
June 2015	<i>Salmonella</i> Newport	Multistate	1	Oysters	Restaurant
July 2015	<i>Salmonella</i> Enteritidis	Crawford	9	Home-made ice cream	Private home
August 2015	<i>Salmonella</i> Enteritidis	Cuyahoga	9	Unknown	Restaurant
August 2015	<i>Salmonella</i> Poona	Multistate	3	Cucumbers	Multiple
September 2015	<i>Campylobacter</i> spp.	Clinton	10	Banh Mi Vietnamese sandwich, pate sauce	Workplace cafeteria
September 2015	<i>Salmonella</i> Bareilly	Multistate	1	Frozen raw tuna	Multiple
October 2015	<i>Escherichia coli</i> O26	Multistate	3	Unknown	Restaurant
October 2015	<i>Salmonella</i> (I) 4,5,12:i:-	Hamilton	2	Unknown	Private home
November 2015	<i>Salmonella</i> Weltevreden	Butler	14	Unknown	College, university
December 2015	Norovirus GII	Guernsey	170	Unknown	Hospital
December 2015	Norovirus GII.2	Mahoning	8	Roast beef	Caterer
December 2015	<i>Salmonella</i> Enteritidis	Stark	3	Eggs	Restaurant

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 \*Salmonella\* Poona Infections Linked to Imported Cucumbers](#)

[Multistate Outbreaks of Shiga toxin-producing \*Escherichia coli\* O26 Infections Linked to Chipotle Mexican Grill Restaurants](#)

## HEALTHCARE-ASSOCIATED OUTBREAKS

There were 97 healthcare-associated outbreaks reported in 2015, 58 of which were confirmed as shown in Table 3.

[CDC investigated](#) a cluster of surgical site infections in Ohio in October 2015. All patients had received an amniotic tissue product from the same donor; investigators found that 27 vials of product from this donor were distributed to seven states. Of the nine Ohio patients who received it, two developed confirmed infections with *Mycoplasma hominis* and two developed probable infections. Amniotic tissue, obtained from the innermost layer of the placenta, is used in wound management, but this CDC investigation demonstrated that the product may not be free of contamination by microorganisms that can result in disease transmission. See the abstract of the investigation from the [65<sup>th</sup> Epidemic Intelligence Service \(EIS\) Conference program](#) (page 126) for further details.

**Table 3: Confirmed Healthcare-Associated Outbreaks, Ohio, 2015**

<b>Month of Onset</b>	<b>Causative Agent</b>	<b># III</b>	<b>Setting</b>
December 2014	<i>Bordetella pertussis</i>	2	Hospital
December 2014	Influenza virus	4	Long-term care facility
December 2014	Influenza virus	4	Long-term care facility
December 2014	Influenza virus	7	Long-term care facility
December 2014	Influenza virus	12	Long-term care facility
December 2014	Influenza virus	15	Long-term care facility
December 2014	Influenza virus	28	Long-term care facility
December 2014	Influenza virus	29	Rehabilitation facility
December 2014	Norovirus GII.4 Sydney	9	Long-term care facility
January 2015	<i>Clostridium difficile</i>	3	Hospital
January 2015	Influenza virus	6	Long-term care facility
January 2015	Norovirus GI.1	91	Long-term care facility
January 2015	Norovirus GII.4 Sydney	12	Long-term care facility
January 2015	Norovirus GII.4 Sydney	23	Hospital
January 2015	Norovirus GII.4 Sydney	36	Long-term care facility
January 2015	Norovirus GII.4 Sydney	38	Long-term care facility
January 2015	Norovirus GII.4 Sydney	45	Long-term care facility
January 2015	Norovirus GII.4 Sydney	71	Long-term care facility
February 2015	Influenza virus	15	Long-term care facility
February 2015	Influenza virus	39	Long-term care facility
February 2015	Norovirus GII	98	Long-term care facility
February 2015	Norovirus GII	41	Long-term care facility
February 2015	Norovirus GII.4 Sydney	16	Long-term care facility
February 2015	Norovirus GII.4 Sydney	21	Long-term care facility
February 2015	Norovirus GII.6B	105	Long-term care facility
March 2015	<i>Clostridium difficile</i>	6	Long-term care facility
March 2015	Influenza virus	8	Long-term care facility
March 2015	Norovirus	21	Hospital and long-term care facility
March 2015	Norovirus GI and GII.4 Sydney	34	Long-term care facility
March 2015	Norovirus GII.1	39	Long-term care facility
March 2015	Norovirus GII.4 Sydney	9	Long-term care facility
March 2015	Norovirus GII.4 Sydney	16	Long-term care facility
March 2015	Norovirus GII.4 Sydney	32	Long-term care facility
March 2015	Norovirus GII.4 Sydney	36	Long-term care facility
March 2015	Norovirus GII.4 Sydney	37	Long-term care facility
March 2015	Norovirus GII.4 Sydney	42	Long-term care facility
March 2015	Norovirus GII.4 Sydney	50	Long-term care facility
March 2015	Norovirus GII.4 Sydney	57	Hospital
March 2015	<i>Sarcoptes scabiei</i>	4	Long-term care facility
April 2015	Norovirus GII.1	70	Hospital
April 2015	Norovirus GII.4 Sydney	17	Long-term care facility
April 2015	Norovirus GII.4 Sydney	26	Rehabilitation facility

Month of Onset	Causative Agent	# III	Setting
May 2015	<i>Clostridium difficile</i>	8	Long-term care facility
May 2015	Norovirus GII.4 Sydney	25	Long-term care facility
May 2015	Rhinovirus	9	Hospital
May 2015	<i>Salmonella</i> Typhimurium	21	Long-term care facility
June 2015	<i>Staphylococcus aureus</i> , methicillin sensitive	2	Long-term care facility
July 2015	<i>Sarcoptes scabiei</i>	44	Long-term care facility
August 2015	<i>Acinetobacter baumannii</i>	3	Hospital
August 2015	Carbapenem-resistant Enterobacteriaceae	2	Hospital
August 2015	Norovirus GI.3B	12	Long-term care facility
August 2015	<i>Sarcoptes scabiei</i>	30	Long-term care facility
August 2015	Viral conjunctivitis	4	Long-term care facility
September 2015	<i>Mycoplasma hominis</i>	4	Hospital
September 2015	<i>Sarcoptes scabiei</i>	14	Long-term care facility
December 2015	Norovirus GII.1	16	Hospital
December 2015	Norovirus GII.4 Sydney	6	Long-term care facility
December 2015	Norovirus GII.4 Sydney	14	Long-term care facility

Source of outbreak data: Ohio Disease Reporting System.

## INSTITUTIONAL OUTBREAKS

In 2015, 163 institutional outbreaks were reported. Of these, 91 were confirmed. See Table 4 below for the confirmed institutional outbreaks.

**Table 4: Confirmed Institutional Outbreaks, Ohio, 2015**

Month of Onset	Causative Agent	County	# III	Setting
November 2014	<i>Bordetella pertussis</i>	Franklin	2	School
November 2014	<i>Bordetella pertussis</i>	Franklin	5	School
November 2014	<i>Bordetella pertussis</i>	Licking	5	School
November 2014	Influenza virus	Franklin	6	Assisted living facility
December 2014	Influenza virus	Franklin	3	Assisted living facility
December 2014	Influenza virus	Hamilton	12	Retirement community
December 2014	<i>Shigella sonnei</i>	Cuyahoga	6	Day care center
January 2015	<i>Bordetella pertussis</i>	Franklin	5	School
January 2015	Influenza virus	Defiance	8	Assisted living facility
January 2015	Influenza virus	Franklin	38	Assisted living facility
January 2015	Influenza virus	Hancock	2	Assisted living facility

Month of Onset	Causative Agent	County	# III	Setting
January 2015	Influenza virus	Union	6	Assisted living facility
January 2015	Norovirus GII.4 Sydney	Hamilton	35	Assisted living facility
January 2015	<i>Pediculus capitis</i>	Union	7	School
January 2015	<i>Shigella sonnei</i>	Cuyahoga	22	Day care center
January 2015	<i>Staphylococcus aureus</i> , methicillin resistant	Belmont	5	Group home
February 2015	Influenza virus	Franklin	8	Assisted living facility
February 2015	Norovirus GI.3B	Clark	27	Assisted living facility
February 2015	Norovirus GII (confirmed), Rotavirus (probable)	Madison	43	Day care center
February 2015	Norovirus GII.4 Sydney	Cuyahoga	47	Day care center
February 2015	Norovirus GII.4 Sydney	Hamilton	71	Assisted living facility
February 2015	Norovirus GII.4 Sydney	Huron	22	Assisted living facility
February 2015	Norovirus GII.4 Sydney	Stark	163	MRDD facility
February 2015	<i>Streptococcus pyogenes</i>	Franklin	47	School
February 2015	<i>Streptococcus pyogenes</i>	Franklin	52	School
March 2015	<i>Bordetella pertussis</i>	Fairfield	3	School
March 2015	<i>Bordetella pertussis</i>	Lorain	3	School
March 2015	<i>Bordetella pertussis</i>	Summit	6	School
March 2015	<i>Escherichia coli</i> O111	Franklin	4	Day care center in private home
March 2015	Influenza virus	Franklin	3	MRDD facility
March 2015	Norovirus GI.3B	Montgomery	6	Assisted living facility
March 2015	Norovirus GI.3C	Huron	38	Assisted living facility
March 2015	Norovirus GII.4 Sydney	Ashland	31	Camp
March 2015	Norovirus GII.4 Sydney	Franklin	30	School
March 2015	<i>Streptococcus pyogenes</i>	Franklin	15	School
April 2015	<i>Bordetella pertussis</i>	Franklin	5	School
April 2015	Norovirus GII.4 Sydney	Stark	34	Assisted living facility
April 2015	<i>Shigella sonnei</i>	Franklin	30	Day care center
April 2015	<i>Streptococcus pyogenes</i>	Franklin	6	School
April 2015	Varicella-zoster virus	Franklin	6	School
May 2015	<i>Bordetella pertussis</i>	Stark	5	School
May 2015	Norovirus GI.2	Lucas	73	Day care center
May 2015	Norovirus GII.4 Sydney	Montgomery	19	Assisted living facility
May 2015	<i>Sarcoptes scabiei</i>	Cuyahoga	9	Correctional facility
June 2015	Impetigo	Montgomery	7	Day care center
June 2015	<i>Shigella sonnei</i>	Hamilton	52	Day care center
July 2015	<i>Bordetella pertussis</i>	Franklin	7	Day care center

Month of Onset	Causative Agent	County	# III	Setting
July 2015	<i>Escherichia coli</i> O26	Franklin	11	Day care center in private home
July 2015	<i>Shigella sonnei</i>	Franklin	25	Day care center
August 2015	<i>Bordetella pertussis</i>	Franklin	5	School
August 2015	<i>Campylobacter jejuni</i>	Holmes	39	Camp
August 2015	<i>Cryptosporidium</i> spp.	Mercer	6	Day care center in private home
August 2015	Norovirus GII	Hamilton	16	Day care center
August 2015	<i>Shigella sonnei</i>	Hamilton	3	Day care center
August 2015	<i>Staphylococcus aureus</i> , methicillin resistant	Seneca	32	College sports team
September 2015	<i>Bordetella pertussis</i>	Franklin	4	School
September 2015	<i>Bordetella pertussis</i>	Franklin	13	School
September 2015	<i>Bordetella pertussis</i>	Franklin	13	School
September 2015	<i>Bordetella pertussis</i>	Franklin	45	School
September 2015	<i>Escherichia coli</i> O157:H7	Allen	10	Sitter in a private home
September 2015	Parainfluenza virus	Hamilton	7	Day care center
September 2015	<i>Shigella sonnei</i>	Franklin	12	Day care center
September 2015	<i>Shigella sonnei</i>	Hamilton	4	Day care center
September 2015	<i>Shigella sonnei</i>	Hamilton	27	School
September 2015	<i>Staphylococcus aureus</i> , methicillin resistant	Noble	6	Group home
October 2015	Adenovirus B3	Franklin	13	School
October 2015	<i>Bordetella pertussis</i>	Fairfield	9	School
October 2015	<i>Bordetella pertussis</i>	Franklin	2	School
October 2015	<i>Bordetella pertussis</i>	Franklin	3	School
October 2015	<i>Bordetella pertussis</i>	Franklin	4	School
October 2015	<i>Bordetella pertussis</i>	Mercer	13	School
October 2015	<i>Bordetella pertussis</i>	Mercer	14	School
October 2015	Coxsackievirus	Allen	5	Day care center
October 2015	Coxsackievirus	Union	15	Day care center
October 2015	<i>Escherichia coli</i> O103	Franklin	5	Day care center
October 2015	Norovirus GII.2	Franklin	14	School
October 2015	<i>Shigella sonnei</i>	Franklin	5	School
October 2015	<i>Shigella sonnei</i>	Hamilton	3	Day care center
October 2015	<i>Shigella sonnei</i>	Hamilton	4	Day care center
October 2015	<i>Shigella sonnei</i>	Lucas	6	Day care center
November 2015	<i>Bordetella pertussis</i>	Fairfield	3	School
November 2015	<i>Bordetella pertussis</i>	Franklin	2	School
November 2015	<i>Bordetella pertussis</i>	Franklin	2	Day care center
November 2015	<i>Bordetella pertussis</i>	Franklin	3	School
November 2015	<i>Bordetella pertussis</i>	Franklin	9	School
November 2015	<i>Bordetella pertussis</i>	Hamilton	2	School
November 2015	<i>Salmonella</i> Agbeni	Franklin	3	Day care center
November 2015	<i>Salmonella</i> Typhimurium	Summit	3	Day care center
December 2015	Norovirus GII.4 Sydney	Franklin	37	College, university

Month of Onset	Causative Agent	County	# III	Setting
December 2015	<i>Shigella sonnei</i>	Franklin	8	Day care center
December 2015	Varicella-zoster virus	Cuyahoga	7	School

Source of outbreak data: Ohio Disease Reporting System.

## WATERBORNE OUTBREAKS

In 2015, eight confirmed and probable waterborne outbreaks were reported. These are detailed in Table 5.

**Table 5: Confirmed and Probable Waterborne Outbreaks, Ohio, 2015**

Month of Onset	Causative Agent	County	# III	Setting
January 2015	<i>Mycobacterium chelonae</i>	Lucas	4	Ambulatory surgery center
May 2015	<i>Legionella pneumophila</i>	Lucas	20	Office building
June 2015	<i>Legionella pneumophila</i>	Franklin	5	Long-term care facility
June 2015	Chloramine reaction	Franklin	32	Indoor waterpark
July 2015	<i>Escherichia coli</i> O71:H11	Stark	9	Lake
August 2015	<i>Cryptosporidium</i> spp.	Montgomery	3	Splash pad
August 2015	<i>Cryptosporidium</i> spp.	Delaware	27	Waterpark
August 2015	<i>Legionella pneumophila</i>	Wood	2	Church

Source of outbreak data: Ohio Disease Reporting System.

Here is the link to the *M. chelonae* outbreak report for further details:

[Notes from the Field: \*Mycobacterium chelonae\* Eye Infections Associated with Humidifier Use in an Outpatient LASIK Clinic – Ohio, 2015](#), MMWR: October 23, 2015 / 64(41); 1177.

## ZOONOTIC OUTBREAKS

In 2015, 11 confirmed and probable zoonotic outbreaks were reported, as seen in Table 6.

**Table 6: Confirmed and Probable Zoonotic Outbreaks, Ohio, 2015**

Month of Onset	Causative Agent	County	# III	Type of Animal	Setting
January 2015	<i>Salmonella</i> Muenchen	Franklin	2	Crested gecko	Home day care
March 2015	<i>Salmonella</i> (I) 4,5,12:i:-	Licking	3	Dairy cattle	Farm
March 2015	<i>Salmonella</i> Hadar	Multistate	3	Live poultry	Private home
March 2015	<i>Cryptosporidium parvum</i>	Franklin	4	Calves	Veterinary clinic

Month of Onset	Causative Agent	County	# III	Type of Animal	Setting
April 2015	<i>Salmonella</i> Enteritidis	Multistate	20	Live poultry	Private home
May 2015	<i>Salmonella</i> Muenchen and Muenster	Multistate	3	Live poultry	Private home
June 2015	<i>Salmonella</i> Poona	Multistate	1	Turtles	Private home
July 2015	<i>Campylobacter</i> spp.	Clermont	2	Cats	Humane society
August 2015	<i>Campylobacter</i> spp.	Columbiana	2	Puppy	Private home
August 2015	<i>Salmonella</i> Paratyphi B var Java, Pomona and Poona	Multistate	5	Turtles	Private home
September 2015	<i>Cryptosporidium</i> spp.	Hancock	23	Calves	Veterinary clinic

Source of outbreak data: Ohio Disease Reporting System.

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

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

[Four Multistate Outbreaks of Human \*Salmonella\* Infections Linked to Small Turtles](#)

Please refer to the Technical Notes (pp. 89-91) for additional information on the outbreak data.

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

# TECHNICAL NOTES

## SPECIFIC DISEASES

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

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

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

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

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

**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). State correctional cases are excluded from individual county totals, thus county totals do not match totals; these include as follows: one case of acute hepatitis B, 99 cases of chronic hepatitis B, one case of acute hepatitis C and 3,254 cases of past or present hepatitis C.

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

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

**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 three months of age), *Haemophilus influenzae*, *Listeria monocytogenes*, *Mycobacterium tuberculosis*, *Neisseria meningitidis* and *Streptococcus pneumoniae*. Cases of meningitis due to these agents are reported as those specific conditions.

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

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

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

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

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

## OUTBREAKS

Numbers in tables on pages 6-50 indicate the number of outbreaks reported and do not reflect the number of cases involved in the outbreak, except as noted. Outbreak data for vaccine-preventable diseases (i.e., influenza, pertussis, varicella-zoster virus) only include confirmed outbreaks. All other outbreaks are confirmed, probable or suspected.

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

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

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

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

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

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

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

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

## RATE CALCULATIONS

Population estimates for rates in the "Age in Years," "Sex" and "County of Residence" tables come from the 2015 U.S. Census estimates. Population data for rates in the "Year of Onset" table come from the U.S. Census estimates for each year. Rates were not calculated for the following conditions because they pertain to selected age populations and not the entire population. Rates were calculated in the "Age in Years" table only for the conditions below containing an asterisk (\*) because appropriate population data were available for the denominator:

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

## DISEASES NOT INCLUDED IN TABLES

There were no known cases in Ohio of the following reportable diseases during at least the past five years; thus, they are not included in the 2011-2015 disease tables (pp. 6-7):

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

Reportable diseases not included in the "Age in Years," "Sex," "Month of Onset" and "County of Residence" tables (pp. 8-43) had no known cases reported in 2015.

## SEROTYPES AND SEROGROUPS

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

## REFERENCES

Ohio Department of Health. *Infectious Disease Control Manual*. Columbus, OH: Ohio Department of Health; 2015. Available at: <http://www.odh.ohio.gov/pdf/idcm/sect3TOC.pdf>.