ANNUAL SUMMARY OF INFECTIOUS DISEASES

OHIO

2014

REPORTED INCIDENCE OF SELECTED NOTIFIABLE DISEASES



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BUREAU OF INFECTIOUS DISEASES

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INTRODUCTION

The Annual Summary of Infectious Diseases, Ohio, 2014 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, meningococcal disease serogroups and Salmonella serotypes. In addition, there are graphs of selected disease incidence, profiles of selected diseases, outbreak summaries and profiles of health events detected in EpiCenter that feature recent epidemiologic trends.

The sources of these data are individual case and laboratory reports submitted to the Ohio Department of Health (ODH) by infection preventionists, 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), available online at http://www.odh.ohio.gov/pdf/IDCM/sect3TOC.pdf and
- The Centers for Disease Control and Prevention (CDC) Division of Integrated Surveillance Systems and Services' nationally notifiable infectious disease case definitions, available online at http://wwwn.cdc.gov/NNDSS/script/ConditionList.aspx?Type=0&Yr=2014.

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

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

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

OHIO NOTIFIABLE DISEASES

Ohio Administrative Code (OAC) 3701-3, effective Jan. 1, 2014

The following infectious diseases were reportable to the Ohio Department of Health Jan. 1, 2014 through Dec. 31, 2014:

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
- Plaque
- Rabies, human
- Rubella, not congenital
- Severe acute respiratory syndrome
- Smallpox
- Tularemia
- Viral hemorrhagic fever
- Yellow fever
- Any unexpected pattern of cases, suspected cases, deaths or increased incidence of any other disease of major public health concern because of the severity of disease or potential for epidemic spread, which may indicate a newly recognized infectious agent, outbreak, epidemic, related public health hazard or act of bioterrorism.

CLASS B

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

- Amebiasis
- Arboviral neuroinvasive and non-neuroinvasive disease:
 - 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
- 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

OHIO NOTIFIABLE DISEASES

Ohio Administrative Code (OAC) 3701-3, effective Jan. 1, 2014

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.

- 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

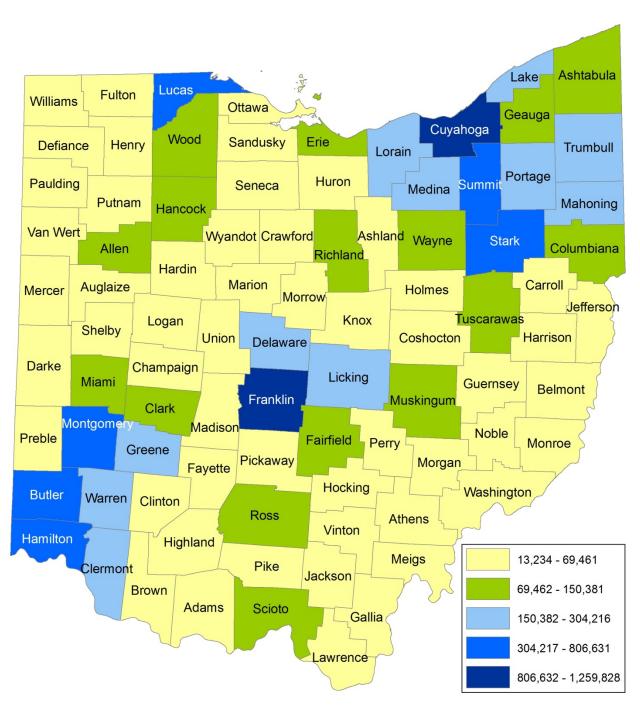
- Healthcare-associated
- Institutional
- Waterborne
- Zoonotic

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 http://www.odh.ohio.gov/reportablediseases or OAC 3701-3-02 and 3701-3-12.

OHIO COUNTY POPULATION MAP



Source of population data: 2014 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 2010-2014. Medians and means were calculated only when five years of data were available. Population data come from the U.S. Census estimates for each year except 2010, which uses the actual count. Data are by year of onset with the exception of hepatitis B and C conditions and outbreaks, which are shown by date of report for all years. Please refer to the technical notes for limitations on hepatitis B and C data.

BY AGE TABLE Pages 8-11

This table provides case counts and rates by age group (in years) for 2014. Age refers to the patient's age at the earliest known date associated with the case. Population data come from the 2014 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 2014. Population data come from the 2014 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 2014 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 2014. 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 2014 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 2010-2014. The bacteriology laboratory at ODH performs serogrouping of Shiga toxin-producing *E. coli* isolates.

HAEMOPHILUS INFLUENZAE, INVASIVE DISEASE SEROGROUPS TABLE Page 45

This table shows invasive *Haemophilus influenzae* case counts in children < 5 years of age by serogroup during 2010-2014. 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 2010-2014. The bacteriology laboratory at ODH performs serogrouping of *Neisseria meningitidis* isolates.

SALMONELLA SEROTYPES TABLE

Pages 47-50

Salmonella case counts by serotype during 2010-2014 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, 2010-2014

	2010		20	11	20	12	2013		2014		MEDIAN	
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate								
Amebiasis	29	0.3	10	0.1	11	0.1	7	0.1	9	0.1	10	0.1
Botulism	3	0.0	2	0.0	6	0.1	5	0.0	5	0.0	5	0.0
Foodborne	0	0.0	1	0.0	2	0.0	0	0.0	2	0.0	1	0.0
Infant*	2	*	1	*	4	*	5	*	3	*	3	*
Wound	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	1,124	9.7	1,191	10.3	1,129	9.8	1,023	8.8	923	8.0	1,124	9.7
Cholera	3	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Coccidioidomycosis	17	0.1	20	0.2	17	0.1	10	0.1	15	0.1	17	0.1
Creutzfeldt-Jakob Disease (CJD)	12	0.1	12	0.1	13	0.1	8	0.1	12	0.1	12	0.1
Cryptosporidiosis	477	4.1	1,113	9.6	550	4.8	367	3.2	322	2.8	477	4.1
Cyclosporiasis	0	0.0	0	0.0	0	0.0	7	0.1	2	0.0	0	0.0
Cytomegalovirus (CMV), Congenital*	28	*	10	*	31	*	29	*	_	n/a	_	*
Escherichia coli, Shiga Toxin-Producing	138	1.2	182	1.6	240	2.1	223	1.9	203	1.8	203	1.8
O157:H7	75	0.7	95	0.8	122	1.1	76	0.7	92	0.8	92	0.8
Not O157:H7	43	0.4	72	0.6	105	0.9	138	1.2	105	0.9	105	0.9
Unknown Serotype	20	0.2	15	0.1	13	0.1	9	0.1	6	0.1	13	0.1
Giardiasis	863	7.5	781	6.8	571	4.9	505	4.4	380	3.3	571	4.9
Haemophilus influenzae, Invasive Disease	125	1.1	178	1.5	152	1.3	153	1.3	129	1.1	152	1.3
Hemolytic Uremic Syndrome (HUS)	1	0.0	5	0.0	10	0.1	10	0.1	8	0.1	8	0.1
egionellosis	230	2.0	390	3.4	288	2.5	496	4.3	409	3.5	390	3.4
Leprosy (Hansen Disease)	1	0.0	1	0.0	0	0.0	1	0.0	1	0.0	1	0.0
Listeriosis	29	0.3	29	0.3	28	0.2	28	0.2	29	0.3	29	0.3
Meningitis, Aseptic	810	7.0	1,329	11.5	701	6.1	857	7.4	530	4.6	810	7.0
Meningitis, Other Bacterial*	82	0.7	84	0.7	95	0.8	83	0.7	91	0.8	84	0.7
Salmonellosis	1,309	11.3	1,183	10.2	1,270	11.0	1,190	10.3	1,188	10.2	1,190	10.3
Shigellosis	304	2.6	338	2.9	1,812	15.7	645	5.6	591	5.1	591	5.1
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	10	0.1	3	0.0	9	0.1	13	0.1	8	0.1	9	0.1
Streptococcal Disease, Group A, Invasive	248	2.1	322	2.8	286	2.5	305	2.6	319	2.8	305	2.6
Streptococcal Disease, Group B, in Newborn*	41	*	71	*	79	*	65	*	63	*	65	*
Streptococcal Toxic Shock Syndrome (STSS)	12	0.1	18	0.2	11	0.1	9	0.1	9	0.1	11	0.1
Streptococcus pneumoniae, Invasive Disease	1,220	10.6	1,261	10.9	1,188	10.3	1,112	9.6	924	8.0	1,188	10.3
Ages < 5 Years*	97	*	84	*	81	*	41	*	47	*	81	*
Drug Resistant, Ages 5+ Years*	320	*	304	*	321	*	277	*	216	*	304	*
Drug Susceptible, Ages 5+ Years*	803	*	873	*	786	*	794	*	661	*	794	*
Toxic Shock Syndrome (TSS)	4	0.0	0	0.0	2	0.0	2	0.0	9	0.1	2	0.0
Typhoid Fever	9	0.1	5	0.0	13	0.1	5	0.0	7	0.1	7	0.1
/ibriosis	11	0.1	7	0.1	11	0.1	11	0.1	12	0.1	11	0.1
Vibrio parahaemolyticus Infection	5	0.0	3	0.0	6	0.1	7	0.1	7	0.1	6	0.1
Vibrio vulnificus Infection	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0
Other (Not Cholera)	6	0.1	4	0.0	4	0.0	3	0.0	5	0.0	4	0.0
/ersiniosis	42	0.4	31	0.3	43	0.4	34	0.3	52	0.4	42	0.4
SUB-TOTAL	7.217	62.6	8,600	74.5	8,590	74.4	7,213	62.3	6,250	53.9	7,217	62.6

591	5.1	738	6.4
9	0.1	9	0.1
305	2.6	296	2.6
65	*	64	*
11	0.1	12	0.1
1,188	10.3	1,141	9.9
81	*	70	*
304	*	288	*
794	*	783	*
2	0.0	3	0.0
7	0.1	8	0.1
11	0.1	10	0.1
6	0.1	6	0.1
0	0.0	0	0.0
4	0.0	4	0.0
42	0.4	40	0.4
7,217	62.6	7,574	65.5
45	0.4	42	0.4
170	1.5	160	1.4
3	*	3	*
12	0.1	49	0.4
*	*	*	*
0	0.0	0	0.0
223	1.9	3,409	29.4

MEAN

13

4

0

1,078

16

11

566

2

197

92

13

620

147

7

363

1

29

845

87

1,228

Rate

0.1

0.0

0.0

0.0

9.3

0.0

0.1

0.1

4.9

0.0

1.7

0.8

8.0

0.1

5.4

1.3

0.1

3.1

0.0

0.3

7.3

0.7

10.6

Rate

3.4

10.3

HEPATITIS										
Hepatitis A	49	0.4	34	0.3	45	0.4	55	0.5	27	0.2
Hepatitis B, Acute*	123	1.1	106	0.9	170	1.5	232	2.0	170	1.5
Hepatitis B, Perinatal Infection*	3	*	4	*	1	*	5	*	2	*
Hepatitis C, Acute*	12	0.1	6	0.1	7	0.1	113	1.0	106	0.9
Hepatitis C, Past or Present*	*	*	*	*	*	*	*	*	15,772	136.0
Hepatitis E	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	188	1.6	150	1.3	223	1.9	405	3.5	16,077	138.7

N = number of cases reported.

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

n/a = not applicable.

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

^{*} Please see Technical Notes (pp. 103-106).

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2010-2014

	20	10	20	11	20	12	20	13	20	14	MED	IAN	MEAN	
OUTBREAKS*	N	Rate	N -V	Rate	N T	Rate	N T	Rate	N T	Rate	N N	Rate	N	Rate
Community*	47	n/a	32	n/a	55	n/a	40	n/a	72	n/a	47	n/a	49	n/a
Foodborne*	69	n/a	61	n/a	85	n/a	76	n/a	75	n/a	75	n/a	73	n/a
Healthcare-Associated*	68	n/a	37	n/a	94	n/a	84	n/a	70	n/a	70	n/a	71	n/a
Institutional*	82	n/a	104	n/a	170	n/a	153	n/a	202	n/a	153	n/a	142	n/a
Waterborne*	10	n/a	17	n/a	5	n/a	14	n/a	14	n/a	14	n/a	12	n/a
Zoonotic*	2	n/a	4	n/a	18	n/a	4	n/a	13	n/a	4	n/a	8	n/a
SUB-TOTAL	278	n/a	255	n/a	427	n/a	371	n/a	446	n/a	371	n/a	355	n/a
VACCINE PREVENTARI E	•		1							•				
VACCINE-PREVENTABLE	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
Diphtheria					_									
Influenza-Associated Hospitalization Influenza-Associated Pediatric Mortality*	259 0	2.2	2,410	20.9	2,961	25.6	4,197 6	36.3	8,247 4	71.1	2,961	25.6	3,615	31.2
,		0.0	0				1	0.0		0.0	1			0.0
Influenza A Virus, Novel Human Infection* Measles	2	0.0	0	0.0	107	0.9	0	0.0	382	3.3	1	0.0	22 77	0.2
	1	0.0	0	0.0	1	0.0	0	0.0	302	0.0	1	0.0	1	0.7
Imported	1	0.0	0	0.0	0	0.0	0	0.0	379	3.3	0	0.0	76	0.0
Indigenous Maningenous Diagona	35	0.0	24	0.0	24	0.0	10	0.0	12	0.1	24	0.0	21	0.7
Meningococcal Disease	27	0.3	13	0.2	8	0.2	12	0.1	554	4.8	13	0.2	123	1.1
Mumps	1.858	16.1	690	6.0	905	7.8	1,667		1.310	11.3	1.310	11.3	1.286	11.1
Pertussis Rubella	0	0.0	0	0.0	905	0.0	1,007	14.4 0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Not Congenital	1	0.0	1	0.0		0.0	0		1	0.0	1	0.0	1	0.0
Tetanus Varicella	1,337	11.6	1,040	9.0	2 811	7.0	648	0.0 5.6	513	4.4	811	7.0	870	7.5
SUB-TOTAL	3.484	30.2	4.155	36.0	4,797	41.6	6,532	56.5	11.026	95.1	4,797	41.6	5,999	51.9
30B-10TAL	3,404	30.2	4,133	30.0	4,131	41.0	0,332	30.3	11,020	33.1	4,131	41.0	3,333	31.3
ZOONOSES														
Brucellosis	1	0.0	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	1	0.0
Chikungunya Virus Infection*		n/a	_	n/a	_	n/a		n/a	43	0.4	_	0.4	_	0.4
Dengue	16	0.1	2	0.0	6	0.1	9	0.1	9	0.1	9	0.1	8	0.1
Ehrlichiosis/Anaplasmosis	10	0.1	14	0.1	6	0.1	15	0.1	6	0.1	10	0.1	10	0.1
Anaplasma phagocytophilum*	2	0.0	8	0.1	1	0.0	4	0.0	1	0.0	2	0.0	3	0.0
Ehrlichia chaffeensis*	8	0.1	5	0.0	4	0.0	9	0.1	4	0.0	5	0.0	6	0.0
Unknown	0	0.0	1	0.0	1	0.0	2	0.0	1	0.0	1	0.0	1	0.0
LaCrosse Virus Disease*	24	0.2	50	0.4	14	0.1	16	0.1	31	0.3	24	0.2	27	0.2
Leptospirosis	0	0.0	1	0.0	0	0.0	0	0.0	2	0.0	0	0.0	1	0.0
Lyme Disease	37	0.3	52	0.5	63	0.5	83	0.7	120	1.0	63	0.5	71	0.6
Malaria	44	0.4	41	0.4	40	0.3	33	0.3	39	0.3	40	0.3	39	0.3
Psittacosis	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	1	0.0	1	0.0	3	0.0	5	0.0	2	0.0	2	0.0	2	0.0
Acute	0	0.0	1	0.0	3	0.0	2	0.0	1	0.0	1	0.0	1	0.0
Chronic	1	0.0	0	0.0	0	0.0	3	0.0	1	0.0	1	0.0	1	0.0
Rabies, Animal*	47	n/a	51	n/a	41	n/a	64	n/a	25	n/a	47	n/a	46	n/a
Spotted Fever Rickettsiosis*	16	0.1	21	0.2	23	0.2	23	0.2	10	0.1	21	0.2	19	0.2
Trichinellosis	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	1	0.0	0	0.0	2	0.0	1	0.0	1	0.0	1	0.0
West Nile Virus Infection	5	0.0	21	0.2	122	1.1	24	0.2	11	0.1	21	0.2	37	0.3
SUB-TOTAL	202	1.3	255	1.8	318	2.4	277	1.8	299	2.4	277	1.8	270	1.9
GRAND TOTAL	11,369	95.7	13,415	113.6	14,355	120.3	14,798	124.1	34,098	290.0	14,355	120.3	17,607	148.8
POPULATION	11,53	6 504	11,54	1 007	11,54	4 225	11,57	000	11,59	1162	11,54	4 22E	11,55	7 2/1
PUPULATION	11,53	0,304	11,34	1,007	11,54	4,223	11,5/	u,ouo	11,59	4,103	1 11,54	4,223	∣ ≀≀,ວວ	1,341

N = number of cases reported.

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

n/a = not applicable.

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

^{*} Please see Technical Notes (pp. 103-106).

	0	-4	5-9 10-14		-14	15	-19	20-	-29	30-	-39	
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N .	Rate	N .C	Rate	N Z	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2	1	0.1
Botulism	3	0.4	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0
Infant*	3	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	89	12.9	35	4.8	29	3.8	68	8.8	125	8.1	94	6.7
Coccidioidomycosis	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1	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
Cryptosporidiosis	49	7.1	19	2.6	12	1.6	34	4.4	55	3.6	31	2.2
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Escherichia coli, Shiga Toxin-Producing	49	7.1	24	3.3	20	2.6	33	4.3	31	2.0	15	1.1
O157:H7	24	3.5	16	2.2	9	1.2	11	1.4	13	0.8	9	0.6
Not O157:H7	23	3.3	8	1.1	10	1.3	21	2.7	17	1.1	6	0.4
Unknown Serotype	2	0.3	0	0.0	1	0.1	1	0.1	1	0.1	0	0.0
Giardiasis	57	8.3	25	3.4	14	1.9	18	2.3	51	3.3	45	3.2
Haemophilus influenzae, Invasive Disease	19	2.8	2	0.3	0	0.0	2	0.3	4	0.3	3	0.2
Hemolytic Uremic Syndrome (HUS)	2	0.3	3	0.4	2	0.3	1	0.1	0	0.0	0	0.0
Legionellosis	0	0.0	0	0.0	0	0.0	2	0.3	8	0.5	23	1.6
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Listeriosis	4	0.6	1	0.1	0	0.0	0	0.0	0	0.0	1	0.1
Meningitis, Aseptic	135	19.5	25	3.4	17	2.2	23	3.0	83	5.4	74	5.3
Meningitis, Other Bacterial*	15	2.2	1	0.1	3	0.4	2	0.3	7	0.5	11	0.8
Salmonellosis	164	23.7	75	10.3	55	7.3	72	9.3	152	9.9	105	7.5
Shigellosis	160	23.2	121	16.6	34	4.5	15	1.9	72	4.7	65	4.6
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	12	1.7	14	1.9	2	0.3	3	0.4	14	0.9	38	2.7
Streptococcal Disease, Group B, in Newborn*	63	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	2	0.1
Streptococcus pneumoniae, Invasive Disease	47	6.8	17	2.3	8	1.1	2	0.3	30	1.9	47	3.4
Ages < 5 Years*	47	6.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Drug Resistant, Ages 5+ Years*	0	0.0	2	0.3	1	0.1	2	0.3	5	0.3	15	1.1
Drug Susceptible, Ages 5+ Years*	0	0.0	15	2.1	7	0.9	0	0.0	25	1.6	32	2.3
Toxic Shock Syndrome (TSS)	1	0.1	0	0.0	4	0.5	3	0.4	0	0.0	0	0.0
Typhoid Fever	0	0.0	2	0.3	0	0.0	1	0.1	2	0.1	1	0.1
Vibriosis	0	0.0	2	0.3	0	0.0	1	0.1	0	0.0	2	0.1
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1
Other (Not Cholera)	0	0.0	2	0.3	0	0.0	0	0.0	0	0.0	1	0.1
Yersiniosis	14	2.0	5	0.7	2	0.3	2	0.3	2	0.1	4	0.3
SUB-TOTAL	883	127.9	371	51.0	203	26.8	282	36.5	644	41.8	563	40.2
HEPATITIS												
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	6	0.4
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	26	1.7	47	3.4
Hepatitis B, Perinatal Infection*	2	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	1	0.1	0	0.0	0	0.0	3	0.4	37	2.4	22	1.6
Hepatitis C, Past or Present*	70	10.1	7	1.0	3	0.4	134	17.3	4,375	284.2	3,136	223.8
SUB-TOTAL	73	10.6	7	1.0	3	0.4	137	17.7	4,440	288.4	3,211	229.1

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	0-	-4	5-	-9	10	-14	15	-19	20-	-29	30-39	
VACCINE-PREVENTABLE	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Diphtheria	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0
Influenza-Associated Hospitalization	592	85.7	205	28.2	100	13.2	110	14.2	344	22.3	369	26.3
Influenza-Associated Pediatric Mortality*	2	0.3	0	0.0	0	0.0	2	0.3	0	0.0	0	0.0
Influenza A Virus, Novel Human Infection*	1	0.1	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Measles	69	10.0	54	7.4	66	8.7	54	7.0	78	5.1	36	2.6
Imported	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	1	0.1
Indigenous	69	10.0	54	7.4	66	8.7	54	7.0	76	4.9	35	2.5
Meningococcal Disease	1	0.1	0	0.0	0	0.0	0	0.0	2	0.1	1	0.1
Mumps	23	3.3	35	4.8	20	2.6	51	6.6	188	12.2	70	5.0
Pertussis	366	53.0	217	29.8	297	39.3	221	28.6	28	1.8	48	3.4
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Varicella	160	23.2	149	20.5	106	14.0	44	5.7	26	1.7	8	0.6
SUB-TOTAL	1,214	175.8	660	90.6	590	78.0	483	62.5	667	43.3	532	38.0
ZOONOSES												
Chikungunya Virus Infection*	1	0.1	0	0.0	0	0.0	6	8.0	5	0.3	7	0.5
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	1	0.1
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	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*	5	0.7	15	2.1	11	1.5	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0
Lyme Disease	3	0.4	11	1.5	16	2.1	8	1.0	10	0.6	17	1.2
Malaria	2	0.3	1	0.1	0	0.0	4	0.5	8	0.5	5	0.4
Q Fever	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
Chronic	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
Spotted Fever Rickettsiosis*	1	0.1	0	0.0	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	0	0.0	1	0.1
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	1	0.1	2	0.1	0	0.0
SUB-TOTAL	12	1.7	27	3.7	27	3.6	19	2.5	30	1.9	32	2.3
GRAND TOTAL	2,182	316.0	1,065	146.3	823	108.8	921	119.2	5,781	375.5	4,338	309.5
POPULATION	690,57		728	,134	756	5,139	772,486		1,539,499		1,401,467	

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	40-	-49	50-59 6			+	Unkr	own	TOTAL		
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N S	Rate	N	Rate	N.O.	Rate	
Amebiasis	2	0.1	2	0.1	1	0.0	0	n/a	9	0.1	
Botulism	0	0.0	0	0.0	0	0.0	0	n/a	5	0.0	
Foodborne	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0	
Infant*	0	*	0	*	0	*	0	n/a	3	*	
Campylobacteriosis	110	7.4	154	9.1	217	8.6	2	n/a	923	8.0	
Coccidioidomycosis	3	0.2	3	0.2	7	0.3	0	n/a	15	0.1	
Creutzfeldt-Jakob Disease (CJD)	0	0.0	2	0.1	10	0.4	0	n/a	12	0.1	
Cryptosporidiosis	27	1.8	33	1.9	61	2.4	1	n/a	322	2.8	
Cyclosporiasis	1	0.1	0	0.0	0	0.0	1	n/a	2	0.0	
Escherichia coli, Shiga Toxin-Producing	8	0.5	8	0.5	15	0.6	0	n/a	203	1.8	
O157:H7	3	0.2	3	0.2	4	0.2	0	n/a	92	0.8	
Not O157:H7	5	0.3	4	0.2	11	0.4	0	n/a	105	0.9	
Unknown Serotype	0	0.0	1	0.1	0	0.0	0	n/a	6	0.1	
Giardiasis	58	3.9	37	2.2	74	2.9	1	n/a	380	3.3	
Haemophilus influenzae, Invasive Disease	8	0.5	17	1.0	74	2.9	0	n/a	129	1.1	
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	n/a	8	0.1	
Legionellosis	44	3.0	108	6.4	224	8.9	0	n/a	409	3.5	
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0	
Listeriosis	0	0.0	1	0.1	22	0.9	0	n/a	29	0.3	
Meningitis, Aseptic	55	3.7	53	3.1	63	2.5	2	n/a	530	4.6	
Meningitis, Other Bacterial*	16	1.1	19	1.1	17	0.7	0	n/a	91	0.8	
Salmonellosis	139	9.4	157	9.3	269	10.6	0	n/a	1,188	10.2	
Shigellosis	38	2.6	37	2.2	49	1.9	0	n/a	591	5.1	
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	1	0.1	2	0.1	5	0.2	0	n/a	8	0.1	
Streptococcal Disease, Group A, Invasive	31	2.1	58	3.4	146	5.8	1	n/a	319	2.8	
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	n/a	63	*	
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	1	0.1	4	0.2	0	n/a	9	0.1	
Streptococcus pneumoniae, Invasive Disease	67	4.5	180	10.6	522	20.7	4	n/a	924	8.0	
Ages < 5 Years*	0	0.0	0	0.0	0	0.0	0	n/a	47	6.8	
Drug Resistant, Ages 5+ Years*	12	0.8	44	2.6	134	5.3	1	n/a	216	2.0	
Drug Susceptible, Ages 5+ Years*	55	3.7	136	8.0	388	15.4	3	n/a	661	6.1	
Toxic Shock Syndrome (TSS)	1	0.1	0	0.0	0	0.0	0	n/a	9	0.1	
Typhoid Fever	1	0.1	0	0.0	0	0.0	0	n/a	7	0.1	
Vibriosis	2	0.1	3	0.2	2	0.1	0	n/a	12	0.1	
Vibrio parahaemolyticus Infection	2	0.1	3	0.2	0	0.0	0	n/a	7	0.1	
Other (Not Cholera)	0	0.0	0	0.0	2	0.1	0	n/a	5	0.0	
Yersiniosis	8	0.5	6	0.4	9	0.4	0	n/a	52	0.4	
SUB-TOTAL	620	41.8	881	52.0	1,791	70.9	12	n/a	6,250	53.9	
					•				•		
HEPATITIS											
Hepatitis A	6	0.4	6	0.4	7	0.3	0	n/a	27	0.2	
Hepatitis B, Acute*	38	2.6	14	0.8	13	0.5	32	n/a	170	1.5	
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	n/a	2	*	
Hepatitis C, Acute*	11	0.7	11	0.6	1	0.0	20	n/a	106	0.9	
Hepatitis C, Past or Present*	1,817	122.5	2,119	125.0	1,292	51.1	2,819	n/a	15,772	136.0	
SUB-TOTAL	1,872	126.2	2,150	126.8	1,313	52.0	2,871	n/a	16,077	138.7	

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	40-	-49	50-	-59	60) +	Unknown		TOT	ΓAL
VACCINE-PREVENTABLE	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Diphtheria	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Influenza-Associated Hospitalization	573	38.6	1,149	67.8	4,799	189.9	6	n/a	8,247	71.1
Influenza-Associated Pediatric Mortality*	0	0.0	0	0.0	0	0.0	0	n/a	4	0.0
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Measles	12	0.8	13	0.8	0	0.0	0	n/a	382	3.3
Imported	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
Indigenous	12	0.8	13	0.8	0	0.0	0	n/a	379	3.3
Meningococcal Disease	2	0.1	0	0.0	6	0.2	0	n/a	12	0.1
Mumps	75	5.1	62	3.7	30	1.2	0	n/a	554	4.8
Pertussis	43	2.9	37	2.2	52	2.1	1	n/a	1,310	11.3
Tetanus	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Varicella	8	0.5	6	0.4	6	0.2	0	n/a	513	4.4
SUB-TOTAL	713	48.1	1,267	74.7	4,893	193.6	7	n/a	11,026	95.1
ZOONOSES										
Chikungunya Virus Infection*	9	0.6	10	0.6	5	0.2	0	n/a	43	0.4
Dengue	2	0.1	2	0.1	2	0.1	0	n/a	9	0.1
Ehrlichiosis/Anaplasmosis	0	0.0	1	0.1	4	0.2	0	n/a	6	0.1
Anaplasma phagocytophilum*	0	0.0	0	0.0	1	0.0	0	n/a	1	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	3	0.1	0	n/a	4	0.0
Unknown	0	0.0	1	0.1	0	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	n/a	31	0.3
Leptospirosis	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Lyme Disease	17	1.1	21	1.2	17	0.7	0	n/a	120	1.0
Malaria	4	0.3	7	0.4	8	0.3	0	n/a	39	0.3
Q Fever	1	0.1	0	0.0	1	0.0	0	n/a	2	0.0
Acute	1	0.1	0	0.0	0	0.0	0	n/a	1	0.0
Chronic	0	0.0	0	0.0	1	0.0	0	n/a	1	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	25	n/a	25	n/a
Spotted Fever Rickettsiosis*	3	0.2	2	0.1	3	0.1	0	n/a	10	0.1
Tularemia	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
West Nile Virus Infection	2	0.1	0	0.0	6	0.2	0	n/a	11	0.1
SUB-TOTAL	38	2.6	43	2.5	46	1.8	25	n/a	299	2.4
GRAND TOTAL	3,243	218.6	4,341	256.1	8,043	318.3	2,915	n/a	33,652	290.0
POPULATION	1,483	3,500	1,695	5,198	2,527	7,164	()	11,59	4,163

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

	Female		Ma	ale	Unk	nown	ТОТ	AL
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	3	0.1	6	0.1	0	n/a	9	0.1
Botulism	4	0.1	1	0.0	0	n/a	5	0.0
Foodborne	2	0.0	0	0.0	0	n/a	2	0.0
Infant*	2	*	1	*	0	n/a	3	*
Campylobacteriosis	440	7.4	481	8.5	2	n/a	923	8.0
Coccidioidomycosis	9	0.2	6	0.1	0	n/a	15	0.1
Creutzfeldt-Jakob Disease (CJD)	5	0.1	7	0.1	0	n/a	12	0.1
Cryptosporidiosis	166	2.8	155	2.7	1	n/a	322	2.8
Cyclosporiasis	1	0.0	1	0.0	0	n/a	2	0.0
Escherichia coli, Shiga Toxin-Producing	92	1.6	110	1.9	1	n/a	203	1.8
O157:H7	36	0.6	56	1.0	0	n/a	92	0.8
Not O157:H7	54	0.9	50	0.9	1	n/a	105	0.9
Unknown Serotype	2	0.0	4	0.1	0	n/a	6	0.1
Giardiasis	160	2.7	217	3.8	3	n/a	380	3.3
Haemophilus influenzae, Invasive Disease	66	1.1	61	1.1	2	n/a	129	1.1
Hemolytic Uremic Syndrome (HUS)	5	0.1	3	0.1	0	n/a	8	0.1
Legionellosis	155	2.6	254	4.5	0	n/a	409	3.5
Leprosy (Hansen Disease)	0	0.0	1	0.0	0	n/a	1	0.0
Listeriosis	19	0.3	10	0.2	0	n/a	29	0.3
Meningitis, Aseptic	280	4.7	245	4.3	5	n/a	530	4.6
Meningitis, Other Bacterial*	38	0.6	51	0.9	2	n/a	91	0.8
Salmonellosis	666	11.3	521	9.2	1	n/a	1,188	10.2
Shigellosis	305	5.2	285	5.0	1	n/a	591	5.1
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	4	0.1	4	0.1	0	n/a	8	0.1
Streptococcal Disease, Group A, Invasive	176	3.0	143	2.5	0	n/a	319	2.8
Streptococcal Disease, Group B, in Newborn*	30	*	33	*	0	n/a	63	*
Streptococcal Toxic Shock Syndrome (STSS)	5	0.1	4	0.1	0	n/a	9	0.1
Streptococcus pneumoniae, Invasive Disease	439	7.4	475	8.4	10	n/a	924	8.0
Ages < 5 Years*	13	*	34	*	0	n/a	47	*
Drug Resistant, Ages 5+ Years*	103	*	113	*	0	n/a	216	*
Drug Susceptible, Ages 5+ Years*	323	*	328	*	10	n/a	661	*
Toxic Shock Syndrome (TSS)	6	0.1	3	0.1	0	n/a	9	0.1
Typhoid Fever	4	0.1	3	0.1	0	n/a	7	0.1
	3	0.1	9	0.1	0		12	0.1
Vibriosis Vibrios para la completique la faction	1	0.1	6	0.2	0	n/a	7	0.1
Vibrio parahaemolyticus Infection	2		3		0	n/a	5	0.1
Other (Not Cholera)	25	0.0	27	0.1		n/a	52	
Yersiniosis SUB TOTAL	3.106	0.4 52.5		0.5 54.9	0 28	n/a		0.4
SUB-TOTAL	3,106	52.5	3,116	54.9	28	n/a	6,250	53.9
HEPATITIS								
Hepatitis A	19	0.3	8	0.1	0	n/a	27	0.2
Hepatitis B, Acute*	73	1.2	97	1.7	0	n/a	170	1.5
Hepatitis B, Perinatal Infection*	1	*	1	*	0	n/a	2	*
Hepatitis C, Acute*	41	0.7	65	1.1	0	n/a	106	0.9
Hepatitis C, Past or Present*	6,479	109.5	9,279	163.5	14	n/a	15,772	136.0
SUB-TOTAL	6,613	111.7	9,450	166.5	14	n/a	16,077	138.7
30B-101AL	0,013	111.7	9,430	100.5	14	II/a	10,077	130.1
VACCINE-PREVENTABLE								
Diphtheria	1	0.0	0	0.0	0	n/a	1	0.0
Influenza-Associated Hospitalization	4,502	76.1	3,657	64.4	88	n/a	8,247	71.1
Influenza-Associated Prospitalization Influenza-Associated Pediatric Mortality*	2	*	2	*	0	n/a	4	*
Influenza A Virus, Novel Human Infection*	2	0.0	0	0.0	0	n/a	2	0.0
Measles	178	3.0	204	3.6	0	n/a	382	3.3
Imported	0	0.0	3	0.1	0	n/a	3	0.0
Indigenous	178	3.0	201	3.5	0	n/a	379	3.3
Meningococcal Disease	6	0.1	6	0.1	0	n/a n/a	12	0.1
	343			3.7			554	
Mumps Pertussis	689	5.8	211		0	n/a		4.8
		11.6	617	10.9	4	n/a	1,310	11.3
Tetanus	0	0.0	1	0.0	0	n/a	1	0.0
Varicella	237	4.0	273	4.8	3	n/a	513	4.4
SUB-TOTAL SUB-TOTAL	5,960	100.7	4,971	87.6	95	n/a	11,026	95.1

	Fer	nale	M	ale	Unk	nown	TO	TAL
ZOONOSES	N	Rate	N	Rate	N	Rate	N	Rate
Chikungunya Virus Infection*	22	0.4	21	0.4	0	n/a	43	0.4
Dengue	3	0.1	6	0.1	0	n/a	9	0.1
Ehrlichiosis/Anaplasmosis	1	0.0	5	0.1	0	n/a	6	0.1
Anaplasma phagocytophilum*	0	0.0	1	0.0	0	n/a	1	0.0
Ehrlichia chaffeensis*	1	0.0	3	0.1	0	n/a	4	0.0
Unknown	0	0.0	1	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	19	0.3	12	0.2	0	n/a	31	0.3
Leptospirosis	0	0.0	2	0.0	0	n/a	2	0.0
Lyme Disease	59	1.0	61	1.1	0	n/a	120	1.0
Malaria	17	0.3	22	0.4	0	n/a	39	0.3
Q Fever	1	0.0	1	0.0	0	n/a	2	0.0
Acute	0	0.0	1	0.0	0	n/a	1	0.0
Chronic	1	0.0	0	0.0	0	n/a	1	0.0
Rabies, Animal*	0	n/a	0	n/a	25	n/a	25	n/a
Spotted Fever Rickettsiosis*	4	0.1	6	0.1	0	n/a	10	0.1
Tularemia	0	0.0	1	0.0	0	n/a	1	0.0
West Nile Virus Infection	4	0.1	7	0.1	0	n/a	11	0.1
SUB-TOTAL	130	2.2	144	2.5	25	n/a	299	2.4

GRAND TOTAL	15,809	267.1	17,681	311.6	162	n/a	33,652	290.0
	•							-
POPULATION	5,919	,391	5,674	l,772	()	11,594	4,163

	Jan	uary	Febr	ruary	Ma	rch	Ar	oril	M	ay	Ju	ne	Ju	ılv
GENERAL INFECTIOUS DISEASES	N	%	N	%	N	%	N	%	N	~, %	N	%	N	,
Amebiasis	1	11%	0	0%	0	0%	1	11%	0	0%	2	22%	0	0%
Botulism	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	40%
Foodborne	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Infant*	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Campylobacteriosis	39	4%	55	6%	53	6%	61	7%	80	9%	96	10%	153	17%
Coccidioidomycosis	1	7%	0	0%	0	0%	1	7%	4	27%	1	7%	2	13%
Creutzfeldt-Jakob Disease (CJD)	1	8%	0	0%	2	17%	2	17%	0	0%	1	8%	0	0%
Cryptosporidiosis	21	7%	25	8%	26	8%	21	7%	15	5%	30	9%	41	13%
Cyclosporiasis	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Escherichia coli, Shiga Toxin-Producing	5	2%	10	5%	15	7%	16	8%	14	7%	21	10%	30	15%
O157:H7	2	2%	4	4%	4	4%	7	8%	8	9%	11	12%	14	15%
Not O157:H7	3	3%	6	6%	9	9%	8	8%	5	5%	10	10%	16	15%
Unknown Serotype	0	0%	0	0%	2	33%	1	17%	1	17%	0	0%	0	0%
Giardiasis	23	6%	27	7%	34	9%	26	7%	33	9%	23	6%	49	13%
Haemophilus influenzae, Invasive Disease	15	12%	10	8%	7	5%	6	5%	10	8%	11	9%	13	10%
Hemolytic Uremic Syndrome (HUS)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	25%
Legionellosis	21	5%	6	1%	25	6%	24	6%	17	4%	53	13%	61	15%
Leprosy (Hansen Disease)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Listeriosis	0	0%	1	3%	4	14%	5	17%	1	3%	4	14%	2	7%
Meningitis, Aseptic	24	5%	29	5%	28	5%	26	5%	35	7%	39	7%	67	13%
Meningitis, Other Bacterial*	10	11%	5	5%	3	3%	10	11%	6	7%	8	9%	10	11%
Salmonellosis	67	6%	56	5%	63	5%	110	9%	135	11%	119	10%	142	12%
Shigellosis	41	7%	31	5%	21	4%	41	7%	66	11%	78	13%	72	12%
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	2	25%	1	13%	1	13%	1	13%	0	0%	0	0%	1	13%
Streptococcal Disease, Group A, Invasive	44	14%	34	11%	35	11%	44	14%	37	12%	25	8%	15	5%
Streptococcal Disease, Group B, in Newborn*	6	10%	4	6%	4	6%	8	13%	4	6%	5	8%	8	13%
Streptococcal Toxic Shock Syndrome (STSS)	1	11%	4	44%	1	11%	1	11%	0	0%	0	0%	0	0%
Streptococcus pneumoniae, Invasive Disease	113	12%	72	8%	105	11%	109	12%	97	10%	53	6%	29	3%
Ages < 5 Years*	4	9%	3	6%	6	13%	7	15%	5	11%	3	6%	1	2%
Drug Resistant, Ages 5+ Years*	36	17%	19	9%	22	10%	22	10%	25	12%	15	7%	6	3%
Drug Susceptible, Ages 5+ Years*	73	11%	50	8%	77	12%	80	12%	67	10%	35	5%	22	3%
Toxic Shock Syndrome (TSS)	0	0%	1	11%	0	0%	1	11%	0	0%	1	11%	4	44%
Typhoid Fever	1	14%	1	14%	0	0%	0	0%	1	14%	1	14%	1	14%
Vibriosis	0	0%	1	8%	0	0%	1	8%	1	8%	0	0%	3	25%
Vibrio parahaemolyticus Infection	0	0%	0	0%	0	0%	0	0%	1	14%	0	0%	1	14%
Other (Not Cholera)	0	0%	1	20%	0	0%	1	20%	0	0%	0	0%	2	40%
Yersiniosis	10	19%	4	8%	3	6%	1	2%	4	8%	4	8%	6	12%
SUB-TOTAL	446	7%	377	6%	430	7%	516	8%	560	9%	575	9%	715	11%
	•													
HEPATITIS														
Hepatitis A	2	7%	1	4%	3	11%	1	4%	2	7%	4	15%	4	15%
Hepatitis B, Acute*	20	12%	23	14%	16	9%	26	15%	18	11%	10	6%	10	6%
Hepatitis B, Perinatal Infection*	0	0%	0	0%	1	50%	0	0%	0	0%	1	50%	0	0%
Hepatitis C, Acute*	4	4%	4	4%	5	5%	15	14%	11	10%	7	7%	13	12%
Hepatitis C, Past or Present*	491	3%	734	5%	975	6%	1,394	9%	1,800	11%	1,583	10%	1,534	10%
SUB-TOTAL	517	3%	762	5%	1,000	6%	1,436	9%	1,831	11%	1,605	10%	1,561	10%

N = number of cases reported.

^{% =} percentage of cases occurring in the month for the disease.
* Please see Technical Notes (pp. 103-106).

	Janu	ıarv	Febr	uarv	Ma	ırch	Aı	oril	М	lay	Jı	ıne	Jı	ulv
OUTBREAKS*	N	· <i>y</i>	N N	%	N	%	N N	%	N	, %	N	%	N .	<i>y</i>
Community*	5	7%	3	4%	5	7%	8	11%	5	7%	4	6%	14	19%
Foodborne*	4	5%	8	11%	10	13%	10	13%	9	12%	3	4%	7	9%
Healthcare-Associated*	2	3%	12	17%	12	17%	15	21%	5	7%	4	6%	1	1%
Institutional*	14	7%	16	8%	18	9%	18	9%	16	8%	15	7%	26	13%
Waterborne*	0	0%	0	0%	0	0%	1	7%	1	7%	2	14%	4	29%
Zoonotic*	0	0%	2	15%	1	8%	2	15%	0	0%	0	0%	2	15%
SUB-TOTAL	25	6%	41	9%	46	10%	54	12%	36	8%	28	6%	54	12%
VACCINE-PREVENTABLE	,													
Diphtheria	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%
Influenza-Associated Hospitalization	1,390	17%	515	6%	313	4%	209	3%	83	1%	17	0%	13	0%
Influenza-Associated Pediatric Mortality*	0	0%	0	0%	0	0%	0	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%
Measles	0	0%	0	0%	1	0%	55	14%	245	64%	73	19%	8	2%
Imported	0	0%	0	0%	1	33%	2	67%	0	0%	0	0%	0	0%
Indigenous	0	0%	0	0%	0	0%	53	14%	245	65%	73	19%	8	2%
Meningococcal Disease	1	8%	2	17%	2	17%	0	0%	0	0%	1	8%	0	0%
Mumps	8	1%	12	2%	202	36%	197	36%	76	14%	21	4%	13	2%
Pertussis	144	11%	74	6%	94	7%	107	8%	89	7%	98	7%	145	11%
Tetanus	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Varicella	48	9%	37	7%	41	8%	50	10%	53	10%	46	9%	28	5%
SUB-TOTAL	1,591	14%	640	6%	653	6%	619	6%	546	5%	256	2%	207	2%
ZOONOSES														
Chikungunya Virus Infection*	0	0%	0	0%	0	0%	0	0%	3	7%	19	44%	5	12%
Dengue	3	33%	0	0%	0	0%	2	22%	1	11%	0	0%	1	11%
Ehrlichiosis/Anaplasmosis	0	0%	0	0%	0	0%	0	0%	1	17%	3	50%	2	33%
Anaplasma phagocytophilum*	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
Ehrlichia chaffeensis*	0	0%	0	0%	0	0%	0	0%	1	25%	1	25%	2	50%
Unknown	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
LaCrosse Virus Disease*	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	6	19%
Leptospirosis	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%	0	0%
Lyme Disease	0	0%	3	3%	4	3%	6	5%	6	5%	25	21%	30	25%
Malaria	3	8%	2	5%	2	5%	1	3%	7	18%	5	13%	3	8%
Q Fever	0	0%	0	0%	1	50%	0	0%	0	0%	1	50%	0	0%
Acute	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
Chronic	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%
Rabies, Animal*	0	0%	0	0%	0	0%	2	8%	4	16%	1	4%	4	16%
Spotted Fever Rickettsiosis*	0	0%	2	20%	0	0%	0	0%	5	50%	2	20%	1	10%
- I	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Tularemia	0		_			0%	_	0%			_	0%	1	9%
West Nile Virus Infection	6	0%	7	0%	7	- , ,	0	- , -	0	0%	0	- , ,		- , -
SUB-TOTAL	ď	2%		2%	1	2%	11	4%	27	9%	58	19%	53	18%

N = number of cases reported.

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

^{*} Please see Technical Notes (pp. 103-106).

	Auc	gust	Septe	mber	Octo	ober	Nove	mber	Dece	mber	TO1	AL
GENERAL INFECTIOUS DISEASES	N	%	N	%	N	%	N	%	N	%	N	%
Amebiasis	1	11%	2	22%	0	0%	1	11%	1	11%	9	100%
Botulism	0	0%	0	0%	2	40%	1	20%	0	0%	5	100%
Foodborne	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Infant*	0	0%	0	0%	2	67%	1	33%	0	0%	3	100%
Campylobacteriosis	109	12%	77	8%	71	8%	80	9%	49	5%	923	100%
Coccidioidomycosis	2	13%	2	13%	0	0%	1	7%	1	7%	15	100%
Creutzfeldt-Jakob Disease (CJD)	1	8%	3	25%	1	8%	0	0%	1	8%	12	100%
Cryptosporidiosis	51	16%	32	10%	30	9%	17	5%	13	4%	322	100%
Cyclosporiasis	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Escherichia coli, Shiga Toxin-Producing	25	12%	26	13%	22	11%	9	4%	10	5%	203	100%
O157:H7	15	16%	15	16%	5	5%	3	3%	4	4%	92	100%
Not O157:H7	10	10%	11	10%	17	16%	5	5%	5	5%	105	100%
Unknown Serotype	0	0%	0	0%	0	0%	1	17%	1	17%	6	100%
Giardiasis	46	12%	35	9%	34	9%	21	6%	29	8%	380	100%
Haemophilus influenzae, Invasive Disease	8	6%	5	4%	10	8%	12	9%	22	17%	129	100%
Hemolytic Uremic Syndrome (HUS)	1	13%	5	63%	0	0%	0	0%	0	0%	8	100%
Legionellosis	56	14%	48	12%	42	10%	29	7%	27	7%	409	100%
Leprosy (Hansen Disease)	0	0%	0	0%	1	100%	0	0%	0	0%	1	100%
Listeriosis	5	17%	2	7%	2	7%	0	0%	3	10%	29	100%
Meningitis, Aseptic	84	16%	72	14%	68	13%	28	5%	30	6%	530	100%
Meningitis, Other Bacterial*	11	12%	13	14%	4	4%	3	3%	8	9%	91	100%
Salmonellosis	132	11%	129	11%	106	9%	69	6%	60	5%	1,188	100%
Shigellosis	53	9%	38	6%	57	10%	57	10%	36	6%	591	100%
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	1	13%	1	13%	0	0%	0	0%	0	0%	8	100%
Streptococcal Disease, Group A, Invasive	18	6%	12	4%	13	4%	13	4%	29	9%	319	100%
Streptococcal Disease, Group B, in Newborn*	9	14%	1	2%	5	8%	4	6%	5	8%	63	100%
Streptococcal Toxic Shock Syndrome (STSS)	0	0%	0	0%	0	0%	1	11%	1	11%	9	100%
Streptococcus pneumoniae, Invasive Disease	32	3%	42	5%	54	6%	83	9%	135	15%	924	100%
Ages < 5 Years*	3	6%	1	2%	4	9%	7	15%	3	6%	47	100%
Drug Resistant, Ages 5+ Years*	8	4%	10	5%	12	6%	10	5%	31	14%	216	100%
Drug Susceptible, Ages 5+ Years*	21	3%	31	5%	38	6%	66	10%	101	15%	661	100%
Toxic Shock Syndrome (TSS)	0	0%	0	0%	0	0%	0	0%	2	22%	9	100%
Typhoid Fever	2	29%	0	0%	0	0%	0	0%	0	0%	7	100%
Vibriosis	3	25%	2	17%	1	8%	0	0%	0	0%	12	100%
Vibrio parahaemolyticus Infection	2	29%	2	29%	1	14%	0	0%	0	0%	7	100%
Other (Not Cholera)	1	20%	0	0%	0	0%	0	0%	0	0%	5	100%
Yersiniosis	3	6%	1	2%	4	8%	9	17%	3	6%	52	100%
SUB-TOTAL	653	10%	548	9%	527	8%	438	7%	465	7%	6,250	100%
											•	
HEPATITIS											I	
Hepatitis A	1	4%	2	7%	3	11%	4	15%	0	0%	27	100%
Hepatitis B, Acute*	13	8%	7	4%	9	5%	7	4%	11	6%	170	100%
Hepatitis B, Perinatal Infection*	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Hepatitis C, Acute*	11	10%	6	6%	8	8%	10	9%	12	11%	106	100%
Hepatitis C, Past or Present*	1,555	10%	1,134	7%	1,568	10%	1,298	8%	1,706	11%	15,772	100%
SUB-TOTAL	1,580	10%	1,149	7%	1,588	10%	1,319	8%	1,729	11%	16,077	100%

N = number of cases reported.

^{% =} percentage of cases occurring in the month for the disease.
* Please see Technical Notes (pp. 103-106).

	Au	gust	Septe	ember	Oct	ober	Nove	mber	Dece	mber	TO	TAL
OUTBREAKS*	N	~	N .	%	N	%	N	%	N	%	N	%
Community*	6	8%	5	7%	3	4%	9	13%	5	7%	72	100%
Foodborne*	6	8%	4	5%	5	7%	3	4%	6	8%	75	100%
Healthcare-Associated*	1	1%	3	4%	2	3%	3	4%	10	14%	70	100%
Institutional*	6	3%	17	8%	11	5%	26	13%	19	9%	202	100%
Waterborne*	2	14%	1	7%	2	14%	0	0%	1	7%	14	100%
Zoonotic*	1	8%	2	15%	0	0%	1	8%	2	15%	13	100%
SUB-TOTAL	22	5%	32	7%	23	5%	42	9%	43	10%	446	100%
VACCINE-PREVENTABLE												
Diphtheria	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Influenza-Associated Hospitalization	15	0%	30	0%	54	1%	415	5%	5.193	63%	8.247	100%
Influenza-Associated Pediatric Mortality*	0	0%	0	0%	0	0%	2	50%	2	50%	4	100%
Influenza A Virus, Novel Human Infection*	2	100%	0	0%	0	0%	0	0%	0	0%	2	100%
Measles	0	0%	0	0%	0	0%	0	0%	0	0%	382	100%
Imported	0	0%	0	0%	0	0%	0	0%	0	0%	3	100%
Indigenous	0	0%	0	0%	0	0%	0	0%	0	0%	379	100%
Meningococcal Disease	1	8%	1	8%	1	8%	2	17%	1	8%	12	100%
Mumps	4	1%	4	1%	3	1%	3	1%	11	2%	554	100%
Pertussis	104	8%	79	6%	110	8%	146	11%	120	9%	1,310	100%
Tetanus	0	0%	1	100%	0	0%	0	0%	0	0%	1	100%
Varicella	33	6%	43	8%	57	11%	49	10%	28	5%	513	100%
SUB-TOTAL	159	1%	158	1%	225	2%	617	6%	5,355	49%	11,026	100%
ZOONOSES												
Chikungunya Virus Infection*	3	7%	6	14%	4	9%	3	7%	0	0%	43	100%
Dengue	0	0%	1	11%	0	0%	1	11%	0	0%	9	100%
Ehrlichiosis/Anaplasmosis	0	0%	0	0%	0	0%	0	0%	0	0%	6	100%
Anaplasma phagocytophilum*	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Ehrlichia chaffeensis*	0	0%	0	0%	0	0%	0	0%	0	0%	4	100%
Unknown	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
LaCrosse Virus Disease*	14	45%	10	32%	1	3%	0	0%	0	0%	31	100%
Leptospirosis	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Lyme Disease	27	23%	4	3%	9	8%	3	3%	3	3%	120	100%
Malaria	6	15%	1	3%	4	10%	1	3%	4	10%	39	100%
Q Fever	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Acute	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Chronic	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Rabies, Animal*	6	24%	6	24%	2	8%	0	0%	0	0%	25	100%
	0	0%	0	0%	0	0%	0	0%	0	0%	10	100%
Spotted Fever Rickettsiosis*		0%	1	100%	0	0%	0	0%	0	0%	1	100%
Tularemia	0											
	0 4	36%	6 35	55% 12%	0 20	0% 7%	0 8	0% 3%	7	0%	11 299	100%

GRAND TOTAL 2,474 7% 1,922 6% 2,383 7% 2,424 7% 7,599 22% 34,098 100%

N = number of cases reported.

^{% =} percentage of cases occurring in the month for the disease.
* Please see Technical Notes (pp. 103-106).

	Ad	lams	Α	llen	Asł	land	Ashi	tabula	Atl	nens	Auc	laize	Bel	mont
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	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	*	1	*	0	*	0	*
Campylobacteriosis	5	17.8	17	16.2	9	17.0	7	7.1	4	6.2	7	15.3	4	5.8
Coccidioidomycosis	0	0.0	1	1.0	0	0.0	1	1.0	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	1	1.4
Cryptosporidiosis	0	0.0	6	5.7	4	7.5	0	0.0	1	1.5	7	15.3	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
Escherichia coli, Shiga Toxin-Producing	0	0.0	2	1.9	1	1.9	0	0.0	0	0.0	0	0.0	0	0.0
O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not O157:H7	0	0.0	2	1.9	1	1.9	0	0.0	0	0.0	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	0	0.0	2	1.9	3	5.7	6	6.0	0	0.0	1	2.2	0	0.0
Haemophilus influenzae, Invasive Disease	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	1	2.2	2	2.9
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	2	7.1	7	6.7	1	1.9	1	1.0	0	0.0	1	2.2	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	0	0.0	3	2.9	3	5.7	2	2.0	2	3.1	4	8.7	4	5.8
Meningitis, Other Bacterial*	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	3	10.7	15	14.3	5	9.4	12	12.1	13	20.1	8	17.4	8	11.5
Shigellosis	0	0.0	5	4.8	1	1.9	0	0.0	0	0.0	2	4.4	1	1.4
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	2	1.9	0	0.0	6	6.0	3	4.6	2	4.4	3	4.3
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	0	*	0	*	2	*
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
Streptococcus pneumoniae, Invasive Disease	0	0.0	8	7.6	3	5.7	12	12.1	3	4.6	2	4.4	14	20.2
Ages < 5 Years*	0	*	1	*	0	*	0	*	0	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	0	*	0	*	0	*	3	*	0	*	0	*	4	*
Drug Susceptible, Ages 5+ Years*	0	*	7	*	3	*	9	*	3	*	2	*	9	*
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
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	1	2.2	2	2.9
SUB-TOTAL	10	35.6	71	67.6	30	56.6	47	47.4	27	41.7	36	78.5	41	59.0
LEDATITIE	_		_						_					
HEPATITIS Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1 1
Hepatitis A Hepatitis B, Acute*	1	3.6	0	0.0	0	0.0	0	0.0	7	10.8	0	0.0	0	1.4 0.0
· · · · · ·	0	3.6	0	0.0 *		*	_	*	0	10.8		0.0 *		*
Hepatitis B, Perinatal Infection*	•				0		0				0		0	
Hepatitis C, Acute*	0	0.0	3	2.9	0	0.0	5	5.0	0	0.0	0	0.0	0	0.0
Hepatitis C, Past or Present*	77	273.7	61	58.1	18	33.9	108	108.9	93	143.7	19	41.4	100	144.0
SUB-TOTAL	78	277.3	64	60.9	18	33.9	113	113.9	100	154.5	19	41.4	101	145.4

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Δα	lams	ΔΙ	len	Δeh	land	Δsht	abula	Δŧŀ	nens	Διιο	laize	Ralı	mont
OUTBREAKS*	N	Rate	N A	Rate	N	Rate	N	Rate	N	Rate	N Aug	Rate	N	Rate
Community*	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	2	n/a	1	n/a	1	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Institutional*	0	n/a	4	n/a	0	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	1	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	6	n/a	2	n/a	3	n/a	2	n/a	1	n/a	1	n/a
		100		1170		IVa		11/4		i va	•	1170	•	TIVO
VACCINE-PREVENTABLE Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	3	10.7	180	171.4	38	71.7	70	70.6	17	26.3	54	117.8	8	11.5
Influenza-Associated Pediatric Mortality*	0	*	1	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	46	86.7	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
Indigenous	0	0.0	0	0.0	46	86.7	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	1	1.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Mumps	1	3.6	0	0.0	1	1.9	2	2.0	1	1.5	0	0.0	1	1.4
Pertussis	0	0.0	0	0.0	7	13.2	27	27.2	7	10.8	2	4.4	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	1	3.6	1	1.0	2	3.8	8	8.1	2	3.1	12	26.2	4	5.8
SUB-TOTAL	5	17.8	183	174.2	94	177.2	108	108.9	27	41.7	68	148.3	13	18.7
ZOONOSES														
Chikungunya Virus Infection*	1	3.6	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	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	1	1.9	0	0.0	3	4.6	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	5	9.4	0	0.0	1	1.5	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	3.6	2	1.9	6	11.3	0	0.0	4	6.2	0	0.0	0	0.0
GRAND TOTAL	94	334.2	326	304.6	150	279.1	271	270.2	160	244.2	124	268.3	156	223.1
POPULATION	28	,129	105	,040	53.	035	99.	175	64	,713	45.	841	69.	461
L				•										

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Br	own	Bu	ıtler	Ca	rroll	Char	npaign	С	lark	Cler	mont	Cli	inton
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	1	2.3	31	8.3	2	7.1	4	10.2	11	8.1	17	8.4	1	2.4
Coccidioidomycosis	0	0.0	0	0.0	1	3.5	0	0.0	1	0.7	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	0	0.0	4	1.1	3	10.6	0	0.0	0	0.0	3	1.5	2	4.8
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Escherichia coli, Shiga Toxin-Producing	2	4.5	3	0.8	0	0.0	2	5.1	4	2.9	4	2.0	0	0.0
O157:H7	0	0.0	1	0.3	0	0.0	1	2.6	2	1.5	2	1.0	0	0.0
Not O157:H7	2	4.5	2	0.5	0	0.0	1	2.6	2	1.5	2	1.0	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	0	0.0	11	2.9	0	0.0	0	0.0	5	3.7	12	6.0	3	7.2
Haemophilus influenzae, Invasive Disease	0	0.0	2	0.5	0	0.0	0	0.0	1	0.7	2	1.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	3	0.8	0	0.0	3	7.7	4	2.9	1	0.5	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	0	0.0	28	7.5	3	10.6	0	0.0	4	2.9	10	5.0	0	0.0
Meningitis, Other Bacterial*	0	0.0	3	0.8	1	3.5	0	0.0	4	2.9	1	0.5	0	0.0
Salmonellosis	2	4.5	28	7.5	4	14.2	3	7.7	13	9.5	16	7.9	1	2.4
Shigellosis	0	0.0	3	0.8	4	14.2	0	0.0	1	0.7	0	0.0	0	0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	8	2.1	1	3.5	1	2.6	8	5.9	5	2.5	2	4.8
Streptococcal Disease, Group B, in Newborn*	0	*	3	*	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
Streptococcus pneumoniae, Invasive Disease	2	4.5	28	7.5	0	0.0	5	12.8	15	11.0	26	12.9	2	4.8
Ages < 5 Years*	0	*	1	*	0	*	1	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	9	*	0	*	0	*	5	*	4	*	1	*
Drug Susceptible, Ages 5+ Years*	2	*	18	*	0	*	4	*	10	*	21	*	1	*
Toxic Shock Syndrome (TSS)	0	0.0	1	0.3	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	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	1	0.3	1	3.5	0	0.0	1	0.7	0	0.0	0	0.0
SUB-TOTAL	7	15.9	158	42.2	20	71.0	18	46.0	73	53.5	98	48.6	11	26.3
LIEDATITIO														
HEPATITIS		0.0	_	0.0	- 1	2.5	_	0.0	^	0.0	0	0.0	^	0.0
Hepatitis A	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	1	2.3	5	1.3	0	0.0	2	5.1	0	0.0		0.5	0	0.0
Hepatitis B, Perinatal Infection*	•				0		0		0		0		0	
Hepatitis C, Acute*	0	0.0	1	0.3	0	0.0	1	2.6	1	0.7	2	1.0	2	4.8
Hepatitis C, Past or Present*	83	188.1	611	163.3	10	35.5	32	81.8	155	113.5	299	148.3	57	136.2
SUB-TOTAL	84	190.4	617	164.9	11	39.0	35	89.5	156	114.2	302	149.8	59	141.0

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Br	own	Bu	tler	Ca	rroll	Chan	npaign	CI	ark	Cler	mont	Cli	nton
OUTBREAKS*	N .	Rate	N Z	Rate	N	Rate	N	Rate	N .	Rate	N	Rate	N	Rate
Community*	0	n/a	0	n/a	0	n/a	0	n/a	4	n/a	1	n/a	0	n/a
Foodborne*	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	2	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Institutional*	0	n/a	3	n/a	0	n/a	1	n/a	6	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	7	n/a	0	n/a	1	n/a	11	n/a	1	n/a	0	n/a
VACCINE-PREVENTABLE				-								-		
Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	7	15.9	340	90.9	25	88.7	18	46.0	131	95.9	152	75.4	17	40.6
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
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	1	2.3	1	0.3	0	0.0	0	0.0	1	0.7	4	2.0	0	0.0
Pertussis	0	0.0	39	10.4	0	0.0	7	17.9	56	41.0	11	5.5	3	7.2
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	19	5.1	0	0.0	2	5.1	5	3.7	8	4.0	0	0.0
SUB-TOTAL	8	18.1	400	106.9	25	88.7	27	69.0	193	141.3	175	86.8	20	47.8
ZOONOSES														
Chikungunya Virus Infection*	0	0.0	1	0.3	0	0.0	1	2.6	1	0.7	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
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	2	0.5	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
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	2	0.5	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	1	3.5	0	0.0	0	0.0	1	0.5	0	0.0
SUB-TOTAL	0	0.0	5	1.3	2	7.1	1	2.6	3	0.7	2	1.0	0	0.0
GRAND TOTAL	99	224.4	1,187	315.4	58	205.8	82	207.0	436	309.8	578	286.3	90	215.1
POPULATION	44	,116	374	,158	28	.187	39	,128	136	5,554	201	,560	41	,835
<u> </u>		<u> </u>		, -				, -		, -		,		

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Colu	mbiana	Cosł	octon	Crav	wford	Cuya	hoga	Da	arke	Def	iance	Dela	aware
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	1	0.1	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	*	1	*	0	*	0	*	0	*
Campylobacteriosis	7	6.6	7	19.2	1	2.4	60	4.8	7	13.4	2	5.2	12	6.3
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	1	0.5
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	1	0.1	1	1.9	0	0.0	0	0.0
Cryptosporidiosis	1	0.9	1	2.7	2	4.7	30	2.4	2	3.8	1	2.6	3	1.6
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Escherichia coli, Shiga Toxin-Producing	1	0.9	2	5.5	0	0.0	14	1.1	2	3.8	2	5.2	3	1.6
O157:H7	1	0.9	1	2.7	0	0.0	4	0.3	1	1.9	0	0.0	0	0.0
Not O157:H7	0	0.0	1	2.7	0	0.0	9	0.7	1	1.9	2	5.2	3	1.6
Unknown Serotype	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Giardiasis	9	8.5	1	2.7	0	0.0	40	3.2	1	1.9	1	2.6	9	4.8
Haemophilus influenzae, Invasive Disease	0	0.0	0	0.0	0	0.0	16	1.3	1	1.9	0	0.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	5	4.7	2	5.5	2	4.7	63	5.0	0	0.0	0	0.0	9	4.8
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	1	0.9	0	0.0	0	0.0	2	0.2	1	1.9	0	0.0	0	0.0
Meningitis, Aseptic	2	1.9	4	11.0	1	2.4	48	3.8	1	1.9	2	5.2	3	1.6
Meningitis, Other Bacterial*	1	0.9	0	0.0	0	0.0	14	1.1	0	0.0	0	0.0	0	0.0
Salmonellosis	13	12.3	2	5.5	3	7.1	123	9.8	6	11.5	7	18.2	18	9.5
Shigellosis	2	1.9	0	0.0	1	2.4	233	18.5	1	1.9	1	2.6	5	2.6
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	3	0.2	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	1	0.9	1	2.7	1	2.4	41	3.3	1	1.9	2	5.2	4	2.1
Streptococcal Disease, Group B, in Newborn*	1	*	0	*	0	*	14	*	1	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	1	0.5
Streptococcus pneumoniae, Invasive Disease	8	7.6	0	0.0	1	2.4	86	6.8	3	5.7	6	15.6	7	3.7
Ages < 5 Years*	0	*	0	*	1	*	3	*	0	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	2	*	0	*	0	*	28	*	1	*	1	*	0	*
Drug Susceptible, Ages 5+ Years*	6	*	0	*	0	*	55	*	2	*	5	*	6	*
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	1	0.9	0	0.0	1	2.4	4	0.3	0	0.0	0	0.0	2	1.1
Vibrio parahaemolyticus Infection	1	0.9	0	0.0	0	0.0	3	0.2	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	1	2.4	1	0.1	0	0.0	0	0.0	2	1.1
Yersiniosis	0	0.0	0	0.0	0	0.0	6	0.5	0	0.0	0	0.0	1	0.5
SUB-TOTAL	53	50.1	20	54.8	13	30.6	804	63.8	28	53.6	24	62.3	79	41.8
HEPATITIS	_													
Hepatitis A	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	1	2.6	0	0.0
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	9	0.7	0	0.0	0	0.0	2	1.1
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	3	2.8	1	2.7	1	2.4	4	0.3	0	0.0	0	0.0	11	0.5
Hepatitis C, Past or Present*	139	131.5	24	65.7	65	153.0	1,063	84.4	29	55.6	18	46.7	71	37.5
SUB-TOTAL	142	134.4	25	68.5	66	155.4	1,080	85.7	29	55.6	19	49.3	74	39.1

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Colu	mbiana	Cosh	octon	Crav	wford	Cuva	hoga	Da	arke	Defi	ance	Dela	ware
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	0	n/a	1	n/a	5	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*	0	n/a	0	n/a	1	n/a	11	n/a	0	n/a	0	n/a	2	n/a
Institutional*	0	n/a	1	n/a	0	n/a	22	n/a	0	n/a	0	n/a	5	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*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
SUB-TOTAL	0	n/a	1	n/a	2	n/a	38	n/a	0	n/a	0	n/a	9	n/a
VACCINE-PREVENTABLE		,												
Diphtheria VACCINE-PREVENTABLE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	33	31.2	7	19.2	17	40.0	1,414	112.2	21	40.2	10	26.0	100	52.9
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	48	131.4	1	2.4	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
Indigenous	0	0.0	48	131.4	1	2.4	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	1	2.6	0	0.0
Mumps	0	0.0	0	0.0	1	2.4	3	0.2	0	0.0	0	0.0	44	23.3
Pertussis	0	0.0	5	13.7	1	2.4	30	2.4	3	5.7	1	2.6	35	18.5
Tetanus	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Varicella	6	5.7	4	11.0	0	0.0	31	2.5	1	1.9	4	10.4	16	8.5
SUB-TOTAL	39	36.9	64	175.3	20	47.1	1,480	117.5	25	47.9	16	41.5	195	103.1
ZOONOSES														
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	11	0.9	0	0.0	0	0.0	2	1.1
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
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	1	0.9	3	8.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.1
Lyme Disease	4	3.8	1	2.7	0	0.0	12	1.0	0	0.0	0	0.0	8	4.2
Malaria	0	0.0	0	0.0	0	0.0	6	0.5	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	1	0.1	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
Chronic	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	4	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.1
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	3	0.2	0	0.0	0	0.0	0	0.0
SUB-TOTAL SUB-TOTAL	6	4.7	4	11.0	0	0.0	35	2.7	0	0.0	0	0.0	19	7.9
GRAND TOTAL	240	226.1	114	309.5	101	233.1	3,437	269.7	82	157.1	59	153.2	376	191.9
POPULATION	105	5,686	36.	516	42.	480	1,259	9,828	52	,196	38.	510	189	,113

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

		rie	Fair	rfield	Fa	Fayette Franklin			Fu	llton	Gallia		Geauga	
GENERAL INFECTIOUS DISEASES	N	Rate	N N	Rate	N N	Rate	N N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	8	10.6	5	3.3	1	3.5	66	5.4	4	9.4	4	13.2	6	6.4
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	1	1.3	2	1.3	1	3.5	38	3.1	0	0.0	0	0.0	2	2.1
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Escherichia coli, Shiga Toxin-Producing	1	1.3	1	0.7	2	6.9	47	3.8	1	2.3	1	3.3	0	0.0
O157:H7	0	0.0	1	0.7	1	3.5	21	1.7	1	2.3	0	0.0	0	0.0
Not O157:H7	1	1.3	0	0.0	1	3.5	24	1.9	0	0.0	1	3.3	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Giardiasis	4	5.3	2	1.3	1	3.5	51	4.1	1	2.3	1	3.3	2	2.1
Haemophilus influenzae, Invasive Disease	0	0.0	1	0.7	0	0.0	17	1.4	1	2.3	0	0.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	1	0.1	2	4.7	1	3.3	0	0.0
Legionellosis	2	2.6	2	1.3	0	0.0	120	9.7	0	0.0	1	3.3	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	2	2.6	0	0.0	0	0.0	3	0.2	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	1	1.3	6	4.0	1	3.5	64	5.2	2	4.7	0	0.0	2	2.1
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	12	1.0	0	0.0	0	0.0	0	0.0
Salmonellosis	12	15.8	13	8.6	1	3.5	148	12.0	1	2.3	5	16.4	19	20.1
Shigellosis	18	23.7	0	0.0	0	0.0	47	3.8	1	2.3	0	0.0	4	4.2
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	4	5.3	0	0.0	0	0.0	36	2.9	2	4.7	0	0.0	1	1.1
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	9	*	11	*	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
Streptococcus pneumoniae, Invasive Disease	12	15.8	6	4.0	3	10.4	90	7.3	3	7.0	1	3.3	5	5.3
Ages < 5 Years*	1	*	0	*	0	*	9	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	2	*	1	*	1	*	17	*	1	*	0	*	2	*
Drug Susceptible, Ages 5+ Years*	9	*	5	*	2	*	64	*	2	*	1	*	3	*
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	2	0.2	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	1	1.1
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	6	0.5	0	0.0	0	0.0	2	2.1
SUB-TOTAL	65	85.7	39	25.9	10	34.7	764	62.0	19	44.6	14	46.1	45	47.7
HEPATITIS														
Hepatitis A	1	1.3	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	2	1.3	1	3.5	35	2.8	0	0.0	2	6.6	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	2	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	2	6.9	2	0.2	0	0.0	0	0.0	0	0.0
Hepatitis C, Past or Present*	86	113.4	208	138.3	61	211.8	1.305	106.0	18	42.3	96	315.8	31	32.9
SUB-TOTAL	87	114.7	210	139.6	64	222.2	1.348	109.5	18	42.3	98	322.4	31	32.9

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Erie		Fair	field	Fav	vette	Franklin		Fulton		Gallia		Gea	auga
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	0	n/a	0	n/a	26	n/a	1	n/a	0	n/a	1	n/a
Foodborne*	1	n/a	0	n/a	0	n/a	14	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	1	n/a	0	n/a	13	n/a	1	n/a	1	n/a	0	n/a
Institutional*	3	n/a	0	n/a	1	n/a	54	n/a	0	n/a	1	n/a	0	n/a
Waterborne*	0	n/a	1	n/a	0	n/a	5	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	4	n/a	2	n/a	1	n/a	113	n/a	2	n/a	2	n/a	1	n/a
VACCINE-PREVENTABLE														
Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	38	50.1	45	29.9	11	38.2	912	74.1	25	58.7	9	29.6	57	60.4
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	8	5.3	0	0.0	409	33.2	0	0.0	0	0.0	0	0.0
Pertussis	2	2.6	15	10.0	4	13.9	268	21.8	3	7.0	2	6.6	4	4.2
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	2	2.6	11	7.3	1	3.5	66	5.4	3	7.0	2	6.6	5	5.3
SUB-TOTAL	42	55.4	79	52.5	16	55.6	1,656	134.5	31	72.8	13	42.8	66	70.0
ZOONOSES	1 1	4.0	-	4.0	0	0.0		0.4	0	0.0	0	0.0	0	0.0
Chikungunya Virus Infection*	•	1.3	2	1.3		0.0	5					0.0		0.0
Dengue	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1
Anaplasma phagocytophilum*	_	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1
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	0.7	0	0.0	1	0.1	0	0.0	0	0.0	1	1.1
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	3	2.0	0	0.0	17	1.4	0	0.0	0	0.0	1	1.1
Malaria	0	0.0	1	0.7	0	0.0	12	1.0	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
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	1	n/a	0	n/a	2	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
SUB-TOTAL	1	1.3	8	4.7	0	0.0	39	3.0	0	0.0	0	0.0	3	3.2
GRAND TOTAL	199	257.2	338	222.8	91	312.5	3,920	309.0	70	159.7	127	411.2	146	153.8
					<u> </u>	0.12.0	0,020	000.0	,,	100.7	121	711.2	170	

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

ilton Rate 0.1 0.2 0.2 * 6.7	0 0 0	Rate 0.0 0.0	N	rdin Rate 0.0	N	rison Rate	N	enry Rate
0.1 0.2 0.2 * 6.7	0	0.0	0					
0.2 * 6.7		0.0			U	0.0	0	0.0
0.2 * 6.7	0		0	0.0	0	0.0	0	0.0
6.7		0.0	0	0.0	0	0.0	0	0.0
	0	*	0	*	0	*	0	*
	2	2.7	4	12.6	1	6.4	2	7.2
0.1	0	0.0	0	0.0	0	0.0	1	3.6
0.2	0	0.0	0	0.0	0	0.0	0	0.0
1.9	3	4.0	2	6.3	0	0.0	1	3.6
0.0	0	0.0	0	0.0	0	0.0	0	0.0
2.2	1	1.3	0	0.0	0	0.0	1	3.6
1.1	0	0.0	0	0.0	0	0.0	1	3.6
1.1	1	1.3	0	0.0	0	0.0	0	0.0
0.0	0	0.0	0	0.0	0	0.0	0	0.0
2.0	4	5.3	0	0.0	0	0.0	0	0.0
1.6	0	0.0	0	0.0	0	0.0	0	0.0
0.1	0	0.0	0	0.0	0	0.0	0	0.0
2.1	0	0.0	0	0.0	0	0.0	1	3.6
0.0	0	0.0	0	0.0	0	0.0	0	0.0
0.1	0	0.0	0	0.0	0	0.0	0	0.0
4.7	4	5.3	0	0.0	0	0.0	0	0.0
0.4	0	0.0	0	0.0	0	0.0	0	0.0
8.9	11	14.6	2	6.3	2	12.9	2	7.2
1.2	0	0.0	3	9.4	2	12.9	0	0.0
0.1	0	0.0	0	0.0	0	0.0	0	0.0
3.3	0	0.0	1	3.1	4	25.7	0	0.0
*	0	*	0	*	0	*	0	*
0.0	0	0.0	0	0.0	0	0.0	0	0.0
11.9	2	2.7	2	6.3	0	0.0	3	10.7
*	0	*	0	*	0	*	0	*
*	0	*	0	*	0	*	0	*
*	2	*	2	*	0	*	3	*
0.1	0	0.0	0	0.0	0	0.0	0	0.0
0.0	0	0.0	0	0.0	0	0.0	0	0.0
0.1	0	0.0	0	0.0	0	0.0	0	0.0
0.1	0	0.0	0	0.0	0	0.0	0	0.0
0.0	0	0.0	0	0.0	0	0.0	0	0.0
0.2	0	0.0	0	0.0	0	0.0	0	0.0
49.8	27	35.8	14	44.0	9	57.9	11	39.4
0.1	0	0.0	0	0.0	0	0.0	0	0.0
-					1			0.0
*		*		*		*	0	*
0.2		1.3		3 1		0.0	•	0.0
U /		1.0		0.1				
97.4	64	85.0	57	179.3	13	83.6	12	43.0
	0.0 11.9 * * * 0.1 0.0 0.1 0.0 0.2 49.8	0.0 0 11.9 2 * 0 * 0 * 0 0.1 0 0.0 0 0.1 0 0.0 0 0.2 0 49.8 27	0.0 0 0.0 11.9 2 2.7 * 0 * * 0 * * 2 * 0.1 0 0.0 0.0 0.0 0 0.0 0.1 0 0.0 0.0 0 0.0 0.1 0 0.0 0.0 0 0.0 0.2 0 0.0 49.8 27 35.8	0.0 0 0.0 0 11.9 2 2.7 2 * 0 * 0 * 0 * 0 * 0 0.0 0 * 0 0.0 0 0.1 0 0.0 0 0.1 0 0.0 0 0.1 0 0.0 0 0.0 0 0.0 0 0.2 0 0.0 0 49.8 27 35.8 14	0.0 0 0.0 0 0.0 11.9 2 2.7 2 6.3 * 0 * 0 * * 0 * 0 * * 0 * 0 * 0.1 0 0.0 0 0.0 0.1 0 0.0 0 0.0 0.1 0 0.0 0 0.0 0.2 0 0.0 0 0.0 2.2 1 1.3 0 0.0 0.2 1 1.3 1 3.1	0.0 0 0.0 0 0.0 0 11.9 2 2.7 2 6.3 0 * 0 * 0 * 0 * 0 * 0 * 0 * 2 * 2 * 0 0.1 0 0.0 0 0.0 0 0 0 0.1 0 0.0 0 0.0 0 </td <td>0.0 0 0.0 0<</td> <td>0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0</td>	0.0 0 0.0 0<	0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Gre	eene	Gue	rnsey	Ham	ilton	Han	cock	На	rdin	Har	rison	He	enry	
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Community*	0	n/a	0	n/a	4	n/a	0	n/a	0	n/a	0	n/a	0	n/a	
Foodborne*	2	n/a	0	n/a	6	n/a	0	n/a	0	n/a	0	n/a	0	n/a	
Healthcare-Associated*	0	n/a	0	n/a	5	n/a	2	n/a	0	n/a	0	n/a	0	n/a	
Institutional*	0	n/a	0	n/a	21	n/a	1	n/a	0	n/a	0	n/a	0	n/a	
Waterborne*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	
SUB-TOTAL	2	n/a	0	n/a	37	n/a	3	n/a	0	n/a	0	n/a	0	n/a	
VACCINE-PREVENTABLE															
Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Influenza-Associated Hospitalization	135	82.4	21	53.0	806	99.9	31	41.1	9	28.3	8	51.5	26	93.1	
Influenza-Associated Pediatric Mortality*	0	*	0	*	1	*	0	*	0	*	0	*	0	*	
Influenza A Virus, Novel Human Infection*	1	0.6	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	
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Meningococcal Disease	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	
Mumps	2	1.2	0	0.0	9	1.1	0	0.0	0	0.0	0	0.0	0	0.0	
Pertussis	10	6.1	14	35.4	144	17.9	4	5.3	0	0.0	0	0.0	2	7.2	
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Varicella	2	1.2	0	0.0	22	2.7	0	0.0	2	6.3	0	0.0	1	3.6	
SUB-TOTAL	150	91.6	35	88.4	983	121.9	35	46.5	11	34.6	8	51.5	29	103.8	
ZOONOSES															
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	3	0.4	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	
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Ehrlichia chaffeensis*	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	1.3	0	0.0	0	0.0	0	0.0	
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Lyme Disease	0	0.0	1	2.5	5	0.6	0	0.0	0	0.0	0	0.0	0	0.0	
Malaria	1	0.6	0	0.0	6	0.7	0	0.0	0	0.0	0	0.0	0	0.0	
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Rabies, Animal*	1	n/a	0	n/a	3	n/a	0	n/a	0	n/a	0	n/a	0	n/a	
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	2	0.2	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	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0	
SUB-TOTAL	2	0.6	1	2.5	21	2.2	1	1.3	0	0.0	0	0.0	0	0.0	
GRAND TOTAL	361	218.5	104	262.7	2,250	274.0	132	171.2	83	261.0	31	199.4	52	186.1	
PORUH ATION	400	920	20	E00	900	624	75	227	24	706	45	E42	27	027	
POPULATION	103	3,820	39,590		806	806,631		337	31,796		15	,543	27,937		

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

		hland	Ho	cking	Но	mes	Huron		Jackson		Jefferson		К	nox
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	1	2.3	2	7.0	10	22.8	9	15.3	4	12.2	9	13.3	6	9.8
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	2	4.6	0	0.0	0	0.0	1	1.7	1	3.1	0	0.0	9	14.7
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Escherichia coli, Shiga Toxin-Producing	1	2.3	0	0.0	1	2.3	1	1.7	1	3.1	1	1.5	1	1.6
O157:H7	0	0.0	0	0.0	1	2.3	1	1.7	1	3.1	0	0.0	0	0.0
Not O157:H7	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	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	3	7.0	1	3.5	2	4.6	2	3.4	1	3.1	1	1.5	3	4.9
Haemophilus influenzae, Invasive Disease	1	2.3	0	0.0	0	0.0	2	3.4	0	0.0	3	4.4	1	1.6
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	1	2.3	0	0.0	0	0.0	3	5.1	0	0.0	3	4.4	6	9.8
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	5	11.6	0	0.0	6	13.7	4	6.8	1	3.1	0	0.0	0	0.0
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	5	11.6	2	7.0	7	15.9	10	17.0	1	3.1	4	5.9	8	13.1
Shigellosis	0	0.0	0	0.0	0	0.0	3	5.1	0	0.0	1	1.5	0	0.0
Staphylococcus aureus, 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	2.3	0	0.0	0	0.0	1	1.7	0	0.0	2	3.0	1	1.6
Streptococcal Disease, Group B, in Newborn*	1	*	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
Streptococcus pneumoniae, Invasive Disease	6	13.9	2	7.0	1	2.3	5	8.5	2	6.1	10	14.8	3	4.9
Ages < 5 Years*	0	*	0	*	0	*	0	*	0	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	2	*	0	*	0	*	2	*	0	*	1	*	1	*
Drug Susceptible, Ages 5+ Years*	4	*	2	*	1	*	3	*	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
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	1	3.5	1	2.3	1	1.7	0	0.0	0	0.0	0	0.0
SUB-TOTAL	27	62.7	8	27.9	28	63.8	42	71.5	11	33.6	34	50.2	38	62.1
HEPATITIS				2.2		0.0				2.2				
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	2	3.4	3	9.2	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	
Hepatitis C, Acute*	0	0.0	3	10.4	0	0.0	2	3.4	3	9.2	0	0.0	3	4.9
Hepatitis C, Past or Present*	82	190.5	67	233.2	5	11.4	56	95.4	102	311.5	121	178.7	68	111.2
SUB-TOTAL	82	190.5	70	243.7	5	11.4	60	102.2	108	329.8	122	180.2	71	116.1

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Hia	hland	Hoo	cking	Hol	mes	Hu	iron	Jac	kson	Jeffe	erson	Kı	nox
OUTBREAKS*	N	Rate	N	Rate	N	Rate								
Community*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	2	n/a
Healthcare-Associated*	0	n/a	1	n/a	2	n/a								
Institutional*	0	n/a	0	n/a	0	n/a								
Waterborne*	0	n/a	0	n/a	1	n/a								
Zoonotic*	0	n/a	0	n/a	1	n/a								
SUB-TOTAL	0	n/a	0	n/a	1	n/a	2	n/a	0	n/a	1	n/a	6	n/a
VACCINE-PREVENTABLE														
Diphtheria Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	40	92.9	8	27.9	21	47.8	40	68.1	21	64.1	28	41.4	18	29.4
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	1	2.3	0	0.0	64	145.8	0	0.0	0	0.0	0	0.0	195	318.8
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	4.9
Indigenous	1	2.3	0	0.0	64	145.8	0	0.0	0	0.0	0	0.0	192	313.9
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	1	3.5	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	1	2.3	6	20.9	9	20.5	0	0.0	0	0.0	4	5.9	5	8.2
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	10	23.2	4	13.9	7	15.9	0	0.0	1	3.1	2	3.0	1	1.6
SUB-TOTAL	52	120.8	19	66.1	102	232.4	40	68.1	22	67.2	34	50.2	219	358.0
ZOONOSES														
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	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	2	4.6	0	0.0	0	0.0	0	0.0	1	1.6
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	1	3.5	1	2.3	0	0.0	0	0.0	2	3.0	0	0.0
Malaria	0	0.0	0	0.0	1	2.3	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
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a								
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
SUB-TOTAL	0	0.0	1	3.5	4	9.1	1	1.7	0	0.0	2	3.0	1	1.6
	-													
GRAND TOTAL	161	374.0	98	341.2	140	316.6	145	243.6	141	430.6	193	283.6	335	537.9
POPULATION	43	.045	28	,725	43.	898	58	,714	32	,748	67.	694	61.	,167
		, -		, -	,	-		•		, -				

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

05N5D41 NJ550510110 D1054050		ake	Law	rence	Licking		Logan		Lorain		Lucas		Mad	dison
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Botulism	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	1	*	0	*	0	*	0	*	0	*
Campylobacteriosis	26	11.3	12	19.5	29	17.1	2	4.4	15	4.9	47	10.8	6	13.7
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Creutzfeldt-Jakob Disease (CJD)	1	0.4	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	4	1.7	2	3.2	5	3.0	2	4.4	5	1.6	17	3.9	1	2.3
Cyclosporiasis	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Escherichia coli, Shiga Toxin-Producing	6	2.6	0	0.0	4	2.4	0	0.0	3	1.0	5	1.1	0	0.0
O157:H7	2	0.9	0	0.0	2	1.2	0	0.0	1	0.3	4	0.9	0	0.0
Not O157:H7	4	1.7	0	0.0	2	1.2	0	0.0	2	0.7	1	0.2	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	4	1.7	1	1.6	1	0.6	0	0.0	7	2.3	10	2.3	1	2.3
Haemophilus influenzae, Invasive Disease	2	0.9	1	1.6	2	1.2	0	0.0	2	0.7	8	1.8	2	4.6
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Legionellosis	3	1.3	4	6.5	8	4.7	2	4.4	5	1.6	4	0.9	1	2.3
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	2	0.9	0	0.0	2	1.2	0	0.0	1	0.3	1	0.2	0	0.0
Meningitis, Aseptic	6	2.6	4	6.5	4	2.4	0	0.0	1	0.3	38	8.7	5	11.4
Meningitis, Other Bacterial*	1	0.4	0	0.0	0	0.0	2	4.4	0	0.0	5	1.1	0	0.0
Salmonellosis	18	7.9	5	8.1	17	10.0	4	8.8	30	9.9	36	8.3	1	2.3
Shigellosis	17	7.4	0	0.0	0	0.0	0	0.0	13	4.3	19	4.4	1	2.3
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	5	2.2	1	1.6	1	0.6	0	0.0	4	1.3	13	3.0	0	0.0
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	1	0.3	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	13	5.7	8	13.0	19	11.2	0	0.0	6	2.0	30	6.9	8	18.2
Ages < 5 Years*	0	*	0	*	2	*	0	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	4	*	4	*	6	*	0	*	3	*	7	*	2	*
Drug Susceptible, Ages 5+ Years*	9	*	4	*	11	*	0	*	3	*	22	*	6	*
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
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	3	1.0	1	0.2	0	0.0
SUB-TOTAL	110	48.0	38	61.7	94	55.5	12	26.4	96	31.6	238	54.7	26	59.2
HEPATITIS	_		_									2.2		
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*	2	0.9	9	14.6	1	0.6	0	0.0	0	0.0	0	0.0	2	4.6
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	2	0.9	2	3.2	2	1.2	0	0.0	0	0.0	0	0.0	1	2.3
Hepatitis C, Past or Present*	153	66.7	256	415.4	122	72.0	24	52.7	926	304.4	336	77.2	67	152.6
SUB-TOTAL	157	68.5	267	433.3	126	74.4	24	52.7	926	304.4	336	77.2	70	159.4

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	La	ake	Law	rence	Lic	king	Lo	gan	Lo	rain	Lu	cas	Mac	lison
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N D	Rate	N Zu	Rate	N	Rate
Community*	1	n/a	0	n/a	0	n/a	2	n/a	0	n/a	1	n/a	0	n/a
Foodborne*	1	n/a	0	n/a	1	n/a	0	n/a	2	n/a	11	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	6	n/a	0	n/a
Institutional*	4	n/a	0	n/a	3	n/a	2	n/a	0	n/a	8	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	6	n/a	0	n/a	6	n/a	4	n/a	2	n/a	27	n/a	0	n/a
VACCINE-PREVENTABLE					-								-	
Diphtheria VACCINE-FREVENTABLE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	100	43.6	22	35.7	116	68.5	8	17.6	84	27.6	319	73.3	15	34.2
Influenza-Associated Pediatric Mortality*	0	*	1	*	1	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	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
Indigenous	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	1	0.2	0	0.0
Mumps	1	0.4	0	0.0	8	4.7	0	0.0	0	0.0	1	0.2	5	11.4
Pertussis	9	3.9	3	4.9	51	30.1	28	61.5	10	3.3	24	5.5	4	9.1
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	7	3.1	8	13.0	6	3.5	0	0.0	9	3.0	11	2.5	6	13.7
SUB-TOTAL	117	51.0	34	55.2	182	107.4	36	79.1	103	33.9	356	81.8	30	68.3
ZOONOSES														
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2	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
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	1	0.4	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	6	2.6	2	3.2	4	2.4	0	0.0	0	0.0	3	0.7	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	1	1.6	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	1	0.6	0	0.0	1	0.3	0	0.0	0	0.0
SUB-TOTAL	7	3.1	3	4.9	6	3.5	0	0.0	3	1.0	5	1.1	0	0.0
					-									
GRAND TOTAL	397	170.6	342	555.0	414	240.9	76	158.2	1,130	370.8	962	214.8	126	286.9
POPULATION	229),230	61.	623	169	,390	45	,507	304	,216	435	,286	43	918

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

		oning	Marion		Medina		Meigs		Mercer		Miami		Monroe	
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	8	3.4	2	3.0	7	4.0	2	8.6	5	12.2	14	13.5	0	0.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	1	4.3	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	3	1.3	3	4.6	3	1.7	0	0.0	13	31.8	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
Escherichia coli, Shiga Toxin-Producing	1	0.4	0	0.0	1	0.6	0	0.0	4	9.8	2	1.9	1	6.9
O157:H7	0	0.0	0	0.0	1	0.6	0	0.0	2	4.9	2	1.9	1	6.9
Not O157:H7	1	0.4	0	0.0	0	0.0	0	0.0	2	4.9	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	4	1.7	4	6.1	12	6.8	0	0.0	3	7.3	2	1.9	0	0.0
Haemophilus influenzae, Invasive Disease	4	1.7	0	0.0	2	1.1	0	0.0	0	0.0	1	1.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
Legionellosis	9	3.9	1	1.5	4	2.3	0	0.0	0	0.0	5	4.8	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	2	0.9	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
Meningitis, Aseptic	10	4.3	8	12.2	5	2.8	1	4.3	3	7.3	5	4.8	0	0.0
Meningitis, Other Bacterial*	1	0.4	0	0.0	1	0.6	0	0.0	0	0.0	2	1.9	0	0.0
Salmonellosis	12	5.1	10	15.2	29	16.5	3	12.9	8	19.6	16	15.4	1	6.9
Shigellosis	3	1.3	5	7.6	20	11.4	0	0.0	2	4.9	0	0.0	0	0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Streptococcal Disease, Group A, Invasive	10	4.3	3	4.6	3	1.7	0	0.0	1	2.4	2	1.9	1	6.9
Streptococcal Disease, Group B, in Newborn*	1	*	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
Streptococcus pneumoniae, Invasive Disease	12	5.1	7	10.7	5	2.8	6	25.7	5	12.2	7	6.7	0	0.0
Ages < 5 Years*	0	*	1	*	1	*	0	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	3	*	1	*	2	*	1	*	0	*	3	*	0	*
Drug Susceptible, Ages 5+ Years*	9	*	5	*	2	*	5	*	5	*	4	*	0	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	1	0.6	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
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	1	0.4	0	0.0	1	0.6	0	0.0	2	4.9	0	0.0	0	0.0
SUB-TOTAL	81	34.7	43	65.4	94	53.4	13	55.7	49	120.0	58	55.8	3	20.7
	•			'										
HEPATITIS			-											
Hepatitis A	0	0.0	2	3.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	4	6.1	0	0.0	1	4.3	0	0.0	3	2.9	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	2	3.0	11	0.6	0	0.0	0	0.0	5	4.8	0	0.0
Hepatitis C, Past or Present*	236	101.2	175	266.3	61	34.7	56	240.0	40	98.0	64	61.6	13	89.9
SUB-TOTAL	236	101.2	183	278.5	62	35.2	57	244.3	40	98.0	72	69.3	13	89.9

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Mah	oning	Ma	rion	Ma	dina	M	eigs	Me	rcer	Mi	ami	Mo	nroe
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	2	n/a	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	1	n/a	0	n/a	2	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	1	n/a	0	n/a	1	n/a
Institutional*	1	n/a	2	n/a	6	n/a	1	n/a	1	n/a	1	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	4	n/a	2	n/a	10	n/a	1	n/a	2	n/a	1	n/a	1	n/a
	_	14.0		140		1 4 42		1.9,02		19.00	-	140	-	
VACCINE-PREVENTABLE														
Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	137	58.7	32	48.7	110	62.5	9	38.6	22	53.9	48	46.2	2	13.8
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	1	1.0	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
Indigenous	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	3	1.3	5	7.6	11	0.6	1	4.3	1	2.4	1	1.0	0	0.0
Pertussis	15	6.4	4	6.1	12	6.8	0	0.0	2	4.9	7	6.7	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	4	1.7	8	12.2	9	5.1	0	0.0	6	14.7	3	2.9	0	0.0
SUB-TOTAL	159	68.2	49	74.6	132	75.0	10	42.9	31	75.9	60	57.7	2	13.8
ZOONOSES														
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	1	4.3	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	2	0.9	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	7	3.0	0	0.0	2	1.1	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	1	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
Chronic	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	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	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	13	4.7	1	1.5	2	1.1	1	4.3	0	0.0	1	1.0	0	0.0
				- 1						- 1		- 1		
GRAND TOTAL	493	208.8	278	420.0	300	164.7	82	347.2	122	293.9	192	183.8	19	124.4
GRAND TOTAL	493	200.6	2/0	420.0	300	104.7	02	341.2	122	293.9	192	103.0	19	124.4
POPULATION	233	,204	65,	720	176	,029	23	,331	40	,831	103	,900	14	,465

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Monto	gomery	Mo	rgan	Мо	rrow	Musk	kingum	N	oble	Ot	tawa	Pau	ılding
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	24	4.5	4	26.9	4	11.4	18	21.0	0	0.0	3	7.3	2	10.5
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	7	1.3	0	0.0	0	0.0	10	11.7	0	0.0	2	4.9	1	5.3
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Escherichia coli, Shiga Toxin-Producing	8	1.5	1	6.7	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
O157:H7	3	0.6	1	6.7	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
Not O157:H7	4	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown Serotype	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	13	2.4	0	0.0	1	2.8	10	11.7	1	7.0	1	2.4	0	0.0
Haemophilus influenzae, Invasive Disease	4	0.8	0	0.0	0	0.0	1	1.2	1	7.0	0	0.0	1	5.3
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	32	6.0	2	13.5	3	8.5	6	7.0	1	7.0	1	2.4	1	5.3
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	2	2.3	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	41	7.7	0	0.0	0	0.0	3	3.5	0	0.0	0	0.0	0	0.0
Meningitis, Other Bacterial*	11	2.1	1	6.7	0	0.0	0	0.0	0	0.0	0	0.0	1	5.3
Salmonellosis	57	10.7	2	13.5	6	17.1	7	8.2	4	27.8	4	9.7	3	15.8
Shigellosis	5	0.9	0	0.0	0	0.0	1	1.2	1	7.0	0	0.0	0	0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	23	4.3	0	0.0	1	2.8	0	0.0	0	0.0	2	4.9	1	5.3
Streptococcal Disease, Group B, in Newborn*	3	*	0	*	1	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	61	11.4	0	0.0	7	19.9	16	18.6	1	7.0	4	9.7	3	15.8
Ages < 5 Years*	0	*	0	*	0	*	0	*	1	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	14	*	0	*	2	*	6	*	0	*	2	*	1	*
Drug Susceptible, Ages 5+ Years*	47	*	0	*	5	*	10	*	0	*	2	*	2	*
Toxic Shock Syndrome (TSS)	1	0.2	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
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	4	0.8	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
SUB-TOTAL	295	55.3	10	67.4	23	65.4	76	88.6	9	62.7	17	41.3	13	68.5
	•													
HEPATITIS														
Hepatitis A	0	0.0	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	13	2.4	1	6.7	1	2.8	1	1.2	0	0.0	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	7	8.2	0	0.0	11	2.4	11	5.3
Hepatitis C, Past or Present*	739	138.6	13	87.6	39	110.9	81	94.4	44	306.3	21	51.0	5	26.3
SUB-TOTAL	752	141.1	14	94.3	40	113.8	90	104.9	44	306.3	22	53.5	6	31.6

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Monto	omery	Mo	rgan	Mo	rrow	Musk	ingum	N	oble	Ott	awa	Pau	lding
OUTBREAKS*	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*	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Institutional*	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	4	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a
000 10 112		19 41		140	<u> </u>	190	<u> </u>	14.02		144		144	-	
VACCINE-PREVENTABLE	1 4	0.0		0.0		0.0		0.0	-	0.0		0.0		
Diphtheria	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	460	86.3	9	60.6	9	25.6	62	72.2	8	55.7	17	41.3	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
Indigenous	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	2	0.4	1	6.7	3	8.5	3	3.5	0	0.0	0	0.0	0	0.0
Pertussis	79	14.8	0	0.0	3	8.5	24	28.0	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	34	6.4	0	0.0	2	5.7	2	2.3	2	13.9	1	2.4	2	10.5
SUB-TOTAL	576	108.0	10	67.4	17	48.4	91	106.0	10	69.6	18	43.7	4	21.1
ZOONOSES														
Chikungunya Virus Infection*	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	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	0	0.0	3	3.5	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	11	2.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	4	0.8	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
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
SUB-TOTAL	18	3.4	0	0.0	0	0.0	4	4.7	0	0.0	0	0.0	0	0.0
,				1							-			
GRAND TOTAL	1.645	307.8	34	229.1	80	227.6	262	304.1	63	438.6	57	138.5	24	121.1
ONAID IVIAL	1,040	307.0	J#	LLJ. I	00	LLI.U	202	JU4. I	00	730.0	JI .	100.0	44	121.1
POPULATION	533	,116	14	,843	35,	,152	85,	818	14	,363	41	154	18	,989

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Р	erry	Pick	away	Р	ike	Poi	tage	Pr	eble	Put	tnam	Rich	hland
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	5	14.0	7	12.3	4	14.2	8	4.9	1	2.4	4	11.7	13	10.7
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
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	0	0.0	1	1.8	0	0.0	9	5.6	2	4.8	0	0.0	6	4.9
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Escherichia coli, Shiga Toxin-Producing	2	5.6	0	0.0	0	0.0	1	0.6	0	0.0	2	5.9	1	0.8
O157:H7	1	2.8	0	0.0	0	0.0	1	0.6	0	0.0	1	2.9	0	0.0
Not O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.9	1	0.8
Unknown Serotype	1	2.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	3	8.4	0	0.0	6	21.2	6	3.7	3	7.2	2	5.9	6	4.9
Haemophilus influenzae, Invasive Disease	0	0.0	2	3.5	1	3.5	1	0.6	0	0.0	0	0.0	2	1.6
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	1	2.8	7	12.3	1	3.5	1	0.6	0	0.0	1	2.9	2	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	1	2.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	0	0.0	4	7.0	4	14.2	8	4.9	1	2.4	3	8.8	8	6.6
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	3	1.9	1	2.4	0	0.0	1	0.8
Salmonellosis	7	19.5	6	10.5	1	3.5	10	6.2	5	12.0	4	11.7	9	7.4
Shigellosis	0	0.0	0	0.0	0	0.0	5	3.1	0	0.0	0	0.0	23	18.9
Staphylococcus aureus, 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	3	5.3	2	7.1	6	3.7	0	0.0	1	2.9	2	1.6
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	1	*	0	*	0	*	1	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	2	5.6	5	8.8	3	10.6	13	8.0	1	2.4	2	5.9	12	9.8
Ages < 5 Years*	0	*	0	*	0	*	1	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	1	*	0	*	5	*	0	*	0	*	3	*
Drug Susceptible, Ages 5+ Years*	2	*	4	*	3	*	7	*	1	*	2	*	9	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	2	1.2	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
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.9	0	0.0
SUB-TOTAL	22	61.4	35	61.5	22	77.9	74	45.7	15	36.1	20	58.5	87	71.3
								·						
HEPATITIS														
Hepatitis A	0	0.0	0	0.0	11	3.5	0	0.0	0	0.0	0	0.0	1	0.8
Hepatitis B, Acute*	0	0.0	0	0.0	1	3.5	1	0.6	2	4.8	0	0.0	14	11.5
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	1	2.8	0	0.0	4	14.2	1	0.6	1	2.4	0	0.0	5	4.1
Hepatitis C, Past or Present*	45	125.7	1,831	3,219.3	111	392.8	127	78.5	37	89.0	6	17.6	190	155.8
SUB-TOTAL	46	128.4	1,831	3,219.3	117	414.1	129	79.7	40	96.2	6	17.6	210	172.2

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Pe	erry	Pick	kaway	Р	ike	Por	tage	Pr	eble	Put	nam	Rich	hland
OUTBREAKS*	N	Rate	N N	Rate	N	Rate	N O.	Rate	N.	Rate	N	Rate	N N	Rate
Community*	1	n/a	0	n/a	0	n/a	1	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	0	n/a	2	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a	1	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	1	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	1	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
SUB-TOTAL	1	n/a	0	n/a	0	n/a	6	n/a	0	n/a	2	n/a	4	n/a
	<u> </u>			.,,		.44		,		.,,		.,		
VACCINE-PREVENTABLE														
Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	8	22.3	31	54.5	19	67.2	87	53.7	18	43.3	23	67.3	61	50.0
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	20	16.4
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	20	16.4
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	5	8.8	1	3.5	1	0.6	0	0.0	0	0.0	2	1.6
Pertussis	1	2.8	5	8.8	11	38.9	31	19.1	2	4.8	0	0.0	16	13.1
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	6	16.8	6	10.5	0	0.0	6	3.7	5	12.0	1	2.9	4	3.3
SUB-TOTAL	15	41.9	47	82.6	31	109.7	125	77.2	25	60.1	24	70.2	103	84.5
ZOONOSES														
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	1	0.6	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
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	1	2.8	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0	2	1.6
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	2	5.6	0	0.0	0	0.0	4	2.5	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
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
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	3	8.4	1	1.8	0	0.0	6	3.1	0	0.0	0	0.0	3	2.5
GRAND TOTAL	87	240.1	1 014	3 365 2	170	601 6	340	205.7	80	102 /	52	1/6 2	407	330.5
GRAND TOTAL	87	240.1	1,914	3,365.2	170	601.6	340	205.7	80	192.4	52	146.3	407	330.5

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	R	oss	San	dusky	Sc	ioto	Se	neca	Sh	elby	St	ark	Sur	nmit
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0	1	0.3	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	8	10.4	3	5.0	5	6.5	7	12.6	5	10.2	68	18.1	45	8.3
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2
Creutzfeldt-Jakob Disease (CJD)	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	0	0.0	1	1.7	3	3.9	3	5.4	1	2.0	28	7.5	11	2.0
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Escherichia coli, Shiga Toxin-Producing	3	3.9	0	0.0	0	0.0	1	1.8	0	0.0	8	2.1	7	1.3
O157:H7	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	6	1.6	6	1.1
Not O157:H7	2	2.6	0	0.0	0	0.0	1	1.8	0	0.0	2	0.5	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Giardiasis	4	5.2	2	3.3	1	1.3	0	0.0	2	4.1	18	4.8	21	3.9
Haemophilus influenzae, Invasive Disease	1	1.3	1	1.7	0	0.0	0	0.0	4	8.2	6	1.6	7	1.3
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Legionellosis	2	2.6	1	1.7	0	0.0	1	1.8	3	6.1	6	1.6	13	2.4
Leprosy (Hansen Disease)	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	1	1.3	0	0.0	0	0.0	1	1.8	0	0.0	1	0.3	2	0.4
Meningitis, Aseptic	3	3.9	3	5.0	3	3.9	0	0.0	4	8.2	20	5.3	31	5.7
Meningitis, Other Bacterial*	1	1.3	0	0.0	2	2.6	0	0.0	0	0.0	1	0.3	8	1.5
Salmonellosis	7	9.1	15	24.9	7	9.1	4	7.2	5	10.2	37	9.8	49	9.0
Shigellosis	1	1.3	1	1.7	1	1.3	0	0.0	1	2.0	63	16.8	46	8.5
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	4	5.2	0	0.0	3	3.9	1	1.8	1	2.0	8	2.1	21	3.9
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	1	*	1	*	6	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8	0	0.0
Streptococcus pneumoniae, Invasive Disease	7	9.1	4	6.6	2	2.6	3	5.4	6	12.3	37	9.8	53	9.8
Ages < 5 Years*	1	*	0	*	0	*	0	*	0	*	4	*	4	*
Drug Resistant, Ages 5+ Years*	1	*	1	*	0	*	0	*	2	*	8	*	9	*
Drug Susceptible, Ages 5+ Years*	5	*	3	*	2	*	3	*	4	*	25	*	40	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8	3	0.6
SUB-TOTAL	43	55.7	32	53.2	27	34.9	22	39.5	33	67.4	313	83.3	326	60.2
HEPATITIS														
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	4	0.7
Hepatitis B, Acute*	0	0.0	0	0.0	4	5.2	0	0.0	0	0.0	1	0.3	9	1.7
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	2	2.6	1	1.7	6	7.8	1	1.8	0	0.0	3	0.8	3	0.6
Hepatitis C, Past or Present*	249	322.7	20	33.2	432	559.2	26	46.7	59	120.5	179	47.6	404	74.5
SUB-TOTAL	251	325.3	21	34.9	442	572.1	27	48.5	59	120.5	185	49.2	420	77.5

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	R	oss	San	dusky	Sc	ioto	Se	neca	Sh	elby	Sta	ark	Sur	nmit
OUTBREAKS*	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	2	n/a	5	n/a	3	n/a
Foodborne*	0	n/a	2	n/a	0	n/a	0	n/a	1	n/a	0	n/a	7	n/a
Healthcare-Associated*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	4	n/a
Institutional*	1	n/a	1	n/a	1	n/a	0	n/a	0	n/a	17	n/a	7	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	1	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
SUB-TOTAL	1	n/a	3	n/a	2	n/a	0	n/a	3	n/a	24	n/a	22	n/a
VACCINE-PREVENTABLE														
Diphtheria Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	42	54.4	38	63.1	20	25.9	19	34.1	8	16.3	412	109.7	426	78.6
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	6	1.6	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
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	1.6	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	0	0.0
Mumps	2	2.6	0	0.0	0	0.0	1	1.8	2	4.1	1	0.3	2	0.4
Pertussis	4	5.2	0	0.0	6	7.8	2	3.6	1	2.0	54	14.4	69	12.7
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	8	10.4	4	6.6	4	5.2	1	1.8	1	2.0	20	5.3	7	1.3
SUB-TOTAL	56	72.6	42	69.8	30	38.8	23	41.3	12	24.5	495	131.7	504	93.0
ZOONOSES														
Chikungunya Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	5	0.9
Dengue	0	0.0	0	0.0	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	2	2.6	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	1	1.3	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*	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	1.3
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	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
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	2	n/a
Spotted Fever Rickettsiosis*	2	2.6	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	0	0.0	0	0.0
SUB-TOTAL SUB-TOTAL	3	3.9	0	0.0	4	5.2	1	1.8	0	0.0	3	0.5	15	2.4
GRAND TOTAL	354	457.5	98	157.9	505	651.1	73	131.1	107	212.5	1,020	264.8	1,287	233.1
POPULATION	77	,159	60	,179	77.	258	55	,669	48	,951	375	,736	541	,943
								•		•				

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

Trumbull Tuscarawas Union Van Wert Vinton Warren Washington GENERAL INFECTIOUS DISEASES Ν Rate Ν Rate Ν Rate Ν Rate Ν Rate Ν Rate Rate Amebiasis 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 **Botulism** 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0 Foodborne 0 Infant* 0 0 0 0 0 0 0 12 0.0 Campylobacteriosis 16 17.2 4 7.4 6 0 0.0 3.2 0 5.8 21.1 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) 0.5 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 Cryptosporidiosis 6 2.9 3 3.2 6 11.2 0 0.0 0 0.0 1 0.5 1.6 0 0.0 0.0 0.0 0.0 0 0.0 0 0.0 Cyclosporiasis 0 0 0 0.0 0 Escherichia coli, Shiga Toxin-Producing 0 0.0 0 0.0 2 3.7 0 0.0 0 0.0 6 2.7 2 3.3 O157:H7 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 2 0.9 1.6 Not O157:H7 0 0.0 0 0.0 2 3.7 0 0.0 0 0.0 4 1.8 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 6 2.9 2 2.2 2 3.7 3.5 n 0.0 6 2.7 1.6 Giardiasis Haemophilus influenzae, Invasive Disease 0.5 1.1 0 0.0 0 0.0 0 0.0 2 0.9 0 0.0 Hemolytic Uremic Syndrome (HUS) 0 0.0 0 0.0 0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 Legionellosis 5 2.4 2 2.2 3 5.6 0 0.0 0 0.0 0.5 0 0.0 0 0 0 Leprosy (Hansen Disease) 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0.0 Listeriosis 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 1 0.5 0 0.0 Meningitis, Aseptic 7 3 3.2 0 2 1.6 3.4 1 1.9 0.0 15.1 8 3.6 1 Meningitis, Other Bacterial* 2 1.0 0 0.0 0 0.0 0 0.0 0 0.0 2 0.9 2 3.3 Salmonellosis 18 8.8 10 10.8 9 16.7 7 24.6 0 0.0 16 7.2 4 6.5 2 Shigellosis 1.0 1 1.1 0 0.0 3.5 0 0.0 5 2.3 1.6 0 0 0 Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA) 0 0.0 0.0 0 0 0.0 0 0.0 0.0 0.0 0.0 Streptococcal Disease, Group A, Invasive 5 2.4 1 1.1 3 5.6 0 0.0 2 15.1 4 1.8 0 0.0 Streptococcal Disease, Group B, in Newborn* 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 Streptococcus pneumoniae, Invasive Disease 23 11.2 6 6.5 7 13.0 0 0.0 1 7.6 9 4.1 1 1.6 Ages < 5 Years* 2 O O O 0 Drug Resistant, Ages 5+ Years* 2 0 0 3 0 Drug Susceptible, Ages 5+ Years* 20 4 6 0 5 0 Toxic Shock Syndrome (TSS) 0 0.0 0 0.0 1 1.9 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 Vibrio parahaemolyticus Infection 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 Other (Not Cholera) n 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 1.1 0.0 2 7.0 0.0 0.5 0.0 Yersiniosis 0 0 0 SUB-TOTAL 89 43.4 46 49.6 38 70.7 17 59.7 5 37.8 69 14 22.9 31.1 **HEPATITIS** Hepatitis A 0.0 0.0 0 0.0 0.0 0.0 0.5 0 0.0 0 0 0 0 Hepatitis B, Acute* 0 0.0 0 0.0 0 0.0 0 0.0 3 22.7 3 1.4 0 0.0 Hepatitis B, Perinatal Infection* 0 0 0 0 * 0 0 0 Hepatitis C, Acute* 2 1.0 0 0.0 3 10.5 0.0 1 0.5 0 0.0 1 1.1 0 Hepatitis C. Past or Present* 274 133.5 42 45.3 817 1.519.3 27 94.9 40 302.3 173 78.0 28 45.7

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

SUB-TOTAL

46.3

817

1,519.3

30

105.4

43

324.9

178

80.3

28

45.7

276

134.5

43

^{*} Please see Technical Notes (pp. 103-106).

	Trui	mbull	Tusca	arawas	Ur	nion	Van	Wert	Vi	nton	Wa	rren	Wash	ington
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a
Foodborne*	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	2	n/a
Institutional*	0	n/a	2	n/a	5	n/a	1	n/a	0	n/a	6	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
SUB-TOTAL	4	n/a	2	n/a	5	n/a	3	n/a	1	n/a	6	n/a	2	n/a
VACCINE-PREVENTABLE	1													
Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Influenza-Associated Hospitalization	68	33.1	54	58.2	29	53.9	7	24.6	4	30.2	143	64.5	20	32.7
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	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	1	1.1	3	5.6	1	3.5	0	0.0	4	1.8	0	0.0
Pertussis	16	7.8	10	10.8	1	1.9	2	7.0	11	7.6	59	26.6	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	2.4	9	9.7	1	1.9	2	7.0	0	0.0	17	7.7	0	0.0
SUB-TOTAL	89	43.4	74	79.8	34	63.2	12	42.2	5	37.8	223	100.6	20	32.7
ZOONOSES														
Chikungunya Virus Infection*	0	0.0	1	1.1	1	1.9	0	0.0	0	0.0	2	0.9	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.9	0	0.0
Ehrlichiosis/Anaplasmosis	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	1	1.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	1	0.5	1	1.1	0	0.0	1	3.5	0	0.0	2	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.9	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
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	2		0	n/a	1		0	n/a	0		0	n/a	0	
Spotted Fever Rickettsiosis*	0	n/a 0.0	0	0.0	0	n/a 0.0	0	0.0	0	n/a 0.0	0	0.0	0	n/a 0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	4	1.0	3	3.2	2	1.9	1	3.5	0	0.0	4	1.8	0	0.0
OUD TOTAL	· -	1.0		J.L		1.3	<u> </u>	5.5	- 0	0.0	-	1.0	<u> </u>	
GRAND TOTAL	462	222.2	168	178.9	896	1,655.0	63	210.8	54	400.5	480	213.8	64	101.3
POPULATION	205	5,175	02	788	E2	,776	20	462	12	,234	224	,659	64	213
PUPULATION	200	,175	92,	100	ეა	,,,,,	20	,+ 02	13	,254	221	,000	υι,	Z 13

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	W.	avne	Will	liams	W	ood	Ww	andot	Hnk	nown	ТО	ΓΛΙ
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N N	Rate	N N	Rate	N N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	9	0.1
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	5	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Infant*	0	*	0	*	0	*	0	*	0	n/a	3	*
Campylobacteriosis	8	6.9	2	5.4	20	15.4	2	8.9	0	n/a	923	8.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	15	0.1
Creutzfeldt-Jakob Disease (CJD)	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	12	0.1
Cryptosporidiosis	2	1.7	0	0.0	2	1.5	2	8.9	0	n/a	322	2.8
Cyclosporiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Escherichia coli, Shiga Toxin-Producing	3	2.6	0	0.0	2	1.5	0	0.0	0	n/a	203	1.8
O157:H7	1	0.9	0	0.0	1	0.8	0	0.0	0	n/a	92	0.8
Not O157:H7	2	1.7	0	0.0	1	0.8	0	0.0	0	n/a	105	0.9
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	6	0.1
Giardiasis	4	3.5	0	0.0	4	3.1	0	0.0	0	n/a	380	3.3
Haemophilus influenzae, Invasive Disease	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	129	1.1
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	8	0.1
Legionellosis	2	1.7	0	0.0	0	0.0	1	4.5	0	n/a	409	3.5
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	0	0.0	0	0.0	0	0.0	0	n/a	29	0.3
Meningitis, Aseptic	3	2.6	0	0.0	11	8.5	1	4.5	0	n/a	530	4.6
Meningitis, Other Bacterial*	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	91	0.8
Salmonellosis	17	14.7	5	13.4	15	11.6	0	0.0	0	n/a	1,188	10.2
Shigellosis	1	0.9	0	0.0	0	0.0	1	4.5	0	n/a	591	5.1
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	8	0.1
Streptococcal Disease, Group A, Invasive	1	0.9	0	0.0	3	2.3	1	4.5	0	n/a	319	2.8
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	1	*	0	*	0	n/a	63	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	9	0.1
Streptococcus pneumoniae, Invasive Disease	8	6.9	0	0.0	5	3.9	2	8.9	0	n/a	924	8.0
Ages < 5 Years*	0	*	0	*	1	*	0	*	0	n/a	47	*
Drug Resistant, Ages 5+ Years*	4	*	0	*	1	*	1	*	0	n/a	216	*
Drug Susceptible, Ages 5+ Years*	4	*	0	*	3	*	1	*	0	n/a	661	*
Toxic Shock Syndrome (TSS)	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	9	0.1
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	7	0.1
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	12	0.1
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	7	0.1
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	5	0.0
Yersiniosis	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	52	0.4
SUB-TOTAL	52	45.0	7	18.8	65	50.2	10	44.7	0	n/a	6,250	53.9
HEPATITIS												
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	27	0.2
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	1	n/a	170	1.5
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	n/a	2	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	2	8.9	0	n/a	106	0.9
Hepatitis C, Past or Present*	61	52.8	8	21.5	44	34.0	18	80.5	503	n/a	15,772	136.0
SUB-TOTAL	61	52.8	8	21.5	44	34.0	20	89.5	504	n/a	16,077	138.7

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

	Wa	ayne	Will	iams	W	ood	Wv:	andot	Unk	nown	TO	ΓAL
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	70	n/a
Foodborne*	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	69	n/a
Healthcare-Associated*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	70	n/a
Institutional*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	200	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	14	n/a
Zoonotic*	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	9	n/a
SUB-TOTAL	0	n/a	1	n/a	6	n/a	0	n/a	0	n/a	432	n/a
VACCINE-PREVENTABLE												
Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Influenza-Associated Hospitalization	71	61.5	2	5.4	62	47.8	13	58.2	0	n/a	8.247	71.1
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	n/a	4	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Measles	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	382	3.3
Imported	0	0.9	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
Indigenous	1	0.0	0	0.0	0	0.0	0	0.0	0	n/a	379	3.3
Meningococcal Disease	0	0.9	1	2.7	1	0.0	0	0.0	0		12	0.1
	1	0.0	0	0.0	0	0.0	0	0.0	0	n/a	554	4.8
Mumps Pertussis	9	7.8	0	0.0	4	3.1	0	0.0	0	n/a n/a	1,310	11.3
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1,310	0.0
Varicella	12	10.4	1	2.7	3	2.3	2	8.9	0	n/a	513	4.4
SUB-TOTAL	94	81.4	4	10.7	70	54.0	15	67.1	0	n/a	11,026	95.1
ZOONOSES	1	•				•		•			,	
Chikungunya Virus Infection*	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	43	0.4
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	9	0.1
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	6	0.1
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	4	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	31	0.3
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Lyme Disease	2	1.7	0	0.0	1	0.8	0	0.0	0	n/a	120	1.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	39	0.3
Q Fever	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Acute	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Chronic	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Rabies, Animal*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	25	n/a
Spotted Fever Rickettsiosis*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	10	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	0	0.0	0	0.0	0	0.0	0	n/a	11	0.1
SUB-TOTAL	4	3.5	0	0.0	3	1.5	0	0.0	0	n/a	299	2.4
GRAND TOTAL	211	182.6	20	51.0	188	139.7	45	201.3	504	n/a	34,084	290.0
POPULATION	445	5,537		291	400	9.590		,353		0	11,59	4.400

N = number of cases reported.
Rates use 2014 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

^{*} Please see Technical Notes (pp. 103-106).

ESCHERICHIA COLI, SHIGA TOXIN-PRODUCING SEROGROUPS BY YEAR OF ONSET, OHIO, 2010-2014

SEROGROUP	2010	2011*	2012*	2013*	2014*
O1	0	1	0	0	0
O5	0	0	1	4	1
O8	0	1	0	0	1
O22	1	0	0	0	0
O26*	5	14	26	27	21
O28	0	0	0	1	0
O36	0	0	0	1	0
O39	0	0	0	0	1
O43	0	1	0	0	0
O45*	9	9	14	15	10
O55	0	0	1	0	0
O69	0	0	1	2	0
O71	0	0	2	4	7
O76	0	0	2	2	1
O77	0	0	0	0	1
O78	0	0	1	0	0
O80	0	1	0	0	0
O84	0	0	1	0	1
O88	1	0	0	0	0
O91	0	1	1	0	2
O103*	14	14	18	25	27
O105	0	1	0	0	0
O111*	2	12	10	21	11
O118	0	2	1	1	0
O121*	1	5	1	10	2
O123	0	0	1	0	1
O124	0	0	1	0	1
O128	0	0	0	1	0
O145*	8	0	4	2	2
O146	0	1	1	0	2
O152	0	0	1	0	0
O157	72	92	117	75	89
O158	0	1	0	0	0
O159	0	0	0	1	0
O163	0	0	1	0	0
O165	0	0	1	2	1
O168	0	1	0	0	0
O174	0	0	0	0	1
O178	0	0	0	1	1
O180	0	0	0	0	1
O185	0	0	0	0	1
O186	0	1	2	0	5
O Rough	0	2	4	2	1
O Undetermined	2	3	2	3	2
Unknown	23	19	25	23	9
TOTAL	138	182	240	223	203

^{*} 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 SEROGROUPS IN CHILDREN <5 YEARS OF AGE BY YEAR OF ONSET, OHIO, 2010-2014

SEROGROUP	2010	2011	2012	2013	2014
Group A	1	0	0	5	0
Group B	3	2	3	1	0
Group C	1	0	0	0	0
Group E	0	2	3	0	0
Group F	1	3	1	2	4
Non-Typeable	9	12	10	21	13
Unknown	4	0	0	0	2
TOTAL	19	19	17	29	19

MENINGOCOCCAL DISEASE SEROGROUPS BY YEAR OF ONSET, OHIO, 2010-2014

SEROGROUP	2010	2011	2012	2013	2014
Group A	0	0	0	0	2
Group B	12	7	4	3	2
Group C	7	8	6	0	0
Group W	0	0	0	2	5
Group Y	6	5	8	4	1
Not Groupable	0	2	1	0	0
Unknown	10	2	5	1	2
TOTAL	35	24	24	10	12

SEROTYPE	2010	2011	2012	2013	2014
Abony	1	0	1	0	1
Adelaide	2	2	1	0	0
Agbeni	6	9	8	9	7
Ago	0	1	0	0	0
Agona	7	13	11	8	10
Agoueve	0	0	0	2	0
Alachua Albany	3	0	1	0	0
Altona	1	12	1	2	1
Anatum	4	6	6	6	4
Anatum, var 15 +	0	1	0	0	0
Арара	0	0	0	0	2
Baildon	8	1	3	0	5
Bardo	0	1	0	0	0
Bareilly	9	3	4	3	7
Barranquilla	0	1	0	0	0
Bere	0	0 16	9	1	0
Berta Blijdorp	11	0	0	10	6
Blockley	2	0	0	0	1
Bodjonegoro	0	0	0	1	0
Bovis-morbificans	7	3	13	2	3
Braenderup	16	17	22	20	28
Brandenburg	0	3	1	0	2
Bredeney	0	0	1	2	1
Carrau	1	0	0	0	0
Cerro	1	1	0	0	1
Chailey	0	0	0	1	0
Chester Choleraesuis	1 2	1	0	0	3
Choleraesuis, var Kunzendorf	0	0	1	0	0
Colindale	0	1	1	0	0
Cotham	1	0	2	0	2
Cubana	1	0	0	0	1
Dahra	0	1	0	0	0
Derby	3	0	1	1	4
Dublin	5	5	2	3	2
Durban	0	1	2	0	2
Ealing	2	2	0	0	0
Eastbourne Enteritidis	0 431	277	264	289	305
Fluntern	1	0	1	1	0
Fresno	0	0	0	0	1
Gaminara	4	2	0	4	0
Gera	0	0	0	2	0
Give	2	3	0	1	0
Hadar	2	5	7	2	4
Hartford	36	17	32	11	12
Havana Heidelberg	2	1 27	0	2	0 32
Holcomb	35 1	0	25 1	27 1	1
Hvittingfoss	0	5	3	2	2
Infantis	17	26	38	42	40
Javiana	36	33	22	26	35
Johannesburg	0	4	3	1	0
Kedougou	0	0	1	0	0
Kentucky	3	0	2	1	0
Kiambu	3	4	0	1	1
Kingabwa	0	0	1	0	0
Kingston	0	0	0	0	1
Kintambo Kokomlemle	0	0	0	0	0
Kottbus	0	1	0	0	0
Lexington	0	0	0	0	1
Lille	0	0	3	2	0
Litchfield	6	12	9	3	4
Liverpool	1	0	0	0	0
Livingstone	3	3	0	0	0

SEROTYPE	2010	2011	2012	2013	2014
Loma Linda	0	0	0	2	0
Lome	0	0	0	0	1
London	0	1	0	1	0
Madelia	1	0	0	0	0
Manhattan	1	1	2	2	0
Matadi	0	0	0	0	1
Mbandaka	6	2	5	13	5
Miami	0	1	1	6	5
Michigan Minnesota	0	0	0	0	1
Mississippi	3	3	3	2	12
Molade	1	0	0	0	0
Monschaui	1	1	1	2	2
Montevideo	20	12	24	20	19
Muenchen	15	17	20	25	15
Muenster	1	2	5	1	3
Muenster, var 15 +	0	0	1	0	0
Napoli	0	0	0	0	1
Narashino	0	1	0	0	0
New Mexico	0	0	0	0	1
Newport	72	87	117	61	62
Nima	0	0	1	0	0
Norwich	1	5	2	1	2
Nottingham	0	1	0	0	0
Obogu	1	0	0	0	0
Offa Ohio	0	2	0	0	2
Oranienburg	26	33	37	21	25
Orion	0	1	0	0	0
Oslo	0	0	0	0	1
Panama	4	5	6	3	2
Paratyphi A	3	5	1	2	6
Paratyphi B	1	0	1	0	0
Paratyphi B, var D - Tartrate +	1	0	0	0	0
Paratyphi B, var L - Tartrate +	42	44	59	51	38
Paratyphi B, var Tartrate +	0	0	0	1	0
Pensacola	0	0	0	0	1
Pomona	2	2	3	1	2
Poona	10	9	1	5	6
Potsdam	0	0	1	1	0
Putten	1	0	1	2	1
Reading Richmond	0	0	1	0	0
Rissen	1	2	1	1	2
Romanby	1	0	0	0	0
Roodepoort	0	0	0	1	0
Rubislaw	0	2	1	1	1
Saarbruecken	1	0	0	0	0
Saint Paul	33	14	24	19	27
San Diego	4	1	4	4	4
Saphra	1	0	0	0	0
Schwartzengrund	4	2	1	2	2
Senftenberg	1	3	1	1	1
Singapore	3	0	0	0	0
Skansen	0	0	1	0	0
Soerenga Stanley	7	4	4	10	5
Stanleyville	0	0	0	0	1
Stellingen	0	0	1	0	0
Suelldorf	0	0	0	1	0
Tarshyne	0	0	0	0	2
Telelkebir	2	0	1	0	0
Tennessee	1	0	0	0	1
Thompson	13	19	33	13	15
Typhimurium	123	150	208	196	155
Typhimurium, var Copenhagen	61	40	0	1	0
Uganda	0	0	0	2	4
Uganda, var 15 +	0	0	0	1	0

Uzbanan	SEROTYPE	2010	2011	2012	2013	2014
Virchow 4 0 8 3 2 Wandsworth 0 0 0 1 0 Wardsworth 0 0 0 1 0 Weltevreden 2 0 4 1 2 Worthington 3 0 0 0 0 0 (0 1, 1, 9, 12-15 0 1 0 1 0 0 0 0 0 1 0 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 1 0 0 0 1		1	2	4	3	3
Wandsworth	Uzaramo	1	0	0	0	1
Waycross 0 0 0 0 1 Wefterveden 2 0 4 1 2 Worthington 3 0 0 0 0 (I) 1,912:Non-motile 2 2 1 0 0 (I) 3,10::1,5 0 0 0 0 1 0 (I) 3,10::1,9 0 0 0 0 1 0 (I) 3,10::1,9 0 0 0 0 1 0 (I) 4,512::12 0 0 0 0 1 0 (I) 4,512::12 0 0 0 0 0 1 0 (I) 4,5,12::12 0 0 0 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 1 1 0 0 <td>Virchow</td> <td>4</td> <td>0</td> <td>8</td> <td>3</td> <td>2</td>	Virchow	4	0	8	3	2
Wefteverden 2 0 4 1 2 Worthington 3 0 0 0 0 (I) 1.9, 12:-5 0 1 0 0 0 (I) 3, 10:-1.5 0 0 0 1 0 0 (I) 3, 10:Non-motile 0 0 0 0 1 0 (I) 4,51:D:- 0 0 0 0 1 0 (I) 4,51:E:- 0 0 0 0 1 0 (I) 4,5,12:D:- 0 0 0 0 0 1 0 (I) 4,5,12:D:- 0 1 0 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 0 0 1 0 0 1 1 0 0 1 1 0 0 1 1 0	Wandsworth	0		0	-	
Worthington 3 0 0 0 0 (1) 1,9,12:Non-motile 2 2 1 0 0 (1) 3,10:-1,5 0 0 0 1 0 0 (1) 3,10:-1,18 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 1 0 0 0 0 0 1 0 1 1 0 0 0 0	•				~	
(i) 1.9.12::55			-	-		
(i) 1,9,12:Non-motile				-	-	-
(i) 3.10:-1.5 (i) 3.10:-1.w (i) 3.10:-1.w (i) 3.10:-1.w (i) 4.5.12:-1 (i) 5.12:-1 (i) 5.12:-1 (i) 6.7:-1.5 (i) 6		-	-	_		_
(i) 3,10:Non-motile	.,				-	-
(i) 3,10-Non-motile						
(i) 4.5.bb. (i) 4.5.bb. (i) 4.5.12::1,2 (i) 0 0 0 0 0 1 (i) 4.5.12::1,2 (i) 0 0 0 0 0 0 1 (i) 4.5.12:bb. (i) 5.12:bb. (i) 6.7.15. (i) 6.7.15. (i) 6.7.15. (i) 6.7.15. (i) 6.7.15. (i) 6.7.10. (i) 6.7.	, , ,		-	-		-
(i) 4,5,12:-1,2	() /					
(i) 4,5,12:-2: (i) 4,5,12:-5: (ii) 4,5,12:-7: (ii) 6,7:-15: (ii) 0 0 0 1 1 (ii) 6,7:-15: (ii) 0 0 0 0 1 (ii) 6,7:-15: (ii) 0 0 0 0 0 1 (ii) 6,7:-15: (ii) 0 0 0 0 0 1 (ii) 6,7:-15: (ii) 1 1 1 (ii) 6,7:-15: (ii) 0 0 0 0 1 1 (ii) 6,7:-15: (ii) 0 0 0 0 1 1 (ii) 6,7:-15: (ii) 0 0 0 0 1 1 (ii) 6,7:-15: (ii) 1 1 1 1 (ii) 6,7:-15: (iii) 1 1 1 1 (ii) 6,7:-15: (iii) 1 1 1 1 (ii) 6,7:-15: (iii) 1 1 1 1 (iii) 1,7:-15: (iii) 1 1 1 1 (iii) 1,7:-15: (iii) 1 1 1 1 (iii) 1,7:-15: (iii) 2,7:-15: (iii) 1 1 1 (iii) 1,7:-15: (iii) 1 1 1 (iii) 1 1,7:-15: (iii) 1 1 1 (ii) 1 1 1 (iii) 1 1 1 (iii) 1 1 1 (iii) 1 1 1 (iii)			-	-		-
(I) 4,5,12:b:, var L + Tartrate +				-		
(i) 4,5,12:b:, var L + Tartrate + 0 0 0 0 0 0 1 (1) 4,5,12:b: 0 0 0 0 0 0 0 1 (1) 4,5,12:b: 38 44 75 118 72 (1) 4,5,12:b: 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	-	-	0	0
(i) 4,5,12:i:- (i) 5,7::5 (i) 0 0 1 (i) 6,7::5 (i) 0 0 0 0 (i) 1 (i) 6,7::5 (i) 0 0 0 0 1 (i) 6,7::4 (i) 6,7::4 (i) 6,7::5 (i) 0 0 0 0 1 (i) 6,7::4 (i) 6,7::5 (i) 0 0 0 0 1 (i) 6,7::4 (i) 6,7::4 (i) 6,7::5 (i) 0 0 0 0 1 (i) 6,7::4 (i) 6,7::4 (i) 6,7::5 (i) 0 0 0 0 1 (i) 6,7::4 (i) 6,7::5 (i) 6,7::5 (i) 0 0 0 0 1 (i) 6,7::4 (i) 6,7::5 (i) 0 0 0 0 1 (i) 6,7::4 (i) 6,7::5 (i) 6,7::5 (i) 6,7::5 (i) 0 0 0 0 1 (i) 6,7::4 (i) 6,7::5 (i) 6,8:Non-motile (i) 7,9:15 (i) 1 1 (i) 9,12:Non-motile (i) 0 0 0 0 0 (i) 1 (i) 1,12:0,25 (i) 1 0 0 0 0 (i) 1 0 0 0 0 0 (i) 1 0 0 0 0 0 0 (i) 1 0 0 0 0 0 0 (i) 1 0 0 0 0 0 0 0 (i) Rough Os:g,m:- (i) 0 0 0 0 1 1 0 0 0 (i) Rough Os:210:e,n,z15 (i) 7,0:x15 (ii) 1 0 0 0 0 0 1 (iii) 21:z10:z6 (iii) 21:z10:z6 (iii) 1 0 0 0 0 0 0 1 (iii) 21:z10:z6 (iii) 21:z10:z6 (iii) 1 0 0 0 0 0 0 1 (iii) 21:z10:z6 (iii) 1 0 0 0 0 0 0 1 (iii) 21:z10:z6 (iii) 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	0	0	
(i) 4,5,12:r- (ii) 4,5,12:Non-motile (ii) 6,7::1,5 (ii) 6,7::1,5 (ii) 6,7::1,w (ii) 6,7::1,w (ii) 6,7::1,w (ii) 6,7::1,w (iii) 6,7:Non-motile (iii) 6,7:Non-motile (iii) 6,7:Non-motile (iii) 6,8:Non-motile (iii) 6,8:Non-motile (iii) 6,8:Non-motile (iii) 6,8:Non-motile (iii) 6,1:1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	(I) 4,5,12:d:-	0	0	0	0	1
(i) 4,5,12:r- (ii) 4,5,12:Non-motile (ii) 6,7::1,5 (ii) 6,7::1,5 (ii) 6,7::1,w (ii) 6,7::1,w (ii) 6,7::1,w (ii) 6,7::1,w (iii) 6,7:Non-motile (iii) 6,7:Non-motile (iii) 6,7:Non-motile (iii) 6,8:Non-motile (iii) 6,8:Non-motile (iii) 6,8:Non-motile (iii) 6,8:Non-motile (iii) 6,1:1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,		38	44	75	118	72
(i) 6,7::-1,5	(I) 4,5,12:r:-			0		
(i) 6,7:::5 (i) 6,7::-i,w (i) 6,7::-i,w (i) 6,7::-i,w (i) 6,7::Non-motile (i) 6,7:Non-motile (i) 6,8:Non-motile (i) 6,8:Non-motile (i) 6,8:Non-motile (i) 9,12:g251:- (i) 0 0 0 0 0 1 (i) 9,12:g251:- (i) 0 0 0 0 0 0 1 (i) 9,12:S0n-motile (i) 1 0 0 0 0 0 0 1 (i) 18:Non-motile (i) 0 0 0 0 0 0 0 1 (i) 18:Non-motile (i) 1 0 0 0 0 0 0 0 0 0 (i) 18:Non-motile (i) 0 0 0 0 0 0 0 0 0 0 0 (i) 18:Non-motile (i) 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.,	-	-	-		
(I) 6,7::-I,w (I) 6,8::Non-motile (I) 0 0 0 0 0 (I) 1 (I) 9,12::Non-motile (I) 0 0 0 0 0 0 (I) 1 (I) 9,12::Non-motile (I) 0 0 0 0 0 0 (I) 1 (I) 1,3;23:Non-motile (I) 1 0 0 0 0 0 0 (I) 1 0 0 (I) 1,3;23:Non-motile (I) 1 0 0 0 0 0 0 (I) 1 0 0 0 (I) 1 0 0 0 0 0 (I) 1 0 0 0 0 0 (I) 1 0 0 0 0 0 0 (I) 47::II, II 0 0 0 0 0 0 (I) 6,8:Non-motile (I) 1 0 0 0 0 0 0 0 0 0 (I) 7,9:Non-motile (I) 1 0 0 0 0 0 0 0 0 0 (I) 8,0:y (I) 2,1:2,1:2,2,3 (II) 2,1:2,1:2,2,3 (III) 3,1:2,1,3 (III) 1,1:2,1,3 (III) 1,1:2,1,3 (III) 1,1:2,1,3 (III) 1,1:2,1,3 (III) 1,1:2,1,3 (III) 1,1:3,1,3 (III) 1,1:2,3 (III) 1,1:3,1,3 (IIII) 6,1:2,3 (IIIII) 6,1:2,3 (IIII) 6,1:2,3 (I				-	_	-
(i) 6,7:ks:- (i) 6,7:kon-motile (i) 6,7:Non-motile (i) 6,8:Non-motile 0			-	-	-	-
(i) 6,7:Non-motile						-
(i) 6,8:Non-motile			-			
(i) 9,12:g.251:-				_	_	
(i) 9,12:Non-motile	, , .		-	-	-	
(i) 13,23:Non-motile				_	-	
(i) 18:Non-motile	. , .		-	-		
(I) 47:m,t:- (I) Mucoid:b:e,n,x (I) Rough Os:b:- (I) Rough Os:e,h:e,n,z15 (I) Rough Os:g,m:- (I) Rough Os:g,m:- (I) Rough Os:g,m:- (I) Rough Os:12 (I) Rough Os:210:e,n,z15 (I) Rough Os:238:- (III) Arizona (III) Arizona (IIII) Arizona (IIII) Arizona (IIII) Arizona (IIII) Arizona (IIIII) Arizona (IIII) Arizona (IIII) Arizona (IIII) Arizona (IIII) Arizona (IIIII) Arizona (IIII) Arizona (IIIII) Arizona (IIII) Arizona (IIIIII) Arizona (IIIII) Arizona (IIII) Arizona (IIII) Arizona (IIII)	()				_	
(I) Mucoid:b:e,n,x	. 7		-			_
(I) Rough Os:b:- (I) Rough Os:e,he,n,z15 (I) Rough Os:e,he,n,z15 (I) Rough Os:e,he,n,z15 (I) Rough Os:g,m:- (I) Rough Os:i2 (I) Rough Os:i2 (I) Rough Os:z238:- (I) Rough Os:z38:- (I) Rough Os:z38:- (I) Rough Os:z38:- (I) Rough Os:z38:- (II) Z1:z10:z6 (II) Z1:z10:z6 (III) Z1:z10:z6 (III) Z1:z10:z6 (III) Z1:z10:z6 (IIII) Z1:z10:z6 (IIIII) Z1:z10:z6 (IIII) Z1:z10:z6 (IIII) Z1:z10:z6 (IIII) Z1:z10:z6 (IIII) Z1:z10:z6 (IIII) Z1:z10:z10 (IIIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIII) Z1:z10:z10 (IIIII) Z1:z10:z10 (IIIIII) Z1:z10:z10 (IIIIIIII) Z1:z10:z10 (IIIIIIIII:z10:z10 (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			-		-	_
(I) Rough Os:e,h:e,n,z15	, ,			-	-	_
(I) Rough Os:g,m:- (I) Rough Os:i2 (I) Rough Os:i2 (I) Rough Os:z10:e,n,z15 (I) Rough Os:z38:- (III) Arizona (III) Arizona (III) Arizona (IIII) Arizona (IIII) Arizona (IIIII) Arix (IIII) Arix (IIIII) Arix (IIII) Arix (I	., .	0	0	0	1	0
(I) Rough Os:z10:e,n,z15	(I) Rough Os:g,m:-	0	0	0	1	1
(I) Rough Os:z38:- (II) 21:z10:z6 (III) Arizona (III) Arizona (III) Arizona (IIII) 44:z4,z23:- (IIII) 16:Non-motile (IIII) 47:Non-motile (IIII) 47:Non-motile (IIII) 48:Non-motile (IIII) 48:Non-motile (IIII) 48:Non-motile (IIII) 48:Non-motile (IIII) 50:K:- (IIII) 50:K:- (IIII) 50:Non-motile (IIII) 50:Non-motile (IIIIII) 57:c:e,n,x,z15 (IIIIII) 60:r:e,n,x,z15 (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	(I) Rough Os:i:2	0	0	0	0	1
(II) 21:z10:z6	(I) Rough Os:z10:e,n,z15	0	1	0	0	0
(III) Arizona				-	-	_
(IIIa) 44:z4,z23:- 0 1 0 0 (IIIb) 16:Non-motile 0 0 0 1 0 (IIIb) 47:Non-motile 0 0 0 0 1 1 (IIIb) 48:I:z 0 0 1 0 0 0 0 1 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td>· · ·</td> <td></td> <td></td> <td></td> <td>_</td> <td></td>	· · ·				_	
(IIIb) 16:Non-motile 0 0 0 1 0 (IIIb) 47:Non-motile 0 0 0 0 1 (IIIb) 48:iz 0 0 1 1 1 (IIIb) 48:ix 0 0 1 1 1 (IIIb) 48:Non-motile 0 0 1 0 0 (IIIb) 50:k:- 0 0 1 0 0 (IIIb) 50:k:- 1 0 0 1 0 (IIIb) 50:k:- 1 0 0 1 0 (IIIb) 50:k:- 1 0 0 0 1 0 (IIIb) 50:k:- 1 0 <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td>			-			
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(IV) 44:z4,z32:- 0 0 0 1 0	. ,					
	(IV) 45:g,z51:-	0	0	0	0	1

SEROTYPE	2010	2011	2012	2013	2014
(IV) 48:g,z51:- (Marina)	1	0	1	0	1
(IV) 50:g,z51:- (Wassenaar)	0	0	0	0	1
(IV) 50:z4,z23:- (Flint)	0	3	1	0	1
(VI) 41:b:1,7	0	1	0	0	0
Rough Os:d:1,7	0	0	1	0	0
Rough Os:e,h:z15	1	0	0	0	0
Rough Os:e,h:1,2	0	0	1	0	0
Rough Os:e,h:1,6	0	0	0	1	0
Rough Os:f,g:-	0	0	1	0	0
Rough Os:g,m:-	1	1	0	0	0
Rough Os:g,m,s:-	1	0	0	1	1
Rough Os:i:1,2	0	0	0	0	1
Rough Os:i:2	0	1	0	0	1
Rough Os:I,z28:5	1	0	0	0	0
Rough Os:z:1,6	0	0	0	1	0
Rough Os:Non-motile	2	2	1	0	0
SUB-TOTAL	1,220	1,073	1,186	1,124	1,088
SEROGROUP Group A	0	0	1	0	0
	11	7	4	7	5
Group B	7	8	1	3	4
Group C Group C1	1	1	1	0	1
· ·	2	0	0	0	0
Group C2 Group D	9	5	8	1	7
SUB-TOTAL	30	21	15	11	17
GOD-TOTAL	30		10	- 11	17
UNGROUPED, UNTYPED	59	89	68	55	83

1,309 1,183 1,270 1,190 1,188

GRAND TOTAL

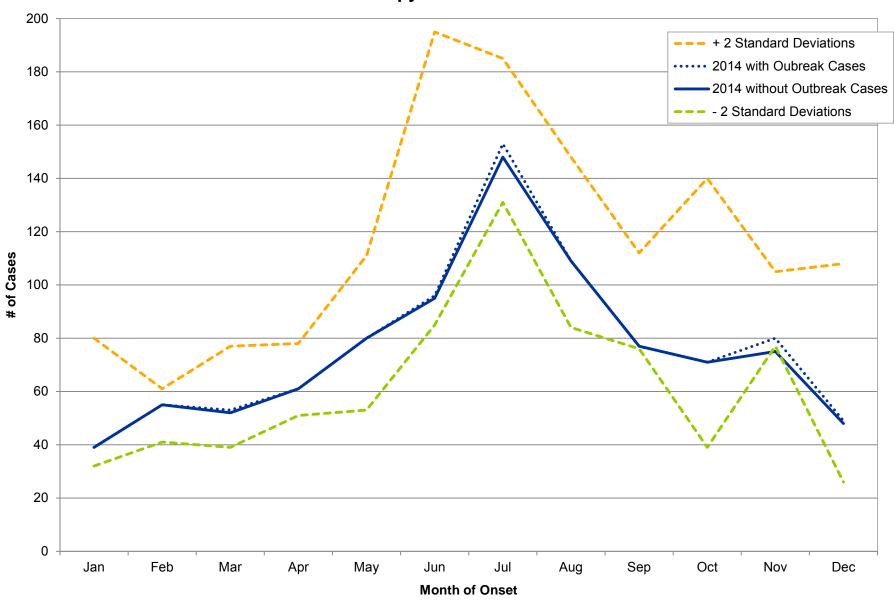
GRAPHS OF SELECTED NOTIFIABLE DISEASE INCIDENCE

Disease incidence from 2014 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 2014 (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, over the previous three years, 2011-2013. Statistically significant changes in incidence are demonstrated by graphing 2 standard deviations above and below the average baseline disease incidence. A statistically significant difference in 2014 disease incidence compared to baseline disease incidence suggests the difference is unlikely to have occurred by chance.

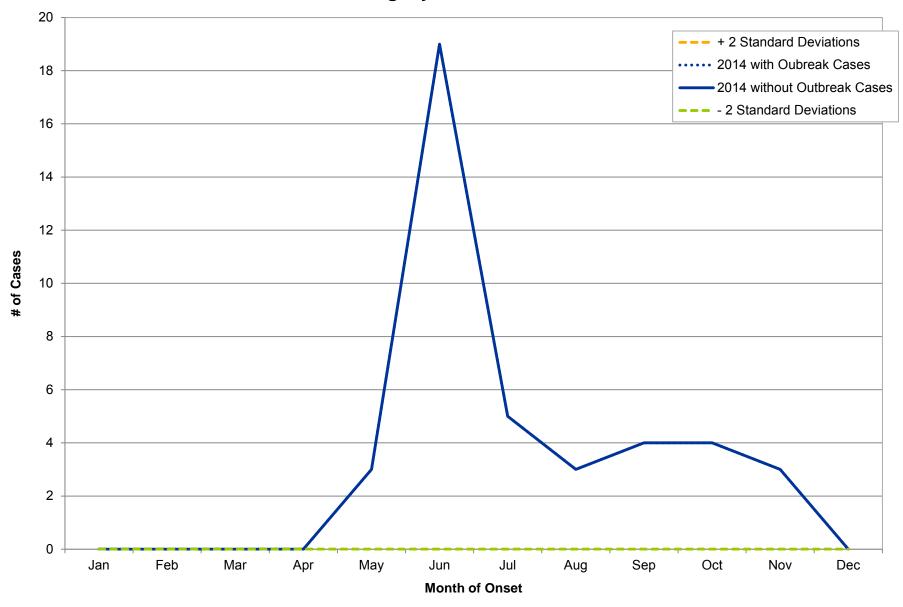
General surveillance trends are graphed statewide. The 2014 data represent confirmed and probable cases of selected reportable diseases. In many instances, two trend lines can be seen graphed for 2014 incidence data: one for all cases, including those linked to a known outbreak or cluster, and one for 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 2014 and data used in the calculation of the baseline (2011-2013) average are finalized. All data are by month and year of illness onset. The source of the data is the Ohio Disease Reporting System.

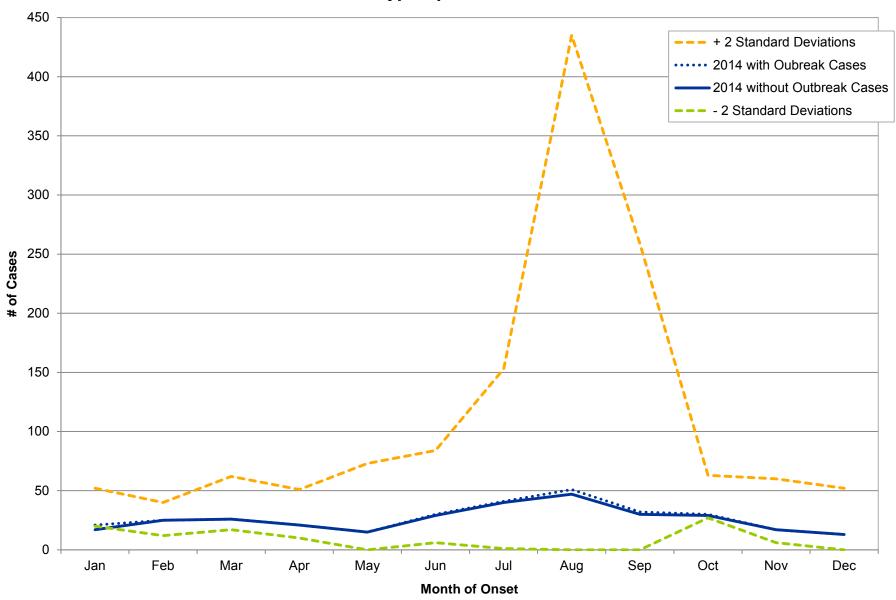
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Campylobacteriosis



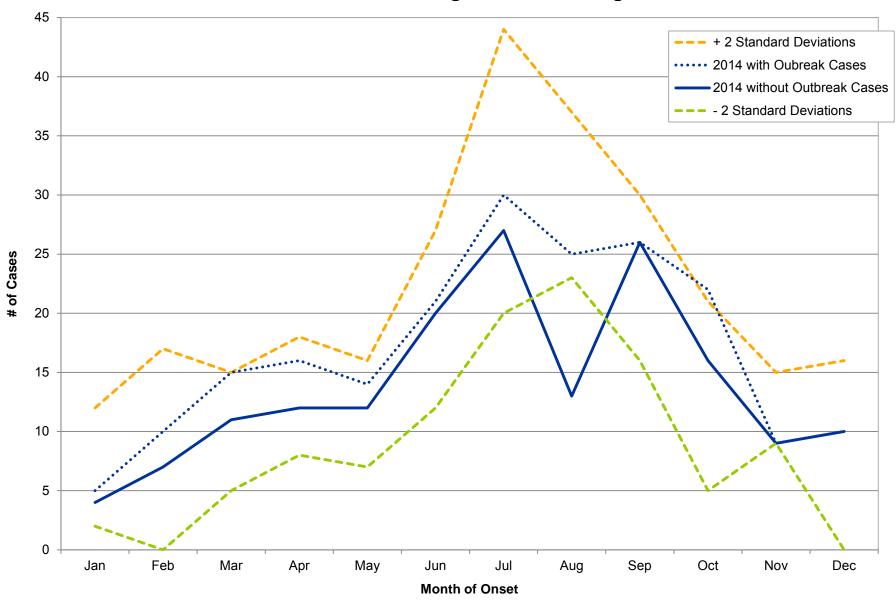
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Chikungunya Virus Infection



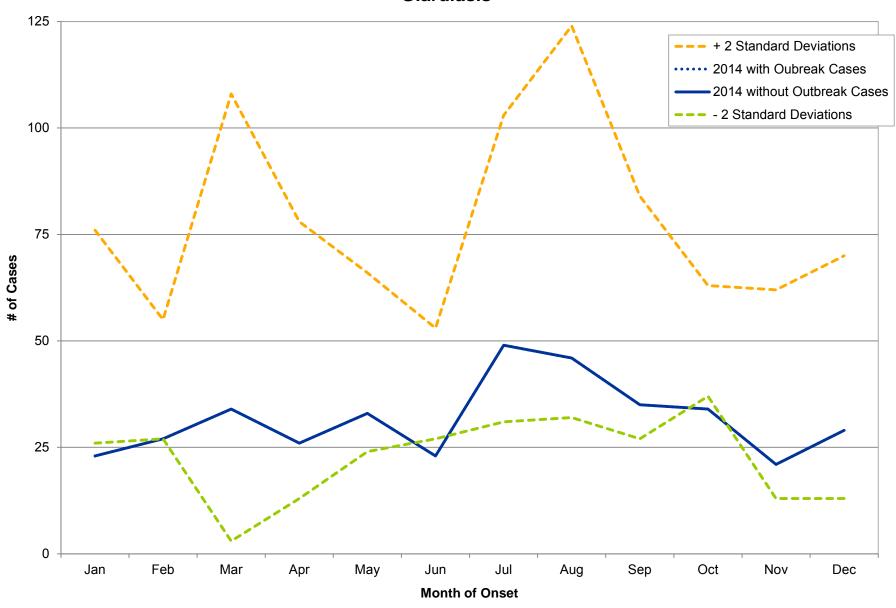
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Cryptosporidiosis



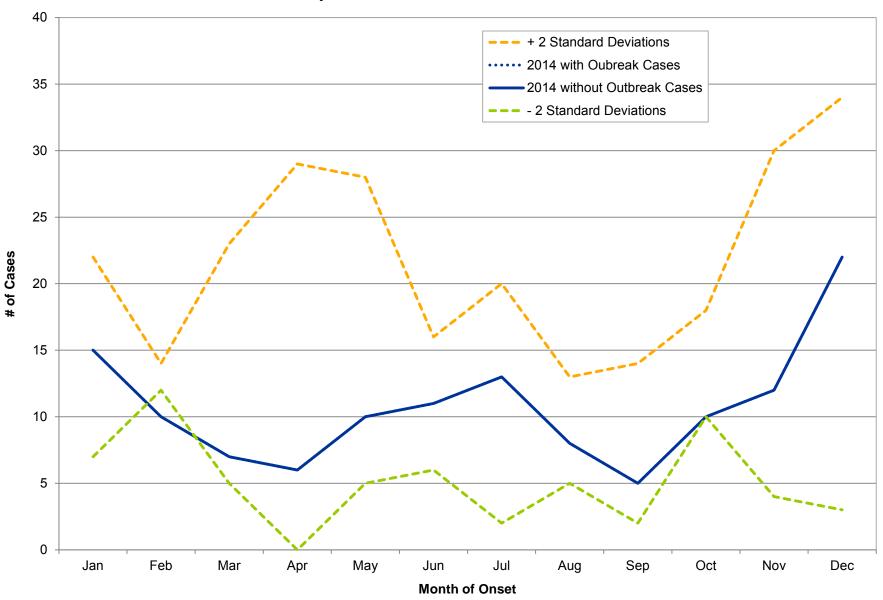
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Escherichia coli, Shiga Toxin-Producing



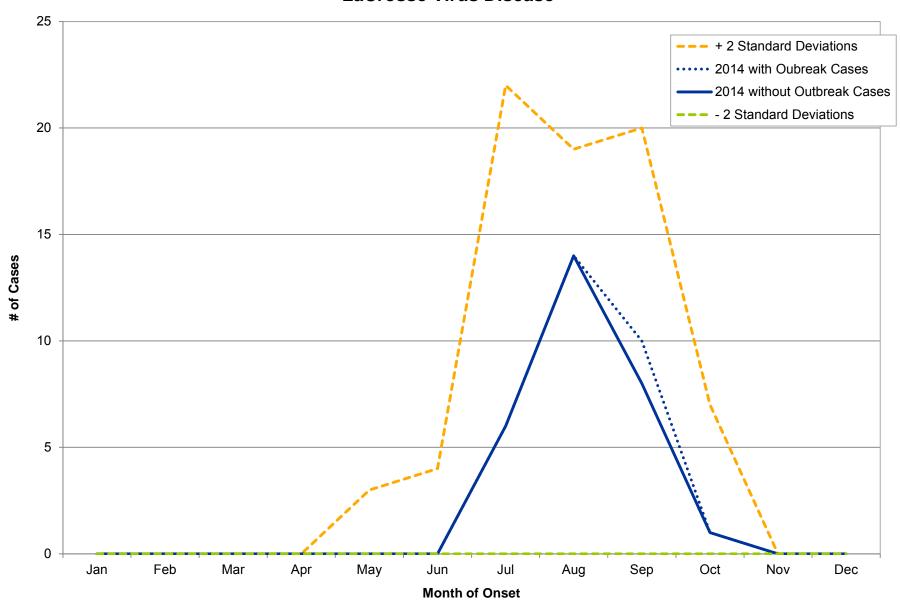
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Giardiasis



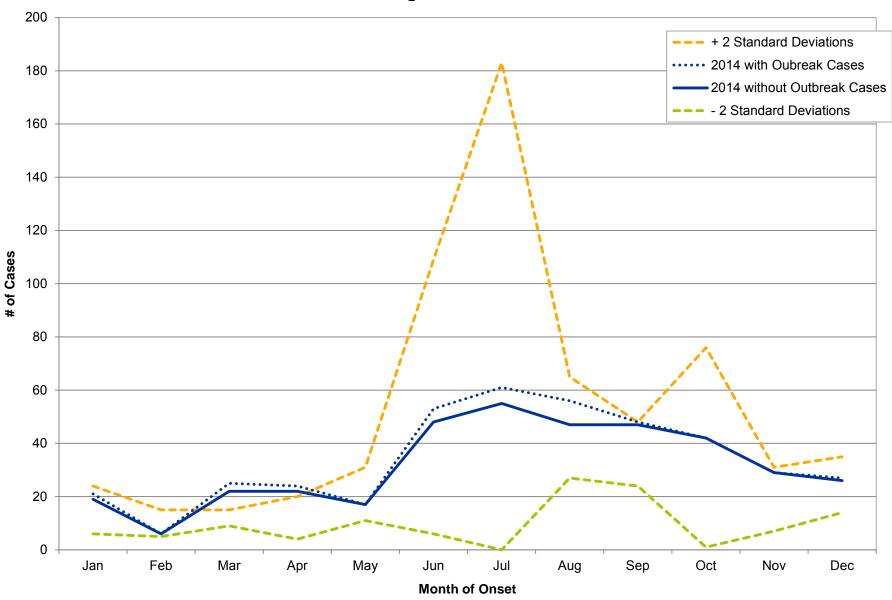
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Haemophilus influenzae, Invasive Disease



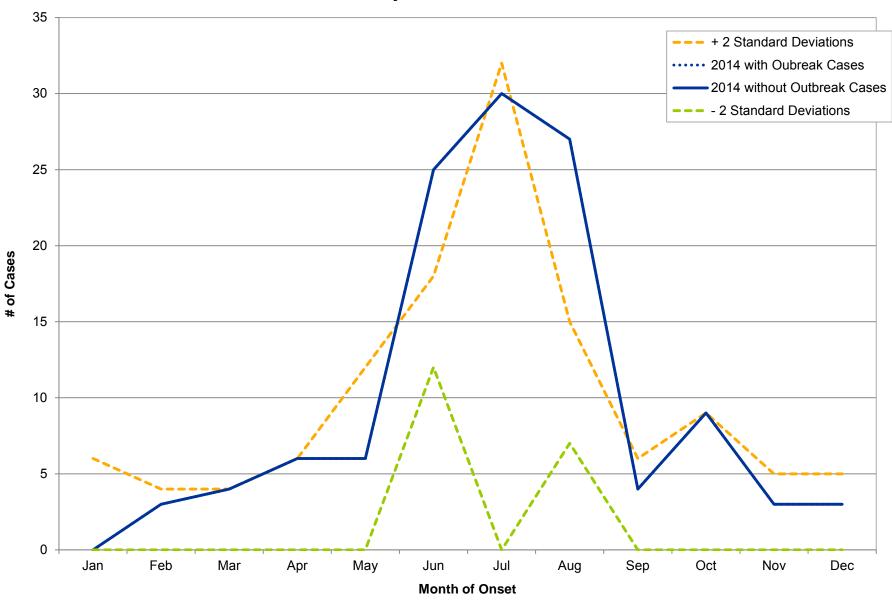
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 LaCrosse Virus Disease



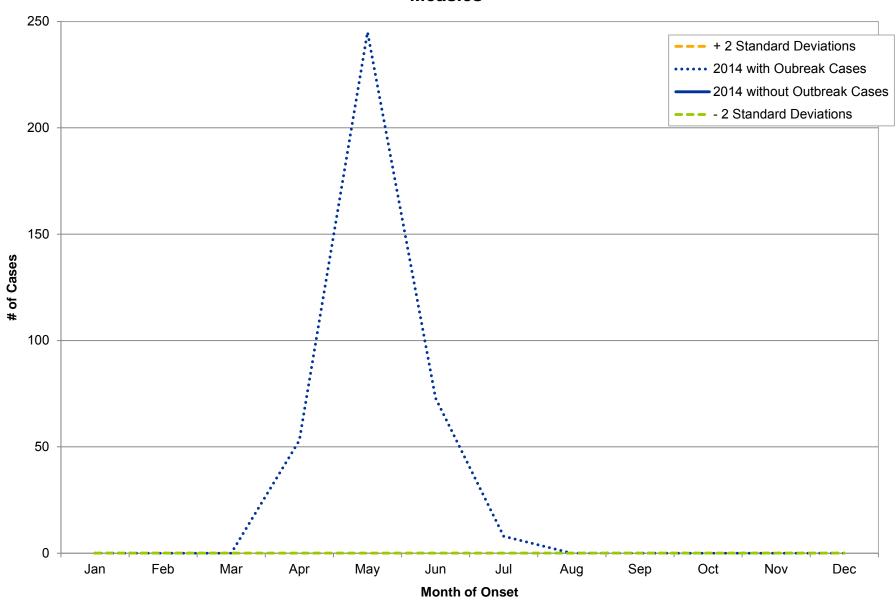
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Legionellosis



INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Lyme Disease

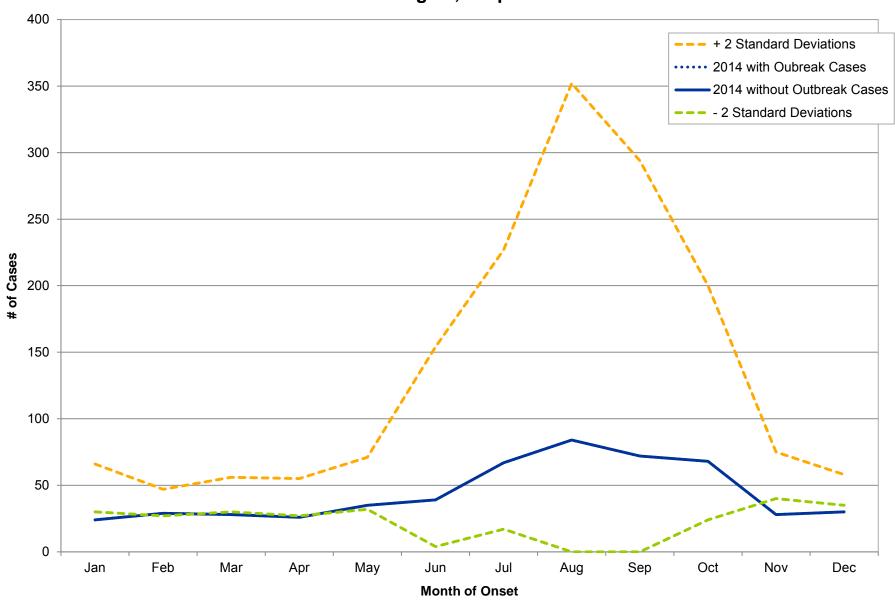


INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Measles

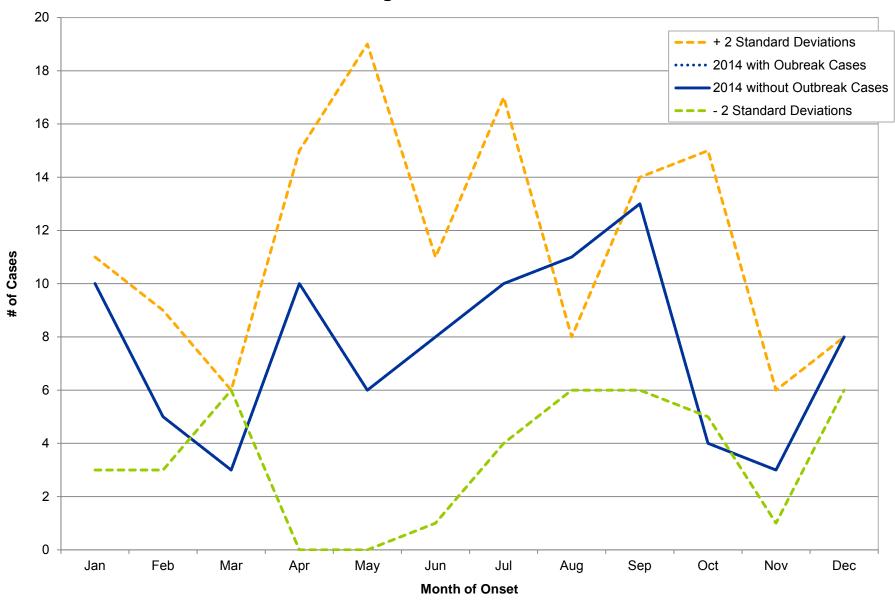


Baseline trends are 2 standard deviations of mean counts from 2011-2013 data. Source of disease data: Ohio Disease Reporting System. In 2014, Ohio experienced a large outbreak of measles in a highly unvaccinated population.

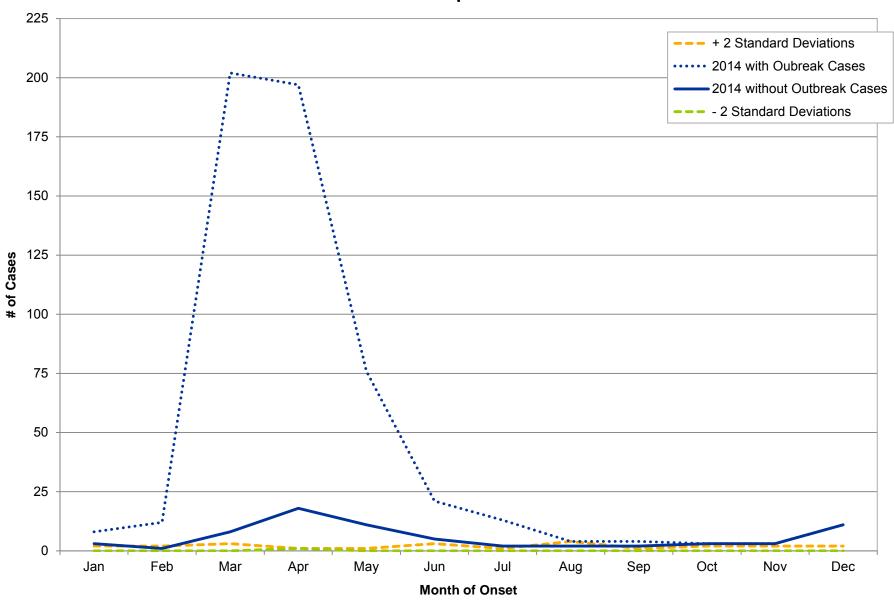
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Meningitis, Aseptic



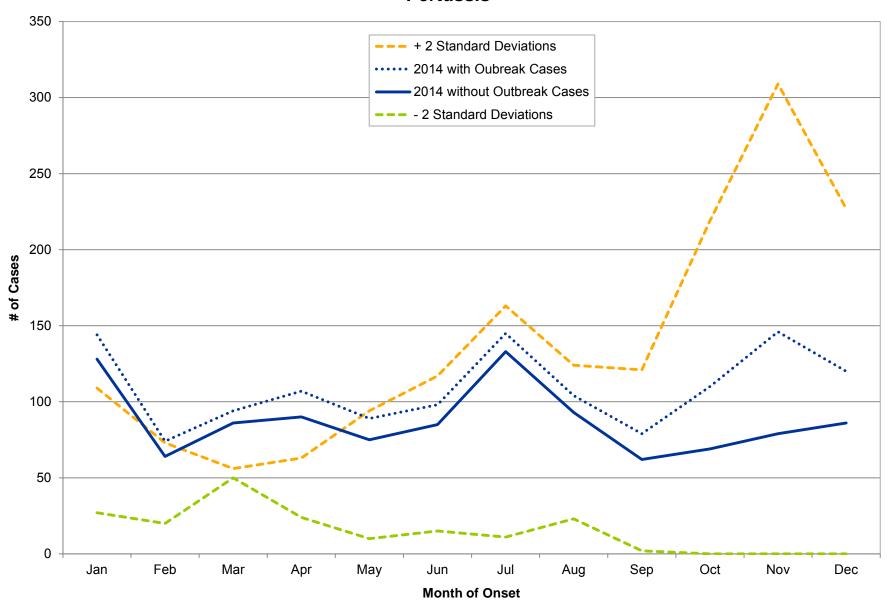
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Meningitis, Other Bacterial



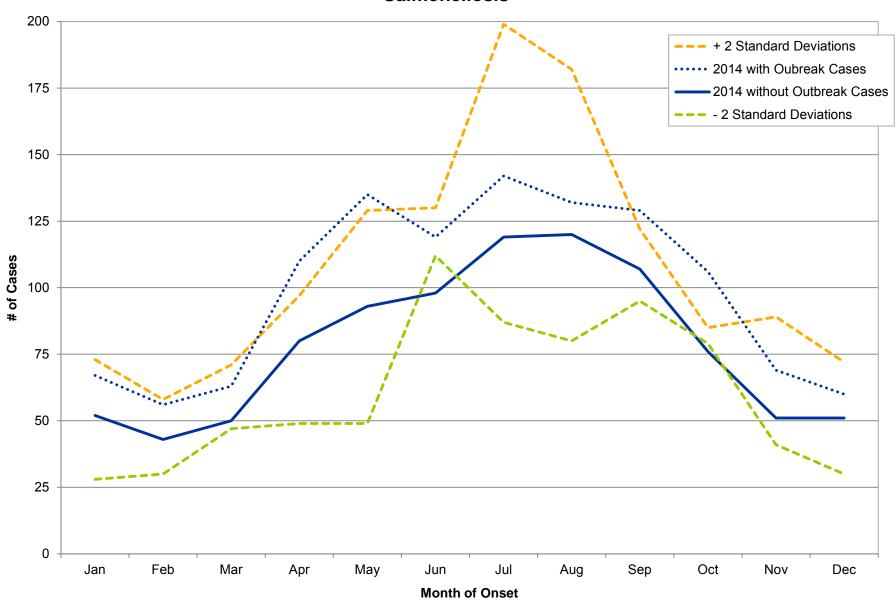
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Mumps



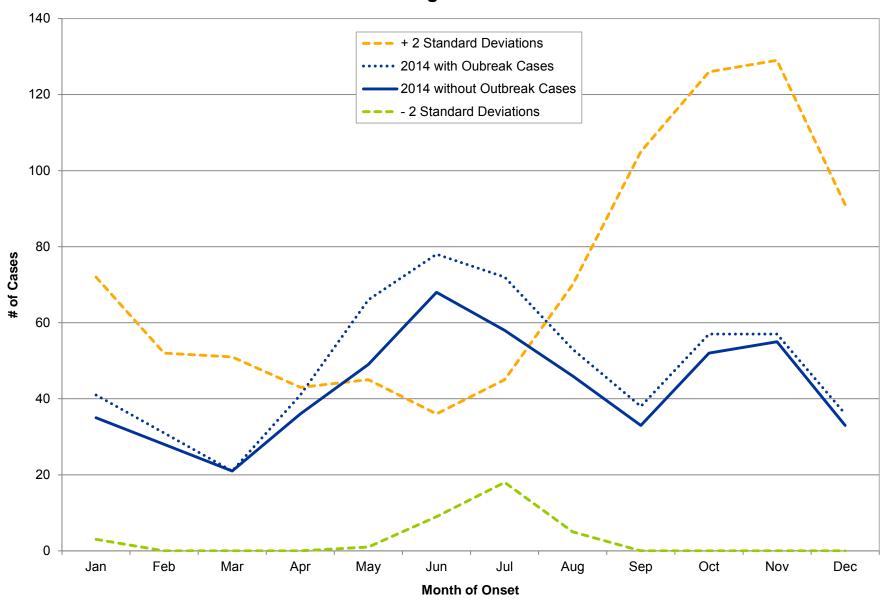
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Pertussis



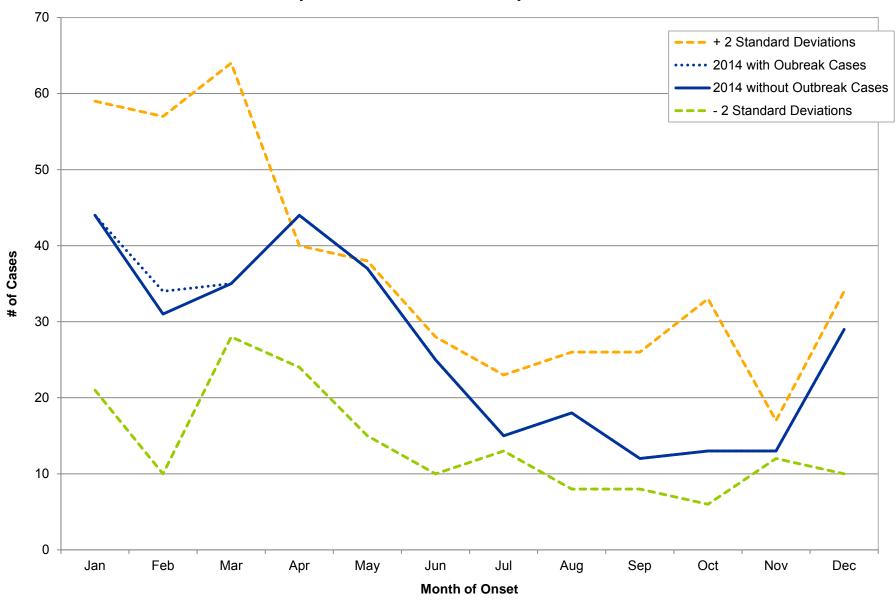
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Salmonellosis



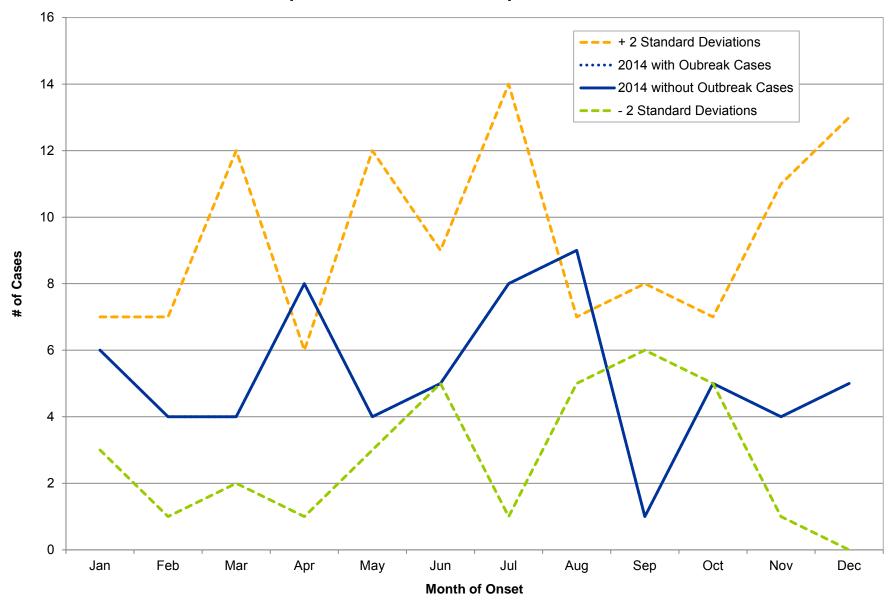
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Shigellosis



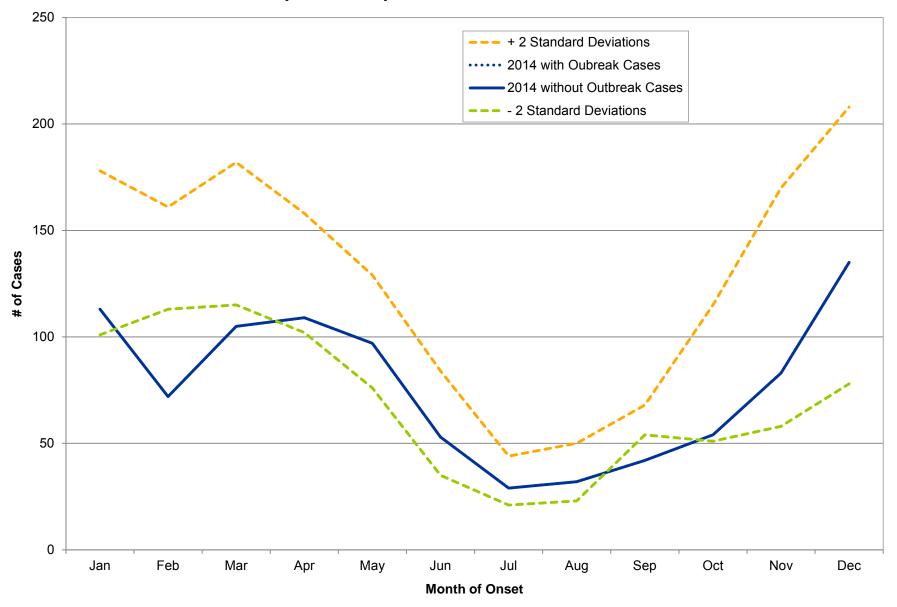
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Streptococcal Disease, Group A, Invasive



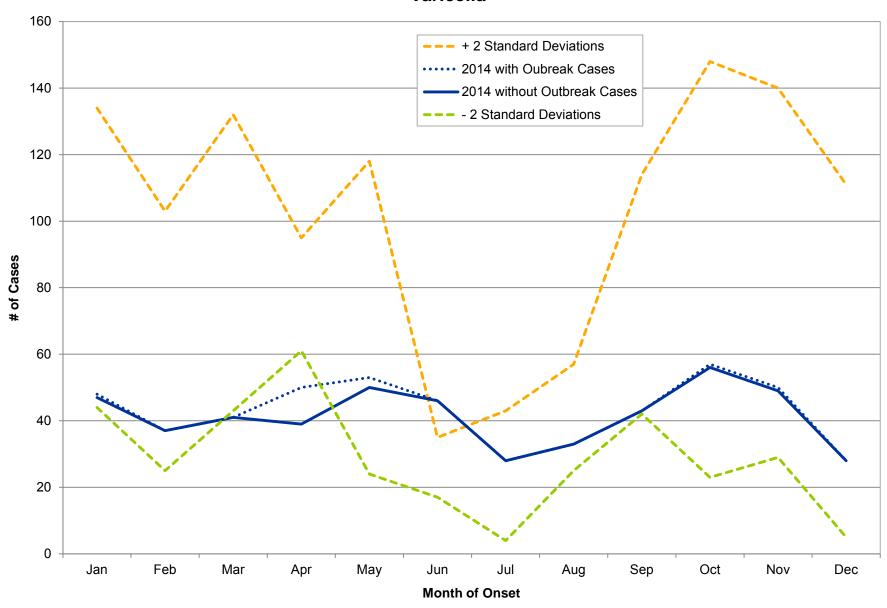
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Streptococcal Disease, Group B, in Newborn



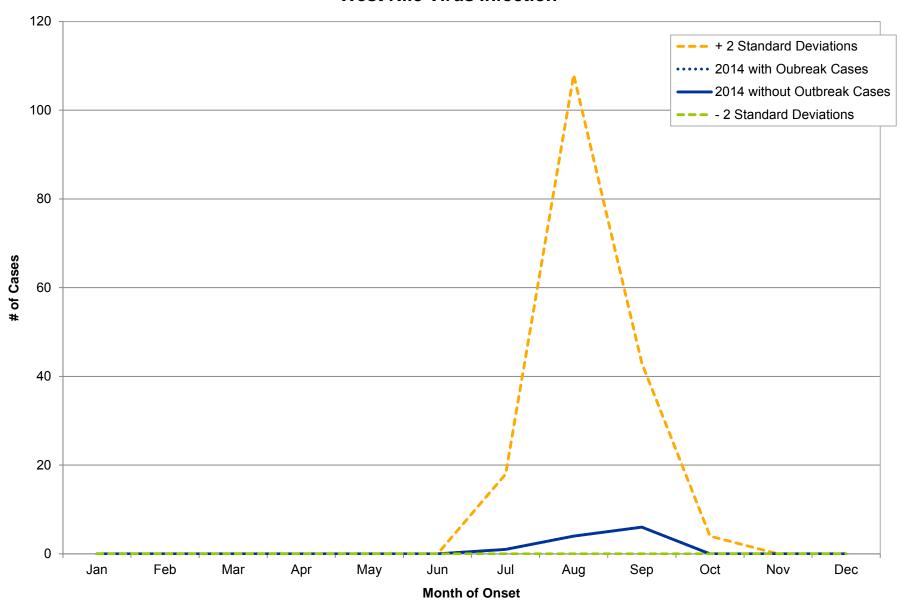
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Streptococcus pneumoniae, Invasive Disease



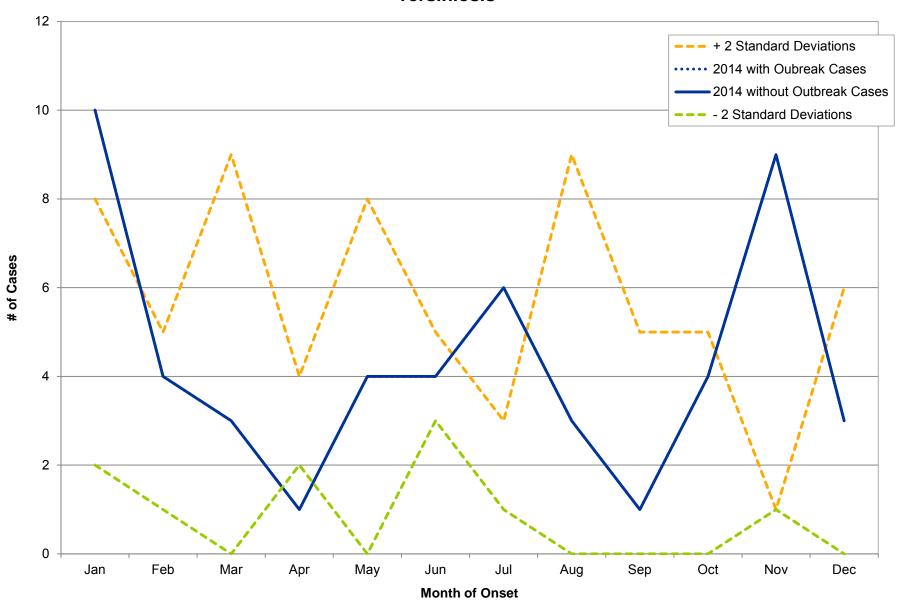
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Varicella



INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 West Nile Virus Infection



INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2014 Yersiniosis



PROFILES OF SELECTED NOTIFIABLE DISEASES

CHIKUNGUNYA VIRUS INFECTION

Number of cases in 2014:	43	Rate in 2014:	0.4
Number of cases in 2013:	0	Rate in 2013:	0.0

^{*} Rates are based on the 2013 and 2014 U.S. Census estimates and are per 100,000 population.

In December 2013, the first local transmission of chikungunya virus in the Western Hemisphere was identified in the Caribbean country of St. Martin. One and a half years after its introduction, more than 1.5 million infections were reported from 45 countries and territories in the Americas.

The mosquitoes that transmit the virus, *Aedes aegypti* and *Aedes albopictus*, are found throughout much of the Americas, including parts of the United States. One of the chikungunya vectors, *Ae. aegypti*, is not established in Ohio. On rare occasions, it has been imported into the state, but cannot survive Ohio winters. The other chikungunya vector, *Ae. albopictus*, was introduced to the United States in 1985 and has spread throughout much of the country. It has been identified in 37 Ohio counties and likely occurs in others. *Ae. albopictus* breeds in water-holding containers, especially tires, and survives winters as eggs in Ohio.

In early 2014, cases were identified in U.S. travelers returning from the Caribbean. Although chikungunya virus infection was not explicitly notifiable in Ohio, the reporting of suspected and confirmed cases was facilitated in Ohio as "other arthropod-borne disease." Prior to 2014, a few sporadic cases were reported in Ohio residents returning from endemic countries in Asia.

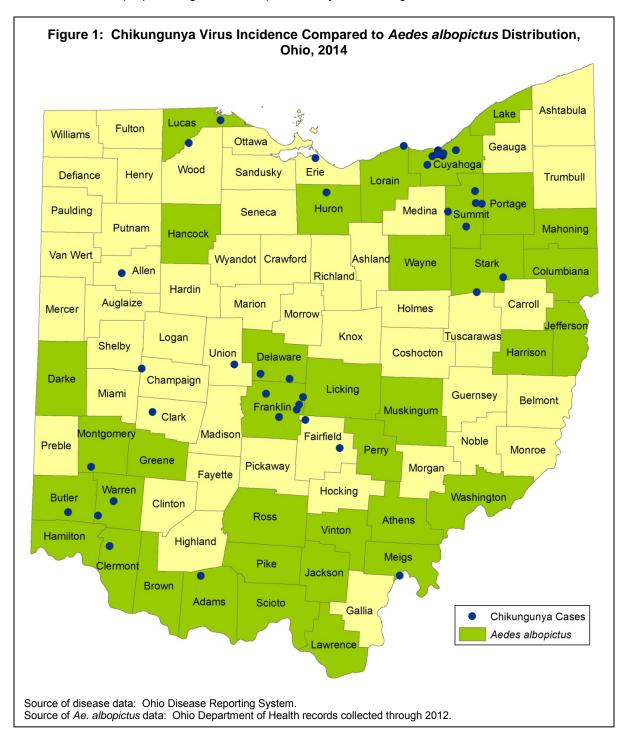
In 2014, more than 2,500 cases of chikungunya were reported in U.S. travelers returning from affected countries in the Americas, and included 12 locally-acquired cases in Florida. A total of 43 cases of chikungunya virus infection were reported in Ohio travelers returning from Caribbean and Central American countries during 2014 (see Table 1). The majority of cases acquired their infections in the Dominican Republic, Haiti or Puerto Rico (77 percent).

Table 1: Chikungunya Virus Infection by Country of Exposure, Ohio, 2014

Country of Exposure	# Cases
Dominica	1
Dominican Republic	13
El Salvador	2
Grenada	1
Haiti	13
Jamaica	1
Puerto Rico	10
U.S. Virgin Islands	2
Total	43

Source of disease data: Ohio Disease Reporting System.

The 43 cases of chikungunya virus infection in 2014 were reported from throughout Ohio (Figure 1). Looking at the reported cases with respect to the distribution of the *Ae. albopictus* chikungunya vector, 79 percent of cases were residents of counties where *Ae. albopictus* has been identified. For jurisdictions that have resources, it may be prudent to visit the home and other outdoor places the case may have visited while viremic (7 days after illness onset) to look for *Ae. albopictus*. While testing local *Ae. albopictus* mosquitoes for chikungunya virus is not timely to detect an outbreak, identifying breeding habitats and performing vector control on the property may prevent local transmission from perpetuating when mosquito activity is occurring in Ohio.



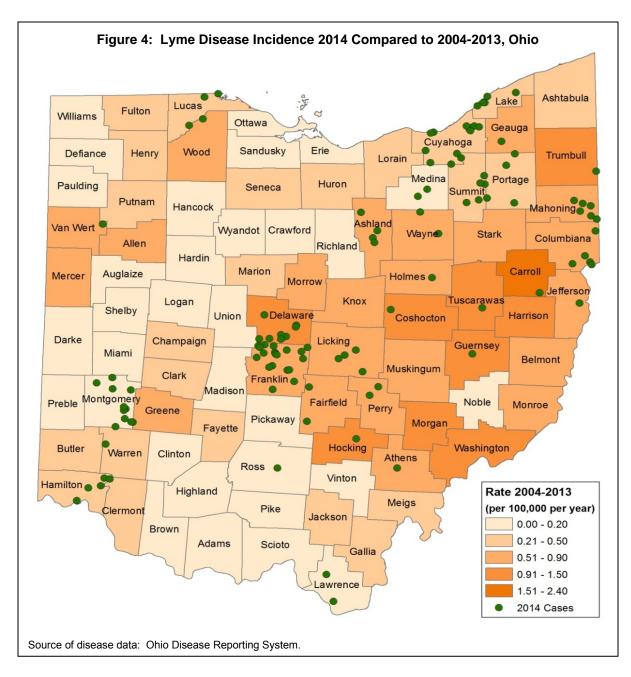
LYME DISEASE

Number of cases in 2014:	120	Rate in 2014:	1.0
Number of cases in 2013:	83	Rate in 2013:	0.7

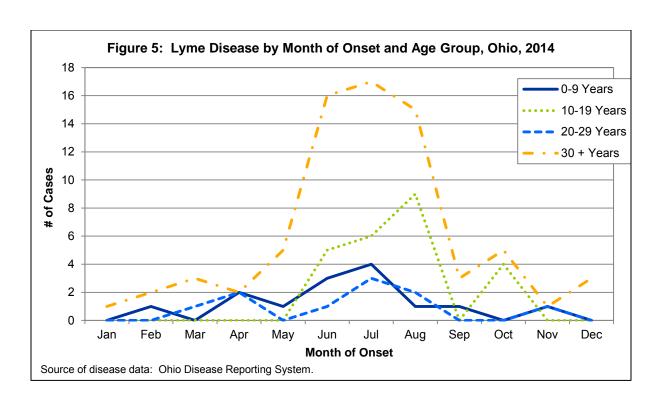
^{*} Rates are based on the 2013 and 2014 U.S. Census estimates and are per 100,000 population.

Lyme disease is caused by the bacterium *Borrelia burgdorferi*. The bacteria are transmitted through the bite of an infected tick, *Ixodes scapularis*, also called the blacklegged tick or deer tick. The risk of exposure to this tick is greater in wooded or brushy areas and in the edge area between lawns and woods. However, ticks can also be carried by animals onto lawns and gardens and into houses by pets. In general, ticks need to be attached for 36 to 48 hours before they can transmit Lyme disease bacteria. Campers, hikers, outdoor workers and others may be exposed to infected ticks in wooded, brushy and grassy places. People who spend time in heavily wooded areas where infected ticks are common are at higher risk for exposure.

Figure 4 displays the county of residence for Ohio cases diagnosed with Lyme disease in 2014. Blacklegged ticks were once considered rare in Ohio; however, at the end of 2014, the vector was found in at least 65 of Ohio's 88 counties.



Cases of Lyme disease follow a seasonal pattern in Ohio (Figure 5). Cases began to increase in April and peaked in July. Adults 30 years and over demonstrated a higher burden of disease throughout the year except in April and November. Few cases were reported in any age group in April and November, likely because both blacklegged tick activity and people's outdoor activities are minimized due to colder weather.



MEASLES

Number of cases in 2014:	382	Rate in 2014:	3.3
Number of cases in 2013:	0	Rate in 2013:	0.0

^{*} Rates are based on the 2013 and 2014 U.S. Census estimates and are per 100,000 population.

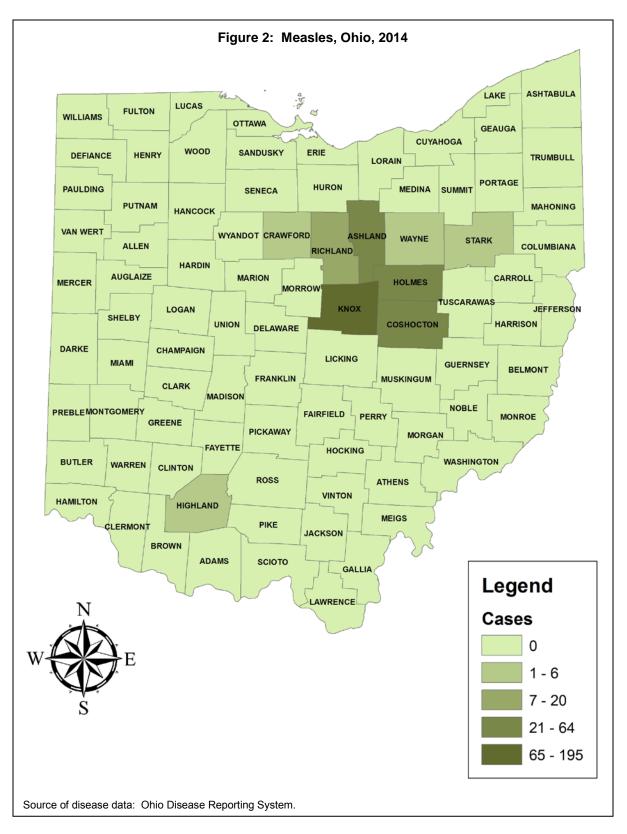
Measles is a highly contagious viral disease that spreads through the air from coughing and sneezing. The prodromal period occurs 10-12 days after exposure and is characterized by a fever, cough, coryza, conjunctivitis and photophobia. Following the prodromal period, a maculopapular rash will appear on the face and spreads to the trunk and extremities. Complications can include otitis media, pneumonia, cardiac manifestations, encephalitis and occasionally death.

In 2014, Ohio experienced the largest documented measles outbreak in the United States in over two decades. The outbreak began when infected travelers returned to Knox County from the Philippines. Measles spread throughout a highly unvaccinated population, affecting nine Ohio counties (Table 2 and Figure 2). A total of 382 cases (3 imported, 379 Ohio-acquired) were reported during the 121-day duration of the outbreak (illness onset dates ranged from Mar. 24, 2014 to Jul. 23, 2014).

Table 2: Measles Outbreak by County and Hospitalization Status, Ohio, 2014

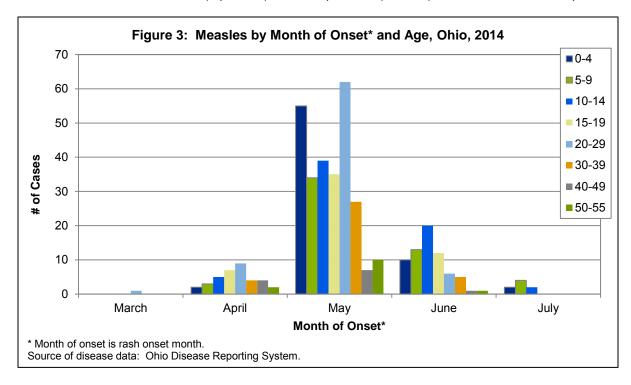
County of Residence	# Cases	Hospitalizations
Ashland	46	1
Coshocton	48	3
Crawford	1	0
Highland	1	0
Holmes	64	1
Knox	195	6
Richland	20	0
Stark	6	0
Wayne	1	0
Total	382	11

Source of disease data: Ohio Disease Reporting System.



As seen in Figure 3, the measles outbreak peaked in May 2014. The cases ranged in age from under six months to 53 years. Twenty percent of the cases (78 of 382) were between 20 and 29 years of age, and 18 percent (69 cases) were younger than 5 years. No cases were reported in individuals

who were born prior to 1957. Of the 382 cases, 178 (47 percent) were female and 204 (53 percent) were male. A total of 11 cases (3 percent) were hospitalized (Table 2), and no deaths were reported.



SHIGELLOSIS

Number of cases in 2014:	591	Rate in 2014:	5.1
Number of cases in 2013:	645	Rate in 2013:	5.6

^{*} Rates are based on the 2013 and 214 U.S. Census estimates and are per 100,000 population.

Shigellosis is an infectious disease caused by a group of bacteria known as *Shigella*. There are four species of *Shigella*: *Shigella boydii*, *Shigella dysenteriae*, *Shigella flexneri* and *Shigella sonnei*. *Shigella* species primarily infect the large intestine, causing clinical manifestations that range from loose or watery stools to more severe symptoms, including fever, abdominal tenderness or cramps and mucoid stools with or without blood. *Shigella* is spread directly via person-to-person contact by the fecal-oral route. Transmission by eating contaminated foods and/or swallowing contaminated water may also occur.

Table 3 demonstrates the proportion of shigellosis cases linked to a known outbreak. Outbreak-associated cases occurred in almost all age groups during 2014, especially in persons under 9 years of age. Persons of all ages are at risk of acquiring shigellosis.

Table 3: Shigellosis by Age and Outbreak Status, Ohio, 2013-2014

		20	13			20	14	
Age Group		reak- ciated	Spo	radic	0 5.1.	oreak- ciated	Spo	radic
0-9 years	245	75%	163	51%	58	75%	223	43%
10-19 years	15	5%	29	9%	5	7%	44	9%
20-29 years	35	11%	39	12%	7	9%	65	13%
30-39 years	17	5%	29	9%	3	4%	62	12%
40-49 years	7	2%	20	6%	1	1%	37	7%
50-59 years	5	2%	18	6%	3	4%	34	7%
60 + years	4	1%	19	6%	0	0%	49	9%
Total	328	51%	317	49%	77	13%	514	87%

Source of disease data: Ohio Disease Reporting System.

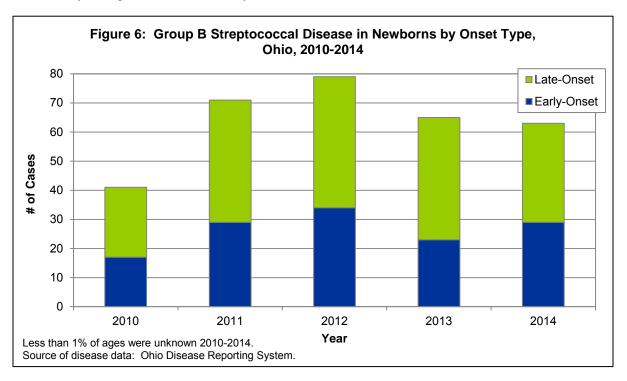
STREPTOCOCCAL DISEASE, GROUP B, IN NEWBORN

Number of cases in 2014:	63	Rate in 2014:	0.5
Number of cases in 2013:	65	Rate in 2013:	0.5

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

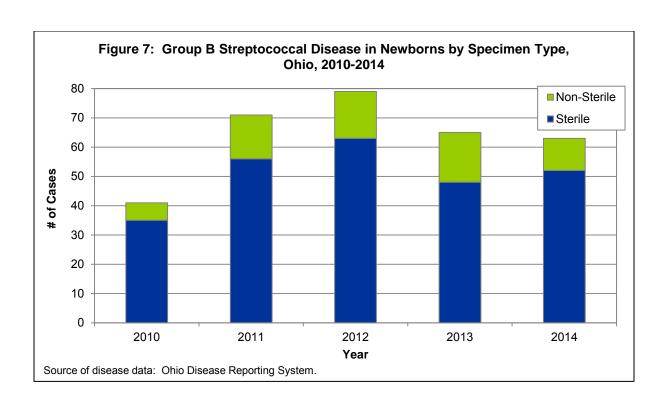
Group B *Streptococcus* is a type of bacteria commonly found in the digestive tract and birth canal of pregnant women. Group B streptococci (GBS) can cause systemic and focal infections in infants from birth until three months of age. Disease in young infants is categorized on the basis of chronologic 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 6 demonstrates the burden of GBS infections in Ohio newborns over the past five years by onset type. Over the past five years, higher incidence of infection was observed among infants older than six days of age than infants six days old or less.



Early-onset infections of 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 7 demonstrates the number of cases occurring in sterile sites (blood or cerebrospinal fluid) and non-sterile sites. Over the last five years, 41 percent of cases occurred in infants less than seven days old. Group B *Streptococcus* was isolated from a normally sterile site in 80 percent of early-onset cases. Infections in infants less than seven days old usually occur during the intrapartum period or during delivery. Infection in infants greater than six days of age is through person-to-person contact.



OUTBREAK SUMMARIES

Per the Ohio Administrative Code <u>Chapter 3701-03</u>, Class C diseases are reportable by the end of the next business day. Class C includes any outbreak, unusual incidence or epidemic. The categories for outbreak reporting are: community outbreak, foodborne outbreak, healthcare-associated outbreak, institutional outbreak, waterborne outbreak and zoonotic outbreak.

In 2014, the Bureau of Infectious Diseases (BID) assisted local health jurisdictions in Ohio in the investigation of 446 outbreaks. These outbreaks were detected in 62 of 88 counties throughout the state. The number of Ohioans known to be ill from these outbreaks was 8,522 (median 7, range 1-382). The outbreaks were classified as: community (72), foodborne (75), healthcare-associated (70), institutional (202), waterborne (14) and zoonotic (13). Causative agents identified during the outbreak investigations included: Bordetella pertussis, Campylobacter spp., Clostridium botulinum, Clostridium difficile, Clostridium perfringens, coxsackievirus, Cryptosporidium spp., enterovirus D68, Epstein-Barr virus, Giardia spp., influenza A virus, influenza B virus, Klebsiella pneumoniae, LaCrosse virus, Legionella pneumophila, Leptospira spp., measles virus, mumps virus, microcystin, Mycoplasma pneumoniae, norovirus genotypes GI and GII, parainfluenza virus type 2, parvovirus, Pediculus capitis (head louse), respiratory syncytial virus, Salmonella (various serotypes), Sarcoptes scabiei (scabies mite), Shiga toxin-producing Escherichia coli (various serotypes), Shigella sonnei, methicillin-resistant Staphylococcus aureus (MRSA), Streptococcus spp., Tinea spp. and varicella-zoster virus.

This is the fifth 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 2014 outbreaks are discussed below.

COMMUNITY OUTBREAKS

In 2014, 72 community outbreaks were reported from a variety of settings. Forty-four of these outbreaks were confirmed, with the causative agent as follows: *B. pertussis* (10), coxsackievirus (3), enterovirus D68 (2), *Giardia* spp. (1), influenza A virus (1), measles virus (1), mumps virus (1), norovirus genotype GI (1), norovirus genotype GII (9), parainfluenza virus type 2 (1), *Salmonella* (4), Shiga toxin-producing *E. coli* (4), *S. sonnei* (4), *Streptococcus* spp. (1) and *Tinea* spp. (1).

In 2014, Ohio experienced the largest documented measles outbreak in the United States in over two decades. The outbreak began when infected travelers returned to Knox County from the Philippines. Measles spread throughout a highly unvaccinated population, affecting nine Ohio counties. Refer to the measles profile in this annual summary for further details on this outbreak and the report in the MMWR: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6322a4.htm?s cid=mm6322a4 w.

In 2014, the United States experienced a <u>nationwide outbreak of enterovirus D68</u> (EV-D68) associated with severe respiratory illness. From mid-August 2014 to January 15, 2015, CDC or state public health laboratories confirmed a total of 1,153 people in 49 states and the District of Columbia with respiratory illness caused by EV-D68. Almost all of the confirmed cases were among children, many of whom had asthma or a history of wheezing.

The confirmed community outbreaks of 2014 are listed in Table 1.

Table 1: Confirmed Community Outbreaks, Ohio, 2014

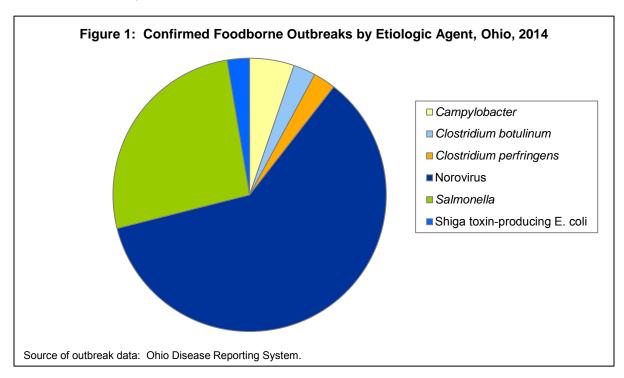
Month of Onset	Causative Agent	County	# 111	
November 2013	Bordetella pertussis	Vinton	7	
November 2013	Giardia spp.	Shelby	4	
December 2013	Streptococcus spp.	Cuyahoga	11	
January 2014	Mumps virus	Multicounty	230	
February 2014	Norovirus GII.2	Shelby	20	
February 2014	Norovirus GII.7	Franklin	4	
March 2014	Bordetella pertussis	Franklin	4	
March 2014	Measles virus	Multicounty	382	
March 2014	Norovirus GI.3B	Ashtabula	5	
March 2014	Norovirus GII.3	Summit	6	
March 2014	Norovirus GII.4 Sydney	Franklin	22	
March 2014	Norovirus GII.14	Franklin	9	
April 2014	Bordetella pertussis	Ashtabula	21	
April 2014	Norovirus GII.2	Summit	3	
April 2014	Norovirus GII.7	Lucas	2	
May 2014	Bordetella pertussis	Holmes	3	
May 2014	Escherichia coli O103	Franklin	4	
May 2014	Salmonella (I) 4,5,12:i:-	Hamilton	3	
June 2014	Bordetella pertussis	Franklin	3	
June 2014	Bordetella pertussis	Franklin	3	
June 2014	Coxsackievirus	Logan	13	
June 2014	Salmonella Enteritidis	Hamilton	2	
June 2014	Salmonella (I) 4,5,12:i:-	Franklin	8	
June 2014	Shigella sonnei	Medina	2	
July 2014	Bordetella pertussis	Stark	2	
July 2014	Coxsackievirus	Cuyahoga	2	
July 2014	Enterovirus D68	Cuyahoga	160	
July 2014	Escherichia coli O26	Franklin	4	
July 2014	Escherichia coli O157	Franklin	2	
July 2014	Norovirus GII.4 Sydney	Clark	4	
July 2014	Shigella sonnei	Geauga	3	
July 2014	Shigella sonnei	Richland	4	
August 2014	Enterovirus D68	Franklin	12	
September 2014	Bordetella pertussis	Franklin	3	
September 2014	Bordetella pertussis	Franklin	3	
September 2014	Coxsackievirus	Stark	16	
September 2014	Parainfluenza virus type 2	Stark	27	
September 2014	Tinea spp.	Lake	13	
October 2014	Escherichia coli 071	Franklin	6	
October 2014	Salmonella Enteritidis	Franklin	19	
October 2014	Shigella sonnei	Franklin	3	

Month of Onset	Causative Agent	County	# III
November 2014	Bordetella pertussis	Franklin	4
November 2014	Norovirus GII.4 Sydney	Hamilton	35
December 2014	Influenza A virus	Hamilton	12

FOODBORNE OUTBREAKS

In 2014, 38 of the 75 foodborne outbreaks reported were confirmed. These 75 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 38 confirmed outbreaks also met the agent-specific criteria for confirmation of outbreaks. As shown in Figure 1, for these 38 foodborne outbreaks, the causative agent was distributed as follows: Campylobacter spp. (2), Clostridium botulinum (1), Clostridium perfringens (1), E. coli O157:H7 (1), norovirus GI (4), norovirus GII (19) and Salmonella (10).

The outbreak of foodborne botulism involved two Hamilton County residents who consumed commercially prepared pesto from California. The investigation resulted in a <u>warning issued by California</u> about this product. There were no other cases of foodborne botulism in Ohio in 2014.



The 38 confirmed foodborne outbreaks are detailed in Table 2.

Table 2: Confirmed Foodborne Outbreaks, Ohio, 2014

Month of Onset	Causative Agent	County	# 111	Suspected Food Vehicle	Event / Setting
December 2013	Salmonella Typhimurium	Huron	3	Steak	Private home
January 2014	Norovirus GI.6A	Summit	8	Unknown	Restaurant
January 2014	Salmonella Enteritidis	Athens	8	Unknown	School
February 2014	Norovirus GI.6A	Richland	2	Unknown	Restaurant
February 2014	Norovirus GII.4 Sydney	Franklin	17	Unknown	Restaurant
February 2014	Norovirus GII.4 Sydney	Franklin	3	Lettuce and grilled chicken (wraps, salad)	Restaurant
February 2014	Norovirus GII.7	Franklin	10	Unknown	Restaurant
February 2014	Norovirus GII.7	Richland	20	Unknown	Private home
March 2014	Norovirus GII.4 Sydney	Franklin	9	Unknown	Restaurant
March 2014	Norovirus GII.7	Franklin	6	Unknown	Restaurant
March 2014	Norovirus GII.7 and GII.4 Sydney	Knox	6	Unknown	Restaurant
April 2014	Escherichia coli O157	Multistate	5	Ground beef, undercooked	Restaurant
April 2014	Norovirus GII.4 Sydney	Butler	2	Unknown	Restaurant
April 2014	Norovirus GII.4 Sydney	Summit	6	Unknown	Restaurant
April 2014	Norovirus GII.13	Franklin	56	Unknown	Convention
April 2014	Norovirus GII.13	Hamilton	5	Unknown	Restaurant
April 2014	Norovirus GII.14	Greene	29	Salad	Restaurant
April 2014	Salmonella Hartford and Newport	Multistate	1	Chia powder	Private home
May 2014	Norovirus GII.4 Sydney	Erie	13	Guacamole	Restaurant
May 2014	Norovirus GII.4 Sydney	Greene	3	Unknown	Restaurant
May 2014	Norovirus GII.4 Sydney	Mahoning	12	Unknown	Grocery store
May 2014	Salmonella Javiana	Multicounty	8	Tomatoes, cucumbers, mesclun lettuce	Restaurant, Long-term care facility, private home
June 2014	Clostridium perfringens	Huron	8	Shredded chicken	Banquet facility
June 2014	Salmonella (I) 4,5,12:i:-	Medina	18	Whole pig, roasted	Private home
July 2014	Campylobacter spp.	Lucas	2	Raw kibbee	Grocery store
July 2014	Clostridium botulinum	Hamilton	2	Pesto	Commercial product
July 2014	Norovirus GII.4 Sydney	Lucas	16	Unknown	Restaurant
July 2014	Norovirus GII.4 Sydney	Sandusky	4	Unknown	Restaurant
July 2014	Salmonella Newport	Multistate	6	Cucumbers	Restaurant, private home
August 2014	Norovirus GII.6B	Ashland	11	Unknown	Restaurant
August 2014	Salmonella Oranienburg	Franklin	10	Unknown	Caterer, unlicensed
September 2014	Salmonella Typhimurium	Licking	3	Unknown	Private home
October 2014	Norovirus GI.2	Montgomery	30	Unknown	Caterer
October 2014	Norovirus GI.3B	Lucas	9	Unknown	Private home

Month of Onset	Causative Agent	County	# 111	Suspected Food Vehicle	Event / Setting
October 2014	Salmonella Enteritidis	Multistate	3	Bean sprouts	Restaurant
October 2014	Salmonella Javiana	Multistate	3	Cucumbers	Private home
November 2014	Campylobacter spp.	Summit	6	Turkey, undercooked	Private home
December 2014	Norovirus GII.4 Sydney	Lucas	5	Shrimp	Commercial product

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

<u>Multistate Outbreak of Shiga Toxin-Producing Escherichia coli O157:H7 Infections Linked to</u> Ground Beef

Multistate Outbreak of Salmonella Infections Linked to Organic Sprouted Chia Powder

Outbreak of Salmonella Newport Infections Linked to Cucumbers – United States, 2014 (Morbidity and Mortality Weekly Report 64 (06); 144-147)

Multistate Outbreak of Salmonella Enteritidis Infections Linked to Bean Sprouts

HEALTHCARE-ASSOCIATED OUTBREAKS

There were 70 healthcare-associated outbreaks reported in 2014, 46 of which were confirmed as shown in Table 3.

Table 3: Confirmed Healthcare-Associated Outbreaks, Ohio, 2014

Month of Onset	Causative Agent	# 111	Setting
January 2014	Influenza A H3 virus	28	Long-term care facility
January 2014	Influenza B virus	14	Long-term care facility
January 2014	Klebsiella pneumoniae	11	Hospital
January 2014	Norovirus (genotype unknown)	64	Long-term care facility
January 2014	Norovirus GI.3B	25	Long-term care facility
January 2014	Norovirus GII.4 Sydney	64	Long-term care facility
February 2014	Norovirus GII.4 Sydney	13	Long-term care facility
February 2014	Norovirus GII.4 Sydney	52	Long-term care facility
February 2014	Norovirus GII.4 Sydney	17	Hospital
February 2014	Norovirus GII.4 Sydney	8	Hospital
February 2014	Streptococcus, group A	2	Long-term care facility
March 2014	Norovirus (genotype unknown)	30	Long-term care facility
March 2014	Norovirus GI.6A	27	Long-term care facility
March 2014	Norovirus GII.4 Sydney	45	Long-term care facility
March 2014	Norovirus GII.4 Sydney	62	Long-term care facility
March 2014	Norovirus GII.4 Sydney	56	Long-term care facility

Month of Onset	Causative Agent	# 111	Setting
March 2014	Norovirus GII.4 Sydney	45	Long-term care facility
March 2014	Norovirus GII.4 Sydney	57	Long-term care facility
March 2014	Norovirus GII.4 Sydney	24	Hospital
March 2014	Norovirus GII.4 Sydney	55	Long-term care facility
March 2014	Norovirus GII.4 Sydney	81	Long-term care facility
March 2014	Salmonella Typhimurium	3	Long-term care facility
April 2014	Norovirus (genotype unknown)	4	Hospital
April 2014	Norovirus GII.4 Sydney	8	Hospital
April 2014	Norovirus GII.4 Sydney	10	Hospital
April 2014	Norovirus GII.4 Sydney	14	Long-term care facility
April 2014	Norovirus GII.4 Sydney	46	Long-term care facility
April 2014	Norovirus GII.4 Sydney	53	Long-term care facility
April 2014	Norovirus GII.6A	24	Long-term care facility
May 2014	Influenza A virus	40	Long-term care facility
May 2014	Norovirus GII.4 Sydney	68	Long-term care facility
June 2014	Sarcoptes scabiei	10	Rehabilitation facility
July 2014	Sarcoptes scabiei	6	Hospital
August 2014	Salmonella Enteritidis	2	Long-term care facility
September 2014	Clostridium difficile	7	Hospital
October 2014	Bordetella pertussis	4	Long-term care facility
November 2014	Influenza A H3 virus	12	Long-term care facility
November 2014	Norovirus GI.3B	10	Long-term care facility
November 2014	Norovirus GII.4 Sydney	32	Long-term care facility
November 2014	Norovirus GII.4 Sydney	22	Long-term care facility
December 2014	Influenza A virus	4	Long-term care facility
December 2014	Influenza A virus	17	Long-term care facility
December 2014	Influenza A H3 virus	11	Long-term care facility
December 2014	Norovirus GI.3B	39	Long-term care facility
December 2014	Norovirus GII.4 Sydney	15	Long-term care facility
December 2014	Norovirus GII.4 Sydney	28	Long-term care facility

INSTITUTIONAL OUTBREAKS

In 2014, 202 institutional outbreaks were reported. Of these, 113 were confirmed. See Table 4 below for the confirmed institutional outbreaks.

By the spring of 2014, an increasing number of mumps cases linked to a college campus in central Ohio were reported. There were 255 mumps cases in this large institutional outbreak. This evolved into a separate community outbreak as it spread into surrounding counties with an additional 230 cases reported.

Table 4: Confirmed Institutional Outbreaks, Ohio, 2014

Month of Onset	Causative Agent	County	# 111	Setting
August 2013	Varicella-zoster virus	Franklin	6	School
November 2013	Bordetella pertussis	Franklin	4	School
November 2013	Shigella sonnei	Hamilton	5	Day care center
November 2013	Shigella sonnei	Stark	24	Day care center
December 2013	Bordetella pertussis	Franklin	8	School
December 2013	Bordetella pertussis	Franklin	2	School
December 2013	Bordetella pertussis	Franklin	2	Youth group
December 2013	Bordetella pertussis	Hamilton	2	School
December 2013	Staphylococcus aureus, methicillin resistant	Stark	2	School
January 2014	Bordetella pertussis	Hamilton	2	School
January 2014	Bordetella pertussis	Hamilton	4	School
January 2014	Epstein-Barr virus	Franklin	7	School
January 2014	Mumps virus	Multicounty	255	School
January 2014	Norovirus GI.3B	Medina	27	Assisted living facility
January 2014	Norovirus GI.6A	Franklin	89	Day care center
January 2014	Norovirus GII.4 Sydney	Fayette	40	Assisted living facility
February 2014	Bordetella pertussis	Franklin	2	School
February 2014	Bordetella pertussis	Hamilton	2	School
February 2014	Bordetella pertussis	Scioto	2	School
February 2014	Escherichia coli O157	Franklin	3	Day care center
February 2014	Norovirus GI.6A and GI.3B	Stark	73	Developmental delay workshop
February 2014	Norovirus GII.4 Sydney	Gallia	73	Assisted living facility
February 2014	Norovirus GII.4 Sydney	Hamilton	63	Assisted living facility
February 2014	Norovirus GII.6B and GII.4 Sydney	Franklin	20	Day care center
February 2014	Respiratory syncytial virus	Cuyahoga	3	Assisted living facility
February 2014	Respiratory syncytial virus	Stark	8	Day care center
February 2014	Salmonella Typhimurium	Multistate	2	College, university
February 2014	Shigella sonnei	Summit	2	Day care center
March 2014	Bordetella pertussis	Franklin	4	School
March 2014	Escherichia coli O103	Franklin	5	Day care center
March 2014	Mycoplasma pneumoniae	Warren	13	School
March 2014	Norovirus GI.3B	Miami	15	Assisted living facility
March 2014	Norovirus GII.4 Sydney	Franklin	51	Assisted living facility
March 2014	Norovirus GII.4 Sydney	Franklin	10	Day care center
March 2014	Norovirus GII.4 Sydney	Medina	51	Assisted living facility
March 2014	Norovirus GII.4 Sydney	Portage	43	Assisted living facility

Month of Onset	Causative Agent	County	# III	Setting	
March 2014	Norovirus GII.4 Sydney	Summit	15	Correctional facility	
March 2014	Pediculus capitis			School	
April 2014	Bordetella pertussis	Franklin	5	School	
April 2014	Bordetella pertussis	Logan	13	School	
April 2014	Bordetella pertussis	Summit	2	School	
April 2014	Norovirus GI.6A	Stark	87	School	
April 2014	Norovirus GII (untypeable)	Franklin	32	Day care center	
April 2014	Norovirus GII.4 Sydney	Franklin	46	Assisted living facility	
April 2014	Norovirus GII.4 Sydney	Hamilton	81	Assisted living facility	
April 2014	Staphylococcus aureus, methicillin resistant	Cuyahoga	5	Correctional facility	
April 2014	Varicella-zoster virus	Franklin	8	Day care center	
May 2014	Bordetella pertussis	Clark	3	School	
May 2014	Pediculus capitis (head louse)	Stark	7	Day care center	
May 2014	Shigella sonnei	Cuyahoga	4	Day care center	
May 2014	Shigella sonnei	Cuyahoga	14	School	
May 2014	Shigella sonnei	Cuyahoga	4	Day care center	
May 2014	Shigella sonnei	Erie	13	Day care center	
May 2014	Shigella sonnei	Medina	2	Day care center	
June 2014	Bordetella pertussis	Hamilton	2	School	
June 2014	Coxsackievirus	Allen	6	Day care center	
June 2014	Coxsackievirus	Hamilton	5	Day care center	
June 2014	Coxsackievirus	Lucas	8	Day care center	
June 2014	Coxsackievirus	Lucas	6	Day care center	
June 2014	Coxsackievirus	Union	10	Day care center	
June 2014	Sarcoptes scabiei	Lake	6	Assisted living facility	
June 2014	Sarcoptes scabiei	Lake	8	Assisted living facility	
June 2014	Shigella sonnei	Cuyahoga	2	Day care center	
June 2014	Shigella sonnei	Lake	11	Day care center	
July 2014	Coxsackievirus	Hamilton	4	Day care center	
July 2014	Norovirus GII.4 Sydney	Sandusky	31	Assisted living facility	
July 2014	Sarcoptes scabiei	Lake	5	Assisted living facility	
July 2014	Sarcoptes scabiei	Licking	4	Day care center	
July 2014	Shigella sonnei	Cuyahoga	5	Day care center	
August 2014	Bordetella pertussis	Franklin	10	School	
August 2014	Bordetella pertussis	Hamilton	9	School	
August 2014	Bordetella pertussis	Warren	3	School	
August 2014	Coxsackievirus	Stark	23	School	
August 2014	Shigella sonnei	Franklin	14	Day care center	
September 2014	Bordetella pertussis	Franklin	5	School	
September 2014	Bordetella pertussis	Franklin	5	School	

Month of Onset	Causative Agent	County	# 111	Setting
September 2014	Bordetella pertussis	Franklin	16	School
September 2014	Bordetella pertussis	Franklin	21	School
September 2014	Bordetella pertussis	Hamilton	2	School
September 2014	Bordetella pertussis	Hamilton	6	School
September 2014	Coxsackievirus	Butler	32	College, university
September 2014	Coxsackievirus	Marion	34	School
September 2014	Coxsackievirus	Stark	7	School
September 2014	Norovirus GI.3B	Erie	57	School
September 2014	Staphylococcus aureus, methicillin resistant	Stark	5	Sports team
October 2014	Bordetella pertussis	Delaware	2	School
October 2014	Bordetella pertussis	Franklin	10	School
October 2014	Bordetella pertussis	Franklin	6	School
October 2014	Bordetella pertussis	Hamilton	3	School
October 2014	Bordetella pertussis	Hamilton	4	School
October 2014	Bordetella pertussis	Warren	7	School
October 2014	Bordetella pertussis	Warren	2	School
October 2014	Coxsackievirus	Portage	3	School
October 2014	Coxsackievirus	Union	13	Day care center
October 2014	Sarcoptes scabiei	Belmont	50	Correctional facility
October 2014	Shigella sonnei	Franklin	2	Day care center
October 2014	Shigella sonnei	Summit	4	Day care center
November 2014	Bordetella pertussis	Hamilton	5	School
November 2014	Bordetella pertussis	Hamilton	4	School
November 2014	Bordetella pertussis	Hamilton	3	School
November 2014	Bordetella pertussis	Warren	2	School
November 2014	Fifth disease	Stark	4	School
November 2014	Norovirus GI.2 and GII.4 Sydney	Franklin	66	School
November 2014	Norovirus GI.3B	Hamilton	25	Assisted living facility
November 2014	Norovirus GII.6B	Franklin	59	School
November 2014	Norovirus GII.6B	Lucas	19	School
November 2014	Shigella sonnei	Cuyahoga	3	Day care center
December 2014	Bordetella pertussis	Warren	3	School
December 2014	Influenza A virus	Franklin	12	School
December 2014	Influenza A virus	Franklin	9	School
December 2014	Influenza A virus	Franklin	13	Assisted living facility
December 2014	Influenza A H3 virus	Franklin	34	School
December 2014	Norovirus GI.3B	Medina	44	Assisted living facility

Here is a link to the report for the multistate institutional outbreak:

<u>Human Salmonella Typhimurium Infections Linked to Exposure to Clinical and Teaching Microbiology Laboratories</u>

WATERBORNE OUTBREAKS

In 2014, 14 waterborne outbreaks were reported and investigated. Of those, there were 11 confirmed and probable waterborne outbreaks, which are detailed in Table 5.

Table 5: Confirmed and Probable Waterborne Outbreaks, Ohio, 2014

Month of Onset	Causative Agent	County	# 111	Setting
July 2009	Legionella pneumophila	Franklin	9	Long-term care facility
March 2014	Legionella pneumophila	Franklin	6	Long-term care facility
April 2014	Legionella pneumophila	Knox	4	Long-term care facility
June 2014	Legionella pneumophila	Hamilton	14	Long-term care facility
June 2014	Leptospira spp.	Delaware	2	Reservoir (not designated for swimming)
July 2014	Legionella pneumophila	Fairfield	10	Hot tub (private residence)
August 2014	Legionella pneumophila	Franklin	22	Church
August 2014	Microcystin	Lucas	110	Treated drinking water
August 2014	Unknown chemical	Franklin	2	Pool at fitness center
October 2014	Cryptosporidium parvum	Stark	100	Untreated drinking water
October 2014	Legionella pneumophila	Montgomery	2	Hospital

Source of outbreak data: Ohio Disease Reporting System.

ZOONOTIC OUTBREAKS

In 2014, 13 zoonotic outbreaks were reported, as seen in Table 6.

Table 6: Confirmed Zoonotic Outbreaks, Ohio, 2014

Month of Onset	Causative Agent	County	# III	Type of Animal
May 2012	Salmonella Cotham	Multistate	1	Bearded dragons (private home)
December 2012	Salmonella Typhimurium	Delaware	2	Small turtles (private home)
February 2014	Salmonella Typhimurium	Multistate	4	Frozen feeder rodents (private home)
March 2014	Cryptosporidium spp.	Knox	4	Calves
March 2014	Salmonella Infantis, Newport, Hadar, Enteritidis	Multistate	37	Baby poultry
June 2014	Campylobacter spp.	Putnam	6	Calves
June 2014	Campylobacter spp.	Multicounty	3	Puppies (pet store)
August 2014	Escherichia coli O157	Stark	9	Petting zoo

Month of Onset	Causative Agent	County	# 111	Type of Animal
September 2014	LaCrosse virus	Athens	2	Mosquito exposure (home day care)
September 2014	Salmonella Typhimurium, (I) 4,5,12:i:-	Van Wert	4	Livestock (agricultural fair)
October 2014	Salmonella Pomona	Franklin	4	Chameleon (private home)
October 2014	Tinea corporis	Wood	4	Mice
December 2014	Salmonella Braenderup	Wood	3	Guinea pig (private home)

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

<u>Multistate Outbreak of Human Salmonella Typhimurium Infections Linked to Frozen Feeder</u> Rodents

Multistate Outbreak of Human Salmonella Infections Linked to Live Poultry in Backyard Flocks

Multistate Outbreak of Human Salmonella Cotham and Salmonella Kisarawe Infections Linked to
Contact with Pet Bearded Dragons

Please refer to the Technical Notes (pp. 103-106) for additional information on the outbreak data.

PROFILES OF SELECTED HEALTH EVENTS DETECTED IN EPICENTER

Syndromic surveillance is the classification of healthcare visits into syndrome or symptom categories to identify and characterize events of public health importance. In partnership with local health departments, the Ohio Department of Health has been analyzing chief complaint data from over 6 million annual healthcare visits transmitted by emergency departments and urgent care centers from around the state for over a decade. In most cases, data is also captured when an Ohio resident visits an emergency department in a neighboring state. Some examples of past health events where syndromic surveillance was used for situation awareness include the Ebola response, a mumps outbreak, cold weather-related exposures, seasonal and pandemic influenza surveillance and heat-related illness. Previous cluster detections include scabies, occupational exposures and carbon monoxide poisonings. The data is made available to over 500 authorized users at Ohio's local health departments and hospitals. State and local health departments investigate identified anomalies in the syndromic surveillance data and actively seek information for situational awareness during a health event.

Healthcare visit information is received in real-time or near real-time and includes chief complaint, basic de-identified demographic information and sometimes diagnosis and discharge disposition. The data is accessible in a web application called EpiCenter. EpiCenter automatically alerts system users to unusual trends and patterns in the data that may indicate a potential health event. The system also manages the syndrome classifications, anomaly records, investigation information and displays anomaly analytics, maps and subscription of automated alerting for users.

Classification of chief complaint data occurs by both syndrome and symptom category. These classifications have been developed to detect acute health events. State and local health departments review the syndrome and symptom anomalies, and if appropriate, investigate with the submitting facilities. The anomaly is then categorized into one of ten final dispositions to indicate whether it is related to a health event or a random occurrence. Anomalies that were determined to be duplicates or an incomplete assessment were excluded (see Technical Notes). Table 1 illustrates the final distribution of syndromic surveillance anomalies for 2014. Comparisons of anomaly counts and percentages between years should not be made due to high variability of the data, classifier definition changes, circulating viruses, man-made and natural outbreaks and methods of analysis.

Table 1: Distribution of EpiCenter Anomalies, Ohio, 2014

Anomaly Disposition*	# of Events	% of Events	
Environmental health event	5	0.1	
Naturally occurring disease outbreak	90	2.7	
Seasonal illness health event	1,359	40.3	
Other health event	135	4.0	
Not a health event	390	11.6	
Data error (facility or EpiCenter)	12	0.4	
Unknown health event	69	2.0	
Indeterminate	1,313	38.9	
Total	3,373	100.0	

Source of data: Ohio Department of Health Public Health Informatics & Vaccine-Preventable Disease Epidemiology Unit. * Please see Technical Notes.

Multiple algorithms for syndromes and symptoms creates potential overlaps for the detection of health events. This overlap increases the odds of detecting a health event, but also creates duplicates (same or similar patient lists over the same or similar time period). Grouped anomalies were reclassified to provide a greater consistency of the reported events (see Technical Notes). Almost 39 percent of the 2014 anomalies were classified as indeterminate in assessing if there was a health event (Table 1). Of the other dispositions, "Seasonal illness health event" then "Not a health event" had the second and third highest frequencies, respectively. The distribution across county and state geopolitical boundaries are highlighted in Table 2. The number of facilities, algorithm requirements and population size in some counties are certainly factors in the number and distribution of anomalies generated (Table 2). Some health events are seasonal in nature, like influenza in December and first quarter of the calendar year and respiratory illnesses associated with the start of grade-school (Table 3).

Table 2: Distribution of EpiCenter Anomalies by Jurisdiction, Ohio, 2014*

Jurisdiction	Environmental Health Event	Naturally Occurring Disease Outbreak	Seasonal Illness Health Event	Other Health Event	Not a Health Event	Data Error (Facility or EpiCenter)	Unknown Health Event	Indeterminate	Total
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Adams	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	6 (100)	6 (100)
Allen	0 (0)	0 (0)	31 (60)	0 (0)	10 (19)	0 (0)	0 (0)	11 (21)	52 (100)
Ashland	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	2 (100)
Ashtabula	0 (0)	0 (0)	18 (35)	0 (0)	0 (0)	0 (0)	0 (0)	33 (65)	51 (100)
Athens	0 (0)	0 (0)	16 (48)	0 (0)	0 (0)	0 (0)	0 (0)	17 (52)	33 (100)
Auglaize	0 (0)	0 (0)	28 (64)	0 (0)	16 (36)	0 (0)	0 (0)	0 (0)	44 (100)
Belmont	0 (0)	0 (0)	12 (38)	0 (0)	1 (3)	0 (0)	0 (0)	19 (59)	32 (100)
Brown	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (100)	5 (100)
Butler	0 (0)	0 (0)	41 (39)	0 (0)	0 (0)	0 (0)	0 (0)	63 (61)	104 (100)
Carroll	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	6 (86)	7 (100)
Champaign	0 (0)	0 (0)	8 (24)	0 (0)	0 (0)	0 (0)	0 (0)	25 (76)	33 (100)
Clark	0 (0)	0 (0)	32 (41)	0 (0)	0 (0)	0 (0)	0 (0)	46 (59)	78 (100)
Clermont	0 (0)	1 (1)	43 (57)	3 (4)	3 (4)	0 (0)	0 (0)	26 (34)	76 (100)
Clinton	0 (0)	0 (0)	11 (85)	1 (8)	0 (0)	0 (0)	0 (0)	1 (8)	13 (100)
Columbiana	0 (0)	0 (0)	3 (5)	0 (0)	0 (0)	0 (0)	52 (93)	1 (2)	56 (100)
Coshocton	0 (0)	0 (0)	2 (67)	0 (0)	0 (0)	0 (0)	0 (0)	1 (33)	3 (100)
Crawford	0 (0)	0 (0)	15 (50)	1 (3)	8 (27)	3 (10)	0 (0)	3 (10)	30 (100)
Cuyahoga	0 (0)	0 (0)	34 (37)	55 (60)	2 (2)	0 (0)	0 (0)	0 (0)	91 (100)
Defiance	0 (0)	0 (0)	13 (42)	0 (0)	0 (0)	3 (10)	0 (0)	15 (48)	31 (100)
Delaware	0 (0)	0 (0)	25 (58)	0 (0)	4 (9)	2 (5)	12 (28)	0 (0)	43 (100)
Erie	0 (0)	0 (0)	10 (26)	1 (3)	0 (0)	0 (0)	0 (0)	27 (71)	38 (100)
Fairfield	0 (0)	0 (0)	11 (16)	0 (0)	0 (0)	0 (0)	0 (0)	56 (84)	67 (100)
Franklin	0 (0)	13 (12)	24 (23)	1 (1)	0 (0)	0 (0)	0 (0)	67 (64)	105 (100)
Fulton	0 (0)	0 (0)	16 (70)	0 (0)	0 (0)	0 (0)	0 (0)	7 (30)	23 (100)

Jurisdiction	Environmental Health Event	Naturally Occurring Disease Outbreak	Seasonal Illness Health Event	Other Health Event	Not a Health Event	Data Error (Facility or EpiCenter)	Unknown Health Event	Indeterminate	Total
O-III-	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Gallia	0 (0)	0 (0)	13 (76)	0 (0)	1 (6)	0 (0)	0 (0)	3 (18)	17 (100)
Geauga	0 (0)	0 (0)	3 (17)	0 (0)	0 (0)	0 (0)	0 (0)	15 (83)	18 (100)
Greene	3 (4)	0 (0)	51 (65)	0 (0)	10 (13)	1 (1)	0 (0)	13 (17)	78 (100)
Guernsey	0 (0)	0 (0)	11 (26)	0 (0)	0 (0)	0 (0)	0 (0)	32 (74)	43 (100)
Hamilton	0 (0)	1 (1)	28 (23)	12 (10)	2 (2)	0 (0)	0 (0)	78 (64)	121 (100)
Hancock	0 (0)	0 (0)	9 (41)	0 (0)	12 (55)	0 (0)	0 (0)	1 (5)	22 (100)
Hardin	0 (0)	0 (0)	0 (0)	0 (0)	3 (100)	0 (0)	0 (0)	0 (0)	3 (100)
Harrison	0 (0)	0 (0)	4 (57)	0 (0)	1 (14)	0 (0)	0 (0)	2 (29)	7 (100)
Henry	0 (0)	0 (0)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	4 (80)	5 (100)
Highland	0 (0)	0 (0)	14 (41)	0 (0)	0 (0)	0 (0)	0 (0)	20 (59)	34 (100)
Hocking	0 (0)	0 (0)	17 (43)	0 (0)	0 (0)	0 (0)	0 (0)	23 (58)	40 (100)
Holmes	0 (0)	0 (0)	9 (64)	1 (7)	1 (7)	0 (0)	0 (0)	3 (21)	14 (100)
Huron	0 (0)	12 (24)	4 (8)	0 (0)	18 (36)	2 (4)	0 (0)	14 (28)	50 (100)
Jackson	0 (0)	1 (6)	11 (65)	0 (0)	0 (0)	0 (0)	0 (0)	5 (29)	17 (100)
Jefferson	0 (0)	0 (0)	34 (42)	0 (0)	9 (11)	0 (0)	0 (0)	38 (47)	81 (100)
Knox	0 (0)	0 (0)	10 (36)	0 (0)	0 (0)	0 (0)	0 (0)	18 (64)	28 (100)
Lake	0 (0)	0 (0)	44 (56)	4 (5)	8 (10)	0 (0)	0 (0)	23 (29)	79 (100)
Licking	0 (0)	0 (0)	22 (42)	4 (8)	1 (2)	0 (0)	0 (0)	25 (48)	52 (100)
Logan	0 (0)	0 (0)	17 (85)	0 (0)	0 (0)	1 (5)	2 (10)	0 (0)	20 (100)
Lorain	0 (0)	0 (0)	24 (50)	1 (2)	9 (19)	0 (0)	0 (0)	14 (29)	48 (100)
Lucas	0 (0)	6 (6)	43 (44)	41 (42)	0 (0)	0 (0)	0 (0)	7 (7)	97 (100)
Madison	0 (0)	0 (0)	21 (81)	0 (0)	0 (0)	0 (0)	0 (0)	5 (19)	26 (100)
Mahoning	0 (0)	0 (0)	12 (15)	0 (0)	0 (0)	0 (0)	0 (0)	67 (85)	79 (100)
Marion	0 (0)	0 (0)	10 (18)	0 (0)	45 (82)	0 (0)	0 (0)	0 (0)	55 (100)
Medina	0 (0)	0 (0)	17 (53)	0 (0)	0 (0)	0 (0)	0 (0)	15 (47)	32 (100)
Meigs	0 (0)	0 (0)	5 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (100)

Jurisdiction	Environmental Health Event	Naturally Occurring Disease Outbreak	Seasonal Illness Health Event	Other Health Event	Not a Health Event	Data Error (Facility or EpiCenter)	Unknown Health Event	Indeterminate	Total
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Mercer	0 (0)	0 (0)	5 (36)	0 (0)	9 (64)	0 (0)	0 (0)	0 (0)	14 (100)
Miami	0 (0)	0 (0)	14 (31)	0 (0)	0 (0)	0 (0)	0 (0)	31 (69)	45 (100)
Montgomery	0 (0)	0 (0)	46 (58)	0 (0)	34 (43)	0 (0)	0 (0)	0 (0)	80 (100)
Morgan	0 (0)	0 (0)	3 (50)	0 (0)	0 (0)	0 (0)	0 (0)	3 (50)	6 (100)
Morrow	0 (0)	0 (0)	2 (67)	0 (0)	1 (33)	0 (0)	0 (0)	0 (0)	3 (100)
Muskingum	0 (0)	0 (0)	37 (41)	0 (0)	11 (12)	0 (0)	0 (0)	42 (47)	90 (100)
Noble	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)	1 (100)
Ottawa	0 (0)	0 (0)	13 (52)	0 (0)	12 (48)	0 (0)	0 (0)	0 (0)	25 (100)
Paulding	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)	2 (100)
Perry	0 (0)	0 (0)	4 (29)	0 (0)	2 (14)	0 (0)	0 (0)	8 (57)	14 (100)
Pickaway	0 (0)	0 (0)	21 (30)	0 (0)	0 (0)	0 (0)	0 (0)	48 (70)	69 (100)
Pike	0 (0)	0 (0)	19 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	19 (100)
Portage	0 (0)	1 (4)	19 (68)	0 (0)	0 (0)	0 (0)	0 (0)	8 (29)	28 (100)
Preble	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (100)	5 (100)
Putnam	0 (0)	0 (0)	7 (33)	0 (0)	0 (0)	0 (0)	0 (0)	14 (67)	21 (100)
Richland	0 (0)	2 (11)	7 (39)	0 (0)	8 (44)	0 (0)	0 (0)	1 (6)	18 (100)
Ross	2 (5)	1 (3)	12 (31)	1 (3)	3 (8)	0 (0)	0 (0)	20 (51)	39 (100)
Sandusky	0 (0)	6 (9)	19 (29)	0 (0)	32 (49)	0 (0)	0 (0)	8 (12)	65 (100)
Scioto	0 (0)	0 (0)	7 (17)	0 (0)	0 (0)	0 (0)	0 (0)	34 (83)	41 (100)
Seneca	0 (0)	22 (32)	12 (18)	7 (10)	7 (10)	0 (0)	2 (3)	18 (26)	68 (100)
Shelby	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	35 (97)	36 (100)
Stark	0 (0)	0 (0)	53 (55)	0 (0)	25 (26)	0 (0)	0 (0)	19 (20)	97 (100)
Summit	0 (0)	22 (28)	5 (6)	0 (0)	0 (0)	0 (0)	0 (0)	52 (66)	79 (100)
Trumbull	0 (0)	0 (0)	27 (66)	2 (5)	12 (29)	0 (0)	0 (0)	0 (0)	41 (100)
Tuscarawas	0 (0)	0 (0)	19 (29)	0 (0)	0 (0)	0 (0)	0 (0)	46 (71)	65 (100)
Union	0 (0)	0 (0)	6 (33)	0 (0)	12 (67)	0 (0)	0 (0)	0 (0)	18 (100)

Jurisdiction	Z Environmental % Health Event	Naturally Occurring Disease Outbreak	Seasonal Illness Health Event	A Other Health Event	Not a Health Event	Z Data Error (Facility % or EpiCenter)	Z Unknown Health (%) Event	N Indeterminate	(%) Total
Van Wert	0 (0)	0 (0)	17 (57)	0 (0)	13 (43)	0 (0)	0 (0)	0 (0)	30 (100)
Vinton	0 (0)	0 (0)	5 (71)	0 (0)	0 (0)	0 (0)	0 (0)	2 (29)	7 (100)
Warren	0 (0)	0 (0)	30 (64)	0 (0)	0 (0)	0 (0)	0 (0)	17 (36)	47 (100)
Washington	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)	0 (0)	13 (93)	14 (100)
Wayne	0 (0)	1 (2)	27 (52)	0 (0)	24 (46)	0 (0)	0 (0)	0 (0)	52 (100)
Williams	0 (0)	0 (0)	5 (31)	0 (0)	0 (0)	0 (0)	0 (0)	11 (69)	16 (100)
Wood	0 (0)	1 (3)	20 (53)	0 (0)	17 (45)	0 (0)	0 (0)	0 (0)	38 (100)
State of Ohio	0 (0)	0 (0)	69 (80)	0 (0)	2 (2)	0 (0)	0 (0)	15 (17)	86 (100)
Total	5 (0)	90 (3)	1,359 (40)	135 (4)	390 (12)	12 (0)	69 (2)	1,313 (39)	3,373 (100)

Source of data: Ohio Department of Health Public Health Informatics and Vaccine-Preventable Disease Epidemiology Unit. * Please see Technical Notes.

Table 3: Distribution of EpiCenter Anomalies by Month, Ohio, 2014

Anomaly Disposition*	Jan N (%)	Feb N (%)	Mar N (5)	Apr N (%)	May N (%)	Jun N (%)	Jul N (%)	Aug N (%)	Sep N (%)	Oct N (%)	Nov N (%)	Dec N (%)	Total N (%)
Environmental health event	0 (0)	0 (0)	0 (0)	0 (0)	1 (20)	0 (0)	1 (20)	0 (0)	1 (20)	0 (0)	0 (0)	2 (40)	5 (100)
Naturally occurring disease outbreak	0 (0)	0 (0)	0 (0)	2 (2)	1 (1)	0 (0)	0 (0)	8 (9)	12 (13)	2 (2)	2 (2)	63 (70)	90 (100)
Seasonal illness health event	69 (5)	43 (3)	44 (3)	24 (2)	22 (2)	12 (1)	14 (1)	52 (4)	126 (9)	52 (4)	66 (5)	835 (61)	1,359 (100)
Other health event	7 (5)	8 (6)	9 (7)	13 (10)	9 (7)	9 (7)	10 (7)	25 (19)	19 (14)	7 (5)	8 (6)	11 (8)	135 (100)
Not a health event	30 (8)	23 (6)	27 (7)	25 (6)	25 (6)	40 (10)	42 (11)	35 (9)	30 (8)	33 (8)	29 (7)	51 (13)	390 (100)
Data error (facility or EpiCenter)	0 (0)	3 (25)	2 (17)	4 (33)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	2 (17)	12 (100)
Unknown health event	2 (3)	10 (14)	7 (10)	2 (3)	6 (9)	5 (7)	7 (10)	6 (9)	11 (16)	2 (3)	2 (3)	9 (13)	69 (100)
Indeterminate	58 (4)	75 (6)	79 (6)	91 (7)	105 (8)	86 (7)	102 (8)	130 (10)	174 (13)	145 (11)	124 (9)	144 (11)	1,313 (100)
Total	166 (5)	162 (5)	168 (5)	161 (5)	169 (5)	152 (5)	176 (5)	256 (8)	373 (11)	241 (7)	232 (7)	1,117 (33)	3,373 (100)

Source of data: Ohio Department of Health Public Health Informatics and Vaccine-Preventable Disease Epidemiology Unit.
* Please see Technical Notes.

TECHNICAL NOTES

SPECIFIC DISEASES

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

Chikungunya Virus Infection: not explicitly reportable in Ohio, but reporting was captured under "Other Arthropod-borne Diseases." Reporting may not be complete since this was not listed by name on Ohio's reportable disease list.

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). Chronic hepatitis B data are not published due to insufficient case ascertainment.

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

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

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 5 years of age, regardless of drug-resistance pattern.

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

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

OUTBREAKS

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

Outbreak data are not included in the "Age in Years" and "Sex" tables, and rates were not calculated in any table. Outbreak data are by year of report, so "Month" refers to the month of report, except as noted. The source of outbreak data is the ODH Bureau of Infectious Diseases, the Ohio Disease Reporting System and local health jurisdictions. Fourteen multistate and multicounty outbreaks are not included in the "County" table; thus, county totals do not match totals. (There were 2 community, 6 foodborne, 2 institutional and 4 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 <u>Infectious Disease Control Manual</u> (IDCM); foodborne outbreaks and waterborne outbreaks are also defined on the CDC's Nationally Notifiable Disease Surveillance System's <u>website</u>. Outbreak definitions for vaccine-preventable diseases are located in the <u>disease-specific chapters</u> 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. Agent-specific criteria to confirm foodborne outbreaks can be found at: http://www.cdc.gov/foodsafety/outbreaks/confirming_diagnosis.html.

Healthcare-associated: defined as the occurrence of a disease (illness) above the expected or baseline level, usually over a given period of time, as a result of being in a healthcare facility. 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.

EPICENTER ANOMALY DE-DUPLICATION TO REPORT ON A SINGLE EVENT

Within EpiCenter, anomaly records can be marked "associated" or as a "duplicate" if the time period or the patient line lists are relatively the same. Methodology of selecting "associated" versus "duplicate" is oftentimes a user's preference. Combining anomalies as associated effectively groups the records together allowing a user to select the same health event outcome for all anomalies. Enumeration of health events when associated would overestimate the true number of health events. A reclassification hierarchy was constructed to resolve these preferences of reporting for a more consistent enumeration of health events. Records that were labeled with the same classifier on the same day were separated and all but one record of the greatest hierarchy was kept to label the health event. The hierarchy used was: "Environmental health event", "Naturally occurring disease outbreak", "Seasonal illness health event", "Severe weather event", "Other health event", "Not a health event", "Data error (facility or EpiCenter)", "Unknown health event", "Indeterminate", "Duplicate" and "Incomplete assessment". The remaining records were recoded as duplicate anomalies. Duplicates (n=1,891) and incomplete assessments (n=274) were removed from the enumeration of health event totals for the 2014 report.

RATE CALCULATIONS

Population estimates for rates in the "Age in Years," "Sex" and "County of Residence" tables come from the 2014 U.S. Census estimates. Population data for rates in the "Year of Onset" table come from the U.S. Census estimates for each year except 2010, which uses the actual count. Rates were not calculated for the following conditions because they pertain to selected age populations and not the entire population. Rates were calculated in the "Age in Years" table only for the conditions below containing an asterisk (*) because appropriate population data were available for the denominator:

- Botulism, infant
- 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 2010-2014 disease tables (pp. 6-7):

- Anthrax
- Babesiosis
- Eastern equine encephalitis virus disease
- Ehrlichia ewingii
- Hantavirus
- Plague
- Poliomvelitis
- Powassan virus disease
- 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 2014.

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