ANNUAL SUMMARY OF INFECTIOUS DISEASES OHIO 2012

REPORTED INCIDENCE OF SELECTED NOTIFIABLE DISEASES



PREPARED AND DISTRIBUTED BY:

BUREAU OF INFECTIOUS DISEASES

DIVISION OF PREVENTION AND HEALTH PROMOTION

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INTRODUCTION

The Annual Summary of Infectious Diseases, Ohio, 2012 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=2012.

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, 2009

The following infectious diseases were reportable to the Ohio Department of Health Jan. 1, 2012 through Dec. 31, 2012:

CLASS A

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

- Anthrax
- Botulism, foodborne
- Cholera
- Diphtheria
- Influenza A, novel virus
- Measles

- Meningococcal disease
- Plague
- 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(1)

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

- Arboviral neuroinvasive and non-neuroinvasive disease:
 - Eastern equine encephalitis virus disease
 - LaCrosse virus disease
 - Powassan virus disease
 - St. Louis encephalitis virus disease
 - West Nile virus infection
 - Western equine encephalitis virus disease
 - Other arthropod-borne disease
- Chancroid

- Coccidioidomycosis
- Cyclosporiasis
- Dengue
- Escherichia coli, Shiga toxin-producing
- Granuloma inguinale
- Haemophilus influenzae, invasive disease
- Hantavirus
- Hemolytic uremic syndrome
- Hepatitis A
- Hepatitis B, perinatal
- Influenza-associated pediatric mortality
- Legionellosis
- Listeriosis
- Malaria

- Meningitis, aseptic
- Meningitis, other bacterial
- Mumps
- Pertussis
- Poliomyelitis
- Psittacosis
- Q fever
- Rubella, congenital
- Salmonellosis
- Shigellosis
- Staphylococcus aureus, vancomycin resistant or intermediate resistant
- Syphilis
- Tetanus
- Tuberculosis
- Typhoid fever

OHIO NOTIFIABLE DISEASES

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

CLASS B(2)

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

- Amebiasis
- Botulism, infant
- Botulism, wound
- Brucellosis
- Campylobacteriosis
- Chlamydia infections
- Creutzfeldt-Jakob disease
- Cryptosporidiosis
- Cytomegalovirus, congenital
- Ehrlichiosis/Anaplasmosis
- Giardiasis
- Gonococcal infections

- Hepatitis B, non-perinatal
- Hepatitis C
- Hepatitis D
- Hepatitis E
- Herpes, congenital
- Influenza-associated hospitalization
- Leprosy
- Leptospirosis
- Lyme disease
- Mycobacterial disease, other than tuberculosis
- Rocky Mountain spotted fever

- Streptococcal disease, group A, invasive
- Streptococcal disease, group B, in newborn
- Streptococcal toxic shock syndrome
- Streptococcus pneumoniae, invasive disease
- Toxic shock syndrome
- Trichinosis
- Typhus fever
- Varicella
- Vibriosis
- Yersiniosis

CLASS C

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

- Community
- Foodborne

- Healthcare-associated
- Institutional

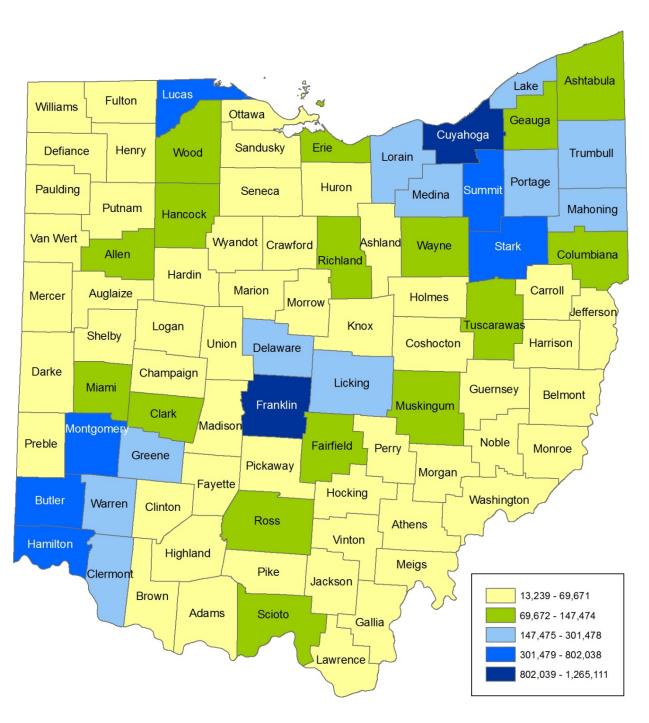
- Waterborne
- Zoonotic

AIDS AND HIV REPORTING

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

For the current list of reportable diseases in Ohio, please see http://www.odh.ohio.gov/reportablediseases or OAC 3701-3-02 and <a href="http://www.odh.ohio.

OHIO COUNTY POPULATION MAP



Source of population data: 2012 U.S. Census estimates.

TABLES OF SELECTED NOTIFIABLE DISEASES

BY YEAR OF ONSET TABLE

Pages 6-8

This table displays case counts and rates for five years of data in addition to the median and mean counts and rates during 2008-2012. Medians and means were calculated only when five years of data were available. Population data come from the U.S. Census estimates for each year except 2010, which uses the actual count. Data are by year of onset with the exception of hepatitis B and C conditions and outbreaks, which are shown by date of report for all years. Please refer to the technical notes for limitations on hepatitis B and C data. Data in 1992-2003 annual summaries were by date of report.

BY AGE TABLE Pages 9-12

This table provides case counts and rates by age group (in years) for 2012. Age refers to the patient's age at the earliest known date associated with the case. Population data come from the 2012 U.S. Census estimates. Outbreak data are not included in this table.

BY SEX TABLE Pages 13-14

This table contains case counts and rates by sex for 2012. Population data come from the 2012 U.S. Census estimates. Outbreak data are not included in this table.

BY MONTH OF ONSET TABLE

Pages 15-18

Case counts and percentages by month of onset for 2012 are presented in this table. Month refers to the month of symptom onset except for hepatitis B and C conditions and all outbreaks, which are by month of report, and for influenza-associated pediatric mortality, which is by month of death. Population data are not available by month, so rates were not calculated.

BY COUNTY OF RESIDENCE TABLE

Pages 19-44

This table displays case counts and rates by county for 2012. 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 2012 U.S. Census estimates.

ESCHERICHIA COLI, SHIGA TOXIN-PRODUCING SEROGROUPS TABLE

Page 45

This table shows Shiga toxin-producing *Escherichia coli* case counts by serogroup during 2008-2012. The bacteriology laboratory at ODH performs serogrouping of Shiga toxin-producing *E. coli* isolates.

MENINGOCOCCAL SEROGROUPS TABLE

Page 46

This table shows meningococcal disease case counts by serogroup during 2008-2012. The bacteriology laboratory at ODH performs serogrouping of *Neisseria meningitidis* isolates.

SALMONELLA SEROTYPES TABLE

Pages 47-50

Salmonella case counts by serotype during 2008-2012 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, 2008-2012

GENERAL INFECTIOUS DISEASES Amebiasis Botulism Foodborne Infant* Wound	N 34 4 3 1 0 1,215	0.3 0.0 0.0 *	N 22 6 1	0.2 0.1	N 29 3	Rate 0.3	N 10	Rate 0.1	N 11	Rate 0.1
Botulism Foodborne Infant*	4 3 1 0 1,215	0.0 0.0 *	6	0.1				0.1	11	0.1
Foodborne Infant*	3 1 0 1,215	0.0			3	~ ~				U. I
Infant*	1 0 1,215	*	1			0.0	2	0.0	6	0.1
	0 1,215			0.0	0	0.0	1	0.0	2	0.0
Wound	1,215	0.0	5	*	2	*	1	*	4	*
	, -	0.0	0	0.0	1	0.0	0	0.0	0	0.0
Campylobacteriosis	0	10.6	1,262	10.9	1,124	9.7	1,191	10.3	1,129	9.8
Cholera		0.0	0	0.0	3	0.0	0	0.0	0	0.0
Coccidioidomycosis	14	0.1	18	0.2	17	0.1	20	0.2	17	0.1
Creutzfeldt-Jakob Disease (CJD)	5	0.0	12	0.1	12	0.1	12	0.1	13	0.1
Cryptosporidiosis	704	6.1	386	3.3	477	4.1	1,113	9.6	550	4.8
Cyclosporiasis	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cytomegalovirus (CMV), Congenital*	15	*	19	*	28	*	10	*	31	*
Encephalitis	15	0.1	_	-	_	_	_	_	_	_
Post Other Infection*	3	0.0	_	_	_	_	_	_	_	_
Primary Viral	12	0.1	_	_	_	_	-	_	_	_
Escherichia coli, Shiga Toxin-Producing	209	1.8	128	1.1	138	1.2	182	1.6	240	2.1
O157:H7	161	1.4	87	0.8	75	0.7	95	0.8	122	1.1
Not O157:H7	20	0.2	26	0.2	43	0.4	72	0.6	105	0.9
Unknown Serotype	28	0.2	15	0.1	20	0.2	15	0.1	13	0.1
Giardiasis	891	7.8	816	7.1	863	7.5	781	6.8	571	4.9
Haemophilus influenzae, Invasive Disease	128	1.1	98	0.8	125	1.1	178	1.5	152	1.3
Hemolytic Uremic Syndrome (HUS)	8	0.1	14	0.1	1	0.0	5	0.0	10	0.1
Kawasaki Disease	27	0.2	_	_	_	_	-	_	_	_
Legionellosis	248	2.2	274	2.4	230	2.0	390	3.4	288	2.5
Leprosy (Hansen Disease)	2	0.0	2	0.0	1	0.0	1	0.0	0	0.0
Listeriosis	29	0.3	29	0.3	29	0.3	29	0.3	28	0.2
Meningitis, Aseptic	770	6.7	828	7.2	810	7.0	1,329	11.5	701	6.1
Meningitis, Other Bacterial*	59	0.5	68	0.6	82	0.7	84	0.7	95	0.8
Meningococcal Disease	42	0.4	42	0.4	35	0.3	24	0.2	24	0.2
Rheumatic Fever	2	0.0	_	_	_	_	-	_	_	_
Salmonellosis	1,378	12.0	1,377	11.9	1,309	11.3	1,183	10.2	1,270	11.0
Shigellosis	1,954	17.0	1,050	9.1	304	2.6	338	2.9	1,812	15.7
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	4	0.0	3	0.0	10	0.1	3	0.0	9	0.1
Streptococcal Disease, Group A, Invasive	265	2.3	208	1.8	248	2.1	322	2.8	286	2.5
Streptococcal Disease, Group B, in Newborn*	51	*	63	*	41	*	71	*	79	*
Streptococcal Toxic Shock Syndrome (STSS)	12	0.1	11	0.1	12	0.1	18	0.2	11	0.1
Streptococcus pneumoniae, Invasive Disease	1,240	10.8	1,358	11.8	1,220	10.6	1,261	10.9	1,188	10.3
Ages < 5 Years*	123	*	139	*	97	*	84	*	81	*
Drug Resistant, Ages 5+ Years*	338	*	343	*	320	*	304	*	321	*
Drug Susceptible, Ages 5+ Years*	779	*	876	*	803	*	873	*	786	*
Toxic Shock Syndrome (TSS)	4	0.0	2	0.0	4	0.0	0	0.0	2	0.0
Typhoid Fever	10	0.1	11	0.1	9	0.1	5	0.0	13	0.1
Vibriosis	9	0.1	6	0.1	11	0.1	7	0.1	11	0.1
Vibrio parahaemolyticus Infection	4	0.0	0	0.0	5	0.0	3	0.0	6	0.1
Vibrio vulnificus Infection	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Other (Not Cholera)	5	0.0	6	0.1	6	0.1	4	0.0	4	0.0
Yersiniosis	48	0.4	44	0.4	42	0.4	31	0.3	43	0.4
SUB-TOTAL	9.397	81.8	8,157	70.7	7,217	62.6	8.600	74.5	8,590	74.4

MED	IAN	MEAN							
N	Rate	N	Rate						
22	0.2	21	0.2						
4	0.2	4	0.2						
1	0.0	1	0.0						
2	*	3	*						
0	0.0	0	0.0						
1,191	10.3	1,184	10.3						
0	0.0	1,104	0.0						
17									
12	0.1	17	0.1						
	0.1		0.1						
550	4.8	646	5.6						
0	0.0	0	0.0						
19	*	21	*						
_	-	_	_						
_		_							
_	-	_	_						
182	1.6	179	1.6						
95	0.8	108	1.0						
43	0.4	53	0.5						
15	0.1	18	0.1						
816	7.1	784	6.8						
128	1.1	136	1.2						
8	0.1	8	0.1						
_	_	_	_						
274	2.4	286	2.5						
1	0.0	1	0.0						
29	0.3	29	0.3						
810	7.0	888	7.7						
82	0.7	78	0.7						
35	0.3	33	0.3						
_	_	_	_						
1,309	11.3	1,303	11.3						
1,050	9.1	1,092	9.5						
4	0.0	6	0.0						
265	2.3	266	2.3						
63	*	61	*						
12	0.1	13	0.1						
1,240	10.8	1,253	10.9						
97	*	105	*						
321	*	325	*						
803	*	823	*						
2	0.0	2	0.0						
10	0.1	10	0.1						
9	0.1	9	0.1						
4	0.0	4	0.0						
0	0.0	0	0.0						
5	0.0	5	0.0						
43	0.4	42	0.4						
8,590	74.4	8,392	72.8						

N= number of cases reported. Rates use U.S. Census estimates, except 2010, and are per 100,000 population.

n/a = not applicable.

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

§ = outbreak reporting categories changed in 2009. Refer to Technical Notes for more information.

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

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2008-2012

	2	800	20	09	20	10	20	11	20)12	MEI	DIAN	ME	EAN
HEPATITIS	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis A	54	0.5	34	0.3	49	0.4	34	0.3	45	0.4	45	0.4	43	0.4
Hepatitis B, Acute*	131	1.1	213	1.8	123	1.1	106	0.9	170	1.5	131	1.1	149	1.3
Hepatitis B, Perinatal Infection*	1	*	0	*	3	*	4	*	1	*	1	*	2	*
Hepatitis C, Acute*	41	0.4	64	0.6	12	0.1	6	0.1	7	0.1	12	0.1	26	0.2
Hepatitis E	2	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SUB-TOTAL	229	2.0	311	2.7	188	1.6	150	1.3	223	1.9	223	1.9	220	1.9
OUTBREAKS*	1 0		00	,	17	,	00			,	40		40	
Community*	§	n/a	26	n/a	47	n/a	32	n/a	55	n/a	40	n/a	40	n/a
Conjunctivitis*	1	n/a	§	n/a	8	n/a	§	n/a	§	n/a	§	n/a	§	n/a
Foodborne*	92	n/a	56	n/a	69	n/a	61	n/a	85	n/a	69	n/a	73	n/a
Healthcare-Associated*	§	n/a	55	n/a	68	n/a	37	n/a	94	n/a	62	n/a	64	n/a
Institutional*	§	n/a	64	n/a	82	n/a	104	n/a	170	n/a	93	n/a	105	n/a
Nosocomial*	12	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a
Pediculosis*	4	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a
Scabies*	14	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a
Staphylococcal Skin Infections*	21	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a
Unspecified*	69	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a
Unusual Incidence of Non-Class A, Class B or Class C Disease*	73	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a	§	n/a
Waterborne*	4	n/a	2	n/a	10	n/a	17	n/a	5	n/a	5	n/a	8	n/a
Zoonotic*	§	n/a	9	n/a	2	n/a	4	n/a	18	n/a	7	n/a	8	n/a
SUB-TOTAL	290	n/a	212	n/a	278	n/a	255	n/a	427	n/a	278	n/a	292	n/a
VACCINE-PREVENTABLE	•													
Influenza-Associated Hospitalization*	_	_	3,818	33.1	259	2.2	2,410	20.9	2,961	25.6	_	_	_	_
Influence Associated Dedictric Mortality*	1		1 4 5	*		*	1 1	*		*		*	4	*

VACCINE-PREVENTABLE										
Influenza-Associated Hospitalization*	-	-	3,818	33.1	259	2.2	2,410	20.9	2,961	25.6
Influenza-Associated Pediatric Mortality*	1	*	15	*	0	*	1	*	2	*
Influenza A Virus, Novel Human Infection*	_	-	240	2.1	0	0.0	0	0.0	107	0.9
Measles	0	0.0	1	0.0	2	0.0	0	0.0	1	0.0
Imported	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0
Indigenous	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0
Mumps	17	0.1	6	0.1	27	0.2	13	0.1	8	0.1
Pertussis	628	5.5	1,100	9.5	1,858	16.1	690	6.0	905	7.8
Tetanus	0	0.0	2	0.0	1	0.0	1	0.0	2	0.0
Varicella	2,392	20.8	1,829	15.8	1,337	11.6	1,040	9.0	811	7.0
SUB-TOTAL	3,038	26.4	7,011	60.7	3,484	30.2	4,155	36.0	4,797	41.6

_	_	_	_
1	*	4	*
_	-	_	_
1	0.0	1	0.0
0			0.0
		0	0.0
		14	0.1
905	7.8	1,036	9.0
1	0.0	1	0.0
1,337	11.6	1,482	12.9
4,155	36.0	4,497	39.0

N= number of cases reported. Rates use U.S. Census estimates, except 2010, and are per 100,000 population.

n/a = not applicable.

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

§ = outbreak reporting categories changed in 2009. Refer to Technical Notes for more information.

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

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2008-2012

	2	800	20	009	20	10	20	11	20	012
ZOONOSES	N	Rate								
Brucellosis	0	0.0	4	0.0	1	0.0	0	0.0	0	0.0
Dengue	7	0.1	3	0.0	16	0.1	2	0.0	6	0.1
Ehrlichiosis/Anaplasmosis	12	0.1	13	0.1	10	0.1	14	0.1	6	0.1
Anaplasma phagocytophilum*	1	0.0	1	0.0	2	0.0	8	0.1	1	0.0
Ehrlichia chaffeensis*	11	0.1	11	0.1	8	0.1	5	0.0	4	0.0
Ehrlichia ewingii*	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0
LaCrosse Virus Disease*	6	0.1	5	0.0	24	0.2	50	0.4	14	0.1
Leptospirosis	1	0.0	1	0.0	0	0.0	1	0.0	0	0.0
Lyme Disease	45	0.4	56	0.5	37	0.3	52	0.5	63	0.5
Malaria	31	0.3	36	0.3	44	0.4	41	0.4	40	0.3
Psittacosis	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
Q Fever	1	0.0	0	0.0	1	0.0	1	0.0	3	0.0
Acute	1	0.0	0	0.0	0	0.0	1	0.0	3	0.0
Chronic	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
Rabies, Animal*	64	n/a	47	n/a	47	n/a	51	n/a	41	n/a
Rocky Mountain Spotted Fever (RMSF)	31	0.3	17	0.1	16	0.1	21	0.2	23	0.2
Toxoplasmosis, Congenital*	0	*	_	_	_	_	_	_	-	_
Tularemia	0	0.0	1	0.0	0	0.0	1	0.0	0	0.0
Typhus Fever, Murine	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	15	0.1	2	0.0	5	0.0	21	0.2	122	1.1
SUB-TOTAL	213	1.3	186	1.2	202	1.3	255	1.8	318	2.4

MED	DIAN	ME	AN
N	Rate	N	Rate
0	0.0	1	0.0
6	0.1	7	0.1
12	0.1	11	0.1
1	0.0	3	0.0
8	0.1	8	0.1
0	0.0	0	0.0
0	0.0	0	0.0
14	0.1	20	0.2
1	0.0	1	0.0
52	0.5	51	0.4
40	0.3	38	0.3
0	0.0	0	0.0
1	0.0	1	0.0
1	0.0	1	0.0
0	0.0	0	0.0
47	n/a	50	n/a
21	0.2	22	0.2
_	-	_	_
0	0.0	0	0.0
0	0.0	0	0.0
15	0.1	33	0.3
213	1.3	235	1.6

GRAND TOTAL	13,167	111.6	15,877	135.3	11,369	95.7	13,415	113.6	14,355	120.3	13,415	113.6	13,637	115.3
POPULATION	11,485,	,910	11,54	2,645	11,53	6,504	11,54	1,007	11,54	4,225	11,5	38,756	11,52	6,517

N= number of cases reported. Rates use U.S. Census estimates, except 2010, and are per 100,000 population.

n/a = not applicable.

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

§ = outbreak reporting categories changed in 2009. Refer to Technical Notes for more information.

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

	0-	-4	5	-9	10	-14	15-	-19	20	-29	30	-39
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2	3	0.2
Botulism	4	0.6	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
Infant*	4	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	142	20.4	60	8.2	37	4.8	58	7.4	152	10.1	112	8.1
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	3	0.4	2	0.1	1	0.1
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	57	8.2	36	4.9	28	3.7	35	4.4	101	6.7	83	6.0
Cytomegalovirus (CMV), Congenital*	31	*	0	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	54	7.8	17	2.3	13	1.7	35	4.4	43	2.9	22	1.6
O157:H7	23	3.3	12	1.6	8	1.0	18	2.3	18	1.2	13	0.9
Not O157:H7	27	3.9	4	0.5	4	0.5	15	1.9	23	1.5	9	0.6
Unknown Serotype	4	0.6	1	0.1	1	0.1	2	0.3	2	0.1	0	0.0
Giardiasis	102	14.7	58	7.9	28	3.7	27	3.4	68	4.5	73	5.3
Haemophilus influenzae, Invasive Disease	17	2.4	0	0.0	1	0.1	1	0.1	5	0.3	10	0.7
Hemolytic Uremic Syndrome (HUS)	5	0.7	2	0.3	1	0.1	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	0	0.0	1	0.1	1	0.1	10	0.7	16	1.2
Listeriosis	2	0.3	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Meningitis, Aseptic	154	22.2	19	2.6	19	2.5	36	4.6	128	8.5	106	7.6
Meningitis, Other Bacterial*	11	1.6	5	0.7	5	0.7	1	0.1	4	0.3	5	0.4
Meningococcal Disease	5	0.7	0	0.0	1	0.1	1	0.1	0	0.0	2	0.1
Salmonellosis	212	30.5	84	11.4	61	8.0	64	8.1	158	10.5	123	8.9
Shigellosis	856	123.2	386	52.5	76	9.9	44	5.6	179	11.9	118	8.5
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Streptococcal Disease, Group A, Invasive	17	2.4	4	0.5	4	0.5	2	0.3	15	1.0	26	1.9
Streptococcal Disease, Group B, in Newborn*	79	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	81	11.7	20	2.7	20	2.6	12	1.5	22	1.5	63	4.5
Ages < 5 Years*	81	11.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Drug Resistant, Ages 5+ Years*	0	0.0	4	0.5	0	0.0	2	0.3	6	0.4	15	1.1
Drug Susceptible, Ages 5+ Years*	0	0.0	16	2.2	20	2.6	10	1.3	16	1.1	48	3.5
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Typhoid Fever	3	0.4	2	0.3	1	0.1	1	0.1	1	0.1	2	0.1
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
Vibrio vulnificus Infection	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
Yersiniosis	16	2.3	2	0.3	1	0.1	1	0.1	3	0.2	2	0.1
SUB-TOTAL	1,848	265.9	696	94.6	297	38.7	322	40.9	896	59.4	770	55.6
HEPATITIS												
Hepatitis A	0	0.0	0	0.0	0	0.0	5	0.6	12	0.8	5	0.4
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	33	2.2	55	4.0
Hepatitis B, Perinatal Infection*	1	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	4	0.3	1	0.1
SUB-TOTAL	1	0.1	0	0.0	0	0.0	5	0.6	49	3.2	61	4.4
000 101712		V. I	,	0.0	U	0.0		0.0	73	U.£		7.7

	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
Influenza-Associated Hospitalization*	366	52.7	132	17.9	59	7.7	49	6.2	150	9.9	143	10.3
Influenza-Associated Pediatric Mortality*	0	0.0	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0
Influenza A Virus, Novel Human Infection*	37	5.3	44	6.0	19	2.5	4	0.5	0	0.0	1	0.1
Measles	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	213	30.7	164	22.3	246	32.1	72	9.2	28	1.9	47	3.4
Tetanus	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	204	29.4	255	34.7	202	26.4	77	9.8	31	2.1	18	1.3
SUB-TOTAL	824	118.6	597	81.2	527	68.8	202	25.7	209	13.9	209	15.1
ZOONOSES												
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	3	0.2
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2	1	0.1
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
LaCrosse Virus Disease*	1	0.1	7	1.0	5	0.7	0	0.0	0	0.0	0	0.0
Lyme Disease	1	0.1	3	0.4	8	1.0	5	0.6	9	0.6	8	0.6
Malaria	1	0.1	0	0.0	3	0.4	3	0.4	9	0.6	6	0.4
Q Fever	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1
Acute	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	2	0.3	0	0.0	1	0.1	3	0.4	0	0.0	5	0.4
West Nile Virus Infection	1	0.1	0	0.0	0	0.0	2	0.3	8	0.5	14	1.0
SUB-TOTAL	6	0.9	10	1.4	17	2.2	14	1.8	31	2.1	38	2.7
GRAND TOTAL	2,679	385.5	1,303	177.1	841	109.7	543	69.0	1,185	78.6	1,078	77.8

GRAND TOTAL	2,679 385.5	1,303 177.1	841 109.7	543 69.0	1,185 78.6	1,078 77.8
POPULATION	694,870	735,672	766,481	786,650	1,508,567	1,385,958

	40	-49	50-	-59	60) +	Unk	nown	ТО	TAL
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	3	0.2	1	0.1	1	0.0	0	n/a	11	0.1
Botulism	1	0.1	0	0.0	1	0.0	0	n/a	6	0.1
Foodborne	1	0.1	0	0.0	1	0.0	0	n/a	2	0.0
Infant*	0	*	0	*	0	*	0	n/a	4	*
Campylobacteriosis	143	9.2	200	11.8	217	9.0	8	n/a	1,129	9.8
Coccidioidomycosis	2	0.1	4	0.2	5	0.2	0	n/a	17	0.1
Creutzfeldt-Jakob Disease (CJD)	1	0.1	1	0.1	11	0.5	0	n/a	13	0.1
Cryptosporidiosis	62	4.0	50	2.9	98	4.1	0	n/a	550	4.8
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	n/a	31	*
Escherichia coli, Shiga Toxin-Producing	10	0.6	15	0.9	31	1.3	0	n/a	240	2.1
O157:H7	6	0.4	6	0.4	18	0.7	0	n/a	122	1.1
Not O157:H7	3	0.2	7	0.4	13	0.5	0	n/a	105	0.9
Unknown Serotype	1	0.1	2	0.1	0	0.0	0	n/a	13	0.1
Giardiasis	79	5.1	64	3.8	69	2.9	3	n/a	571	4.9
Haemophilus influenzae, Invasive Disease	11	0.7	23	1.4	84	3.5	0	n/a	152	1.3
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	2	0.1	0	n/a	10	0.1
Legionellosis	38	2.4	71	4.2	151	6.3	0	n/a	288	2.5
Listeriosis	1	0.1	2	0.1	22	0.9	0	n/a	28	0.2
Meningitis, Aseptic	90	5.8	65	3.8	84	3.5	0	n/a	701	6.1
Meningitis, Other Bacterial*	20	1.3	16	0.9	28	1.2	0	n/a	95	0.8
Meningococcal Disease	1	0.1	7	0.4	7	0.3	0	n/a	24	0.2
Salmonellosis	138	8.9	173	10.2	256	10.6	1	n/a	1,270	11.0
Shigellosis	58	3.7	44	2.6	48	2.0	3	n/a	1,812	15.7
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	3	0.2	2	0.1	3	0.1	0	n/a	9	0.1
Streptococcal Disease, Group A, Invasive	39	2.5	40	2.4	139	5.8	0	n/a	286	2.5
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	n/a	79	*
Streptococcal Toxic Shock Syndrome (STSS)	2	0.1	4	0.2	4	0.2	0	n/a	11	0.1
Streptococcus pneumoniae, Invasive Disease	126	8.1	231	13.6	611	25.3	2	n/a	1,188	10.3
Ages < 5 Years*	0	0.0	0	0.0	0	0.0	0	n/a	81	11.7
Drug Resistant, Ages 5+ Years*	35	2.3	61	3.6	196	8.1	2	n/a	321	3.0
Drug Susceptible, Ages 5+ Years*	91	5.9	170	10.0	415	17.2	0	n/a	786	7.2
Toxic Shock Syndrome (TSS)	1	0.1	0	0.0	0	0.0	0	n/a	2	0.0
Typhoid Fever	2	0.1	1	0.1	0	0.0	0	n/a	13	0.1
Vibriosis	2	0.1	3	0.2	4	0.2	0	n/a	11	0.1
Vibrio parahaemolyticus Infection	1	0.1	2	0.1	1	0.0	0	n/a	6	0.1
Vibrio vulnificus Infection	0	0.0	1	0.1	0	0.0	0	n/a	1	0.0
Other (Not Cholera)	1	0.1	0	0.0	3	0.1	0	n/a	4	0.0
Yersiniosis	3	0.2	6	0.4	9	0.4	0	n/a	43	0.4
SUB-TOTAL	836	53.8	1,023	60.1	1,885	78.2	17	n/a	8,590	74.4
HEPATITIS										
Hepatitis A	6	0.4	10	0.6	7	0.3	0	n/a	45	0.4
Hepatitis B, Acute*	44	2.8	26	1.5	12	0.5	0	n/a	170	1.5
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	n/a	1	*
Hepatitis C, Acute*	1	0.1	1	0.1	0	0.0	0	n/a	7	0.1
SUB-TOTAL	51	3.3	37	2.2	19	0.8	0	n/a	223	1.9

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.
* Please see Technical Notes (pp. 94-97).

	40-	-49	50-	-59	60) +	Unk	nown	TO	TAL
VACCINE-PREVENTABLE	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Influenza-Associated Hospitalization*	182	11.7	335	19.7	1,542	64.0	3	n/a	2,961	25.6
Influenza-Associated Pediatric Mortality*	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Influenza A Virus, Novel Human Infection*	0	0.0	1	0.1	1	0.0	0	n/a	107	0.9
Measles	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Imported	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Mumps	4	0.3	1	0.1	1	0.0	0	n/a	8	0.1
Pertussis	44	2.8	35	2.1	54	2.2	2	n/a	905	7.8
Tetanus	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Varicella	17	1.1	3	0.2	3	0.1	1	n/a	811	7.0
SUB-TOTAL	247	15.9	375	22.0	1,601	66.4	6	n/a	4,797	41.6
Dengue Ehrlighiseis / A poplesmesis	0	0.0	1	0.1	0	0.0	0	n/a	6	0.1
ZOONOSES										
Ehrlichiosis/Anaplasmosis	0	0.0	1	0.1	1	0.0	0	n/a	6	0.1
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Ehrlichia chaffeensis*	0	0.0	1	0.1	1	0.0	0	n/a	4	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	1	0.1	0	0.0	0	0.0	0	n/a	14	0.1
Lyme Disease	9	0.6	8	0.5	12	0.5	0	n/a	63	0.5
Malaria	7	0.5	5	0.3	6	0.2	0	n/a	40	0.3
Q Fever	1	0.1	0	0.0	0	0.0	0	n/a	3	0.0
Acute	1	0.1	0	0.0	0	0.0	0	n/a	3	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	41	n/a	41	n/a
	3	0.2	4	0.2	5	0.2	0	n/a	23	0.2
Rocky Mountain Spotted Fever (RMSF)										
Rocky Mountain Spotted Fever (RMSF) West Nile Virus Infection SUB-TOTAL	15 36	1.0 2.3	25 44	1.5 2.6	57 81	2.4 3.4	0 41	n/a n/a	122 318	1.1 2.4

GRAND TOTAL	1,170	75.3	1,479	87.0	3,586	148.7	64	n/a	13,928	120.3
POPULATION	1,554	,145	1,700	0,906	2,410),976		0 11,		4,225

GENERAL INFECTIOUS DISEASES N Rate N N Rate N N N Rate N N Rate N N Rate N N Rate N N N Rate N N Rate N N Rate N N Rate N N N Rate N N Rate N N Rate N N Rate N N N Rate N N Rate N N Rate N N Rate N N N Rate N N N N N N N N N		Fen	nale	Ma	ale	Unk	nown	TOT	AL
Amebiasis	GENERAL INFECTIOUS DISEASES								
Foodborne									
Infant"	Botulism	2	0.0	4	0.1	0	n/a		0.1
Campybloacteriosis	Foodborne	1	0.0		0.0	0	n/a		0.0
Coccidiotiomycosis	Infant*	1	*	3	*		n/a	4	*
Creutzfeldt-Jakob Disease (CLD)		495	8.4	627	11.1	7	n/a	1,129	9.8
Cryptespondius (CMV), Congenital* 11				_			n/a		
Cytomegalovirus (CMV), Congenital			0.2	4		-	n/a		
Secherichen Singa Tosin-Producing 137 2.3 103 1.8 0 1.6 240 2.1									
Olf5/H7									
Not 0157:H7	, ,								
Unknown Serotype						-			
Glardiasis									
Haemophilus Influenzae, Invasive Disease	,,					-			
Hemolytic Uremic Syndrome (HUS)									
Legionellosis									
Listenoisis									
Meningitis, Aseptic 399 6.8 297 5.3 5 n/a 701 6.1									
Meningpits, Other Bacterial* 37 0.6 58 1.0 0 n/a 95 0.8									
Meningococcal Disease									
Salmonellosis 667 11.3 603 10.7 0 n/a 1.270 11.0									
Shigellosis 969 16.4 842 14.9 1 n/a 1.812 15.7						-			
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA) 2 0.0 7 0.1 0 n/a 286 2.5									
Streptococcal Disease, Group A, Invasive				-					
Streptococcal Disease, Group B, in Newborn* 33									
Streptococcal Toxic Shock Syndrome (STSS) 4 0.1 7 0.1 0 n/a 11 0.1 Streptococcus pneumoniae, Invasive Disease 591 10.0 586 10.4 11 n/a 1,188 10.3 Ages < 5 Years' 29 * 52 * 0 n/a 81 * Drug Resistant, Ages 5+ Years' 173 * 143 * 5 n/a 321 * Drug Susceptible, Ages 5+ Years' 389 * 391 * 6 n/a 786 * Toxic Shock Syndrome (TSS) 2 0.0 0 0.0 0 n/a 2 0.0 Typhoid Fever 7 0.1 6 0.1 0 n/a 13 0.1 Vibriosis 2 0.0 9 0.2 0 n/a 11 0.1 Vibrio parahaemolyticus Infection 0 0.0 6 0.1 0 n/a 13 0.1 Vibrio vulnificus Infection 1 0.0 0 0 0.0 0 n/a 1 0.0 Versiniosis 1 0.0 0 0 0.0 0 n/a 1 0.0 Versiniosis 1 0 0.0 3 0.1 0 n/a 4 0.0 Yersiniosis 1 0 0.0 3 0.1 0 n/a 4 0.0 Yersiniosis 1 0 0.0 3 0.1 0 n/a 4 0.0 Yersiniosis 1 0 0.0 3 0.1 0 n/a 4 0.0 Yersiniosis 1 0 0.0 3 0.1 0 n/a 4 0.0 Yersiniosis 1 0 0.0 3 0.1 0 n/a 4 0.0 Yersiniosis 1 0 0.0 0 0 0 0 n/a 1 0 0.0 Yersiniosis 1 0 0.0 0 0 0 0 n/a 1 0 0.0 Yersiniosis 1 0 0 0 0 0 0 0 n/a 1 0 0.0 Yersiniosis 1 0 0 0 0 0 0 0 n/a 2 0 0.0 Yersiniosis 1 0 0 0 0 0 0 0 n/a 2 0 0.0 Hepatitis A HEPATITIS Hepatitis B, Acute' 60 1.0 110 1.9 0 n/a 170 1.5 Hepatitis B, Acute' 1 0 0 0 0 0 0 n/a 1 0 0.5 Hepatitis B, Acute' 1 0 0 0 0 0 0 0 n/a 2 2 0.0 Influenza-Associated Hospitalization' 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
Streptococcus pneumoniae Invasive Disease 591 10.0 586 10.4 11 n/a 1,188 10.3									
Ages < 5 Years* 29						-			
Drug Resistant, Ages 5+ Years* 173 143 5 5 7a 321 7									
Drug Susceptible, Ages 5+ Years* 389								_	
Toxic Shock Syndrome (TSS) 2									
Typhoid Fever 7									
Vibriosis 2 0.0 9 0.2 0 n/a 11 0.1 Vibrio parahaemolyticus Infection 0 0.0 6 0.1 0 n/a 6 0.1 Vibrio vulnificus Infection 1 0.0 0 0.0 0 0.0 Other (Not Cholera) 1 0.0 3 0.1 0 n/a 4 0.0 Yersiniosis 16 0.3 27 0.5 0 n/a 43 0.4 SUB-TOTAL 4,309 73.0 4,246 75.2 35 n/a 8,590 74.4 HEPATITIS									
Vibrio parahaemolyticus Infection 0 0.0 6 0.1 0 n/a 6 0.1 Vibrio vulnificus Infection 1 0.0 0 0.0 0 n/a 1 0.0 Other (Not Cholera) 1 0.0 3 0.1 0 n/a 4 0.0 Yersiniosis 16 0.3 27 0.5 0 n/a 43 0.4 BUB-TOTAL 4,309 73.0 4,246 75.2 35 n/a 8,590 74.4 HEPATITIS Hepatitis A 25 0.4 20 0.4 0 n/a 45 0.4 Hepatitis B, Acute* 60 1.0 110 1.9 0 n/a 170 1.5 Hepatitis C, Acute* 3 0.1 4 0.1 0 n/a 1 * BuB-TOTAL 89 1.5 134 2.4 0 n/a 7 0.1	· ·					-			
Vibrio vulnificus Infection 1 0.0 0 0.0 0 n/a 1 0.0 Other (Not Cholera) 1 0.0 3 0.1 0 n/a 4 0.0 Yersiniosis 16 0.3 27 0.5 0 n/a 43 0.4 SUB-TOTAL HEPATITIS HEPATITIS <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>									
Other (Not Cholera) 1 0.0 3 0.1 0 n/a 4 0.0 Yersiniosis 16 0.3 27 0.5 0 n/a 43 0.4 BUB-TOTAL 4,309 73.0 4,246 75.2 35 n/a 8,590 74.4 HEPATITIS Hepatitis A 25 0.4 20 0.4 0 n/a 45 0.4 Hepatitis B, Acute* 60 1.0 110 1.9 0 n/a 170 1.5 Hepatitis B, Perinatal Infection* 1 * 0 * 0 n/a 1 * 0 n/a 2 1 0 n/a		_							
Yersiniosis 16									
HEPATITIS Hepatitis A 25 0.4 20 0.4 0 n/a 45 0.4	· ,								
HEPATITIS						-			
Hepatitis A 25	SUB-TOTAL	4,309	73.0	4,240	73.2	33	II/a	0,390	14.4
Hepatitis A 25	HEPATITIS								
Hepatitis B, Acute*		25	0.4	20	0.4	0	n/a	45	0.4
Hepatitis B, Perinatal Infection*									
Hepatitis C, Acute* 3			*		*				*
VACCINE-PREVENTABLE Influenza-Associated Hospitalization* 1,595 27.0 1,353 24.0 13 n/a 2,961 25.6 Influenza-Associated Pediatric Mortality* 1 * 1 * 0 n/a 2 * Influenza A Virus, Novel Human Infection* 60 1.0 47 0.8 0 n/a 107 0.9 Measles 1 0.0 0 0.0 0 0 n/a 1 0.0 Mumps 6 0.1 2 0.0 0 0 n/a 1 0.0 Mumps 6 0.1 2 0.0 0 0 0 0 0 0 0 0			0.1		0.1				0.1
VACCINE-PREVENTABLE Influenza-Associated Hospitalization* 1,595 27.0 1,353 24.0 13 n/a 2,961 25.6 Influenza-Associated Pediatric Mortality* 1 * 1 * 0 n/a 2 * Influenza A Virus, Novel Human Infection* 60 1.0 47 0.8 0 n/a 107 0.9 Measles 1 0.0 0 0.0 0 n/a 1 0.0 Imported 1 0.0 0 0.0 0 n/a 1 0.0 Mumps 6 0.1 2 0.0 0 n/a 8 0.1 Pertussis 506 8.6 394 7.0 5 n/a 905 7.8 Tetanus 0 0.0 2 0.0 0 n/a 811 7.0 Varicella 393 6.7 412 7.3 6 n/a 811 7.0									
Influenza-Associated Hospitalization* 1,595 27.0 1,353 24.0 13 n/a 2,961 25.6 Influenza-Associated Pediatric Mortality* 1 * 1 * 0 n/a 2 * Influenza A Virus, Novel Human Infection* 60 1.0 47 0.8 0 n/a 107 0.9 Measles 1 0.0 0 0.0 0 n/a 1 0.0 Imported 1 0.0 0 0.0 0 n/a 1 0.0 Mumps 6 0.1 2 0.0 0 n/a 8 0.1 Pertussis 506 8.6 394 7.0 5 n/a 905 7.8 Tetanus 0 0.0 2 0.0 0 n/a 2 0.0 Varicella 393 6.7 412 7.3 6 n/a 811 7.0	-	, ,,					.,,,,		
Influenza-Associated Hospitalization* 1,595 27.0 1,353 24.0 13 n/a 2,961 25.6 Influenza-Associated Pediatric Mortality* 1 * 1 * 0 n/a 2 * Influenza A Virus, Novel Human Infection* 60 1.0 47 0.8 0 n/a 107 0.9 Measles 1 0.0 0 0.0 0 n/a 1 0.0 Imported 1 0.0 0 0.0 0 n/a 1 0.0 Mumps 6 0.1 2 0.0 0 n/a 8 0.1 Pertussis 506 8.6 394 7.0 5 n/a 905 7.8 Tetanus 0 0.0 2 0.0 0 n/a 2 0.0 Varicella 393 6.7 412 7.3 6 n/a 811 7.0	VACCINE-PREVENTABLE								
Influenza-Associated Pediatric Mortality* 1 * 1 * 0 n/a 2 * Influenza A Virus, Novel Human Infection* 60 1.0 47 0.8 0 n/a 107 0.9 Measles 1 0.0 0 0.0 0 n/a 1 0.0 Imported 1 0.0 0 0.0 0 n/a 1 0.0 Mumps 6 0.1 2 0.0 0 n/a 8 0.1 Pertussis 506 8.6 394 7.0 5 n/a 905 7.8 Tetanus 0 0.0 2 0.0 0 n/a 2 0.0 Varicella 393 6.7 412 7.3 6 n/a 811 7.0		1,595	27.0	1,353	24.0	13	n/a	2,961	25.6
Influenza A Virus, Novel Human Infection* 60 1.0 47 0.8 0 n/a 107 0.9 Measles 1 0.0 0 0.0 0 n/a 1 0.0 Imported 1 0.0 0 0.0 0 n/a 1 0.0 Mumps 6 0.1 2 0.0 0 n/a 8 0.1 Pertussis 506 8.6 394 7.0 5 n/a 905 7.8 Tetanus 0 0.0 2 0.0 0 n/a 2 0.0 Varicella 393 6.7 412 7.3 6 n/a 811 7.0		,			*				*
Measles 1 0.0 0 0.0 0 n/a 1 0.0 Imported 1 0.0 0 0.0 0 n/a 1 0.0 Mumps 6 0.1 2 0.0 0 n/a 8 0.1 Pertussis 506 8.6 394 7.0 5 n/a 905 7.8 Tetanus 0 0.0 2 0.0 0 n/a 2 0.0 Varicella 393 6.7 412 7.3 6 n/a 811 7.0		60	1.0		0.8				0.9
Imported 1 0.0 0 0.0 0 n/a 1 0.0 Mumps 6 0.1 2 0.0 0 n/a 8 0.1 Pertussis 506 8.6 394 7.0 5 n/a 905 7.8 Tetanus 0 0.0 2 0.0 0 n/a 2 0.0 Varicella 393 6.7 412 7.3 6 n/a 811 7.0	,			0					
Pertussis 506 8.6 394 7.0 5 n/a 905 7.8 Tetanus 0 0.0 2 0.0 0 n/a 2 0.0 Varicella 393 6.7 412 7.3 6 n/a 811 7.0	Imported								
Pertussis 506 8.6 394 7.0 5 n/a 905 7.8 Tetanus 0 0.0 2 0.0 0 n/a 2 0.0 Varicella 393 6.7 412 7.3 6 n/a 811 7.0	Mumps	6	0.1		0.0	0	n/a	8	
Tetanus 0 0.0 2 0.0 0 n/a 2 0.0 Varicella 393 6.7 412 7.3 6 n/a 811 7.0		506	8.6	394	7.0		n/a	905	7.8
	Tetanus	0		2	0.0	0	n/a	2	0.0
			6.7			6	n/a	811	7.0
	SUB-TOTAL	2,562	43.4	2,211	39.2	24	n/a	4,797	41.6

	Fer	nale	Ma	ale	Unk	nown	TO	TAL
ZOONOSES	N	Rate	N	Rate	N	Rate	N	Rate
Dengue	2	0.0	4	0.1	0	n/a	6	0.1
Ehrlichiosis/Anaplasmosis	3	0.1	3	0.1	0	n/a	6	0.1
Anaplasma phagocytophilum*	0	0.0	1	0.0	0	n/a	1	0.0
Ehrlichia chaffeensis*	2	0.0	2	0.0	0	n/a	4	0.0
Unknown	1	0.0	0	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	5	0.1	9	0.2	0	n/a	14	0.1
Lyme Disease	32	0.5	31	0.5	0	n/a	63	0.5
Malaria	16	0.3	24	0.4	0	n/a	40	0.3
Q Fever	1	0.0	2	0.0	0	n/a	3	0.0
Acute	1	0.0	2	0.0	0	n/a	3	0.0
Rabies, Animal*	0	n/a	0	n/a	41	n/a	41	n/a
Rocky Mountain Spotted Fever (RMSF)	11	0.2	12	0.2	0	n/a	23	0.2
West Nile Virus Infection	55	0.9	67	1.2	0	n/a	122	1.1
SUB-TOTAL	125	2.1	152	2.7	41	n/a	318	2.4

GRAND TOTAL	7,085	120.1	6,743	119.5	100	n/a	13,928	120.3
POPULATION	5,901	,605	5,642	2,620	(0	11,54	4,225

	Jar	nuary	Febi	ruary	Ma	arch	Aı	oril	М	lay	Jι	ine	Jı	uly
GENERAL INFECTIOUS DISEASES	N	%	N	%	N	%	N .	%	N	%	N	%	N	%
Amebiasis	1	9%	0	0%	2	18%	0	0%	2	18%	0	0%	0	0%
Botulism	2	33%	1	17%	1	17%	1	17%	0	0%	0	0%	0	0%
Foodborne	1	50%	0	0%	0	0%	1	50%	0	0%	0	0%	0	0%
Infant*	1	25%	1	25%	1	25%	0	0%	0	0%	0	0%	0	0%
Campylobacteriosis	71	6%	54	5%	52	5%	61	5%	89	8%	157	14%	230	20%
Coccidioidomycosis	0	0%	1	6%	2	12%	1	6%	3	18%	1	6%	3	18%
Creutzfeldt-Jakob Disease (CJD)	2	15%	2	15%	0	0%	0	0%	2	15%	1	8%	1	8%
Cryptosporidiosis	42	8%	38	7%	52	9%	34	6%	30	5%	37	7%	64	12%
Cytomegalovirus (CMV), Congenital*	0	0%	2	6%	2	6%	1	3%	3	10%	7	23%	5	16%
Escherichia coli, Shiga Toxin-Producing	4	2%	8	3%	9	4%	13	5%	13	5%	24	10%	47	20%
O157:H7	3	2%	2	2%	6	5%	4	3%	8	7%	11	9%	29	24%
Not O157:H7	1	1%	6	6%	3	3%	8	8%	5	5%	8	8%	16	15%
Unknown Serotype	0	0%	0	0%	0	0%	1	8%	0	0%	5	38%	2	15%
Giardiasis	63	11%	41	7%	39	7%	31	5%	44	8%	43	8%	55	10%
Haemophilus influenzae, Invasive Disease	10	7%	14	9%	14	9%	21	14%	10	7%	11	7%	16	11%
Hemolytic Uremic Syndrome (HUS)	1	10%	0	0%	1	10%	0	0%	1	10%	1	10%	3	30%
Legionellosis	16	6%	15	5%	12	4%	8	3%	23	8%	30	10%	27	9%
Listeriosis	0	0%	3	11%	4	14%	2	7%	2	7%	2	7%	3	11%
Meningitis, Aseptic	55	8%	42	6%	46	7%	48	7%	50	7%	65	9%	76	11%
Meningitis, Other Bacterial*	7	7%	7	7%	6	6%	11	12%	4	4%	4	4%	14	15%
Meningococcal Disease	4	17%	0	0%	3	13%	2	8%	2	8%	2	8%	2	8%
Salmonellosis	53	4%	39	3%	86	7%	103	8%	121	10%	134	11%	199	16%
Shigellosis	80	4%	38	2%	42	2%	40	2%	66	4%	64	4%	111	6%
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0%	0	0%	0	0%	2	22%	1	11%	1	11%	0	0%
Streptococcal Disease, Group A, Invasive	41	14%	29	10%	38	13%	36	13%	20	7%	14	5%	18	6%
Streptococcal Disease, Group B, in Newborn*	5	6%	3	4%	10	13%	3	4%	6	8%	8	10%	11	14%
Streptococcal Toxic Shock Syndrome (STSS)	2	18%	1	9%	1	9%	3	27%	1	9%	0	0%	1	9%
Streptococcus pneumoniae, Invasive Disease	129	11%	139	12%	141	12%	141	12%	90	8%	67	6%	34	3%
Ages < 5 Years*	4	5%	8	10%	8	10%	10	12%	11	14%	5	6%	4	5%
Drug Resistant, Ages 5+ Years*	44	14%	36	11%	38	12%	36	11%	24	7%	16	5%	8	2%
Drug Susceptible, Ages 5+ Years*	81	10%	95	12%	95	12%	95	12%	55	7%	46	6%	22	3%
Toxic Shock Syndrome (TSS)	0	0%	0	0%	0	0%	0	0%	0	0%	1	50%	0	0%
Typhoid Fever	3	23%	2	15%	2	15%	1	8%	0	0%	0	0%	0	0%
Vibriosis	0	0%	1	9%	0	0%	0	0%	1	9%	0	0%	6	55%
Vibrio parahaemolyticus Infection	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	4	67%
Vibrio vulnificus Infection	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Other (Not Cholera)	0	0%	1	25%	0	0%	0	0%	1	25%	0	0%	1	25%
Yersiniosis	5	12%	3	7%	7	16%	2	5%	2	5%	4	9%	2	5%
SUB-TOTAL	596	7%	483	6%	572	7%	565	7%	586	7%	678	8%	928	11%
HEPATITIS														
Hepatitis A	1	2%	1	2%	2	4%	3	7%	6	13%	4	9%	2	4%
Hepatitis B, Acute*	14	8%	16	9%	15	9%	13	8%	23	14%	15	9%	17	10%
Hepatitis B, Perinatal Infection*	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%
Hepatitis C. Acute*	0	0%	1	14%	1	14%	1	14%	1	14%	0	0%	0	0%
SUB-TOTAL	15	7%	18	8%	19	9%	17	8%	30	13%	19	9%	19	9%

N = number of cases reported.

^{% =} percentage of cases occurring in the month for the disease.
* Please see Technical Notes (pp. 94-97).

	Jan	uary	Febr	uary	Ма	rch	A	oril	N	lay	Jı	une	J	uly
OUTBREAKS*	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Community*	7	13%	9	16%	5	9%	2	4%	4	7%	2	4%	4	7%
Foodborne*	8	9%	9	11%	7	8%	7	8%	10	12%	2	2%	7	8%
Healthcare-Associated*	14	15%	22	23%	13	14%	8	9%	6	6%	2	2%	3	3%
Institutional*	23	14%	29	17%	14	8%	11	6%	11	6%	20	12%	10	6%
Waterborne*	0	0%	2	40%	0	0%	0	0%	1	20%	1	20%	0	0%
Zoonotic*	1	6%	0	0%	1	6%	2	11%	0	0%	1	6%	0	0%
SUB-TOTAL	53	12%	71	17%	40	9%	30	7%	32	7%	28	7%	24	6%
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	65	2%	124	4%	318	11%	202	7%	78	3%	21	1%	6	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%	21	20%
Measles	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
Imported	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
Mumps	1	13%	0	0%	1	13%	1	13%	0	0%	1	13%	0	0%
Pertussis	53	6%	67	7%	67	7%	66	7%	78	9%	86	10%	119	13%
Tetanus	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Varicella	86	11%	82	10%	104	13%	88	11%	84	10%	21	3%	34	4%
SUB-TOTAL SUB-TOTAL	206	4%	273	6%	490	10%	357	7%	240	5%	130	3%	180	4%
ZOONOSES														
Dengue	0	0%	1	17%	0	0%	0	0%	0	0%	1	17%	1	17%
Ehrlichiosis/Anaplasmosis	0	0%	0	0%	0	0%	0	0%	2	33%	3	50%	0	0%
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%	2	50%	0	0%
Unknown	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%
LaCrosse Virus Disease*	0	0%	0	0%	0	0%	0	0%	2	14%	3	21%	1	7%
Lyme Disease	1	2%	1	2%	3	5%	5	8%	1	2%	13	21%	16	25%
Malaria	4	10%	1	3%	3	8%	3	8%	3	8%	8	20%	4	10%
Q Fever	1	33%	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%
Acute	1	33%	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%
Rabies, Animal*	1	2%	1	2%	2	5%	0	0%	5	12%	5	12%	5	12%
Rocky Mountain Spotted Fever (RMSF)	1	4%	1	4%	1	4%	4	17%	1	4%	3	13%	3	13%
West Nile Virus Infection	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	12	10%
SUB-TOTAL	8	3%	5	2%	9	3%	12	4%	14	4%	37	12%	42	13%

N = number of cases reported.

^{% =} percentage of cases occurring in the month for the disease.
* Please see Technical Notes (pp. 94-97).

	Aud	gust	Septe	ember	Oct	ober	Nove	mber	Dece	mber	TO.	TAL
GENERAL INFECTIOUS DISEASES	N	%	N	%	N	%	N	%	N	%	N	%
Amebiasis	3	27%	1	9%	1	9%	0	0%	1	9%	11	100%
Botulism	0	0%	1	17%	0	0%	0	0%	0	0%	6	100%
Foodborne	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Infant*	0	0%	1	25%	0	0%	0	0%	0	0%	4	100%
Campylobacteriosis	108	10%	87	8%	80	7%	86	8%	54	5%	1,129	100%
Coccidioidomycosis	1	6%	2	12%	0	0%	2	12%	1	6%	17	100%
Creutzfeldt-Jakob Disease (CJD)	0	0%	0	0%	1	8%	4	31%	0	0%	13	100%
Cryptosporidiosis	81	15%	72	13%	37	7%	32	6%	31	6%	550	100%
Cytomegalovirus (CMV), Congenital*	2	6%	1	3%	1	3%	5	16%	2	6%	31	100%
Escherichia coli, Shiga Toxin-Producing	48	20%	27	11%	17	7%	12	5%	18	8%	240	100%
O157:H7	23	19%	13	11%	7	6%	5	4%	11	9%	122	100%
Not O157:H7	23	22%	11	10%	10	10%	7	7%	7	7%	105	100%
Unknown Serotype	2	15%	3	23%	0	0%	0	0%	0	0%	13	100%
Giardiasis	70	12%	62	11%	56	10%	28	5%	39	7%	571	100%
Haemophilus influenzae, Invasive Disease	7	5%	5	3%	12	8%	22	14%	10	7%	152	100%
Hemolytic Uremic Syndrome (HUS)	3	30%	0	0%	0	0%	0	0%	0	0%	10	100%
Legionellosis	43	15%	42	15%	27	9%	25	9%	20	7%	288	100%
Listeriosis	6	21%	1	4%	3	11%	1	4%	1	4%	28	100%
Meningitis, Aseptic	91	13%	74	11%	62	9%	50	7%	42	6%	701	100%
Meningitis, Other Bacterial*	6	6%	12	13%	13	14%	4	4%	7	7%	95	100%
Meningococcal Disease	3	13%	1	4%	1	4%	1	4%	3	13%	24	100%
Salmonellosis	172	14%	122	10%	101	8%	85	7%	55	4%	1,270	100%
Shigellosis	204	11%	365	20%	349	19%	303	17%	150	8%	1,812	100%
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0%	3	33%	1	11%	0	0%	1	11%	9	100%
Streptococcal Disease, Group A, Invasive	15	5%	18	6%	17	6%	14	5%	26	9%	286	100%
Streptococcal Disease, Group B, in Newborn*	6	8%	7	9%	5	6%	6	8%	9	11%	79	100%
Streptococcal Toxic Shock Syndrome (STSS)	0	0%	0	0%	1	9%	0	0%	1	9%	11	100%
Streptococcus pneumoniae, Invasive Disease	38	3%	59	5%	77	6%	96	8%	177	15%	1,188	100%
Ages < 5 Years*	3	4%	9	11%	8	10%	7	9%	4	5%	81	100%
Drug Resistant, Ages 5+ Years*	9	3%	18	6%	15	5%	23	7%	54	17%	321	100%
Drug Susceptible, Ages 5+ Years*	26	3%	32	4%	54	7%	66	8%	119	15%	786	100%
Toxic Shock Syndrome (TSS)	0	0%	0	0%	0	0%	1	50%	0	0%	2	100%
Typhoid Fever	1	8%	2	15%	0	0%	0	0%	2	15%	13	100%
Vibriosis	2	18%	0	0%	1	9%	0	0%	0	0%	11	100%
Vibrio parahaemolyticus Infection	1	17%	0	0%	1	17%	0	0%	0	0%	6	100%
Vibrio vulnificus Infection	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Other (Not Cholera)	1	25%	0	0%	0	0%	0	0%	0	0%	4	100%
Yersiniosis	6	14%	5	12%	4	9%	1	2%	2	5%	43	100%
SUB-TOTAL	916	11%	969	11%	867	10%	778	9%	652	8%	8,590	100%
HEPATITIS												
Hepatitis A	3	7%	5	11%	5	11%	8	18%	5	11%	45	100%
Hepatitis B, Acute*	11	6%	15	9%	15	9%	14	8%	2	1%	170	100%
Hepatitis B, Perinatal Infection*	0	0%	0	0%	0	0%	0	0%	0	0%	170	100%
Hepatitis C, Acute*	1	14%	2	29%	0	0%	0	0%	0	0%	7	100%
SUB-TOTAL	15	7%	22	10%	20	9%	22	10%	7	3%	223	100%
OOD-101AL	13	1 /0		10/0	20	J /0		10 /0		J /0	223	100/0

N = number of cases reported.

^{% =} percentage of cases occurring in the month for the disease.
* Please see Technical Notes (pp. 94-97).

	Au	gust	Septe	ember	Oct	ober	Nove	mber	Dece	mber	TO	TAL
OUTBREAKS*	N	%	N .	%	N	%	N	%	N	%	N	%
Community*	8	15%	6	11%	0	0%	3	5%	5	9%	55	100
Foodborne*	7	8%	7	8%	8	9%	9	11%	4	5%	85	100
Healthcare-Associated*	3	3%	2	2%	0	0%	8	9%	13	14%	94	100
Institutional*	9	5%	12	7%	5	3%	15	9%	11	6%	170	100
Waterborne*	1	20%	0	0%	0	0%	0	0%	0	0%	5	100
Zoonotic*	11	61%	1	6%	1	6%	0	0%	0	0%	18	100
SUB-TOTAL	39	9%	28	7%	14	3%	35	8%	33	8%	427	100
VACCINE-PREVENTABLE												
Influenza-Associated Hospitalization*	20	1%	19	1%	51	2%	266	9%	1,791	60%	2,961	100
Influenza-Associated Pediatric Mortality*	0	0%	0	0%	0	0%	0	0%	2	100%	2	100
Influenza A Virus, Novel Human Infection*	81	76%	5	5%	0	0%	0	0%	0	0%	107	10
Measles	0	0%	0	0%	0	0%	0	0%	0	0%	1	10
Imported	0	0%	0	0%	0	0%	0	0%	0	0%	1	10
Mumps	1	13%	0	0%	1	13%	1	13%	1	13%	8	10
Pertussis	80	9%	53	6%	63	7%	108	12%	65	7%	905	10
Tetanus	0	0%	1	50%	0	0%	0	0%	0	0%	2	10
Varicella	33	4%	77	9%	81	10%	76	9%	45	6%	811	100
SUB-TOTAL	215	4%	155	3%	196	4%	451	9%	1,904	40%	4,797	10
ZOONOSES												
Dengue	0	0%	0	0%	2	33%	1	17%	0	0%	6	100
Ehrlichiosis/Anaplasmosis	0	0%	0	0%	1	17%	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%	1	25%	0	0%	0	0%	4	10
Unknown	0	0%	0	0%	0	0%	0	0%	0	0%	1	10
LaCrosse Virus Disease*	4	29%	3	21%	1	7%	0	0%	0	0%	14	100
Lyme Disease	12	19%	2	3%	4	6%	2	3%	3	5%	63	100
Malaria	5	13%	1	3%	4	10%	2	5%	2	5%	40	10
Q Fever	0	0%	0	0%	0	0%	0	0%	1	33%	3	10
Acute	0	0%	0	0%	0	0%	0	0%	1	33%	3	10
Rabies, Animal*	16	39%	5	12%	1	2%	0	0%	0	0%	41	10
Rocky Mountain Spotted Fever (RMSF)	4	17%	2	9%	1	4%	1	4%	1	4%	23	10
West Nile Virus Infection	76	62%	32	26%	2	2%	0	0%	0	0%	122	100
SUB-TOTAL	117	37%	45	14%	16	5%	6	2%	7	2%	318	100

GRAND TOTAL

9% 1,219

8% 1,113

8% 1,292

9%

2,603

18% 14,355 100%

1,302

N = number of cases reported.

^{% =} percentage of cases occurring in the month for the disease.
* Please see Technical Notes (pp. 94-97).

	Ac	dams	Α	llen	Asl	nland	Ash	tabula	At	hens	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	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	1	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	1	3.5	9	8.6	5	9.4	27	26.9	2	3.1	9	19.6	7	10.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	2	2.0	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	0	0.0	3	2.9	2	3.8	5	5.0	0	0.0	5	10.9	1	1.4
Cytomegalovirus (CMV), Congenital*	0	*	1	*	0	*	3	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	0	0.0	6	5.7	0	0.0	2	2.0	2	3.1	1	2.2	0	0.0
O157:H7	0	0.0	4	3.8	0	0.0	2	2.0	1	1.6	0	0.0	0	0.0
Not O157:H7	0	0.0	2	1.9	0	0.0	0	0.0	1	1.6	1	2.2	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	1	3.5	7	6.7	1	1.9	8	8.0	4	6.2	3	6.5	5	7.2
Haemophilus influenzae, Invasive Disease	0	0.0	1	1.0	0	0.0	1	1.0	0	0.0	1	2.2	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	1	1.0	1	1.9	0	0.0	2	3.1	0	0.0	2	2.9
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	1	3.5	13	12.4	0	0.0	0	0.0	2	3.1	1	2.2	9	12.9
Meningitis, Other Bacterial*	0	0.0	3	2.9	0	0.0	1	1.0	0	0.0	2	4.4	0	0.0
Meningococcal Disease	0	0.0	0	0.0	1	1.9	0	0.0	1	1.6	1	2.2	0	0.0
Salmonellosis	2	7.1	9	8.6	9	17.0	19	18.9	9	14.0	8	17.5	6	8.6
Shigellosis	0	0.0	1	1.0	0	0.0	2	2.0	0	0.0	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	2	1.9	1	1.9	2	2.0	2	3.1	0	0.0	3	4.3
Streptococcal Disease, Group B, in Newborn*	0	*	1	*	0	*	3	*	0	*	1	*	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	0	0.0	10	9.5	1	1.9	10	10.0	3	4.7	10	21.8	19	27.3
Ages < 5 Years*	0	*	1	*	0	*	2	*	0	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	0	*	2	*	1	*	4	*	3	*	3	*	4	*
Drug Susceptible, Ages 5+ Years*	0	*	7	*	0	*	4	*	0	*	7	*	14	*
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
Vibrio vulnificus 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	0	0.0	0	0.0
SUB-TOTAL	6	21.2	68	64.7	21	39.7	86	85.7	27	42.0	42	91.6	53	76.1
HEPATITIS														·
Hepatitis A	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	1	1.0	1	1.6	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	1	1.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	0	0.0	0	0.0	3	3.0	1	1.6	0	0.0	0	0.0
SUB-TUTAL	U	U.U	U	U.U	U	0.0	_ 3	3.0	1	1.6	U	U.U	U	

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

		ams		len		land		abula		ens	_	laize		nont
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	1	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	11	n/a	11	n/a	1	n/a	0	n/a	11	n/a	0	n/a
Healthcare-Associated*	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Institutional*	0	n/a	0	n/a	3	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	3	n/a	5	n/a	2	n/a	0	n/a	3	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	0	0.0	85	80.8	19	35.9	31	30.9	11	17.1	22	48.0	3	4.3
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	1	1.9	0	0.0	8	12.4	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
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	0	0.0	1	1.0	6	11.3	5	5.0	7	10.9	5	10.9	0	0.0
Tetanus	0	0.0	0	0.0	2	3.8	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	0	0.0	3	2.9	11	20.8	16	15.9	3	4.7	10	21.8	3	4.3
SUB-TOTAL	0	0.0	89	84.6	39	73.6	52	51.8	29	45.1	37	80.7	6	8.6
ZOONOSES														
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	1	1.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	3	2.9	2	3.8	0	0.0	0	0.0	0	0.0	0	
			<u> </u>											0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6	0	0.0	0	0.0
Malaria Q Fever		0.0		0.0	0	0.0	0	0.0	1 0	1.6 0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	0.0								0.0
Q Fever Acute Rabies, Animal*	0	0.0 0.0 0.0 n/a	0	0.0 0.0 0.0 n/a	0 0 0 0	0.0 0.0 0.0 n/a	0	0.0 0.0 n/a	0	0.0 0.0 n/a	0 0	0.0 0.0 n/a	0 0	0.0 0.0 0.0 n/a
Q Fever Acute	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 n/a 0.0	0	0.0 0.0 0.0
Q Fever Acute Rabies, Animal* Rocky Mountain Spotted Fever (RMSF) West Nile Virus Infection	0 0 0 0	0.0 0.0 0.0 n/a 0.0 0.0	0 0 0 0 0 0 7	0.0 0.0 0.0 n/a 0.0 6.7	0 0 0 0	0.0 0.0 0.0 n/a 0.0 1.9	0 0 2	0.0 0.0 n/a 0.0 2.0	0 0 0	0.0 0.0 n/a 0.0 0.0	0 0	0.0 0.0 n/a 0.0 2.2	0 0	0.0 0.0 0.0 n/a 0.0 0.0
Q Fever Acute Rabies, Animal* Rocky Mountain Spotted Fever (RMSF)	0 0 0 0	0.0 0.0 0.0 n/a 0.0	0 0 0 0	0.0 0.0 0.0 n/a 0.0	0 0 0 0	0.0 0.0 0.0 n/a 0.0	0 0 2 0	0.0 0.0 n/a 0.0	0 0 0	0.0 0.0 n/a 0.0	0 0 0 0	0.0 0.0 n/a 0.0	0 0 0 0	0.0 0.0 0.0 n/a 0.0
Q Fever Acute Rabies, Animal* Rocky Mountain Spotted Fever (RMSF) West Nile Virus Infection	0 0 0 0 0	0.0 0.0 0.0 n/a 0.0 0.0	0 0 0 0 0 0 7	0.0 0.0 0.0 n/a 0.0 6.7	0 0 0 0 0	0.0 0.0 0.0 n/a 0.0 1.9	0 0 2 0 2	0.0 0.0 n/a 0.0 2.0	0 0 0 0	0.0 0.0 n/a 0.0 0.0	0 0 0 0	0.0 0.0 n/a 0.0 2.2	0 0 0 0	0.0 0.0 0.0 n/a 0.0 0.0
Q Fever Acute Rabies, Animal* Rocky Mountain Spotted Fever (RMSF) West Nile Virus Infection	0 0 0 0 0	0.0 0.0 0.0 n/a 0.0 0.0	0 0 0 0 0 0 7	0.0 0.0 0.0 n/a 0.0 6.7	0 0 0 0 0	0.0 0.0 0.0 n/a 0.0 1.9	0 0 2 0 2	0.0 0.0 n/a 0.0 2.0	0 0 0 0	0.0 0.0 n/a 0.0 0.0	0 0 0 0	0.0 0.0 n/a 0.0 2.2	0 0 0 0	0.0 0.0 0.0 n/a 0.0 0.0

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

	Bı	rown	Βι	ıtler	Ca	rroll	Char	npaign	С	lark	Cler	mont	Cli	nton
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	3	6.8	22	5.9	3	10.5	2	5.1	12	8.7	19	9.5	0	0.0
Coccidioidomycosis	0	0.0	1	0.3	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	0	0.0	4	1.1	0	0.0	1	2.5	3	2.2	3	1.5	7	16.7
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
Escherichia coli, Shiga Toxin-Producing	1	2.3	9	2.4	0	0.0	5	12.6	0	0.0	7	3.5	1	2.4
O157:H7	1	2.3	7	1.9	0	0.0	5	12.6	0	0.0	7	3.5	1	2.4
Not O157:H7	0	0.0	2	0.5	0	0.0	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	18	4.9	3	10.5	5	12.6	1	0.7	10	5.0	2	4.8
Haemophilus influenzae, Invasive Disease	0	0.0	9	2.4	1	3.5	0	0.0	2	1.5	3	1.5	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Legionellosis	0	0.0	1	0.3	0	0.0	1	2.5	4	2.9	1	0.5	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	0	0.0	20	5.4	2	7.0	2	5.1	5	3.6	9	4.5	3	7.2
Meningitis, Other Bacterial*	0	0.0	3	0.8	0	0.0	0	0.0	2	1.5	2	1.0	0	0.0
Meningococcal Disease	0	0.0	1	0.3	0	0.0	0	0.0	1	0.7	0	0.0	0	0.0
Salmonellosis	2	4.5	36	9.7	9	31.5	1	2.5	14	10.2	19	9.5	2	4.8
Shigellosis	1	2.3	60	16.2	0	0.0	3	7.6	34	24.8	14	7.0	1	2.4
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7	1	0.5	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	8	2.2	1	3.5	0	0.0	1	0.7	2	1.0	0	0.0
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	1	*	0	*	1	*	2	*	1	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	0	0.0	32	8.6	6	21.0	5	12.6	28	20.4	21	10.5	6	14.3
Ages < 5 Years*	0	*	2	*	0	*	0	*	1	*	3	*	1	*
Drug Resistant, Ages 5+ Years*	0	*	9	*	1	*	2	*	4	*	6	*	0	*
Drug Susceptible, Ages 5+ Years*	0	*	21	*	5	*	3	*	23	*	12	*	5	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Vibrio vulnificus 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	0.3	0	0.0	0	0.0	1	0.7	0	0.0	0	0.0
SUB-TOTAL	7	15.8	227	61.3	26	91.0	25	63.2	110	80.2	117	58.8	23	54.9
HEPATITIS														
Hepatitis A	0	0.0	2	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	1	2.3	4	1.1	0	0.0	0	0.0	2	1.5	18	9.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	2.3	7	1.9	0	0.0	0	0.0	2	1.5	18	9.0	0	0.0
JUB-TUTAL TOTAL		2.3	, , , , , , , , , , , , , , , , , , ,	1.9	U	U.U	U	U.U		1.0	10	9.U	U	0.0

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

	Br	own	Bu	tler	Ca	rroll	Chan	npaign	CI	lark	Cler	mont	Cli	nton
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	3	n/a	1	n/a	1	n/a
Foodborne*	0	n/a	1	n/a	0	n/a	1	n/a	2	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	4	n/a	0	n/a	0	n/a	2	n/a	2	n/a	0	n/a
Institutional*	0	n/a	7	n/a	1	n/a	0	n/a	2	n/a	3	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	1	n/a	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	13	n/a	1	n/a	2	n/a	10	n/a	6	n/a	1	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	4	9.0	46	12.4	13	45.5	8	20.2	35	25.5	25	12.6	4	9.5
Influenza-Associated Prospitalization Influenza-Associated Pediatric Mortality*	0	*	0	*	0	45.5 *	0	*	1	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	17	4.6	0	0.0	15	37.9	3	2.2	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
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	0	0.0	22	5.9	4	14.0	0	0.0	7	5.1	8	4.0	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	1	2.3	16	4.3	1	3.5	2	5.1	9	6.6	17	8.5	2	4.8
SUB-TOTAL	5	11.3	101	27.3	18	63.0	25	63.2	 55	40.1	50	25.1	6	14.3
ZOONOSES														
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
Lyme Disease	0	0.0	1	0.3	1	3.5	0	0.0	1	0.7	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	1	2.4
Q Fever	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	1	n/a	1	n/a	5	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	1	0.3	0	0.0	1	2.5	0	0.0	2	1.0	0	0.0
West Nile Virus Infection	0	0.0	5	1.3	0	0.0	0	0.0	8	5.8	5	2.5	0	0.0
SUB-TOTAL	1	2.3	9	2.4	2	3.5	2	2.5	14	6.6	7	3.5	1	2.4
GRAND TOTAL	14	31.5	357	92.8	47	157.4	54	128.9	191	128.3	198	96.4	31	71.6
POPULATION	44	,381	370	,589	28.	.587	39.	565	137	7,206	199	,085	41	,886

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

	Colu	mbiana	Cosh	nocton	Cra	wford	Cuva	ahoga	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	1	0.1	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	11	10.3	6	16.3	1	2.3	137	10.8	13	24.8	5	12.9	17	9.4
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	2	0.2	0	0.0	0	0.0	1	0.6
Cryptosporidiosis	1	0.9	3	8.2	2	4.7	80	6.3	7	13.3	1	2.6	9	5.0
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	7	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	2	1.9	1	2.7	0	0.0	17	1.3	3	5.7	3	7.8	8	4.4
O157:H7	0	0.0	1	2.7	0	0.0	3	0.2	3	5.7	2	5.2	3	1.7
Not O157:H7	2	1.9	0	0.0	0	0.0	9	0.7	0	0.0	1	2.6	5	2.8
Unknown Serotype	0	0.0	0	0.0	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0
Giardiasis	5	4.7	2	5.4	1	2.3	59	4.7	2	3.8	2	5.2	14	7.7
Haemophilus influenzae, Invasive Disease	0	0.0	1	2.7	0	0.0	10	0.8	0	0.0	1	2.6	3	1.7
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	3	2.8	3	8.2	2	4.7	57	4.5	3	5.7	0	0.0	4	2.2
Listeriosis	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	4	3.8	2	5.4	0	0.0	91	7.2	2	3.8	0	0.0	9	5.0
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	8	0.6	0	0.0	0	0.0	1	0.6
Meningococcal Disease	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Salmonellosis	9	8.5	9	24.5	9	21.0	133	10.5	19	36.2	6	15.5	15	8.3
Shigellosis	0	0.0	0	0.0	0	0.0	53	4.2	0	0.0	0	0.0	13	7.2
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	3.8	0	0.0	0	0.0	27	2.1	2	3.8	3	7.8	4	2.2
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	18	*	0	*	0	*	3	*
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	11	10.3	2	5.4	3	7.0	83	6.6	5	9.5	3	7.8	18	9.9
Ages < 5 Years*	0	*	0	*	0	*	5	*	2	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	3	*	0	*	1	*	19	*	1	*	2	*	7	*
Drug Susceptible, Ages 5+ Years*	8	*	2	*	2	*	59	*	2	*	1	*	10	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.6
Vibriosis	0	0.0	0	0.0	0	0.0	1	0.1	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
Vibrio vulnificus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Yersiniosis	1	0.9	1	2.7	0	0.0	2	0.2	0	0.0	0	0.0	1	0.6
SUB-TOTAL	51	47.9	30	81.6	18	42.0	794	62.8	56	106.7	24	62.1	121	66.8
		-												
HEPATITIS	1 0	0.0		0.0		0.0		0.0		0.0		0.0	0	0.0
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	10	0.8	2	3.8	0	0.0	1	0.6
Hepatitis B, Perinatal Infection*	0		0		0		0		0		0		1	
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	0	0.0	0	0.0	10	0.8	2	3.8	0	0.0	2	1.1

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

		mbiana		octon		vford	Cuya			arke		ance		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	3	n/a	0	n/a	0	n/a	2	n/a
Foodborne*	0	n/a	0	n/a	11	n/a	8	n/a	0	n/a	5	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	12	n/a	0	n/a	0	n/a	2	n/a
Institutional*	0	n/a	0	n/a	0	n/a	12	n/a	1	n/a	0	n/a	4	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	0	n/a	2	n/a	35	n/a	1	n/a	5	n/a	8	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	27	25.4	12	32.6	4	9.3	514	40.6	16	30.5	2	5.2	21	11.6
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
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	1	0.9	1	2.7	2	4.7	48	3.8	0	0.0	1	2.6	68	37.6
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	3	2.8	11	29.9	10	23.3	54	4.3	16	30.5	7	18.1	18	9.9
SUB-TOTAL	31	29.1	24	65.3	16	37.3	616	48.7	32	60.9	10	25.9	107	59.1
ZOONOSES														
Dengue	0	0.0	0	0.0	0	0.0	3	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	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	0.1	0	0.0	0	0.0	0	0.0
Lyme Disease	4	3.8	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	6	3.3
Malaria	1	0.9	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	2	1.1
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	1	0.1	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	1	2.7	0	0.0	0	0.0	0	0.0	0	0.0	1	0.6
West Nile Virus Infection	1	0.9	0	0.0	0	0.0	28	2.2	1	1.9	1	2.6	0	0.0
SUB-TOTAL	7	5.6	1	2.7	0	0.0	41	3.2	1	1.9	1	2.6	9	5.0
GRAND TOTAL	89	82.6	55	149.5	36	79.3	1,496	115.5	92	173.3	40	90.5	247	132.0

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

	Е	Erie	Fai	rfield	Fa	yette	Fran	ıklin	Fu	lton	G	allia	Ge	auga
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	1	0.7	0	0.0	7	0.6	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	1	0.1	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	4	5.2	9	6.1	1	3.5	87	7.3	5	11.8	3	9.8	17	18.1
Coccidioidomycosis	0	0.0	1	0.7	0	0.0	5	0.4	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	7	4.7	0	0.0	16	1.3	11	25.9	1	3.3	10	10.7
Cytomegalovirus (CMV), Congenital*	0	*	1	*	0	*	0	*	1	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	2	2.6	0	0.0	0	0.0	36	3.0	2	4.7	0	0.0	1	1.1
O157:H7	1	1.3	0	0.0	0	0.0	10	8.0	1	2.4	0	0.0	0	0.0
Not O157:H7	1	1.3	0	0.0	0	0.0	25	2.1	1	2.4	0	0.0	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	1	1.1
Giardiasis	5	6.5	5	3.4	1	3.5	104	8.7	5	11.8	0	0.0	4	4.3
Haemophilus influenzae, Invasive Disease	4	5.2	0	0.0	0	0.0	12	1.0	2	4.7	1	3.3	2	2.1
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Legionellosis	1	1.3	3	2.0	1	3.5	54	4.5	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	0.7	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	2	2.6	9	6.1	1	3.5	82	6.9	2	4.7	0	0.0	2	2.1
Meningitis, Other Bacterial*	0	0.0	0	0.0	1	3.5	5	0.4	1	2.4	1	3.3	1	1.1
Meningococcal Disease	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Salmonellosis	12	15.7	21	14.2	3	10.4	118	9.9	7	16.5	4	13.0	9	9.6
Shigellosis	0	0.0	11	7.5	3	10.4	1,200	100.4	1	2.4	0	0.0	1	1.1
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	5	6.5	2	1.4	0	0.0	40	3.3	1	2.4	0	0.0	0	0.0
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	8	*	1	*	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	11	14.4	8	5.4	3	10.4	153	12.8	6	14.1	2	6.5	6	6.4
Ages < 5 Years*	0	*	3	*	0	*	14	*	2	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	4	*	3	*	1	*	43	*	1	*	2	*	1	*
Drug Susceptible, Ages 5+ Years*	7	*	2	*	2	*	96	*	3	*	0	*	4	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	5	0.4	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	0	0.0
Vibrio vulnificus 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	1	1.3	1	0.7	0	0.0	7	0.6	1	2.4	0	0.0	1	1.1
SUB-TOTAL	48	62.8	80	54.2	14	48.5	1,951	163.2	46	108.2	12	39.1	56	59.8
HEPATITIS														
Hepatitis A	0	0.0	0	0.0	1	3.5	7	0.6	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	37	3.1	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	1	0.1	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	0	0.0	1	3.5	45	3.8	0	0.0	0	0.0	0	0.0

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

	E	rie	Fair	field	Fay	ette	Fran	ıklin	Fu	ılton	G	allia	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	16	n/a	0	n/a	1	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	15	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	1	n/a	1	n/a	0	n/a	8	n/a	0	n/a	1	n/a	0	n/a
Institutional*	0	n/a	0	n/a	1	n/a	58	n/a	0	n/a	2	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	1	n/a	0	n/a
SUB-TOTAL	1	n/a	1	n/a	1	n/a	98	n/a	0	n/a	5	n/a	1	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	6	7.9	48	32.5	2	6.9	386	32.3	3	7.1	10	32.6	30	32.0
Influenza-Associated Prospitalization Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	1	0.7	0	0.0	4	0.3	0	0.0	12	39.1	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
Mumps	1	1.3	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Pertussis	0	0.0	22	14.9	1	3.5	280	23.4	3	7.1	8	26.1	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	7	9.2	37	25.1	0	0.0	62	5.2	5	11.8	4	13.0	1	1.1
SUB-TOTAL	14	18.3	108	73.2	3	10.4	734	61.4	11	25.9	34	110.7	31	33.1
ZOONOSES						-		-						
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	2	0.2	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	1	0.1	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	2	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	2	1.4	0	0.0	6	0.5	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	1	0.7	0	0.0	18	1.5	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	1	0.7	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	6	0.5	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	6	4.1	0	0.0	39	3.1	0	0.0	0	0.0	0	0.0
GRAND TOTAL	63	81.2	195	131.5	19	62.3	2,867	231.4	57	134.1	51	149.8	88	92.9
DODUL ATION	70	,398	4.47	,474	20	880	1,195	E E 2 7	40	2,513	20	,708	00	680
POPULATION	70	,330	14/	,414	∠8,	000	1,190	J,JJ1	42	,,,,,,,	30	,100	93	000

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

	Gr	eene	Gue	rnsey	Han	nilton	Har	ncock	На	rdin	Har	rison	Не	enry
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	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	11	6.7	6	15.1	70	8.7	1	1.3	3	9.5	5	31.8	3	10.7
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	0	0.0	6	15.1	26	3.2	22	29.1	0	0.0	0	0.0	4	14.3
Cytomegalovirus (CMV), Congenital*	1	*	0	*	2	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	3	1.8	0	0.0	16	2.0	0	0.0	2	6.3	0	0.0	0	0.0
O157:H7	2	1.2	0	0.0	11	1.4	0	0.0	1	3.2	0	0.0	0	0.0
Not O157:H7	1	0.6	0	0.0	3	0.4	0	0.0	1	3.2	0	0.0	0	0.0
Unknown Serotype	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	8	4.9	5	12.6	35	4.4	4	5.3	1	3.2	0	0.0	1	3.6
Haemophilus influenzae, Invasive Disease	3	1.8	0	0.0	7	0.9	0	0.0	0	0.0	0	0.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	2	1.2	0	0.0	10	1.2	0	0.0	1	3.2	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	3	0.4	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	10	6.1	5	12.6	66	8.2	5	6.6	0	0.0	1	6.4	3	10.7
Meningitis, Other Bacterial*	1	0.6	0	0.0	7	0.9	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	5	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	11	6.7	3	7.5	59	7.4	3	4.0	2	6.3	1	6.4	4	14.3
Shigellosis	12	7.3	0	0.0	107	13.3	0	0.0	0	0.0	0	0.0	0	0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	2	1.2	2	5.0	30	3.7	0	0.0	1	3.2	0	0.0	0	0.0
Streptococcal Disease, Group B, in Newborn*	1	*	0	*	8	*	0	*	0	*	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	20	12.2	11	27.6	96	12.0	4	5.3	3	9.5	0	0.0	5	17.8
Ages < 5 Years*	2	*	0	*	9	*	0	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	7	*	4	*	23	*	0	*	0	*	0	*	2	*
Drug Susceptible, Ages 5+ Years*	11	*	7	*	64	*	4	*	3	*	0	*	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	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
Vibrio vulnificus 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	1	3.2	1	6.4	0	0.0
SUB-TOTAL	86	52.6	38	95.4	550	68.6	39	51.5	14	44.3	9	57.3	20	71.3
HEPATITIS														
Hepatitis A	1	0.6	0	0.0	2	0.2	0	0.0	1	3.2	0	0.0	0	0.0
Hepatitis B, Acute*	1	0.6	0	0.0	19	2.4	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	2	1.2	0	0.0	21	2.6	0	0.0	1	3.2	0	0.0	0	0.0

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

	Gre	ene	Gue	rnsey	Ham	ilton	Han	cock	Ha	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	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	2	n/a	0	n/a	7	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	1	n/a	8	n/a	1	n/a	0	n/a	0	n/a	1	n/a
Institutional*	1	n/a	0	n/a	20	n/a	4	n/a	0	n/a	0	n/a	1	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*	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a
SUB-TOTAL	4	n/a	1	n/a	38	n/a	7	n/a	0	n/a	0	n/a	3	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	24	14.7	12	30.1	141	17.6	6	7.9	7	22.1	2	12.7	9	32.1
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	6	3.7	0	0.0	3	0.4	0	0.0	0	0.0	0	0.0	6	21.4
Measles	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	0	0.0	0	0.0	76	9.5	0	0.0	0	0.0	1	6.4	2	7.1
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	13	7.9	2	5.0	23	2.9	3	4.0	0	0.0	0	0.0	4	14.3
SUB-TOTAL	44	26.9	14	35.2	244	30.4	9	11.9	7	22.1	3	19.1	21	74.9
ZOONOSES														
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	1	2.5	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	1	0.6	2	5.0	5	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	2	1.2	0	0.0	4	0.5	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	0	n/a	7	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	11	1.4	1	1.3	0	0.0	0	0.0	0	0.0
SUB-TOTAL	4	1.8	3	7.5	30	2.9	1	1.3	0	0.0	0	0.0	0	0.0
GRAND TOTAL	140	82.5	56	138.1	883	104.5	56	64.8	22	69.6	12	76.4	44	146.2
POPULATION	163	,587	39,	817	802	,038	75,	671	31	,627	15	714	28,	,045

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

	Hig	hland	Hoo	king	Но	mes	H	uron	Jac	kson	Jeff	erson	K	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	1	2.3	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	3	7.0	1	3.4	9	20.9	1	1.7	3	9.1	4	5.8	2	3.3
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	1	2.3	1	3.4	1	2.3	1	1.7	1	3.0	0	0.0	15	24.7
Cytomegalovirus (CMV), Congenital*	0	*	0	*	2	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	0	0.0	1	3.4	0	0.0	1	1.7	3	9.1	0	0.0	0	0.0
O157:H7	0	0.0	0	0.0	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0
Not O157:H7	0	0.0	1	3.4	0	0.0	0	0.0	2	6.1	0	0.0	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	1	3.0	0	0.0	0	0.0
Giardiasis	1	2.3	1	3.4	1	2.3	4	6.7	0	0.0	2	2.9	2	3.3
Haemophilus influenzae, Invasive Disease	1	2.3	1	3.4	0	0.0	2	3.4	0	0.0	5	7.3	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	1	2.3	2	6.8	0	0.0	1	1.7	1	3.0	4	5.8	2	3.3
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6
Meningitis, Aseptic	0	0.0	2	6.8	0	0.0	1	1.7	0	0.0	6	8.8	2	3.3
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	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
Salmonellosis	7	16.3	4	13.7	0	0.0	18	30.4	2	6.1	12	17.5	6	9.9
Shigellosis	1	2.3	0	0.0	0	0.0	1	1.7	1	3.0	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	0	0.0	0	0.0	1	2.3	3	5.1	0	0.0	0	0.0	1	1.6
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	4	9.3	1	3.4	3	7.0	0	0.0	1	3.0	17	24.9	4	6.6
Ages < 5 Years*	1	*	0	*	2	*	0	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	1	*	0	*	0	*	0	*	1	*	7	*	2	*
Drug Susceptible, Ages 5+ Years*	2	*	1	*	1	*	0	*	0	*	9	*	2	*
Toxic Shock Syndrome	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
Vibrio vulnificus 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	1	1.7	0	0.0	3	4.4	0	0.0
SUB-TOTAL	20	46.5	14	47.8	18	41.8	34	57.4	12	36.4	55	80.4	35	57.7
HEPATITIS														
Hepatitis A	0	0.0	1	3.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	2.3	1	3.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

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

	Hig	hland	Hoc	king	Hol	mes	Hu	ron	Jac	kson	Jeff	erson	Kı	nox
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	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	1	n/a	2	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	1	n/a	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	1	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	1	n/a	0	n/a	1	n/a	6	n/a	1	n/a	0	n/a	0	n/a
VACCINE DREVENTARI E		-		-		-								
VACCINE-PREVENTABLE Influenza-Associated Hospitalization*	19	44.2		30.7	7	16.3	12	20.2	12	36.4	4	5.8		13.2
Influenza-Associated Pospitalization Influenza-Associated Pediatric Mortality*	0	44.Z *	9	*	0	10.3	0	2U.Z *	0	30.4 *	0	5.8 *	8	13.2
Influenza A Virus, Novel Human Infection*	0	0.0	0		0	0.0		5.1	1		0	0.0	0	
				0.0			3			3.0				0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0		0.0	0		0			0.0	0	0.0	0	
Mumps			0			0.0	0	0.0	0				0	0.0
Pertussis	2	4.7	1	3.4	19	44.2	0	0.0	3	9.1	6	8.8	1	1.6
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	11 32	25.6	4	13.7	8	18.6	10 25	16.9	11	3.0	4 14	5.8	1	1.6
SUB-TOTAL SUB-TOTAL	32	74.4	14	47.8	34	79.0	25	42.2	17	51.6	14	20.5	10	16.5
ZOONOSES														
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	1	3.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	3.3
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	2	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	0	0.0	2	6.1	0	0.0	1	1.6
West Nile Virus Infection	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	2.3	0	0.0	0	0.0	1	0.0	3	9.1	0	0.0	5	4.9
GRAND TOTAL	55	125.6	29	99.1	53	120.9	66	99.5	33	97.1	69	100.9	50	79.1
POPULATION	42	,998	29.	273	43.	025	59.	280	32	,954	68.	389	60.	705
		,	,				, , ,						, , ,	

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

	La	ake	Law	rence	Lic	king	Lo	ogan	Lo	rain	Lu	cas	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	0	0.0	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	37	16.1	4	6.4	14	8.4	1	2.2	29	9.6	56	12.8	2	4.6
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	5	2.2	1	1.6	3	1.8	3	6.6	16	5.3	20	4.6	2	4.6
Cytomegalovirus (CMV), Congenital*	1	*	0	*	0	*	0	*	0	*	1	*	0	*
Escherichia coli, Shiga Toxin-Producing	0	0.0	1	1.6	7	4.2	1	2.2	1	0.3	9	2.1	0	0.0
O157:H7	0	0.0	1	1.6	1	0.6	0	0.0	0	0.0	3	0.7	0	0.0
Not O157:H7	0	0.0	0	0.0	6	3.6	1	2.2	1	0.3	6	1.4	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	0	0.0	5	3.0	1	2.2	8	2.7	6	1.4	1	2.3
Haemophilus influenzae, Invasive Disease	2	0.9	3	4.8	8	4.8	0	0.0	4	1.3	4	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	4	1.7	0	0.0	1	0.6	0	0.0	7	2.3	4	0.9	1	2.3
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	2	0.5	0	0.0
Meningitis, Aseptic	6	2.6	0	0.0	7	4.2	1	2.2	4	1.3	47	10.7	2	4.6
Meningitis, Other Bacterial*	1	0.4	0	0.0	1	0.6	0	0.0	2	0.7	7	1.6	0	0.0
Meningococcal Disease	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	1	0.2	0	0.0
Salmonellosis	24	10.5	7	11.3	28	16.7	8	17.6	21	7.0	51	11.6	6	13.9
Shigellosis	15	6.5	0	0.0	5	3.0	1	2.2	3	1.0	10	2.3	1	2.3
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	1	1.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	4	1.7	2	3.2	2	1.2	1	2.2	6	2.0	12	2.7	1	2.3
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	2	*	1	*	2	*	3	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	1.1	0	0.0
Streptococcus pneumoniae, Invasive Disease	9	3.9	6	9.7	27	16.1	0	0.0	17	5.6	47	10.7	2	4.6
Ages < 5 Years*	0	*	0	*	2	*	0	*	1	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	2	*	1	*	6	*	0	*	11	*	13	*	0	*
Drug Susceptible, Ages 5+ Years*	7	*	5	*	19	*	0	*	5	*	33	*	2	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Vibrio vulnificus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	2	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
SUB-TOTAL	114	49.7	25	40.3	112	66.9	18	39.6	121	40.1	287	65.5	18	41.8
HEPATITIS														
Hepatitis A	1	0.4	1	1.6	3	1.8	0	0.0	0	0.0	2	0.5	1	2.3
Hepatitis B, Acute*	1	0.4	0	0.0	2	1.2	0	0.0	1	0.3	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	2	0.9	1	1.6	5	3.0	0	0.0	1	0.3	2	0.5	1	2.3

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

		Lake		Lawrence		Licking		Logan		Lorain		Lucas		Madison	
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	0	n/a	1	n/a	7	n/a	1	n/a	
Foodborne*	0	n/a	0	n/a	1	n/a	0	n/a	3	n/a	1	n/a	0	n/a	
Healthcare-Associated*	2	n/a	0	n/a	2	n/a	0	n/a	0	n/a	7	n/a	0	n/a	
Institutional*	0	n/a	1	n/a	4	n/a	0	n/a	1	n/a	6	n/a	4	n/a	
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	
Zoonotic*	0	n/a	0	n/a	1	n/a	0	n/a	1	n/a	0	n/a	0	n/a	
SUB-TOTAL	2	n/a	1	n/a	9	n/a	0	n/a	6	n/a	21	n/a	5	n/a	
VACCINE PREVENTARI E															
VACCINE-PREVENTABLE Influenza-Associated Hospitalization*	44	19.2	3	4.8	44	26.3	4	8.8	25	8.3	74	16.9	10	23.2	
Influenza-Associated Pediatric Mortality*	0	19.2	0	*	0	*	0	*	0	*	0	*	0	*	
Influenza A Virus, Novel Human Infection*	1	0.4	0	0.0	2	1.2	0	0.0	0	0.0	0	0.0	1	2.3	
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	
Mumps	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	
Pertussis	20	8.7	2	3.2	46	27.5	2	4.4	4	1.3	7	1.6	9	20.9	
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Varicella	15	6.5	1	1.6	24	14.3	3	6.6	19	6.3	12	2.7	2	4.6	
SUB-TOTAL	81	35.3	6	9.7	116	69.2	9	19.8	48	15.9	94	21.5	22	51.1	
ZOONOSES				'		'									
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	0.6	0	0.0	0	0.0	0	0.0	0	0.0	
Lyme Disease	0	0.0	0	0.0	1	0.6	0	0.0	1	0.3	1	0.2	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	
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	2	n/a	1	n/a	
Rocky Mountain Spotted Fever (RMSF)	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	3	1.0	4	0.9	0	0.0	
SUB-TOTAL	1	0.4	0	0.0	2	1.2	0	0.0	4	1.3	7	1.1	1	0.0	
GRAND TOTAL	200	86.2	33	51.5	244	140.3	27	59.4	180	57.7	411	88.6	47	95.2	
	229.582		62.109		167,537		45,474		301,478		437,998				

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

GENERAL INFECTIOUS DISEASES	Mahoning		Marion		Medina		Meigs		Mercer		Miami		Monroe	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	1	1.5	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	16	6.8	11	16.6	17	9.8	0	0.0	5	12.2	12	11.6	0	0.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	1	1.5	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Cryptosporidiosis	11	4.7	13	19.6	7	4.0	0	0.0	36	88.1	2	1.9	0	0.0
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
Escherichia coli, Shiga Toxin-Producing	2	0.9	0	0.0	4	2.3	1	4.2	9	22.0	0	0.0	1	6.9
O157:H7	1	0.4	0	0.0	2	1.2	0	0.0	7	17.1	0	0.0	0	0.0
Not O157:H7	1	0.4	0	0.0	2	1.2	1	4.2	2	4.9	0	0.0	1	6.9
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	1.3	3	4.5	4	2.3	1	4.2	8	19.6	3	2.9	0	0.0
Haemophilus influenzae, Invasive Disease	0	0.0	0	0.0	1	0.6	1	4.2	1	2.4	4	3.9	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	10	4.3	1	1.5	2	1.2	0	0.0	1	2.4	1	1.0	0	0.0
Listeriosis	1	0.4	0	0.0	2	1.2	2	8.5	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	6	2.6	7	10.6	1	0.6	1	4.2	3	7.3	6	5.8	0	0.0
Meningitis, Other Bacterial*	4	1.7	1	1.5	0	0.0	0	0.0	1	2.4	2	1.9	0	0.0
Meningococcal Disease	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	17	7.2	6	9.1	13	7.5	4	17.0	21	51.4	14	13.6	0	0.0
Shigellosis	0	0.0	3	4.5	7	4.0	0	0.0	0	0.0	2	1.9	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	4	1.7	0	0.0	6	3.5	0	0.0	2	4.9	1	1.0	0	0.0
Streptococcal Disease, Group B, in Newborn*	3	*	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	26	11.1	3	4.5	9	5.2	1	4.2	6	14.7	9	8.7	3	20.6
Ages < 5 Years*	1	*	0	*	0	*	0	*	1	*	0	*	1	*
Drug Resistant, Ages 5+ Years*	7	*	0	*	4	*	1	*	2	*	1	*	0	*
Drug Susceptible, Ages 5+ Years*	18	*	3	*	5	*	0	*	3	*	8	*	2	*
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	2	1.2	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	2	1.2	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio vulnificus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	6.9
SUB-TOTAL	104	44.2	50	75.5	75	43.2	11	46.6	93	227.5	58	56.3	5	34.4
HEPATITIS														
Hepatitis A	0	0.0	0	0.0	3	1.7	0	0.0	0	0.0	1	1.0	0	0.0
Hepatitis B, Acute*	1	0.4	0	0.0	1	0.6	2	8.5	0	0.0	7	6.8	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	0.4	0	0.0	4	2.3	2	8.5	0	0.0	8	7.8	0	0.0

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

		oning		rion		dina		eigs		ercer		ami		nroe
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	1	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	2	n/a	1	n/a	3	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	1	n/a	0	n/a	3	n/a	1	n/a	0	n/a
Institutional*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	1	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	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	3	n/a	2	n/a	6	n/a	1	n/a	4	n/a	2	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	84	35.7	17	25.7	37	21.3	4	17.0	17	41.6	22	21.3	0	0.0
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	2	13.7
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
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Pertussis	3	1.3	2	3.0	3	1.7	4	17.0	2	4.9	6	5.8	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	8	3.4	18	27.2	8	4.6	0	0.0	10	24.5	9	8.7	0	0.0
SUB-TOTAL	95	40.4	37	55.9	49	28.2	8	33.9	29	70.9	38	36.9	2	13.7
ZOONOSES														
Dengue	0	0.0	0	0.0	1	0.6	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
Lyme Disease	3	1.3	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	3	7.3	1	1.0	0	0.0
SUB-TOTAL	5	1.3	1	1.5	1	0.6	0	0.0	3	7.3	1	1.0	0	0.0
GRAND TOTAL	208	86.3	90	132.9	135	74.3	22	89.0	129	305.8	107	101.9	7	48.1
GRAND TOTAL														

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

	Monte	gomery	Мо	rgan	Мо	rrow	Musi	kingum	No	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	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	1	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	28	5.2	4	26.8	6	17.2	14	16.3	1	6.9	6	14.5	4	20.7
Coccidioidomycosis	2	0.4	0	0.0	1	2.9	1	1.2	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	3	0.6	0	0.0	3	8.6	11	12.8	0	0.0	1	2.4	2	10.4
Cytomegalovirus (CMV), Congenital*	2	*	0	*	0	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	23	4.3	0	0.0	0	0.0	1	1.2	0	0.0	1	2.4	0	0.0
O157:H7	20	3.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not O157:H7	2	0.4	0	0.0	0	0.0	1	1.2	0	0.0	1	2.4	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	21	3.9	1	6.7	0	0.0	3	3.5	0	0.0	4	9.7	1	5.2
Haemophilus influenzae, Invasive Disease	15	2.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	3	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	10	1.9	1	6.7	0	0.0	5	5.8	0	0.0	1	2.4	0	0.0
Listeriosis	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	43	8.0	2	13.4	1	2.9	7	8.1	0	0.0	1	2.4	1	5.2
Meningitis, Other Bacterial*	11	2.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	10.4
Meningococcal Disease	0	0.0	0	0.0	2	5.7	1	1.2	0	0.0	0	0.0	0	0.0
Salmonellosis	54	10.1	0	0.0	7	20.0	11	12.8	2	13.7	5	12.1	6	31.1
Shigellosis	166	31.1	0	0.0	2	5.7	3	3.5	0	0.0	0	0.0	0	0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	4	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	19	3.6	0	0.0	0	0.0	1	1.2	0	0.0	2	4.8	0	0.0
Streptococcal Disease, Group B, in Newborn*	4	*	0	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	76	14.2	4	26.8	4	11.4	14	16.3	3	20.6	8	19.4	2	10.4
Ages < 5 Years*	3	*	0	*	0	*	0	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	10	*	1	*	0	*	1	*	1	*	3	*	0	*
Drug Susceptible, Ages 5+ Years*	63	*	3	*	4	*	13	*	2	*	5	*	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	2	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	1	0.2	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
Vibrio vulnificus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	492	92.1	12	80.5	26	74.4	73	84.9	6	41.2	29	70.2	18	93.3
HEPATITIS														
Hepatitis A	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B, Acute*	9	1.7	0		1	2.9	1	1.2	0		0		0	
,	0	1.7	0	0.0	0	2.9	0	*	0	0.0	0	0.0	0	0.0
Hepatitis B, Perinatal Infection* Hepatitis C, Acute*	0		0		0		_		0		0		0	
	1 0	0.0 1.9	0	0.0		0.0 2.9	0	0.0 1.2	0	0.0		0.0	0	0.0
SUB-TOTAL	10	1.9	U	0.0	1	2.9	1	1.2	U	0.0	0	0.0	U	0.0

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

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

OUTDDE AVO	_	omery		rgan		rrow		ingum		oble		awa		Iding
OUTBREAKS* Community*	N 3	Rate	N	Rate	N	Rate	N	Rate	N 0	Rate	N	Rate	N	Rate
, ,	2	n/a	1	n/a	0	n/a		n/a	0	n/a	0	n/a n/a	0	n/a
Foodborne* Healthcare-Associated*	3	n/a n/a	0	n/a n/a	0	n/a n/a	0	n/a n/a	0	n/a n/a	0	n/a n/a	1	n/a n/a
Institutional*	2	n/a	0	n/a	1		0		1		0	n/a	0	
						n/a		n/a		n/a			0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a		n/a
Zoonotic*	11	n/a	0 1	n/a	0	n/a	0	n/a	<u>0</u>	n/a	0	n/a	0 1	n/a
SUB-TOTAL	11	n/a	1	n/a	1	n/a	0	n/a	1	n/a	0	n/a	1	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	135	25.3	5	33.5	6	17.2	37	43.0	3	20.6	6	14.5	3	15.5
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	5	0.9	0	0.0	1	2.9	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
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	35	6.6	0	0.0	1	2.9	5	5.8	0	0.0	2	4.8	1	5.2
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	28	5.2	2	13.4	2	5.7	10	11.6	0	0.0	1	2.4	11	57.0
SUB-TOTAL	203	38.0	7	46.9	10	28.6	52	60.5	3	20.6	9	21.8	15	77.7
ZOONOSES														
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	2.9	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	1	0.2	0	0.0	1	2.9	0	0.0	0	0.0	1	2.4	0	0.0
Malaria	2	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	14	2.6	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
SUB-TOTAL	18	3.2	0	0.0	2	5.7	2	2.3	0	0.0	1	2.4	0	0.0
002.0	10	Ų.i_												
	10	<u> </u>												
GRAND TOTAL	734	135.1	20	127.4	40	111.6	128	148.9	10	61.7	39	94.3	34	171.0

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

	Р	erry	Pick	away	P	ike	Po	rtage	Pr	eble	Put	tnam	Ricl	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	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	3	8.3	3	5.3	1	3.5	20	12.4	1	2.4	6	17.5	25	20.4
Coccidioidomycosis	0	0.0	1	1.8	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	1	0.6	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	3	8.3	0	0.0	2	7.0	16	9.9	0	0.0	0	0.0	6	4.9
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	1	*
Escherichia coli, Shiga Toxin-Producing	1	2.8	3	5.3	1	3.5	0	0.0	1	2.4	0	0.0	2	1.6
O157:H7	0	0.0	1	1.8	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
Not O157:H7	1	2.8	2	3.5	1	3.5	0	0.0	0	0.0	0	0.0	2	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	2	5.6	6	10.6	0	0.0	4	2.5	4	9.5	2	5.8	9	7.3
Haemophilus influenzae, Invasive Disease	0	0.0	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	1	2.8	1	1.8	0	0.0	3	1.9	0	0.0	0	0.0	2	1.6
Listeriosis	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	1	2.8	2	3.5	1	3.5	11	6.8	1	2.4	3	8.8	8	6.5
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	4	11.1	10	17.7	2	7.0	18	11.1	6	14.3	8	23.4	12	9.8
Shigellosis	3	8.3	27	47.9	0	0.0	1	0.6	0	0.0	0	0.0	1	0.8
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	3.5	0	0.0	2	1.2	2	4.8	1	2.9	0	0.0
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	1	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	6	16.7	5	8.9	4	14.0	11	6.8	6	14.3	2	5.8	7	5.7
Ages < 5 Years*	1	*	0	*	0	*	0	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	1	*	1	*	3	*	1	*	0	*	4	*
Drug Susceptible, Ages 5+ Years*	5	*	4	*	3	*	8	*	5	*	2	*	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	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Vibrio vulnificus 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	2	3.5	0	0.0	1	0.6	0	0.0	0	0.0	1	0.8
SUB-TOTAL	24	66.6	63	111.7	12	42.1	90	55.7	21	50.1	22	64.3	76	62.0
HEPATITIS														
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	1	2.9	1	0.8
Hepatitis B, Acute*	3	8.3	1	1.8	0	0.0	1	0.6	2	4.8	0	0.0	0	0.0
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
SUB-TOTAL	3	8.3	1	1.8	0	0.0	1	0.6	3	7.2	1	2.9	2	1.6
OOD-TOTAL		0.5		1.0	U	0.0		0.0	J	1.4		2.3		1.0

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

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

	P	erry	Pick	away	P	ike	Por	tage	Pr	eble	Put	nam	Rich	hland
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	1	n/a
Foodborne*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	4	n/a
Institutional*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	3	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	1	n/a	0	n/a	0	n/a	0	n/a	1	n/a	8	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	17	47.2	14	24.8	8	28.1	45	27.9	8	19.1	20	58.5	42	34.2
Influenza-Associated Prospitalization Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	1	*	0	*	0	*	0	*
Influenza A Virus. Novel Human Infection*	0	0.0	0	0.0	0	0.0	0	0.0	3	7.2	0	0.0	2	1.6
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
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.9	0	0.0
Pertussis	0	0.0	8	14.2	1	3.5	8	5.0	1	2.4	2	5.8	9	7.3
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	1	2.8	8	14.2	3	10.5	8	5.0	5	11.9	3	8.8	15	12.2
SUB-TOTAL	18	50.0	30	53.2	12	42.1	62	38.4	17	40.6	26	76.0	68	55.4
ZOONOSES														
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	1	0.8
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	3.5	0	0.0	0	0.0	0	0.0	1	0.8
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	1	0.8
Lyme Disease	0	0.0	0	0.0	0	0.0	2	1.2	0	0.0	0	0.0	1	0.8
Malaria	0	0.0	0	0.0	0	0.0	1	0.6	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	1	8.0
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
Rabies, Animal*	0	n/a	1	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	3	8.8	1	0.8
SUB-TOTAL	0	0.0	1	0.0	1	3.5	4	1.9	1	2.4	3	8.8	6	4.9
GRAND TOTAL	45	124.9	96	166.7	25	87.8	157	96.6	42	100.3	53	152.1	160	123.9

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

	R	oss	San	dusky	Sc	ioto	Se	neca	Sh	elby	St	ark	Sur	mmit
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	1	1.3	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	8	10.3	15	24.8	8	10.2	4	7.1	1	2.0	65	17.3	35	6.5
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	1	2.0	0	0.0	1	0.2
Cryptosporidiosis	3	3.9	16	26.4	1	1.3	1	1.8	0	0.0	45	12.0	20	3.7
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	1	*	1	*	0	*	2	*
Escherichia coli, Shiga Toxin-Producing	2	2.6	0	0.0	0	0.0	2	3.6	0	0.0	4	1.1	4	0.7
O157:H7	0	0.0	0	0.0	0	0.0	2	3.6	0	0.0	3	0.8	1	0.2
Not O157:H7	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	3	0.6
Unknown Serotype	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	2	2.6	1	1.7	1	1.3	3	5.4	1	2.0	41	10.9	30	5.5
Haemophilus influenzae, Invasive Disease	1	1.3	1	1.7	0	0.0	2	3.6	2	4.1	7	1.9	6	1.1
Hemolytic Uremic Syndrome (HUS)	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	3	3.9	0	0.0	1	1.3	1	1.8	2	4.1	15	4.0	29	5.4
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	2	0.4
Meningitis, Aseptic	3	3.9	2	3.3	8	10.2	1	1.8	5	10.2	33	8.8	57	10.5
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	0	0.0	1	2.0	3	0.8	8	1.5
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Salmonellosis	7	9.0	9	14.9	9	11.5	15	26.8	3	6.1	38	10.1	50	9.2
Shigellosis	1	1.3	0	0.0	7	8.9	0	0.0	0	0.0	7	1.9	10	1.8
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	1	0.2
Streptococcal Disease, Group A, Invasive	2	2.6	1	1.7	1	1.3	1	1.8	6	12.2	20	5.3	15	2.8
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	0	*	2	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2
Streptococcus pneumoniae, Invasive Disease	16	20.7	5	8.3	2	2.5	7	12.5	4	8.1	80	21.3	44	8.1
Ages < 5 Years*	0	*	0	*	0	*	0	*	0	*	6	*	4	*
Drug Resistant, Ages 5+ Years*	8	*	2	*	2	*	3	*	2	*	20	*	17	*
Drug Susceptible, Ages 5+ Years*	8	*	3	*	0	*	4	*	2	*	54	*	23	*
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	0	0.0	2	0.4
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Vibrio vulnificus 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	2	0.5	3	0.6
SUB-TOTAL	48	62.0	51	84.3	39	49.7	38	67.8	27	54.9	365	97.4	323	59.7
HEPATITIS														
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	1	0.2
Hepatitis B, Acute*	2	2.6	1	1.7	6	7.6	0	0.0	0	0.0	3	0.8	9	1.7
Hepatitis B, Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	1	0.2
SUB-TOTAL	2	2.6	1	1.7	6	7.6	0	0.0	0	0.0	7	1.9	11	2.0

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

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

	R	oss	Sand	dusky	Sc	ioto	Sei	neca	Sh	elby	St	ark	Sun	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	0	n/a	2	n/a	1	n/a
Foodborne*	1	n/a	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a	4	n/a
Healthcare-Associated*	0	n/a	4	n/a	1	n/a	2	n/a	0	n/a	5	n/a	4	n/a
Institutional*	0	n/a	1	n/a	1	n/a	1	n/a	0	n/a	4	n/a	9	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
SUB-TOTAL	1	n/a	6	n/a	2	n/a	3	n/a	1	n/a	12	n/a	18	n/a
VACCINE PREVENTARI E														
VACCINE-PREVENTABLE Influenza-Associated Hospitalization*	20	25.8	20	33.1	26	33.1	6	10.7	10	20.3	181	48.3	135	25.0
Influenza-Associated Prospitalization Influenza-Associated Pediatric Mortality*	0	25.6 *	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	7	9.0	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
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	2	2.6	0	0.0	15	19.1	0	0.0	0	0.0	7	1.9	18	3.3
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	26	33.6	9	14.9	10	12.7	0	0.0	3	6.1	32	8.5	13	2.4
SUB-TOTAL	55	71.0	29	47.9	51	65.0	6	10.7	13	26.4	220	58.7	166	30.7
		1 110		1110		0010								
ZOONOSES	1													
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	1	1.3	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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	2	2.6	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Lyme Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	1.3	2	0.4
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	3	n/a	0	n/a	1	n/a	0	n/a	1	n/a	3	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	2	2.5	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	1	1.3	1	1.7	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2
SUB-TOTAL	6	3.9	1	1.7	4	3.8	0	0.0	1	0.0	11	2.1	3	0.6
GRAND TOTAL	112	139.5	88	135.5	102	126.2	47	78.5	42	81.4	615	160.1	521	93.0
POPULATION	77	,429	60	510	78	477	56	018	40	.167	374	,868	540	,811
10.02/11011		,•	50,		. 0,		30	J. V	70	,	V17	,	0 10	,

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

Tusc	arawas	Ur	nion	Van	Wert	Vii	nton	Wa	rren	Wash	nington
N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
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	0.0	0	0.0	0	0.0	0	0.0	0	0.0
0	*	0	*	0	*	0	*	0	*	0	*
22	23.8	2	3.8	5	17.4	1	7.6	12	5.5	1	1.6
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2	2.2	3	5.7	0	0.0	1	7.6	7	3.2	0	0.0
1	*	0	*	0	*	0	*	0	*	0	*
0	0.0	2	3.8	1	3.5	0	0.0	7	3.2	0	0.0
0	0.0	0	0.0	1	3.5	0	0.0	5	2.3	0	0.0
0	0.0	2	3.8	0	0.0	0	0.0	1	0.5	0	0.0
0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
4	4.3	4	7.6	2	7.0	0	0.0	10	4.6	2	3.3
0	0.0	1	1.9	1	3.5	0	0.0	5	2.3	0	0.0
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
1	1.1	1	1.9	0	0.0	0	0.0	0	0.0	1	1.6
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
1	1.1	2	3.8	2	7.0	0	0.0	12	5.5	0	0.0
0	0.0	0	0.0	0	0.0	0	0.0	3	1.4	1	1.6
0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
15	16.2	9	17.1	0	0.0	1	7.6	27	12.4	9	14.6
0	0.0	1	1.9	0	0.0	0	0.0	13	6.0	1	1.6
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
1	1.1	1	1.9	0	0.0	0	0.0	6	2.8	0	0.0
1	*	0	*	0	*	0	*	3	*	0	*
0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
11	11.9	2	3.8	2	7.0	0	0.0	17	7.8	2	3.3
1	*	0	*	0	*	0	*	2	*	0	*
2	*	0	*	0	*	0	*	3	*	2	*
8	*	2	*	2	*	0	*	12	*	0	*
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
0	0.0	3	5.7	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	0.0	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	0.0
2	2.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
61	66.0	31	58.8	13	45.2	3	22.7	124	57.1	18	29.3
0	0.0	9	17 1	Λ	0.0	0	0.0	0	0.0	0	0.0
U											0.0
Λ							0.0		1.8	0	0.0
0	0.0	0	0.0	1	3.5	0	0.0	4	1.8	0	0.0
0 0	0.0		0.0		3.5					0 0 0	
	1 0 1 0 0 15 0 0 1 1 1 1 0 11 1 2 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1.1 0 0.0 1 1.1 0 0.0 1 1.1 0 0.0 0 0.0 15 16.2 0 0.0 0 0.0 1 1.1 1 * 0 0.0 11 11.9 1 * 2 * 8 * 0 0.0 0 0.	1 1.1 1 0 0.0 0 1 1.1 2 0 0.0 0 0 0.0 0 0 0.0 0 15 16.2 9 0 0.0 1 0 0.0 0 1 1.1 1 1 * 0 0 0.0 0 11 11.9 2 1 * 0 2 * 0 8 * 2 0 0.0 0 0	1 1.1 1 1.9 0 0.0 0.0 1 1.1 1.9 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 1.1 1 1.9 0 0 0.0 0 0.0 0 1 1.1 2 3.8 2 0 0.0 0 0.0 0 0 0.0 0 0.0 0 15 16.2 9 17.1 0 0 0.0 1 1.9 0 0 0.0 0 0.0 0 1 1.1 1 1.9 0 1 1.1 1 1.9 0 0 0.0 0 0.0 0 1 1.1 1 1.9 0 0 0.0 0 0.0 0 1 1.1 1 1.9 0 0 0.0 0 0.0 0 1 1.1 1 1.9 0 1 1.1 1 1.9 0 0 0.0 0 0.0 0 1 1.1 1 1.9	1 1.1 1 1.9 0 0.0 0 0.0 0 0.0 0 0.0 1 1.1 2 3.8 2 7.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 15 16.2 9 17.1 0 0.0 0 0.0 1 1.9 0 0.0 0 0.0 0 0.0 0 0.0 1 1.1 1 1.9 0 0.0 1 1.1 1 1.9 0 0.0 1 1.1 1 1.9 0 0.0 1 1.2 0 0 0.0 0 0.0 1 1.3 0 0 0 0.0 0 0.0 1 1.4 0 0 0 0 0 0 0<	1 1.1 1 1.9 0 0.0 0 0 0.0 0 0.0 0 0.0 0 1 1.1 2 3.8 2 7.0 0 0 0.0 0 0.0 0 0.0 0 0 0.0 0 0.0 0 0.0 0 15 16.2 9 17.1 0 0.0 1 0 0.0 1 1.9 0 0.0 0 0 0.0 0 0.0 0 0.0 0 1 1.1 1 1.9 0 0.0 0 0 0.0 0 0.0 0 0.0 0 1 * 0 * 0 * 0 1 * 0 * 0 * 0 1 * 0 * 0 * 0 * </td <td>1 1.1 1 1.9 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 1 1.1 2 3.8 2 7.0 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 15 16.2 9 17.1 0 0.0 1 7.6 0 0.0 1 1.9 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 1 1.1 1 1.9 0 0.0 0 0.0 1 1.1 1 1.9 0 0.0 0 0.0 1 1.2 0 0 0 0 0.0 0 0.0 1 1.3</td> <td>1 1.1 1 1.9 0 0.0 0 0.0 0 0 0.0 0 0.0 0 0.0 0 0.0 0 1 1.1 2 3.8 2 7.0 0 0.0 12 0 0.0 0 0.0 0 0.0 0 0.0 12 0 0.0 0 0.0 0 0.0 0 0.0 1 7.6 27 0 0.0 1 1.9 0 0.0 0 0.0 1 7.6 27 0 0.0 1 1.9 0 0.0 0 0.0 13 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</td> <td>1 1.1 1 1.9 0 0.0<</td> <td>1 1.1 1 1.9 0 0.0<</td>	1 1.1 1 1.9 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 1 1.1 2 3.8 2 7.0 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 15 16.2 9 17.1 0 0.0 1 7.6 0 0.0 1 1.9 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 1 1.1 1 1.9 0 0.0 0 0.0 1 1.1 1 1.9 0 0.0 0 0.0 1 1.2 0 0 0 0 0.0 0 0.0 1 1.3	1 1.1 1 1.9 0 0.0 0 0.0 0 0 0.0 0 0.0 0 0.0 0 0.0 0 1 1.1 2 3.8 2 7.0 0 0.0 12 0 0.0 0 0.0 0 0.0 0 0.0 12 0 0.0 0 0.0 0 0.0 0 0.0 1 7.6 27 0 0.0 1 1.9 0 0.0 0 0.0 1 7.6 27 0 0.0 1 1.9 0 0.0 0 0.0 13 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	1 1.1 1 1.9 0 0.0<	1 1.1 1 1.9 0 0.0<

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

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

		mbull		arawas	_	ion		Wert		nton		rren		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	0	n/a	1	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	1	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Institutional*	0	n/a	1	n/a	0	n/a	3	n/a	0	n/a	1	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	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	2	n/a	0	n/a	5	n/a	0	n/a	2	n/a	1	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	40	19.3	38	41.1	13	24.7	5	17.4	3	22.7	18	8.3	14	22.8
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Influenza A Virus, Novel Human Infection*	0	0.0	0	0.0	1	1.9	0	0.0	0	0.0	1	0.5	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
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	12	5.8	10	10.8	7	13.3	2	7.0	0	0.0	23	10.6	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	19	9.2	5	5.4	2	3.8	11	38.3	1	7.6	12	5.5	3	4.9
SUB-TOTAL	71	34.2	53	57.4	23	43.6	18	62.6	4	30.2	54	24.9	17	27.7
ZOONOSES														
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	1	0.5	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	1	1.6
Lyme Disease	0	0.0	1	1.1	0	0.0	0	0.0	0	0.0	1	0.5	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
Rabies, Animal*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
West Nile Virus Infection	1	0.5	0	0.0	0	0.0	3	10.4	0	0.0	2	0.9	0	0.0
SUB-TOTAL	3	1.0	1	1.1	0	0.0	3	10.4	0	0.0	4	1.8	1	1.6
GRAND TOTAL	210	99.8	117	124.5	63	119.5	40	121.8	7	52.9	188	85.6	37	58.6

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.

	Wa	ayne	Will	liams	W	ood	Wva	andot	Unk	nown	то	TAL
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	11	0.1
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	6	0.1
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	4	*
Campylobacteriosis	24	20.9	2	5.3	19	14.8	5	22.1	0	n/a	1,129	9.8
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	17	0.1
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	13	0.1
Cryptosporidiosis	3	2.6	0	0.0	2	1.6	1	4.4	0	n/a	550	4.8
Cytomegalovirus (CMV), Congenital*	1	*	0	*	0	*	0	*	0	n/a	31	*
Escherichia coli, Shiga Toxin-Producing	2	1.7	0	0.0	10	7.8	1	4.4	0	n/a	240	2.1
O157:H7	2	1.7	0	0.0	3	2.3	0	0.0	0	n/a	122	1.1
Not O157:H7	0	0.0	0	0.0	7	5.5	1	4.4	0	n/a	105	0.9
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	13	0.1
Giardiasis	5	4.4	1	2.7	4	3.1	0	0.0	0	n/a	571	4.9
Haemophilus influenzae, Invasive Disease	3	2.6	0	0.0	3	2.3	0	0.0	0	n/a	152	1.3
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	10	0.1
Legionellosis	3	2.6	1	2.7	1	0.8	0	0.0	0	n/a	288	2.5
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	28	0.2
Meningitis, Aseptic	12	10.4	1	2.7	7	5.5	0	0.0	0	n/a	701	6.1
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	95	0.8
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	24	0.2
Salmonellosis	22	19.2	8	21.3	13	10.1	1	4.4	0	n/a	1,270	11.0
Shigellosis	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	1,812	15.7
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	9	0.1
Streptococcal Disease, Group A, Invasive	2	1.7	0	0.0	1	0.8	1	4.4	0	n/a	286	2.5
Streptococcal Disease, Group B, in Newborn*	2	*	0	*	0	*	1	*	0	n/a	79	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	11	0.1
Streptococcus pneumoniae, Invasive Disease	7	6.1	1	2.7	6	4.7	4	17.7	0	n/a	1,188	10.3
Ages < 5 Years*	1	*	0	*	0	*	0	*	0	n/a	81	*
Drug Resistant, Ages 5+ Years*	0	*	0	*	2	*	1	*	0	n/a	321	*
Drug Susceptible, Ages 5+ Years*	6	*	1	*	4	*	3	*	0	n/a	786	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	13	0.1
Vibriosis	1	0.9	0	0.0	1	0.8	0	0.0	0	n/a	11	0.1
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	6	0.1
Vibrio vulnificus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Other (Not Cholera)	1	0.9	0	0.0	1	0.8	0	0.0	0	n/a	4	0.0
Yersiniosis	2	1.7	0	0.0	0	0.0	0	0.0	0	n/a	43	0.4
SUB-TOTAL	89	77.5	14	37.3	69	53.8	14	61.9	0	n/a	8,590	74.4
LIEDATITIO												
HEPATITIS	0	0.0	0	0.0	- 1	0.0	0	0.0	0	n/o	15	0.4
Hepatitis A	1	0.0		0.0	1	0.8	_	0.0	0	n/a	45	0.4
Hepatitis B, Acute*		0.9	0	0.0	3	2.3	0	0.0	0	n/a	170	1.5
Hepatitis B, Perinatal Infection*	0		0		0		0		0	n/a	1	0.4
Hepatitis C, Acute*	1	0.0 0.9	0	0.0	0 4	0.0 3.1	0 0	0.0	0	n/a	7 223	0.1
SUB-TOTAL	1	0.9	U	0.0	4	3.1	U	0.0	U	n/a	223	1.9

N = number of cases reported.
Rates use 2012 U.S. Census estimates and are per 100,000 population.
n/a = not applicable.
* Please see Technical Notes (pp. 94-97).

Community		Wa	yne	Will	ams	W	ood	Wya	andot	Unk	nown	TO	ΓAL
Foodborne*	OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate		Rate
Healthcare-Associated*	Community*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	54	n/a
Institutional*	Foodborne*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	76	n/a
Watchorner	Healthcare-Associated*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	93	n/a
Sub-total	Institutional*	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	170	n/a
Sub-Total	Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	5	n/a
National Color	Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	14	n/a
Influenza-Associated Hospitalization*	SUB-TOTAL	0	n/a	0	n/a	3	n/a	1	n/a	0	n/a	412	n/a
Influenza-Associated Pediatric Montality* 0	VACCINE-PREVENTABLE												
Influenza A Virus, Novel Human Infection* 0 0.0 0	Influenza-Associated Hospitalization*	23	20.0	4	10.7	11	8.6	1	4.4	0	n/a	2,961	25.6
Influenza A Virus, Novel Human Infection*	Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	n/a		*
Measles	•	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	107	0.9
Imported	,												0.0
Mumps				0		0						1	0.0
Pertussis	•												0.1
Tetanus													7.8
Varicella				0									0.0
SUB-TOTAL 48 41.8 5 13.3 21 16.4 6 26.5 0 n/a 4,797 41		_											7.0
Dengue													41.6
Ehrlichiosis/Anaplasmosis 0 0.0 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													0.1
Ehrlichia chaffeensis* 0 0.0<													0.1
Unknown 0 0.0 <t< td=""><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.0</td></t<>		-											0.0
LaCrosse Virus Disease* 0 0.0 0 0 0 0 0 0													0.0
Lyme Disease 1 0.9 0 0.0 0 0 0.0 0 0 0.0 0 0 0.0 0 0 0 0								_				-	0.0
Malaria 1 0.9 0 0.0 0 0.0 0 0.0 0 n/a 40 0. Q Fever 0 0.0						-		-					0.1
Q Fever 0 0.0 0.0 0 0.0 0.0 0 0.0 0.0	· ·	-				_							0.5
Acute 0 0.0 0.0 0.0 0.0 0.0													0.3
Rabies, Animal* 1 n/a 0 n/a 0 n/a 0 n/a 41 n/a Rocky Mountain Spotted Fever (RMSF) 0 0.0 0 0.0 1 0.8 0 0.0 0 n/a 23 0. West Nile Virus Infection 1 0.9 0 0.0 1 0.8 0 0.0 0 n/a 122 1. SUB-TOTAL 4 2.6 0 0.0 2 1.6 0 0.0 0 n/a 318 2. GRAND TOTAL 142 122.8 19 50.6 99 74.9 21 88.5 0 n/a 14,340 120													0.0
Rocky Mountain Spotted Fever (RMSF) 0 0.0 0 0.0 1 0.8 0 0.0 0 n/a 23 0. West Nile Virus Infection 1 0.9 0 0.0 1 0.8 0 0.0 0 n/a 122 1. SUB-TOTAL 4 2.6 0 0.0 2 1.6 0 0.0 0 n/a 318 2. GRAND TOTAL 142 122.8 19 50.6 99 74.9 21 88.5 0 n/a 14,340 120	1111												0.0
West Nile Virus Infection 1 0.9 0 0.0 1 0.8 0 0.0 0 n/a 122 1. SUB-TOTAL 4 2.6 0 0.0 2 1.6 0 0.0 0 n/a 318 2. GRAND TOTAL 142 122.8 19 50.6 99 74.9 21 88.5 0 n/a 14,340 120		-						_					n/a
SUB-TOTAL 4 2.6 0 0.0 2 1.6 0 0.0 0 n/a 318 2. GRAND TOTAL 142 122.8 19 50.6 99 74.9 21 88.5 0 n/a 14,340 120	, ,					•							0.2
GRAND TOTAL 142 122.8 19 50.6 99 74.9 21 88.5 0 n/a 14,340 120													1.1
	SUB-TOTAL	4	2.6	0	0.0	2	1.6	0	0.0	0	n/a	318	2.4
44444	GRAND TOTAL	142	122.8	19	50.6	99	74.9	21	88.5	0	n/a	14,340	120.3
POPULATION 114,848 37,513 128,200 22,607 0 11,544,225	POPULATION	114	1,848	37,	513	128	3,200	22	,607		0	11,54	4,225

ESCHERICHIA COLI, SHIGA TOXIN-PRODUCING SEROGROUPS BY YEAR OF ONSET, OHIO, 2008-2012

SEROGROUP	2008	2009	2010	2011*	2012*
O1	0	0	0	1	0
O5	0	1	0	0	1
08	0	1	0	1	0
014	1	0	0	0	0
O22	0	0	1	0	0
O26*	2	6	5	14	26
O43	0	0	0	1	0
O45*	2	4	9	9	14
O52	1	0	0	0	0
O55	0	0	0	0	1
O69	0	0	0	0	1
O71	0	0	0	0	2
O76	0	0	0	0	2
O78	0	0	0	0	1
O80	0	0	0	1	0
O84	0	0	0	0	1
O88	0	0	1	0	0
O91	0	0	0	1	1
O103*	4	7	14	14	18
O104	1	0	0	0	0
O105	0	0	0	1	0
O111*	4	2	2	12	10
O118	0	0	0	2	1
O121*	2	2	1	5	1
O123	0	0	0	0	1
O124	0	0	0	0	1
O130	0	1	0	0	0
O145*	0	1	8	0	4
O146	1	0	0	1	1
O152	0	0	0	0	1
O157	160	84	72	92	117
O158	0	0	0	1	0
O163	0	0	0	0	1
O165	1	0	0	0	1
O168	0	0	0	1	0
O172	1	0	0	0	0
O186	0	0	0	1	2
O Rough	0	0	0	2	4
O Undetermined	0	1	2	3	2
Unknown	29	18	23	19	25
TOTAL	209	128	138	182	240

MENINGOCOCCAL DISEASE SEROGROUPS BY YEAR OF ONSET, OHIO, 2008-2012

SEROGROUP	2008	2009	2010	2011	2012
Group A	0	0	0	0	0
Group B	11	13	12	7	4
Group C	6	4	7	8	6
Group W	0	1	0	0	0
Group Y	17	10	6	5	8
Not Groupable	1	0	0	2	1
Unknown	7	14	10	2	5
TOTAL	42	42	35	24	24

SEROTYPE	2008	2009	2010	2011	2012
Abaetetuba	0	1	0	0	0
Abony	0	0	1	0	1
Adelaide	0	1	2	2	1
Agama	0	1	0	0	0
Agbeni Ago	3	3	6	9	8
Agona	19	8	7	13	11
Agoueve	0	0	0	1	0
Ajiobo	0	1	0	0	0
Alachua	0	0	1	0	0
Albany	1	1	3	0	1
Altona	1	0	1	12	1
Amager	1 5	0	0	0	0
Anatum vor 15	5	6	0	6	6
Anatum, var 15 + Apapa	1	0	0	0	0
Baildon	2	0	8	1	3
Bardo	0	0	0	1	0
Bareilly	2	3	9	3	4
Barranquilla	0	0	0	1	0
Benin	0	1	0	0	0
Berta	9	15	11	16	9
Blockley	1 7	2	2	0	0
Bovis-morbificans Braenderup	7 18	7	7 16	17	13 22
Brandenburg	10	0	0	3	1
Brazzaville	1	0	0	0	0
Bredeney	1	0	0	0	1
Carmel	1	0	0	0	0
Carrau	0	0	1	0	0
Cerro	0	0	1	1	0
Chester	1	1	1	1	2
Choleraesuis ver Kunzenderf	0	0	0	0	0
Choleraesuis, var Kunzendorf Colindale	0	0	0	1	1
Corvallis	1	1	0	0	0
Cotham	0	0	1	0	2
Cubana	0	2	1	0	0
Dahra	0	0	0	1	0
Derby	6	6	3	0	1
Dublin	6	3	5	5	2
Durban	0	0	0	1	2
Duval	0	1 2	0 2	2	0
Ealing Eastbourne	1	1	0	1	0
Enteritidis	293	379	431	277	264
Fluntern	1	0	1	0	1
Gallinarum	0	1	0	0	0
Gaminara	1	1	4	2	0
Georgia	1	0	0	0	0
Give	2	4	2	3	0
Glostrup Hadar	9	0 4	0 2	5	7
Hannover	0	1	0	0	0
Hartford	12	22	36	17	32
Havana	3	2	2	1	0
Heidelberg	57	50	35	27	25
Hermannswerder	0	1	0	0	0
Herston	0	1	0	0	0
Holcomb	0	0	1	0	1
Hull	1	0	0	0	0
Hvittingfoss	0	2	17	5	3
Infantis Inverness	7	15 0	0	26 0	38
Isangi	1	0	0	0	0
iourigi					
Jangwani	1	()	()	()	()
Jangwani Javiana	1 11	36	36	33	0 22

SEROTYPE	2008	2009	2010	2011	2012
Kedougou	1	0	0	0	1
Kentucky	2	1	3	0	2
Kiambu	1	4	3	4	0
Kingabwa	0	1	0	0	1
Kintambo	0	1	0	1	0
Kottbus	0	1	0	1	0
Labadi	0	1	0	0	0
Lexington	1	0	0	0	0
Lille	0	0	0	0	3
Litchfield	6	2	6	12	9
Liverpool	0	0	1	0	0
Livingstone	0	2	3	3	0
London	1	0	0	1	0
Madelia	0	0	1	0	0
Manhattan	0	1	1	1	2
Mbandaka	1	5	6	0	5
Meleagridis	2	-	0	4	_
Miami		1	2	1	1
Michigan	1 1	0	0	0	0
Minnesota	2	1	3	3	3
Mississippi Molade	0	0	1	0	0
Monschaui	0	2	1	1	1
Montevideo	15	25	20	12	24
Muenchen	56	11	15	17	20
Muenster	0	1	1	2	5
Muenster, var 15 +	0	1	0	0	1
Narashino	0	0	0	1	0
Newport	52	72	72	87	117
Nima	0	0	0	0	1
Norwich	0	0	1	5	2
Nottingham	0	0	0	1	0
Oakland	1	0	0	0	0
Obogu	0	0	1	0	0
Ohio	1	1	0	2	0
Oranienburg	34	56	26	33	37
Orion	0	0	0	1	0
Orion, var 15 +	0	1	0	0	0
Oslo	2	1	0	0	0
Ouakam	0	1	0	0	0
Panama	4	2	4	5	6
Paratyphi A	4	3	3	5	1
Paratyphi B	2	2	1	0	1
Paratyphi B, var D - Tartrate +	0	0	1	0	0
Paratyphi B, var L - Tartrate +	41	54	42	44	59
Paratyphi B, var Tartrate +	3	1	0	0	0
Paratyphi C	0	1	0	0	0
Pomona	0	0	2	2	3
Poona	21	7	10	9	1
Potsdam	1	2	0	2	2
Putten	0	1	1	0	1
Reading	2	0	1	0	1
Richmond	0	0	0	0	1
Rissen	0	0	1	2	1
Romanby	0	0	1	0	0
Rubislaw	0	0	0	2	1
Saarbruecken	0	0	1	0	0
Saint Paul	22	26	33	14	24
San Diego	5	6	4	1	4
Saphra	1	0	1	0	0
Schwartzengrund	4	6	4	2	1
Senftenberg	6	3	1	3	1
Shubra	2	1	0	0	0
Singapore	1	0	3	1	0
Sinstorf	1	0	0	0	0
Soerenga	0	0	0	0	1
Stanley	10	5	7	4	4
Stellingen	0	0	0	0	1

SEROTYPE	2008	2009	2010	2011	2012
Stoneferry	0	1	0	0	0
Suelldorf	0	2	0	0	0
Sundsvall	1	0	0	0	0
Takoradi	1	0	0	0	0
Telelkebir	1	1	2	0	1
Tennessee	4	3	1	0	0
Thompson	18	17	13	19	33
Typhimurium	229	212	123	150	208
Typhimurium, var Copenhagen	55	51	61	40	0
Urbana Uzaramo	0	0	1	0	0
Virchow	5	7	4	0	8
Weltevreden	2	2	2	0	4
Worthington	4	1	3	0	0
(I) 1,9,12:-:5	0	2	0	1	0
(l) 1,9,12:l,z28:-	1	0	0	0	0
(I) 1,9,12:Non-motile	0	1	2	2	1
(I) 3,10:Non-motile	0	1	0	0	0
(I) 4,5,12:b:-	0	0	0	1	0
(l) 4,5,12:i:-	91	46	38	44	75
(I) 4,5,12:r:-	0	0	0	1	0
(I) 4,5,12:2:-	0	1	0	0	0
(I) 4,5,12:Non-motile	0	1	1	0	0
(I) 6,7:-:1,5	0	0	1	0	0
(I) 6,7:-:5	0	3	0	0	0
(I) 6,7:Non-motile	0	1	1	1	3
(I) 13,23:Non-motile	0	0	1	0	0
(I) 18:Non-motile	0	0	0	0	1
(I) Mucoid:b:e,n,x	0	0	1	0	0
(I) Rough Os:210:0 p 715	0	0	0	0	0
(I) Rough Os:z10:e,n,z15 (I) Rough Os:z38:-	0	0	0	1	0
(I) X0ugii Os.236 (II) 21:z10:z6	0	0	0	1	0
(II) 50:b:z6	0	1	0	0	0
(III) Arizona	5	1	0	0	1
(IIIa) 13,23:z4:-	0	1	0	0	0
(IIIa) 41:z4,z23:-	2	0	0	0	0
(IIIa) 44:z4,z23:-	0	0	0	1	0
(IIIa) 44:z4,z24:-	0	1	0	0	0
(IIIb) 48:i:z	0	2	0	0	1
(IIIb) 50:k:-	0	0	0	0	1
(IIIb) 50:k:z	0	1	1	0	0
(IIIb) 50:z:z52	1	1	0	0	0
(IIIb) 57:c:e,n,x,z15	0	0	1	0	0
(IIIb) 61:-:1,5	0	0	1	2	0
(IIIb) 61:i:z53	0	1	1	0	0
(IIIb) 61:I,v:1,5	0	0	0	0	1
(IIIb) 61:l,v,z13:z35	0	1	0	0	0
(IIIb) 61:I,v,z13:1,5	0	0	0	1	0
(IIIb) 61:r:z	0	1	0	0	0
(IIIb) 61:z52:z53	0	1	0	0	0
(IIIb) 65:(k):z	0	0	0	0	0
(IIIb) Rough Os:c:z35 (IV) 40:z4,z24:-	0	0	0	1	0
(IV) 40:24,224:- (IV) 44:z4,z23:-	2	2	2	1	0
(IV) 44.24,223 (IV) 45:g,z51:-	2	1	0	0	0
(IV) 48:g,z51:- (Marina)	3	0	1	0	1
(IV) 50:z4,z23:- (Flint)	2	1	0	3	1
(VI) 41:b:1,7	0	0	0	1	0
Rough Os:d,x	2	0	0	0	0
Rough Os:d:1,2	0	1	0	0	0
Rough Os:d:1,7	0	0	0	0	1
Rough Os:e,h:l,w	1	0	0	0	0
Rough Os:e,h:z15	0	1	1	0	0
Rough Os:e,h:1,2	0	0	0	0	1
Rough Os:f,g:-	0	0	0	0	1
Rough Os:g,m:-	1	0	1	1	0
Rough Os:g,m,s:-	1	0	1	0	0

SEROTYPE	2008	2009	2010	2011	2012
Rough Os:i:2	0	0	0	1	0
Rough Os:I,z28:5	0	0	1	0	0
Rough Os:m,t:-	3	0	0	0	0
Rough Os:z:6	1	0	0	0	0
Rough Os:Non-motile	4	2	2	2	1
SUB-TOTAL	1,248	1,289	1,220	1,073	1,186
SEROGROUP					
Group A	0	0	0	0	1

Group A	0	0	0	0	1
Group B	20	13	11	7	4
Group C	4	3	7	8	1
Group C1	1	1	1	1	1
Group C2	2	0	2	0	0
Group D	16	11	9	5	8
SUB-TOTAL	43	28	30	21	15

UNGROUPED, UNTYPED	87	60	59	89	68

GRAND TOTAL	1.378	1.377	1.309	1.183	1.270

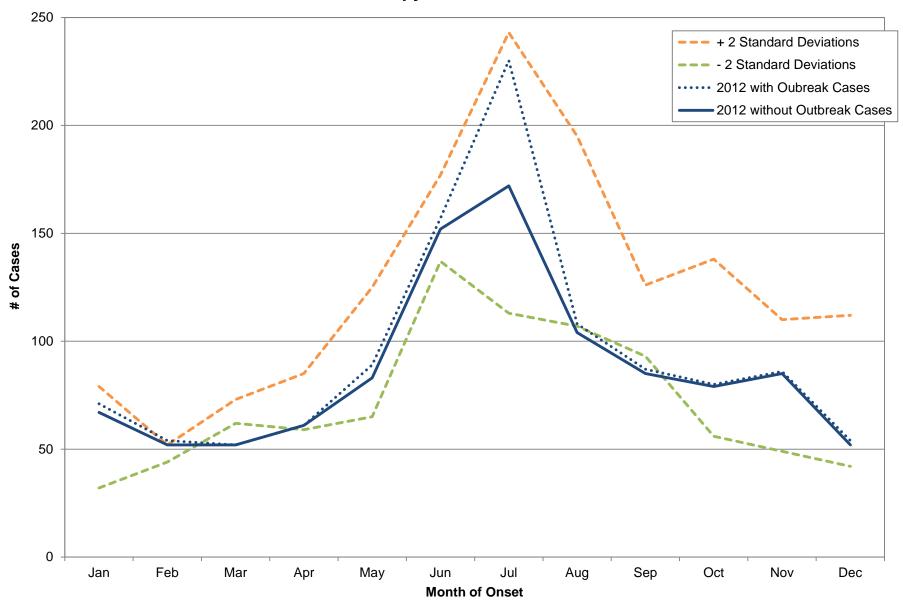
GRAPHS OF SELECTED NOTIFIABLE DISEASE INCIDENCE

Disease incidence from 2012 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 2012 (i.e., observed cases) to baseline disease incidence (i.e., expected cases) by month. Baseline disease incidence was determined by calculating the average disease incidence over the previous three years, 2009-2011. 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 2012 disease incidence compared to baseline disease incidence suggests the difference is unlikely to have occurred by chance.

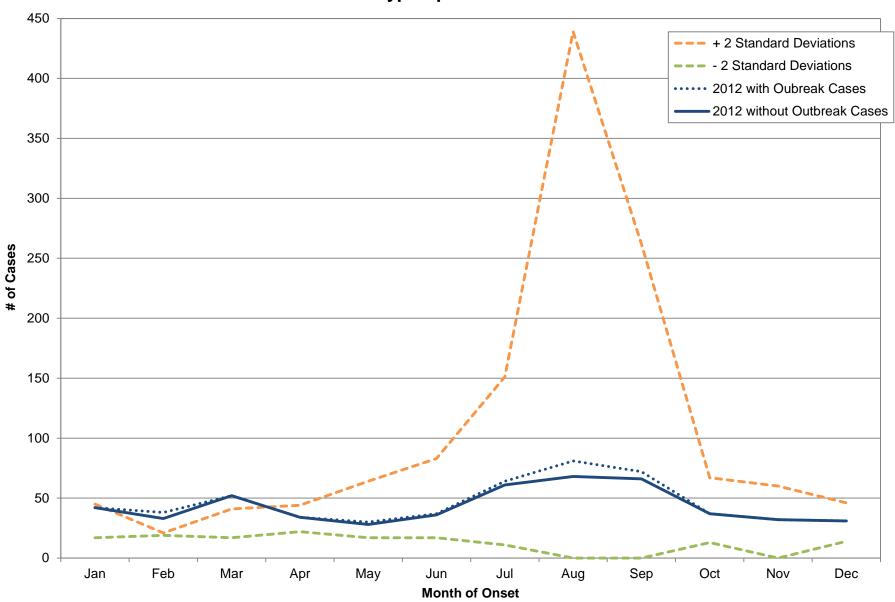
General surveillance trends are graphed statewide. The 2012 data represent confirmed and probable cases of selected reportable diseases. In many instances, two trend lines can be seen graphed for 2012 incidence data: one for all cases, including those linked to a known outbreak or cluster, and one for 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 2012 and data used in the calculation of the baseline (2009-2011) average are finalized. All data are by month and year of illness onset. The source of the data is the Ohio Disease Reporting System.

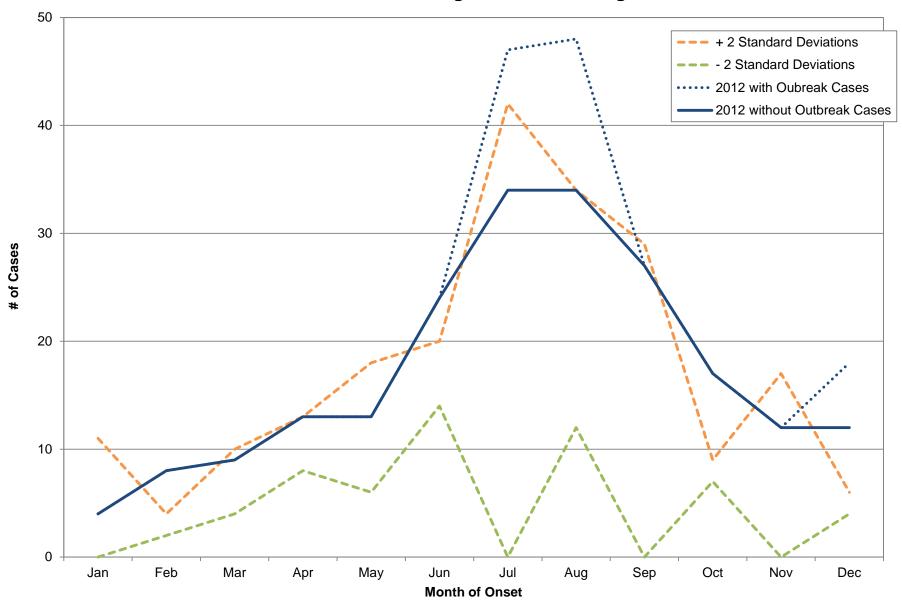
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Campylobacteriosis



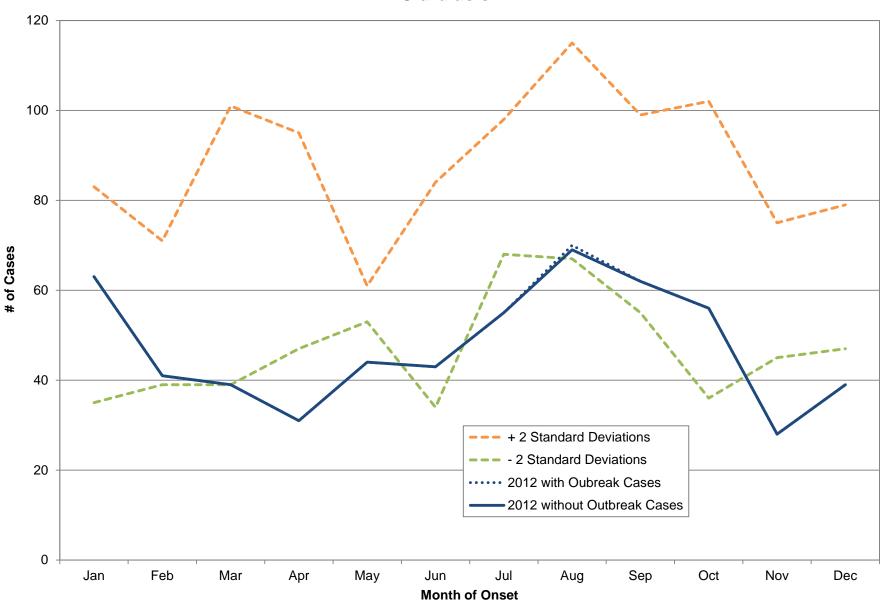
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Cryptosporidiosis



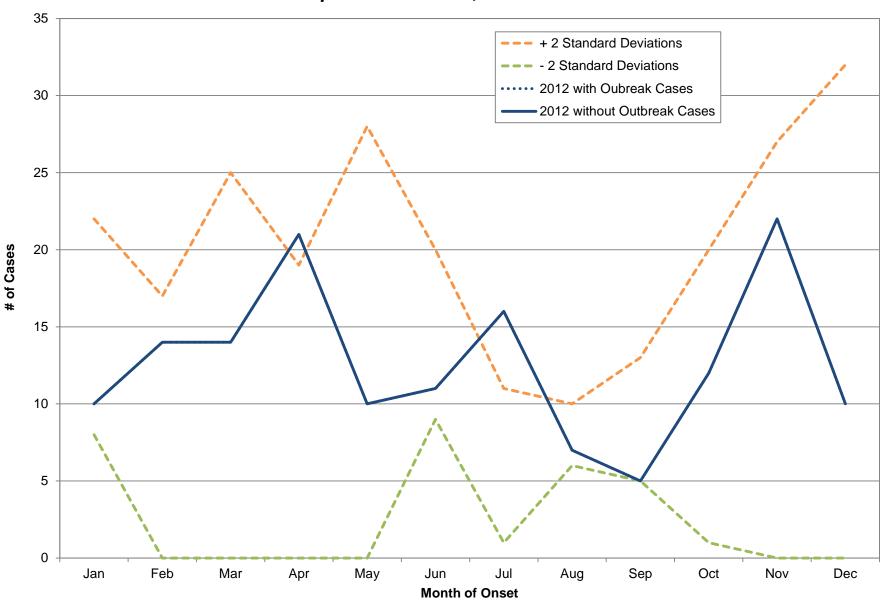
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Escherichia coli, Shiga Toxin-Producing



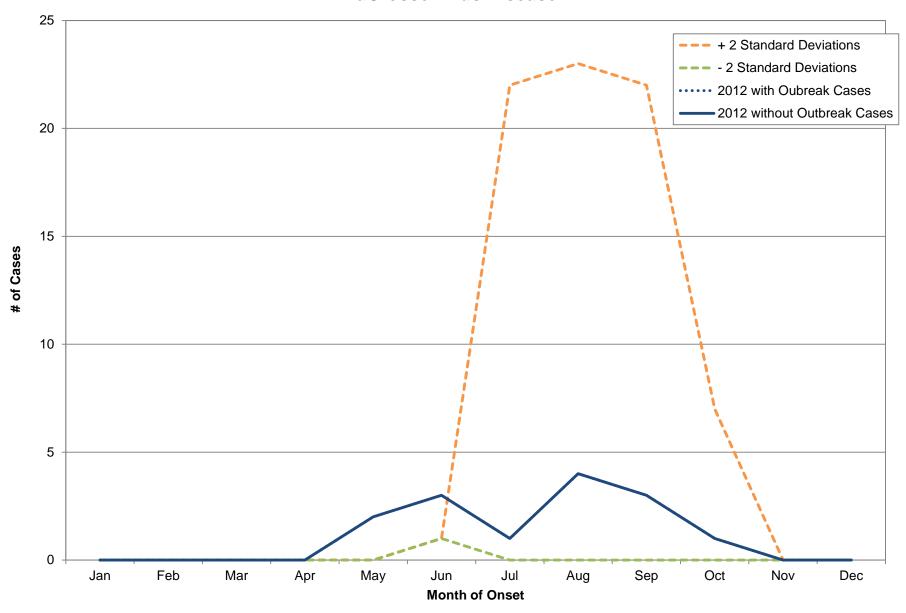
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Giardiasis



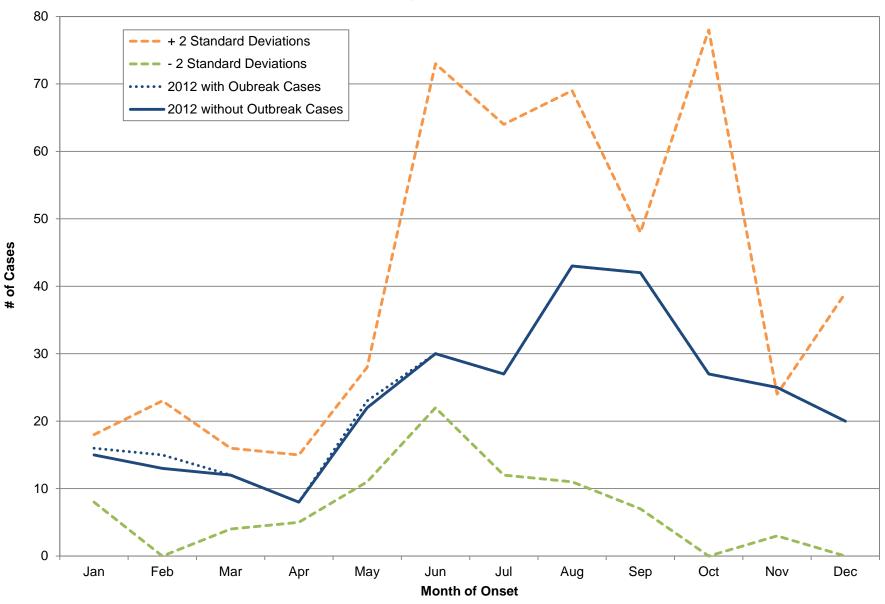
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Haemophilus influenzae, Invasive Disease



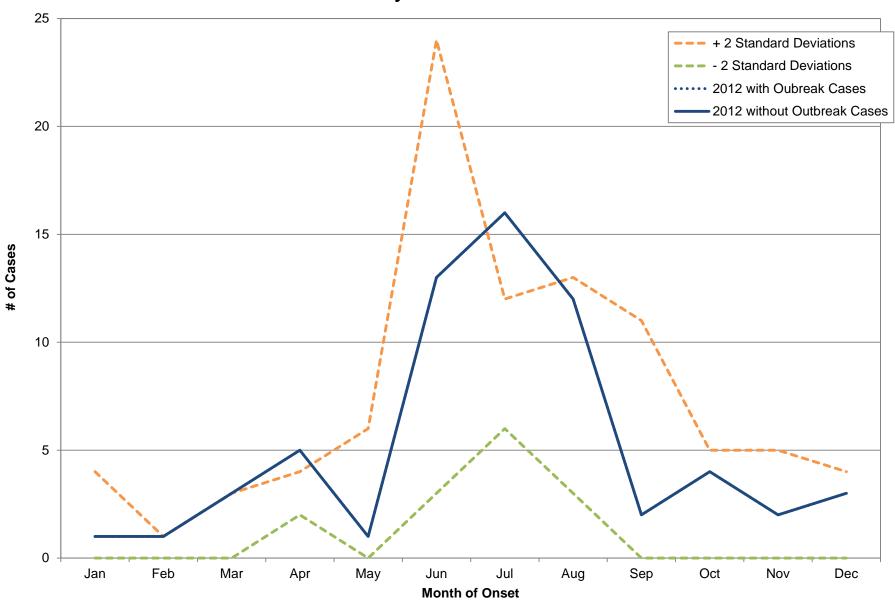
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 LaCrosse Virus Disease



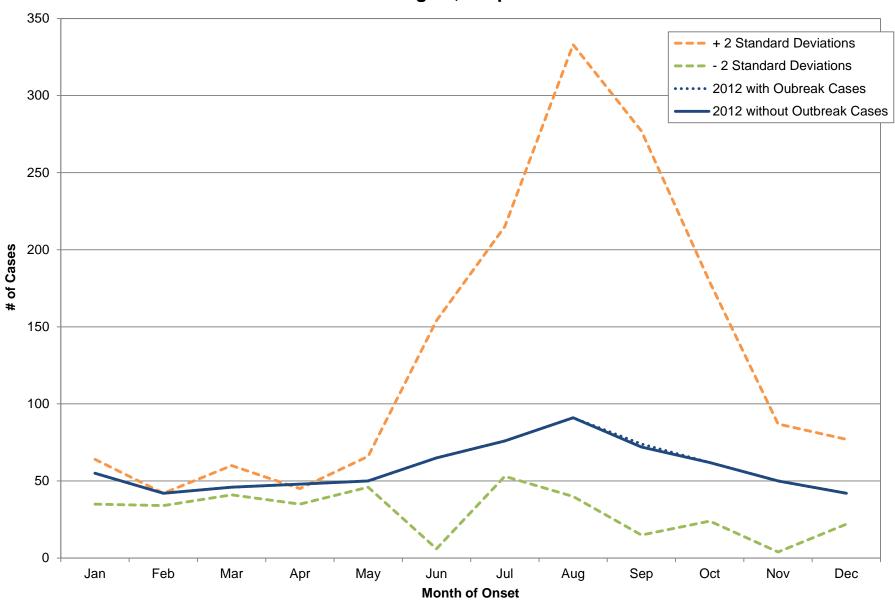
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Legionellosis



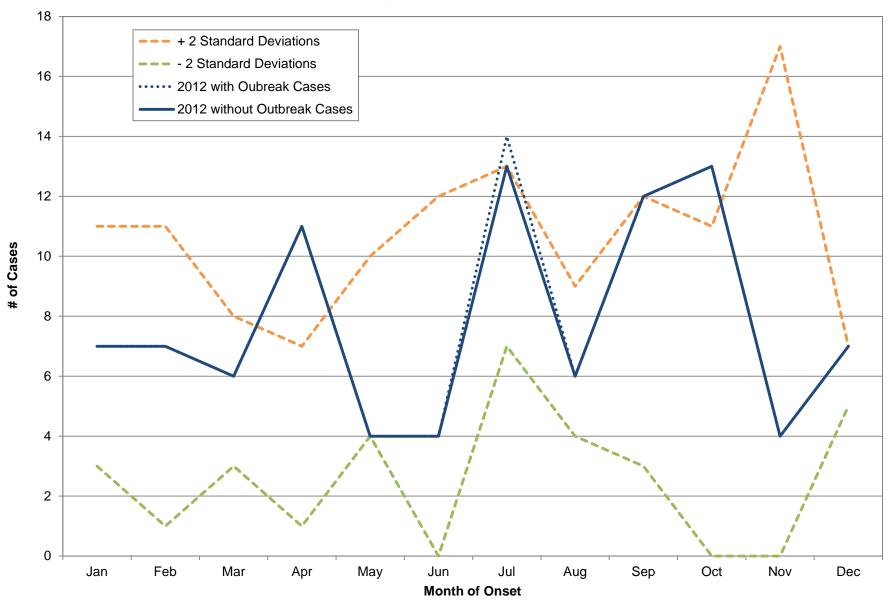
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Lyme Disease



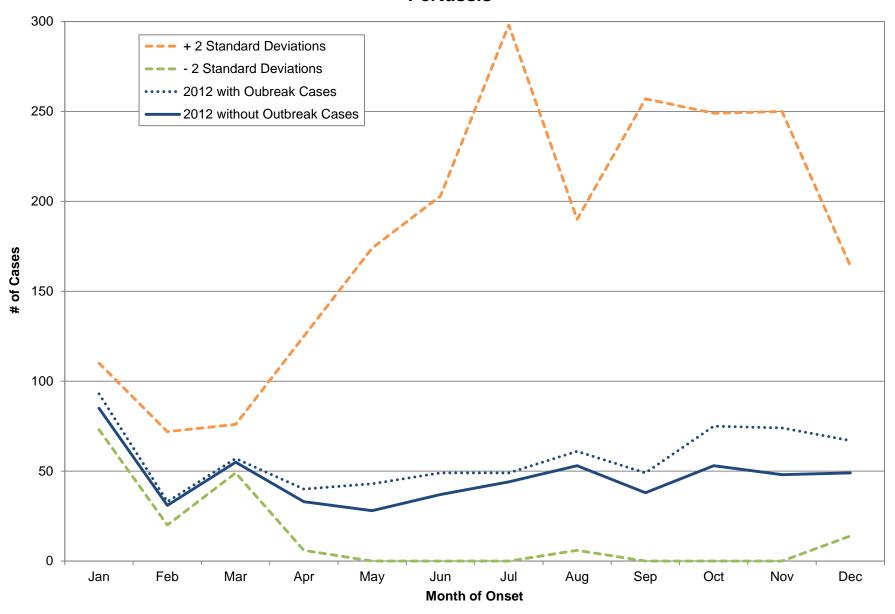
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Meningitis, Aseptic



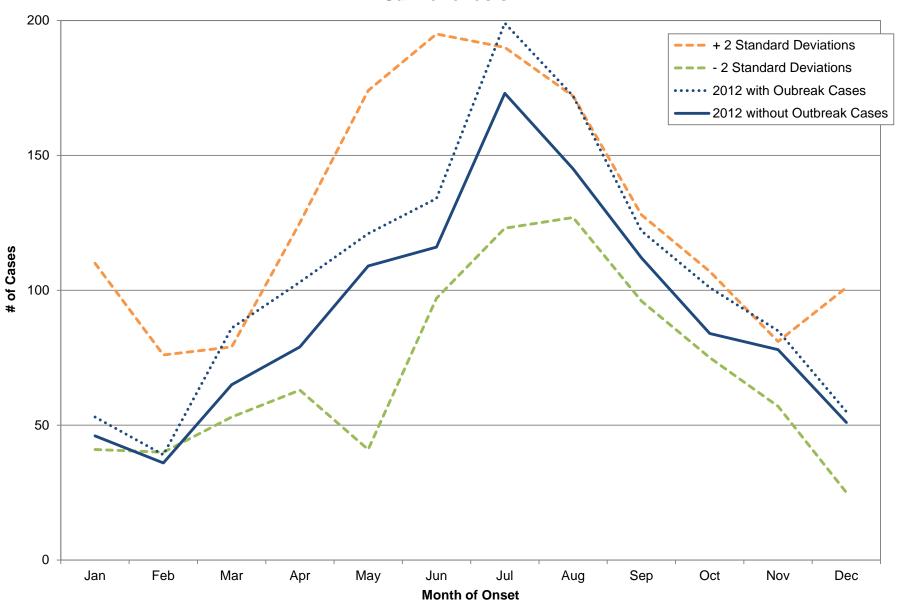
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Meningitis, Other Bacterial



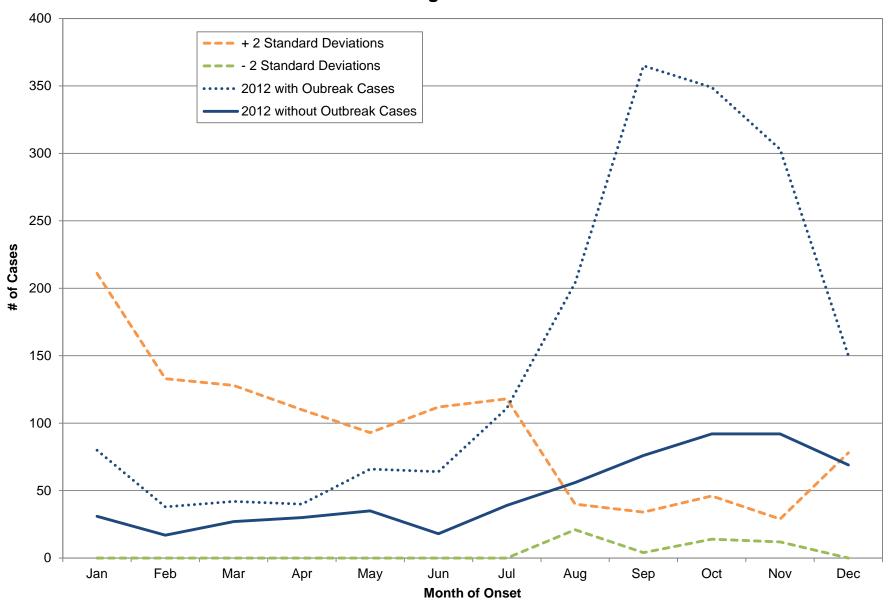
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Pertussis



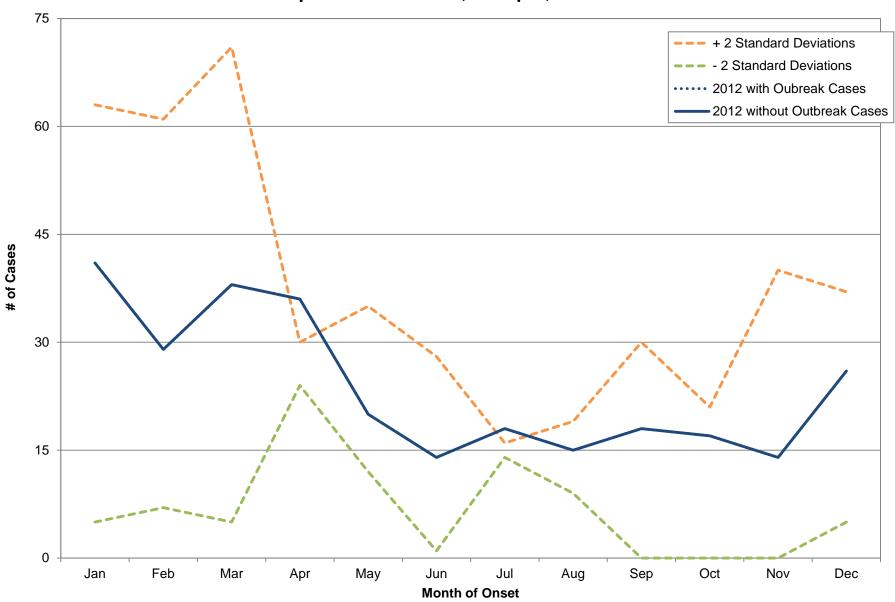
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Salmonellosis



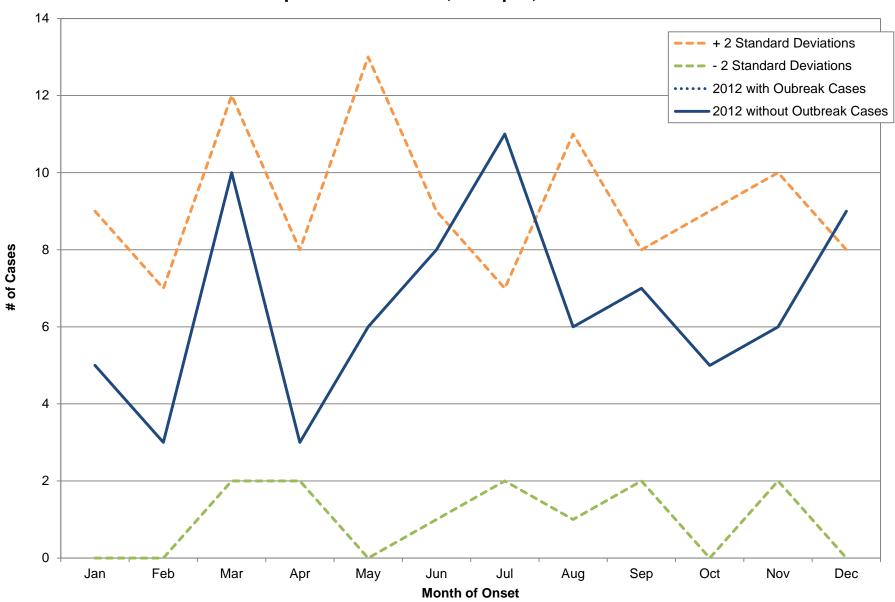
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Shigellosis



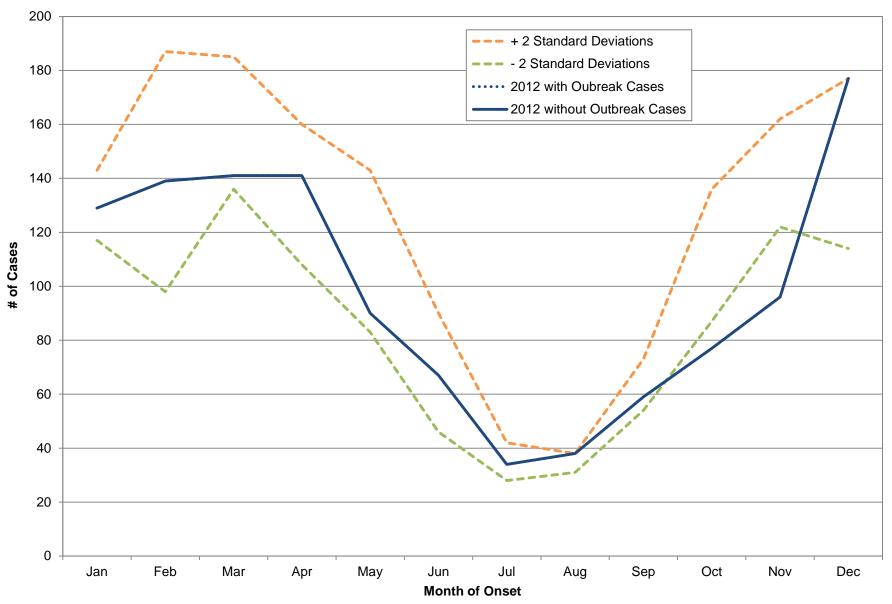
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Streptococcal Disease, Group A, Invasive



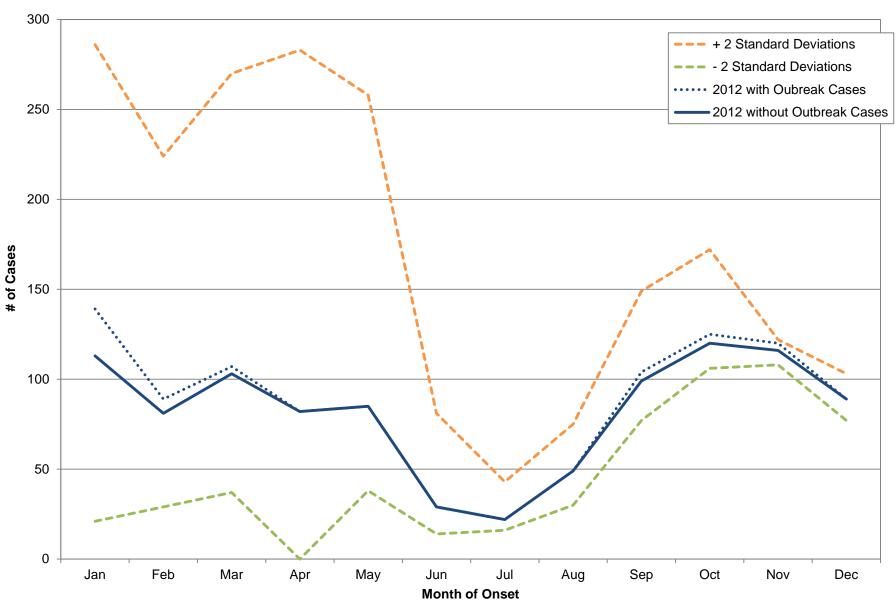
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Streptococcal Disease, Group B, in Newborn



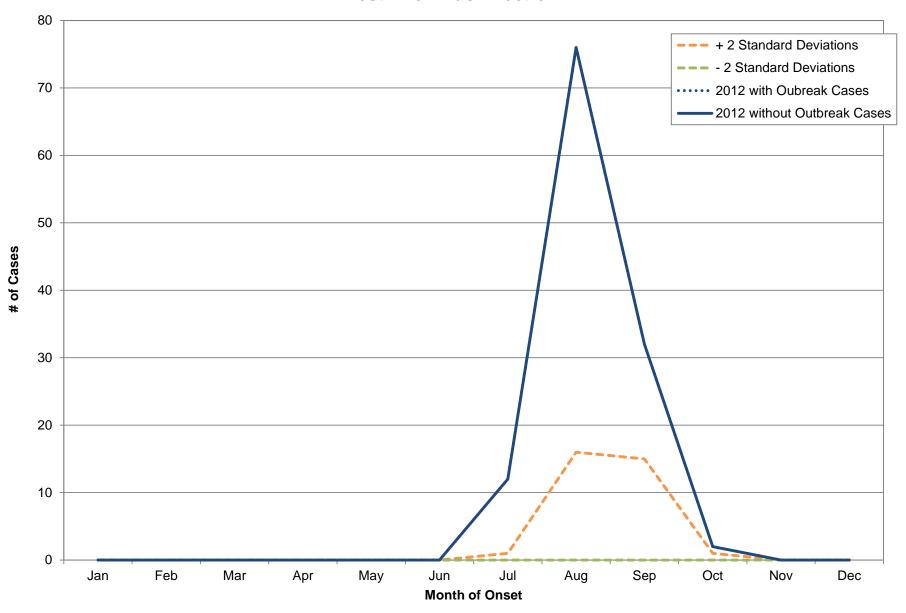
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Streptococcus pneumoniae, Invasive Disease



INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 Varicella



INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2012 West Nile Virus Infection



PROFILES OF SELECTED NOTIFIABLE DISEASES

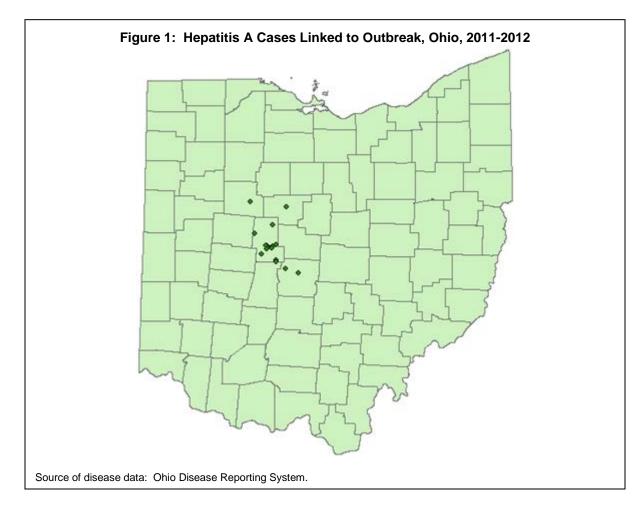
HEPATITIS A

Number of cases in 2012:	45	Rate in 2012:	0.4
Number of cases in 2011:	34	Rate in 2011:	0.3

 $^{^{\}star}$ Rates are based on the U.S. Census 2011 and 2012 estimates and are per 100,000 population.

Hepatitis A is caused by an infection with the hepatitis A virus (HAV). Hepatitis A has an incubation period of approximately 28 days (range 15-50 days). HAV replicates in the liver and is shed in concentrations in the feces from 2 weeks before to 1 week after the onset of clinical illness. HAV infection produces a self-limited disease that does not result in chronic infection or chronic liver disease.

From September 2012 through February 2013, 21 cases (4 suspect and 17 confirmed) of hepatitis A were identified as part of a multi-jurisdictional outbreak (Figure 1). Cases from multiple counties reported meeting in Union County, Ohio either in a parked car or at a residence to inject drugs or share needles.



The Centers for Disease Control and Prevention (CDC) were contacted for additional support in testing available serum samples from confirmed cases. Seven specimens were sent to CDC for testing; results can be seen in Table 1. All seven specimens shared the genotype IA1, four shared the related sequence SC325 and three shared a unique sequence among one another. The results suggest two clusters were involved in the outbreak: HAOH 2, 22 and 23 are related to each other and are considered a cluster while HAOH 1, 3, 4 and 21 are a separate cluster.

Table 1: Hepatitis A Specimen Genotyping Results

Patient ID	HAV RNA	Genotype	VP1-P2B Sequence	Related Sequence ID in Database	Analysis Comments
HAOH 1	Positive	IA1	HAOH 1	SC325	
НАОН 3	Positive	IA1	HAOH 1	SC325	Share VP1-P2B
HAOH 4	Positive	IA1	HAOH 1	SC325	sequence
HAOH 21	Positive	IA1	HAOH 1	SC235	
HAOH 2	Positive	IA1	HAOH 22	Unique	0, 7,04,000
HAOH 22	Positive	IA1	HAOH 22	Unique	Share VP1-P2B sequence
HAOH 23	Positive	IA1	HAOH 22	Unique	Soquerice

Source of data: Centers for Disease Control and Prevention.

Several of the cases involved in this outbreak were also co-infected with hepatitis C. Due to the transient nature of intravenous drug users, contacting the cases for follow-up proved very difficult since many did not have voicemail set up on their cellphones, had disconnected cellphones or had moved without leaving forwarding addresses. For the few cases investigators were able to interview, hepatitis B vaccination was discussed if the case was positive for hepatitis A and C. Additionally, hepatitis A vaccination for contacts was encouraged.

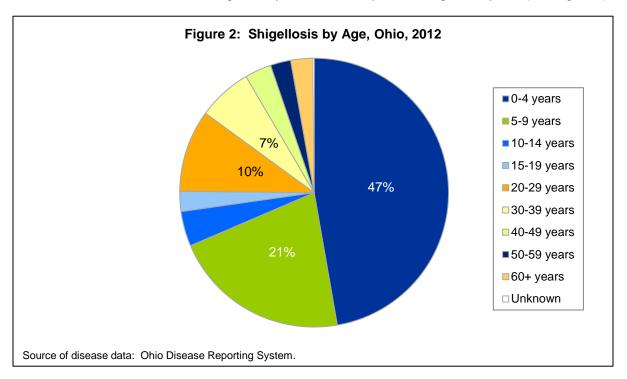
SHIGELLOSIS

Number of cases in 2012:	1,812	Rate in 2012:	15.7
Number of cases in 2011:	338	Rate in 2011:	2.9

^{*} Rates are based on the 2011 and 2012 U.S. Census estimates and are per 100,000 population.

Shigellosis is an infectious disease caused by a group of bacteria known as *Shigella*.² There are four species of *Shigella*: *Shigella boydii*, *Shigella dysenteriae*, *Shigella flexneri* and *Shigella sonnei*. *Shigella* is spread directly via person-to-person contact by the fecal-oral route. Eating contaminated foods and/or swallowing contaminated water are common vehicles for *Shigella* infection.

In 2012, Central Ohio experienced a community outbreak of *Shigella*. The greatest proportion of cases in 2012 occurred in children aged 0-4 years followed by children aged 5-9 years (see Figure 2).



Outbreaks that began in day care centers quickly spread throughout the Central Ohio community; 1,050 cases were linked to this outbreak in Central Ohio. This accounted for 58 percent of all shigellosis cases reported in 2012. Throughout the state, a total of 1,230 cases of *Shigella* were linked to outbreaks in 2012.

Table 2 demonstrates the proportion of shigellosis cases linked to a known outbreak. In 2011, 28 percent of cases were linked to a known outbreak. In 2012, the number of cases linked to a known outbreak increased to 68 percent. Outbreak-associated cases occurred in all age groups during 2012, especially in children under 9 years of age.

Table 2: Shigellosis by Age and Outbreak Status, Ohio, 2011-2012

		2011		2012				
Age Group		oreak- ciated	Sporadic		Outbreak- Associated		Sporadic	
0-9 years	84	39%	130	61%	896	72%	346	28%
10-19 years	2	12%	15	88%	70	58%	50	42%
20-29 years	1	3%	37	97%	127	71%	52	29%
30-39 years	2	10%	19	90%	74	63%	44	37%
40-49 years	3	20%	12	80%	27	47%	31	53%
50-59 years	3	15%	17	85%	20	45%	24	55%
60+ years	0	0%	13	100%	13	27%	35	73%
Unknown	0	0%	0	0%	3	100%	0	0%
Total	95	28%	243	72%	1,230	68%	582	32%

Source of disease data: Ohio Disease Reporting System.

STREPTOCOCCAL DISEASE, GROUP B, IN NEWBORN

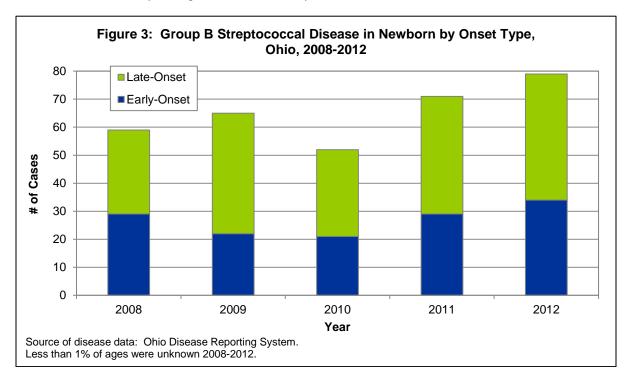
Number of cases in 2012:	79	Rate in 2012:	0.6
Number of cases in 2011:	71	Rate in 2011:	0.6

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

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

Guidelines to use intrapartum antimicrobial prophylaxis for women at increased risk of transmitting group B streptococci to their newborns were first issued in 1996. However, it wasn't recommended to screen all pregnant women for group B streptococcal colonization at 35-37 weeks' gestation until 2002. Since these recommendations, the incidence of early-onset group B streptococcal disease in newborns has greatly decreased nationwide.

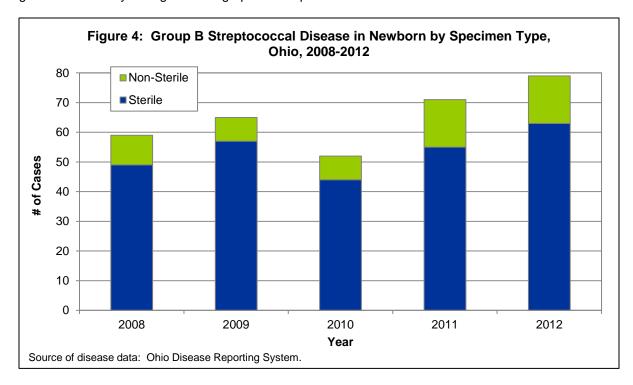
Figure 3 demonstrates the burden of group B streptococcal infections in Ohio newborns over the past five years by onset type. Over the past five years, higher incidence of infection was observed among infants older than 6 days of age than infants 6 days old or less.



Early-onset infections of group B *Streptococcus* 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 4 demonstrates the number of cases of early-onset and late-onset infections occurring in sterile sites (e.g., blood or cerebrospinal fluid) and non-sterile sites. Over the last five years, 41% of

cases occurred in infants less than 7 days old. Group B *Streptococcus* was isolated from a normally sterile site in 85% of early-onset cases reported over the last five years. Infections in infants less than 7 days old usually occur during the intrapartum period or during delivery. Infections in infants greater than 6 days of age is through person to person contact.



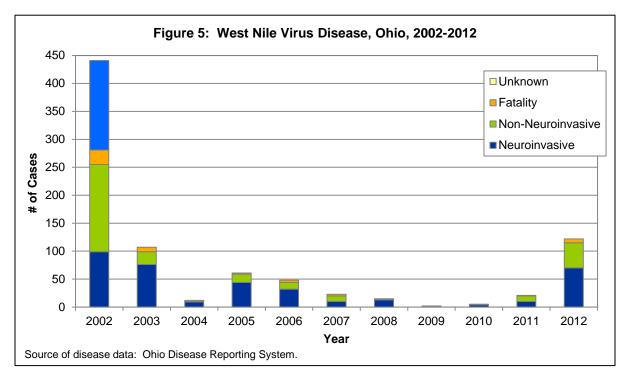
WEST NILE VIRUS INFECTION

Number of cases in 2012:	122	Rate in 2012:	1.1
Number of cases in 2011:	21	Rate in 2011:	0.2

^{*} Rates are based on the 2011 and 2012 U.S. Census estimates and are per 100,000 population.

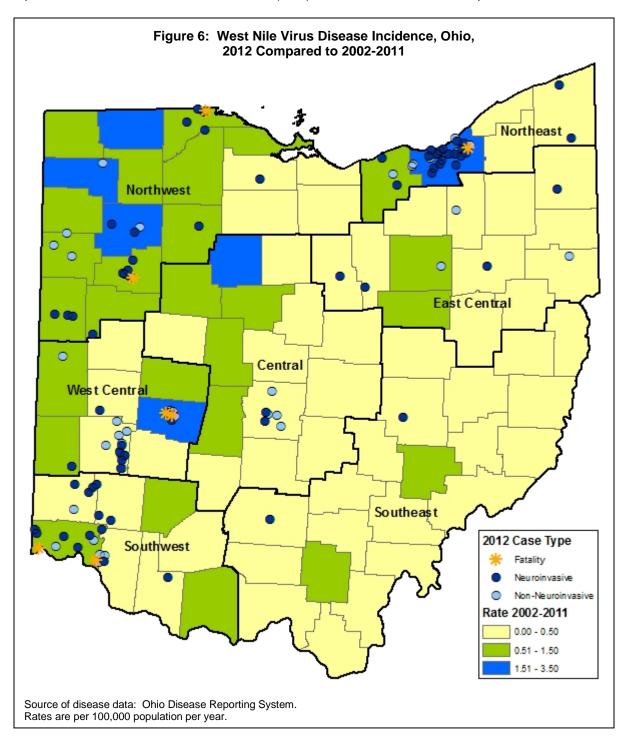
West Nile virus disease is a viral illness transmitted through the bite of infected mosquitoes, particularly *Culex pipiens*. Although rare, West Nile virus can also be transmitted through transfusion or transplantation with infected blood, tissue or organ products. There are two clinical syndromes associated with West Nile virus disease: non-neuroinvasive disease and neuroinvasive disease. Symptoms of non-neuroinvasive disease include a fever, headache, and sometimes nausea, vomiting, a skin rash, and body aches. Neuroinvasive disease is a more serious illness and is characterized by a fever and stiff neck and can include other meningeal symptoms, altered consciousness (disorientation, lethargy, stupor, coma) and signs of neurologic dysfunction (tremors, rigidity, convulsions). Cases occur during the late summer and early fall in Ohio, corresponding to mosquito activity and amplification of the virus in birds.

West Nile virus was introduced into the United States in 1999, and Ohio's first cases were identified in 2002. Since its introduction, the incidence of West Nile virus disease in Ohio dramatically decreased 2003-2004, increased in 2005, and then continued to decrease until 2011-2012 (Figure 5). There was a slight increase in 2011 to 21 cases followed by a significant, nearly six-fold increase in 2012 to 122 cases, the second highest recorded number of cases in a year. During 2002-2012, more cases were of neuroinvasive disease when compared to non-neuroinvasive disease (49 percent vs. 32 percent), and fatalities ranged from 0 to 17 percent of cases. More than 50 deaths have been reported in Ohio West Nile virus cases 2002-2012.



Like 2002-2011, the majority of West Nile virus disease incidence in 2012 occurred in the northern and western parts of Ohio (Figure 6). Nearly 90 percent of cases reported in 2012 occurred in the

Northeast, Northwest, West Central, and Southwest regions of Ohio. More than half of the cases reported in 2012 had neuroinvasive disease (63%), and there were 7 deaths reported.



OUTBREAK SUMMARIES

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

In 2012, the Bureau of Infectious Diseases (ODH) assisted local health jurisdictions in Ohio in the investigation of 427 outbreaks. These outbreaks were detected in 64 of 88 counties throughout the state. The number of Ohioans known to be ill from these outbreaks was 10,496 (median 10, range 1-1,255). The outbreaks were classified as: community (55), foodborne (85), healthcare-associated (94), institutional (170), waterborne (5) and zoonotic (18). Causative agents identified during the outbreak investigations included: Bordetella pertussis, Campylobacter jejuni, chlorine, Clostridium difficile, Clostridium perfringens, coxsackievirus, Cryptosporidium spp., Enterobius vermicularis, vancomycin-resistant Enterococcus, enterovirus, Escherichia coli O26, Escherichia coli O45, Escherichia coli O111, Escherichia coli O157:H7, Exserohilum rostratum, hepatitis A virus, herpesvirus 2, influenza A virus, influenza H3N2v virus, Legionella pneumophila, Listeria monocytogenes, Mycoplasma pneumoniae, norovirus genotypes GI and GII, parvovirus B19, Pediculus capitis (head louse), respiratory syncytial virus, Salmonella (various serotypes), Sarcoptes scabiei (scabies mite), Serratia marcescens, Shigella sonnei, methicillin-resistant Staphylococcus aureus (MRSA), Streptococcus pyogenes, varicella-zoster virus and Vibrio parahaemolyticus.

This is the third 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 2012 outbreaks are discussed below.

COMMUNITY OUTBREAKS

In 2012, 55 community outbreaks were reported from a variety of settings. Thirty-five of these outbreaks were confirmed, with the causative agent as follows: *B. pertussis* (12), enterovirus (1), *E. coli* O111 (1), hepatitis A virus (1), influenza A virus (1), norovirus genotype GI (1), P. capitis (1), S. sonnei (5) and methicillin-resistant S. aureus (1).

The confirmed community outbreaks of 2012 are listed in Table 1.

Month of Onset	Causative Agent	County	# III
November 2011	Bordetella pertussis	Franklin	2
December 2011	Shigella sonnei	Cuyahoga	50
December 2011	Bordetella pertussis	Ashtabula	8
January 2012	Norovirus GII	Delaware	15
January 2012	Norovirus GII.4 New Orleans	Franklin	3
February 2012	Norovirus GII.1	Montgomery	18
February 2012	Methicillin-resistant Staphylococcus aureus	Huron	3

Table 1: Confirmed Community Outbreaks, Ohio, 2012

Month of Onset	Causative Agent	County	# III
February 2012	Norovirus GII.6C	Lucas	2
February 2012	Bordetella pertussis	Franklin	2
March 2012	Norovirus GII.4 New Orleans	Franklin	2
March 2012	Norovirus GII.4 New Orleans	Franklin	6
April 2012	Influenza A virus	Franklin	36
April 2012	Bordetella pertussis	Gallia	5
May 2012	Shigella sonnei	Franklin	1,255
May 2012	Bordetella pertussis	Licking	6
June 2012	Pediculus capitis	Stark	14
June 2012	Bordetella pertussis	Warren	4
June 2012	Bordetella pertussis	Hamilton	2
July 2012	Bordetella pertussis	Franklin	7
July 2012	Bordetella pertussis	Madison	3
July 2012	Bordetella pertussis	Franklin	4
July 2012	Bordetella pertussis	Meigs	4
July 2012	Bordetella pertussis	Franklin	2
August 2012	Escherichia coli O111	Franklin	4
August 2012	Norovirus GII.6B	Stark	8
August 2012	Shigella sonnei	Clark	5
September 2012	Hepatitis A virus	Multicounty	21
September 2012	Enterovirus	Clinton	2
September 2012	Norovirus GI.6A	Lucas	6
October 2012	Shigella sonnei	Clark	4
November 2012	Shigella sonnei	Clark	2
November 2012	Norovirus GII.2	Delaware	4
December 2012	Norovirus GII.1	Lucas	2
December 2012	Norovirus GII.4 Sydney	Cuyahoga	49
December 2012	Norovirus GII.6B	Summit	9

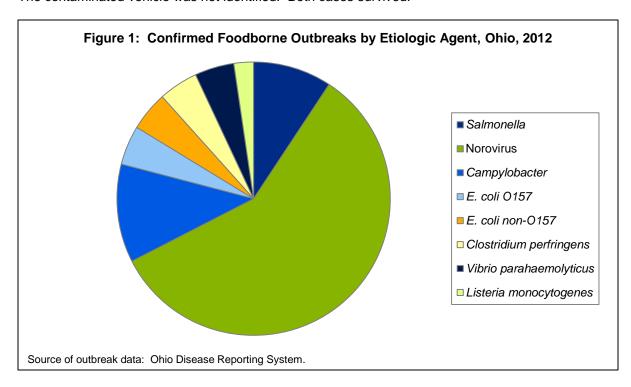
Refer to the shigellosis and hepatitis A profiles, respectively, for the details on the large Franklin County shigellosis outbreak and the multicounty hepatitis A outbreak listed in Table 1.

FOODBORNE OUTBREAKS

In 2012, 43 of the 85 foodborne outbreaks reported in Ohio were confirmed. These 85 outbreaks met the general <u>definition of a foodborne outbreak</u>: "An incident in which two or more persons experience a similar illness after ingestion of a common food, and epidemiologic analysis implicates the food as the source of the illness." The 43 confirmed outbreaks also met the agent-specific <u>criteria for confirmation</u> of outbreaks. As shown in Figure 1, for these 43 foodborne outbreaks, the causative agent was distributed as follows: *Campylobacter* spp. (5), *Clostridium perfringens* (2), *E. coli* O26 (1), *E. coli* O45 (1), *E. coli* O157:H7 (2), *Listeria monocytogenes* (1), Norovirus GI (4), Norovirus GII (21), *Salmonella* spp. (4) and *Vibrio parahaemolyticus* (2).

Two individual cases of foodborne botulism were reported in 2012 in Ohio. A Franklin County adult had onset of confirmed botulism due to type A toxin in January 2012 after eating home-canned green

beans. A Greene County adult had onset of confirmed botulism due to type A toxin in April 2012. The contaminated vehicle was not identified. Both cases survived.



The 43 confirmed foodborne outbreaks are detailed in Table 2.

Month of Onset	Causative Agent	County	# III	Suspected Food Vehicle	Event / Setting
December 2011	Escherichia coli O26	Multistate	3	Clover sprouts	Commercial product
January 2012	Escherichia coli O45	Multistate	1	Pepperoni pizza	Commercial product
February 2012	Norovirus GII.4 New Orleans	Licking	43	Unknown	Banquet
February 2012	Norovirus GII.4 New Orleans	Montgomery	10	Unknown	Banquet
February 2012	Norovirus GII.4 New Orleans	Franklin	29	Unknown	Restaurant
February 2012	Norovirus GII.4 New Orleans	Hamilton	29	Ice	Retreat
March 2012	Norovirus GII.1	Franklin	15	Unknown	Catered meal at work
March 2012	Norovirus GII.4 New Orleans	Franklin	3	Unknown	Restaurant
March 2012	Norovirus GII.4 New Orleans	Huron	5	Salad, sandwich	Restaurant
April 2012	Clostridium perfringens	Cuyahoga	20	Chicken marsala	Catered meal at school
April 2012	Norovirus GI.7	Hamilton	29	Cheese, crackers	Catered meal on riverboat
April 2012	Norovirus GII.1	Clark	5	Pizza	Takeout

Month of Onset	Causative Agent	County	# 111	Suspected Food Vehicle	Event / Setting
April 2012	Norovirus GII.4 New Orleans	Delaware	2	Unknown	Takeout food at home
April 2012	Norovirus GII.6A	Trumbull	6	Salad	Takeout food at work
May 2012	Clostridium perfringens	Cuyahoga	70	Beef brisket, au jus	Church dinner
May 2012	Listeria monocytogenes	Multistate	1	Ricotta salata	Commercial product
May 2012	Campylobacter jejuni	Holmes	15	Unknown	Party at private home
May 2012	Norovirus GII.4 New Orleans	Crawford	6	Unknown	Restaurant
May 2012	Norovirus GII.6A	Butler	9	Unknown	Restaurant
June 2012	Norovirus GII.1	Mahoning	14	Unknown	Party at church
June 2012	Norovirus GI.7	Franklin	18	Unknown	Picnic
July 2012	Campylobacter jejuni	Multicounty	51	Unknown	Catered meal at church
July 2012	Campylobacter jejuni	Cuyahoga	21	Unknown	Catered party
July 2012	Campylobacter jejuni	Cuyahoga	24	Unknown	Catered party
July 2012	Salmonella Typhimurium	Multistate	5	Cantaloupe	Commercial product
July 2012	Salmonella Newport	Multistate	2	Cantaloupe	Commercial product
July 2012	Vibrio parahaemolyticus	Multistate	2	Oyster	Commercial product
July 2012	Vibrio parahaemolyticus	Multistate	1	Oyster	Commercial product
July 2012	Escherichia coli O157:H7	Montgomery	79	Pig roast	Picnic
July 2012	Norovirus GI.6A	Huron	3	Unknown	Restaurant
August 2012	Campylobacter jejuni	Auglaize	2	Raw milk	Private home
September 2012	Norovirus GII.1	Wood	39	Unknown	Banquet
September 2012	Norovirus GII.1	Hancock	4	Unknown	Catered meal at work
October 2012	Salmonella Braenderup	Multistate	4	Mango	Commercial product
October 2012	Norovirus GII.4 Sydney	Franklin	47	Unknown	School trip
October 2012	Salmonella Typhimurium	Ashland	2	Hot dog	Street fair
October 2012	Norovirus GII.6C	Hamilton	14	Sub sandwich	Takeout food at work
November 2012	Norovirus GII.4 Sydney	Hamilton	20	Unknown	Banquet
November 2012	Norovirus GII.4 Sydney	Clark	2	Unknown	Restaurant
November 2012	Norovirus GI.6A	Summit	5	Unknown	Takeout food at work
December 2012	Norovirus GII.4 Sydney	Franklin	50	Cut fruit	Banquet
December 2012	Norovirus GII.4 Sydney	Franklin	29	Unknown	Banquet
December 2012	Escherichia coli O157:H7	Hamilton	7	Salad	Restaurant

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

<u>Multistate Outbreak of Salmonella Typhimurium and Salmonella Newport Infections Linked to Cantaloupe</u>

Multistate Outbreak of Salmonella Braenderup Infections Associated with Mangoes

<u>Multistate Outbreak of Shiga Toxin-Producing Escherichia coli O26 Infections Linked to Raw</u> Clover Sprouts at Jimmy John's Restaurants

<u>Multistate Outbreak of Listeriosis Linked to Imported Frescolina Marte Brand Ricotta Salata Cheese</u>

HEALTHCARE-ASSOCIATED OUTBREAKS

There were 94 healthcare-associated outbreaks reported in 2012, 59 of which were confirmed as shown in Table 3.

Table 3: Confirmed Healthcare-Associated Outbreaks, Ohio, 2012

Month of Onset	Causative Agent	# 111	Setting
May 2011	Campylobacter spp.	3	Long-term care facility
December 2011	Norovirus GII.4 New Orleans	49	Long-term care facility
January 2012	Methicillin-resistant Staphylococcus aureus	9	Hospital
January 2012	Sarcoptes scabiei	2	Long-term care facility
January 2012	Norovirus GII.4 New Orleans	40	Long-term care facility
January 2012	Clostridium difficile	4	Long-term care facility
January 2012	Norovirus	58	Long-term care facility
January 2012	Norovirus	45	Rehabilitation facility
January 2012	Norovirus GII.4 New Orleans	27	Long-term care facility
January 2012	Methicillin-resistant Staphylococcus aureus	5	Long-term care facility
January 2012	Norovirus GII.4 New Orleans	54	Hospital
January 2012	Serratia marcescens	3	Hospital
January 2012	Norovirus GII.4 New Orleans	93	Long-term care facility
January 2012	Norovirus GII.4 New Orleans	41	Long-term care facility
January 2012	Norovirus GII.4 New Orleans	17	Long-term care facility
January 2012	Norovirus GII.6C	117	Long-term care facility
January 2012	Norovirus	84	Long-term care facility
February 2012	Norovirus	13	Long-term care facility
February 2012	Clostridium difficile	5	Long-term care facility
February 2012	Norovirus GII.4 New Orleans	29	Long-term care facility
February 2012	Norovirus GII.4 New Orleans	170	Long-term care facility
February 2012	Norovirus GII.4 New Orleans	23	Long-term care facility
February 2012	Norovirus GII.4 New Orleans	51	Long-term care facility
February 2012	Norovirus GII.4 New Orleans	19	Long-term care facility
February 2012	Norovirus GII.4 New Orleans	58	Rehabilitation facility
February 2012	Norovirus GII.4 New Orleans	41	Long-term care facility
February 2012	Norovirus	69	Hospital
February 2012	Influenza A virus	6	Long-term care facility

Month of Onset	Causative Agent	# III	Setting
March 2012	Norovirus GII.4 New Orleans	86	Long-term care facility
March 2012	Norovirus GII.6A	25	Hospital
March 2012	Norovirus GII.4 New Orleans	16	Rehabilitation facility
March 2012	Influenza A virus	5	Long-term care facility
April 2012	Group A Streptococcus	3	Long-term care facility
April 2012	Norovirus GII.4 New Orleans	22	Hospital
April 2012	Norovirus	13	Hospital
April 2012	Norovirus	43	Long-term care facility
April 2012	Respiratory syncytial virus	3	Hospital
April 2012	Influenza A virus	30	Long-term care facility
May 2012	Norovirus GII.4 New Orleans	72	Long-term care facility
May 2012	Sarcoptes scabiei	5	Long-term care facility
May 2012	Herpesvirus 2	2	Long-term care facility
May 2012	Sarcoptes scabiei	15	Long-term care facility
June 2012	Norovirus GI.6A	17	Long-term care facility
July 2012	Sarcoptes scabiei	4	Long-term care facility
July 2012	Vancomycin-resistant Enterococcus	16	Hospital
September 2012	Sarcoptes scabiei	11	Long-term care facility
September 2012	Exserohilum rostratum	20	Pain clinic [†]
November 2012	Norovirus GII.13	19	Long-term care facility
November 2012	Norovirus GII.6A	72	Long-term care facility
November 2012	Norovirus GII.6A	60	Long-term care facility
November 2012	Norovirus	46	Long-term care facility
November 2012	Influenza A virus	11	Long-term care facility
December 2012	Norovirus	82	Long-term care facility
December 2012	Norovirus GI.3B	10	Long-term care facility
December 2012	Norovirus GII.6A	73	Long-term care facility
December 2012	Norovirus GI.6A	54	Long-term care facility
December 2012	Norovirus GII.1	5	Long-term care facility
December 2012	Influenza A virus	4	Long-term care facility
December 2012	Influenza A virus	13	Long-term care facility

INSTITUTIONAL OUTBREAKS

In 2012, 170 institutional outbreaks were reported. Of these, 115 were confirmed. See Table 4 below for the confirmed institutional outbreaks.

[†] For further information about the multistate outbreak in which Ohio reported 20 cases of fungal infection, see <u>Multistate Fungal Meningitis Outbreak Investigation</u>.

Table 4: Confirmed Institutional Outbreaks, Ohio, 2012

Month of Onset	Causative Agent	County	# 111	Setting
October 2011	Mycoplasma pneumoniae	Franklin	8	School
November 2011	Pediculus capitis	Van Wert	26	School
December 2011	Shigella sonnei	Clermont	5	Day care center
December 2011	Pediculus capitis	Delaware	25	School
December 2011	Shigella sonnei	Hamilton	8	Day care center
December 2011	Shigella sonnei	Clermont	9	Day care center
December 2011	Bordetella pertussis	Ashland	2	Day care center
December 2011	Bordetella pertussis	Franklin	2	School
December 2011	Bordetella pertussis	Franklin	3	School
December 2011	Bordetella pertussis	Franklin	3	School
January 2012	Pediculus capitis	Stark	6	School
January 2012	Norovirus GII.4 New Orleans	Richland	8	Assisted living
January 2012	Shigella sonnei	Summit	5	Early learning center
January 2012	Norovirus GII.4 New Orleans	Franklin	28	Assisted living
January 2012	Shigella sonnei	Butler	2	Day care center
January 2012	Norovirus GII.4 New Orleans	Madison	30	Assisted living
January 2012	Impetigo	Darke	4	Day care center
January 2012	Shigella sonnei	Butler	3	Day care center
January 2012	Norovirus GII.4 New Orleans	Hamilton	66	Assisted living
January 2012	Pediculus capitis	Van Wert	14	School
January 2012	Coxsackievirus	Franklin	34	Day care center
January 2012	Salmonella Thompson	Franklin	7	Military base
January 2012	Streptococcus pyogenes	Franklin	19	School
January 2012	Norovirus	Auglaize	38	Assisted living
January 2012	Shigella sonnei	Hamilton	9	Day care center
January 2012	Bordetella pertussis	Delaware	2	School
January 2012	Bordetella pertussis	Franklin	2	School
February 2012	Norovirus GII.3	Cuyahoga	46	Day care center
February 2012	Norovirus GII.4 New Orleans	Franklin	8	Day care center
February 2012	Norovirus GII.4 New Orleans	Licking	44	School
February 2012	Norovirus GII.1	Summit	162	Assisted living
February 2012	Parvovirus B19	Putnam	18	School
February 2012	Norovirus GII.4 New Orleans	Franklin	67	Retirement community
February 2012	Norovirus GII.4 New Orleans	Butler	40	Assisted living
February 2012	Coxsackie virus	Franklin	6	Day care center
February 2012	Norovirus GII.4 New Orleans	Wood	18	Assisted living
February 2012	Bordetella pertussis	Franklin	2	School
February 2012	Varicella-Zoster virus	Butler	8	School
February 2012	Varicella-Zoster virus	Cuyahoga	6	School
February 2012	Bordetella pertussis	Franklin	2	Day care center
February 2012	Bordetella pertussis	Franklin	2	School

Month of Onset	Causative Agent	County	# 111	Setting	
February 2012	Bordetella pertussis	Warren	3	School	
March 2012	Shigella sonnei	Hamilton	15	Day care center	
March 2012	Norovirus GII.1	Franklin	22	Workplace	
March 2012	Norovirus GII.4 New Orleans	Licking	12	School	
March 2012	Shigella sonnei	Hamilton	9	Day care center	
March 2012	Pediculus capitis	Delaware	15	School	
March 2012	Influenza A virus	Lucas	26	School	
March 2012	Varicella-Zoster virus	Franklin	5	School	
March 2012	Bordetella pertussis	Franklin	8	School	
March 2012	Bordetella pertussis	Franklin	3	School	
March 2012	Bordetella pertussis	Franklin	3	School	
April 2012	Norovirus GII.4 New Orleans	Summit	31	Assisted living	
April 2012	Norovirus GII.6A	Montgomery	606	School	
April 2012	Sarcoptes scabiei	Cuyahoga	3	MRDD facility	
April 2012	Sarcoptes scabiei	Scioto	4	Day care center	
April 2012	Shigella sonnei	Hamilton	9	Day care center	
April 2012	Coxsackievirus	Lucas	15	Day care center	
April 2012	Influenza A virus	Henry	25	School	
April 2012	Bordetella pertussis	Franklin	2	School	
April 2012	Bordetella pertussis	Franklin	2	School	
April 2012	Bordetella pertussis	Franklin	4	School	
April 2012	Bordetella pertussis	Franklin	2	School	
April 2012	Bordetella pertussis	Franklin	6	School	
May 2012	Coxsackievirus	Hamilton	3	Day care center	
May 2012	Shigella sonnei	Franklin	7	Day care center	
May 2012	Shigella sonnei	Hamilton	15	Day care center	
May 2012	Coxsackievirus	Franklin	15	Day care center	
May 2012	Shigella sonnei	Hamilton	2	Day care center	
May 2012	Coxsackievirus	Tuscarawas	10	Day care center	
May 2012	Influenza A virus	Summit	5	School	
May 2012	Bordetella pertussis	Lucas	3	School	
June 2012	Norovirus GI.6A	Franklin	125	Church	
June 2012	Coxsackievirus	Franklin	6	Day care center	
June 2012	Coxsackievirus	Madison	6	Day care center	
June 2012	Shigella sonnei	Greene	2	Day care center	
June 2012	Salmonella Bovis-morbificans	Franklin	10	Day care center	
June 2012	Enterobius vermicularis	Noble	10	Day care center	
June 2012	Norovirus GII.6B	Sandusky	21	Assisted living	
June 2012	Bordetella pertussis	Franklin	2	School	
June 2012	Bordetella pertussis	Hamilton	2	Day care center	
June 2012	Bordetella pertussis	Franklin	2	Day care center	
July 2012	Coxsackievirus	Van Wert	10	Day care center	
July 2012	Coxsackievirus	Cuyahoga	7	Day care center	
July 2012	Coxsackievirus	Hancock	4	Day care center	

Month of Onset	Causative Agent	County	# III	Setting
August 2012	Shigella sonnei	Butler	20	Day care cente
August 2012	Shigella sonnei	Clark	10	Day care cente
August 2012	Escherichia coli O157:H7	Franklin	7	School
August 2012	Shigella sonnei	Hamilton	4	Day care cente
August 2012	Methicillin-resistant Staphylococcus aureus	Gallia	6	School
August 2012	Bordetella pertussis	Hamilton	2	Day care cente
August 2012	Bordetella pertussis	Franklin	18	School
August 2012	Bordetella pertussis	Butler	2	School
September 2012	Pediculus capitis	Lucas	8	School
September 2012	Coxsackievirus	Hancock	3	School
September 2012	Varicella-Zoster virus	Marion	7	Correctional facility
October 2012	Pediculus capitis	Wood	4	School
October 2012	Shigella sonnei	Cuyahoga	6	Day care cente
October 2012	Pediculus capitis	Franklin	2	Day care cente
October 2012	Norovirus GII.5	Clermont	152	School
October 2012	Bordetella pertussis	Franklin	2	School
November 2012	Norovirus GII.4 Sydney	Franklin	12	Day care cente
November 2012	Norovirus GII.2	Franklin	17	Day care cente
November 2012	Pediculus capitis	Morrow	11	School
November 2012	Norovirus GII.1	Hancock	30	School
November 2012	Norovirus GII.2	Hamilton	44	School
November 2012	Norovirus GII.1	Franklin	24	Day care cente
November 2012	Norovirus GII.1	Franklin	10	School
November 2012	Methicillin-unknown Staphylococcus aureus	Richland	15	Sports team
November 2012	Influenza A virus	Butler	126	School
November 2012	Influenza A virus	Franklin	10	School
November 2012	Bordetella pertussis	Hamilton	4	School
November 2012	Varicella-Zoster virus	Delaware	7	School
December 2012	Norovirus GII.4 Sydney	Cuyahoga	19	Shelter
December 2012	Influenza A virus	Summit	93	School

WATERBORNE OUTBREAKS

In 2012, 5 waterborne outbreaks were reported. These outbreaks are detailed in Table 5.

Table 5: Confirmed and Probable Waterborne Outbreaks, Ohio, 2012

Month of Onset	Causative Agent	County	# 111	Setting
December 2011	Legionella pneumophila	Mahoning	2	Fitness center
February 2012	Legionella pneumophila	Hamilton	8	Long-term care facility
April 2012	Folliculitis	Washington	40	Hotel spa
June 2012	Chlorine	Jackson	16	Community pool
July 2012	Cryptosporidium spp.	Geauga	14	Water park

ZOONOTIC OUTBREAKS

In 2012, 18 zoonotic outbreaks were reported, as seen in Table 6. In the summer of 2012, there were 11 confirmed outbreaks of Influenza A (H3N2) variant (H3N2v) between the months of July and September. The outbreaks occurred almost exclusively among those who attended agricultural fairs or had direct or indirect exposure to swine. One hundred seven confirmed cases of H3N2v from 25 Ohio counties were reported to CDC. There were 11 H3N2v-associated hospitalizations in Ohio resulting from these outbreaks. One H3N2v-associated death was reported from an individual with several underlying medical conditions. Limited human-human transmission was seen with no sustained or community transmission identified.

Table 6: Confirmed and Probable Zoonotic Outbreaks, Ohio, 2012

Month of Onset	Causative Agent	County	# 111	Type of Animal
January 2012	Campylobacter spp.	Lorain	3	Puppies at shelter
February 2012	Cryptosporidium spp.	Hancock	6	Calves at university veterinary program
March 2012	Salmonella Newport, Infantis, Lille	Multistate	42	Baby poultry
March 2012	Salmonella Infantis	Multistate	3	Dogs, dog food
May 2012	Campylobacter spp.	Stark	28	Poultry from processing plant
June 2012	Salmonella Typhimurium	Multistate	6	Pet hedgehog
July 2012	Salmonella Braenderup	Multistate	2	Live poultry
July 2012	Influenza H3N2v	Butler	10	Swine at agricultural fair
July 2012	Influenza H3N2v	Clark	3	Swine at agricultural fair
July 2012	Influenza H3N2v	Franklin	3	Swine at agricultural fair
August 2012	Influenza H3N2v	Medina	12	Swine at agricultural fair
August 2012	Influenza H3N2v	Gallia	28	Swine at agricultural fair
August 2012	Influenza H3N2v	Greene	10	Swine at agricultural fair
August 2012	Influenza H3N2v	Champaign	13	Swine at agricultural fair
August 2012	Influenza H3N2v	Licking	5	Swine at agricultural fair

Month of Onset	Causative Agent	County	# 111	Type of Animal
August 2012	Influenza H3N2v	Henry	22	Swine at agricultural fair
August 2012	Influenza H3N2v	Huron	25	Swine at agricultural fair
September 2012	Influenza H3N2v	Montgomery	3	Swine at agricultural fair

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

Multistate Outbreak of Human Salmonella Typhimurium Infections Linked to Pet Hedgehogs

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

Multistate Outbreak of Human Salmonella Infantis Infections Linked to Dry Dog Food

Please refer to the Technical Notes (pp. 94-97) for additional information on the outbreak data.

PROFILES OF SELECTED HEALTH EVENTS DETECTED IN EPICENTER

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

Local health department epidemiologists and nurses conduct investigations of the anomalies detected by the EpiCenter system when visit levels within a given jurisdiction are statistically, significantly higher than normal for a 24-hour period. Approximately 44 percent (2,092) of all EpiCenter anomalies detected during 2012 were resolved as health events related to seasonal illness, naturally occurring diseases, unknown causes or due to other environmental exposures, after an initial assessment by local public health. The percentage of total anomalies resolved as health events for 2012 (44 percent) exceeded the previous two years (40 percent and 25 percent, respectively) but was much less than observed in 2009 (70 percent), which was attributed to the pandemic influenza H1N1 outbreak. Of the 2,092 anomalies resolved as health events in 2012, 81 percent were attributed to seasonal illness.

Anomalies characterized as seasonal illness health events are when an anomaly can be directly or indirectly related to a disease or illness that follows a typical seasonal pattern (i.e., fever and cough illness during cold and influenza season, rash illness over the Memorial Day holiday, gastrointestinal illness during Thanksgiving and Christmas holidays or during norovirus season, etc.). Anomalies characterized as naturally occurring disease outbreaks are when an anomaly can be directly or indirectly related to a disease outbreak as defined in the Infectious Disease Control Manual (IDCM) (i.e., commonly observed for enteric disease outbreaks due to *Shigella*, norovirus, *Salmonella* and respiratory/flu outbreaks such as pertussis, influenza A H1N1, influenza A H3N2v, etc.). Anomalies characterized as environmental health events are when an anomaly can be directly or indirectly related to an environmental cause or agent (i.e., chemical exposure, poisoning, extreme heat/cold exposure, etc.). Often, these anomalies present as a cluster of cases.

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

Table 1: Distribution of EpiCenter Health Events by Type, Ohio, 2012

Disposition	# of Health Events	% of Health Events		
Environmental health event	27	1%		
Naturally occurring disease outbreak	63	3%		
Seasonal illness health event	1,690	81%		
Unknown health event	312	15%		
Total	2,092	100%		

Source of data: Ohio Department of Health Public Health Informatics & Vaccine-Preventable Disease Epidemiology Unit.

Table 2: Distribution of EpiCenter Health Events by Jurisdiction, Ohio, 2012

County	_	Environmental Health Event		Naturally Occurring Disease Outbreak		Seasonal Illness Health Event		Unknown Health Event		otal
	N	%	N	%	N	%	N	%	N	%
Adams	0	0%	0	0%	0	0%	0	0%	0	0%
Allen	0	0%	0	0%	37	100%	0	0%	37	2%
Ashland	0	0%	0	0%	0	0%	0	0%	0	0%
Ashtabula	0	0%	0	0%	18	100%	0	0%	18	1%
Athens	0	0%	2	7%	24	80%	4	13%	30	1%
Auglaize	0	0%	0	0%	14	100%	0	0%	14	1%
Belmont	0	0%	0	0%	0	0%	0	0%	0	0%
Brown	0	0%	0	0%	13	100%	0	0%	13	1%
Butler	0	0%	0	0%	31	97%	1	3%	32	2%
Carroll	0	0%	0	0%	0	0%	0	0%	0	0%
Champaign	0	0%	0	0%	5	100%	0	0%	5	< 1%
Clark	0	0%	0	0%	13	100%	0	0%	13	1%
Clermont	0	0%	0	0%	42	98%	1	2%	43	2%
Clinton	0	0%	0	0%	3	100%	0	0%	3	< 1%
Columbiana	0	0%	0	0%	4	6%	64	94%	68	3%
Coshocton	0	0%	0	0%	3	100%	0	0%	3	< 1%
Crawford	0	0%	0	0%	0	0%	0	0%	0	0%
Cuyahoga	0	0%	8	5%	61	34%	108	61%	177	9%
Darke	0	0%	0	0%	0	0%	0	0%	0	0%
Defiance	0	0%	0	0%	3	100%	0	0%	3	< 1%
Delaware	0	0%	0	0%	50	71%	20	29%	70	3%
Erie	0	0%	0	0%	32	100%	0	0%	32	2%
Fairfield	0	0%	0	0%	14	100%	0	0%	14	1%
Fayette	0	0%	0	0%	0	0%	0	0%	0	0%
Franklin	0	0%	0	0%	66	100%	0	0%	66	3%
Fulton	0	0%	0	0%	2	100%	0	0%	2	< 1%
Gallia	0	0%	0	0%	0	0%	0	0%	0	0%
Geauga	0	0%	0	0%	17	100%	0	0%	17	1%
Greene	14	29%	4	8%	29	59%	2	4%	49	2%
Guernsey	0	0%	0	0%	19	100%	0	0%	19	1%
Hamilton	0	0%	0	0%	71	99%	1	1%	72	4%
Hancock	0	0%	0	0%	23	100%	0	0%	23	1%
Hardin	0	0%	0	0%	1	50%	1	50%	2	< 1%
Harrison	0	0%	0	0%	3	100%	0	0%	3	< 1%
Henry	0	0%	0	0%	0	0%	0	0%	0	0%
Highland	0	0%	0	0%	15	100%	0	0%	15	1%
Hocking	0	0%	0	0%	32	76%	10	24%	42	2%
Holmes	0	0%	0	0%	4	100%	0	0%	4	< 1%
Huron	0	0%	1	4%	27	96%	0	0%	28	1%
Jackson	0	0%	0	0%	0	0%	2	100%	20	< 1%

County	Environmental Health Event		Occi Dis	urally urring ease break	Illness	sonal s Health vent	Unknown Health Event		То	otal
	N	%	N	%	N	%	N	%	N	%
Jefferson	0	0%	0	0%	24	100%	0	0%	24	1%
Knox	0	0%	0	0%	0	0%	0	0%	0	0%
Lake	0	0%	0	0%	64	100%	0	0%	64	3%
Lawrence	0	0%	0	0%	0	0%	0	0%	0	0%
Licking	0	0%	20	59%	12	35%	2	6%	34	2%
Logan	0	0%	0	0%	11	58%	8	42%	19	1%
Lorain	0	0%	1	4%	23	96%	0	0%	24	1%
Lucas	3	3%	7	6%	68	61%	34	30%	112	6%
Madison	0	0%	3	13%	20	83%	1	4%	24	1%
Mahoning	0	0%	0	0%	68	100%	0	0%	68	3%
Marion	0	0%	0	0%	30	79%	8	21%	38	2%
Medina	3	7%	3	7%	35	85%	0	0%	41	2%
Meigs	0	0%	0	0%	0	0%	0	0%	0	0%
Mercer	0	0%	0	0%	3	100%	0	0%	3	< 1%
Miami	0	0%	0	0%	9	100%	0	0%	9	< 1%
Monroe	0	0%	0	0%	0	0%	0	0%	0	0%
Montgomery	4	8%	7	14%	36	72%	3	6%	50	2%
Morgan	0	0%	0	0%	1	100%	0	0%	1	< 1%
Morrow	0	0%	0	0%	0	0%	0	0%	0	0%
Muskingum	0	0%	0	0%	19	100%	0	0%	19	1%
Noble	0	0%	0	0%	0	0%	0	0%	0	0%
Ottawa	0	0%	0	0%	15	100%	0	0%	15	1%
Paulding	0	0%	0	0%	0	0%	0	0%	0	0%
Perry	0	0%	0	0%	7	100%	0	0%	7	< 1%
Pickaway	0	0%	0	0%	0	0%	0	0%	0	0%
Pike	0	0%	0	0%	0	0%	0	0%	0	0%
Portage	0	0%	0	0%	9	100%	0	0%	9	< 1%
Preble	0	0%	0	0%	0	0%	1	100%	1	< 1%
Putnam	0	0%	0	0%	3	75%	1	25%	4	< 1%
Richland	0	0%	0	0%	12	100%	0	0%	12	1%
Ross	0	0%	0	0%	27	100%	0	0%	27	1%
Sandusky	0	0%	0	0%	29	100%	0	0%	29	1%
Scioto	0	0%	0	0%	1	50%	1	50%	2	< 1%
Seneca	0	0%	6	13%	37	82%	2	4%	45	2%
Shelby	0	0%	0	0%	1	100%	0	0%	1	< 1%
Stark	0	0%	1	1%	71	97%	1	1%	73	4%
Summit	3	6%	0	0%	47	94%	0	0%	50	2%
Trumbull	0	0%	0	0%	96	78%	27	22%	123	6%
Tuscarawas	0	0%	0	0%	15	100%	0	0%	15	1%
Union	0	0%	0	0%	10	100%	0	0%	10	< 1%
Van Wert	0	0%	0	0%	26	100%	0	0%	26	1%
Vinton	0	0%	0	0%	5	100%	0	0%	5	< 1%

County	Environmental Health Event		Naturally Occurring Disease Outbreak		Seasonal Illness Health Event Health			То	otal	
	N	%	N	%	N	%	N	%	N	%
Warren	0	0%	0	0%	43	100%	0	0%	43	2%
Washington	0	0%	0	0%	3	100%	0	0%	3	< 1%
Wayne	0	0%	0	0%	28	76%	9	24%	37	2%
Williams	0	0%	0	0%	0	0%	0	0%	0	0%
Wood	0	0%	0	0%	26	100%	0	0%	26	1%
Wyandot	0	0%	0	0%	2	100%	0	0%	2	< 1%
State of Ohio	0	0%	0	0%	78	100%	0	0%	78	4%
Total	27	1%	63	3%	1,690	81%	312	15%	2,092	100%

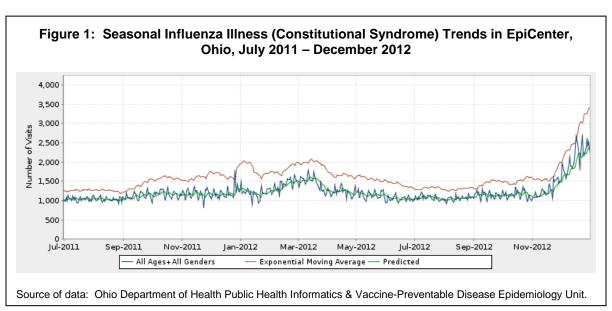
Data based on anomalies generated in the EpiCenter system 01/01/12 to 12/31/12.

Source of data: Ohio Department of Health Public Health Informatics and Vaccine-Preventable Disease Epidemiology Unit.

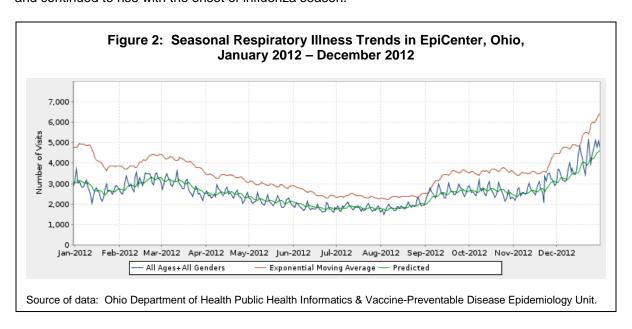
TRACKING OF SEASONAL TRENDS

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

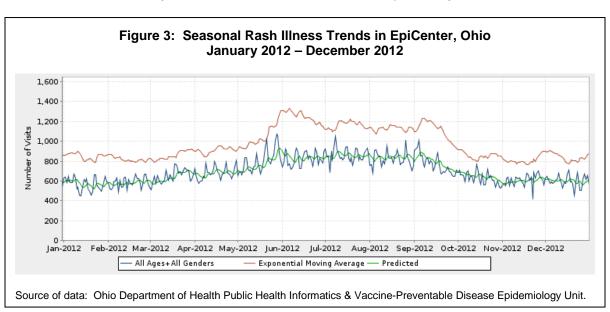
As illustrated in Figure 1, constitutional symptoms were rather mild during the 2011-2012 influenza season, peaking in late December of 2011 with a secondary peak in mid-March 2012. December of 2012 showed an uncharacteristic early start to the 2012-2013 influenza season.



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



As illustrated in Figure 3, rash illness peaked on Memorial Day weekend (it typically reaches its highest peak on Memorial Day Monday) and remained elevated throughout the summer months. The general trends showed a slight increase early in the week (Sunday-Tuesday) followed by a decline through the end of the week and into the weekend. The Memorial Day holiday is significant as this tends to mark the start of outdoor summer activities (e.g., hiking, camping, boating, fishing), which increases environmental exposures and contact with poison ivy and biting insects. The trends observed in 2012 were very similar to those observed in the three previous years.



TECHNICAL NOTES

SPECIFIC DISEASES

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

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

Ehrlichia ewingii: formerly known as other human ehrlichiosis.

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

Hepatitis B and C: due to the chronic nature of hepatitis B and C, all conditions associated with hepatitis B and C are shown by date of report to better capture and describe disease incidence. Data in the "Month of Onset" table are by the month the case was reported to the Centers for Disease Control and Prevention (CDC). Chronic hepatitis B and past or present hepatitis C data are not published due to insufficient case ascertainment.

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

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

Influenza A Virus, Novel Human Infection: became a reportable condition in Ohio on Jan. 1, 2009. This infection is 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.

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. *Fifteen multistate and multicounty outbreaks are not included in the "County" table; thus, county totals do not match totals. (There were 9 foodborne, 4 zoonotic, 1 healthcare-associated and 1 community 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: became a Class C reportable outbreak on Jan. 1, 2009. A community outbreak is defined as two or more cases of similar illness with a common exposure in the community and not considered a foodborne or waterborne disease outbreak.

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

Foodborne: An incident in which two or more persons experience a similar illness after ingestion of a common food, and epidemiologic analysis implicates the food as the source of the illness. Agent-specific criteria to confirm foodborne outbreaks can be found at: http://www.cdc.gov/foodsafety/outbreaks/confirming_diagnosis.html.

Healthcare-associated: became a Class C reportable outbreak on Jan. 1, 2009. The definition of a healthcare-associated outbreak is the occurrence of a disease (illness) above the expected or baseline level, usually over a given period of time, as a result of being in a healthcare facility. The number of cases indicating the presence of an outbreak will vary according to the disease agent, size and type of population exposed, previous exposure to the agent and the time and place of occurrence.

Institutional: became a Class C reportable outbreak on Jan. 1, 2009. An institutional outbreak is defined as two or more cases of similar illness with a common exposure at an institution (e.g., correctional facility, day care center, group home, school) and not considered a foodborne or waterborne disease outbreak.

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

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

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

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

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

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

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

Zoonotic: became a Class C reportable outbreak on Jan. 1, 2009. The definition of a zoonotic outbreak is the occurrence of two or more cases of a similar illness with a common exposure to an animal source and not considered a foodborne or waterborne disease outbreak.

RATE CALCULATIONS

Population estimates for rates in the "Age in Years," "Sex" and "County of Residence" tables come from the 2012 U.S. Census estimates. Population data for rates in the "Year of Onset" table come from the U.S. Census estimates for each year except 2010, which uses the actual count. Rates were not calculated for the following conditions because they pertain to selected age populations and not the entire population. Rates were calculated in the "Age in Years" table only for the conditions below containing an asterisk (*) because appropriate population data were available for the denominator:

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

DISEASES NOT INCLUDED IN TABLES

There were no known cases in Ohio of the following reportable diseases during at least the past five years; thus, they are not included in the 2008-2012 disease tables (pp. 6-8):

- Anthrax
- Diphtheria
- Eastern equine encephalitis virus disease
- Encephalitis, post mumps
- Encephalitis, post chickenpox
- Hantavirus
- Plague
- Poliomyelitis
- Powassan virus disease
- Rabies, human
- Reye syndrome

- Rubella, congenital and not congenital
- Severe acute respiratory syndrome
- Smallpox
- St. Louis encephalitis virus disease
- Staphylococcus aureus, resistant to Vancomycin (VRSA)
- Trichinosis
- Viral hemorrhagic fever
- Western equine encephalitis virus disease
- Yellow fever

There were no outbreaks of the following reported in 2008:

- Blastomycosis
- Histoplasmosis

- Sporotrichosis
- Toxoplasmosis

Reportable diseases not included in the "Age in Years," "Sex," "Month of Onset" and "County of Residence" tables (pp. 9-44) had no known cases reported in 2012.

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.

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