ANNUAL SUMMARY OF INFECTIOUS DISEASES OHIO 2010

REPORTED INCIDENCE OF SELECTED NOTIFIABLE DISEASES



PREPARED AND DISTRIBUTED BY:

BUREAU OF INFECTIOUS DISEASES

DIVISION OF PREVENTION

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INTRODUCTION

The Annual Summary of Infectious Diseases, Ohio, 2010 provides an overview of the incidence of selected notifiable infectious diseases. The report includes tables of disease by year of onset, age group, sex, month of onset, county of residence, Salmonella serotypes and meningococcal disease serogroups. In addition, there are graphs of selected disease incidence, profiles of selected diseases, outbreak summaries and profiles of health events detected in EpiCenter that feature recent epidemiologic trends.

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

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

- The ODH Infectious Disease Control Manual (IDCM), available online at http://www.odh.ohio.gov/pdf/IDCM/sect3TOC.pdf, and
- The Centers for Disease Control and Prevention (CDC) Division of Integrated Surveillance Systems and Services' nationally notifiable infectious disease case definitions, available online at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/infdis2010.htm.

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

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

Questions or comments regarding this annual summary may be directed to the 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, 2010 through Dec. 31, 2010:

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

• Meningococcal disease

Rabies, human

Plaque

•

- Botulism, foodborne
- Cholera
- Diphtheria
- Influenza A, novel virus
- Rubella, not congenital
 Severe acute respiratory syndrome
- Smallpox
- Tularemia
- Viral hemorrhagic fever
- Yellow fever

- Measles
- Any unexpected pattern of cases, suspected cases, deaths or increased incidence of any other disease of major public health concern because of the severity of disease or potential for epidemic spread, which may indicate a newly recognized infectious agent, outbreak, epidemic, related public health hazard or act of bioterrorism.

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 enceph-
 - alitis 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.

Hepatitis B, non-perinatal

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

Gonococcal infections

Giardiasis •

Hepatitis E Herpes, congenital ٠ Influenza-associated

Hepatitis C

Hepatitis D

•

•

•

- 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 •

- Healthcare-associated
- Waterborne

Foodborne

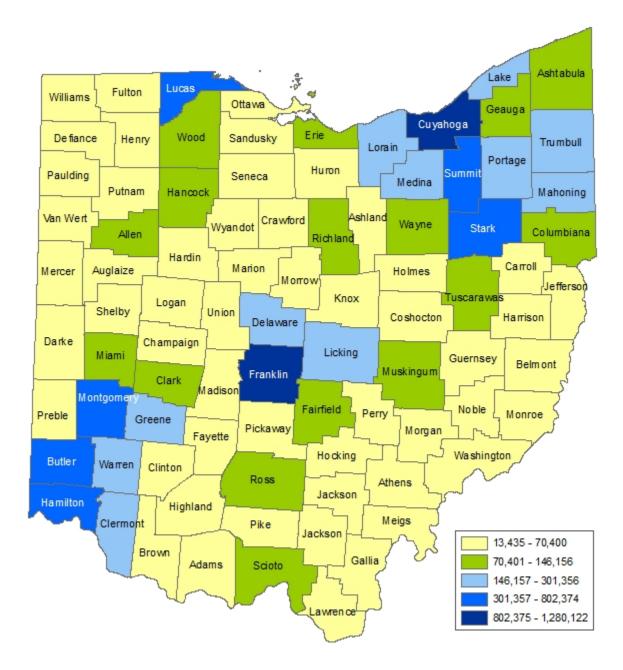
- Institutional
- Zoonotic

- AIDS AND HIV REPORTING

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

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

OHIO COUNTY POPULATION MAP



Source of population data: 2010 U.S. Census.

TABLES OF SELECTED NOTIFIABLE DISEASES

BY YEAR OF ONSET TABLE

This table displays case counts and rates for five years of data in addition to the median and mean counts and rates during 2006-2010. Medians and means were calculated only when five years of data were available. Population data come from the U.S. Census midpoint estimates for each year except 2010, which uses the actual count. Data are by year of onset with the exception of hepatitis B conditions, hepatitis C conditions and outbreaks. Hepatitis B and C and outbreaks 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

This table provides case counts and rates by age group (in years) for 2010. Age refers to the patient's age at the earliest known date associated with the case. Population data come from the 2010 U.S. Census. Outbreak data are not included in this table.

BY SEX TABLE

This table contains case counts and rates by sex for 2010. Population data come from the 2010 U.S. Census. Outbreak data are not included in this table.

BY MONTH OF ONSET TABLE

Case counts and percents by month of onset for 2010 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

This table displays case counts and rates by county for 2010. 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 2010 U.S. Census.

SALMONELLA SEROTYPES TABLE

Salmonella case counts by serotype during 2006-2010 are contained in this table. Serotypes, untyped serogroups and untyped/ungrouped isolates are provided. The bacteriology laboratory at ODH performs serotyping of *Salmonella* isolates.

MENINGOCOCCAL SEROGROUPS TABLE

This table shows meningococcal disease case counts by serogroup during 2006-2010. The bacteriology laboratory at ODH performs serogrouping of *Neisseria meningitidis* isolates.

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REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2006-2010

	2006		20	07	20	08	20	09	20	10	MED	IAN	ME	AN
GENERAL INFECTIOUS DISEASES	N	Rate												
Amebiasis	14	0.1	33	0.3	34	0.3	22	0.2	29	0.3	29	0.3	26	0.2
Botulism	2	0.0	4	0.0	4	0.0	6	0.1	3	0.0	4	0.0	4	0.0
Foodborne	0	0.0	3	0.0	3	0.0	1	0.0	0	0.0	1	0.0	1	0.0
Infant*	2	*	1	*	1	*	5	*	2	*	2	*	2	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
Campylobacteriosis	1,129	9.8	1,083	9.4	1,215	10.6	1,262	10.9	1,124	9.7	1,129	9.8	1,163	10.1
Cholera	0	0.0	1	0.0	0	0.0	0	0.0	3	0.0	0	0.0	1	0.0
Coccidioidomycosis	8	0.1	11	0.1	14	0.1	18	0.2	17	0.1	14	0.1	14	0.1
Creutzfeldt-Jakob Disease (CJD)	15	0.1	10	0.1	5	0.0	12	0.1	12	0.1	12	0.1	11	0.1
Cryptosporidiosis	366	3.2	611	5.3	704	6.1	386	3.3	477	4.1	477	4.1	509	4.4
Cyclosporiasis	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cytomegalovirus (CMV), Congenital*	13	*	16	*	15	*	19	*	28	*	16	*	18	*
Encephalitis	40	0.3	29	0.3	15	0.1	-	-	-	-	-	-	-	-
Post Other Infection*	10	0.1	5	0.0	3	0.0	-	-	-	-	-	-	-	-
Primary Viral	30	0.3	24	0.2	12	0.1	-	-	-	-	-	-	-	-
Escherichia coli, Shiga Toxin-Producing	211	1.8	138	1.2	209	1.8	128	1.1	138	1.2	138	1.2	165	1.4
O157:H7	160	1.4	80	0.7	161	1.4	87	0.8	75	0.7	87	0.8	113	1.0
Not O157:H7	20	0.2	19	0.2	20	0.2	26	0.2	43	0.4	20	0.2	26	0.2
Unknown Serotype	31	0.3	39	0.3	28	0.2	15	0.1	20	0.2	28	0.2	27	0.2
Giardiasis	806	7.0	833	7.3	891	7.8	816	7.1	863	7.5	833	7.3	842	7.3
Haemophilus influenzae, Invasive Disease	93	0.8	114	1.0	128	1.1	98	0.8	125	1.1	114	1.0	112	1.0
Hemolytic Uremic Syndrome (HUS)	16	0.1	12	0.1	8	0.1	14	0.1	1	0.0	12	0.1	10	0.1
Kawasaki Disease	35	0.3	38	0.3	27	0.2	-	-	-	-	-	-	-	-
Legionellosis	237	2.1	231	2.0	248	2.2	274	2.4	230	2.0	237	2.1	244	2.1
Leprosy (Hansen Disease)	0	0.0	1	0.0	2	0.0	2	0.0	1	0.0	1	0.0	1	0.0
Listeriosis	43	0.4	33	0.3	29	0.3	29	0.3	29	0.3	29	0.3	33	0.3
Meningitis, Aseptic	905	7.9	816	7.1	770	6.7	828	7.2	810	7.0	816	7.1	826	7.2
Meningitis, Other Bacterial*	68	0.6	49	0.4	59	0.5	68	0.6	82	0.7	68	0.6	65	0.6
Meningococcal Disease	50	0.4	32	0.3	42	0.4	42	0.4	35	0.3	42	0.4	40	0.4
Rheumatic Fever	0	0.0	4	0.0	2	0.0	-	-	-	-	-	-	-	-
Salmonellosis	1,299	11.3	1,323	11.5	1,378	12.0	1,377	11.9	1,309	11.3	1,323	11.5	1,337	11.6
Shigellosis	200	1.7	1,277	11.1	1,954	17.0	1,050	9.1	304	2.6	1,050	9.1	957	8.3
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	3	0.0	2	0.0	4	0.0	3	0.0	10	0.1	3	0.0	4	0.0
Streptococcal Disease, Group A, Invasive	245	2.1	226	2.0	265	2.3	208	1.8	248	2.1	245	2.1	238	2.1
Streptococcal Disease, Group B, in Newborn*	63	*	49	*	51	*	63	*	41	*	51	*	53	*
Streptococcal Toxic Shock Syndrome (STSS)	18	0.2	12	0.1	12	0.1	11	0.1	12	0.1	12	0.1	13	0.1
Streptococcus pneumoniae, Invasive Disease	1,306	11.4	1,155	10.1	1,240	10.8	1,358	11.8	1,220	10.6	1,240	10.8	1,256	10.9
Ages < 5 Years*	144	*	117	*	123	*	139	*	97	*	123	*	124	*
Drug Resistant, Ages 5+ Years*	396	*	302	*	338	*	343	*	320	*	338	*	340	*
Drug Susceptible, Ages 5+ Years*	766	*	736	*	779	*	876	*	803	*	779	*	792	*
Toxic Shock Syndrome (TSS)	7	0.1	2	0.0	4	0.0	2	0.0	4	0.0	4	0.0	4	0.0
Typhoid Fever	11	0.1	11	0.1	10	0.1	11	0.1	9	0.1	11	0.1	10	0.1
Vibriosis	5	0.0	6	0.1	9	0.1	6	0.1	11	0.1	6	0.1	7	0.1
Vibrio parahaemolyticus Infection	2	0.0	3	0.0	4	0.0	0	0.0	5	0.0	3	0.0	3	0.0
Vibrio vulnificus Infection	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	2	0.0	3	0.0	5	0.0	6	0.1	6	0.1	5	0.0	4	0.0
Yersiniosis	41	0.4	52	0.5	48	0.4	44	0.4	42	0.4	44	0.4	45	0.4
SUB-TOTAL	7,249	63.2	8,214	71.6	9,397	81.8	8,157	70.7	7,217	62.6	8,157	70.7	8,047	70.0

n/a = not applicable.

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2006-2010

	20	006	20	07	20	08	20	09	20	10	MED	DIAN	ME	AN
HEPATITIS	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Hepatitis A	49	0.4	69	0.6	54	0.5	34	0.3	49	0.4	49	0.4	51	0.4
Hepatitis B*	512	4.5	2,551	22.2	1,681	14.6	1,794	15.5	1,903	16.5	1,794	15.5	1,688	14.7
Acute*	126	1.1	124	1.1	131	1.1	213	1.8	123	1.1	126	1.1	143	1.2
Chronic*	386	3.4	2,427	21.2	1,549	13.5	1,581	13.7	1,777	15.4	1,581	13.7	1,544	13.4
Perinatal Infection*	0	*	0	*	1	*	0	*	3	*	0	*	1	*
Hepatitis C*	8,080	70.4	11,338	98.9	9,112	79.3	10,615	92.0	7,728	67.0	9,112	79.3	9,375	81.5
Acute*	7	0.1	19	0.2	41	0.4	64	0.6	12	0.1	19	0.2	29	0.2
Past or Present*	8,073	70.3	11,319	98.7	9,071	79.0	10,551	91.4	7,716	66.9	9,071	79.0	9,346	81.3
Hepatitis E	1	0.0	3	0.0	2	0.0	0	0.0	1	0.0	1	0.0	1	0.0
SUB-TOTAL	8,642	75.3	13,961	121.8	10,849	94.5	12,443	107.8	9,681	83.9	10,849	107.8	11,115	96.6
OUTBREAKS*														
Community*	-	-	-	-	-	-	26	n/a	47	n/a	-	n/a	-	n/a
Conjunctivitis*	0	n/a	2	n/a	1	n/a	-	-	-	-	-	n/a	-	n/a
Foodborne*	115	n/a	87	n/a	92	n/a	56	n/a	69	n/a	87	n/a	84	n/a
Healthcare-Associated*	-	-	-	-	-	-	55	n/a	68	n/a	-	n/a	-	n/a
Institutional*	-	-	-	-	-	-	64	n/a	82	n/a	-	n/a	-	n/a
Nosocomial*	4	n/a	8	n/a	12	n/a	-	-	-	-	-	n/a	-	n/a
Pediculosis*	0	n/a	1	n/a	4	n/a	-	-	-	-	-	n/a	-	n/a
Scabies*	8	n/a	18	n/a	14	n/a	-	-	-	-	-	n/a	-	n/a
Staphylococcal Skin Infections*	18	n/a	39	n/a	21	n/a	-	-	-	-	-	n/a	-	n/a
Unspecified*	9	n/a	28	n/a	69	n/a	-	-	-	-	-	n/a	-	n/a
Unusual Incidence of Non-Class A, Class B or Class C Disease*	70	n/a	117	n/a	73	n/a	-	-	-	-	-	n/a	-	n/a
Waterborne*	5	n/a	9	n/a	4	n/a	2	n/a	10	n/a	5	n/a	6	n/a
Zoonotic*	-	-	-	-	-	-	9	n/a	2	n/a	-	n/a	-	n/a
SUB-TOTAL	229	n/a	309	n/a	290	n/a	212	n/a	278	n/a	278	n/a	264	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	-	_	_	-	_	_	3,818	33.1	259	2.2	_	_	_	_
Influenza-Associated Pediatric Mortality*	1	*	2	*	1	*	15	*	0	*	1	*	4	*
Influenza A Virus, Novel Human Infection*	-	_	-	_	_	-	240	2.1	0	0.0	_	_	-	-
Measles	0	0.0	0	0.0	0	0.0	1	0.0	2	0.0	0	0.0	1	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0
muyenous	0	0.0	0	0.0	U	0.0	1	0.0	1	0.0	0	0.0	0	0.0

45

594

3

8,859

9,502

0.4

5.2

0.0

77.2

82.8

26

837

4,364

5.229

0

0.2

7.3

0.0

38.1

45.6

17

628

0

2,392

3.038

0.1

5.5

0.0

20.8

26.4

6

1,100

2

1,829

7,011

0.1

9.5

0.0

15.8

60.7

27

1,858

1

1,337

3,484

0.2

16.1

0.0

11.6

30.2

26

837

1

2,392

5.229

0.2

7.3

0.0

20.8

45.6

24

1,003

1

3,756

5,653

0.2

8.7

0.0

32.7

49.2

Mumps

Pertussis

Tetanus

Varicella

SUB-TOTAL

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY YEAR OF ONSET, OHIO, 2006-2010

	20	2006		2007		08	20	09	2010		MEDIAN		MEAN	
ZOONOSES	Ν	Rate	Ν	Rate	N	Rate	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate
Brucellosis	0	0.0	0	0.0	0	0.0	4	0.0	1	0.0	0	0.0	1	0.0
Dengue	9	0.1	11	0.1	7	0.1	3	0.0	16	0.1	9	0.1	9	0.1
Ehrlichiosis/Anaplasmosis	6	0.1	3	0.0	12	0.1	13	0.1	10	0.1	10	0.1	9	0.1
Anaplasma phagocytophilum*	1	0.0	2	0.0	1	0.0	1	0.0	2	0.0	1	0.0	1	0.0
Ehrlichia chaffeensis*	5	0.0	1	0.0	11	0.1	11	0.1	8	0.1	8	0.1	7	0.1
Ehrlichia ewingii*	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	11	0.1	9	0.1	6	0.1	5	0.0	24	0.2	9	0.1	11	0.1
Leptospirosis	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	36	0.3	34	0.3	45	0.4	56	0.5	37	0.3	37	0.3	42	0.4
Malaria	28	0.2	28	0.2	31	0.3	36	0.3	44	0.4	31	0.3	33	0.3
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
Q Fever	3	0.0	2	0.0	1	0.0	0	0.0	1	0.0	1	0.0	1	0.0
Rabies, Animal*	59	n/a	86	n/a	64	n/a	47	n/a	47	n/a	59	n/a	61	n/a
Rocky Mountain Spotted Fever (RMSF)	26	0.2	9	0.1	31	0.3	17	0.1	16	0.1	17	0.1	20	0.2
St. Louis Virus Disease*	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Toxoplasmosis, Congenital*	1	*	1	*	0	*	-	-	-	-	-	-	-	-
Tularemia	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Typhus Fever, Murine	1	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection*	48	0.4	23	0.2	15	0.1	2	0.0	5	0.0	15	0.1	19	0.1
SUB-TOTAL	229	1.5	206	1.0	213	1.3	186	1.2	202	1.3	206	1.3	207	1.3

GRAND TOTAL	25,851	222.7	27,919	240.0	23,787	204.0	28,009	240.4	20,862	178.0	25,851	222.7	25,286	217.0
POPULATION	11,47	8,006	11,46	6,917	11,48	5,910	11,54	2,645	11,536	6,504	11,48	5,910	11,50	1,996

	0.	-4	5	-9	10	-14	15	-19	20	-29	30	-39
GENERAL INFECTIOUS DISEASES	Ν	Rate	Ν	Rate	N	Rate	Ν	Rate	N	Rate	Ν	Rate
Amebiasis	1	0.1	2	0.3	1	0.1	2	0.2	4	0.3	4	0.3
Botulism	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	127	17.6	44	5.9	49	6.3	61	7.4	127	8.6	114	8.1
Cholera	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	4	0.3	2	0.1
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	77	10.7	44	5.9	39	5.0	36	4.4	41	2.8	42	3.0
Cytomegalovirus (CMV), Congenital*	28	3.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Escherichia coli, Shiga Toxin-Producing	30	4.2	12	1.6	19	2.5	19	2.3	16	1.1	10	0.7
O157:H7	17	2.4	7	0.9	9	1.2	7	0.8	9	0.6	5	0.4
Not O157:H7	9	1.2	4	0.5	8	1.0	8	1.0	4	0.3	3	0.2
Unknown Serotype	4	0.6	1	0.1	2	0.3	4	0.5	3	0.2	2	0.1
Giardiasis	209	29.0	90	12.0	68	8.8	43	5.2	91	6.1	102	7.2
Haemophilus influenzae, Invasive Disease	19	2.6	5	0.7	0	0.0	1	0.1	3	0.2	3	0.2
Hemolytic Uremic Syndrome (HUS)	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	1	0.1	0	0.0	0	0.0	3	0.4	8	0.5	19	1.3
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	3	0.4	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
Meningitis, Aseptic	201	27.9	32	4.3	31	4.0	40	4.9	138	9.3	119	8.4
Meningitis, Other Bacterial*	17	2.4	0	0.0	1	0.1	3	0.4	4	0.3	4	0.3
Meningococcal Disease	8	1.1	0	0.0	0	0.0	3	0.4	4	0.3	4	0.3
Salmonellosis	186	25.8	89	11.9	64	8.3	87	10.6	169	11.4	118	8.4
Shigellosis	117	16.2	62	8.3	15	1.9	8	1.0	37	2.5	22	1.6
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	16	2.2	6	0.8	2	0.3	2	0.2	20	1.3	15	1.1
Streptococcal Disease, Group B, in Newborn*	41	5.7	0	0.0	0	0.0	0	0.0	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	2	0.1
Streptococcus pneumoniae, Invasive Disease	97	13.5	16	2.1	6	0.8	11	1.3	36	2.4	68	4.8
Ages < 5 Years*	97	13.5	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	1	0.1	1	0.1	7	0.5	19	1.3
Drug Susceptible, Ages 5+ Years*	0	0.0	12	1.6	5	0.6	10	1.2	29	2.0	49	3.5
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	3	0.4	1	0.1	0	0.0	0	0.0
Typhoid Fever	0	0.0	2	0.3	2	0.3	1	0.1	1	0.1	1	0.1
Vibriosis	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	2	0.1
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	1	0.1
Yersiniosis	18	2.5	2	0.3	1	0.1	1	0.1	1	0.1	6	0.4
SUB-TOTAL	1,199	166.3	408	54.6	301	38.9	324	39.3	705	47.6	658	46.7

HEPATITIS												
Hepatitis A	2	0.3	0	0.0	3	0.4	2	0.2	9	0.6	5	0.4
Hepatitis B*	18	2.5	18	2.4	12	1.5	52	6.3	459	31.0	461	32.7
Acute*	0	0.0	0	0.0	0	0.0	4	0.5	28	1.9	44	3.1
Chronic*	15	2.1	18	2.4	12	1.5	48	5.8	431	29.1	417	29.6
Perinatal Infection*	3	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis C*	26	3.6	11	1.5	9	1.2	191	23.2	1,903	128.4	1,384	98.2
Acute*	0	0.0	1	0.1	0	0.0	0	0.0	6	0.4	3	0.2
Past or Present*	26	3.6	10	1.3	9	1.2	191	23.2	1,897	128.0	1,381	98.0
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
SUB-TOTAL	46	6.4	29	3.9	24	3.1	245	29.7	2,372	160.1	1,850	131.2

$$\begin{split} N &= \text{number of cases reported.} \\ \text{Rates use 2010 U.S. Census counts and are per 100,000 population.} \\ n/a &= \text{not applicable.} \\ ^* \text{Please see Technical Notes (pp. 93-97).} \end{split}$$

			10-	-14	15-19		20-29		30-	-39		
VACCINE-PREVENTABLE	Ν	Rate	Ν	Rate	N	Rate	Ν	Rate	N	Rate	N	Rate
Influenza-Associated Hospitalization*	52	7.2	13	1.7	3	0.4	7	0.8	23	1.6	17	1.2
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	4	0.6	3	0.4	4	0.5	5	0.6	0	0.0	3	0.2
Pertussis	569	78.9	362	48.4	482	62.2	113	13.7	58	3.9	92	6.5
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	191	26.5	525	70.2	471	60.8	90	10.9	36	2.4	14	1.0
SUB-TOTAL	816	113.2	903	120.7	960	123.9	215	26.1	117	7.9	126	8.9
ZOONOSES	-											
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Dengue	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	3	0.2
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	1	0.1	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
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0
LaCrosse Virus Disease*	4	0.6	11	1.5	8	1.0	0	0.0	1	0.1	0	0.0
Lyme Disease	2	0.3	3	0.4	5	0.6	4	0.5	3	0.2	8	0.6
Malaria	0	0.0	1	0.1	2	0.3	3	0.4	14	0.9	4	0.3
Psittacosis	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
Rabies, Animal*	n/a	n/a	n/a	n/a	n/a	n/a						
Rocky Mountain Spotted Fever (RMSF)	0	0.0	2	0.3	0	0.0	1	0.1	2	0.1	2	0.1
West Nile Virus Infection*	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
SUB-TOTAL	7	1.0	18	2.4	15	1.9	9	1.1	20	1.3	19	1.3
GRAND TOTAL	2,068	286.9	1,358	181.6	1,300	167.8	793	96.3	3,214	216.9	2,653	188.2
POPULATION	720	.856	747	.889	774	.699	823	.682	1.48	1,746	1.409	9.791

	40	-49	50	-59	60)+	Unk	nown	TO	ΓAL
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	4	0.2	6	0.4	5	0.2	0	n/a	29	0.3
Botulism	0	0.0	0	0.0	1	0.0	0	n/a	3	0.0
Infant*	0	0.0	0	0.0	0	0.0	0	n/a	2	0.3
Wound	0	0.0	0	0.0	1	0.0	0	n/a	1	0.0
Campylobacteriosis	158	9.8	187	11.2	257	11.2	0	n/a	1,124	9.7
Cholera	1	0.1	0	0.0	0	0.0	0	n/a	3	0.0
Coccidioidomycosis	1	0.1	7	0.4	3	0.1	0	n/a	17	0.1
Creutzfeldt-Jakob Disease (CJD)	0	0.0	2	0.1	10	0.4	0	n/a	12	0.1
Cryptosporidiosis	44	2.7	50	3.0	103	4.5	1	n/a	477	4.1
Cytomegalovirus (CMV), Congenital*	0	0.0	0	0.0	0	0.0	0	n/a	28	3.9
Escherichia coli, Shiga Toxin-Producing	6	0.4	10	0.6	14	0.6	2	n/a	138	1.2
O157:H7	6	0.4	6	0.4	8	0.3	1	n/a	75	0.7
Not O157:H7	0	0.0	1	0.1	5	0.2	1	n/a	43	0.4
Unknown Serotype	0	0.0	3	0.2	1	0.0	0	n/a	20	0.2
Giardiasis	91	5.6	72	4.3	96	4.2	1	n/a	863	7.5
Haemophilus influenzae, Invasive Disease	5	0.3	17	1.0	72	3.1	0	n/a	125	1.1
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Legionellosis	37	2.3	48	2.9	114	5.0	0	n/a	230	2.0
Leprosy (Hansen Disease)	1	0.1	0	0.0	0	0.0	0	n/a	1	0.0
Listeriosis	1	0.1	2	0.1	21	0.9	0	n/a	29	0.3
Meningitis, Aseptic	92	5.7	74	4.4	82	3.6	1	n/a	810	7.0
Meningitis, Other Bacterial*	15	0.9	17	1.0	21	0.9	0	n/a	82	0.7
Meningococcal Disease	3	0.2	2	0.1	11	0.5	0	n/a	35	0.3
Salmonellosis	160	9.9	147	8.8	288	12.6	1	n/a	1,309	11.3
Shigellosis	11	0.7	16	1.0	16	0.7	0	n/a	304	2.6
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	1	0.1	3	0.2	6	0.3	0	n/a	10	0.1
Streptococcal Disease, Group A, Invasive	28	1.7	42	2.5	117	5.1	0	n/a	248	2.1
Streptococcal Disease, Group B, in Newborn*	0	0.0	0	0.0	0	0.0	0	n/a	41	5.7
Streptococcal Toxic Shock Syndrome (STSS)	3	0.2	3	0.2	4	0.2	0	n/a	12	0.1
Streptococcus pneumoniae, Invasive Disease	148	9.2	215	12.8	620	27.1	3	n/a	1,220	10.6
Ages < 5 Years*	0	0.0	0	0.0	0	0.0	0	n/a	97	13.5
Drug Resistant, Ages 5+ Years*	35	2.2	58	3.5	194	8.5	1	n/a	320	3.0
Drug Susceptible, Ages 5+ Years*	113	7.0	157	9.4	426	18.6	2	n/a	803	7.4
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	n/a	4	0.0
Typhoid Fever	2	0.1	0	0.0	0	0.0	0	n/a	9	0.1
Vibriosis	3	0.2	1	0.1	3	0.1	0	n/a	11	0.1
Vibrio parahaemolyticus Infection	2	0.1	1	0.1	1	0.0	0	n/a	5	0.0
Other (Not Cholera)	1	0.1	0	0.0	2	0.1	0	n/a	6	0.1
Yersiniosis	2	0.1	3	0.2	8	0.3	0	n/a	42	0.4
SUB-TOTAL	817	50.5	924	55.2	1,872	81.8	9	n/a	7,217	62.6
HEPATITIS Hepatitis A	8	0.5	7	0.4	13	0.6	0	n/a	49	0.4
	400	0.0	201	10.4	105	0.0	45		4 002	40.5

Hepatitis A	8	0.5	7	0.4	13	0.6	0	n/a	49	0.4
Hepatitis B*	402	24.9	281	16.8	185	8.1	15	n/a	1,903	16.5
Acute*	30	1.9	12	0.7	5	0.2	0	n/a	123	1.1
Chronic*	372	23.0	269	16.1	180	7.9	15	n/a	1,777	15.4
Perinatal Infection*	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
Hepatitis C*	1,669	103.2	1,922	114.8	591	25.8	22	n/a	7,728	67.0
Acute*	1	0.1	1	0.1	0	0.0	0	n/a	12	0.1
Past or Present*	1,668	103.2	1,921	114.8	591	25.8	22	n/a	7,716	66.9
Hepatitis E	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
SUB-TOTAL	2,079	128.6	2,210	132.0	789	34.5	37	n/a	9,681	83.9

	4)-49	50	-59	60) +	Unk	nown	TO	ſAL
VACCINE-PREVENTABLE	N	Rate	N	Rate	N	Rate	N	Rate	Ν	Rate
Influenza-Associated Hospitalization*	25	1.5	46	2.7	73	3.2	0	n/a	259	2.2
Measles	0	0.0	2	0.1	0	0.0	0	n/a	2	0.0
Imported	0	0.0	1	0.1	0	0.0	0	n/a	1	0.0
Indigenous	0	0.0	1	0.1	0	0.0	0	n/a	1	0.0
Mumps	5	0.3	1	0.1	2	0.1	0	n/a	27	0.2
Pertussis	80	4.9	56	3.3	43	1.9	3	n/a	1,858	16.1
Tetanus	1	0.1	0	0.0	0	0.0	0	n/a	1	0.0
Varicella	8	0.5	1	0.1	1	0.0	0	n/a	1,337	11.6
SUB-TOTAL	119	7.4	106	6.3	119	5.2	3	n/a	3,484	30.2
ZOONOSES		0.0	0	0.0	0	0.0	0	n/a	1	0.0
	0	0.0	0	0.0	0	0.0	0	n/a	16	0.0
Dengue Ehrlichiosis/Anaplasmosis	4	0.2	4	0.4	2	0.1	0	n/a n/a	10	0.1
	2	0.2	4	0.2	0	0.1	0	n/a	2	0.1
Anaplasma phagocytophilum* Ehrlichia chaffeensis*	2	0.1		0.0	2	0.0	0	n/a	8	0.0
LaCrosse Virus Disease*	0	0.1	4	0.2	0	0.1	0	n/a	24	0.1
Lyme Disease	4	0.0	6	0.0	2	0.0	0	n/a	37	0.2
Malaria	9	0.2	7	0.4	4	0.1	0	n/a	44	0.3
Psittacosis	0	0.0	0	0.4	4	0.2	0	n/a	44	0.4
Q Fever	0	0.0	1	0.0	0	0.0	0	n/a	1	0.0
Rabies, Animal*	n/a	0.0	n/a	n/a	n/a	0.0	47	n/a	47	0.0
Rocky Mountain Spotted Fever (RMSF)	3	0.2	2	0.1	4	0.2	- 47	n/a	16	0.1
West Nile Virus Infection*	1	0.2	1	0.1		0.0	0	n/a	5	0.0
SUB-TOTAL	24	1.5	27	1.6	16	0.0	47	n/a	202	1.3
					10			11/0		
GRAND TOTAL	3,039	188.0	3,267	195.2	2,796	122.2	96	n/a	20,584	178.0
	4.0	16 502	4 67	2 014	2.00	7 404		0	11.53	6 504
POPULATION	1,0	16,503	1,07	3,914	2,28	7,424		0	11,53	0,304

	Eon	nale	Ma	ماد	Unk	nown	тот	ΓAL
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	7	0.1	22	0.4	0	n/a	29	0.3
Botulism	2	0.0	1	0.4	0	n/a	3	0.0
Infant*	2	*	0	*	0	n/a	2	*
Wound	0	0.0	1	0.0	0	n/a	1	0.0
Campylobacteriosis	549	9.3	570	10.1	5	n/a	1,124	9.7
Cholera	1	0.0	2	0.0	0	n/a	3	0.0
Coccidioidomycosis	5	0.0	12	0.0	0	n/a	17	0.0
Creutzfeldt-Jakob Disease (CJD)	5	0.1	7	0.2	0	n/a n/a	17	0.1
Cryptosporidiosis	261	4.4	207	3.7	9		477	4.1
	-	4.4		3.7	-	n/a	28	4.1
Cytomegalovirus (CMV), Congenital*	14 77	4.0	14 61		0	n/a		1.0
Escherichia coli, Shiga Toxin-Producing	45	1.3		1.1	0	n/a	138	1.2
O157:H7		0.8	30	0.5	0	n/a	75	0.7
Not O157:H7	22	0.4	21	0.4	0	n/a	43	0.4
Unknown Serotype	10	0.2	10	0.2	0	n/a	20	0.2
Giardiasis	395	6.7	464	8.2	4	n/a	863	7.5
Haemophilus influenzae, Invasive Disease	67	1.1	57	1.0	1	n/a	125	1.1
Hemolytic Uremic Syndrome (HUS)	1	0.0	0	0.0	0	n/a	1	0.0
Legionellosis	90	1.5	140	2.5	0	n/a	230	2.0
Leprosy (Hansen Disease)	0	0.0	1	0.0	0	n/a	1	0.0
Listeriosis	14	0.2	15	0.3	0	n/a	29	0.3
Meningitis, Aseptic	426	7.2	377	6.7	7	n/a	810	7.0
Meningitis, Other Bacterial*	41	0.7	40	0.7	1	n/a	82	0.7
Meningococcal Disease	16	0.3	19	0.3	0	n/a	35	0.3
Salmonellosis	720	12.2	587	10.4	2	n/a	1,309	11.3
Shigellosis	150	2.5	153	2.7	1	n/a	304	2.6
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	3	0.1	6	0.1	1	n/a	10	0.1
Streptococcal Disease, Group A, Invasive	121	2.0	126	2.2	1	n/a	248	2.1
Streptococcal Disease, Group B, in Newborn*	24	*	17	*	0	n/a	41	*
Streptococcal Toxic Shock Syndrome (STSS)	5	0.1	7	0.1	0	n/a	12	0.1
Streptococcus pneumoniae, Invasive Disease	609	10.3	596	10.6	15	n/a	1,220	10.6
Ages < 5 Years*	44	*	53	*	0	n/a	97	*
Drug Resistant, Ages 5+ Years*	162	*	153	*	5	n/a	320	*
Drug Susceptible, Ages 5+ Years*	403	*	390	*	10	n/a	803	*
Toxic Shock Syndrome (TSS)	4	0.1	0	0.0	0	n/a	4	0.0
Typhoid Fever	3	0.1	6	0.1	0	n/a	9	0.1
Vibriosis	4	0.1	7	0.1	0	n/a	11	0.1
Vibrio parahaemolyticus Infection	1	0.0	4	0.1	0	n/a	5	0.0
Other (Not Cholera)	3	0.1	3	0.1	0	n/a	6	0.1
Yersiniosis	14	0.2	28	0.5	0	n/a	42	0.4
SUB-TOTAL	3,628	61.4	3,542	62.9	47	n/a	7,217	62.6
HEPATITIS								
Hepatitis A	22	0.4	27	0.5	0	n/a	49	0.4
Hepatitis B*	758	12.8	1,127	20.0	18	n/a	1,903	16.5
Acute*	51	0.9	72	1.3	0	n/a	123	1.1
		0.0		1.0	v	1,70	120	

Hepatitis B*	758	12.8	1,127	20.0	18	n/a	1,903	16.5
Acute*	51	0.9	72	1.3	0	n/a	123	1.1
Chronic*	707	12.0	1,052	18.7	18	n/a	1,777	15.4
Perinatal Infection*	0	*	3	*	0	n/a	3	*
Hepatitis C*	2,720	46.1	4,980	88.4	28	n/a	7,728	67.0
Acute*	7	0.1	5	0.1	0	n/a	12	0.1
Past or Present*	2,713	45.9	4,975	88.3	28	n/a	7,716	66.9
Hepatitis E	0	0.0	1	0.0	0	n/a	1	0.0
SUB-TOTAL	3,500	59.3	6,135	108.9	46	n/a	9,681	83.9

VACCINE-PREVENTABLE								
Influenza-Associated Hospitalization*	145	2.5	114	2.0	0	n/a	259	2.2
Measles	1	0.0	1	0.0	0	n/a	2	0.0
Imported	1	0.0	0	0.0	0	n/a	1	0.0
Indigenous	0	0.0	1	0.0	0	n/a	1	0.0
Mumps	10	0.2	17	0.3	0	n/a	27	0.2
Pertussis	1,070	18.1	784	13.9	4	n/a	1,858	16.1
Tetanus	1	0.0	0	0.0	0	n/a	1	0.0
Varicella	660	11.2	672	11.9	5	n/a	1,337	11.6
SUB-TOTAL	1,887	32.0	1,588	28.2	9	n/a	3,484	30.2

	Fer	nale	M	ale	Unk	nown	TO	TAL
ZOONOSES	Ν	Rate	N	Rate	N	Rate	Ν	Rate
Brucellosis	0	0.0	1	0.0	0	n/a	1	0.0
Dengue	9	0.2	7	0.1	0	n/a	16	0.1
Ehrlichiosis/Anaplasmosis	3	0.1	7	0.1	0	n/a	10	0.1
Anaplasma phagocytophilum*	0	0.0	2	0.0	0	n/a	2	0.0
Ehrlichia chaffeensis*	3	0.1	5	0.1	0	n/a	8	0.1
LaCrosse Virus Disease*	12	0.2	12	0.2	0	n/a	24	0.2
Lyme Disease	22	0.4	15	0.3	0	n/a	37	0.3
Malaria	14	0.2	30	0.5	0	n/a	44	0.4
Psittacosis	0	0.0	1	0.0	0	n/a	1	0.0
Q Fever	1	0.0	0	0.0	0	n/a	1	0.0
Rabies, Animal*	n/a	n/a	n/a	n/a	47	n/a	47	n/a
Rocky Mountain Spotted Fever (RMSF)	9	0.2	7	0.1	0	n/a	16	0.1
West Nile Virus Infection*	0	0.0	5	0.1	0	n/a	5	0.0
SUB-TOTAL	70	1.2	85	1.5	47	n/a	202	1.3

GRAND TOTAL	9,085	153.9	11,350	201.5	149	n/a	20,584	178.0
POPULATION	5,904	,348	5,632	.,156)	11,53	6,504

	Jan	uary	Febr	ruary	Ма	rch	Α	pril	M	av	Ju	ine	Ju	uly
GENERAL INFECTIOUS DISEASES	N	%	Ν	%	N	%	N	%	N	%	N	%	N	%
Amebiasis	4	14%	1	3%	1	3%	6	21%	2	7%	1	3%	2	7%
Botulism	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
Infant*	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	50%
Wound	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Campylobacteriosis	43	4%	50	4%	66	6%	66	6%	109	10%	165	15%	179	16%
Cholera	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3	100%
Coccidioidomycosis	0	0%	1	6%	3	18%	0	0%	1	6%	0	0%	0	0%
Creutzfeldt-Jakob Disease (CJD)	1	8%	1	8%	1	8%	1	8%	2	17%	1	8%	1	8%
Cryptosporidiosis	29	6%	20	4%	32	7%	30	6%	33	7%	34	7%	71	15%
Cytomegalovirus (CMV), Congenital*	3	11%	0	0%	1	4%	1	4%	1	4%	2	7%	4	14%
Escherichia coli, Shiga Toxin-Producing	2	1%	3	2%	5	4%	18	13%	15	11%	18	13%	29	21%
O157:H7	1	1%	3	4%	4	5%	6	8%	7	9%	11	15%	18	24%
Not O157:H7	1	2%	0	0%	1	2%	12	28%	6	14%	5	12%	10	23%
Unknown Serotype	0	0%	0	0%	0	0%	0	0%	2	10%	2	10%	1	5%
Giardiasis	53	6%	64	7%	69	8%	85	10%	55	6%	68	8%	86	10%
Haemophilus influenzae, Invasive Disease	17	14%	7	6%	5	4%	15	12%	6	5%	18	14%	4	3%
Hemolytic Uremic Syndrome (HUS)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
Legionellosis	12	5%	18	8%	7	3%	11	5%	24	10%	38	17%	26	11%
Leprosy (Hansen Disease)	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%
Listeriosis	1	3%	0	0%	2	7%	1	3%	2	7%	3	10%	6	21%
Meningitis, Aseptic	42	5%	37	5%	48	6%	37	5%	54	7%	49	6%	100	12%
Meningitis, Other Bacterial*	9	11%	3	4%	4	5%	5	6%	6	7%	7	9%	10	12%
Meningococcal Disease	2	6%	5	14%	2	6%	5	14%	2	6%	1	3%	3	9%
Salmonellosis	69	5%	62	5%	73	6%	91	7%	183	14%	164	13%	160	12%
Shigellosis	32	11%	13	4%	13	4%	17	6%	48	16%	36	12%	39	13%
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0%	0	0%	2	20%	2	20%	2	20%	1	10%	1	10%
Streptococcal Disease, Group A, Invasive	20	8%	20	8%	24	10%	28	11%	22	9%	18	7%	14	6%
Streptococcal Disease, Group B, in Newborn*	2	5%	1	2%	4	10%	5	12%	3	7%	3	7%	4	10%
Streptococcal Toxic Shock Syndrome (STSS)	4	33%	2	17%	1	8%	0	0%	1	8%	1	8%	1	8%
Streptococcus pneumoniae, Invasive Disease	129	11%	119	10%	150	12%	132	11%	119	10%	62	5%	37	3%
Ages < 5 Years*	5	5%	10	10%	13	13%	11	11%	8	8%	8	8%	5	5%
Drug Resistant, Ages 5+ Years*	33	10%	33	10%	37	12%	41	13%	32	10%	17	5%	10	3%
Drug Susceptible, Ages 5+ Years*	91	11%	76	9%	100	12%	80	10%	79	10%	37	5%	22	3%
Toxic Shock Syndrome (TSS)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	25%
Typhoid Fever	2	22%	0	0%	0	0%	0	0%	1	11%	2	22%	1	11%
Vibriosis	0	0%	0	0%	0	0%	0	0%	1	9%	2	18%	4	36%
Vibrio parahaemolyticus Infection	0	0%	0	0%	0	0%	0	0%	0	0%	2	40%	1	20%
Other (Not Cholera)	0	0%	0	0%	0	0%	0	0%	1	17%	0	0%	3	50%
Yersiniosis	7	17%	5	12%	1	2%	3	7%	1	2%	3	7%	3	7%
SUB-TOTAL	483	7%	432	6%	515	7%	559	8%	693	10%	698	10%	790	11%

HEPATITIS														
Hepatitis A	5	10%	2	4%	0	0%	4	8%	1	2%	2	4%	3	6%
Hepatitis B*	240	13%	148	8%	176	9%	145	8%	182	10%	129	7%	139	7%
Acute*	11	9%	12	10%	12	10%	11	9%	13	11%	17	14%	12	10%
Chronic*	229	13%	135	8%	164	9%	134	8%	169	10%	112	6%	127	7%
Perinatal Infection*	0	0%	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%
Hepatitis C*	595	8%	701	9%	698	9%	597	8%	836	11%	586	8%	708	9%
Acute*	0	0%	2	17%	0	0%	2	17%	0	0%	2	17%	2	17%
Past or Present*	595	8%	699	9%	698	9%	595	8%	836	11%	584	8%	706	9%
Hepatitis E	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
SUB-TOTAL	840	9%	851	9%	874	9%	746	8%	1,019	11%	717	7%	850	9%

- % = percentage of cases occurring in the month for the disease. * Please see Technical Notes (pp. 93-97).

	Jan	uary	Febr	uary	Ma	rch	Ap	oril	M	ay	Ju	ne	Ju	uly
OUTBREAKS*	N	%	N	%	N	%	N .	%	N	%	N	%	N	%
Community*	2	4%	1	2%	2	4%	4	9%	3	6%	3	6%	1	2%
Foodborne*	8	12%	4	6%	9	13%	7	10%	8	12%	5	7%	4	6%
Healthcare-Associated*	2	3%	7	10%	12	18%	6	9%	4	6%	2	3%	3	4%
Institutional*	5	6%	3	4%	9	11%	9	11%	4	5%	6	7%	1	1%
Waterborne*	0	0%	0	0%	2	20%	0	0%	0	0%	0	0%	1	10%
Zoonotic*	0	0%	0	0%	1	50%	0	0%	1	50%	0	0%	0	0%
SUB-TOTAL	17	6%	15	5%	35	13%	26	9%	20	7%	16	6%	10	4%
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	41	16%	22	8%	15	6%	4	2%	0	0%	1	0%	0	0%
Measles	0	0%	0	0%	0	0%	2	100%	0	0%	0	0%	0	0%
Imported	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%
Indigenous	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%
Mumps	0	0%	4	15%	1	4%	2	7%	1	4%	0	0%	1	4%
Pertussis	100	5%	54	3%	75	4%	119	6%	138	7%	155	8%	228	12%
Tetanus	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Varicella	121	9%	125	9%	156	12%	150	11%	185	14%	52	4%	34	3%
SUB-TOTAL	262	8%	205	6%	247	7%	277	8%	324	9%	208	6%	263	8%
ZOONOSES	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Dengue	4	25%	1	6%	0	0%	0	0%	0	0%	0	0%	0	0%
Ehrlichiosis/Anaplasmosis	0	0%	0	0%	0	0%	0	0%	0	0%	1	10%	6	60%
Anaplasma phagocytophilum*	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	50%
Ehrlichia chaffeensis*	0	0%	0	0%	0	0%	0	0%	0	0%	1	13%	5	63%
LaCrosse Virus Disease*	0	0%	0	0%	0	0%	0	0%	0	0%	1	4%	4	17%
Lyme Disease	0	0%	1	3%	2	5%	3	8%	3	8%	8	22%	8	22%
Malaria	2	5%	4	9%	2	5%	2	5%	4	9%	7	16%	9	20%
Psittacosis	1	100%	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%	1	100%
Rabies, Animal*	2	4%	0	0%	0	0%	2	4%	4	9%	12	26%	4	9%
Rocky Mountain Spotted Fever (RMSF)	0	0%	0	0%	0	0%	2	13%	1	6%	6	38%	5	31%
West Nile Virus Infection*	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	20%
SUB-TOTAL	9	4%	6	3%	4	2%	9	4%	12	6%	35	17%	38	19%
		. / 0	-	• / •		-/-		. / •		• / •		,5		

	Au	gust	Septe	mber	Oct	ober	Nove	ember	Dece	mber	то	TAL
GENERAL INFECTIOUS DISEASES	Ν	%	N	%	N	%	Ν	%	N	%	Ν	%
Amebiasis	1	3%	4	14%	0	0%	5	17%	2	7%	29	100%
Botulism	0	0%	1	33%	0	0%	0	0%	1	33%	3	100%
Infant*	0	0%	0	0%	0	0%	0	0%	1	50%	2	100%
Wound	0	0%	1	100%	0	0%	0	0%	0	0%	1	100%
Campylobacteriosis	143	13%	107	10%	77	7%	62	6%	57	5%	1,124	100%
Cholera	0	0%	0	0%	0	0%	0	0%	0	0%	3	100%
Coccidioidomycosis	3	18%	1	6%	4	24%	1	6%	3	18%	17	100%
Creutzfeldt-Jakob Disease (CJD)	2	17%	0	0%	0	0%	2	17%	0	0%	12	100%
Cryptosporidiosis	71	15%	71	15%	34	7%	19	4%	33	7%	477	100%
Cytomegalovirus (CMV), Congenital*	1	4%	1	4%	7	25%	2	7%	5	18%	28	100%
Escherichia coli, Shiga Toxin-Producing	24	17%	4	3%	10	7%	5	4%	5	4%	138	100%
O157:H7	12	16%	3	4%	4	5%	5	7%	1	1%	75	100%
Not O157:H7	7	16%	0	0%	1	2%	0	0%	0	0%	43	100%
Unknown Serotype	5	25%	1	5%	5	25%	0	0%	4	20%	20	100%
Giardiasis	80	9%	80	9%	84	10%	65	8%	74	9%	863	100%
Haemophilus influenzae, Invasive Disease	9	7%	9	7%	9	7%	14	11%	12	10%	125	100%
Hemolytic Uremic Syndrome (HUS)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Legionellosis	27	12%	16	7%	21	9%	13	6%	17	7%	230	100%
Leprosy (Hansen Disease)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Listeriosis	6	21%	5	17%	2	7%	1	3%	0	0%	29	100%
Meningitis, Aseptic	156	19%	99	12%	84	10%	43	5%	61	8%	810	100%
Meningitis, Other Bacterial*	7	9%	9	11%	4	5%	13	16%	5	6%	82	100%
Meningococcal Disease	2	6%	3	9%	3	9%	2	6%	5	14%	35	100%
Salmonellosis	140	11%	108	8%	109	8%	74	6%	76	6%	1,309	100%
Shigellosis	27	9%	14	5%	22	7%	22	7%	21	7%	304	100%
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0%	1	10%	1	10%	0	0%	0	0%	10	100%
Streptococcal Disease, Group A, Invasive	16	6%	14	6%	13	5%	29	12%	30	12%	248	100%
Streptococcal Disease, Group B, in Newborn*	3	7%	4	10%	4	10%	5	12%	3	7%	41	100%
Streptococcal Toxic Shock Syndrome (STSS)	1	8%	0	0%	0	0%	0	0%	1	8%	12	100%
Streptococcus pneumoniae, Invasive Disease	34	3%	60	5%	109	9%	133	11%	136	11%	1,220	100%
Ages < 5 Years*	4	4%	9	9%	9	9%	5	5%	10	10%	97	100%
Drug Resistant, Ages 5+ Years*	9	3%	14	4%	25	8%	35	11%	34	11%	320	100%
Drug Susceptible, Ages 5+ Years*	21	3%	37	5%	75	9%	93	12%	92	11%	803	100%
Toxic Shock Syndrome (TSS)	1	25%	0	0%	1	25%	0	0%	1	25%	4	100%
Typhoid Fever	1	11%	1	11%	1	11%	0	0%	0	0%	9	100%
Vibriosis	2	18%	1	9%	0	0%	1	9%	0	0%	11	100%
Vibrio parahaemolyticus Infection	1	20%	1	20%	0	0%	0	0%	0	0%	5	100%
Other (Not Cholera)	1	17%	0	0%	0	0%	1	17%	0	0%	6	100%
Yersiniosis	4	10%	1	2%	5	12%	3	7%	6	14%	42	100%
SUB-TOTAL	761	11%	614	9%	604	8%	514	7%	554	8%	7,217	100%

HEPATITIS												
Hepatitis A	11	22%	10	20%	5	10%	2	4%	4	8%	49	100%
Hepatitis B*	130	7%	123	6%	194	10%	143	8%	154	8%	1,903	100%
Acute*	13	11%	5	4%	5	4%	6	5%	6	5%	123	100%
Chronic*	116	7%	117	7%	189	11%	137	8%	148	8%	1,777	100%
Perinatal Infection*	1	33%	1	33%	0	0%	0	0%	0	0%	3	100%
Hepatitis C*	583	8%	503	7%	694	9%	587	8%	640	8%	7,728	100%
Acute*	1	8%	1	8%	0	0%	0	0%	2	17%	12	100%
Past or Present*	582	8%	502	7%	694	9%	587	8%	638	8%	7,716	100%
Hepatitis E	0	100%	1	100%	0	100%	0	100%	0	100%	1	100%
SUB-TOTAL	724	7%	637	7%	893	9%	732	8%	798	8%	9,681	100%

	Aug	just	Septe	mber	Octo	ober	Nove	mber	Dece	mber	то	ΓAL
OUTBREAKS*	N	%	N	%	N	%	N	%	Ν	%	N	%
Community*	2	4%	9	19%	9	19%	7	15%	4	9%	47	100%
Foodborne*	1	1%	8	12%	4	6%	5	7%	6	9%	69	100%
Healthcare-Associated*	3	4%	4	6%	4	6%	8	12%	13	19%	68	100%
Institutional*	1	1%	3	4%	9	11%	13	16%	19	23%	82	100%
Waterborne*	0	0%	1	10%	0	0%	0	0%	6	60%	10	100%
Zoonotic*	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
SUB-TOTAL	7	3%	25	9%	26	9%	33	12%	48	17%	278	100%
VACCINE-PREVENTABLE												
Influenza-Associated Hospitalization*	0	0%	4	2%	14	5%	30	12%	128	49%	259	100%
Measles	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Imported	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Indigenous	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Mumps	1	4%	5	19%	8	30%	3	11%	1	4%	27	100%
Pertussis	161	9%	235	13%	229	12%	222	12%	142	8%	1,858	100%
Tetanus	0	0%	0	0%	1	100%	0	0%	0	0%	1	100%
Varicella	43	3%	107	8%	157	12%	117	9%	90	7%	1,337	100%
SUB-TOTAL	205	6%	351	1 0 %	409	12%	372	11%	361	10%	3,484	100%
ZOONOSES												
Brucellosis	0	0%	0	0%	0	0%	1	100%	0	0%	1	100%
Dengue	8	50%	1	6%	2	13%	0	0%	0	0%	16	100%
Ehrlichiosis/Anaplasmosis	2	20%	0	0%	0	0%	1	10%	0	0%	10	100%
Anaplasma phagocytophilum*	1	50%	0	0%	0	0%	0	0%	0	0%	2	100%
Ehrlichia chaffeensis*	1	13%	0	0%	0	0%	1	13%	0	0%	8	100%
LaCrosse Virus Disease*	14	58%	5	21%	0	0%	0	0%	0	0%	24	100%
Lyme Disease	5	14%	1	3%	3	8%	2	5%	1	3%	37	100%
Malaria	1	2%	3	7%	3	7%	3	7%	4	9%	44	100%
Psittacosis	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Q Fever	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Rabies, Animal*	18	38%	2	4%	1	2%	1	2%	1	2%	47	100%
Rocky Mountain Spotted Fever (RMSF)	1	6%	0	0%	1	6%	0	0%	0	0%	16	100%
West Nile Virus Infection*	1	20%	2	40%	1	20%	0	0%	0	0%	5	100%
SUB-TOTAL	50	25%	14	7%	11	5%	8	4%	6	3%	202	100%
GRAND TOTAL	1,747	8%	1,641	8%	1,943	9%	1,659	8%	1,767	8%	20,862	100%

	Ac	lams	A	len	Ash	land	Asht	abula	Atl	nens	Auc	laize	Bel	mont
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	Ν	Rate	N	Rate	N	Rate	N	Rate	Ν	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	0	0.0	15	14.1	9	16.9	10	9.9	0	0.0	8	17.4	7	9.9
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Coccidioidomycosis	0	0.0	2	1.9	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	1.9	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	2	7.0	2	1.9	8	15.1	1	1.0	1	1.5	3	6.5	1	1.4
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	1	3.5	4	3.8	0	0.0	0	0.0	1	1.5	2	4.4	1	1.4
O157:H7	0	0.0	4	3.8	0	0.0	0	0.0	1	1.5	1	2.2	0	0.0
Not O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown Serotype	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	1	1.4
Giardiasis	3	10.5	14	13.2	10	18.8	5	4.9	1	1.5	5	10.9	4	5.7
Haemophilus influenzae, Invasive Disease	0	0.0	1	0.9	1	1.9	2	2.0	0	0.0	0	0.0	1	1.4
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	1	0.9	0	0.0	2	2.0	0	0.0	0	0.0	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	1	1.9	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	0	0.0	30	28.2	1	1.9	1	1.0	11	17.0	6	13.1	10	14.2
Meningitis, Other Bacterial*	0	0.0	4	3.8	0	0.0	0	0.0	0	0.0	2	4.4	1	1.4
Meningococcal Disease	0	0.0	0	0.0	0	0.0	1	1.0	3	4.6	0	0.0	0	0.0
Salmonellosis	1	3.5	15	14.1	3	5.6	18	17.7	52	80.3	12	26.1	6	8.5
Shigellosis	0	0.0	4	3.8	0	0.0	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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	1	0.9	0	0.0	1	1.0	0	0.0	0	0.0	2	2.8
Streptococcal Disease, Group B, in Newborn*	0	*	1	*	0	*	1	*	1	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	0	0.0	21	19.7	0	0.0	10	9.9	5	7.7	6	13.1	12	17.0
Ages < 5 Years*	0	*	1	*	0	*	2	*	0	*	2	*	1	*
Drug Resistant, Ages 5+ Years*	0	*	1	*	0	*	4	*	0	*	0	*	2	*
Drug Susceptible, Ages 5+ Years*	0	*	19	*	0	*	4	*	5	*	4	*	9	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	1	1.9	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	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	1.9	1	1.9	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	7	24.5	117	110.0	36	67.7	53	52.2	75	115.8	44	95.8	45	63.9

HEPATITIS														
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B*	6	21.0	11	10.3	4	7.5	3	3.0	8	12.4	0	0.0	5	7.1
Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	2.8
Chronic*	6	21.0	11	10.3	4	7.5	3	3.0	7	10.8	0	0.0	3	4.3
Perinatal Infection*	0	*	0	*	0	*	0	*	1	*	0	*	0	*
Hepatitis C*	12	42.0	55	51.7	15	28.2	78	76.8	29	44.8	5	10.9	27	38.4
Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Past or Present*	12	42.0	55	51.7	15	28.2	78	76.8	29	44.8	5	10.9	27	38.4
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	18	63.0	66	62.1	19	35.8	81	79.8	37	57.1	5	10.9	32	45.5

N = number of cases reported. Rates use 2010 U.S. Census counts and are per 100,000 population. n/a = not applicable.

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

	Ac	dams	A	llen	Ash	nland	Asht	abula	Atl	nens	Aug	laize	Bel	mont
OUTBREAKS*	Ν	Rate	N	Rate	Ν	Rate	N	Rate	Ν	Rate	N	Rate	Ν	Rate
Community*	0	n/a	4	n/a	1	n/a	0	n/a	1	n/a	1	n/a	0	n/a
Foodborne*	0	n/a	2	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Institutional*	0	n/a	5	n/a	0	n/a	1	n/a	1	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	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	12	n/a	1	n/a	1	n/a	4	n/a	2	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	0	0.0	20	18.8	1	1.9	1	1.0	0	0.0	1	2.2	1	1.4
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	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	171	160.8	6	11.3	4	3.9	8	12.4	5	10.9	1	1.4
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	1	3.5	4	3.8	9	16.9	26	25.6	19	29.3	36	78.3	25	35.5
SUB-TOTAL	1	3.5	195	183.4	16	30.1	31	30.5	27	41.7	42	91.4	27	38.4
ZOONOSES			-						-					
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	1	0.9	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	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	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	0	0.0
West Nile Virus Infection*	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	3	2.8	0	0.0	1	0.0	2	3.1	0	0.0	0	0.0
GRAND TOTAL	26	91.1	393	358.3	72	133.6	167	162.6	145	217.7	93	198.0	104	147.7
POPULATION	20	3.550	400	6,331	50	.139	404	,497	• •	757		,949		400

	В	rown	Bu	ıtler	Ca	rroll	Chan	npaign	C	ark	Cler	mont	Cli	nton
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	Ν	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	1	2.2	21	5.7	7	24.3	5	12.5	10	7.2	23	11.7	6	14.3
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	1	2.2	1	0.3	2	6.9	1	2.5	1	0.7	2	1.0	9	21.4
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	1	*	1	*	0	*
Escherichia coli, Shiga Toxin-Producing	0	0.0	13	3.5	0	0.0	1	2.5	2	1.4	1	0.5	0	0.0
O157:H7	0	0.0	11	3.0	0	0.0	1	2.5	0	0.0	1	0.5	0	0.0
Not O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	2	1.4	0	0.0	0	0.0
Unknown Serotype	0	0.0	2	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	2	4.5	15	4.1	4	13.9	3	7.5	4	2.9	16	8.1	4	9.5
Haemophilus influenzae, Invasive Disease	0	0.0	3	0.8	0	0.0	2	5.0	2	1.4	5	2.5	1	2.4
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	5	1.4	2	6.9	0	0.0	0	0.0	0	0.0	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	0.3	1	3.5	0	0.0	0	0.0	1	0.5	0	0.0
Meningitis, Aseptic	0	0.0	31	8.4	1	3.5	0	0.0	3	2.2	24	12.2	5	11.9
Meningitis, Other Bacterial*	0	0.0	2	0.5	0	0.0	1	2.5	2	1.4	1	0.5	0	0.0
Meningococcal Disease	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	2	4.5	23	6.2	5	17.3	5	12.5	14	10.1	23	11.7	5	11.9
Shigellosis	0	0.0	15	4.1	0	0.0	5	12.5	3	2.2	2	1.0	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	5	1.4	1	3.5	4	10.0	3	2.2	3	1.5	1	2.4
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	2	4.5	28	7.6	7	24.3	2	5.0	26	18.8	19	9.6	9	21.4
Ages < 5 Years*	0	*	1	*	0	*	1	*	0	*	1	*	1	*
Drug Resistant, Ages 5+ Years*	1	*	4	*	3	*	0	*	2	*	4	*	3	*
Drug Susceptible, Ages 5+ Years*	1	*	23	*	4	*	1	*	24	*	14	*	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	1	2.4
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	8	17.8	165	44.8	31	107.5	29	72.3	71	51.3	123	62.3	41	97.5

HEPATITIS														
Hepatitis A	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	3	1.5	0	0.0
Hepatitis B*	1	2.2	40	10.9	0	0.0	1	2.5	17	12.3	22	11.1	0	0.0
Acute*	0	0.0	1	0.3	0	0.0	0	0.0	6	4.3	9	4.6	0	0.0
Chronic*	1	2.2	39	10.6	0	0.0	1	2.5	11	8.0	13	6.6	0	0.0
Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C*	18	40.1	129	35.0	4	13.9	5	12.5	52	37.6	79	40.0	19	45.2
Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4
Past or Present*	18	40.1	129	35.0	4	13.9	5	12.5	52	37.6	79	40.0	18	42.8
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	19	42.4	170	46.2	4	13.9	6	15.0	69	49.9	104	52.7	19	45.2

N = number of cases reported. Rates use 2010 U.S. Census counts and are per 100,000 population. n/a = not applicable.

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

	В	rown	Bu	ıtler	Ca	rroll	Chan	npaign	С	lark	Cler	mont	Cli	nton
OUTBREAKS*	N	Rate	N	Rate	Ν	Rate	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate
Community*	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	1	n/a	0	n/a	0	n/a	2	n/a	1	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	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	5	n/a	2	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	0	0.0	3	0.8	1	3.5	0	0.0	1	0.7	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
Indigenous	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	1	0.7	0	0.0	0	0.0
Pertussis	0	0.0	6	1.6	1	3.5	1	2.5	9	6.5	12	6.1	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	2	4.5	24	6.5	7	24.3	10	24.9	6	4.3	32	16.2	1	2.4
SUB-TOTAL	2	4.5	33	9.0	9	31.2	11	27.4	17	12.3	45	22.8	1	2.4
ZOONOSES														
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
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	2	0.5	1	3.5	0	0.0	0	0.0	0	0.0	1	2.4
Malaria	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	5	1.1	1	3.5	0	0.0	1	0.0	1	0.5	1	2.4
GRAND TOTAL	29	64.7	374	101.1	45	156.1	46	114.7	163	113.5	275	138.3	62	147.5
POPULATION	4	1.846	368	3.130	28	.836	40	.097	138	8.333	197	,363	42	.040

	Colu	nbiana	Cosh	octon	Crav	wford	Cuya	hoga	Da	arke	Def	iance	Dela	aware
GENERAL INFECTIOUS DISEASES	Ν	Rate	Ν	Rate	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	6	0.5	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	6	5.6	5	13.5	2	4.6	170	13.3	3	5.7	7	17.9	19	10.9
Cholera	0	0.0	0	0.0	0	0.0	3	0.2	0	0.0	0	0.0	0	0.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	3	0.2	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	6	5.6	5	13.5	1	2.3	31	2.4	7	13.2	2	5.1	20	11.5
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	5	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	0	0.0	2	5.4	0	0.0	7	0.5	0	0.0	0	0.0	1	0.6
O157:H7	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Not O157:H7	0	0.0	2	5.4	0	0.0	5	0.4	0	0.0	0	0.0	1	0.6
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	8	7.4	3	8.1	0	0.0	75	5.9	1	1.9	0	0.0	8	4.6
Haemophilus influenzae, Invasive Disease	0	0.0	0	0.0	2	4.6	9	0.7	0	0.0	0	0.0	1	0.6
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	2	1.9	0	0.0	0	0.0	31	2.4	0	0.0	0	0.0	8	4.6
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	1	0.9	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	5	4.6	4	10.8	3	6.9	104	8.1	1	1.9	1	2.6	9	5.2
Meningitis, Other Bacterial*	0	0.0	1	2.7	0	0.0	9	0.7	0	0.0	0	0.0	1	0.6
Meningococcal Disease	0	0.0	0	0.0	0	0.0	6	0.5	0	0.0	0	0.0	0	0.0
Salmonellosis	7	6.5	2	5.4	3	6.9	156	12.2	6	11.3	3	7.7	21	12.1
Shigellosis	1	0.9	0	0.0	0	0.0	14	1.1	0	0.0	2	5.1	2	1.1
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	1	2.7	0	0.0	23	1.8	0	0.0	1	2.6	2	1.1
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	5	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	17	15.8	4	10.8	4	9.1	74	5.8	3	5.7	6	15.4	10	5.7
Ages < 5 Years*	0	*	0	*	0	*	6	*	0	*	1	*	3	*
Drug Resistant, Ages 5+ Years*	7	*	2	*	2	*	19	*	3	*	0	*	2	*
Drug Susceptible, Ages 5+ Years*	10	*	2	*	2	*	49	*	0	*	5	*	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	1	0.1	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	2	1.9	0	0.0	0	0.0	6	0.5	0	0.0	0	0.0	1	0.6
SUB-TOTAL	55	51.0	27	73.2	15	34.3	746	58.3	21	39.7	22	56.4	103	59.1

HEPATITIS														
Hepatitis A	1	0.9	0	0.0	0	0.0	1	0.1	1	1.9	0	0.0	2	1.1
Hepatitis B*	6	5.6	4	10.8	3	6.9	208	16.2	1	1.9	2	5.1	29	16.6
Acute*	1	0.9	0	0.0	0	0.0	13	1.0	0	0.0	0	0.0	3	1.7
Chronic*	5	4.6	4	10.8	3	6.9	195	15.2	1	1.9	2	5.1	25	14.4
Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	1	*
Hepatitis C*	30	27.8	3	8.1	17	38.8	977	76.3	5	9.4	4	10.2	31	17.8
Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.6
Past or Present*	30	27.8	3	8.1	17	38.8	977	76.3	5	9.4	4	10.2	30	17.2
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	37	34.3	7	19.0	20	45.7	1,186	92.6	7	13.2	6	15.4	62	35.6

N = number of cases reported. Rates use 2010 U.S. Census counts and are per 100,000 population. n/a = not applicable.

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

	Colu	mbiana	Cos	nocton	Crav	wford	Cuya	hoga	Da	arke	Def	iance	Dela	aware
OUTBREAKS*	Ν	Rate	N	Rate	Ν	Rate	N	Rate	Ν	Rate	Ν	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	0	n/a	0	n/a	5	n/a	0	n/a	1	n/a	5	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	25	n/a	0	n/a	0	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	10	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
SUB-TOTAL	0	n/a	0	n/a	0	n/a	40	n/a	0	n/a	1	n/a	8	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	4	3.7	0	0.0	0	0.0	32	2.5	0	0.0	0	0.0	2	1.1
Measles	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Mumps	1	0.9	0	0.0	0	0.0	13	1.0	0	0.0	0	0.0	1	0.6
Pertussis	2	1.9	0	0.0	2	4.6	29	2.3	0	0.0	0	0.0	178	102.2
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	9	8.3	14	37.9	5	11.4	61	4.8	3	5.7	22	56.4	39	22.4
SUB-TOTAL	16	14.8	14	37.9	7	16.0	136	10.6	3	5.7	22	56.4	220	126.3
ZOONOSES														
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	3	0.2	0	0.0	0	0.0	1	0.6
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
LaCrosse Virus DIsease*	0	0.0	2	5.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	1	2.7	0	0.0	1	0.1	0	0.0	0	0.0	1	0.6
Malaria	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies. Animal*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	3	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	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	3	8.1	0	0.0	9	0.6	Ő	0.0	0	0.0	5	1.1
	·													
GRAND TOTAL	108	100.1	51	138.2	42	95.9	2,117	162.2	31	58.5	51	128.1	398	222.1
POPULATION	10	7.841	36	,901	43	.784	1.28	0.122	52	.959	39	.037	174	4,214

	E	Erie	Fai	rfield	Fay	/ette	Frai	nklin	Fu	Iton	Ga	allia	Gea	auga
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate
Amebiasis	0	0.0	4	2.7	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	3	3.9	13	8.9	1	3.4	88	7.6	5	11.7	1	3.2	17	18.2
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Coccidioidomycosis	0	0.0	1	0.7	0	0.0	3	0.3	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	1	3.2	0	0.0
Cryptosporidiosis	1	1.3	3	2.1	0	0.0	43	3.7	11	25.8	0	0.0	1	1.1
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	6	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	1	1.3	2	1.4	1	3.4	27	2.3	1	2.3	0	0.0	0	0.0
O157:H7	1	1.3	0	0.0	1	3.4	9	0.8	1	2.3	0	0.0	0	0.0
Not O157:H7	0	0.0	2	1.4	0	0.0	13	1.1	0	0.0	0	0.0	0	0.0
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	6.5	14	9.6	4	13.8	178	15.3	5	11.7	0	0.0	4	4.3
Haemophilus influenzae, Invasive Disease	0	0.0	1	0.7	0	0.0	6	0.5	0	0.0	0	0.0	1	1.1
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	1	1.3	2	1.4	0	0.0	61	5.2	0	0.0	0	0.0	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	0.7	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	2	2.6	13	8.9	2	6.9	98	8.4	3	7.0	1	3.2	2	2.1
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	1	3.2	0	0.0
Meningococcal Disease	0	0.0	1	0.7	0	0.0	7	0.6	0	0.0	0	0.0	0	0.0
Salmonellosis	9	11.7	12	8.2	2	6.9	117	10.1	2	4.7	5	16.2	17	18.2
Shigellosis	0	0.0	1	0.7	0	0.0	11	0.9	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	1	0.1	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	1	0.7	0	0.0	34	2.9	1	2.3	0	0.0	0	0.0
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	7	*	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	7.8	5	3.4	2	6.9	166	14.3	5	11.7	3	9.7	4	4.3
Ages < 5 Years*	2	*	1	*	1	*	18	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	1	*	0	*	56	*	1	*	0	*	0	*
Drug Susceptible, Ages 5+ Years*	4	*	3	*	1	*	92	*	4	*	3	*	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	2	0.2	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	3	0.3	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	7	0.6	0	0.0	0	0.0	0	0.0
SUB-TOTAL	28	36.3	74	50.6	12	41.3	881	75.7	33	77.3	13	42.0	46	49.3

HEPATITIS														
Hepatitis A	0	0.0	0	0.0	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0
Hepatitis B*	5	6.5	22	15.1	0	0.0	387	33.3	0	0.0	7	22.6	4	4.3
Acute*	0	0.0	1	0.7	0	0.0	36	3.1	0	0.0	3	9.7	0	0.0
Chronic*	5	6.5	21	14.4	0	0.0	351	30.2	0	0.0	4	12.9	4	4.3
Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C*	29	37.6	87	59.5	2	6.9	658	56.6	8	18.7	17	55.0	31	33.2
Acute*	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Past or Present*	29	37.6	87	59.5	2	6.9	657	56.5	8	18.7	17	55.0	31	33.2
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	34	44.1	109	74.6	2	6.9	1,050	90.3	8	18.7	24	77.6	35	37.5

N = number of cases reported. Rates use 2010 U.S. Census counts and are per 100,000 population. n/a = not applicable.

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

		Erie	Fai	rfield	Fay	/ette	Fran	nklin	Fu	lton	G	allia	Ge	auga
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate
Community*	0	n/a	0	n/a	0	n/a	8	n/a	1	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	11	n/a	1	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	4	n/a	0	n/a	0	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	28	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	1	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	0	n/a	0	n/a	52	n/a	3	n/a	1	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	1	1.3	2	1.4	0	0.0	39	3.4	6	14.1	3	9.7	3	3.2
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1
Pertussis	2	2.6	93	63.6	0	0.0	593	51.0	4	9.4	1	3.2	1	1.1
Tetanus	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Varicella	8	10.4	15	10.3	3	10.3	68	5.8	7	16.4	1	3.2	5	5.4
SUB-TOTAL	11	14.3	110	75.3	3	10.3	701	60.3	17	39.8	5	16.2	10	10.7
ZOONOSES														
Brucellosis	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.2	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	1	3.2	0	0.0
LaCrosse Virus Disease*	0	0.0	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	0	0.0	5	0.4	0	0.0	0	0.0	3	3.2
Malaria	0	0.0	0	0.0	0	0.0	20	1.7	0	0.0	0	0.0	0	0.0
Psittacosis	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	1	1.1
Rabies, Animal*	0	n/a	0	n/a	0	n/a	4	n/a	1	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	1	0.7	0	0.0	1	0.1	0	0.0	0	0.0	1	1.1
West Nile Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	2	1.4	0	0.0	32	2.4	1	0.0	1	3.2	5	5.4
GRAND TOTAL	73	94.7	295	201.8	17	58.6	2,716	228.6	62	135.8	44	139.0	96	102.8
POPULATION	7	7.079	146	6.156	29	.030	1.16	3.414	42	.698	30	,934	93	,389

	Gr	eene	Gue	rnsey	Ham	ilton	Han	cock	На	ardin	Har	rison	He	enrv
GENERAL INFECTIOUS DISEASES	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	7	0.9	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
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	16	9.9	4	10.0	58	7.2	1	1.3	0	0.0	3	18.9	7	24.8
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	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	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	1	0.6	1	2.5	15	1.9	5	6.7	2	6.2	0	0.0	0	0.0
Cytomegalovirus (CMV), Congenital*	0	*	0	*	1	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	2	1.2	0	0.0	8	1.0	1	1.3	0	0.0	0	0.0	1	3.5
O157:H7	0	0.0	0	0.0	6	0.7	0	0.0	0	0.0	0	0.0	0	0.0
Not O157:H7	2	1.2	0	0.0	0	0.0	1	1.3	0	0.0	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	1	3.5
Giardiasis	5	3.1	3	7.5	77	9.6	5	6.7	1	3.1	0	0.0	1	3.5
Haemophilus influenzae, Invasive Disease	2	1.2	0	0.0	12	1.5	0	0.0	0	0.0	0	0.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	6	3.7	1	2.5	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	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	13	8.0	8	20.0	58	7.2	1	1.3	1	3.1	0	0.0	1	3.5
Meningitis, Other Bacterial*	0	0.0	0	0.0	5	0.6	1	1.3	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	1	2.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	19	11.8	11	27.4	79	9.8	10	13.4	1	3.1	2	12.6	3	10.6
Shigellosis	2	1.2	0	0.0	141	17.6	0	0.0	0	0.0	0	0.0	0	0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	1	0.6	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	9	5.6	0	0.0	34	4.2	1	1.3	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group B, in Newborn*	1	*	0	*	2	*	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	16	9.9	6	15.0	113	14.1	2	2.7	2	6.2	2	12.6	2	7.1
Ages < 5 Years*	2	*	1	*	10	*	1	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	6	*	1	*	37	*	0	*	0	*	1	*	1	*
Drug Susceptible, Ages 5+ Years*	8	*	4	*	66	*	1	*	2	*	1	*	1	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	95	58.8	35	87.3	621	77.4	28	37.4	7	21.8	7	44.1	15	53.2

HEPATITIS														
Hepatitis A	0	0.0	0	0.0	3	0.4	1	1.3	0	0.0	0	0.0	0	0.0
Hepatitis B*	12	7.4	1	2.5	156	19.4	5	6.7	1	3.1	1	6.3	1	3.5
Acute*	0	0.0	0	0.0	15	1.9	0	0.0	0	0.0	0	0.0	0	0.0
Chronic*	12	7.4	1	2.5	141	17.6	5	6.7	1	3.1	1	6.3	1	3.5
Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C*	68	42.1	17	42.4	329	41.0	15	20.1	11	34.3	1	6.3	3	10.6
Acute*	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Past or Present*	68	42.1	17	42.4	328	40.9	15	20.1	11	34.3	1	6.3	3	10.6
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	80	49.5	18	44.9	488	60.8	21	28.1	12	37.4	2	12.6	4	14.2

$$\begin{split} N &= \text{number of cases reported.} \\ \text{Rates use 2010 U.S. Census counts and are per 100,000 population.} \\ n/a &= \text{not applicable.} \\ ^* \text{Please see Technical Notes (pp. 93-97).} \end{split}$$

	Gr	eene	Gue	rnsey	Ham	ilton	Har	cock	Ha	rdin	Har	rison	He	enry
OUTBREAKS*	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate
Community*	2	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Foodborne*	1	n/a	0	n/a	4	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	1	n/a	0	n/a	7	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Institutional*	1	n/a	0	n/a	10	n/a	0	n/a	0	n/a	0	n/a	2	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	5	n/a	0	n/a	22	n/a	0	n/a	0	n/a	0	n/a	3	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	6	3.7	0	0.0	11	1.4	1	1.3	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	2	1.2	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	5	3.1	3	7.5	62	7.7	0	0.0	0	0.0	1	6.3	38	134.7
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	15	9.3	2	5.0	49	6.1	8	10.7	7	21.8	0	0.0	19	67.3
SUB-TOTAL	28	17.3	5	12.5	123	15.3	9	12.0	7	21.8	1	6.3	57	202.0
ZOONOSES														
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
LaCrosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.5
Malaria	2	1.2	0	0.0	4	0.5	0	0.0	0	0.0	0	0.0	0	0.0
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	5	n/a	2	n/a	1	n/a	0	n/a	2	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	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	7	1.2	2	0.0	6	0.6	0	0.0	2	0.0	0	0.0	1	3.5
GRAND TOTAL	215	126.9	60	144.7	1,260	154.2	58	77.6	28	81.1	10	63.0	80	272.9
POPULATION	16	1,573	40	,087	802	,374	74	,782	32	,058	15	,864	28	,215

	Hig	hland	Нос	cking	Hol	Imes	H	uron	Jac	kson	Jeff	erson	K	nox
GENERAL INFECTIOUS DISEASES	N	Rate	Ν	Rate	Ν	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	3	6.9	1	3.4	9	21.2	4	6.7	0	0.0	5	7.2	10	16.4
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	4	9.2	2	6.8	2	4.7	4	6.7	1	3.0	0	0.0	25	41.0
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	0	0.0	1	3.4	0	0.0	0	0.0	0	0.0	1	1.4	1	1.6
O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4	1	1.6
Unknown Serotype	0	0.0	1	3.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	4	9.2	0	0.0	2	4.7	7	11.7	0	0.0	1	1.4	5	8.2
Haemophilus influenzae, Invasive Disease	0	0.0	1	3.4	1	2.4	0	0.0	0	0.0	1	1.4	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	0	0.0	3	7.1	0	0.0	0	0.0	0	0.0	3	4.9
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	3.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	3	6.9	2	6.8	4	9.4	0	0.0	1	3.0	4	5.7	2	3.3
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4	0	0.0
Meningococcal Disease	2	4.6	0	0.0	0	0.0	2	3.4	0	0.0	0	0.0	0	0.0
Salmonellosis	3	6.9	1	3.4	4	9.4	10	16.8	2	6.0	3	4.3	8	13.1
Shigellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4	0	0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	1	3.4	2	4.7	0	0.0	0	0.0	4	5.7	2	3.3
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	1	*	2	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	3	6.9	1	3.4	1	2.4	0	0.0	1	3.0	10	14.3	12	19.7
Ages < 5 Years*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	0	*	0	*	0	*	0	*	3	*	5	*
Drug Susceptible, Ages 5+ Years*	3	*	1	*	1	*	0	*	1	*	6	*	7	*
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	1.6
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4	0	0.0
Yersiniosis	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	22	50.5	11	37.4	30	70.8	27	45.3	6	18.1	35	50.2	69	113.3

HEPATITIS														
Hepatitis A	0	0.0	0	0.0	2	4.7	0	0.0	0	0.0	0	0.0	1	1.6
Hepatitis B*	0	0.0	0	0.0	2	4.7	2	3.4	5	15.0	2	2.9	5	8.2
Acute*	0	0.0	0	0.0	0	0.0	0	0.0	1	3.0	0	0.0	0	0.0
Chronic*	0	0.0	0	0.0	2	4.7	2	3.4	4	12.0	2	2.9	5	8.2
Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C*	19	43.6	17	57.9	7	16.5	19	31.9	25	75.2	26	37.3	7	11.5
Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Past or Present*	19	43.6	17	57.9	7	16.5	19	31.9	25	75.2	26	37.3	7	11.5
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	19	43.6	17	57.9	11	26.0	21	35.2	30	90.3	28	40.2	13	21.3

$$\begin{split} N &= \text{number of cases reported.} \\ \text{Rates use 2010 U.S. Census counts and are per 100,000 population.} \\ n/a &= \text{not applicable.} \\ ^* \text{Please see Technical Notes (pp. 93-97).} \end{split}$$

	Hig	hland	Но	cking	Но	Imes	H	uron	Jac	kson	Jeff	erson	K	nox
OUTBREAKS*	N	Rate	N	Rate	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate
Community*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	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	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	0	n/a	1	n/a	0	n/a	1	n/a	1	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	1	2.3	1	3.4	0	0.0	2	3.4	2	6.0	5	7.2	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0
Pertussis	1	2.3	22	74.9	1	2.4	2	3.4	4	12.0	5	7.2	3	4.9
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	14	32.1	3	10.2	5	11.8	12	20.1	16	48.2	1	1.4	4	6.6
SUB-TOTAL	16	36.7	26	88.5	6	14.2	17	28.5	22	66.2	11	15.8	7	11.5
ZOONOSES														
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	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
LaCrosse Virus Disease*	0	0.0	0	0.0	5	11.8	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0	0	0.0	1	1.6
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	1	2.3	0	0.0	0	0.0	0	0.0	4	12.0	0	0.0	0	0.0
West Nile Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	2.3	0	0.0	6	14.2	0	0.0	4	0.0	0	0.0	3	4.9
GRAND TOTAL	58	133.1	54	183.8	54	125.1	65	109.0	63	186.6	75	106.2	92	151.0
POPULATION	43	.589	29	.380	42	.366	59	.626	33	.225	69	.709	60	.921

	L	ake	Law	rence	Lic	king	Lo	gan	Lo	rain	Lu	cas	Ma	dison
GENERAL INFECTIOUS DISEASES	Ν	Rate	Ν	Rate	Ν	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	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	1	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	21	9.1	5	8.0	38	22.8	5	10.9	12	4.0	43	9.7	6	13.8
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	1	0.6	0	0.0	1	0.3	1	0.2	0	0.0
Cryptosporidiosis	0	0.0	0	0.0	9	5.4	0	0.0	25	8.3	18	4.1	2	4.6
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	3	*	1	*
Escherichia coli, Shiga Toxin-Producing	2	0.9	1	1.6	2	1.2	1	2.2	2	0.7	0	0.0	1	2.3
O157:H7	2	0.9	1	1.6	1	0.6	1	2.2	1	0.3	0	0.0	0	0.0
Not O157:H7	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	1	2.3
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0
Giardiasis	8	3.5	1	1.6	8	4.8	2	4.4	14	4.6	19	4.3	0	0.0
Haemophilus influenzae, Invasive Disease	2	0.9	0	0.0	3	1.8	0	0.0	6	2.0	5	1.1	1	2.3
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	0	0.0	4	2.4	0	0.0	3	1.0	7	1.6	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	3	1.3	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0
Meningitis, Aseptic	10	4.3	2	3.2	8	4.8	2	4.4	8	2.7	39	8.8	1	2.3
Meningitis, Other Bacterial*	0	0.0	0	0.0	2	1.2	0	0.0	1	0.3	6	1.4	1	2.3
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.7	0	0.0
Salmonellosis	32	13.9	7	11.2	15	9.0	3	6.5	40	13.3	48	10.9	3	6.9
Shigellosis	3	1.3	0	0.0	0	0.0	2	4.4	2	0.7	43	9.7	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	1	0.2	0	0.0
Streptococcal Disease, Group A, Invasive	2	0.9	1	1.6	2	1.2	1	2.2	2	0.7	21	4.8	0	0.0
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	1	*	0	*	0	*	3	*	1	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	1	1.6	0	0.0	0	0.0	0	0.0	6	1.4	0	0.0
Streptococcus pneumoniae, Invasive Disease	19	8.3	8	12.8	24	14.4	8	17.4	16	5.3	58	13.1	5	11.5
Ages < 5 Years*	0	*	0	*	2	*	1	*	3	*	7	*	0	*
Drug Resistant, Ages 5+ Years*	4	*	3	*	12	*	1	*	4	*	15	*	1	*
Drug Susceptible, Ages 5+ Years*	15	*	5	*	10	*	6	*	9	*	36	*	4	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	2	1.2	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0
SUB-TOTAL	103	44.8	27	43.2	119	71.5	24	52.3	137	45.5	325	73.6	23	53.0

HEPATITIS														
Hepatitis A	6	2.6	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	0	0.0
Hepatitis B*	15	6.5	3	4.8	23	13.8	1	2.2	48	15.9	99	22.4	27	62.2
Acute*	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.3
Chronic*	14	6.1	3	4.8	23	13.8	1	2.2	48	15.9	99	22.4	26	59.9
Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C*	105	45.6	32	51.2	79	47.4	16	34.9	627	208.1	136	30.8	116	267.1
Acute*	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Past or Present*	104	45.2	32	51.2	79	47.4	16	34.9	627	208.1	136	30.8	116	267.1
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	126	54.8	35	56.0	102	61.3	17	37.1	675	224.0	237	53.6	143	329.2

N = number of cases reported. Rates use 2010 U.S. Census counts and are per 100,000 population. n/a = not applicable.

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

	L	ake	Law	rence	Lic	king	Lo	gan	Lo	rain	Lu	cas	Mac	dison
OUTBREAKS*	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate
Community*	2	n/a	0	n/a	1	n/a	0	n/a	0	n/a	6	n/a	0	n/a
Foodborne*	2	n/a	0	n/a	0	n/a	1	n/a	3	n/a	2	n/a	0	n/a
Healthcare-Associated*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	1	n/a
Institutional*	1	n/a	0	n/a	1	n/a	0	n/a	3	n/a	4	n/a	2	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	6	n/a	0	n/a	2	n/a	2	n/a	6	n/a	13	n/a	4	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	0	0.0	1	1.6	2	1.2	1	2.2	6	2.0	12	2.7	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	2	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	11	4.8	0	0.0	111	66.7	5	10.9	4	1.3	39	8.8	27	62.2
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	13	5.7	3	4.8	20	12.0	5	10.9	24	8.0	27	6.1	4	9.2
SUB-TOTAL	26	11.3	4	6.4	133	79.9	11	24.0	34	11.3	78	17.7	31	71.4
ZOONOSES														
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	2	4.4	2	0.7	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
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	2	1.2	0	0.0	2	0.7	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	1	2.2	2	0.7	0	0.0	0	0.0
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	4	n/a	1	n/a	1	n/a	0	n/a	3	n/a	1	n/a	1	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	4	0.0	1	0.0	5	2.4	3	6.5	9	2.0	1	0.0	1	0.0
GRAND TOTAL	265	110.8	67	105.7	361	215.0	57	119.9	861	282.7	654	144.9	202	453.6
POPULATION	23	0.041	62	.450	166	6.492	45	.858	301	,356	441	,815	43	435

	Mah	oning	Ма	rion	Ме	dina	M	eigs	Me	rcer	М	ami	Мо	onroe
GENERAL INFECTIOUS DISEASES	Ν	Rate	Ν	Rate	Ν	Rate	N	Rate	N	Rate	Ν	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	15	6.3	7	10.5	13	7.5	0	0.0	3	7.4	9	8.8	0	0.0
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	1	4.2	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	9	3.8	7	10.5	4	2.3	0	0.0	50	122.5	0	0.0	0	0.0
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	1	0.4	1	1.5	7	4.1	0	0.0	2	4.9	2	2.0	1	6.8
O157:H7	0	0.0	1	1.5	5	2.9	0	0.0	1	2.5	1	1.0	1	6.8
Not O157:H7	0	0.0	0	0.0	1	0.6	0	0.0	1	2.5	1	1.0	0	0.0
Unknown Serotype	1	0.4	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	8	3.3	5	7.5	4	2.3	1	4.2	6	14.7	5	4.9	0	0.0
Haemophilus influenzae, Invasive Disease	2	0.8	0	0.0	1	0.6	0	0.0	1	2.5	2	2.0	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	6	2.5	2	3.0	4	2.3	0	0.0	0	0.0	1	1.0	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	12	5.0	6	9.0	5	2.9	0	0.0	6	14.7	8	7.8	0	0.0
Meningitis, Other Bacterial*	4	1.7	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	26	10.9	8	12.0	34	19.7	7	29.4	5	12.3	14	13.7	1	6.8
Shigellosis	1	0.4	0	0.0	2	1.2	0	0.0	1	2.5	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	5	2.1	1	1.5	1	0.6	0	0.0	0	0.0	4	3.9	0	0.0
Streptococcal Disease, Group B, in Newborn*	2	*	0	*	0	*	0	*	0	*	0	*	1	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	32	13.4	5	7.5	8	4.6	0	0.0	6	14.7	14	13.7	1	6.8
Ages < 5 Years*	3	*	0	*	1	*	0	*	0	*	1	*	1	*
Drug Resistant, Ages 5+ Years*	9	*	1	*	2	*	0	*	0	*	2	*	0	*
Drug Susceptible, Ages 5+ Years*	20	*	4	*	5	*	0	*	6	*	11	*	0	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	2	0.8	1	1.5	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
SUB-TOTAL	125	52.3	44	66.2	85	49.3	9	37.9	80	196.0	60	58.5	4	27.3

HEPATITIS														
Hepatitis A	2	0.8	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B*	19	8.0	13	19.5	10	5.8	2	8.4	3	7.4	6	5.9	0	0.0
Acute*	3	1.3	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Chronic*	16	6.7	13	19.5	10	5.8	2	8.4	3	7.4	5	4.9	0	0.0
Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C*	74	31.0	79	118.8	66	38.3	11	46.3	3	7.4	33	32.2	1	6.8
Acute*	0	0.0	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Past or Present*	74	31.0	78	117.3	66	38.3	11	46.3	3	7.4	33	32.2	1	6.8
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	95	39.8	93	139.8	76	44.1	13	54.7	6	14.7	39	38.0	1	6.8

$$\begin{split} N &= \text{number of cases reported.} \\ \text{Rates use } 2010 \text{ U.S. Census counts and are per 100,000 population.} \\ n/a &= \text{not applicable.} \\ ^* \text{Please see Technical Notes (pp. 93-97).} \end{split}$$

	Mah	oning	Ma	rion	Me	dina	M	eigs	Me	rcer	Mi	ami	Мо	nroe
OUTBREAKS*	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate
Community*	0	n/a	0	n/a	2	n/a	0	n/a	2	n/a	0	n/a	0	n/a
Foodborne*	4	n/a	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	2	n/a	0	n/a	2	n/a	3	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	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	4	n/a	0	n/a	6	n/a	0	n/a	4	n/a	4	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	3	1.3	1	1.5	1	0.6	1	4.2	0	0.0	1	1.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	1	1.0	0	0.0
Pertussis	8	3.3	5	7.5	5	2.9	0	0.0	3	7.4	5	4.9	1	6.8
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	20	8.4	13	19.5	10	5.8	0	0.0	36	88.2	19	18.5	1	6.8
SUB-TOTAL	31	13.0	19	28.6	17	9.9	1	4.2	39	95.6	26	25.4	2	13.7
ZOONOSES														
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	1	1.5	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	1	1.5	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	2	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	2	n/a	0	n/a	0	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	0	0.0	0	0.0	0	0.0
West Nile Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	3	0.8	3	1.5	1	0.6	0	0.0	0	0.0	1	1.0	2	0.0
GRAND TOTAL	258	105.9	159	236.1	185	103.9	23	96.8	129	306.3	130	122.9	9	47.8
POPULATION	238	3.823	66	.501	172	.332	23	,770	40	.814	102	2.506	14	.642

	Monte	gomery	Мо	rgan	Мо	rrow	Musk	ingum	N	oble	Ot	awa	Pau	Ilding
GENERAL INFECTIOUS DISEASES	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	33	6.2	0	0.0	6	17.2	14	16.3	2	13.7	6	14.5	0	0.0
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Coccidioidomycosis	1	0.2	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	1	2.4	0	0.0
Cryptosporidiosis	2	0.4	0	0.0	1	2.9	1	1.2	0	0.0	3	7.2	2	10.2
Cytomegalovirus (CMV), Congenital*	3	*	0	*	0	*	1	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	2	0.4	1	6.6	0	0.0	1	1.2	0	0.0	0	0.0	1	5.1
O157:H7	1	0.2	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	1	5.1
Not O157:H7	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown Serotype	0	0.0	1	6.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	22	4.1	0	0.0	2	5.7	5	5.8	0	0.0	2	4.8	1	5.1
Haemophilus influenzae, Invasive Disease	11	2.1	0	0.0	1	2.9	1	1.2	2	13.7	1	2.4	2	10.2
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	12	2.2	1	6.6	1	2.9	5	5.8	0	0.0	0	0.0	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	2	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	51	9.5	1	6.6	2	5.7	11	12.8	1	6.8	2	4.8	0	0.0
Meningitis, Other Bacterial*	6	1.1	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	1	5.1
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	58	10.8	0	0.0	1	2.9	10	11.6	3	20.5	4	9.7	2	10.2
Shigellosis	3	0.6	0	0.0	0	0.0	1	1.2	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	16	3.0	0	0.0	2	5.7	1	1.2	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group B, in Newborn*	1	*	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	97	18.1	1	6.6	5	14.4	21	24.4	1	6.8	2	4.8	4	20.4
Ages < 5 Years*	6	*	0	*	0	*	1	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	29	*	0	*	2	*	2	*	0	*	0	*	1	*
Drug Susceptible, Ages 5+ Years*	62	*	1	*	3	*	18	*	1	*	2	*	3	*
Toxic Shock Syndrome (TSS)	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	4	0.7	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
SUB-TOTAL	326	60.9	4	26.6	21	60.3	75	87.1	9	61.5	21	50.7	13	66.3

HEPATITIS														
Hepatitis A	10	1.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B*	116	21.7	1	6.6	3	8.6	2	2.3	1	6.8	0	0.0	0	0.0
Acute*	7	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic*	109	20.4	1	6.6	3	8.6	2	2.3	1	6.8	0	0.0	0	0.0
Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C*	295	55.1	2	13.3	7	20.1	9	10.5	8	54.6	7	16.9	9	45.9
Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Past or Present*	295	55.1	2	13.3	7	20.1	9	10.5	8	54.6	7	16.9	9	45.9
Hepatitis E	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	422	78.9	3	19.9	10	28.7	11	12.8	9	61.5	7	16.9	9	45.9

N = number of cases reported. Rates use 2010 U.S. Census counts and are per 100,000 population. n/a = not applicable. * Please see Technical Notes (pp. 93-97).

	Mont	gomery	Мо	rgan	Мо	rrow	Musk	ingum	N	oble	Ot	tawa	Pau	Ilding
OUTBREAKS*	N	Rate	Ν	Rate	Ν	Rate	N	Rate	N	Rate	Ν	Rate	Ν	Rate
Community*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	3	n/a	0	n/a	0	n/a	1	n/a	0	n/a	1	n/a	0	n/a
Healthcare-Associated*	5	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	8	n/a	1	n/a	0	n/a	1	n/a	0	n/a	2	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	10	1.9	1	6.6	0	0.0	1	1.2	0	0.0	1	2.4	2	10.2
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	41	7.7	15	99.6	1	2.9	6	7.0	0	0.0	0	0.0	1	5.1
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	25	4.7	2	13.3	5	14.4	5	5.8	3	20.5	4	9.7	4	20.4
SUB-TOTAL	77	14.4	18	119.6	6	17.2	12	13.9	3	20.5	5	12.1	7	35.7
ZOONOSES														
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	3	0.6	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
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	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
Malaria	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	2	n/a	0	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	0	0.0
West Nile Virus Infection*	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	8	1.1	0	0.0	1	2.9	2	1.2	0	0.0	0	0.0	0	0.0
GRAND TOTAL	841	155.3	26	166.1	38	109.1	101	115.0	21	143.4	35	79.7	29	147.9
POPULATION	53	5.153	15	.054	34	.827	86	.074	14	.645	41	,428	19	.614

	Р	erry	Pick	away	Р	ike	Po	rtage	Pr	eble	Put	tnam	Ric	hland
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	Ν	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	1	2.8	7	12.6	2	7.0	6	3.7	3	7.1	12	34.8	11	8.8
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
Cryptosporidiosis	0	0.0	0	0.0	2	7.0	8	5.0	0	0.0	0	0.0	2	1.6
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	2	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	1	2.8	1	1.8	0	0.0	1	0.6	0	0.0	1	2.9	1	0.8
O157:H7	1	2.8	1	1.8	0	0.0	1	0.6	0	0.0	1	2.9	0	0.0
Not O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	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	1	0.8
Giardiasis	1	2.8	3	5.4	1	3.5	9	5.6	1	2.4	4	11.6	7	5.6
Haemophilus influenzae, Invasive Disease	0	0.0	2	3.6	1	3.5	1	0.6	2	4.7	0	0.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	1	2.8	3	5.4	0	0.0	0	0.0	1	2.4	1	2.9	1	0.8
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	3	8.3	2	3.6	1	3.5	11	6.8	4	9.5	1	2.9	4	3.2
Meningitis, Other Bacterial*	1	2.8	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	1	0.8
Meningococcal Disease	1	2.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	9	25.0	3	5.4	2	7.0	24	14.9	2	4.7	1	2.9	13	10.4
Shigellosis	0	0.0	0	0.0	0	0.0	6	3.7	0	0.0	0	0.0	0	0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	1	1.8	0	0.0	1	0.6	0	0.0	1	2.9	3	2.4
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	0	*	0	*	1	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	5	13.9	10	18.0	3	10.4	20	12.4	3	7.1	2	5.8	7	5.6
Ages < 5 Years*	0	*	0	*	1	*	2	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	1	*	1	*	0	*	2	*	1	*	0	*	4	*
Drug Susceptible, Ages 5+ Years*	4	*	9	*	2	*	16	*	2	*	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	2	1.2	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
SUB-TOTAL	23	63.8	33	59.2	13	45.3	91	56.4	18	42.6	23	66.7	53	42.6

HEPATITIS														
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.9	0	0.0
Hepatitis B*	3	8.3	55	98.7	4	13.9	15	9.3	1	2.4	0	0.0	13	10.4
Acute*	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0
Chronic*	3	8.3	55	98.7	3	10.4	15	9.3	1	2.4	0	0.0	13	10.4
Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C*	7	19.4	932	1,673.3	45	156.7	65	40.3	4	9.5	2	5.8	75	60.3
Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
Past or Present*	7	19.4	932	1,673.3	45	156.7	65	40.3	4	9.5	2	5.8	74	59.4
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	10	27.7	987	1,772.1	49	170.7	80	49.6	5	11.8	3	8.7	88	70.7

N = number of cases reported. Rates use 2010 U.S. Census counts and are per 100,000 population. n/a = not applicable. * Please see Technical Notes (pp. 93-97).

	P	erry	Pick	kaway	Р	ike	Por	rtage	Pr	eble	Pu	tnam	Ricl	nland
OUTBREAKS*	N	Rate	N	Rate	Ν	Rate	N	Rate	N	Rate	Ν	Rate	Ν	Rate
Community*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	1	n/a	4	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	3	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Institutional*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a	1	n/a	8	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	0	0.0	0	0.0	1	3.5	3	1.9	0	0.0	2	5.8	3	2.4
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	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	8	22.2	16	28.7	0	0.0	7	4.3	2	4.7	5	14.5	10	8.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	18	49.9	17	30.5	10	34.8	29	18.0	8	18.9	2	5.8	46	37.0
SUB-TOTAL	26	72.1	33	59.2	11	38.3	39	24.2	10	23.7	9	26.1	59	47.4
ZOONOSES														
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	1	3.5	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
LaCrosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	1	0.8
Lyme Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	1	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	0	0.0	2	5.8	0	0.0
SUB-TOTAL	0	0.0	0	0.0	1	3.5	0	0.0	2	2.4	2	5.8	1	0.8
GRAND TOTAL	59	163.6	1,053	1,890.6	74	257.8	212	130.1	35	80.4	38	107.2	209	161.5
POPULATION	36	6.058	55	.698		.709	404	.419	40	,270		,499	404	,475

	R	oss	San	dusky	Sc	ioto	Se	neca	Sh	elby	St	ark	Sui	mmit
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	Ν	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	4	0.7
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	9	11.5	13	21.3	5	6.3	2	3.5	6	12.1	50	13.3	48	8.9
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	4	5.1	13	21.3	2	2.5	3	5.3	3	6.1	22	5.9	10	1.8
Cytomegalovirus (CMV), Congenital*	0	*	0	*	1	*	0	*	0	*	0	*	2	*
Escherichia coli, Shiga Toxin-Producing	0	0.0	0	0.0	0	0.0	0	0.0	3	6.1	4	1.1	4	0.7
O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	3	6.1	3	0.8	1	0.2
Not O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	2	0.4
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Giardiasis	1	1.3	2	3.3	2	2.5	1	1.8	3	6.1	66	17.6	81	15.0
Haemophilus influenzae, Invasive Disease	2	2.6	2	3.3	1	1.3	0	0.0	0	0.0	7	1.9	6	1.1
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	2	2.6	0	0.0	5	6.3	0	0.0	1	2.0	15	4.0	10	1.8
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	2	0.4
Meningitis, Aseptic	6	7.7	1	1.6	3	3.8	0	0.0	4	8.1	33	8.8	37	6.8
Meningitis, Other Bacterial*	1	1.3	2	3.3	0	0.0	1	1.8	1	2.0	2	0.5	4	0.7
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	2	0.4
Salmonellosis	11	14.1	10	16.4	22	27.7	4	7.0	8	16.2	36	9.6	60	11.1
Shigellosis	0	0.0	1	1.6	0	0.0	0	0.0	1	2.0	4	1.1	21	3.9
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	4	6.6	6	7.5	2	3.5	4	8.1	12	3.2	9	1.7
Streptococcal Disease, Group B, in Newborn*	1	*	0	*	0	*	0	*	0	*	4	*	2	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	1	1.3	0	0.0	0	0.0	0	0.0	2	0.4
Streptococcus pneumoniae, Invasive Disease	12	15.4	6	9.8	1	1.3	6	10.6	12	24.3	44	11.7	51	9.4
Ages < 5 Years*	2	*	0	*	0	*	0	*	0	*	2	*	1	*
Drug Resistant, Ages 5+ Years*	3	*	2	*	0	*	3	*	1	*	19	*	12	*
Drug Susceptible, Ages 5+ Years*	7	*	4	*	1	*	3	*	11	*	23	*	38	*
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	0.2
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	1	1.3	0	0.0	0	0.0	0	0.0	5	0.9
SUB-TOTAL	49	62.8	54	88.6	50	62.9	19	33.5	46	93.1	302	80.4	361	66.6

HEPATITIS														
Hepatitis A	0	0.0	1	1.6	1	1.3	0	0.0	0	0.0	0	0.0	3	0.6
Hepatitis B*	27	34.6	3	4.9	26	32.7	2	3.5	5	10.1	18	4.8	94	17.4
Acute*	0	0.0	0	0.0	4	5.0	0	0.0	2	4.0	2	0.5	7	1.3
Chronic*	27	34.6	3	4.9	22	27.7	2	3.5	3	6.1	16	4.3	87	16.1
Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C*	98	125.5	18	29.5	234	294.3	5	8.8	14	28.3	133	35.4	246	45.4
Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.4
Past or Present*	98	125.5	18	29.5	234	294.3	5	8.8	14	28.3	133	35.4	244	45.0
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	125	160.1	22	36.1	261	328.3	7	12.3	19	38.4	151	40.2	343	63.3

N = number of cases reported. Rates use 2010 U.S. Census counts and are per 100,000 population. n/a = not applicable.

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

	R	oss	Sand	dusky	Sc	ioto	Sei	neca	Sh	elby	St	ark	Sur	mmit
OUTBREAKS*	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate
Community*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Foodborne*	0	n/a	2	n/a	1	n/a	0	n/a	2	n/a	0	n/a	3	n/a
Healthcare-Associated*	1	n/a	2	n/a	0	n/a	0	n/a	0	n/a	4	n/a	1	n/a
Institutional*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	4	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	1	n/a	4	n/a	2	n/a	0	n/a	2	n/a	9	n/a	4	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	3	3.8	3	4.9	2	2.5	0	0.0	0	0.0	15	4.0	11	2.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Indigenous	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	8	10.2	20	32.8	12	15.1	0	0.0	0	0.0	74	19.7	17	3.1
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	14	17.9	6	9.8	10	12.6	33	58.2	10	20.2	54	14.4	37	6.8
SUB-TOTAL	25	32.0	29	47.6	24	30.2	33	58.2	10	20.2	143	38.1	66	12.2
ZOONOSES														
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.2
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	6	7.5	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	5	6.3	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	1	2.0	2	0.5	2	0.4
Lyme Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8	3	0.6
Malaria	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	1	0.2
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	1	2.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a	1	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	1	1.6	2	2.5	0	0.0	0	0.0	1	0.3	0	0.0
West Nile Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	1.3	1	1.6	8	10.1	0	0.0	2	4.0	10	2.4	8	1.3
					-		-		_				-	
GRAND TOTAL	201	256.2	110	173.9	345	431.5	59	104.0	79	155.8	615	161.1	782	143.4
POPULATION	78	,064	60	,944	79,	,499	56	,745	49	,423	375	,586	541	1,781

	Trur	nbull	Tusca	arawas	Ur	nion	Van	Wert	Vii	nton	Wa	rren	Wash	ington
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	20	9.5	18	19.4	5	9.6	3	10.4	1	7.4	20	9.4	1	1.6
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9	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	24	11.4	2	2.2	5	9.6	1	3.5	0	0.0	6	2.8	0	0.0
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	2	1.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9	4	6.5
O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9	2	3.2
Not O157:H7	2	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	3.2
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	5	2.4	15	16.2	6	11.5	4	13.9	1	7.4	22	10.3	0	0.0
Haemophilus influenzae, Invasive Disease	3	1.4	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	4	1.9	1	1.1	2	3.8	0	0.0	0	0.0	2	0.9	2	3.2
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Meningitis, Aseptic	12	5.7	5	5.4	2	3.8	1	3.5	0	0.0	17	8.0	3	4.9
Meningitis, Other Bacterial*	1	0.5	3	3.2	0	0.0	0	0.0	0	0.0	3	1.4	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6
Salmonellosis	20	9.5	9	9.7	5	9.6	2	7.0	1	7.4	19	8.9	4	6.5
Shigellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	1.4	0	0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	4	1.9	0	0.0	2	3.8	0	0.0	0	0.0	1	0.5	0	0.0
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	29	13.8	5	5.4	4	7.6	1	3.5	1	7.4	20	9.4	1	1.6
Ages < 5 Years*	0	*	1	*	0	*	0	*	0	*	2	*	0	*
Drug Resistant, Ages 5+ Years*	5	*	0	*	2	*	0	*	1	*	2	*	0	*
Drug Susceptible, Ages 5+ Years*	24	*	4	*	2	*	1	*	0	*	16	*	1	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	1	0.5	1	1.1	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
SUB-TOTAL	127	60.4	59	63.7	31	59.3	12	41.7	4	29.8	121	56.9	16	25.9

HEPATITIS														
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Hepatitis B*	21	10.0	7	7.6	37	70.7	1	3.5	2	14.9	31	14.6	1	1.6
Acute*	0	0.0	0	0.0	1	1.9	0	0.0	0	0.0	0	0.0	0	0.0
Chronic*	21	10.0	7	7.6	36	68.8	1	3.5	2	14.9	30	14.1	1	1.6
Perinatal Infection*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
Hepatitis C*	72	34.2	20	21.6	465	889.1	13	45.2	14	104.2	94	44.2	3	4.9
Acute*	0	0.0	0	0.0	2	3.8	0	0.0	1	7.4	0	0.0	0	0.0
Past or Present*	72	34.2	20	21.6	463	885.3	13	45.2	13	96.8	94	44.2	3	4.9
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	93	44.2	27	29.2	502	959.8	14	48.7	16	119.1	126	59.2	4	6.5

N = number of cases reported. Rates use 2010 U.S. Census counts and are per 100,000 population. n/a = not applicable.

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

	Tru	mbull	Tusca	arawas	U	nion	Van	Wert	Vi	nton	Wa	rren	Wash	nington
OUTBREAKS*	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate
Community*	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Institutional*	0	n/a	1	n/a	2	n/a	0	n/a	0	n/a	0	n/a	2	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	1	n/a	3	n/a	2	n/a	0	n/a	0	n/a	0	n/a	3	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	6	2.9	4	4.3	2	3.8	1	3.5	1	7.4	3	1.4	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	1	7.4	0	0.0	0	0.0
Pertussis	15	7.1	4	4.3	24	45.9	42	146.1	0	0.0	8	3.8	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	38	18.1	24	25.9	30	57.4	4	13.9	1	7.4	32	15.0	11	17.8
SUB-TOTAL	59	28.1	32	34.6	56	107.1	47	163.5	3	22.3	43	20.2	11	17.8
ZOONOSES	-													
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
LaCrosse Virus Disease*	1	0.5	3	3.2	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Lyme Disease	3	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	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	1	1.6
West Nile Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	5	1.9	3	3.2	0	0.0	0	0.0	0	0.0	3	1.4	1	1.6
	-													
GRAND TOTAL	285	134.6	124	130.7	591	1,126.2	73	254.0	23	171.2	293	137.8	35	51.8
POPULATION	210	0,312	92	,582	52	,300	28	,744	13	,435	212	2,693	61	,778

	Wa	ayne	Will	iams	w	ood	Wya	andot	Unk	nown	тот	FAL
GENERAL INFECTIOUS DISEASES	N	Rate	Ν	Rate	Ν	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	29	0.3
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
Infant*	0	*	0	*	0	*	0	*	0	n/a	2	*
Wound	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Campylobacteriosis	31	27.1	3	8.0	16	12.8	10	44.2	0	n/a	1,124	9.7
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	3	0.0
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	12	0.1
Cryptosporidiosis	5	4.4	1	2.7	2	1.6	1	4.4	0	n/a	477	4.1
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	1	*	0	n/a	28	*
Escherichia coli, Shiga Toxin-Producing	2	1.7	1	2.7	0	0.0	0	0.0	0	n/a	138	1.2
O157:H7	2	1.7	1	2.7	0	0.0	0	0.0	0	n/a	75	0.7
Not O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	43	0.4
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	20	0.2
Giardiasis	6	5.2	1	2.7	1	0.8	1	4.4	0	n/a	863	7.5
Haemophilus influenzae, Invasive Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	125	1.1
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Legionellosis	2	1.7	0	0.0	1	0.8	0	0.0	0	n/a	230	2.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	29	0.3
Meningitis, Aseptic	9	7.9	0	0.0	7	5.6	0	0.0	0	n/a	810	7.0
Meningitis, Other Bacterial*	0	0.0	2	5.3	0	0.0	0	0.0	0	n/a	82	0.7
Meningococcal Disease	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	35	0.3
Salmonellosis	6	5.2	2	5.3	12	9.6	1	4.4	0	n/a	1,309	11.3
Shigellosis	3	2.6	1	2.7	1	0.8	0	0.0	0	n/a	304	2.6
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	10	0.1
Streptococcal Disease, Group A, Invasive	0	0.0	0	0.0	2	1.6	0	0.0	0	n/a	248	2.1
Streptococcal Disease, Group B, in Newborn*	1	*	1	*	0	*	0	*	0	n/a	41	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	12	0.1
Streptococcus pneumoniae, Invasive Disease	3	2.6	0	0.0	9	7.2	3	13.3	0	n/a	1,220	10.6
Ages < 5 Years*	0	*	0	*	3	*	0	*	0	n/a	97	*
Drug Resistant, Ages 5+ Years*	0	*	0	*	1	*	1	*	0	n/a	320	*
Drug Susceptible, Ages 5+ Years*	3	*	0	*	5	*	2	*	0	n/a	803	*
Toxic Shock Syndrome (TSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	4	0.0
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	9	0.1
Vibriosis	0	0.0	0	0.0	0	0.0	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	5	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	6	0.1
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	42	0.4
SUB-TOTAL	68	59.4	12	31.9	52	41.4	17	75.2	0	n/a	7,217	62.6

HEPATITIS												
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	49	0.4
Hepatitis B*	6	5.2	0	0.0	8	6.4	0	0.0	142	n/a	1,903	16.5
Acute*	0	0.0	0	0.0	0	0.0	0	0.0	2	n/a	123	1.1
Chronic*	6	5.2	0	0.0	8	6.4	0	0.0	140	n/a	1,777	15.4
Perinatal Infection*	0	*	0	*	0	*	0	*	0	n/a	3	*
Hepatitis C*	27	23.6	2	5.3	25	19.9	1	4.4	409	n/a	7,728	67.0
Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	12	0.1
Past or Present*	27	23.6	2	5.3	25	19.9	1	4.4	409	n/a	7,716	66.9
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
SUB-TOTAL	33	28.8	2	5.3	33	26.3	1	4.4	551	n/a	9,681	83.9

$$\begin{split} N &= \text{number of cases reported.} \\ \text{Rates use 2010 U.S. Census counts and are per 100,000 population.} \\ n/a &= \text{not applicable.} \\ ^* \text{Please see Technical Notes (pp. 93-97).} \end{split}$$

	Wa	ayne	Will	iams	w	bod	Wya	andot	Unk	nown	тот	AL
OUTBREAKS*	N	Rate	Ν	Rate	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate
Community*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	46	n/a
Foodborne*	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	68	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	68	n/a
Institutional*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	82	n/a
Waterborne*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	9	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	2	n/a
SUB-TOTAL	0	n/a	0	n/a	4	n/a	0	n/a	0	n/a	275	n/a
VACCINE-PREVENTABLE												
Influenza-Associated Hospitalization*	1	0.9	1	2.7	2	1.6	0	0.0	0	n/a	259	2.2
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Imported	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Indigenous	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	27	0.2
Pertussis	16	14.0	1	2.7	5	4.0	0	0.0	0	n/a	1,858	16.1
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Varicella	21	18.3	1	2.7	10	8.0	11	48.6	0	n/a	1,337	11.6
SUB-TOTAL	38	33.2	3	8.0	17	13.5	11	48.6	0	n/a	3,484	30.2
ZOONOSES												
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	16	0.1
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	10	0.1
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	8	0.1
LaCrosse Virus Disease*	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	24	0.2
Lyme Disease	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	37	0.3
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	44	0.4
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Rabies, Animal*	1	n/a	0	n/a	1	n/a	0	n/a	0	n/a	47	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	16	0.1
West Nile Virus Infection*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	5	0.0
SUB-TOTAL	3	1.7	0	0.0	1	0.0	0	0.0	0	n/a	202	1.3
GRAND TOTAL	142	123.1	17	45.2	107	81.3	29	128.2	551	n/a	20,859	178.0
POPULATION	11/	.520	37	642	125	.488	22	.615		0	11,53	6 504
I OF DEATION		,020	57,		123	,	22	,0.0		•	,55	0,004

SEROTYPE	2006	2007	2008	2009	2010
Abaetetuba	0	0	0	1	0
Aberdeen	2	0	0	0	0
Abony	0	0	0	0	1
Adelaide	2	1	0	1	2
Agama	0	0	0	1	0
Agbeni	8	3	3	3	6
Ago	1	0	0	1	0
Agona	17	22	19	8	7
Ajiobo	0	0	0	1	0
Alachua	0	0	0	0	1
Albany	2	1	1	1	3
Altona	0	0	1	0	1
Amager	0	0	1	0	0
Anatum	8	5	5	6	4
Anatum, var 15 +		-	-		-
Apapa Baildon	0	1 0	1	0	0
		-		-	9
Bareilly	3	3	2	3	0
Barranquilla Benin	0	0	0	1	0
Berta	15	10	9	15	11
Blockley	2	0	9	2	2
Bonariensis	1	0	0	0	0
Bovis-morbificans	4	2	7	7	7
Braenderup	20	12	18	11	16
Brandenburg	0	3	1	0	0
Brazzaville	0	0	1	0	0
Bredeney	2	0	1	0	0
Carmel	1	0	1	0	0
Carrau	0	0	0	0	1
Cerro	1	0	0	0	1
Chester	1	3	1	1	1
Choleraesuis	0	0	1	1	2
Corvallis	0	0	1	1	0
Cotham	0	0	0	0	1
Cubana	1	1	0	2	1
Derby	5	5	6	6	3
Dublin	0	5	6	3	5
Durban	0	2	0	0	0
Duval	0	0	0	1	0
Ealing	0	1	0	2	2
Eastbourne	0	1	1	1	0
Edinburg	1	0	0	0	0
Enteritidis	280	268	293	379	431
Fluntern	0	0	1	0	1
Gallinarum	0	0	0	1	0
Gaminara	1	0	1	1	4
Georgia	0	0	1	0	0
Give	2	1	2	4	2
Give, var 15 +	0	1	0	0	0
Glostrup	0	0	1	0	0
Grumpensis	1	0	0	0	0
Guinea	1	1	0	0	0
Hadar	9	6	9	4	2
Haifa	0	1	0	0	0
Hannover	0	0	0	1	0
Hartford	27	25	12	22	36
Havana	0	0	3	2	2
Heidelberg	46	47	57	50	35
Hermannswerder	0	0	0	1	0
Herston	0	0	0	1	0
Hindmarsh	2	0	0	0	0
Holcomb	1	1	0	0	1
Hull	0	0	1	0	0
Hvittingfoss	1	1	0	2	0
Indiana	1	0	0	0	0
Infantis	8	12	7	15	17
Inverness	0	0	1	0	0

SEROTYPE	2006	2007	2008	2009	2010
Irumu	0	1	0	0	0
Isangi	1	0	1	0	0
Jangwani	0	0	1	0	0
Javiana	44	15	11	36	36
Johannesburg	1	2	1 0	0	0
Kaduna Kedougou	0	0	1	0	0
Kentucky	3	0	2	1	3
Kiambu	1	0	1	4	3
Kingabwa	0	2	0	1	0
Kintambo	0	0	0	1	0
Kottbus	0	0	0	1	0
Labadi	0	2	0	1	0
Lexington Litchfield	0	0	1	0	0
Liverpool	0	1	0	0	1
Livingstone	1	0	0	2	3
Loma Linda	0	1	0	0	0
London	1	1	1	0	0
Madelia	1	0	0	0	1
Manhattan	4	3	0	1	1
Matadi	0	1	0	0	0
Mbandaka Meleagridis	<u>8</u> 5	6 4	1	5 0	6 0
Miami	1	0	2	1	2
Michigan	1	0	1	0	0
Minnesota	2	1	1	0	0
Mississippi	9	3	2	1	3
Molade	0	0	0	0	1
Monschaui	0	0	0	2	1
Montevideo	25	19	15	25	20
Muenchen Muenster	17 3	17 1	56 0	11 1	15 1
Muenster, var 15 +	0	0	0	1	0
Newport	71	58	52	72	72
Norwich	0	0	0	0	1
Oakland	0	0	1	0	0
Obogu	0	0	0	0	1
Ohio	1	5	1	1	0
Oranienburg	30	51	34	56	26
Orion, var 15 + Oslo	0	0	0	1 1	0
Ouakam	0	0	0	1	0
Overschie	1	0	0	0	0
Panama	1	12	4	2	4
Paratyphi A	6	7	4	3	3
Paratyphi B	1	1	2	2	1
Paratyphi B, var D - Tartrate +	0	0	0	0	1
Paratyphi B, var L - Tartrate +	15 28	11 40	41	54	42
Paratyphi B, var Tartrate + Paratyphi C	0	0	3	1 1	0
Pomona	1	1	0	0	2
Poona	5	10	21	7	10
Potsdam	0	1	1	2	0
Putten	0	0	0	1	1
Reading	0	2	2	0	1
Rissen	0	0	0	0	1
Romanby	0	0	0	0	1
Saarbruecken Saint Paul	0 16	0	0 22	0 26	33
Salit Faul Sal. (I) 1,9,12:-:-	0	0	0	1	2
Sal. (I) 1,9,12:-:5	0	0	0	2	0
Sal. (I) 1,9,12:1,z28:-	0	0	1	0	0
Sal. (I) 3,10:-:-	0	0	0	1	0
Sal. (I) 4,5,12:-:-	0	0	0	1	1
Sal. (I) 4,5,12:i:-	30	88	91	46	38
Sal. (I) 4,5,12:2:-	0	0	0	1	0
Sal. (I) 6,7:-:-	0	0	0	1	1

Sal. (I) $6.7: 1.5$ 0 0 0 0 1 Sal. (I) $6.7: 5$ 0 4 0 3 0 Sal. (I) $6.7: 5$ 0 1 0 0 0 Sal. (I) $13.23: -:$ 0 0 0 0 0 0 Sal. (I) Mucoidbre,n,x 1 0 0 0 0 1 Sal. (I) Nucoidbre,n,x 1 0 0 0 0 0 Sal. (I) Nucoidbre,n,x 1 0 0 0 0 0 Sal. (III) Afrizona 4 0 5 1 0 0 Sal. (IIII) Afrizona 4 0 0 0 0 0 Sal. (IIII) Afrizona 4 0	SEROTYPE	2006	2007	2008	2009	2010
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SEROTYPE	2006	2007	2008	2009	2010
Typhimurium	177	182	229	212	123
Typhimurium, var Copenhagen	45	37	55	51	61
Uganda	1	0	0	0	0
Urbana	2	1	2	1	1
Uzaramo	0	1	0	0	1
Virchow	2	2	5	7	4
Weltevreden	0	1	2	2	2
Worthington	1	1	4	1	3
SUB-TOTAL	1,133	1,163	1,248	1,289	1,220

SEROGROUP					
Group A	1	2	0	0	0
Group B	53	11	20	13	11
Group C	7	8	4	3	7
Group C1	1	4	1	1	1
Group C2	3	2	2	0	2
Group D	13	11	16	11	9
Group E	1	0	0	0	0
Group G	0	1	0	0	0
SUB-TOTAL	79	39	43	28	30
UNGROUPED, UNTYPED	87	121	87	60	59
GRAND TOTAL	1,299	1,323	1,378	1,377	1,309

MENINGOCOCCAL DISEASE SEROGROUPS BY YEAR OF ONSET, OHIO, 2006-2010

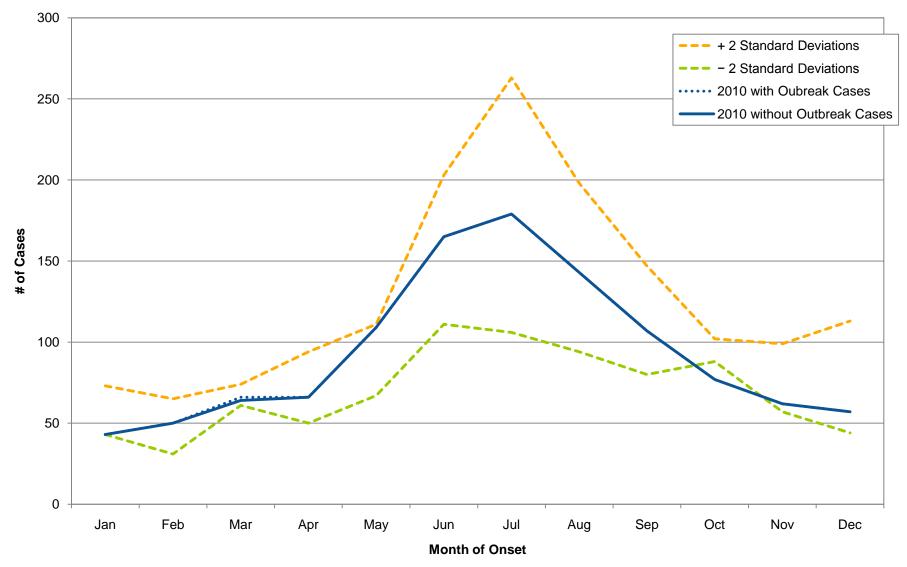
SEROGROUP	2006	2007	2008	2009	2010
Group A	0	0	0	0	0
Group B	16	6	11	13	12
Group C	10	7	6	4	7
Group W-135	2	2	0	1	0
Group Y	8	10	17	10	6
Not Groupable	0	0	1	0	0
Unknown	14	7	7	14	10
TOTAL	50	32	42	42	35

GRAPHS OF SELECTED NOTIFIABLE DISEASE INCIDENCE

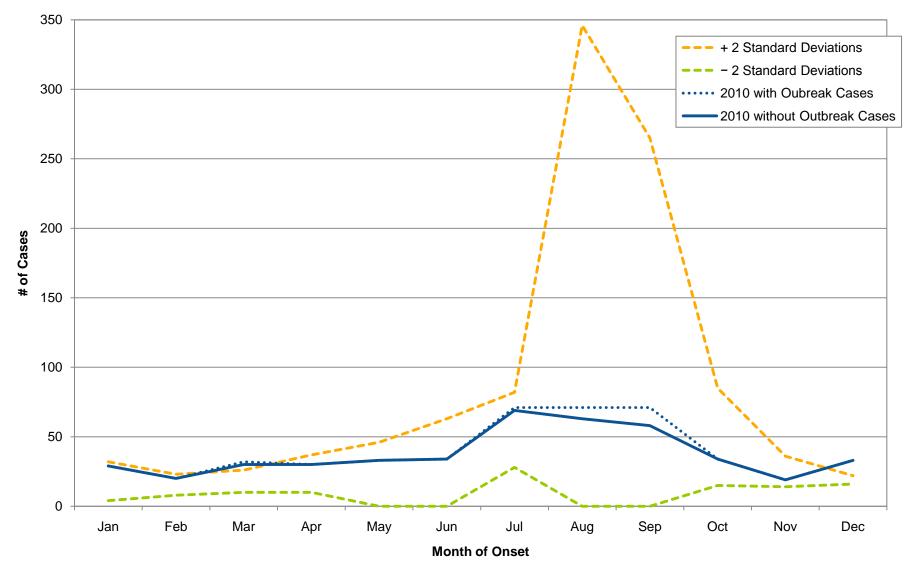
Disease incidence from 2010 is graphically presented to demonstrate general trends in surveillance data for selected Ohio reportable infectious diseases, including any statistically significant changes in the incidence observed. The trend graphs compare disease incidence from 2010 (i.e., observed cases) 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, 2007-2009. 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 2010 disease incidence compared to baseline disease incidence suggests the difference is unlikely to have occurred by chance.

General surveillance trends are graphed statewide. The 2010 data represent confirmed and probable cases of selected reportable diseases. In many instances, two trend lines can be seen graphed for 2010 incidence data: one for all cases, including those linked to a known outbreak, and one for cases not linked to a known outbreak. It should be noted that not every graph will include a trend line for cases linked to a known outbreak as not all cases are outbreak-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 2010 and data used in the calculation of the baseline (2007-2009) average are finalized. All data are by month and year of illness onset. The source of the data is the Ohio Disease Reporting System.

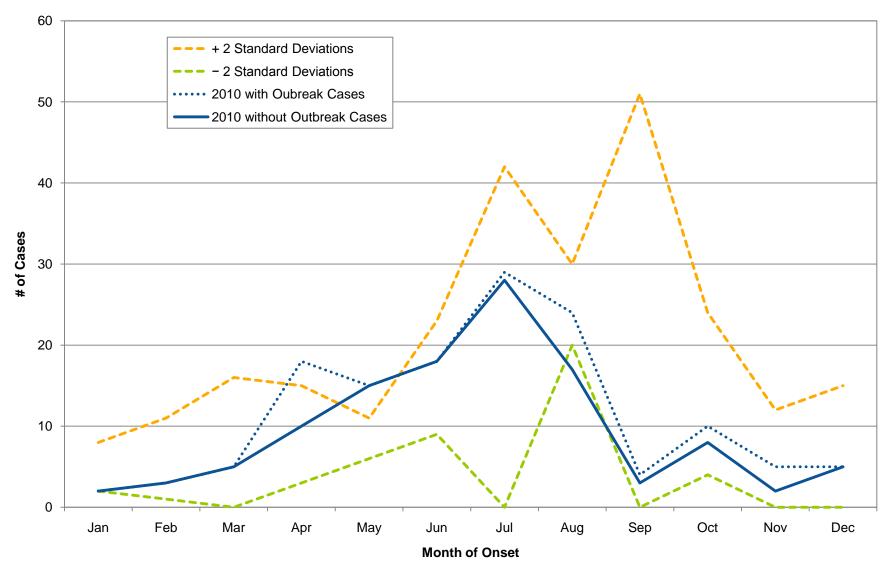


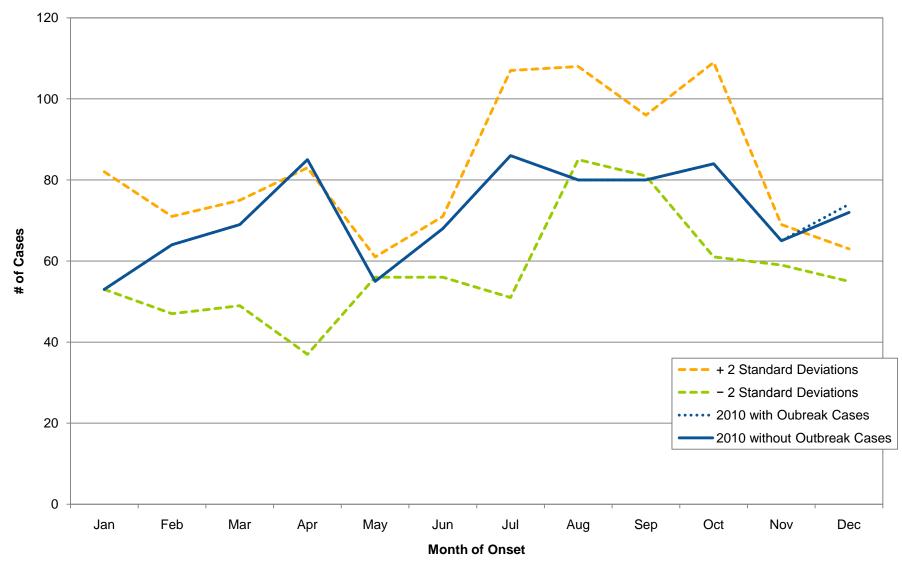
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Campylobacteriosis



INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Cryptosporidiosis

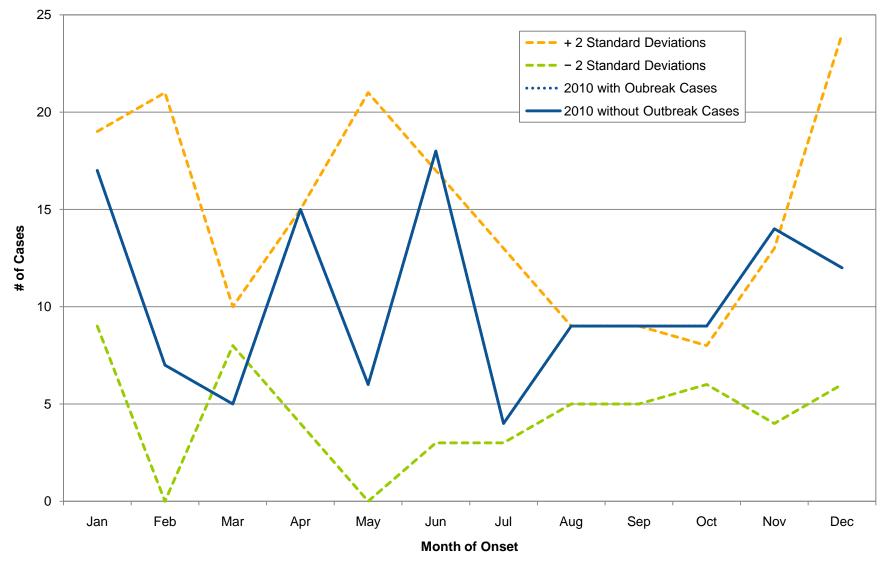
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Escherichia coli, Shiga Toxin-Producing



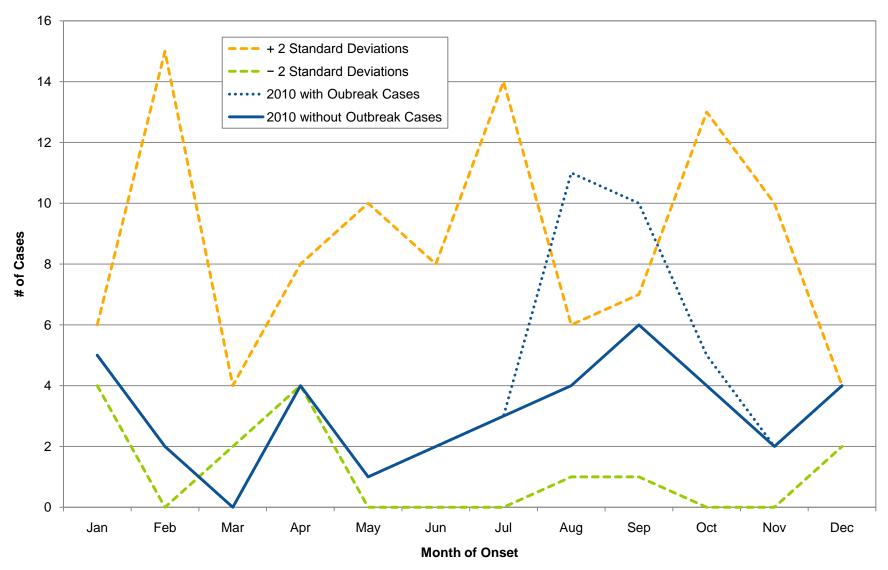


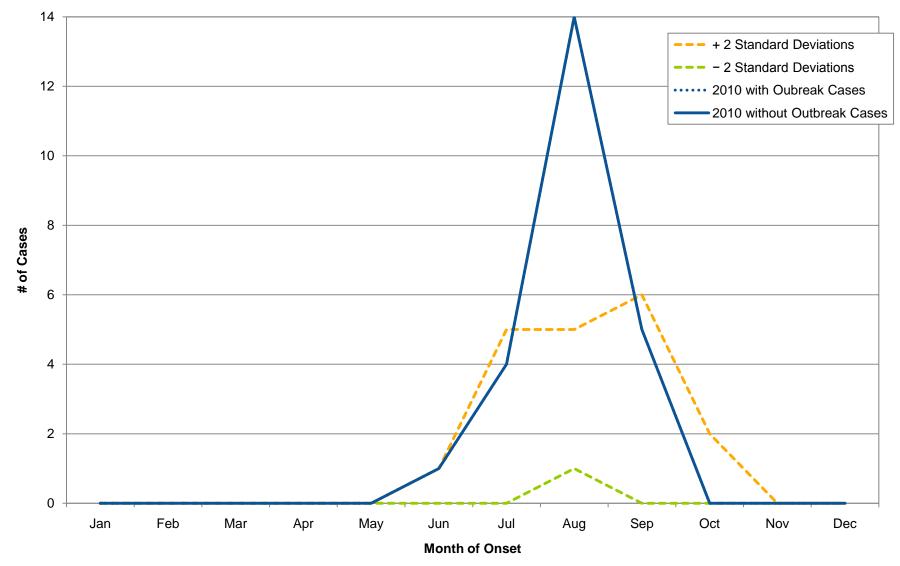
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Giardiasis

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Haemophilus influenzae, Invasive Disease

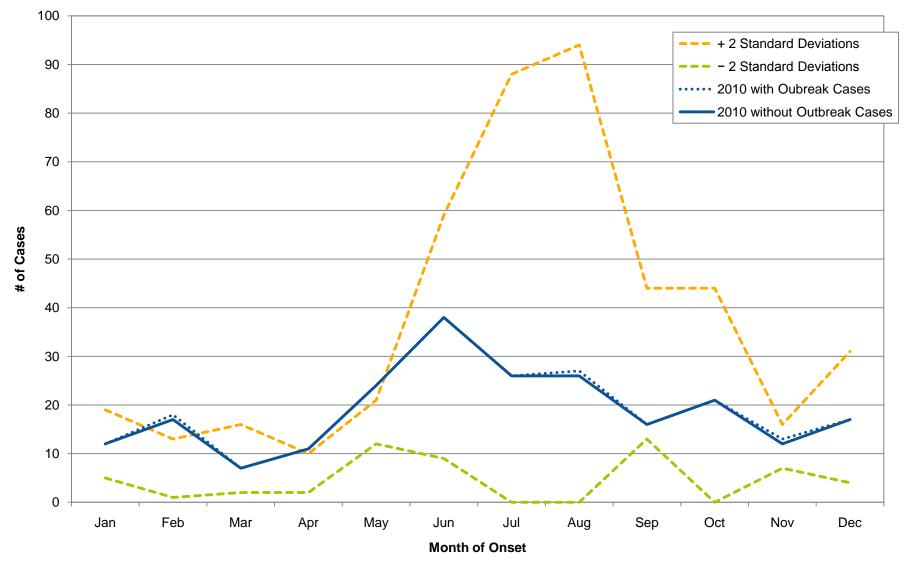


INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Hepatitis A

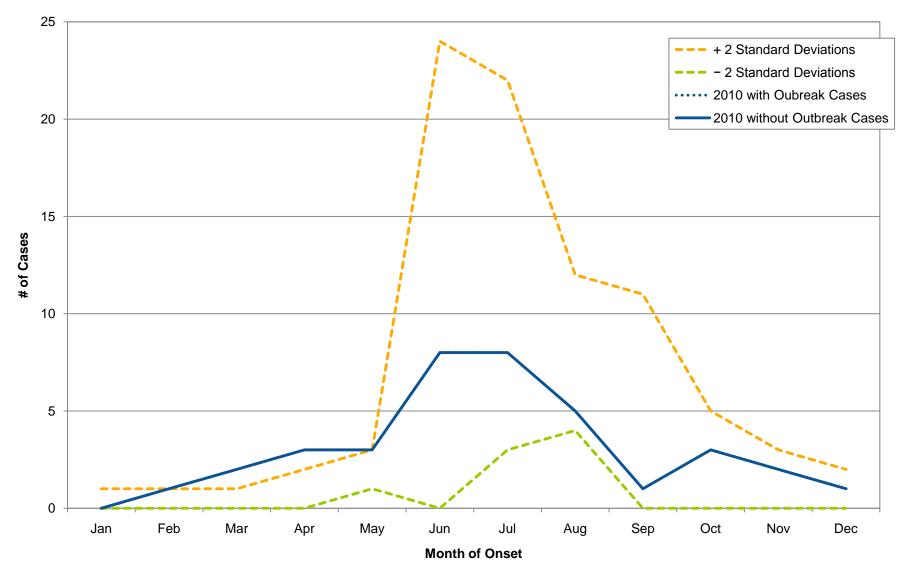




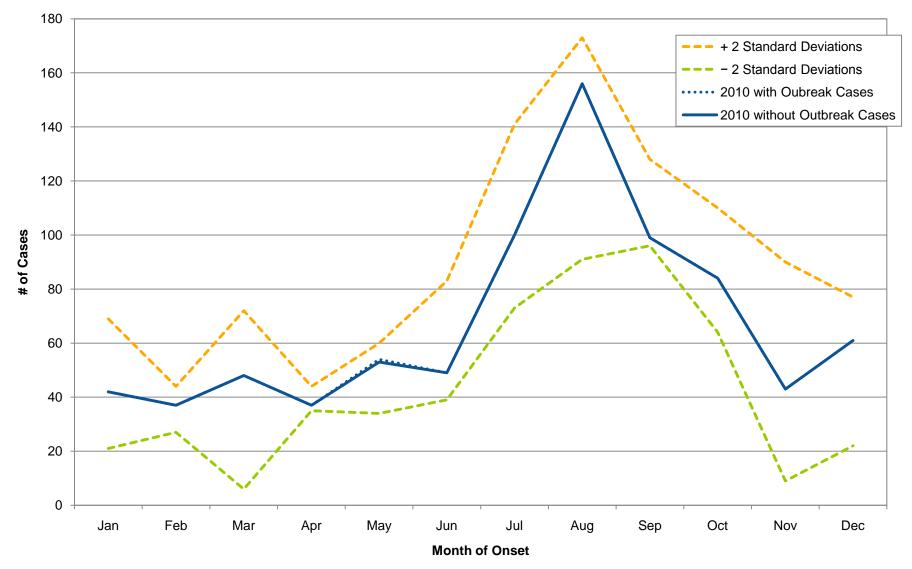
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 LaCrosse Virus Disease



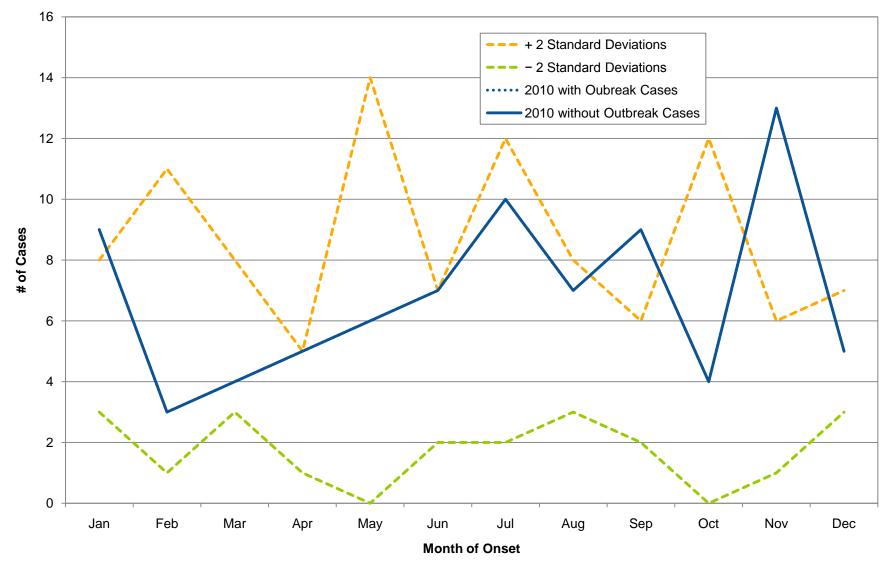
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Legionellosis



INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Lyme Disease

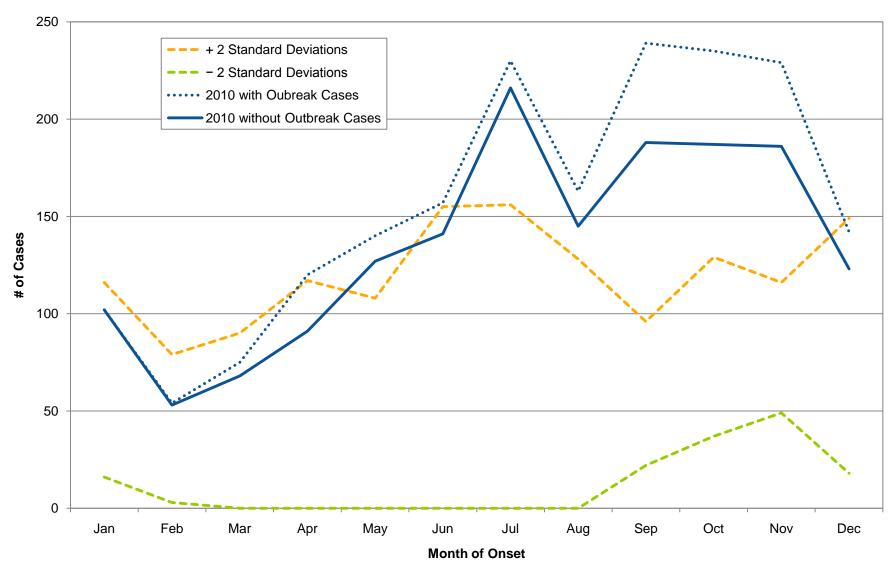


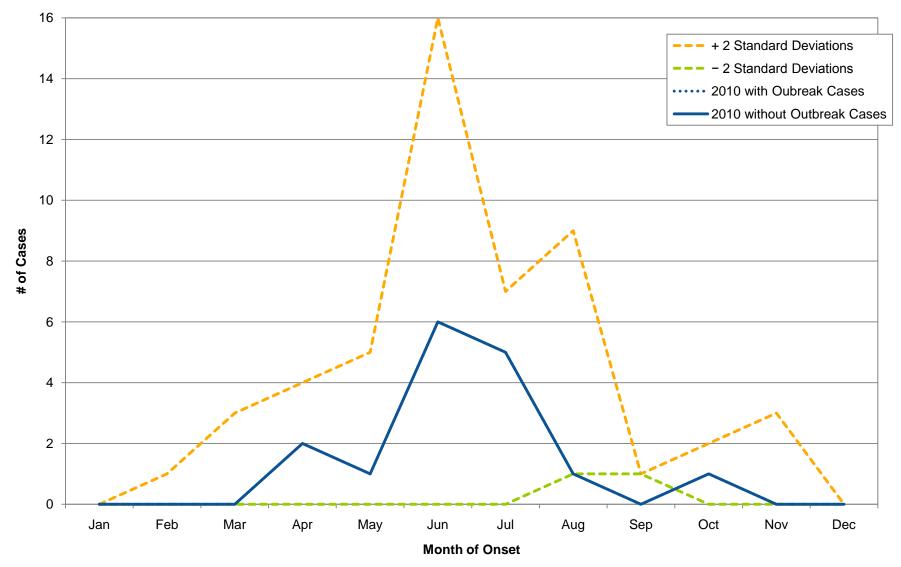
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Meningitis, Aseptic



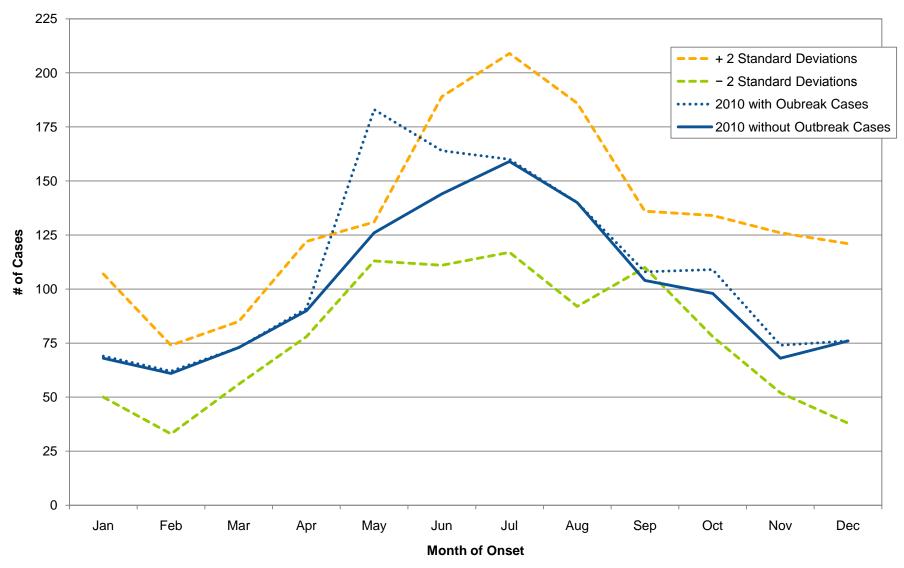
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Meningitis, Other Bacterial

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Pertussis



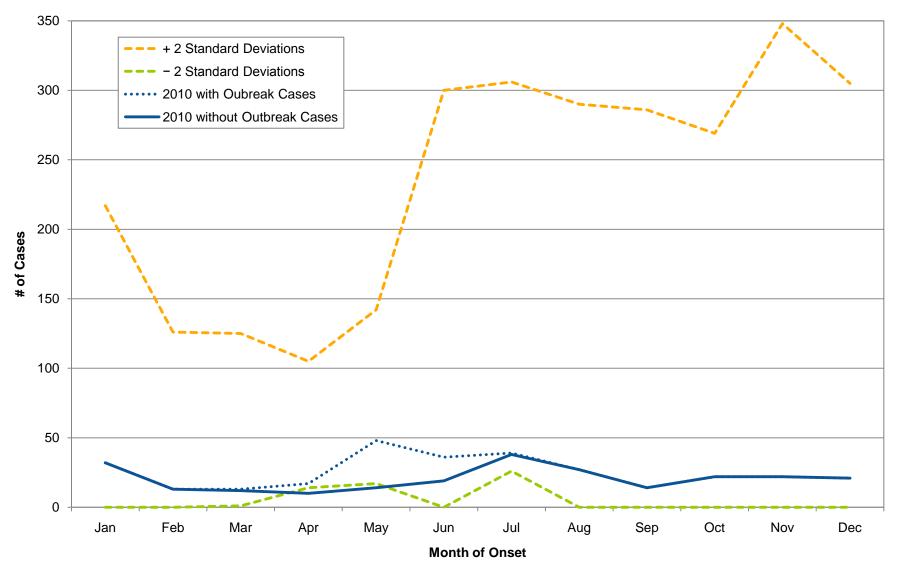


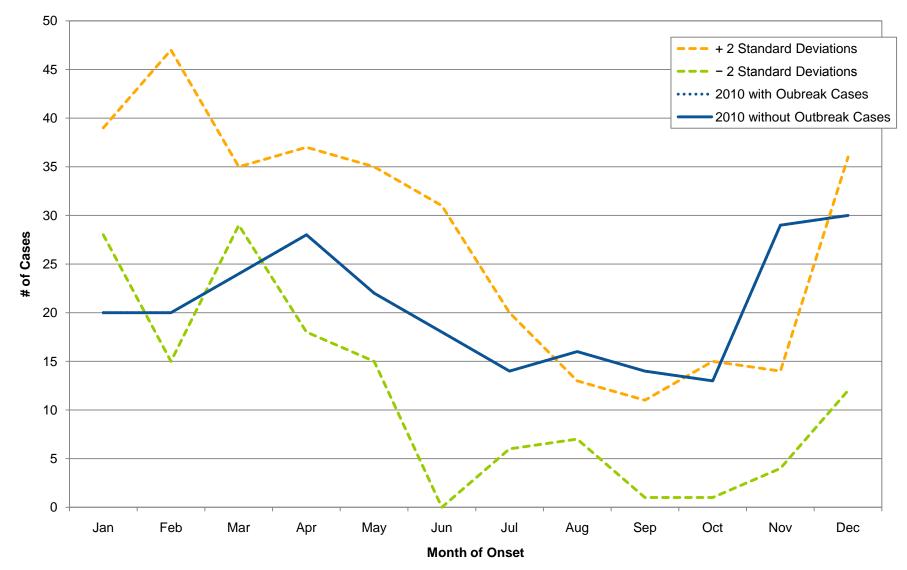
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Rocky Mountain Spotted Fever



INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Salmonellosis

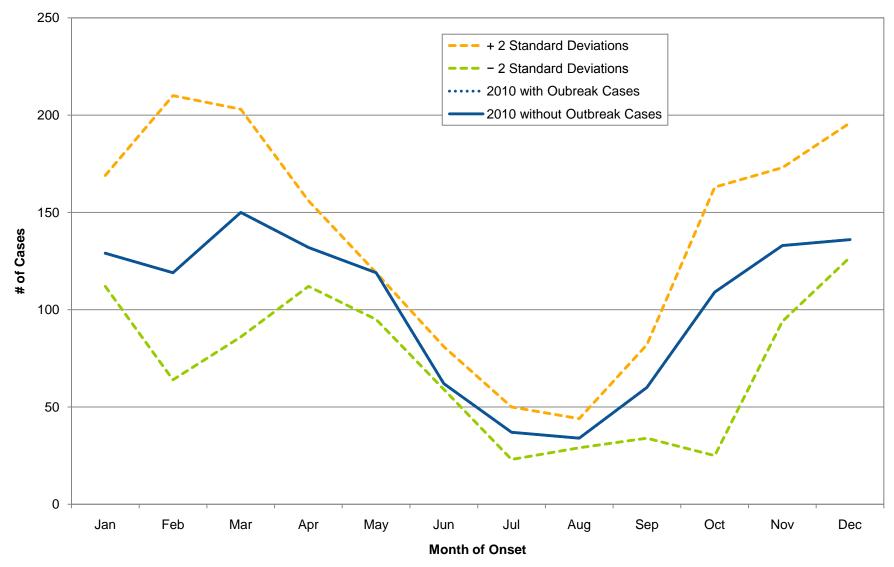
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Shigellosis

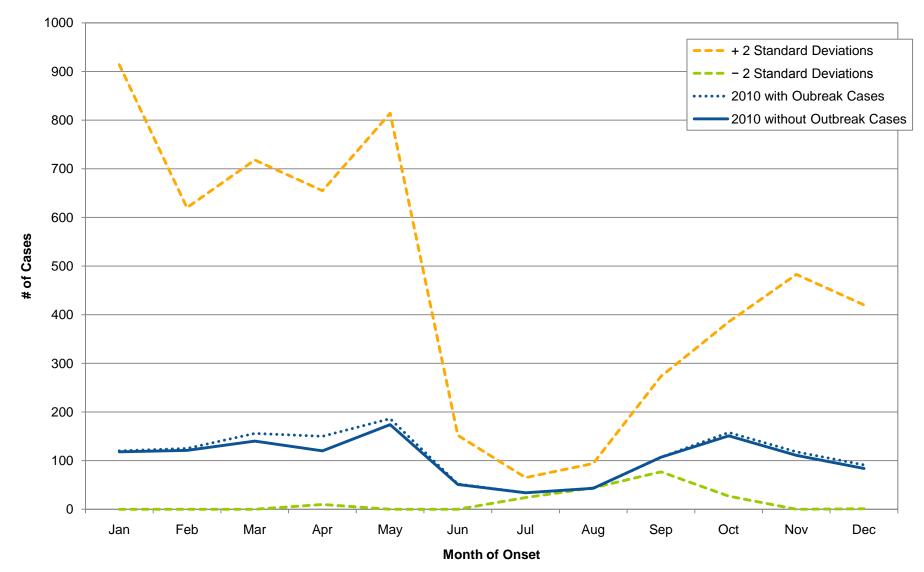




INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Streptococcal Disease, Group A, Invasive

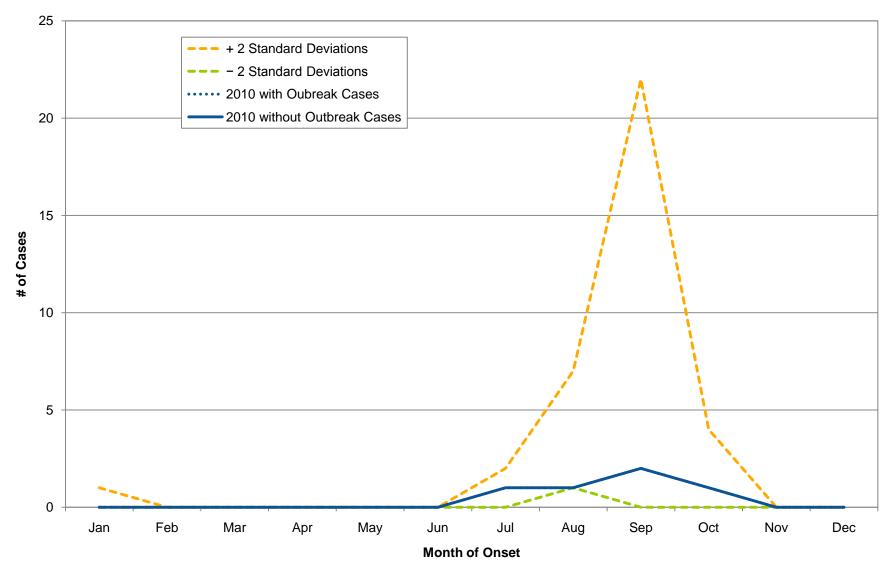
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Streptococcus pneumoniae, Invasive Disease





INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 Varicella

INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2010 West Nile Virus Infection



Baseline trends are 2 standard deviations of mean counts from 2007-2009. Source of disease data: Ohio Disease Reporting System.

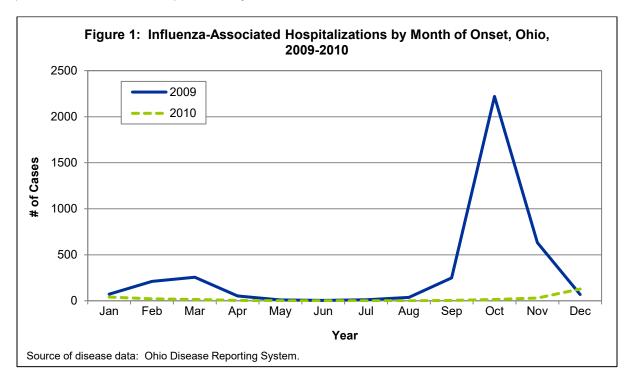
PROFILES OF SELECTED NOTIFIABLE DISEASES

INFLUENZA-ASSOCIATED HOSPITALIZATION

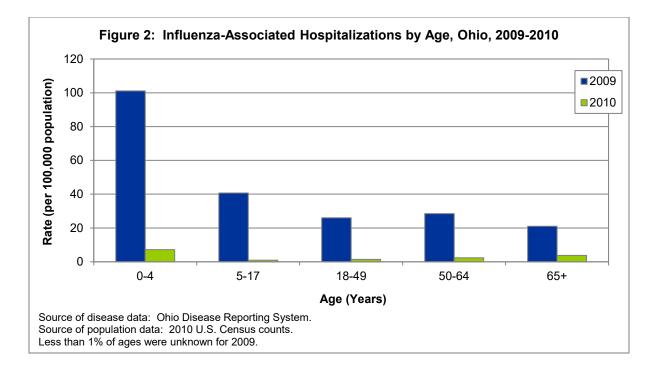
Number of cases in 2010:	259	Rate in 2010:	2.2
Number of cases in 2009:	3,818	Rate in 2009:	33.1

* Rates are based on the U.S. Census 2010 count and the 2009 midpoint estimate and are per 100,000 population.

The year 2009 exhibited peaks in influenza activity for both the 2008-2009 and the 2009-2010 influenza seasons. The 2009 H1N1 pandemic began in late April and the second wave of influenza activity due to influenza A (2009) H1N1 virus occurred in the fall. Ohio's flu activity for the 2009-2010 influenza season peaked in late October 2009, as demonstrated in influenza-associated hospitalization reporting, where 2,220 cases had a month of onset in October (Figure 1). This fall peak is unusual in that the peak usually occurs in the late winter months of the influenza season.



Nationally, influenza activity was associated with higher hospitalization rates in children and young adults during the second wave of the 2009 H1N1 pandemic than in previous seasons.¹ In Ohio, there was no comparable data because influenza-associated hospitalizations did not become a reportable condition until Jan. 1, 2009. However, lower rates of hospitalizations were observed in 2010 when compared to 2009 (Figure 2). In 2009, 21 percent (518 cases) of influenza-associated hospitalizations reported were between the ages 5 and 17, compared to 7 percent (19 cases) in 2010. Nine percent (340 cases) of those reported in 2009 were over 65 years of age, compared to 24 percent (62 cases) in 2010. This could be attributed to studies indicating that the risk of influenza A (2009) H1N1 infection among persons over 65 years of age was less than the risk of infection for younger age groups.² In addition, the influenza A (2009) H1N1 virus was not the dominant circulating virus in 2010 like it was during the fall of 2009, although it did circulate widely.³



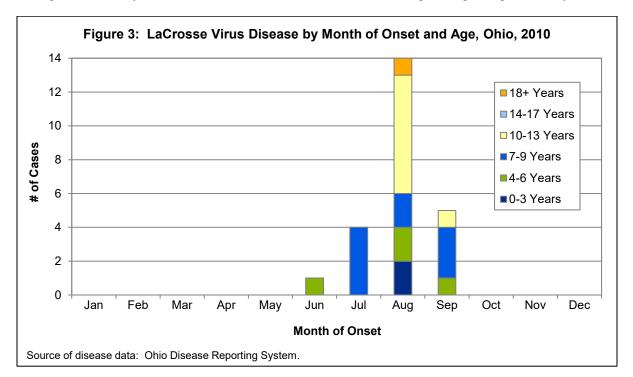
LACROSSE VIRUS DISEASE

Number of cases in 2010:	24	Rate in 2010:	0.2
Number of cases in 2009:	5	Rate in 2009:	0.0

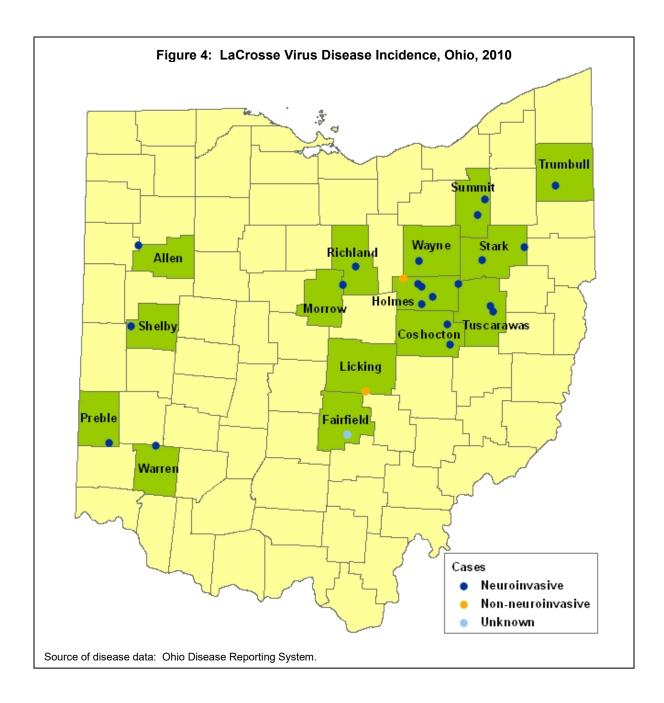
* Rates are based on the U.S. Census 2010 count and the 2009 midpoint estimate and are per 100,000 population.

LaCrosse virus disease is a viral illness transmitted through the bite of an infected mosquito, specifically the treehole mosquito, *Aedes triseriatus*. People infected with LaCrosse virus disease usually experience fever, headache, nausea, vomiting and lethargy; however, severe disease can occur in children less than 16 years of age and include seizures, coma, paralysis and neurological sequelae after recovery.⁴ In Ohio, cases occur during the summer and fall, usually from July through October, coinciding with mosquito activity.⁴ More cases have been reported in Ohio than any other state in the U.S.,⁴ where 1,050 cases have been tallied since 1963.

Incidence of LaCrosse virus disease significantly increased in Ohio from five cases in 2009 to 24 cases in 2010 (p = 0.0004). All 2010 cases occurred from June to September, with the peak incidence occurring in August (Figure 3). The greatest proportion of cases occurred in children aged 7-9 years (38 percent), followed by children aged 10-13 years (33 percent). Cases also occurred among children 0-6 years and in one adult; no cases occurred among teenagers aged 14-17 years.



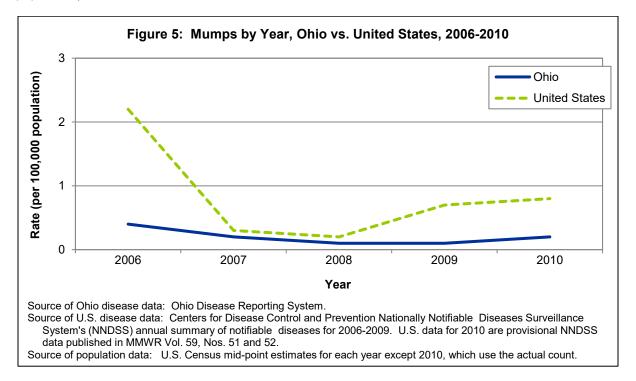
As seen in Figure 4, most LaCrosse virus disease cases in 2010 occurred in northeastern Ohio, particularly Coshocton, Holmes, Stark, Summit and Tuscarawas Counties. It is unclear whether LaCrosse incidence was truly higher in these counties or whether more cases were reported due to heightened awareness and diagnostic testing in this region. Nearly 90 percent of all LaCrosse cases in 2010 were neuroinvasive, meaning the affected individuals had neurological symptoms associated with their infections, such as meningitis, encephalitis or seizures. Non-neuroinvasive manifestations of LaCrosse virus disease include fever, headache, myalgia, arthralgia and/or rash.



Number of cases in 2010:	27	Rate in 2010:	0.2
Number of cases in 2009:	6	Rate in 2009:	0.1

* Rates are based on the U.S. Census 2010 count and the 2009 midpoint estimate and are per 100,000 population.

As seen in Figure 5, Ohio observed a slight increase in its mumps rate during 2010 (0.2 cases per 100,000 population). This increase can be attributed to an outbreak among a religious community in northeastern Ohio. This outbreak may be associated with the 2009-2010 mumps outbreak reported in New York and New Jersey.⁵ Figure 5 demonstrates the large increase in incidence seen in the United States in 2009 (0.65 cases per 100,000 population) and 2010 (0.82 cases per 100,000 population).



Eighteen cases of mumps reported in Cuyahoga and Lake Counties were associated with the 2010 outbreak (Figure 6). Fifteen of these cases (83 percent) were Ohio acquired, one case was imported from out of state and two had unknown case import status. The out-of-state case was the index case in this outbreak and became symptomatic after attending a religious camp in Michigan.

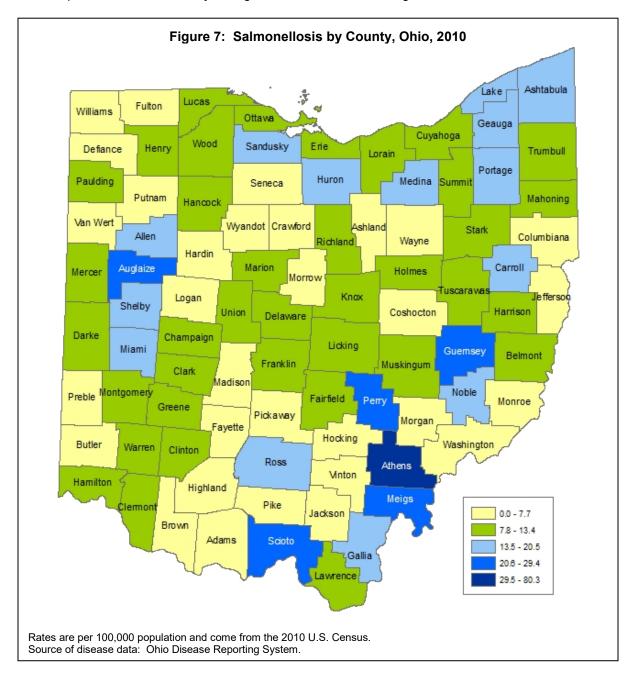


SALMONELLOSIS

Number of cases in 2010:	1,309	Rate in 2010:	11.3
Number of cases in 2009:	1,377	Rate in 2009:	11.9

* Rates are based on the U.S. Census 2010 count and the 2009 midpoint estimate and are per 100,000 population.

Figure 7 demonstrates the incidence of salmonellosis in Ohio for 2010 by county. Athens County had the highest rate of salmonellosis at 80.3 cases per 100,000 population. However, 77 percent of all cases reported in Athens County during 2010 were linked to a single foodborne outbreak.



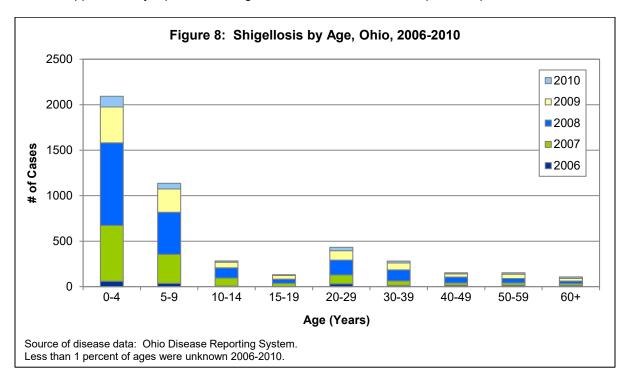
SHIGELLOSIS

Number of cases in 2010:	304	Rate in 2010:	2.6
Number of cases in 2009:	1,050	Rate in 2009:	9.1

* Rates are based on the U.S. Census 2010 count and the 2009 midpoint estimate and are per 100,000 population.

Shigellosis is an infectious disease caused by a group of bacteria known as *Shigella*.⁶ There are four species of *Shigella: Shigella boydii, Shigella dysenteriae, Shigella flexneri* and *Shigella sonnei. Shigella* species primarily infect the large intestine, causing clinical manifestations that range from loose or watery stools to more severe symptoms, including fever, abdominal tenderness or cramps and mucoid stools with or without blood.⁷ *Shigella* is spread directly via person-to-person contact by the fecal-oral route.¹⁰ Transmission by eating contaminated foods and/or swallowing contaminated water may also occur.

Figure 8 demonstrates the burden of shigellosis in Ohio over the past five years by age group. Although a higher incidence of *Shigella* infection was observed among individuals less than 5 years of age (2,092 cases) for each of the five reporting years analyzed, persons of all ages were at risk. Among *Shigella* isolates reported in Ohio 2006-2010, 88 percent were S. *sonnei*, 3 percent were S. *flexneri* and less than 1 percent of cases were identified as either S. *boydii* or S. *dysenteriae*. In addition, approximately 9 percent of shigellosis cases did not have a species reported.



In Ohio, the incidence of *Shigella* significantly decreased from 2009 to 2010 by 71 percent. Outbreak-associated cases occurred in all age groups during 2009 and 2010, especially in persons under 9 years of age (Table 1).

		20	09			20	10	
Age		oreak- ciated	Spo	radic		oreak- ciated	Spo	radic
0-9	170	26%	481	74%	52	29%	127	71%
10-19	14	14%	87	86%	4	17%	19	83%
20-29	14	13%	91	87%	3	8%	34	92%
30-39	5	7%	70	93%	0	0%	22	100%
40-49	4	11%	32	89%	0	0%	11	100%
50-59	7	14%	41	85%	1	6%	15	94%
60+	0	0%	30	100%	0	0%	16	100%
Unknown	0	0%	4	100%	0	0%	0	0%
Total	214	20%	832	80%	60	20%	244	80%

Source of disease data: Ohio Disease Reporting System.

OUTBREAK SUMMARIES

Starting in 2009, the categories for outbreak reporting changed (see Ohio Administrative Code <u>Chapter</u> <u>3701-03</u>). The categories for outbreak reporting are: community outbreak, foodborne outbreak, healthcare-associated outbreak, institutional outbreak, waterborne outbreak and zoonotic outbreak. These outbreaks are Class C reportable diseases and must be reported by the end of the next business day.

In 2010, the Outbreak Response and Bioterrorism Investigation Program (ORBIT) assisted local health jurisdictions in Ohio in the investigation of 278 outbreaks. These outbreaks were detected in 48 of 88 counties throughout the state. The number of Ohioans known to be ill from these outbreaks was 5,136. The outbreaks were classified as: community (47), foodborne (69), healthcare-associated (68), institutional (82), waterborne (10) and zoonotic (2). Causative agents identified during the outbreak investigations included: *Acinetobacter baumannii, Bordetella pertussis, Clostridium difficile,* Coxsackie virus, *Cryptosporidium* spp., *Enterococcus faecalis, Escherichia coli* O145, *Escherichia coli* O157, *Giardia* spp., Hepatitis A virus, *Legionella pneumophila*, Mumps virus, *Neisseria meningitidis*, Norovirus, *Pediculus capitis* (head louse), *Pseudomonas aeruginosa, Ralstonia pickettii, Salmonella* spp., *Sarcoptes scabiei* (scabies mite), *Shigella sonnei, Staphylococcus aureus, Streptococcus pneumoniae* and Varicella Zoster virus.

This is the first 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 selected types of 2010 outbreaks are discussed below.

COMMUNITY OUTBREAKS

In 2010, 47 community outbreaks were reported from a variety of settings. Thirty-two of these outbreaks were confirmed, with the causative agent as follows: *B. pertussis* (14), *Giardia* spp. (1), Hepatitis A virus (1), Mumps virus (1), Norovirus (8), *P. capitis* (head louse) (3), *S. scabiei* (1) and methicillin-resistant *S. aureus* (3).

The confirmed vaccine-preventable community outbreaks of 2010 are listed in Table 1.

1: Confirmed Vac	cine-Preventable Com	munity Outbrea	ks, Ohio
Month of Onset	Causative Agent	County	# 111
April 2010	Bordetella pertussis	Allen	15
April 2010	Bordetella pertussis	Allen	15
April 2010	Bordetella pertussis	Portage	5
April 2010	Bordetella pertussis	Morgan	4
April 2010	Bordetella pertussis	Stark	49
May 2010	Bordetella pertussis	Franklin	2
June 2010	Bordetella pertussis	Franklin	3
June 2010	Bordetella pertussis	Franklin	6

Month of Onset	Causative Agent	County	# III
June 2010	Bordetella pertussis	Franklin	2
July 2010	Bordetella pertussis	Lucas	8
July 2010	Bordetella pertussis	Franklin	2
August 2010	Bordetella pertussis	Lucas	2
August 2010	Mumps virus	Multi-county	18
October 2010	Bordetella pertussis	Allen	8
November 2010	Bordetella pertussis	Scioto	6

Source of outbreak data: Ohio Disease Reporting System.

The confirmed other community outbreaks reporting during 2010 are shown in Table 2.

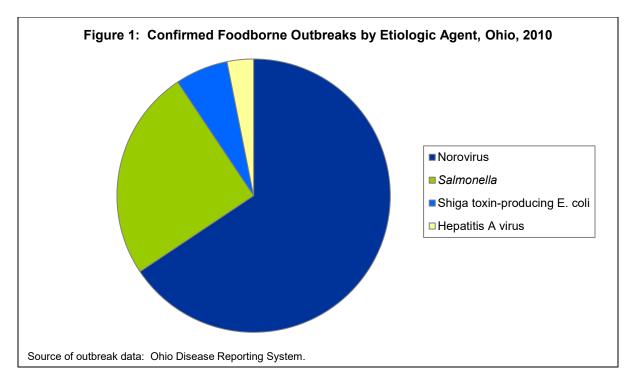
Month of Onset	Causative Agent	County	# 111
December 2009	Norovirus GII.4	Franklin	10
January 2010	Norovirus GII.12	Delaware	2
March 2010	Norovirus GII.12	Franklin	108
March 2010	Norovirus GII.4	Franklin	15
May 2010	MRSA*	Mercer	2
May 2010	MRSA*	Mercer	2
June 2010	MRSA*	Fulton	3
August 2010	Hepatitis A virus	Lake	6
August 2010	Pediculus capitis	Greene	37
September 2010	Sarcoptes scabiei	Tuscarawas	5
September 2010	Giardia spp.	Ashland	4
October 2010	Norovirus GI.3B	Richland	42
October 2010	Pediculus capitis	Richland	4
October 2010	Pediculus capitis	Hamilton	10
October 2010	Norovirus GI.3B	Auglaize	87
November 2010	Norovirus GII	Lake	5
December 2010	Norovirus GII.4	Medina	22

* Methicillin-resistant Staphylococcus aureus.

Source of outbreak data: Ohio Disease Reporting System.

FOODBORNE OUTBREAKS

In 2010, 32 of the 69 foodborne outbreaks reported in Ohio were confirmed. These 69 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 32 confirmed outbreaks also met the agent-specific <u>criteria for confirmation</u> of outbreaks. As shown in Figure 1, for these 32 foodborne outbreaks, the causative agent was distributed as follows: Norovirus (21), *Salmonella* spp. (8), *E. coli* O145 (1), *E. coli* O157



(1) and Hepatitis A virus (1). There were no cases or outbreaks of foodborne botulism in Ohio in 2010.

The 32 confirmed foodborne outbreaks are detailed in Table 3.

		1		1	
Month of Onset	Causative Agent	County	# III	Food Vehicle	Event / Setting
December 2009	Salmonella Enteritidis	Montgomery	3	Unknown	Home
January 2010	Norovirus GII.12	Richland	10	Unknown	Restaurant
January 2010	Norovirus GII.12	Lake	6	Unknown	Home
January 2010	Norovirus GII.2	Defiance	5	Suspect salad	Catered lunch
January 2010	Norovirus GII.12	Montgomery	25	Unknown	Catered party
March 2010	Norovirus GI	Cuyahoga	18	Unknown	Home
March 2010	Norovirus GII.12	Richland	85	Unknown	Catered party
March 2010	Norovirus GII.4	Delaware	3	Salad	Restaurant
March 2010	Norovirus GII	Summit	2	Unknown	Restaurant
April 2010	Norovirus GII.4	Summit	2	Unknown	Restaurant
April 2010	Escherichia coli O145	Franklin	11	Romaine lettuce	Restaurant
April 2010	Norovirus GII.4	Clermont	42	Unknown	Church
April 2010	Salmonella Enteritidis	Athens	56	Chili rellenos	Restaurant
May 2010	Norovirus GII.12	Sandusky	9	Salad	Restaurant
May 2010	Norovirus GII.4	Franklin	9	Unknown	Restaurant

Month of Onset	Causative Agent	County	# III	Food Vehicle	Event / Setting
May 2010	Salmonella Baildon	Multi-state	6	Unknown	Unknown
May 2010	Salmonella Enteritidis	Lucas	3	Unknown	Restauran
May 2010	Salmonella Hartford	Multi-state	14	Unknown	Restauran
June 2010	<i>Salmonella</i> Typhimurium, var Copenhagen	Hamilton	64	Pulled pork	Church
June 2010	Norovirus GII.12	Cuyahoga	95	Suspect lemon/lime	Catered banquet
July 2010	Escherichia coli O157	Butler	8	Unknown	Restauran
August 2010	Norovirus GII.4	Franklin	6	Unknown	Restauran
September 2010	Norovirus GI	Franklin	10	Suspect salad	Restauran
October 2010	Salmonella (I) 4,5,12:i:-	Lorain	33	Unknown	Pot luck
November 2010	Norovirus GII	Lake	66	Unknown	Banquet
November 2010	Norovirus GII	Cuyahoga	39	Unknown	Catered party
November 2010	Salmonella Heidelberg	Allen	6	Turkey	Home
December 2010	Norovirus GII.4	Logan	31	Suspect salad	Unlicenseo home-style restaurant
December 2010	Norovirus GII.4	Greene	11	Raw oysters	Restauran
December 2010	Norovirus GI.3B	Delaware	8	Cheese, veggie dips	Home
December 2010	Norovirus GII	Richland	7	Unknown	Home

Source of outbreak data: Ohio Disease Reporting System.

The *E. coli* O145 outbreak of April 2010 occurred on a Franklin County college campus. This was a multi-state outbreak with clusters also reported from Michigan and New York. A case-control study was conducted by means of an electronic questionnaire administered to students on part of the campus. The case-control study found that consumption of shredded romaine lettuce was associated with illness. The multi-state investigation led to a <u>recall</u> of shredded romaine lettuce.

HEALTHCARE-ASSOCIATED OUTBREAKS

There were 68 healthcare-associated outbreaks reported in 2010, 37 of which were confirmed as shown in Table 4.

Month of Onset	Causative Agent	# III	Event / Setting
December 2009	Norovirus GII	145	Long term care facility
January 2010	Norovirus GII.4	18	Hospital
January 2010	Norovirus GII.4J	29	Long term care facility
January 2010	Norovirus GII.12	49	Long term care facility
February 2010	Norovirus GII.4	74	Long term care facility
February 2010	Enterococcus faecalis	3	Hospital
March 2010	Norovirus GII.4	42	Long term care facility
March 2010	Norovirus GII.12	41	Long term care facility
March 2010	Sarcoptes scabiei	28	Long term care facility
March 2010	Streptococcus pneumoniae	3	Long term care facility
March 2010	Norovirus GII.4	32	Hospital
March 2010	Norovirus GII	32	Long term care facility
March 2010	Norovirus GII.4	28	Long term care facility
March 2010	Norovirus GII	49	Hospital
May 2010	Norovirus GII.4	12	Rehab facility
May 2010	Acinetobacter baumannii	6	Hospital
June 2010	Sarcoptes scabiei	6	Drug treatment facility
June 2010	MRSA*	3	Dialysis center
July 2010	Sarcoptes scabiei	2	Long term care facility
July 2010	Conjunctivitis	4	Long term care facility
August 2010	Sarcoptes scabiei	12	Long term care facility
August 2010	Sarcoptes scabiei	5	Long term care facility
September 2010	Salmonella Poona	14	Long term care facility
October 2010	Sarcoptes scabiei	5	Long term care facility
October 2010	Ralstonia pickettii	3	Dialysis center
October 2010	Norovirus GII	42	Long term care facility
November 2010	Norovirus GII.4	72	Long term care facility
November 2010	Norovirus GII	37	Long term care facility
November 2010	Norovirus GI.3B	39	Long term care facility
November 2010	Clostridium difficile	3	Hospital
November 2010	Norovirus GII	70	Long term care facility
December 2010	Norovirus GII.4	62	Long term care facility
December 2010	Norovirus GII.4	25	Hospital
December 2010	Norovirus GII	12	Long term care facility
December 2010	Norovirus GII.4	38	Long term care facility
December 2010	Norovirus GII.4 and GI.3B	27	Hospital
December 2010	Norovirus GII.4	36	Long term care facility

Table 4: Confirmed Healthcare-Associated Outbreaks, Ohio, 2010

* Methicillin-resistant *Staphylococcus aureus*. Source of outbreak data: Ohio Disease Reporting System.

INSTITUTIONAL OUTBREAKS

In 2010, 82 institutional outbreaks were reported. Of these, 55 were confirmed. See Table 5 below for the confirmed vaccine-preventable institutional outbreaks.

Month of Onset	Causative Agent	County	# III	Setting
December 2009	Varicella Zoster virus	Hamilton	6	School
February 2010	Varicella Zoster virus	Franklin	6	School
March 2010	Bordetella pertussis	Franklin	5	School
March 2010	Varicella Zoster virus	Henry	5	School
March 2010	Varicella Zoster virus	Washington	5	School
April 2010	Bordetella pertussis	Franklin	2	School
April 2010	Varicella Zoster virus	Portage	13	School
April 2010	Varicella Zoster virus	Union	25	School
August 2010	Bordetella pertussis	Franklin	4	School
August 2010	Bordetella pertussis	Franklin	3	School
August 2010	Bordetella pertussis	Franklin	7	School
August 2010	Bordetella pertussis	Franklin	7	School
September 2010	Bordetella pertussis	Franklin	10	School
September 2010	Bordetella pertussis	Franklin	2	Day care center
September 2010	Bordetella pertussis	Franklin	3	Day care center
September 2010	Bordetella pertussis	Franklin	12	School
September 2010	Bordetella pertussis	Franklin	6	School
September 2010	Bordetella pertussis	Franklin	2	School
September 2010	Bordetella pertussis	Franklin	2	School
October 2010	Bordetella pertussis	Allen	13	School
October 2010	Bordetella pertussis	Lorain	2	School
October 2010	Bordetella pertussis	Franklin	3	School
October 2010	Bordetella pertussis	Franklin	2	School
October 2010	Bordetella pertussis	Franklin	2	School
October 2010	Bordetella pertussis	Franklin	3	School
October 2010	Bordetella pertussis	Franklin	5	School
October 2010	Bordetella pertussis	Franklin	4	School
November 2010	Bordetella pertussis	Franklin	8	School
November 2010	Bordetella pertussis	Franklin	8	School
November 2010	Bordetella pertussis	Franklin	2	School
December 2010	Bordetella pertussis	Franklin	5	School

Source of outbreak data: Ohio Disease Reporting System.

The confirmed other institutional outbreaks of 2010 are listed in Table 6.

Month of Onset	Causative Agent	County	# III	Setting
November 2008	Neisseria meningitidis Group B	Athens	10	College/university
January 2010	Norovirus GII.12	Washington	235	College/university
February 2010	MRSA*	Allen	2	Correctional facility
March 2010	Norovirus GII	Cuyahoga	22	Day care center
March 2010	Shigella sonnei	Hamilton	2	Day care center
April 2010	Shigella sonnei	Hamilton	20	Day care center
April 2010	Norovirus GI	Cuyahoga	17	Shelter
May 2010	10 Shigella sonnei		2	Day care center
May 2010	Shigella sonnei	Hamilton	13	Day care center
May 2010	Shigella sonnei	Hamilton	2	Day care center
May 2010	Shigella sonnei	Hamilton	3	Day care center
June 2010	Shigella sonnei	Hamilton	4	Day care center
June 2010	Shigella sonnei	Hamilton	12	Day care center
July 2010	Norovirus GI.3B	Madison	31	Assisted living facility
September 2010	Pediculus capitis	Lucas	17	School
September 2010	Escherichia coli O157	Franklin	6	Day care center
October 2010	Pediculus capitis	Lorain	21	School
October 2010	Coxsackie virus	Allen	4	Day care center
October 2010	Sarcoptes scabiei	Cuyahoga	5	Group home
October 2010	Norovirus GII.4	Cuyahoga	33	Assisted living facility
October 2010	Norovirus GII.4	Cuyahoga	48	Assisted living facility
December 2010	Clostridium difficile	Lucas	2	MRDD facility
December 2010	Norovirus GI.3B	Wood	93	School
December 2010	MRSA*	Madison	2	Sports team

Table 6: Confirmed Other Institutional Outbreaks Obio 2010

* Methicillin-resistant *Staphylococcus aureus*. Source of outbreak data: Ohio Disease Reporting System.

WATERBORNE OUTBREAKS

In 2010, 10 waterborne outbreaks were reported. These outbreaks are detailed in Table 7.

Month of Onset	Status	Causative Agent	County	# 111	Setting
February 2010	Confirmed	Legionella pneumophila	Franklin	3	Long term care facility
March 2010	Probable	Chloramines suspected	Wood	4	Pool
March 2010	Confirmed	Pseudomonas aeruginosa	Gallia	17	Pool and spa
June 2010	Probable	Harmful algal bloom	Auglaize – Mercer	8	Lake
July 2010	Probable	Microcystin (harmful algal bloom)	Logan	19	Lake
July 2010	Confirmed	Cryptosporidium spp.	Delaware	23	Water park
July 2010	Probable	Harmful algal bloom	Athens	7	Lake
July 2010	Probable	Harmful algal bloom	Ottawa	9	Lake
August 2010	Probable	Harmful algal bloom	Jackson	2	Lake
August 2010	Probable	Harmful algal bloom	Madison	3	Lake

ZOONOTIC OUTBREAKS

In 2010, two confirmed zoonotic outbreaks were reported, as seen in Table 8.

Tab	Table 8: Confirmed Zoonotic Outbreaks, Ohio, 2010							
Month of Onset	Causative Agent	County	# III	Type of Animal				
March 2010	Cryptosporidium spp.	Fulton	2	Calves				
May 2010	Salmonella Typhimurium	Delaware	3	Ducklings				

Source of outbreak data: Ohio Disease Reporting System.

PROFILES OF SELECTED HEALTH EVENTS DETECTED IN EPICENTER

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

Local health department epidemiologists and nurses conduct investigations of the anomalies detected by the EpiCenter system when visit levels within a given jurisdiction are statistically, significantly higher than normal for a 24-hour period. Approximately 25 percent (1,060) of all EpiCenter anomalies detected during 2010 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 2010 (25 percent) exceeded that from 2008 (10 percent) but was much less than observed in 2009 (70 percent), which was almost entirely due to the Pandemic Influenza H1N1 outbreak. Seasonal illness health events attributed for 63 percent of all anomalies resolved as health events in 2010. Anomalies characterized as seasonal illness health events typically follow a seasonal trend that can generally be predicted with each new season, such as the tracking of seasonal influenza (October-May). An example of this classification is when an increase in emergency department visits for fever and/or flu-like symptoms is observed during increased influenza activity in a given jurisdiction. Anomalies characterized as naturally occurring disease outbreaks relate to an increase in emergency department visits that can be directly or indirectly attributed to an existing or ongoing disease outbreak in the community that may have no assumption of seasonality. An example of this classification is when a county has reported a norovirus outbreak in a local jurisdiction and the data supports the activity with an increase in vomiting and diarrhea symptoms in or around that same jurisdiction. Anomalies characterized as environmental health events relate to an increase in emergency department visits involving an exposure to chemicals or substances causing an adverse health reaction, normally presenting as a cluster of cases. An example of this classification is when a cluster of visits presenting with "carbon monoxide exposure" or "poisoning after house fire" or "cough and rash reaction after exposure to over-chlorinated pool" is observed at a local hospital facility.

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

Disposition	# of Health Events	% of Health Events
Environmental health event	25	2%
Naturally occurring disease outbreak	168	16%
Seasonal illness health event	666	63%
Unknown health event	201	19%
Total	1,060	100%

County	NaturallyEnvironmentalOccurringHealth EventDiseaseOutbreak			urring ease	Illness	sonal S Health vent		nown h Event	Total	
	Ν	%	N	%	N	%	Ν	%	Ν	%
Adams	0	0%	0	0%	3	75%	1	25%	4	< 1%
Allen	0	0%	2	17%	10	83%	0	0%	12	1%
Ashland	0	0%	0	0%	0	0%	0	0%	0	0%
Ashtabula	0	0%	0	0%	0	0%	0	0%	0	0%
Athens	0	0%	0	0%	9	82%	2	18%	11	1%
Auglaize	0	0%	0	0%	0	0%	0	0%	0	0%
Belmont	0	0%	0	0%	2	100%	0	0%	2	< 1%
Brown	0	0%	0	0%	8	100%	0	0%	8	1%
Butler	0	0%	0	0%	13	100%	0	0%	13	1%
Carroll	0	0%	0	0%	0	0%	0	0%	0	0%
Champaign	2	67%	1	33%	0	0%	0	0%	3	< 1%
Clark	0	0%	1	20%	4	80%	0	0%	5	1%
Clermont	0	0%	0	0%	20	91%	2	9%	22	2%
Clinton	0	0%	0	0%	12	100%	0	0%	12	1%
Columbiana	0	0%	0	0%	0	0%	64	100%	64	6%
Coshocton	0	0%	0	0%	0	0%	0	0%	0	0%
Crawford	0	0%	0	0%	8	89%	1	11%	9	1%
Cuyahoga	1	1%	42	44%	28	29%	25	26%	96	9%
Darke	0	0%	0	0%	0	0%	0	0%	0	0%
Defiance	0	0%	0	0%	4	80%	1	20%	5	1%
Delaware	0	0%	0	0%	2	100%	0	0%	2	< 1%
Erie	0	0%	0	0%	17	100%	0	0%	17	2%
Fairfield	0	0%	0	0%	0	0%	0	0%	0	0%
Fayette	0	0%	0	0%	0	0%	0	0%	0	0%
Franklin	2	40%	0	0%	3	60%	0	0%	5	1%
Fulton	0	0%	0	0%	8	100%	0	0%	8	1%
Gallia	0	0%	0	0%	0	0%	5	100%	5	1%
Geauga	0	0%	0	0%	3	100%	0	0%	3	< 1%
Greene	0	0%	8	31%	16	62%	2	8%	26	3%
Guernsey	0	0%	0	0%	8	100%	0	0%	8	1%
Hamilton	6	16%	0	0%	31	84%	0	0%	37	4%
Hancock	2	13%	5	33%	6	40%	2	13%	15	1%
Hardin	0	0%	0	0%	0	0%	0	0%	0	0%
Harrison	0	0%	0	0%	0	0%	0	0%	0	0%
Henry	0	0%	0	0%	1	100%	0	0%	1	< 1%
Highland	0	0%	0	0%	8	100%	0	0%	8	1%
Hocking	0	0%	4	27%	11	73%	0	0%	15	1%
Holmes	0	0%	0	0%	2	100%	0	0%	2	< 1%
Huron	0	0%	0	0%	15	100%	0	0%	15	1%
Jackson	0	0%	2	100%	0	0%	0	0%	2	< 1%

Table 2: Distribution of EpiCenter Health Events by Jurisdiction, Ohio, 2010

County		nmental n Event	Naturally Occurring Disease Outbreak		Occurring Disease		Unknown Health Event		Total	
	N	%	Ν	%	N	%	Ν	%	N	%
Jefferson	0	0%	0	0%	0	0%	5	100%	5	1%
Knox	0	0%	0	0%	0	0%	0	0%	0	0%
Lake	0	0%	0	0%	22	100%	0	0%	22	2%
Lawrence	0	0%	0	0%	0	0%	0	0%	0	0%
Licking	4	11%	32	87%	0	0%	1	3%	37	4%
Logan	0	0%	0	0%	11	100%	0	0%	11	1%
Lorain	0	0%	1	4%	22	96%	0	0%	23	2%
Lucas	7	12%	8	14%	32	56%	10	18%	57	5%
Madison	1	5%	3	15%	16	80%	0	0%	20	2%
Mahoning	0	0%	0	0%	7	100%	0	0%	7	1%
Marion	0	0%	0	0%	0	0%	11	100%	11	1%
Medina	0	0%	0	0%	9	100%	0	0%	9	1%
Meigs	0	0%	0	0%	0	0%	0	0%	0	0%
Mercer	0	0%	0	0%	0	0%	0	0%	0	0%
Miami	0	0%	0	0%	7	100%	0	0%	7	1%
Monroe	0	0%	0	0%	0	0%	0	0%	0	0%
Montgomery	0	0%	0	0%	0	0%	0	0%	0	0%
Morgan	0	0%	0	0%	0	0%	0	0%	0	0%
Morrow	0	0%	0	0%	0	0%	0	0%	0	0%
Muskingum	0	0%	0	0%	1	100%	0	0%	1	< 1%
Noble	0	0%	0	0%	0	0%	0	0%	0	0%
Ottawa	0	0%	1	7%	13	93%	0	0%	14	1%
Paulding	0	0%	0	0%	0	0%	0	0%	0	0%
Perry	0	0%	0	0%	0	0%	0	0%	0	0%
Pickaway	0	0%	0	0%	0	0%	0	0%	0	0%
Pike	0	0%	0	0%	0	0%	0	0%	0	0%
Portage	0	0%	0	0%	13	100%	0	0%	13	1%
Preble	0	0%	2	100%	0	0%	0	0%	2	< 1%
Putnam	0	0%	0	0%	10	100%	0	0%	10	1%
Richland	0	0%	1	25%	3	75%	0	0%	4	< 1%
Ross	0	0%	0	0%	23	100%	0	0%	23	2%
Sandusky	0	0%	0	0%	0	0%	1	100%	1	< 1%
Scioto	0	0%	6	67%	3	33%	0	0%	9	1%
Seneca	0	0%	4	9%	21	48%	19	43%	44	4%
Shelby	0	0%	12	40%	16	53%	2	7%	30	3%
Stark	0	0%	2	7%	27	93%	0	0%	29	3%
Summit	0	0%	14	40%	21	60%	0	0%	35	3%
Trumbull	0	0%	0	0%	62	57%	47	43%	109	10%
Tuscarawas	0	0%	0	0%	0	0%	0	0%	0	0%
Union	0	0%	0	0%	0	0%	0	0%	0	0%
Van Wert	0	0%	0	0%	9	100%	0	0%	9	1%
Vinton	0	0%	0	0%	0	0%	0	0%	0	0%

County	Environmental nty Health Event				Seasonal Illness Health Event		Unknown Health Event		Total	
	Ν	%	Ν	%	N	%	Ν	%	Ν	%
Warren	0	0%	12	86%	2	14%	0	0%	14	1%
Washington	0	0%	1	33%	2	67%	0	0%	3	< 1%
Wayne	0	0%	0	0%	1	100%	0	0%	1	< 1%
Williams	0	0%	0	0%	0	0%	0	0%	0	0%
Wood	0	0%	0	0%	11	100%	0	0%	11	1%
Wyandot	0	0%	0	0%	0	0%	0	0%	0	0%
State of Ohio	0	0%	4	7%	50	93%	0	0%	54	5%
Total	25	2%	168	16%	666	63%	201	19%	1,060	100%

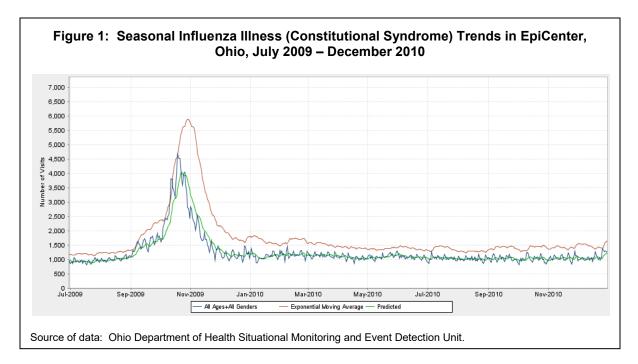
Data based on anomalies generated in the EpiCenter system 01/01/10 to 12/31/10.

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

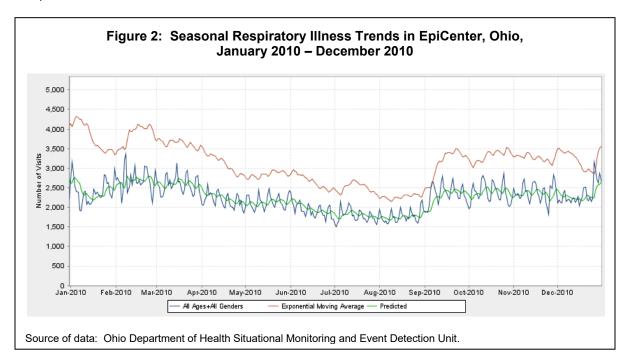
TRACKING OF SEASONAL TRENDS

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

As illustrated in Figure 1, constitutional symptoms did not observe its typical peak in mid- to late February. This influenza season, however, was masked by the Pandemic Influenza H1N1 outbreak from 2009, which peaked in mid-October and finally returned to baseline levels in late November. This led to an uncharacteristic influenza season for 2010-2011.

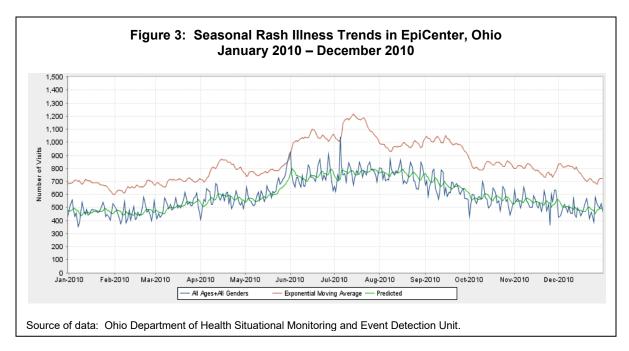


As shown in Figure 2, respiratory illness generally remained elevated throughout the entire cough/cold/flu season, afterward returning to normal baseline levels during the summer months. Then it began to increase at the commencement of the school year (late August into early September) and continued to elevate with the incidence of influenza season. As observed with constitutional illness, visit levels were not as pronounced as observed in 2009 due to the Pandemic Influenza H1N1 outbreak. Nearly a two-fold increase in total visit levels were observed in 2009 compared to 2010.



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 2010 were very similar to those observed in 2009.



TECHNICAL NOTES

NOTES ON SPECIFIC DISEASES:

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

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

Ehrlichia ewingii: formerly known as other human ehrlichiosis.

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

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

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

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

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

LaCrosse Virus Disease: also known as California serogroup virus disease. Case reporting to the CDC is through ArboNet. ArboNet is an electronic-based surveillance system created by the CDC to streamline arboviral disease reporting from state public health departments. Please refer to the ODH Web site for further information on vectorborne diseases at <u>http://www.odh.ohio.gov/odhPrograms/dis/zoonoses/vbdp/vbdp1.aspx</u>.

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.

St. Louis Encephalitis Virus Disease: case reporting to the CDC is through ArboNet. ArboNet is an electronic-based surveillance system created by the CDC to streamline arboviral disease reporting from state public health departments. Please refer to the ODH Web site for further information on vectorborne diseases at http://www.odh.ohio.gov/odhPrograms/dis/zoonoses/vbdp/vbdp1.aspx.

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.

West Nile Virus Infection: case reporting to the CDC is through ArboNet. ArboNet is an electronicbased surveillance system created by the CDC to streamline arboviral disease reporting from state public health departments. Please refer to the ODH Web site for further information on vectorborne diseases at http://www.odh.ohio.gov/odhPrograms/dis/zoonoses/vbdp/vbdp1.aspx.

NOTES ON OUTBREAKS:

Numbers indicate the number of outbreaks reported and do not reflect the number of cases involved in the outbreak. Therefore, 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 Outbreak Response and Bioterrorism Investigation Program and the Ohio Disease Reporting System. *Three multi-county outbreaks are not included in the "County" table; thus, county totals do not match totals.* A multi-county outbreak is an outbreak where the exposure occurred in more than one county.

Definitions for the following categories of outbreaks are from the ODH <u>Infectious Disease Control</u> <u>Manual</u>:

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: the occurrence of two or more cases of a similar illness resulting in the ingestion of a food in common. This is the definition of a foodborne outbreak, as found in "Surveillance for Foodborne Disease Outbreaks – United States, 2008" in: *Morbidity and Mortality Weekly Report (MMWR)*. Sept. 9, 2011; 60 (35); 1197-1202. Available at: <u>http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6035a3.htm? s_cid=mm6035a3 w</u>. Agent-specific criteria to confirm foodborne outbreaks can be found at: <u>http://www.cdc.gov/outbreaknet/references_resources/guide_confirming_diagnosis.html</u>.

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

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

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

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

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

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

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

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

Waterborne: the definition of a waterborne disease outbreak from drinking water is two or more persons that are epidemiologically linked by location of exposure to water, time and illness (including drinking water and water not intended for drinking, excluding recreational water) and epidemiologic evidence implicating water as the probable source of illness (e.g., beverages contaminated by plumbing failures in drink mix/soda machines). The definition of a waterborne disease outbreak from recreational water is two or more persons that are epidemiologically linked by location of exposure to recreational water (e.g., swimming pools, wading pools, spas, water slides, interactive fountains, wet decks, fresh and marine bodies of water), time and illness and epidemiologic evidence that implicates water or volatilization of water-associated compounds into the air surrounding an aquatic facility as the probable source of the illness. Note that single cases of laboratory-confirmed primary amebic meningoencephalitis (PAM) due to Naegleria fowleri, single cases of wound or other Vibrio infections and single cases of chemical or toxin poisoning associated with water may in some circumstances be considered waterborne disease outbreaks. This is the definition of a waterborne outbreak, as found in "Surveillance for Waterborne Disease Outbreaks and Other Health Events Associated with Recreational Water - United States, 2007-2008" and "Surveillance for Waterborne Disease Outbreaks Associated with Drinking Water - United States, 2007-2008" in: Morbidity and Mortality Weekly Reports (MMWR) Surveillance Summaries. Sep. 23, 2011; 66 (SS-12): 1-75. Available at: http://www.cdc.gov/mmwr/PDF/ss/ss6012.pdf.

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

NOTES ON RATE CALCULATIONS:

Population estimates for rates in the "Age in Years," "Sex" and "County of Residence" tables come from the 2010 U.S. Census. Population estimates for rates in the "Year of Onset" table come from the U.S. Census midpoint estimates for each year except 2010, which uses the actual count. Rates were only calculated in the "Age in Years" table for the following conditions because they pertain to selected age populations and not the entire population (please refer to the "Age in Years" table for rates by age group, when available):

- 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 2006-2010 disease tables (pp. 6-8):

- Anthrax
- Diphtheria
- Eastern equine encephalitis virus disease
- Ehrlichiosis/anaplasmosis undetermined
- 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
- Staphylococcus aureus, resistant to vancomycin
- Trichinosis
- Viral hemorrhagic fever
- Western equine encephalitis virus disease
- Yellow fever

There were no outbreaks of the following reported 2006-2008:

BlastomycosisHistoplasmosis

- 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 2010.

NOTE ON SALMONELLA SEROTYPES AND MENINGOCOCCAL DISEASE SEROGROUPS:

The bacteriology laboratory at ODH performs serotyping of *Salmonella* isolates and serogrouping of *Neisseria meningitidis* isolates. Hospital and other clinical laboratories are encouraged to send *Salmonella* and *Neisseria meningitidis* isolates to the ODH Laboratory for serotyping and serogrouping. The ODH Laboratory also requests Shiga toxin-producing *Escherichia coli, Listeria, Vibrio, Haemophilus influenzae* (in children under 5 years of age) and vancomycin resistant *Staphylococcus aureus* isolates with a minimum inhibitory concentration (MIC) of 8 or greater. For

further information on the submission of isolates, please contact the bacteriology laboratory at (614) 644-4656.

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