ANNUAL SUMMARY OF INFECTIOUS DISEASES OHIO 2011

REPORTED INCIDENCE OF SELECTED NOTIFIABLE DISEASES



PREPARED AND DISTRIBUTED BY:

BUREAU OF INFECTIOUS DISEASES

DIVISION OF PREVENTION AND HEALTH PROMOTION

TABLE OF CONTENTS

Intr	oduction	1
Ohi	o Notifiable Diseases	2
Ohi	o County Population Map	4
Tab	oles of Notifiable Diseases	5
	Reported Cases of Selected Notifiable Diseases by Year of Onset, Ohio, 2007-2011	6
	Reported Cases of Selected Notifiable Diseases by Age in Years, Ohio, 2011	9
	Reported Cases of Selected Notifiable Diseases by Sex, Ohio, 2011	13
	Reported Cases of Selected Notifiable Diseases by Month of Onset, Ohio, 2011	15
	Reported Cases of Selected Notifiable Diseases by County of Residence, Ohio, 2011	19
	Salmonella Serotypes by Year of Onset, Ohio, 2007-2011	45
	Meningococcal Disease Serogroups by Year of Onset, Ohio, 2007-2011	49
Gra	phs of Selected Notifiable Disease Incidence	50
	Campylobacteriosis	51
	Cryptosporidiosis	52
	Escherichia coli, Shiga Toxin-Producing	53
	Giardiasis	54
	Haemophilus influenzae, Invasive Disease	55
	LaCrosse Virus Disease	56
	Legionellosis	57
	Lyme Disease	58
	Meningitis, Aseptic	59
	Meningitis, Other Bacterial	60
	Pertussis	61
	Rocky Mountain Spotted Fever	62
	Salmonellosis	63

TABLE OF CONTENTS

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

TABLE OF CONTENTS

Salmonella Serotypes and Meningococcal Disease Serogroups

References

93 93

INTRODUCTION

The Annual Summary of Infectious Diseases, Ohio, 2011 provides an overview of the incidence of selected notifiable infectious diseases. The report includes tables of disease by year of onset, age group, sex, month of onset, county of residence, Salmonella serotypes and meningococcal disease serogroups. In addition, there are graphs of selected disease incidence, profiles of selected diseases, outbreak summaries and profiles of health events detected in EpiCenter that feature recent epidemiologic trends.

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

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

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

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

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

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

OHIO NOTIFIABLE DISEASES

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

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

CLASS A

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

Anthrax

• 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 EHerpes, congenital

Hepatitis C

Hepatitis D

•

•

- Influenza-associated
 hospitalization
- Leprosy
- Leptospirosis
- Lyme disease
- Mycobacterial disease, other than tuberculosis
- Rocky Mountain spotted fever

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

CLASS C

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

Community

- Healthcare-associated
- Waterborne

• Foodborne

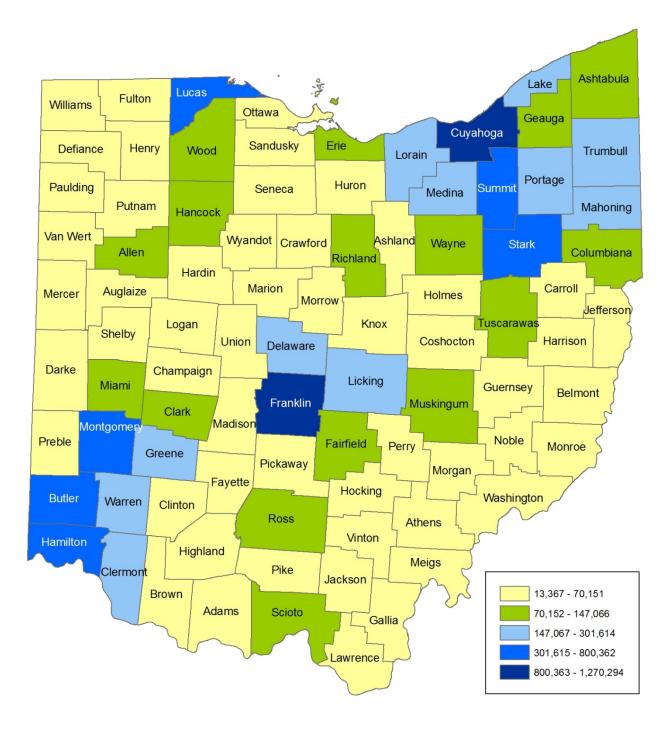
- Institutional
- Zoonotic

- 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 <u>http://www.odh.ohio.gov/odhPrograms/</u> <u>dis/orbitdis/repid1.aspx</u> or OAC 3701-3-02 and 3701-3-13.

OHIO COUNTY POPULATION MAP



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

TABLES OF SELECTED NOTIFIABLE DISEASES

BY YEAR OF ONSET TABLE

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

BY AGE TABLE

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

BY SEX TABLE

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

BY MONTH OF ONSET TABLE

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

BY COUNTY OF RESIDENCE TABLE

This table displays case counts and rates by county for 2011. County refers to the patient's county of residence. If the county of residence is unknown, then the county in which the physician, hospital or local health department is located is used. Population data come from the 2011 U.S. Census estimates.

SALMONELLA SEROTYPES TABLE

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

MENINGOCOCCAL SEROGROUPS TABLE

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

Pages 15-18

Pages 45-48

Pages 19-44

Pages 6-8

Pages 13-14

Pages 9-12

Page 49

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

	200	07	20	08	20	09	20	10	20	11	ME	DIAN	ME	AN
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	N	Rate	N	Rate	N	Rate	Ν	Rate	N	Rate
Amebiasis	33	0.3	34	0.3	22	0.2	29	0.3	10	0.1	29	0.3	26	0.2
Botulism	4	0.0	4	0.0	6	0.1	3	0.0	2	0.0	4	0.0	4	0.0
Foodborne	3	0.0	3	0.0	1	0.0	0	0.0	1	0.0	1	0.0	2	0.0
Infant*	1	*	1	*	5	*	2	*	1	*	1	*	2	*
Wound	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	1,083	9.4	1,215	10.6	1,262	10.9	1,124	9.7	1,191	10.3	1,191	10.3	1,175	10.2
Cholera	1	0.0	0	0.0	0	0.0	3	0.0	0	0.0	0	0.0	1	0.0
Coccidioidomycosis	11	0.1	14	0.1	18	0.2	17	0.1	20	0.2	17	0.1	16	0.1
Creutzfeldt-Jakob Disease (CJD)	10	0.1	5	0.0	12	0.1	12	0.1	12	0.1	12	0.1	10	0.1
Cryptosporidiosis	611	5.3	704	6.1	386	3.3	477	4.1	1,113	9.6	611	5.3	658	5.7
Cyclosporiasis	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cytomegalovirus (CMV), Congenital*	16	*	15	*	19	*	28	*	10	*	16	*	18	*
Encephalitis	29	0.3	15	0.1	-	-	-	-	-	-	-	-	-	-
Post Other Infection*	5	0.0	3	0.0	-	-	-	-	-	-	-	-	-	-
Primary Viral	24	0.2	12	0.1	-	-	-	-	-	-	-	-	-	-
Escherichia coli, Shiga Toxin-Producing	138	1.2	209	1.8	128	1.1	138	1.2	182	1.6	138	1.2	159	1.4
O157:H7	80	0.7	161	1.4	87	0.8	75	0.7	95	0.8	87	0.8	100	0.9
Not O157:H7	19	0.2	20	0.2	26	0.2	43	0.4	72	0.6	26	0.2	36	0.3
Unknown Serotype	39	0.3	28	0.2	15	0.1	20	0.2	15	0.1	20	0.2	23	0.2
Giardiasis	833	7.3	891	7.8	816	7.1	863	7.5	781	6.8	833	7.3	837	7.3
Haemophilus influenzae, Invasive Disease	114	1.0	128	1.1	98	0.8	125	1.1	178	1.5	125	1.1	129	1.1
Hemolytic Uremic Syndrome (HUS)	12	0.1	8	0.1	14	0.1	1	0.0	5	0.0	8	0.1	8	0.1
Kawasaki Disease	38	0.3	27	0.2	-	-	-	-	-	-	-	-	-	-
Legionellosis	231	2.0	248	2.2	274	2.4	230	2.0	390	3.4	248	2.2	275	2.4
Leprosy (Hansen Disease)	1	0.0	2	0.0	2	0.0	1	0.0	1	0.0	1	0.0	1	0.0
Listeriosis	33	0.3	29	0.3	29	0.3	29	0.3	29	0.3	29	0.3	30	0.3
Meningitis, Aseptic	816	7.1	770	6.7	828	7.2	810	7.0	1,329	11.5	816	7.1	911	7.9
Meningitis, Other Bacterial*	49	0.4	59	0.5	68	0.6	82	0.7	84	0.7	68	0.6	68	0.6
Meningococcal Disease	32	0.3	42	0.4	42	0.4	35	0.3	24	0.2	35	0.3	35	0.3
Rheumatic Fever	4	0.0	2	0.0	-	-	-	-	-	-	-	-	-	-
Salmonellosis	1,323	11.5	1,378	12.0	1,377	11.9	1,309	11.3	1,183	10.2	1,323	11.5	1,314	11.4
Shigellosis	1,277	11.1	1,954	17.0	1,050	9.1	304	2.6	338	2.9	1,050	9.1	985	8.5
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	2	0.0	4	0.0	3	0.0	10	0.1	3	0.0	3	0.0	4	0.0
Streptococcal Disease, Group A, Invasive	226	2.0	265	2.3	208	1.8	248	2.1	322	2.8	248	2.1	254	2.2
Streptococcal Disease, Group B, in Newborn*	49	*	51	*	63	*	41	*	71	*	51	*	55	*
Streptococcal Toxic Shock Syndrome (STSS)	12	0.1	12	0.1	11	0.1	12	0.1	18	0.2	12	0.1	13	0.1
Streptococcus pneumoniae, Invasive Disease	1,155	10.1	1,240	10.8	1,358	11.8	1,220	10.6	1,261	10.9	1,240	10.8	1,247	10.8
Ages < 5 Years*	117	*	123	*	139	*	97	*	84	*	117	*	112	*
Drug Resistant, Ages 5+ Years*	302	*	338	*	343	*	320	*	304	*	320	*	321	*
Drug Susceptible, Ages 5+ Years*	736	*	779	*	876	*	803	*	873	*	803	*	813	*
Toxic Shock Syndrome (TSS)	2	0.0	4	0.0	2	0.0	4	0.0	0	0.0	2	0.0	2	0.0
Typhoid Fever	11	0.1	10	0.1	11	0.1	9	0.1	5	0.0	10	0.1	9	0.1
Vibriosis	6	0.1	9	0.1	6	0.1	11	0.1	7	0.1	7	0.1	8	0.1
Vibrio parahaemolyticus Infection	3	0.0	4	0.0	0	0.0	5	0.0	3	0.0	3	0.0	3	0.0
Vibrio vulnificus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	3	0.0	5	0.0	6	0.1	6	0.1	4	0.0	5	0.0	5	0.0
Yersiniosis	52	0.5	48	0.4	44	0.4	42	0.4	31	0.3	44	0.4	43	0.4
SUB-TOTAL	8,214	71.6	9,397	81.8	8,157	70.7	7,217	62.6	8,600	74.5	8,214	71.6	8,317	72.2

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

n/a = not applicable.

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

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

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

	20	007	20	08	20	09	20	10	20	11	ME	DIAN	ME	AN
HEPATITIS	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	Ν	Rate	N	Rate
Hepatitis A	69	0.6	54	0.5	34	0.3	49	0.4	34	0.3	49	0.4	48	0.4
Hepatitis B, Acute*	124	1.1	131	1.1	213	1.8	123	1.1	106	0.9	124	1.1	139	1.2
Hepatitis B, Perinatal Infection*	0	*	1	*	0	*	3	*	4	*	1	*	2	*
Hepatitis C, Acute*	19	0.2	41	0.4	64	0.6	12	0.1	6	0.1	19	0.2	28	0.2
Hepatitis E	3	0.0	2	0.0	0	0.0	1	0.0	0	0.0	1	0.0	1	0.0
SUB-TOTAL	215	1.9	229	2.0	311	2.7	188	1.6	150	1.3	215	1.9	219	1.9
OUTBREAKS*														
Community*	-	-	-	-	26	n/a	47	n/a	32	n/a	-	-	-	-
Conjunctivitis*	2	n/a	1	n/a	-	-	-	-	-	-	-	-	-	-
Foodborne*	87	n/a	92	n/a	56	n/a	69	n/a	61	n/a	69	n/a	73	n/a
Healthcare-Associated*	-	-	-	-	55	n/a	68	n/a	37	n/a	-	-	-	-
Institutional*	-	-	-	-	64	n/a	82	n/a	104	n/a	-	-	-	-
Nosocomial*	8	n/a	12	n/a	-	-	-	-	-	-	-	-	-	-
Pediculosis*	1	n/a	4	n/a	-	-	-	-	-	-	-	-	-	-
Scabies*	18	n/a	14	n/a	-	-	-	-	-	-	-	-	-	-
Staphylococcal Skin Infections*	39	n/a	21	n/a	-	-	-	-	-	-	-	-	-	-
Unspecified*	28	n/a	69	n/a	-	-	-	-	-	-	-	-	-	-
Unusual Incidence of Non-Class A, Class B or Class C Disease*	117	n/a	73	n/a	-	-	-	-	-	-	-	-	-	-
Waterborne*	9	n/a	4	n/a	2	n/a	10	n/a	17	n/a	9	n/a	8	n/a
Zoonotic*	-	-	-	-	9	n/a	2	n/a	4	n/a	-	-	-	-
SUB-TOTAL	309	n/a	290	n/a	212	n/a	278	n/a	255	n/a	278	n/a	269	n/a
					2.040	00.4	250	2.2	2.440	20.0				
Influenza-Associated Hospitalization*	-	-	-	-	3,818	33.1	259	2.2	2,410	20.9	-	-	-	-

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

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

	20	007	20	800	20	09	20	010	20)11	ME	DIAN	ME	EAN
ZOONOSES	Ν	Rate												
Brucellosis	0	0.0	0	0.0	4	0.0	1	0.0	0	0.0	0	0.0	1	0.0
Dengue	11	0.1	7	0.1	3	0.0	16	0.1	2	0.0	7	0.1	8	0.1
Ehrlichiosis/Anaplasmosis	3	0.0	12	0.1	13	0.1	10	0.1	14	0.1	12	0.1	10	0.1
Anaplasma phagocytophilum*	2	0.0	1	0.0	1	0.0	2	0.0	8	0.1	2	0.0	3	0.0
Ehrlichia chaffeensis*	1	0.0	11	0.1	11	0.1	8	0.1	5	0.0	8	0.1	7	0.1
Ehrlichia ewingii*	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	9	0.1	6	0.1	5	0.0	24	0.2	50	0.4	9	0.1	19	0.1
Leptospirosis	0	0.0	1	0.0	1	0.0	0	0.0	1	0.0	1	0.0	1	0.0
Lyme Disease	34	0.3	45	0.4	56	0.5	37	0.3	52	0.5	45	0.4	45	0.4
Malaria	28	0.2	31	0.3	36	0.3	44	0.4	41	0.4	36	0.3	36	0.3
Psittacosis	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Q Fever	2	0.0	1	0.0	0	0.0	1	0.0	1	0.0	1	0.0	1	0.0
Rabies, Animal*	86	n/a	64	n/a	47	n/a	47	n/a	51	n/a	51	n/a	59	n/a
Rocky Mountain Spotted Fever (RMSF)	9	0.1	31	0.3	17	0.1	16	0.1	21	0.2	17	0.1	19	0.1
Toxoplasmosis, Congenital*	1	*	0	*	-	-	-	-	-	-	-	-	-	-
Tularemia	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0
Typhus Fever, Murine	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	23	0.2	15	0.1	2	0.0	5	0.0	21	0.2	15	0.1	13	0.1
SUB-TOTAL	206	1.0	213	1.3	186	1.2	202	1.3	255	1.8	206	1.3	212	1.3

GRAND TOTAL	14,173	120.2	13,167	111.6	15,877	135.3	11,369	95.7	13,415	113.5	13,415	113.5	13,600	115.3
POPULATION	11,46	6,917	11,48	5,910	11,54	2,645	11,53	6,504	11,54	4,951	11,53	6,504	11,51	5,385

	0	-4	-	-9	-	-14	-	-19	-	-29		-39
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	2	0.3	0	0.0	0	0.0	0	0.0
Botulism	1	0.1	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Infant*	1	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	118	16.7	53	7.1	50	6.6	65	8.1	159	10.7	114	8.2
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	1	0.1	2	0.1	3	0.2
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Cryptosporidiosis	270	38.1	121	16.1	93	12.2	64	8.0	140	9.4	123	8.8
Cytomegalovirus (CMV), Congenital*	10	*	0	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	40	5.6	22	2.9	13	1.7	24	3.0	32	2.1	14	1.0
O157:H7	28	4.0	13	1.7	7	0.9	9	1.1	15	1.0	5	0.4
Not O157:H7	10	1.4	8	1.1	4	0.5	14	1.7	13	0.9	7	0.5
Unknown Serotype	2	0.3	1	0.1	2	0.3	1	0.1	4	0.3	2	0.1
Giardiasis	158	22.3	77	10.3	46	6.1	46	5.7	93	6.2	88	6.3
Haemophilus influenzae, Invasive Disease	19	2.7	3	0.4	0	0.0	2	0.2	6	0.4	3	0.2
Hemolytic Uremic Syndrome (HUS)	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	0	0.0	0	0.0	0	0.0	7	0.5	27	1.9
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Listeriosis	1	0.1	0	0.0	0	0.0	0	0.0	3	0.2	0	0.0
Meningitis, Aseptic	326	46.0	101	13.5	111	14.6	104	13.0	232	15.6	147	10.5
Meningitis, Other Bacterial*	9	1.3	1	0.1	3	0.4	1	0.1	7	0.5	9	0.6
Meningococcal Disease	5	0.7	0	0.0	0	0.0	3	0.4	3	0.2	1	0.1
Salmonellosis	198	27.9	85	11.3	60	7.9	76	9.5	115	7.7	98	7.0
Shigellosis	137	19.3	77	10.3	12	1.6	5	0.6	38	2.5	21	1.5
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	21	3.0	11	1.5	4	0.5	3	0.4	13	0.9	25	1.8
Streptococcal Disease, Group B, in Newborn*	71	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
Streptococcus pneumoniae, Invasive Disease	84	11.9	20	2.7	12	1.6	8	1.0	41	2.8	60	4.3
Ages < 5 Years*	84	11.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Drug Resistant, Ages 5+ Years*	0	0.0	4	0.5	0	0.0	3	0.4	11	0.7	13	0.9
Drug Susceptible, Ages 5+ Years*	0	0.0	16	2.1	12	1.6	5	0.6	30	2.0	47	3.4
Typhoid Fever	2	0.3	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0
Vibriosis	0	0.0	1	0.1	0	0.0	0	0.0	2	0.1	2	0.1
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
Other (Not Cholera)	0	0.0	1	0.1	0	0.0	0	0.0	1	0.1	1	0.1
Yersiniosis	11	1.6	0	0.0	1	0.1	1	0.1	5	0.3	1	0.1
SUB-TOTAL	1,483	209.3	572	76.3	407	53.5	405	50.5	900	60.4	739	53.0
		-										
HEPATITIS												

Hepatitis A	1	0.1	0	0.0	1	0.1	4	0.5	7	0.5	3	0.2
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	2	0.2	23	1.5	42	3.0
Hepatitis B, Perinatal Infection*	4	*	0	*	0	*	0	*	0	*	0	*
Hepatitis C, Acute*	1	0.1	0	0.0	0	0.0	0	0.0	2	0.1	2	0.1
SUB-TOTAL	6	0.8	0	0.0	1	0.1	6	0.7	32	2.1	47	3.4

	0	-4	5	-9	10	-14	15	-19	20	-29	30	-39
VACCINE-PREVENTABLE	N	Rate	Ν	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Influenza-Associated Hospitalization*	416	58.7	147	19.6	47	6.2	62	7.7	195	13.1	175	12.6
Influenza-Associated Pediatric Mortality*	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	2	0.3	4	0.5	0	0.0	0	0.0	1	0.1	1	0.1
Pertussis	195	27.5	164	21.9	176	23.2	31	3.9	22	1.5	30	2.2
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	196	27.7	347	46.3	345	45.4	95	11.8	28	1.9	14	1.0
SUB-TOTAL	810	114.3	662	88.3	568	74.7	188	23.4	246	16.5	220	15.8
70010050												
ZOONOSES	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	2	0.0	1	0.0	0	
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	<u> </u>	0.2	1	0.1	0	0.0
Anaplasma phagocytophilum* Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	1	0.1	0	0.1	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	14	2.0	21	2.8	14	1.8	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	-	0	0.0	1	0.0	0	0.0
Leptospirosis Lyme Disease	0	0.0	4	0.0	2	0.0	5	0.0	10	0.1	8	0.0
Malaria	1	0.0	4	0.5	<u> </u>	0.3	1	0.0	10	0.7	10	0.0
Q Fever	0	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	0.0 n/a	0	0.0 n/a	0	0.0 n/a	0	0.0 n/a	0	0.0 n/a	0	0.0
Rocky Mountain Spotted Fever (RMSF)	0	0.0	3	0.4	1	0.1	4	0.5	2	0.1	2	0.1
	0	0.0	0	0.4	1	0.1	4	0.5	0	0.1	2	0.1
West Nile Virus Infection	0	0.0	0	0.0	1	0.1	2	0.0	0	0.0	0	0.0
SUB-TOTAL	15	<u>0.0</u> 2.1	32	4.3	20	2.6	 14	1.7	24	1.6	20	1.4
SUB-TUTAL	15	Z .1	32	4.3	20	2.0	14	1.7	24	1.0	20	1.4

GRAND TOTAL	2,314	326.6	1,266	168.8	996	131.0	613	76.4	1,202	80.6	1,026	73.6
POPULATION	708,443		750,037		760	,141	802	,732	1,490	,404	1,394	4,307

	40	-49	50·	-59	60) +	Unk	nown	TOT	FAL
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	5	0.3	0	0.0	3	0.1	0	n/a	10	0.1
Botulism	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Infant*	0	*	0	*	0	*	0	n/a	1	*
Campylobacteriosis	177	11.1	195	11.6	260	11.0	0	n/a	1,191	10.3
Coccidioidomycosis	2	0.1	2	0.1	10	0.4	0	n/a	20	0.2
Creutzfeldt-Jakob Disease (CJD)	0	0.0	1	0.1	10	0.4	0	n/a	12	0.1
Cryptosporidiosis	82	5.2	67	4.0	151	6.4	2	n/a	1,113	9.6
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	n/a	10	*
Escherichia coli, Shiga Toxin-Producing	9	0.6	8	0.5	20	0.8	0	n/a	182	1.6
O157:H7	3	0.2	5	0.3	10	0.4	0	n/a	95	0.8
Not O157:H7	4	0.3	3	0.2	9	0.4	0	n/a	72	0.6
Unknown Serotype	2	0.1	0	0.0	1	0.0	0	n/a	15	0.1
Giardiasis	82	5.2	82	4.9	109	4.6	0	n/a	781	6.8
Haemophilus influenzae, Invasive Disease	9	0.6	27	1.6	109	4.6	0	n/a	178	1.5
Hemolytic Uremic Syndrome (HUS)	1	0.1	1	0.1	1	0.0	0	n/a	5	0.0
Legionellosis	61	3.8	99	5.9	196	8.3	0	n/a	390	3.4
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Listeriosis	0	0.0	5	0.3	20	0.8	0	n/a	29	0.3
Meningitis, Aseptic	114	7.2	86	5.1	107	4.5	1	n/a	1,329	11.5
Meningitis, Other Bacterial*	9	0.6	15	0.9	30	1.3	0	n/a	84	0.7
Meningococcal Disease	1	0.1	6	0.4	5	0.2	0	n/a	24	0.2
Salmonellosis	152	9.6	155	9.2	242	10.2	2	n/a	1,183	10.2
Shigellosis	15	0.9	20	1.2	13	0.5	0	n/a	338	2.9
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	1	0.1	0	0.0	2	0.1	0	n/a	3	0.0
Streptococcal Disease, Group A, Invasive	28	1.8	49	2.9	167	7.1	1	n/a	322	2.8
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	n/a	71	*
Streptococcal Toxic Shock Syndrome (STSS)	2	0.1	2	0.1	12	0.5	0	n/a	18	0.2
Streptococcus pneumoniae, Invasive Disease	160	10.1	259	15.4	614	26.0	3	n/a	1,261	10.9
Ages < 5 Years*	0	0.0	0	0.0	0	0.0	0	n/a	84	11.9
Drug Resistant, Ages 5+ Years*	39	2.5	72	4.3	162	6.9	0	n/a	304	2.8
Drug Susceptible, Ages 5+ Years*	121	7.6	187	11.1	452	19.1	3	n/a	873	8.1
Typhoid Fever	0	0.0	0	0.0	1	0.0	0	n/a	5	0.0
Vibriosis	1	0.1	0	0.0	1	0.0	0	n/a	7	0.1
Vibrio parahaemolyticus Infection	1	0.1	0	0.0	0	0.0	0	n/a	3	0.0
Other (Not Cholera)	0	0.0	0	0.0	1	0.0	0	n/a	4	0.0
Yersiniosis	2	0.1	3	0.2	7	0.3	0	n/a	31	0.3
SUB-TOTAL	913	57.5	1,082	64.1	2,090	88.4	9	n/a	8,600	74.5
			-,		_,		-		-,9	
HEPATITIS Hepatitis A	5	0.3	5	0.3	8	0.3	0	n/a	34	0.3
Hepatitis P. Acuto*	22	0.3	2 0	0.3	8	0.3	0	n/a	34	0.3

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

	40	-49	50	-59	60)+	Unk	nown	TOT	ſAL
VACCINE-PREVENTABLE	N	Rate	Ν	Rate	N	Rate	N	Rate	Ν	Rate
Influenza-Associated Hospitalization*	229	14.4	401	23.8	735	31.1	3	n/a	2,410	20.9
Influenza-Associated Pediatric Mortality*	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Mumps	2	0.1	2	0.1	1	0.0	0	n/a	13	0.1
Pertussis	24	1.5	23	1.4	25	1.1	0	n/a	690	6.0
Tetanus	0	0.0	0	0.0	1	0.0	0	n/a	1	0.0
Varicella	10	0.6	2	0.1	2	0.1	1	n/a	1,040	9.0
SUB-TOTAL	265	16.7	428	25.4	764	32.3	4	n/a	4,155	36.0
ZOONOSES										
Dengue	0	0.0	1	0.1	1	0.0	0	n/a	2	0.0
Ehrlichiosis/Anaplasmosis	2	0.1	3	0.2	6	0.3	0	n/a	14	0.1
Anaplasma phagocytophilum*	1	0.1	2	0.1	3	0.1	0	n/a	8	0.1
Ehrlichia chaffeensis*	1	0.1	0	0.0	3	0.1	0	n/a	5	0.0
Unknown	0	0.0	1	0.1	0	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	0	0.0	1	0.1	0	0.0	0	n/a	50	0.4
Leptospirosis	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Lyme Disease	8	0.5	10	0.6	5	0.2	0	n/a	52	0.5
Malaria	4	0.3	6	0.4	4	0.2	0	n/a	41	0.4
Q Fever	0	0.0	0	0.0	1	0.0	0	n/a	1	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	51	n/a	51	n/a
Rocky Mountain Spotted Fever (RMSF)	2	0.1	3	0.2	4	0.2	0	n/a	21	0.2
Tularemia	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
West Nile Virus Infection	4	0.3	7	0.4	7	0.3	0	n/a	21	0.2
SUB-TOTAL	20	1.3	31	1.8	28	1.2	51	n/a	255	1.8

GRAND TOTAL	1,226	77.2	1,555	92.2	2,898	122.6	64	n/a	13,160	113.5
POPULATION	1,587,859		1,686,932		2,364,096		()	11,544	4,951

	Eon	nale	Ma		Unk	nown	тот	TAL
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	4	0.1	6	0.1	0	n/a	10	0.1
Botulism	1	0.0	1	0.0	0	n/a	2	0.0
Foodborne	0	0.0	1	0.0	0	n/a	1	0.0
Infant*	1	*	0	*	0	n/a	1	*
Campylobacteriosis	557	9.4	630	11.2	4	n/a	1,191	10.3
Coccidioidomycosis	13	0.2	7	0.1	- 4	n/a	20	0.2
Creutzfeldt-Jakob Disease (CJD)	5	0.2	6	0.1	1	n/a	12	0.2
Cryptosporidiosis	605	10.2	504	8.9	4	n/a	1,113	9.6
Cytomegalovirus (CMV), Congenital*	5	*	5	*	0	n/a	10	*
Escherichia coli, Shiga Toxin-Producing	108	1.8	74	1.3	0	n/a	182	1.6
O157:H7	50	0.8	45	0.8	0	n/a	95	0.8
Not O157:H7	47	0.8	25	0.0	0	n/a	72	0.6
Unknown Serotype	11	0.0	4	0.4	0	n/a	15	0.0
Giardiasis	352	6.0	428	7.6	1	n/a	781	6.8
Haemophilus influenzae, Invasive Disease	96	1.6	82	1.5	0	n/a	178	1.5
Hemolytic Uremic Syndrome (HUS)	5	0.1	02	0.0	0	n/a	5	0.0
Legionellosis	145	2.5	243	4.3	2	n/a	390	3.4
Legionenosis Leprosy (Hansen Disease)	145	0.0	0	0.0	0	n/a	1	0.0
Listeriosis	10	0.0	19	0.0	0	n/a	29	0.3
Meningitis, Aseptic	668	11.3	656	11.6	5	n/a	1,329	11.5
Meningitis, Aseptic Meningitis, Other Bacterial*	37	0.6	47	0.8	0	n/a	84	0.7
Meningococcal Disease	12	0.8	12	0.8	0	n/a	24	0.7
	641				2			
Salmonellosis Shigellosis	183	10.9 3.1	540 155	9.6 2.7	2	n/a	1,183 338	10.2 2.9
	3				0	n/a		0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA) Streptococcal Disease, Group A, Invasive	3 162	0.1	0	0.0	-	n/a	3 322	
	41	2.7	156 29	2.8	4	n/a	71	2.8
Streptococcal Disease, Group B, in Newborn* Streptococcal Toxic Shock Syndrome (STSS)	12	0.2	6		0	n/a	18	0.2
	607		-	0.1 11.3	14	n/a		10.2
Streptococcus pneumoniae, Invasive Disease	30	10.3	640 53	*	14	n/a	1,261 84	10.9
Ages < 5 Years* Drug Resistant, Ages 5+ Years*	143	*	159	*	2	n/a n/a	304	*
	434	*	428	*	 11			*
Drug Susceptible, Ages 5+ Years* Typhoid Fever	434	0.0	420	0.1	0	n/a n/a	873 5	0.0
Vibriosis	-		-	0.1	0		-	
	2	0.0	5	0.1	0	n/a n/a	7	0.1
Vibrio parahaemolyticus Infection Other (Not Cholera)	2	0.0	2	0.0	0	n/a	4	0.0
Yersiniosis	16	0.0	15	0.0	0		31	0.0
SUB-TOTAL	4.291	72.7	4,271	75.7	38	n/a	8.600	74.5
SUB-TUTAL	4,291	12.1	4,271	75.7	30	n/a	0,000	74.5
HEPATITIS								
Hepatitis A	10	0.2	24	0.4	0	n/a	34	0.3
Hepatitis B, Acute*	50	0.2	56	1.0	0	n/a	106	0.3
Hepatitis B, Perinatal Infection*	3	*	1	*	0	n/a	4	*
Hepatitis C, Acute*	4	0.1	2	0.0	0	n/a	6	0.1
SUB-TOTAL	67	1.1	83	1.5	0	n/a	150	1.3
SOB-TOTAL	07	1.1	03	1.5	U	11/a	150	1.3
VACCINE-PREVENTABLE								
Influenza-Associated Hospitalization*	1,315	22.3	1,094	19.4	1	n/a	2,410	20.9
Influenza-Associated Pediatric Mortality*	0	*	1	*	0	n/a	1	*
Mumps	6	0.1	7	0.1	0	n/a	13	0.1
	371	6.3	318	5.6	1	n/a	690	6.0
Perfussis	011	0.0	010	0.0		1/0	030	0.0
Pertussis Tetanus		0.0	1	0.0	Λ	n/a	1	00
Tetanus Varicella	0 522	0.0 8.8	1 510	0.0 9.0	0	n/a n/a	1 1,040	0.0 9.0

	Fen	nale	Ма	ale	Unk	nown	TOT	TAL
ZOONOSES	N	Rate	N	Rate	Ν	Rate	Ν	Rate
Dengue	1	0.0	1	0.0	0	n/a	2	0.0
Ehrlichiosis/Anaplasmosis	3	0.1	11	0.2	0	n/a	14	0.1
Anaplasma phagocytophilum*	2	0.0	6	0.1	0	n/a	8	0.1
Ehrlichia chaffeensis*	0	0.0	5	0.1	0	n/a	5	0.0
Unknown	1	0.0	0	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	14	0.2	36	0.6	0	n/a	50	0.4
Leptospirosis	0	0.0	1	0.0	0	n/a	1	0.0
Lyme Disease	31	0.5	21	0.4	0	n/a	52	0.5
Malaria	15	0.3	26	0.5	0	n/a	41	0.4
Q Fever	0	0.0	1	0.0	0	n/a	1	0.0
Rabies, Animal*	0	0.0	0	0.0	51	n/a	51	n/a
Rocky Mountain Spotted Fever (RMSF)	7	0.1	14	0.2	0	n/a	21	0.2
Tularemia	1	0.0	0	0.0	0	n/a	1	0.0
West Nile Virus Infection	10	0.2	11	0.2	0	n/a	21	0.2
SUB-TOTAL	82	1.4	122	2.2	51	n/a	255	1.8
GRAND TOTAL	6,654	112.7	6,407	113.6	99	n/a	13,160	113.5

GRAND TOTAL	0,034 112.7	0,407 113.0	55 II/a	13,100 113.3
POPULATION	5.903.423	5.641.528	0	11.544.951
T OF OLEAHON	0,000, .20	0,011,020		,•

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

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

	Jan	uary	Febr	uary	Ма	rch	A	oril	M	lay	Jı	une	Jı	ıly
OUTBREAKS*	Ν	%	N	%	Ν	%	N	%	N	%	Ν	%	Ν	%
Community*	1	3%	2	6%	3	9%	2	6%	3	9%	2	6%	2	6%
Foodborne*	8	13%	4	7%	6	10%	5	8%	2	3%	4	7%	4	7%
Healthcare-Associated*	7	19%	6	16%	3	8%	4	11%	3	8%	2	5%	4	11%
Institutional*	16	15%	4	4%	13	13%	4	4%	7	7%	7	7%	2	2%
Waterborne*	1	6%	1	6%	0	0%	0	0%	0	0%	1	6%	0	0%
Zoonotic*	0	0%	0	0%	1	25%	1	25%	0	0%	0	0%	0	0%
SUB-TOTAL	33	13%	17	7%	26	10%	16	6%	15	6%	16	6%	12	5%
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	615	26%	1,109	46%	495	21%	79	3%	7	0%	9	0%	6	0%
Influenza-Associated Pediatric Mortality*	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%
Mumps	2	15%	1	8%	1	8%	1	8%	1	8%	0	0%	0	0%
Pertussis	93	13%	33	5%	57	8%	40	6%	43	6%	49	7%	49	7%
Tetanus	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Varicella	140	13%	89	9%	107	10%	82	8%	85	8%	29	3%	22	2%
SUB-TOTAL	850	20%	1,233	30%	660	16%	202	5%	136	3%	87	2%	77	2%
ZOONOSES														
Dengue	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Ehrlichiosis/Anaplasmosis	0	0%	0	0%	0	0%	0	0%	3	21%	5	36%	2	14%
Anaplasma phagocytophilum*	0	0%	0	0%	0	0%	0	0%	2	25%	1	13%	1	13%
Ehrlichia chaffeensis*	0	0%	0	0%	0	0%	0	0%	1	20%	3	60%	1	20%
Unknown	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
LaCrosse Virus Disease*	0	0%	0	0%	0	0%	0	0%	0	0%	1	2%	15	30%
Leptospirosis	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Lyme Disease	3	6%	0	0%	0	0%	3	6%	5	10%	15	29%	8	15%
Malaria	4	10%	2	5%	2	5%	4	10%	4	10%	4	10%	5	12%
Q Fever	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Rabies, Animal*	1	2%	3	6%	1	2%	2	4%	9	18%	5	10%	1	2%
Rocky Mountain Spotted Fever (RMSF)	0	0%	0	0%	1	5%	0	0%	4	19%	4	19%	2	10%
Tularemia	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
West Nile Virus Infection	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
SUB-TOTAL	9	4%	5	2%	4	2%	9	4%	25	10%	34	13%	33	13%

		just	•	ember		ober	Nove			mber	_	TAL
GENERAL INFECTIOUS DISEASES	N	%	N	%	N	%	N	%	N	%	N	%
Amebiasis	0	0%	0	0%	1	10%	1	10%	0	0%	10	100%
Botulism	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
Foodborne	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Infant*	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Campylobacteriosis	135	11%	104	9%	118	10%	89	7%	95	8%	1,191	100%
Coccidioidomycosis	0	0%	1	5%	3	15%	3	15%	1	5%	20	100%
Creutzfeldt-Jakob Disease (CJD)	2	17%	2	17%	1	8%	0	0%	1	8%	12	100%
Cryptosporidiosis	370	33%	202	18%	63	6%	53	5%	36	3%	1,113	100%
Cytomegalovirus (CMV), Congenital*	2	20%	1	10%	0	0%	0	0%	0	0%	10	100%
Escherichia coli, Shiga Toxin-Producing	32	18%	28	15%	9	5%	11	6%	5	3%	182	100%
O157:H7	16	17%	17	18%	7	7%	5	5%	1	1%	95	100%
Not O157:H7	13	18%	9	13%	2	3%	5	7%	3	4%	72	100%
Unknown Serotype	3	20%	2	13%	0	0%	1	7%	1	7%	15	100%
Giardiasis	104	13%	65	8%	51	7%	51	7%	57	7%	781	100%
Haemophilus influenzae, Invasive Disease	8	4%	11	6%	16	9%	20	11%	25	14%	178	100%
Hemolytic Uremic Syndrome (HUS)	1	20%	3	60%	1	20%	0	0%	0	0%	5	100%
Legionellosis	46	12%	37	9%	64	16%	20	5%	31	8%	390	100%
Leprosy (Hansen Disease)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Listeriosis	1	3%	6	21%	3	10%	4	14%	2	7%	29	100%
Meningitis, Aseptic	270	20%	255	19%	147	11%	67	5%	53	4%	1,329	100%
Meningitis, Other Bacterial*	7	8%	9	11%	8	10%	4	5%	6	7%	84	100%
Meningococcal Disease	0	0%	0	0%	3	13%	1	4%	1	4%	24	100%
Salmonellosis	168	14%	137	12%	91	8%	67	6%	50	4%	1,183	100%
Shigellosis	32	9%	18	5%	30	9%	18	5%	44	13%	338	100%
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	1	33%	0	0%	0	0%	1	33%	0	0%	3	100%
Streptococcal Disease, Group A, Invasive	14	4%	21	7%	14	4%	14	4%	15	5%	322	100%
Streptococcal Disease, Group B, in Newborn*	6	8%	7	10%	6	8%	8	11%	1	1%	71	100%
Streptococcal Toxic Shock Syndrome (STSS)	0	0%	0	0%	1	6%	1	6%	2	11%	18	100%
Streptococcus pneumoniae, Invasive Disease	33	3%	62	5%	101	8%	145	11%	138	11%	1.261	100%
Ages < 5 Years*	1	1%	6	7%	5	6%	6	7%	9	11%	84	100%
Drug Resistant, Ages 5+ Years*	9	3%	17	6%	25	8%	35	12%	30	10%	304	100%
Drug Susceptible, Ages 5+ Years*	23	3%	39	4%	71	8%	104	12%	99	11%	873	100%
Typhoid Fever	1	20%	0	0%	0	0%	0	0%	2	40%	5	100%
Vibriosis	2	29%	1	14%	1	14%	0	0%	0	0%	7	100%
Vibrio parahaemolyticus Infection	0	0%	0	0%	1	33%	0	0%	0	0%	3	100%
Other (Not Cholera)	2	50%	1	25%	0	0%	0	0%	0	0%	4	100%
Yersiniosis	0	0%	2	6%	1	3%	1	3%	5	16%	31	100%
T OTOITIOOIO	1.235	14%	972	11%	733	9%	579	<u>7%</u>	570	7%	8.600	100%

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

	Aug	just	Septe	mber	Oct	ober	Nove	mber	Dece	mber	то	ΓAL
OUTBREAKS*	Ν	%	N	%	N	%	Ν	%	N	%	N	%
Community*	3	9%	4	13%	0	0%	4	13%	6	19%	32	100%
Foodborne*	4	7%	9	15%	5	8%	5	8%	5	8%	61	100%
Healthcare-Associated*	1	3%	0	0%	0	0%	4	11%	3	8%	37	100%
Institutional*	5	5%	10	10%	11	11%	11	11%	14	13%	104	100%
Waterborne*	1	6%	12	71%	0	0%	1	6%	0	0%	17	100%
Zoonotic*	0	0%	0	0%	1	25%	1	25%	0	0%	4	100%
SUB-TOTAL	14	5%	35	14%	17	7%	26	10%	28	11%	255	100%
VACCINE-PREVENTABLE												
Influenza-Associated Hospitalization*	3	0%	9	0%	20	1%	29	1%	29	1%	2,410	100%
Influenza-Associated Pediatric Mortality*	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
Mumps	2	15%	1	8%	1	8%	1	8%	2	15%	13	100%
Pertussis	61	9%	49	7%	75	11%	74	11%	67	10%	690	100%
Tetanus	0	0%	0	0%	0	0%	1	100%	0	0%	1	100%
Varicella	49	5%	104	10%	125	12%	120	12%	88	8%	1,040	100%
SUB-TOTAL	115	3%	163	4%	221	5%	225	5%	186	4%	4,155	100%
ZOONOSES												
Dengue	2	100%	0	0%	0	0%	0	0%	0	0%	2	100%
Ehrlichiosis/Anaplasmosis	1	7%	1	7%	1	7%	1	7%	0	0%	14	100%
Anaplasma phagocytophilum*	1	13%	1	13%	1	13%	1	13%	0	0%	8	100%
Ehrlichia chaffeensis*	0	0%	0	0%	0	0%	0	0%	0	0%	5	100%
Unknown	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
LaCrosse Virus Disease*	14	28%	15	30%	5	10%	0	0%	0	0%	50	100%
Leptospirosis	1	100%	0	0%	0	0%	0	0%	0	0%	1	100%
Lyme Disease	9	17%	2	4%	0	0%	4	8%	3	6%	52	100%
Malaria	4	10%	3	7%	3	7%	4	10%	2	5%	41	100%
Q Fever	0	0%	1	100%	0	0%	0	0%	0	0%	1	100%
Rabies, Animal*	10	20%	10	20%	7	14%	2	4%	0	0%	51	100%
Rocky Mountain Spotted Fever (RMSF)	6	29%	2	10%	2	10%	0	0%	0	0%	21	100%
Tularemia	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
West Nile Virus Infection	11	52%	10	48%	0	0%	0	0%	0	0%	21	100%
SUB-TOTAL	58	23%	44	17%	18	7%	11	4%	5	2%	255	100%
GRAND TOTAL	1,437	11%	1,231	9%	999	7%	851	6%	797	6%	13,415	100%

	Ad	lams	A	len	Ash	land	Asht	abula	Atl	nens	Aug	glaize	Bel	mont
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	Ν	Rate	Ν	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
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	1	3.5	13	12.3	6	11.3	10	9.9	1	1.5	10	21.8	8	11.4
Coccidioidomycosis	0	0.0	1	0.9	0	0.0	0	0.0	1	1.5	1	2.2	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	1	3.5	7	6.6	4	7.5	1	1.0	0	0.0	12	26.2	0	0.0
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	0	0.0	3	2.8	2	3.8	0	0.0	2	3.1	7	15.3	0	0.0
O157:H7	0	0.0	1	0.9	2	3.8	0	0.0	0	0.0	6	13.1	0	0.0
Not O157:H7	0	0.0	2	1.9	0	0.0	0	0.0	2	3.1	1	2.2	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	1	3.5	7	6.6	2	3.8	7	6.9	3	4.6	0	0.0	6	8.6
Haemophilus influenzae, Invasive Disease	0	0.0	4	3.8	0	0.0	1	1.0	1	1.5	1	2.2	2	2.9
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	3	2.8	1	1.9	1	1.0	4	6.2	1	2.2	1	1.4
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	0.9	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Meningitis, Aseptic	1	3.5	28	26.4	1	1.9	10	9.9	6	9.3	4	8.7	14	20.0
Meningitis, Other Bacterial*	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4
Meningococcal Disease	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Salmonellosis	6	21.1	15	14.1	3	5.6	14	13.8	2	3.1	3	6.5	8	11.4
Shigellosis	0	0.0	0	0.0	1	1.9	0	0.0	1	1.5	0	0.0	0	0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	1	3.5	2	1.9	1	1.9	4	3.9	0	0.0	1	2.2	1	1.4
Streptococcal Disease, Group B, in Newborn*	1	*	2	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4
Streptococcus pneumoniae, Invasive Disease	0	0.0	15	14.1	0	0.0	8	7.9	6	9.3	5	10.9	11	15.7
Ages < 5 Years*	0	*	1	*	0	*	0	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	2	*	0	*	2	*	3	*	1	*	4	*
Drug Susceptible, Ages 5+ Years*	0	*	12	*	0	*	6	*	3	*	4	*	7	*
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	13	45.7	101	95.2	21	39.5	58	57.2	28	43.2	45	98.2	53	75.6
								÷						
HEPATITIS														
Hepatitis A	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

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

	Ad	ams	A	len	Ash	land	Asht	abula	Atl	nens	Aug	glaize	Bel	mont
OUTBREAKS*	N	Rate	N	Rate	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate
Community*	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a
Healthcare-Associated*	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Institutional*	0	n/a	0	n/a	5	n/a	1	n/a	0	n/a	1	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	2	n/a	6	n/a	2	n/a	1	n/a	2	n/a	1	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	1	3.5	64	60.3	5	9.4	11	10.9	10	15.4	14	30.5	4	5.7
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	0	0.0	12	11.3	11	20.7	13	12.8	5	7.7	4	8.7	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	3	10.5	6	5.7	13	24.5	32	31.6	7	10.8	9	19.6	7	10.0
SUB-TOTAL	4	14.1	82	77.3	29	54.6	56	55.3	22	34.0	27	58.9	11	15.7
ZOONOSES	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	0	0.0	2	2.0	0	0.0	1	2.2	2	2.9
Malaria	0	0.0	1	0.9	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	0	n/a	0	n/a	0	n/a	3	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	1	0.9	0	0.0	5	2.0	3	4.6	1	2.2	2	2.9
GRAND TOTAL	19	66.8	188	175.3	56	94.1	121	114.5	54	81.8	75	159.3	68	95.5
POPULATION	28	,456	106	6,094	53.	153	101	,345	64	,769	45	.838	70	,151

	Br	rown	Βι	ıtler	Ca	rroll	Char	npaign	C	lark	Cler	mont	Cli	nton
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	1	*	0	*	0	*	0	*	0	*
Campylobacteriosis	1	2.2	26	7.0	2	6.9	3	7.5	11	8.0	14	7.0	4	9.5
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	2	4.5	42	11.4	2	6.9	0	0.0	0	0.0	50	25.1	9	21.5
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	0	0.0	7	1.9	1	3.5	0	0.0	1	0.7	5	2.5	0	0.0
O157:H7	0	0.0	5	1.4	0	0.0	0	0.0	0	0.0	4	2.0	0	0.0
Not O157:H7	0	0.0	2	0.5	1	3.5	0	0.0	1	0.7	1	0.5	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	2	4.5	15	4.1	6	20.8	5	12.6	0	0.0	20	10.0	4	9.5
Haemophilus influenzae, Invasive Disease	0	0.0	9	2.4	1	3.5	1	2.5	2	1.5	6	3.0	1	2.4
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	6	1.6	1	3.5	1	2.5	3	2.2	1	0.5	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	1	2.2	36	9.7	2	6.9	1	2.5	13	9.4	29	14.6	0	0.0
Meningitis, Other Bacterial*	0	0.0	1	0.3	0	0.0	0	0.0	3	2.2	0	0.0	0	0.0
Meningococcal Disease	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	4	9.0	27	7.3	2	6.9	2	5.0	22	16.0	16	8.0	3	7.2
Shigellosis	0	0.0	23	6.2	0	0.0	0	0.0	0	0.0	16	8.0	0	0.0
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	7	1.9	3	10.4	1	2.5	8	5.8	2	1.0	1	2.4
Streptococcal Disease, Group B, in Newborn*	0	*	1	*	1	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	2	4.5	39	10.5	1	3.5	1	2.5	23	16.7	25	12.6	8	19.1
Ages < 5 Years*	1	*	1	*	0	*	0	*	2	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	9	*	0	*	1	*	1	*	10	*	4	*
Drug Susceptible, Ages 5+ Years*	1	*	29	*	1	*	0	*	20	*	15	*	4	*
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	12	26.9	242	65.4	23	79.9	15	37.7	86	62.5	186	93.4	30	71.6
	•													
HEPATITIS														
Henatitis A	0	0.0	0	0.0	0	0.0	0	0.0	1	07	0	0.0	0	0.0

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

	Br	own	Bu	tler	Ca	rroll	Chan	npaign	CI	ark	Clei	mont	Cli	nton
OUTBREAKS*	N	Rate	N	Rate	Ν	Rate	Ν	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	1	n/a	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Institutional*	0	n/a	2	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	3	n/a	0	n/a	1	n/a	0	n/a	1	n/a	1	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	1	2.2	67	18.1	11	38.2	2	5.0	34	24.7	24	12.1	3	7.2
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	1	2.2	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	0	0.0	9	2.4	0	0.0	0	0.0	3	2.2	12	6.0	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	7	15.7	21	5.7	2	6.9	7	17.6	5	3.6	18	9.0	0	0.0
SUB-TOTAL	9	20.1	98	26.5	13	45.2	9	22.6	42	30.5	54	27.1	3	7.2
ZOONOSES	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.0	0	0.0
Malaria	0	0.0	3	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies. Animal*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	2	0.5	0	0.0	1	2.5	0	0.0	1	0.5	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	5	1.4	1	0.0	1	2.5	0	0.0	5	2.0	0	0.0
GRAND TOTAL	21	47.0	352	94.3	37	125.1	26	62.8	133	96.6	251	125.0	34	78.7
POPULATION	44	,687	369	,999	28,	782	39	795	137	,691	199	9,139	41,	,927

		mbiana		octon		wford		hoga		arke		iance		ware
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	Ν	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Amebiasis	0	0.0	1	2.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	14	13.0	10	27.1	0	0.0	151	11.9	4	7.6	15	38.6	19	10.7
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	5	4.6	1	2.7	5	11.5	40	3.1	5	9.5	3	7.7	13	7.3
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	3	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	4	3.7	1	2.7	0	0.0	9	0.7	3	5.7	0	0.0	2	1.1
O157:H7	3	2.8	1	2.7	0	0.0	6	0.5	2	3.8	0	0.0	1	0.6
Not O157:H7	1	0.9	0	0.0	0	0.0	3	0.2	0	0.0	0	0.0	1	0.6
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	1	1.9	0	0.0	0	0.0
Giardiasis	4	3.7	3	8.1	3	6.9	110	8.7	1	1.9	1	2.6	10	5.6
Haemophilus influenzae, Invasive Disease	1	0.9	0	0.0	1	2.3	12	0.9	0	0.0	1	2.6	1	0.6
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	4	3.7	0	0.0	0	0.0	46	3.6	1	1.9	1	2.6	7	3.9
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	2.7	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	5	4.6	6	16.2	0	0.0	127	10.0	6	11.4	0	0.0	11	6.2
Meningitis, Other Bacterial*	1	0.9	0	0.0	0	0.0	10	0.8	0	0.0	0	0.0	1	0.6
Meningococcal Disease	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0
Salmonellosis	19	17.7	4	10.8	2	4.6	132	10.4	14	26.5	9	23.1	18	10.1
Shigellosis	0	0.0	0	0.0	0	0.0	30	2.4	3	5.7	0	0.0	2	1.1
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	4	3.7	0	0.0	0	0.0	34	2.7	2	3.8	1	2.6	1	0.6
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	17	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	19	17.7	3	8.1	5	11.5	102	8.0	2	3.8	7	18.0	15	8.4
Ages < 5 Years*	1	*	0	*	1	*	5	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	5	*	1	*	1	*	31	*	0	*	1	*	5	*
Drug Susceptible, Ages 5+ Years*	13	*	2	*	3	*	66	*	2	*	5	*	10	*
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	3	0.2	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	4	0.2	0	0.0	0	0.0	1	0.6
SUB-TOTAL	80	74.4	30	81.2	17	39.2	838	66.0	41	77.6	38	97.7	101	56.6
	00	17.7	50	01.2		33.2	000	00.0		11.0	50	31.1	101	50.5
HEPATITIS														
Henatitis A	0	0.0	0	0.0	0	0.0	4	0.3	0	0.0	0	0.0	0	0.0

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

		nbiana		nocton		wford	Cuya			arke		iance		aware
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	0	n/a	2	n/a	2	n/a	0	n/a	0	n/a	1	n/a
Foodborne*	0	n/a	0	n/a	2	n/a	4	n/a	0	n/a	0	n/a	2	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	9	n/a	0	n/a	0	n/a	2	n/a
Institutional*	0	n/a	1	n/a	0	n/a	6	n/a	1	n/a	0	n/a	5	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	1	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	1	n/a	4	n/a	23	n/a	1	n/a	0	n/a	11	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	15	13.9	4	10.8	2	4.6	505	39.8	4	7.6	2	5.1	10	5.6
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	6	0.5	1	1.9	0	0.0	0	0.0
Pertussis	1	0.9	2	5.4	0	0.0	29	2.3	0	0.0	0	0.0	51	28.6
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	4	3.7	12	32.5	3	6.9	77	6.1	5	9.5	19	48.9	16	9.0
SUB-TOTAL	20	18.6	18	48.7	5	11.5	617	48.6	10	18.9	21	54.0	77	43.2
ZOONOSES Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus DIsease*	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	2	1.1
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	1	0.0	2	5.4	0	0.0	3	0.0	0	0.0	0	0.0	2	1.1
Malaria	0	0.9	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	3	1.7
Q Fever	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0
Rabies. Animal*	0	n/a	0	n/a	1	n/a	3	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	7	0.6	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	0.0	2	5.4	1	0.0	17	1.1	0	0.0	0	0.0	7	3.9
		0.5	L	J.T		0.0		1.1	U	0.0	U	0.0		0.0
GRAND TOTAL	101	93.9	51	135.3	27	50.7	1,508	116.7	52	96.6	59	151.7	200	106.0
POPULATION	107	,570	36	.955	43.	389	1,270),294	52	.809	38	.884	178	3,341

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

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

			Fair	field	Fay	/ette	Fran	klin	Fu	lton	G	allia	Gea	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	12	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	0	n/a	7	n/a	2	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	6	n/a	0	n/a	1	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	35	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	0	n/a	1	n/a	62	n/a	2	n/a	1	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	5	6.5	14	9.5	3	10.4	254	21.5	14	32.9	7	22.6	23	24.7
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	2	2.6	10	6.8	2	6.9	292	24.8	1	2.4	0	0.0	1	1.1
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	3	3.9	34	23.1	1	3.5	80	6.8	8	18.8	0	0.0	3	3.2
SUB-TOTAL	10	13.0	58	39.4	6	20.7	626	53.1	23	54.1	7	22.6	27	29.0
ZOONOSES	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	3	2.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	1	0.7	0	0.0	6	0.5	0	0.0	0	0.0	1	1.1
Malaria	0	0.0	0	0.0	0	0.0	17	1.4	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies. Animal*	0	n/a	1	n/a	0	n/a	6	n/a	1	n/a	0	n/a	1	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	0	0.0	5	2.7	0	0.0	34	2.4	1	0.0	0	0.0	2	1.1
GRAND TOTAL	48	62.5	140	94.5	23	75.9	1,744	142.2	68	152.9	19	58.1	88	93.3
POPULATION	76	,751	147	,066	28,	,985	1,178	3,799	42	,510	30	,970	93,	,228

	Gr	eene	Gue	rnsey	Ham	ilton		ncock		rdin		rison	He	enry
GENERAL INFECTIOUS DISEASES	N	Rate	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	N	Rate
Amebiasis	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	6	3.7	9	22.5	58	7.2	4	5.3	3	9.4	2	12.6	5	17.8
Coccidioidomycosis	0	0.0	0	0.0	1	0.1	1	1.3	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	4	2.5	0	0.0	389	48.6	10	13.3	5	15.6	0	0.0	1	3.6
Cytomegalovirus (CMV), Congenital*	1	*	0	*	1	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	3	1.8	0	0.0	23	2.9	0	0.0	0	0.0	0	0.0	0	0.0
O157:H7	0	0.0	0	0.0	18	2.2	0	0.0	0	0.0	0	0.0	0	0.0
Not O157:H7	3	1.8	0	0.0	4	0.5	0	0.0	0	0.0	0	0.0	0	0.0
Unknown Serotype	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	5	3.1	3	7.5	77	9.6	1	1.3	0	0.0	3	18.9	1	3.6
Haemophilus influenzae, Invasive Disease	3	1.8	1	2.5	12	1.5	0	0.0	0	0.0	0	0.0	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	5	3.1	2	5.0	16	2.0	0	0.0	0	0.0	0	0.0	1	3.6
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	18	11.1	6	15.0	91	11.4	3	4.0	0	0.0	1	6.3	2	7.1
Meningitis, Other Bacterial*	2	1.2	0	0.0	4	0.5	0	0.0	0	0.0	1	6.3	1	3.6
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	12	7.4	5	12.5	80	10.0	8	10.7	1	3.1	2	12.6	8	28.5
Shigellosis	0	0.0	0	0.0	172	21.5	0	0.0	0	0.0	0	0.0	0	0.0
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	6	3.7	2	5.0	28	3.5	2	2.7	1	3.1	1	6.3	1	3.6
Streptococcal Disease, Group B, in Newborn*	2	*	0	*	5	*	1	*	0	*	0	*	1	*
Streptococcal Toxic Shock Syndrome (STSS)	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	18	11.1	3	7.5	109	13.6	3	4.0	2	6.2	2	12.6	2	7.1
Ages < 5 Years*	1	*	0	*	9	*	0	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	3	*	0	*	30	*	1	*	1	*	0	*	0	*
Drug Susceptible, Ages 5+ Years*	14	*	3	*	70	*	2	*	1	*	2	*	2	*
Typhoid Fever	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	86	52.8	31	77.6	1,068	133.4	33	44.0	12	37.5	12	75.7	23	82.0
	•													
HEPATITIS														
Henatitis A	0	0.0	0	0.0	5	0.6	0	0.0	0	0.0	0	0.0	0	0.0

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

		ene		rnsey		ilton		cock		rdin		rison		enry
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	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	2	n/a	0	n/a	0	n/a	0	n/a	2	n/a
Healthcare-Associated*	1	n/a	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Institutional*	1	n/a	0	n/a	16	n/a	2	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	11	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	2	n/a	0	n/a	31	n/a	2	n/a	0	n/a	0	n/a	2	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	27	16.6	7	17.5	145	18.1	7	9.3	4	12.5	0	0.0	5	17.8
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	1	0.6	0	0.0	69	8.6	0	0.0	0	0.0	0	0.0	3	10.7
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	12	7.4	10	25.0	23	2.9	12	16.0	2	6.2	1	6.3	9	32.1
SUB-TOTAL	40	24.6	17	42.6	237	29.6	19	25.3	6	18.7	1	6.3	17	60.6
ZOONOSES Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	3	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	3	0.4	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.4	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	1	2.5	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	5	3.1	1	2.5	5	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	1	0.6	0	0.0	5	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies. Animal*	2	n/a	2	n/a	3	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	8	3.7	4	5.0	18	1.9	0	0.0	0	0.0	0	0.0	0	0.0
		•					-		•		•		-	
GRAND TOTAL	138	82.3	52	125.2	1,371	167.0	54	69.3	18	56.2	13	82.0	42	142.5
POPULATION	162	2,846	39	,927	800	,362	75	056	32	,020	15	,850	28	,064

	Hig	hland	Ho	cking	Ho	mes	Hu	iron	Jac	kson	Jeff	erson	K	nox
GENERAL INFECTIOUS DISEASES	N	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
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	2	4.6	5	17.0	9	21.1	12	20.2	2	6.0	5	7.3	6	9.8
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	0	0.0	1	3.4	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	2	4.6	2	6.8	1	2.3	1	1.7	1	3.0	1	1.5	31	50.6
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	1	1.6
O157:H7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.6
Not O157:H7	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	1	2.3	1	3.4	5	11.7	1	1.7	0	0.0	1	1.5	6	9.8
Haemophilus influenzae, Invasive Disease	0	0.0	1	3.4	0	0.0	0	0.0	0	0.0	2	2.9	2	3.3
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	0	0.0	4	13.6	3	7.0	0	0.0	1	3.0	3	4.4	1	1.6
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0
Meningitis, Aseptic	5	11.5	1	3.4	8	18.7	11	18.5	2	6.0	9	13.1	3	4.9
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	0	0.0	1	3.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0
Salmonellosis	5	11.5	1	3.4	1	2.3	9	15.1	3	9.0	10	14.5	12	19.6
Shigellosis	1	2.3	0	0.0	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	0	0.0	0	0.0	1	2.3	1	1.7	0	0.0	0	0.0	1	1.6
Streptococcal Disease, Group B, in Newborn*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	3.3
Streptococcus pneumoniae, Invasive Disease	4	9.2	0	0.0	0	0.0	1	1.7	1	3.0	14	20.3	9	14.7
Ages < 5 Years*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	3	*	0	*	0	*	0	*	0	*	2	*	2	*
Drug Susceptible, Ages 5+ Years*	1	*	0	*	0	*	1	*	1	*	11	*	7	*
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	21	48.4	16	54.4	29	67.8	37	62.2	11	33.1	48	69.7	74	120.8
	•													
HEPATITIS														
Hepatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

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

	Hig	hland	Hoo	king		Imes		iron		kson		erson		nox
OUTBREAKS*	Ν	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	0	n/a	0	n/a	0	n/a
Foodborne*	0	n/a	0	n/a	1	n/a	1	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	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	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	0	n/a	1	n/a	1	n/a	1	n/a	0	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	3	6.9	2	6.8	1	2.3	3	5.0	9	27.1	13	18.9	11	18.0
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	0	0.0	1	3.4	9	21.1	1	1.7	0	0.0	4	5.8	1	1.6
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	6	13.8	2	6.8	6	14.0	9	15.1	11	33.1	2	2.9	6	9.8
SUB-TOTAL	9	20.7	5	17.0	16	37.4	13	21.9	20	60.3	19	27.6	18	29.4
ZOONOSES Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	2	6.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	2	6.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	1	2.3	1	3.4	1	2.3	0	0.0	2	6.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	1	3.4	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies. Animal*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	1	2.3	3	6.8	2	4.7	0	0.0	4	12.1	0	0.0	0	0.0
GRAND TOTAL	32	73.7	24	78.2	48	110.0	51	84.0	36	105.5	67	97.3	92	150.1
POPULATION	43	,433	29	,394	42	,746	59	,496	33	,186	68	,828	61	,275

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

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

	La	ake	Law	rence	Lic	king	Lo	gan	Lo	rain	Lu	cas	Mad	dison
OUTBREAKS*	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate
Community*	0	n/a	1	n/a	0	n/a	2	n/a	0	n/a	2	n/a	2	n/a
Foodborne*	5	n/a	0	n/a	0	n/a	1	n/a	1	n/a	2	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	3	n/a	0	n/a
Institutional*	0	n/a	0	n/a	1	n/a	1	n/a	1	n/a	5	n/a	2	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	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	1	n/a	3	n/a	4	n/a	2	n/a	12	n/a	4	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	32	13.9	5	8.0	31	18.5	9	19.7	61	20.2	118	26.8	10	23.0
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Pertussis	3	1.3	1	1.6	12	7.2	1	2.2	2	0.7	6	1.4	16	36.9
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	46	20.0	1	1.6	12	7.2	3	6.6	32	10.6	16	3.6	6	13.8
SUB-TOTAL	82	35.7	7	11.2	55	32.9	13	28.5	95	31.5	141	32.0	32	73.7
ZOONOSES	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	2	3.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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	2	3.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	1	0.4	0	0.0	3	1.8	1	2.2	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	2	0.9	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	1	2.3
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies. Animal*	11	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	1	1.6	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	1	0.4	0	0.0	0	0.0	0	0.0	1	0.3	5	1.1	0	0.0
SUB-TOTAL	15	1.7	3	4.8	3	1.8	1	2.2	1	0.3	9	2.0	2	2.3
GRAND TOTAL	229	92.7	91	144.0	209	123.2	39	76.6	257	84.5	450	99.5	58	122.1
POPULATION	229	,885	62	.,489	167	,248	45	,688	301	,614	440	,005	43	,401

	Mah	oning	Ma	rion	Me	dina	M	eigs	Me	ercer	М	iami	Мо	nroe
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate	N	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
Foodborne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	17	7.2	2	3.0	31	17.9	0	0.0	6	14.7	14	13.6	2	13.7
Coccidioidomycosis	1	0.4	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
Creutzfeldt-Jakob Disease (CJD)	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	7	3.0	11	16.6	7	4.0	0	0.0	34	83.3	0	0.0	0	0.0
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	1	*	0	*
Escherichia coli, Shiga Toxin-Producing	0	0.0	1	1.5	3	1.7	0	0.0	5	12.2	1	1.0	0	0.0
O157:H7	0	0.0	0	0.0	1	0.6	0	0.0	3	7.3	1	1.0	0	0.0
Not O157:H7	0	0.0	0	0.0	1	0.6	0	0.0	2	4.9	0	0.0	0	0.0
Unknown Serotype	0	0.0	1	1.5	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	9	3.8	4	6.0	10	5.8	2	8.4	5	12.2	6	5.8	0	0.0
Haemophilus influenzae, Invasive Disease	3	1.3	1	1.5	4	2.3	0	0.0	0	0.0	2	1.9	0	0.0
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	4	1.7	2	3.0	5	2.9	0	0.0	1	2.4	5	4.9	0	0.0
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	1	1.5	0	0.0	0	0.0	2	4.9	0	0.0	0	0.0
Meningitis, Aseptic	17	7.2	8	12.1	15	8.7	1	4.2	3	7.3	10	9.7	0	0.0
Meningitis, Other Bacterial*	2	0.8	0	0.0	1	0.6	0	0.0	3	7.3	1	1.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Salmonellosis	22	9.3	9	13.6	25	14.4	0	0.0	10	24.5	9	8.8	1	6.9
Shigellosis	0	0.0	3	4.5	0	0.0	0	0.0	1	2.4	1	1.0	0	0.0
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	4	2.3	0	0.0	1	2.4	1	1.0	1	6.9
Streptococcal Disease, Group B, in Newborn*	1	*	0	*	1	*	0	*	0	*	1	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	28	11.8	2	3.0	12	6.9	3	12.7	7	17.1	12	11.7	4	27.4
Ages < 5 Years*	1	*	0	*	1	*	0	*	0	*	1	*	0	*
Drug Resistant, Ages 5+ Years*	10	*	0	*	3	*	0	*	1	*	4	*	1	*
Drug Susceptible, Ages 5+ Years*	17	*	2	*	8	*	3	*	6	*	7	*	3	*
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	117	49.3	45	68.0	118	68.1	6	25.3	80	195.9	65	63.2	8	54.9
HEPATITIS														
	0	0.0	4	15	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0

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

		oning		rion		dina		eigs		ercer		ami		onroe
OUTBREAKS*	Ν	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*	1	n/a	1	n/a	2	n/a	0	n/a	0	n/a	1	n/a	0	n/a
Healthcare-Associated*	0	n/a	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	1	n/a	0	n/a	0	n/a	2	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	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	1	n/a	4	n/a	0	n/a	0	n/a	4	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	35	14.8	7	10.6	29	16.7	7	29.6	9	22.0	14	13.6	0	0.0
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	8	3.4	0	0.0	9	5.2	0	0.0	0	0.0	3	2.9	3	20.6
Tetanus	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	19	8.0	4	6.0	24	13.9	0	0.0	3	7.3	15	14.6	1	6.9
SUB-TOTAL	63	26.6	11	16.6	62	35.8	7	29.6	12	29.4	32	31.1	4	27.4
ZOONOSES	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
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum* Ehrlichia chaffeensis*	0	0.0	0		-	0.0	0	0.0	-	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	1	0.0	1	1.5	1	0.0	0	0.0	0	0.0	1	1.0	0	0.0
Leptospirosis	0	0.4	0	0.0	0	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	0.0 n/a	1	n/a	1	0.0 n/a	0	0.0 n/a	0	0.0 n/a	0	0.0 n/a	0	0.0 n/a
	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rocky Mountain Spotted Fever (RMSF) Tularemia	0	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0
SUB-TOTAL	5	1.7	2	1.5	2	0.0	0	0.0	0	0.0	2	1.0 1.9	0	0.0
JUD-IVIAL	5	1./	2	1.3	2	0.0	U	0.0	U	0.0	2	1.9	U	0.0
GRAND TOTAL	187	78.0	60	87.6	186	104.5	14	59.1	92	225.3	104	97.2	12	82.3
POPULATION	227	7.270	<u> </u>	.212	173	.262	22	.680	40	.838	103	2.857	14	,585
	201	,	50	,		,_•_	20		τv	,		,	17	,

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

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

OUTBREAKS*		gomery		rgan	Mo N	rrow		ingum Data		oble	Ot N	tawa Rate		Iding
COTBREAKS*	N	Rate n/a	<u>N</u>	Rate n/a	<u>N</u>	Rate n/a	N 0	Rate n/a	N 0	Rate n/a	<u>N</u>	n/a	N	Rate n/a
Foodborne*	0	n/a	0		0	n/a	0	n/a	0	n/a	1		0	
Healthcare-Associated*	0	n/a n/a	0	n/a n/a	0	n/a n/a	0	n/a n/a	0	n/a n/a	0	n/a n/a	0	n/a n/a
Institutional*	4	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
	4		0		-		0				0		-	
Waterborne* Zoonotic*		n/a	0	n/a	0	n/a n/a	0	n/a n/a	0	n/a n/a		n/a	0	n/a
	0 5	n/a	0	n/a	0	n/a	0	n/a	0	n/a n/a	0	n/a	0	n/a n/a
SUB-TOTAL	5	n/a	0	n/a	0	n/a	U	n/a	0	n/a	1	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	115	21.4	1	6.7	3	8.6	11	12.8	3	20.4	7	16.9	2	10.3
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	5	0.9	0	0.0	1	2.9	1	1.2	0	0.0	1	2.4	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	35	6.5	0	0.0	5	14.3	9	10.4	2	13.6	2	4.8	3	15.4
SUB-TOTAL	155	28.8	1	6.7	9	25.8	21	24.4	5	34.0	10	24.2	5	25.7
ZOONOSES Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	1	6.7	3	8.6	3	3.5	0	0.0	0	0.0	0	0.0
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	4	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	4	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	3	0.0 n/a	0	n/a	0	0.0 n/a	0	0.0 n/a	0	0.0 n/a	0	0.0 n/a	1	n/a
Rocky Mountain Spotted Fever (RMSF)	2	0.4	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	0	0.0
Tularemia	0	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	11	1.5	1	6.7	3	8.6	3	3.5	0	0.0	1	0.0 2.4	1	0.0
SOB-IVIAL	- 11	1.5		0.7	<u>з</u>	0.0	ು	ა .უ	U	0.0		2.4		0.0
GRAND TOTAL	598	109.7	14	93.1	42	120.5	87	100.9	12	81.6	52	123.2	21	103.0
POPULATION	527	,602	15	.034	34	855	28	.237	1/	,702	/1	,396	10	420
	331	,002	13,		34			201	14	,1 52	41	,000	13	,+20

	P	erry	Pick	away	Р	ike	Por	tage	Pr	eble	Pu	tnam	Rich	hland
GENERAL INFECTIOUS DISEASES	Ν	Rate	N	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate	Ν	Rate
Amebiasis	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Botulism	1	2.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Foodborne	1	2.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Infant*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Campylobacteriosis	8	22.0	4	7.1	2	7.0	13	8.0	3	7.1	9	26.2	8	6.5
Coccidioidomycosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.6
Creutzfeldt-Jakob Disease (CJD)	0	0.0	0	0.0	0	0.0	2	1.2	0	0.0	0	0.0	0	0.0
Cryptosporidiosis	3	8.3	1	1.8	3	10.5	33	20.4	2	4.8	1	2.9	12	9.7
Cytomegalovirus (CMV), Congenital*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Escherichia coli, Shiga Toxin-Producing	1	2.8	1	1.8	0	0.0	2	1.2	2	4.8	0	0.0	1	0.8
O157:H7	0	0.0	1	1.8	0	0.0	1	0.6	1	2.4	0	0.0	1	0.8
Not O157:H7	1	2.8	0	0.0	0	0.0	1	0.6	1	2.4	0	0.0	0	0.0
Unknown Serotype	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Giardiasis	3	8.3	1	1.8	3	10.5	3	1.9	1	2.4	1	2.9	2	1.6
Haemophilus influenzae, Invasive Disease	0	0.0	0	0.0	1	3.5	1	0.6	1	2.4	2	5.8	2	1.6
Hemolytic Uremic Syndrome (HUS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Legionellosis	1	2.8	2	3.6	0	0.0	3	1.9	1	2.4	1	2.9	3	2.4
Leprosy (Hansen Disease)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Listeriosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningitis, Aseptic	5	13.8	2	3.6	3	10.5	17	10.5	3	7.1	8	23.3	21	17.0
Meningitis, Other Bacterial*	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Meningococcal Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
Salmonellosis	3	8.3	4	7.1	2	7.0	10	6.2	6	14.3	6	17.5	10	8.1
Shigellosis	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	1	0.8
Staphylococcus aureus, Intermediate Resistance to Vancomycin (VISA)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcal Disease, Group A, Invasive	1	2.8	2	3.6	0	0.0	1	0.6	1	2.4	1	2.9	4	3.2
Streptococcal Disease, Group B, in Newborn*	1	*	1	*	0	*	1	*	0	*	0	*	0	*
Streptococcal Toxic Shock Syndrome (STSS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus pneumoniae, Invasive Disease	1	2.8	10	17.9	9	31.4	18	11.1	5	11.9	4	11.7	4	3.2
Ages < 5 Years*	0	*	0	*	1	*	1	*	0	*	0	*	0	*
Drug Resistant, Ages 5+ Years*	0	*	2	*	4	*	6	*	2	*	0	*	0	*
Drug Susceptible, Ages 5+ Years*	1	*	8	*	4	*	11	*	3	*	4	*	4	*
Typhoid Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibriosis	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Vibrio parahaemolyticus Infection	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Other (Not Cholera)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yersiniosis	0	0.0	1	1.8	0	0.0	0	0.0	1	2.4	0	0.0	1	0.8
SUB-TOTAL	28	77.1	29	51.8	23	80.3	108	66.8	26	61.8	33	96.2	72	58.3
	. =-													
HEPATITIS														
Henatitis A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

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

	P	erry	Pick	away	Р	ike	Por	tage	Pr	eble	Pu	inam	Rich	nland
OUTBREAKS*	Ν	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	1	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	2	n/a
Institutional*	0	n/a	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	4	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	1	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	0	n/a	0	n/a	0	n/a	2	n/a	0	n/a	0	n/a	8	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	2	5.5	12	21.4	4	14.0	17	10.5	4	9.5	16	46.7	22	17.8
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	1	0.6	1	2.4	0	0.0	0	0.0
Pertussis	0	0.0	5	8.9	0	0.0	3	1.9	0	0.0	1	2.9	9	7.3
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	0	0.0	9	16.1	12	41.9	11	6.8	3	7.1	1	2.9	7	5.7
SUB-TOTAL	2	5.5	26	46.4	16	55.9	32	19.8	8	19.0	18	52.5	38	30.8
ZOONOSES	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	2	1.6
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies. Animal*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.6
Tularemia	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.9	0	0.0
SUB-TOTAL	Ŏ	0.0	Ů	0.0	2	7.0	1	0.6	Ő	0.0	1	2.9	5	4.0
			-									-		
GRAND TOTAL	30	82.6	56	100.0	41	143.2	144	87.9	34	80.8	52	151.6	125	94.7
POPULATION	36	,303	55	,990	28	628	161	,624	42	,083	34	,294	123	,510

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

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

	R	oss	Sand	dusky	Sc	ioto	Se	neca	Sh	elby	St	ark	Sur	nmit
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	1	n/a
Foodborne*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	7	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	2	n/a	3	n/a
Institutional*	0	n/a	1	n/a	0	n/a	0	n/a	0	n/a	1	n/a	2	n/a
Waterborne*	0	n/a	0	n/a	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	2	n/a	0	n/a	0	n/a	0	n/a	3	n/a	13	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	13	16.6	22	36.2	10	12.6	3	5.3	7	14.2	134	35.7	115	21.3
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	3	3.8	1	1.6	2	2.5	0	0.0	0	0.0	2	0.5	6	1.1
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	5	6.4	11	18.1	10	12.6	5	8.9	7	14.2	34	9.1	25	4.6
SUB-TOTAL	21	26.8	34	56.0	22	27.8	8	14.2	14	28.4	170	45.3	146	27.0
ZOONOSES Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Ehrlichiosis/Anaplasmosis		1.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	0	0.0
Anaplasma phagocytophilum* Ehrlichia chaffeensis*	1	1.3	0	0.0	0	0.0	0	0.0	-	0.0	1		0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	0	0.0
LaCrosse Virus Disease*	3	3.8	0	0.0	1	1.3	0	0.0	0	0.0	1	0.0	1	0.0
Leptospirosis	0	3.8 0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	0	0.2
Lyme Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	1.1	1	0.0
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.3	0	0.2
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	0	0.0
Rabies, Animal*	0	0.0 n/a	0	0.0 n/a	0	0.0 n/a	0	0.0 n/a	0	0.0 n/a	1	0.0 n/a	3	0.0 n/a
Rocky Mountain Spotted Fever (RMSF)	1	1.3	0	0.0	2	2.5	0	0.0	0	0.0	1	0.3	<u>ہ</u>	0.2
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	0	0.2
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
SUB-TOTAL	5	6.4	0	0.0	3	3.8	0	0.0	0	0.0	10	2.4	2	0.4
SUB-TOTAL	5	0.4	U	0.0	<u> </u>	3.0	0	0.0	0	0.0	10	2.4	0	0.9
GRAND TOTAL	81	102.2	100	161.4	78	98.4	30	53.1	51	103.4	502	132.8	604	108.9
POPULATION	78	,249	60	,734	79,	277	56	,469	49	,307	375	,087	539	,832

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

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

		nbull		arawas	-	ion		Wert		nton		rren		ington
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	Ν	Rate	N	Rate
Community*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Foodborne*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Institutional*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
SUB-TOTAL	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
VACCINE-PREVENTABLE														
Influenza-Associated Hospitalization*	23	11.0	34	36.8	9	17.1	9	31.5	2	15.0	30	14.0	14	22.7
Influenza-Associated Pediatric Mortality*	0	*	0	*	0	*	0	*	0	*	0	*	0	*
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pertussis	20	9.6	1	1.1	4	7.6	2	7.0	0	0.0	9	4.2	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	25	11.9	15	16.2	5	9.5	19	66.4	4	29.9	20	9.3	2	3.2
SUB-TOTAL	68	32.5	50	54.0	18	34.1	30	104.9	6	44.9	59	27.5	16	25.9
ZOONOSES Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LaCrosse Virus Disease*	2	1.0	1	1.1	2	3.8	0	0.0	1	7.5	0	0.0	1	1.6
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease	0	0.0	0	0.0	0	0.0	1	3.5	0	0.0	0	0.0	0	0.0
Malaria	0	0.0	0	0.0	0	0.0	1	3.5	0	0.0	1	0.5	0	0.0
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rabies, Animal*	1	n/a	0	n/a	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	1	1.9	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus Infection	2	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SUB-TOTAL	5	1.9	1	1.1	3	5.7	2	7.0	1	7.5	1	0.5	1	1.6
GRAND TOTAL	225	106.6	128	138.4	51	96.7	49	171.3	18	134.7	205	95.4	44	71.2
POPULATION	209	,264	92	,508	52,	764	28	,601	13	,367	214	l,910	61,	,755

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

Hepatitis A	1	0.9	0	0.0	1	0.8	0	0.0	0	n/a	34	0.3
Hepatitis B, Acute*	0	0.0	0	0.0	0	0.0	1	4.4	0	n/a	106	0.9
Hepatitis B, Perinatal Infection*	0	*	0	*	1	*	0	*	0	n/a	4	*
Hepatitis C, Acute*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	6	0.1
SUB-TOTAL	1	0.9	0	0.0	2	1.6	1	4.4	0	n/a	150	1.3

		ayne		iams		ood		andot	-	nown	тот	
OUTBREAKS*	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Community*	0	n/a	0	n/a	1	n/a	0	n/a	0	n/a	32	n/a
Foodborne*	1	n/a	1	n/a	0	n/a	1	n/a	0	n/a	55	n/a
Healthcare-Associated*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	37	n/a
Institutional*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	104	n/a
Waterborne*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	17	n/a
Zoonotic*	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	2	n/a
SUB-TOTAL	1	n/a	1	n/a	1	n/a	1	n/a	0	n/a	247	n/a
VACCINE-PREVENTABLE												
Influenza-Associated Hospitalization*	14	12.2	7	18.6	25	19.8	3	13.2	0	n/a	2,410	20.9
Influenza-Associated Pediatric Mortality*	0	*	0	*	1	*	0	*	0	n/a	1	*
Mumps	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	13	0.1
Pertussis	1	0.9	0	0.0	0	0.0	0	0.0	0	n/a	690	6.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Varicella	32	27.9	0	0.0	12	9.5	15	66.1	0	n/a	1.040	9.0
SUB-TOTAL	47	41.0	7	18.6	38	30.1	18	79.3	0	n/a	4.155	36.0
ZOONOSES	<u>^</u>	0.0		0.0	0			0.0	0	,		
Dengue	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	2	0.0
Ehrlichiosis/Anaplasmosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	14	0.1
Anaplasma phagocytophilum*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	8	0.1
Ehrlichia chaffeensis*	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	5	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
LaCrosse Virus Disease*	1	0.9	0	0.0	1	0.8	0	0.0	0	n/a	50	0.4
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Lyme Disease	1	0.9	0	0.0	2	1.6	0	0.0	0	n/a	52	0.5
Malaria	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	41	0.4
Q Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
Rabies, Animal*	1	n/a	0	n/a	0	n/a	0	n/a	0	n/a	51	n/a
Rocky Mountain Spotted Fever (RMSF)	0	0.0	0	0.0	1	0.8	0	0.0	0	n/a	21	0.2
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	1	0.0
West Nile Virus Infection	0	0.0	0	0.0	0	0.0	0	0.0	0	n/a	21	0.2
SUB-TOTAL	3	1.7	0	0.0	4	3.2	0	0.0	0	n/a	255	1.8
	400	440 5	- 10	47.0	440		- 10	100.0	•		10.40-	
GRAND TOTAL	163	140.5	19	47.9	116	91.0	46	198.3	0	n/a	13,407	113.5
POPULATION	114	l,611	37,	597	126	6,355	22	,692		0	11,54	4,951

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

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

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

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

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

Stonefery 0 0 1 0 0 Suelldorf 0 0 1 0 0 1 Sundsval 0 1 0 0 1 0 0 Takoradi 0 1 0 0 1 2 0 Tennessee 20 4 3 1 0 1 1 2 1 Typhimurium, var Copenhagen 37 55 51 61 4 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SEROTYPE	2007	2008	2009	2010	2011
Sundsvall 0 1 0 0 Takoradi 0 1 0 0 0 Tennessee 20 4 3 1 0 Thompson 28 18 17 13 1 Typhimurium, var Copenhagen 37 55 51 61 4 Urbana 1 2 1 1 2 1 1 Virchow 2 5 7 4 0 1 2 2 0 Worthington 1 4 1 3 0 0 1 2 2 0 (0) 1,9,12:-5 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <th></th> <th>0</th> <th>0</th> <th>1</th> <th>0</th> <th>0</th>		0	0	1	0	0
Takoral 0 1 0 0 1 1 2 0 Telelkebir 0 1 1 2 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Suelldorf	0	0	2	0	0
Telelkebir 0 1 1 2 0 Tennessee 20 4 3 1 0 Thompson 28 18 17 13 1 Typhimurium, var Copenhagen 37 55 51 61 4 Urbana 1 2 1 1 2 1 1 2 Viranow 2 5 7 4 0 0 1 2 2 2 0 0 1 2 2 2 0 0 1 2 2 2 0 0 1 2 2 2 0 0 1 2 2 2 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sundsvall	0	1	0	0	0
Tennessee 20 4 3 1 0 Thompson 28 18 17 13 1 Typhimurum 182 229 212 123 13 Typhimurum, var Copenhagen 37 55 51 61 4 Urbana 1 2 1 1 2 1 1 2 Varchow 2 5 7 4 0 0 1 2 2 2 0 0 1 2 2 2 0 0 1 2 2 2 0 0 0 1 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Takoradi	-				0
Thompson 28 18 17 13 1 Typhimurium, var Copenhagen 37 55 51 61 43 Urbana 1 2 1 1 2 1 1 Uzaramo 1 0 0 1 1 2 1 1 2 Virchow 2 5 7 4 0 0 1 2 2 0 0 Wotthington 1 4 1 3 0 0 1 2 2 0 0 1 0 0 0 1 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						0
Typhimurium 182 229 212 123 145 Typhimurium, var Copenhagen 37 55 51 61 4 Urbana 1 2 1 1 2 Uzaramo 1 0 0 1 0 Virchow 2 5 7 4 0 Wortbington 1 4 1 3 0 (1) 1,9,12:-:5 0 0 1 0 0 0 (3,10:-:- 0 0 1 1 0 0 0 (1) 4,5,12:-:- 0 0 0 1 0 0 0 (1) 4,5,12:-:- 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <t< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td>0</td></t<>		-	-			0
Typhimurium, var Copenhagen375551614Urbana12112Urbana10011Varamo10011Virchow25740Weitevreden12220Worthington14130(1) 1,9,12:-500100(1) 1,9,12:-500100(1) 1,9,12:-500110(1) 1,9,12:-500100(1) 4,5,12:-700010(1) 4,5,12:-700010(1) 4,5,12:-700110(1) 4,5,12:-700110(1) 4,5,12:-700110(1) 6,7:-540300(1) 6,7:-510001(1) 6,7:-5100010(1) 6,7:-5100010(1) 8,23:-7000100(1) 8,040 St:10:-710001(1) 8,040 St:2600010(1) 8,040 St:2600010(1) 9,050-56001000<			-			19
Urbana 1 2 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </td <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td>150</td>		-	-			150
Uzaramo 1 0 0 1 0 Virchow 2 5 7 4 0 Weltevreden 1 2 2 2 0 Worthington 1 4 1 3 0 (1) 1,9,12::-5 0 0 1 2 2 0 (1) 1,9,12::-5 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	,, · · · ·					40
Virchow 2 5 7 4 0 Weltverden 1 2 2 2 0 Worthington 1 4 1 3 0 (I) 1,9,12::5 0 0 1 2 0 (I) 1,9,12::5 0 0 1 0 0 (I) 1,9,12::5 0 0 1 0 0 (I) 4,5,12::- 0 0 1 0 0 (I) 4,5,12::- 0 0 0 0 0 0 (I) 4,5,12::- 0 0 1 0 0 0 (I) 4,5,12::- 0 0 1 1 0 0 0 (I) 5,7::-5 0 0 0 1 0 0 0 0 (I) 6,7::-5 4 0 3 0 0 0 0 0 0 0 0 0 0 0 0						2
Weltevreden 1 2 2 2 Worthington 1 4 1 3 0 (1) 1,9,12:-:- 0 0 1 0 0 (1) 1,9,12:-:- 0 1 0 0 0 (1) 4,5,12: 0 0 1 1 0 0 (1) 4,5,12: 0 0 0 1 1 0 0 (1) 4,5,12: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						0
Worthington 1 4 1 3 0 (I) 1, 9, 12:-5 0 0 1 2 2 (I) 1, 9, 12:-5 0 0 2 0 0 (I) 1, 9, 12:-5 0 0 1 0 0 0 (I) 4, 5, 12:- 0 0 0 1 0 0 (I) 4, 5, 12:- 0 0 0 1 0 0 (I) 4, 5, 12:- 0 0 0 1 0 0 (I) 4, 5, 12:- 0 0 0 1 0 0 (I) 6, 7:-1, 5 0 0 0 1 0 0 (I) 6, 7:-5 4 0 3 0 0 0 (I) 8, 7:-5 4 0 0 0 0 0 0 (I) 8, 7:-5 0 0 0 0 0 0 0 0 0 0 0 0		-	-			0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	<u>U</u>	0	0	1	2	2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	(I) 1,9,12:-:5	0	0	2	0	1
(1) $4,5,12:$ 0 0 1 1 0 (1) $4,5,12:$ 0 0 0 0 0 0 (1) $4,5,12:$ 0 0 0 0 0 0 0 (1) $4,5,12:$ 0 0 0 1 0 0 0 0 (1) $4,5,12:$ 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(I) 1,9,12:I,z28:-	0	1	0	0	0
(1) 4.5, 12:b:- 0 0 0 0 0 (1) 4.5, 12:b:- 0 0 0 0 0 0 0 (1) 4.5, 12:c:- 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0<		-				0
(1) $4,5,12:$ 88 91 46 38 4 (1) $4,5,12:$ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-	-			0
Nome Nom Nome Nome		-	-	-	-	1
(1) 4,5,12:2:- 0 0 1 0 0 (1) 6,7:-:- 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td>44</td>			-	-		44
0 0 0 1 1 1 (0) $6,7$::- 0 0 0 1 0 (0) $6,7$::- 1 0 0 0 0 (0) $6,7$::- 1 0 0 0 0 (0) $6,7$::- 0 0 0 0 0 (0) $6,7$::- 0 0 0 0 0 (0) $6,7$::- 0 0 0 0 0 (0) $8,3$::- 0 0 0 0 0 0 (0) $0,9$::- 0 0 0 0 0 0 (0) $0,9$::- 0 0 0 0 0 (0) $0,9$::- 0 0 0 0 0 (0) $0,9$::- 0 0 0		-				1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		-	-		-	0
(I) $6,7::5$ 40300(I) $6,8:c:$ 100000(I) $8,3:$ 100010(I) Mucoid:b:e,n,x000100(I) Rough Os:b:-000100(I) Rough Os:210:e,n,z15000000(I) Rough Os:238:-000000(II) 21:z10:-100000(II) 50:b:26000100(III) 50:b:26001000(III) 41:z4,z23:-120000(IIIa) 41:z4,z23:-100000(IIIa) 44:z4,z23:-001100(IIIb) 50:b:z50001100(IIIb) 50:b:z520110001(IIIb) 61:l,v,z13:z350011000(IIIb) 61:l,v,z13:z350010000(IIIb) 61:l,v,z13:z350010000(IIIb) 61:l,v,z13:z350010000(IIIb) 61:l,v,z13:z350010000(IIIb) 61:l,v,z13:z3500010 <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td>0</td>		-	-			0
I)(1)(1)(0)(0)(0)(1) $6,8:d:$ -10000(1)Mucoid:b:e,n,x00010(1)Rough Os:b:-000010(1)Rough Os:z10:e,n,z15000000(1)Rough Os:z38:-0000000(11)21:z10:-10000000(11)50:b:260000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000<		-	-			0
1)0000(1) $3,23:$ 0001(1)Mucoid:b:e,n,x0001(1)Rough Os:b:-0001(1)Rough Os:210:e,n,z150000(1)Rough Os:238:-0000(11)21:210:-1000(11)21:210:-1000(11)21:210:-1000(11)21:210:-1000(11)21:210:-1000(11)21:210:-1000(11)21:210:-1000(11)21:210:-1000(11)21:210:-1000(11)21:210:-1000(11)21:210:-1000(11)21:210:-1000(111)21:210:-1000(111)41:24,223:-1000(111)41:24,223:-0011(111)50:21:25201100(111)51:1,2510010(111)51:1,2510010(111)61:1,v,213:1,500100 <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>0</td>		-	-		-	0
(i) $13,23:-$ 0001(0)(i) Mucoid:b:e,n,x0001(0)(i) Rough Os:b:-00001(i) Rough Os:210:e,n,z1500000(ii) Rough Os:z38:-00000(ii) 21:z10:-10000(iii) 21:z10:-10000(iii) 50:b:2600010(iii) 50:b:2600100(iiii) 41:z4,z23:-12000(iiii) 44:z4,z23:-12000(iii) 50:b:z5001100(iii) 44:z4,z23:-001100(iii) 50:b:z001100(iiib) 50:c:z52011000(iiib) 51:c:e,n,x,z15000110(iiib) 61::1,51001100(iiib) 61::1,21,50010000(iib) 61::1,22330010000(iib) 61::1,22:530010000(iib) 65:(k):z0010000(iib) 65:(k):z0000000(iib) 65:(-	-	-	0
(i) Rough Os:b:-00010(i) Rough Os:z10:e,n,z1500000(i) Rough Os:z38:-00000(ii) 21:z10:-10000(iii) 21:z10:z600100(iii) 50:b:z600100(iii) 51:z600100(iii) 13,23:z4:-10100(iii) 44:z4,z23:-12000(iii) 44:z4,z23:-00100(iii) 50:b:z5001100(iiib) 50:z:z52011000(iiib) 51:z:z52011000(iiib) 61::1,x,z13:z35001100(iiib) 61:z530010000(iiib) 61:z52:z530010000(iiib) 61:z2:z530010000(iiib) 61:z2:z530010000(iiib) 61:z2:z2:1000000(iiib) 65:(k):z0010000(iiib) 61:z2:z2:1000000(iiib) 61:z2:z2:0000000<		0	0	0	1	0
(I) Rough Os:z10:e,n,z15 0 0 0 0 (I) Rough Os:z38:- 0 0 0 0 0 (II) 21:z10:- 1 0 0 0 0 0 (II) 21:z10:- 0 0 0 0 0 0 0 (III) 50:b:z6 0 0 0 1 0 0 0 (III) Arizona 0 5 1 0 0 0 0 0 (IIIa) 13,23:z4:- 1 0 1 0 0 0 0 0 (IIIa) 44:z4,z23:- 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	0	1	0
(I) Rough Os:z38:-00000(II) 21:z10:-10000(II) 21:z10:z600000(II) 50:b:z600100(III) Arizona05100(III) Arizona05100(IIIa) 13,23:z4:-10100(IIIa) 41:z4,z23:-12000(IIIa) 44:z4,z23:-00100(IIIb) 48:i:z001100(IIIb) 50:k:z001100(IIIb) 50:k:z52011000(IIIb) 51:x;z53000110(IIIb) 61::1,5100100(IIIb) 61::z53001000(IIIb) 61::y,z13:z35001000(IIIb) 61::y,z13:1,5001000(IIIb) 61::z252:c53001000(IIIb) 65:(k):z001000(IIIb) 65:(k):z000000(IV) 44:z4,z23:-12220(IV) 44:z4,z23:-100000(IV) 44:z4,z23:-10000<	I) Rough Os:b:-	0	0	0	1	0
(ii) $21:z10:-$ 10000(ii) $50:b:z6$ 000100(iii) $50:b:z6$ 00100(iii) $41:z4,z23:-$ 10100(iii) $44:z4,z23:-$ 12000(iii) $44:z4,z24:-$ 00100(iiii) $44:z4,z24:-$ 00100(iii) $50:z:z52$ 01100(iii) $50:z:z52$ 01100(iii) $51:z:z52$ 01100(iii) $51:z:z52$ 01100(iii) $51:z:z53$ 00110(iii) $61:z:z53$ 00100(iii) $61:z:z53$ 00100(iii) $61:z:z5:z53$ 00100(iii) $61:z:z2:z53$ 00100(iii) $61:z5:z53$ 00100(iii) $61:z5:z53$ 00100(iii) $61:z5:z53$ 00100(iv) $44:z4,z23:-$ 12222(iv) $44:z4,z23:-$ 10000(iv) $44:z4,z23:-$ 10000(iv) $44:z4,z23:-$ 10000(iv) $45:g,z51:-$ 1222 <td></td> <td>-</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td>		-	0	0	0	1
(II) $21:z10:z6$ 0000(II) $50:b:z6$ 00100(III) Arizona05100(IIIa) $13,23:z4:$ -10100(IIIa) $41:z4,z23:$ -12000(IIIa) $44:z4,z23:$ -00000(IIIa) $44:z4,z24:$ -00100(IIIb) $50:z:z52$ 01100(IIIb) $50:z:z52$ 01100(IIIb) $51:z:z53$ 00011(IIIb) $61::1,z53$ 10011(IIIb) $61:z53$ 00110(IIIb) $61:z52:z53$ 00100(IIIb) $61:z2:z53$ 00100(IIIb) $61:z2:z53$ 00100(IIIb) $61:z2:z53$ 00100(IIIb) $61:z2:z53$ 00100(IIIb) $61:z2:z53$ 00100(IV) $44:z4,z32:$ -12222(IV) $44:z4,z23:$ -10000(IV) $44:z4,z23:$ -10000(IV) $44:z4,z23:$ -10000(IV) $44:z4,z23:$ -10000(IV) $44:z4,z23:$ -10000 </td <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>1</td>		-	-	-	-	1
(II) 50:b:z600100(III) Arizona05100(III) Arizona05100(IIIa) 13,23:z4:-10100(IIIa) 41:z4,z23:-12000(IIIa) 44:z4,z23:-00000(IIIa) 44:z4,z24:-00100(IIIb) 48::z00200(IIIb) 50:x:z5201100(IIIb) 50::z5201100(IIIb) 57::e,n,x,z1500011(IIIb) 61::1,510012(IIIb) 61::1,x,z13:2500100(IIIb) 61::1,x,z13:1,500100(IIIb) 61::1,x,z13:1,500100(IIIb) 61::25:25300100(IIIb) 65:(k):z00100(IV) 44:z4,z32:-12222(IV) 44:z4,z32:-10000(IV) 44:z4,z32:-12100(IV) 44:z4,z32:-12100(IV) 44:z4,z32:-12100(IV) 48:g,z51:- (Marina)43010(IV) 50:g,z51:- (Wassenaar)20000 <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>0</td>			-	-	-	0
(III) Arizona05100(IIIa) 13,23:z4:-10100(IIIa) 41:z4,z23:-12000(IIIa) 44:z4,z23:-00000(IIIa) 44:z4,z24:-00100(IIIb) 48:i:z00200(IIIb) 50:z:z5201100(IIIb) 50:z:z5201100(IIIb) 57:c:e,n,x,z1500011(IIIb) 61::1,510011(IIIb) 61::x,z13:z3500110(IIIb) 61::z5300100(IIIb) 61::z252:5300100(IIIb) 61:z2:z5300100(IIIb) 61:z2:z5300100(IIIb) 61:z2:z5300100(IIIb) 61:z2:z5300100(IIIb) 61:z2:z5300100(IV) 44:z4,z32:-12222(IV) 44:z4,z32:-12222(IV) 44:z4,z32:-10000(IV) 48:g,z51:-121000(IV) 48:g,z51:-120000(IV) 50:g,z51:-12000 <td< td=""><td>· /</td><td></td><td>-</td><td></td><td>-</td><td>1</td></td<>	· /		-		-	1
IIIa) 13,23:z4:-10100(IIIa) 41:z4,z23:-12000(IIIa) 44:z4,z23:-00000(IIIa) 44:z4,z24:-00100(IIIb) 48:iz00110(IIIb) 50:k:z00110(IIIb) 50:c:e,n,x,z1500110(IIIb) 61::1,510011(IIIb) 61::z5300110(IIIb) 61::x,x13:x3500110(IIIb) 61::x,x13:x3500100(IIIb) 61::z5:3300100(IIIb) 61::x,x13:x3500100(IIIb) 61::z2:z5300100(IIIb) 61::z2:z5300100(IIIb) 65:(k):z00100(IV) 44:z4,z32:-12220(IV) 44:z4,z32:-10000(IV) 44:z4,z32:-12100(IV) 48:g,z51:- (Marina)43010(IV) 50:g,z51:- (Wassenaar)20000	()	-	-		-	0
IIIIa) 41:z4,z23:-1200(IIIa) 44:z4,z23:-00000(IIIa) 44:z4,z24:-00100(IIIb) 48:i:z00200(IIIb) 50:k:z00110(IIIb) 50:c:ce,n,x,z1500110(IIIb) 61::1,510011(IIIb) 61::z5300110(IIIb) 61::x,z13:z3500110(IIIb) 61::x,z13:1,500100(IIIb) 61::z5:z5300100(IIIb) 61::z5:z5300100(IIIb) 61:z4,z32:- (Chameleon)1000(IV) 44:z4,z32:-12220(IV) 44:z4,z32:-10000(IV) 44:z4,z32:-10000(IV) 44:z4,z32:-10000(IV) 44:z4,z32:-10000(IV) 44:z4,z32:-10000(IV) 48:g,z51:- (Marina)43010(IV) 50:g,z51:- (Wassenaar)20000	· · /	-	-		-	0
(IIIa) $44:z4,z23:$ -00000(IIIa) $44:z4,z24:$ -00100(IIIb) $48:i:z$ 00200(IIIb) $50:k:z$ 00110(IIIb) $50:c:z,z52$ 01100(IIIb) $57:c:e,n,x,z15$ 00011(IIIb) $61::,1,5$ 10011(IIIb) $61:i,y,z13:z35$ 00110(IIIb) $61:i,y,z13:z35$ 00100(IIIb) $61:z52:z53$ 00100(IIIb) $61:z52:z53$ 00100(IIIb) $65:(k):z$ 00100(IV) $40:z4,z23:$ -10000(IV) $44:z4,z32:$ -10000(IV) $44:z4,z32:$ -10000(IV) $44:z4,z32:$ -10000(IV) $44:z4,z32:$ -10000(IV) $44:z4,z32:$ -10000(IV) $48:g,z51:$ -12100(IV) $50:g,z51:$ -120000		-	-		-	0
IIIIa) 44:z4,z24:- 0 0 1 0 0 (IIIb) 48:iz 0 0 2 0 0 (IIIb) 50:k:z 0 0 1 1 0 0 (IIIb) 50:z:z52 0 1 1 0 0 0 1 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				-	-	1
(IIIb) 48::z00200(IIIb) 50::z5201100(IIIb) 50:z:25201100(IIIb) 57:c:e,n,x,z1500011(IIIb) 61::1,510011(IIIb) 61::25300110(IIIb) 61:!,v,z13:z3500100(IIIb) 61::,v,z13:1,500000(IIIb) 61::z52:z5300100(IIIb) 61:z52:z5300100(IIIb) 65:(k):z00100(IV) 16:z4,z32:- (Chameleon)1000(IV) 44:z4,z32:-1222(IV) 44:z4,z32:-10000(IV) 44:z4,z32:-10000(IV) 44:z4,z32:-12100(IV) 45:g,z51:-12100(IV) 50:g,z51:- (Wassenaar)20000		-			-	0
(IIIb) $50:k:z$ 00110(IIIb) $50:z:z52$ 01100(IIIb) $57:c:e,n,x,z15$ 00011(IIIb) $61::1,5$ 10011(IIIb) $61::z53$ 00110(IIIb) $61:i,v,z13:z35$ 00100(IIIb) $61:i,v,z13:z35$ 00000(IIIb) $61:i,z52:z53$ 00000(IIIb) $61:z52:z53$ 00100(IIIb) $65:(k):z$ 00100(IIIb) $65:(k):z$ 00100(IV) $16:z4,z32:$ -00000(IV) $44:z4,z23:$ -12222(IV) $44:z4,z23:$ -10000(IV) $44:z4,z32:$ -10000(IV) $44:z4,z32:$ -10000(IV) $44:z4,z32:$ -10000(IV) $44:z4,z32:$ -10000(IV) $48:g,z51:$ -12100(IV) $50:g,z51:$ -(Wassenaar)2000			-		-	0
(IIIb) 57:c:e,n,x,z1500010(IIIb) 61::1,510012(IIIb) 61::25300110(IIIb) 61:1,v,z13:z3500100(IIIb) 61:1,v,z13:1,500010(IIIb) 61:1,v,z13:1,500010(IIIb) 61:z52:z5300100(IIIb) 65:(k):z00100(IV) 16:z4,z32:- (Chameleon)1000(IV) 44:z4,z23:-1222(IV) 44:z4,z23:-1000(IV) 44:z4,z32:-1000(IV) 44:z4,z32:-1000(IV) 44:z4,z32:-1000(IV) 45:g,z51:-12100(IV) 50:g,z51:- (Wassenaar)2000		-				0
(IIIb) 61::1,510012(IIIb) 61::1,5001100(IIIb) 61::1,5001100(IIIb) 61:1,v,213:235000100(IIIb) 61:1,v,213:1,5000100(IIIb) 61:25:253001000(IIIb) 65:(k):z001000(IV) 16:z4,z32: (Chameleon)10000(IV) 44:z4,z23:-000000(IV) 44:z4,z23:-12222(IV) 44:z4,z32:-10000(IV) 44:z4,z32:-10000(IV) 44:z4,z32:-121000(IV) 45:g,z51:-121000(IV) 50:g,z51:- (Wassenaar)20000	(IIIb) 50:z:z52	0	1	1	0	0
(IIIb) 61:i:z5300110 $(IIIb)$ 61:i,v,z13:z3500100 $(IIIb)$ 61:i,v,z13:1,500000 $(IIIb)$ 61:r.z00100 $(IIIb)$ 61:r.z00100 $(IIIb)$ 61:r.z00100 $(IIIb)$ 61:z52:z5300100 $(IIIb)$ 65:(k):z00100 (IV) 16:z4,z32:- (Chameleon)1000 (IV) 44:z4,z23:-0000 (IV) 44:z4,z32:-1222 (IV) 44:z4,z32:-1000 (IV) 44:z4,z32:-1000 (IV) 48:g,z51:- (Marina)4301 (IV) 50:g,z51:- (Wassenaar)2000	(IIIb) 57:c:e,n,x,z15	0	0	0	1	0
(IIIb) 61:I,v,z13:z35 0 0 1 0 0 (IIIb) 61:I,v,z13:1,5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1	0	-	1	2
(IIIb) $61:1, v, z13:1, 5$ 00000(IIIb) $61:rz$ 00100(IIIb) $61:z52:z53$ 00100(IIIb) $65:(k):z$ 00100(IIIb) $65:(k):z$ 00100(IV) $16:z4,z32:$ (Chameleon)10000(IV) $40:z4,z23:$ 00000(IV) $44:z4,z23:$ 12220(IV) $45:g,z51:$ 12100(IV) $45:g,z51:$ - (Marina)43010(IV) $50:g,z51:$ - (Wassenaar)20000						0
(IIIb) 61:r.z 0 0 1 0 0 (IIIb) 61:r.z 0 0 1 0 0 (IIIb) 61:z52:z53 0 0 1 0 0 (IIIb) 65:(k):z 0 0 1 0 0 0 (IV) 16:z4,z32:- (Chameleon) 1 0 0 0 0 0 0 0 (IV) 40:z4,z24:- 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-				0
(IIIb) 61:z52:z53 0 0 1 0 0 (IIIb) 61:z52:z53 0 0 1 0 0 1 0 0 (IIIb) 65:(k):z 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						1
(IIIb) 65:(k):z 0 0 1 0 0 (IV) 16:z4,z32:- (Chameleon) 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-				0
(IV) 16:z4,z32:- (Chameleon) 1 0 0 0 0 (IV) 40:z4,z24:- 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td></td> <td>-</td> <td></td> <td></td> <td>-</td> <td>0</td>		-			-	0
(IV) 40:z4,z24:- 0 0 0 0 0 (IV) 40:z4,z23:- 1 2 2 2 2 (IV) 44:z4,z32:- 1 0 0 0 0 0 (IV) 44:z4,z32:- 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-				0
(IV) 44:z4,z23:- 1 2 2 2 (IV) 44:z4,z32:- 1 0 0 0 0 (IV) 44:z4,z32:- 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0<	· · · · · · · · · · · · · · · · · · ·					1
(IV) 44:z4,z32:- 1 0 0 0 0 (IV) 44:z4,z32:- 1 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>1</td></t<>						1
(IV) 45:g,z51:- 1 2 1 0 0 (IV) 45:g,z51:- (Marina) 4 3 0 1 0 (IV) 50:g,z51:- (Wassenaar) 2 0 0 0 0						0
(IV) 50:g,z51:- (Wassenaar) 2 0 0 0 0		1	2	1	0	0
						0
(IV) 50:z4.z23:- (Flint) 0 2 1 0 3						0
	(IV) 50:z4,z23:- (Flint)	0	2	1	0	3
						1
0		-				2
0						0
		-				0
						0
						0
ģ						1

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

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

Group A	2	0	0	0	0
Group B	11	20	13	11	7
Group C	8	4	3	7	8
Group C1	4	1	1	1	1
Group C2	2	2	0	2	0
Group D	11	16	11	9	5
Group G	1	0	0	0	0
SUB-TOTAL	39	43	28	30	21
	••	40			
			20		
UNGROUPED, UNTYPED	121	87	60	59	89
	-		-		

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

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

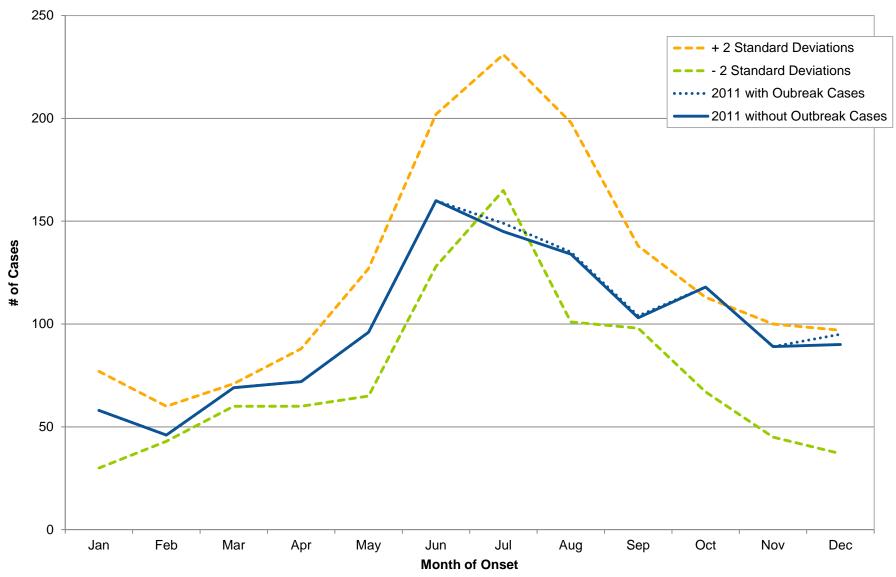
SEROGROUP	2007	2008	2009	2010	2011
Group A	0	0	0	0	0
Group B	6	11	13	12	7
Group C	7	6	4	7	8
Group W-135	2	0	1	0	0
Group Y	10	17	10	6	5
Not Groupable	0	1	0	0	2
Unknown	7	7	14	10	2
TOTAL	32	42	42	35	24

GRAPHS OF SELECTED NOTIFIABLE DISEASE INCIDENCE

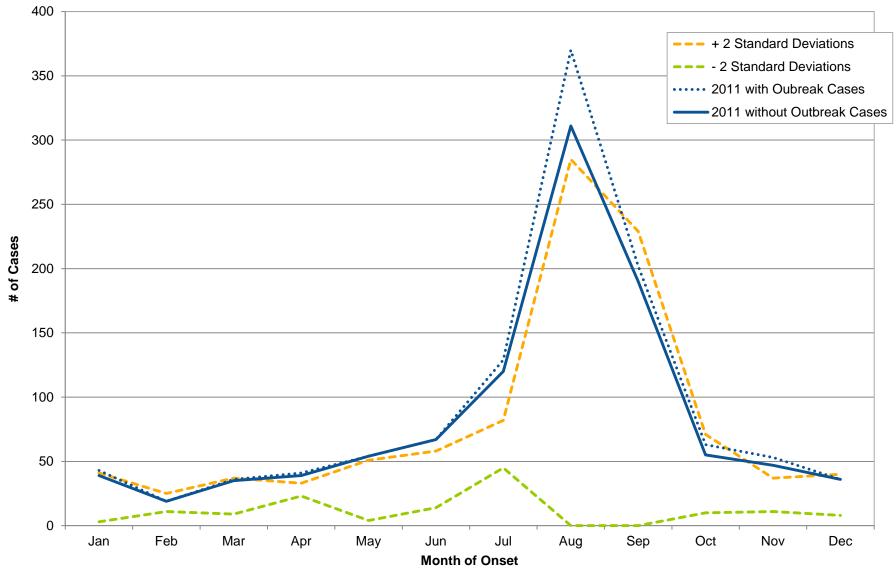
Disease incidence from 2011 is graphically presented to demonstrate general trends in surveillance data for selected Ohio reportable infectious diseases, including any statistically significant changes in the incidence observed. The trend graphs compare disease incidence from 2011 (i.e., observed cases) to baseline disease incidence (i.e., expected cases) by month. Baseline disease incidence was determined by calculating the average disease incidence over the previous three years, 2008-2010. Statistically significant changes in incidence are demonstrated by graphing 2 standard deviations above and below the average baseline disease incidence. A statistically significant difference in 2011 disease incidence compared to baseline disease incidence suggests the difference is unlikely to have occurred by chance.

General surveillance trends are graphed statewide. The 2011 data represent confirmed and probable cases of selected reportable diseases. In many instances, two trend lines can be seen graphed for 2011 incidence data: one for all cases, including those linked to a known outbreak or cluster, and one for cases not linked to a known outbreak or cluster. It should be noted that not every graph will include a trend line for cases linked to a known outbreak or cluster as not all cases are outbreak- or cluster-associated. For statistical reliability/stability purposes, only diseases for which 10 or more cases were reported in a given month are included in the statewide trends.

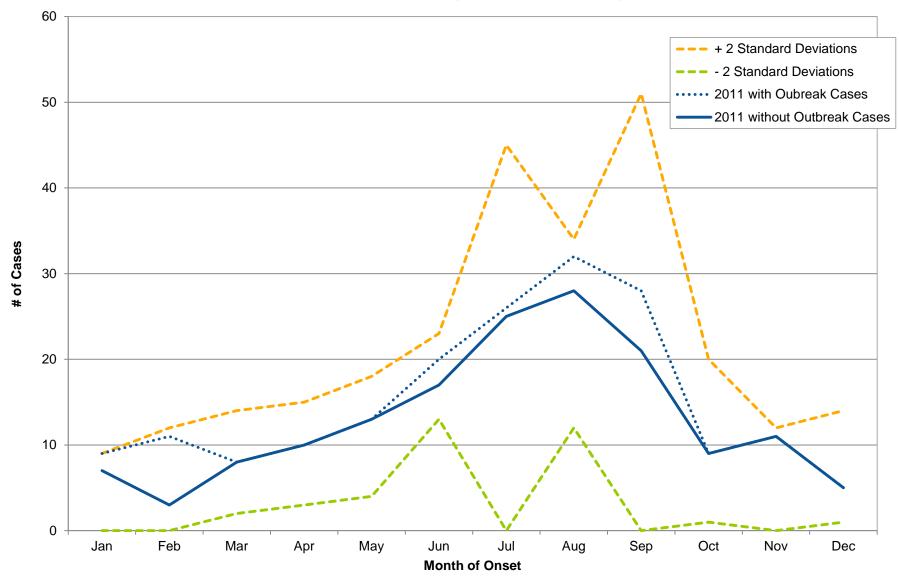
Disease data for 2011 and data used in the calculation of the baseline (2008-2010) average are finalized. All data are by month and year of illness onset. The source of the data is the Ohio Disease Reporting System.



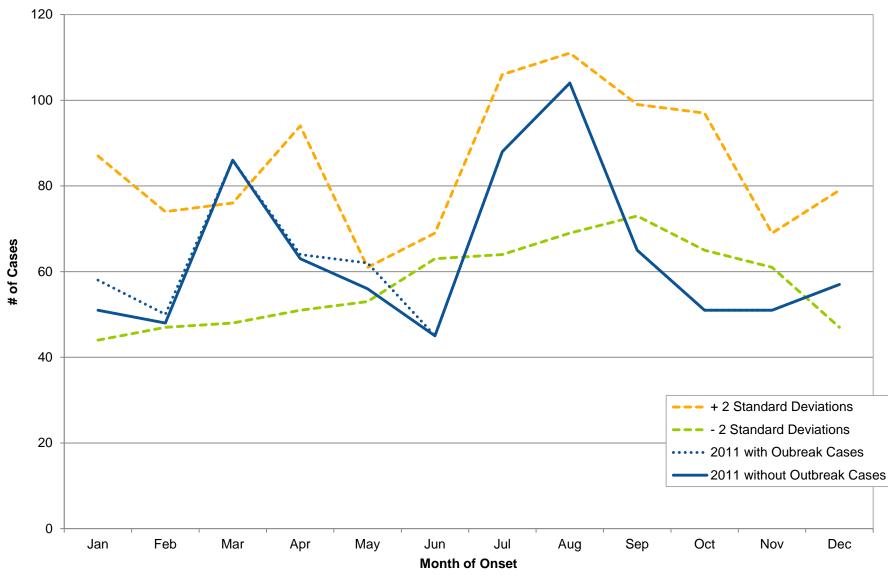
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Campylobacteriosis



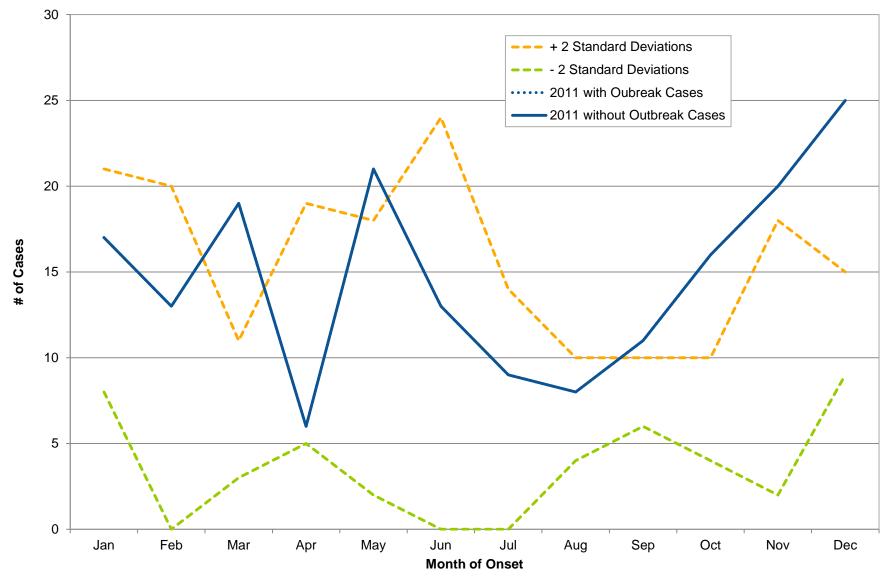
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Cryptosporidiosis



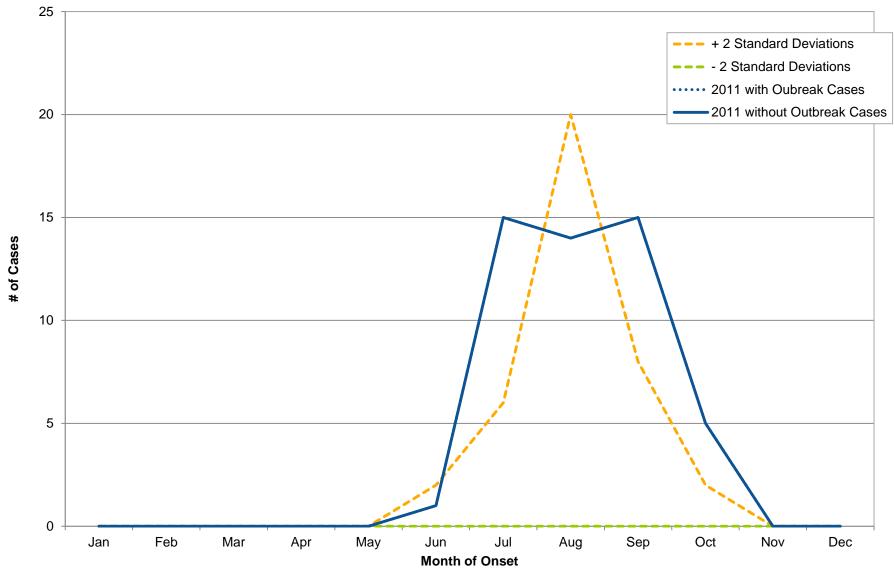
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Escherichia coli, Shiga Toxin-Producing



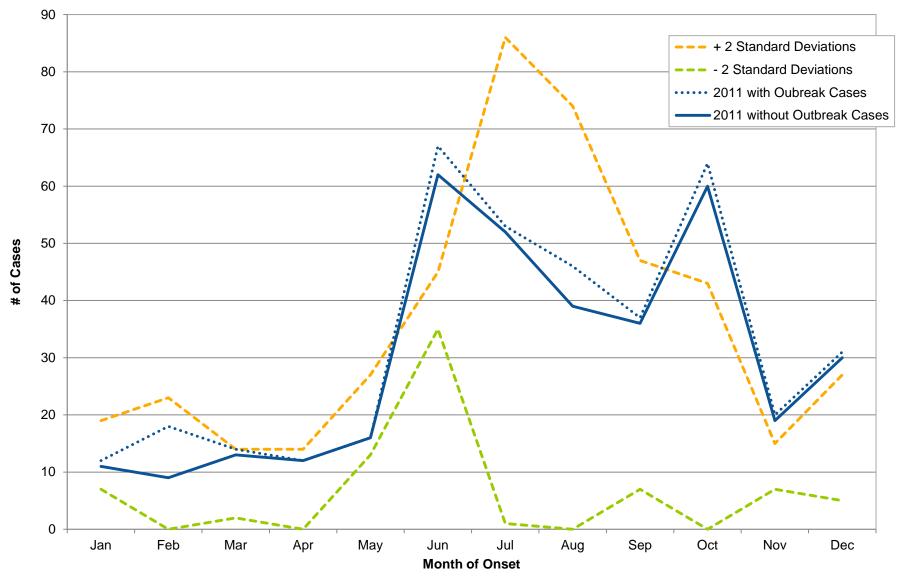
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Giardiasis



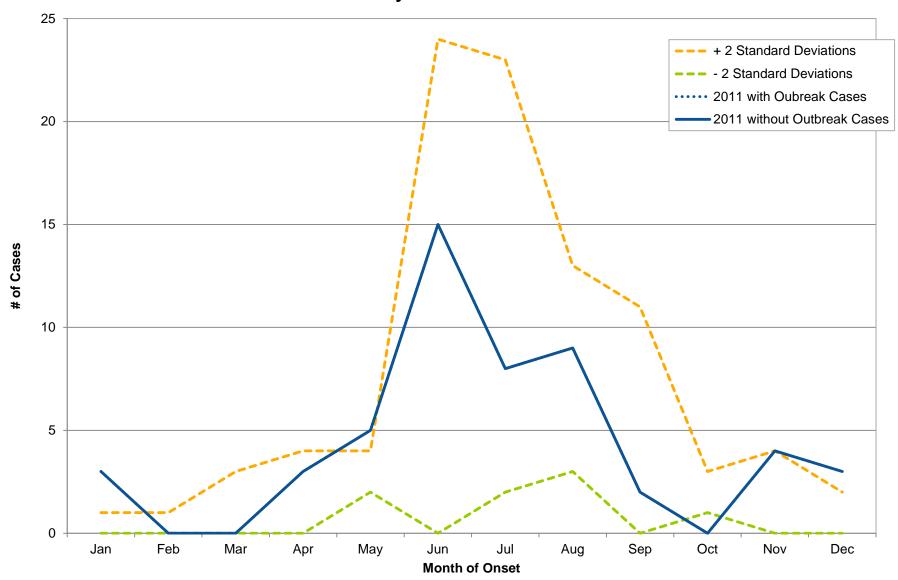
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Haemophilus influenzae, Invasive Disease



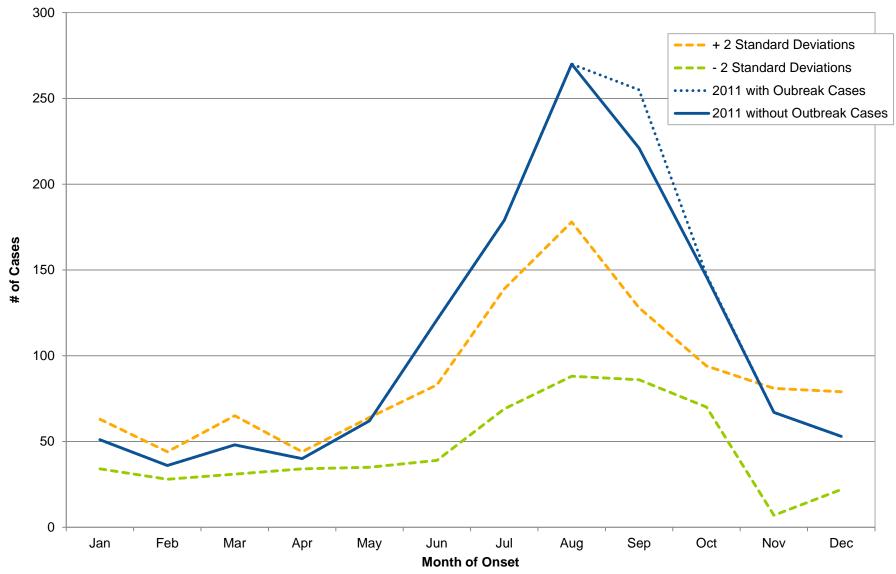
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 LaCrosse Virus Disease



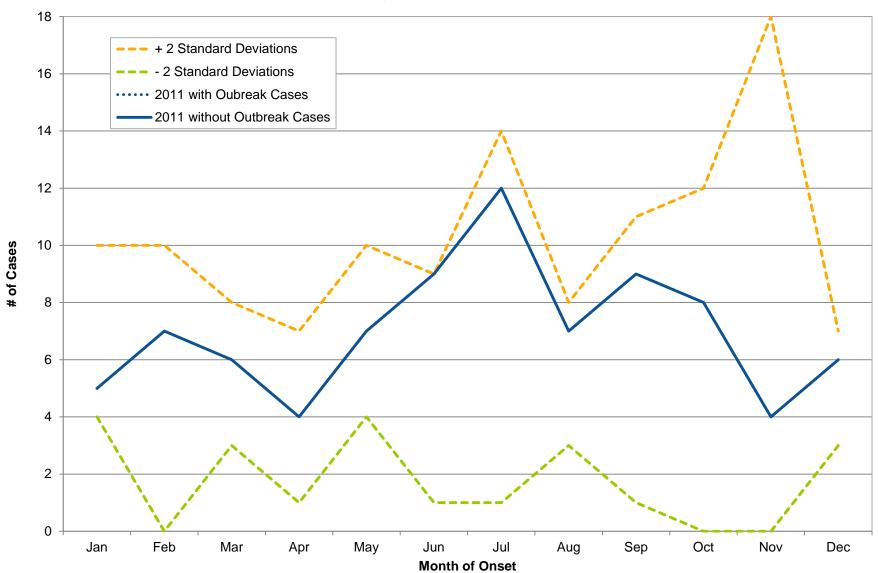
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Legionellosis



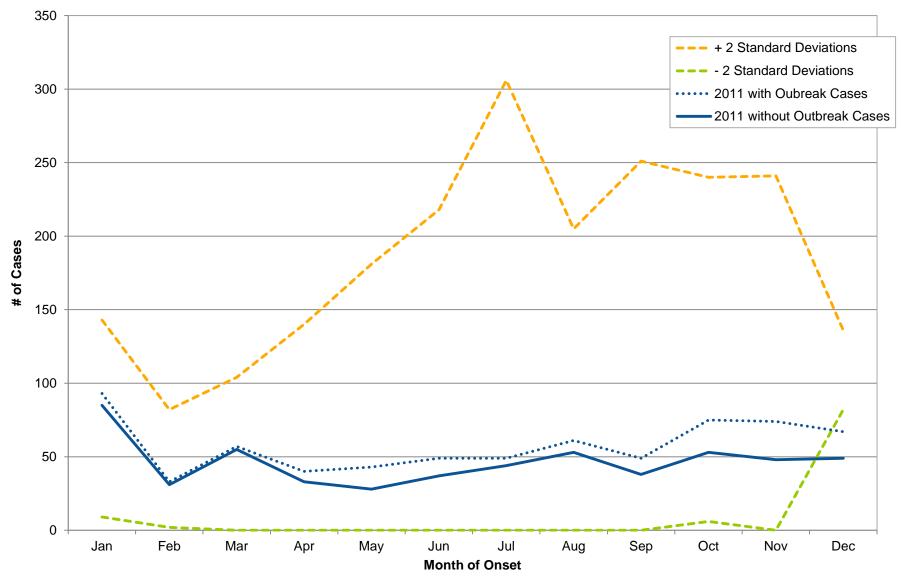
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Lyme Disease



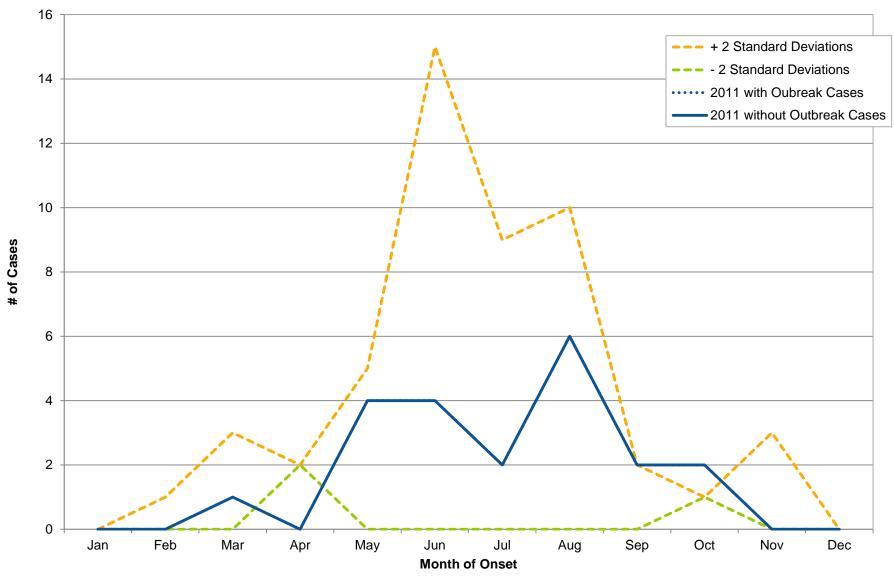
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Meningitis, Aseptic



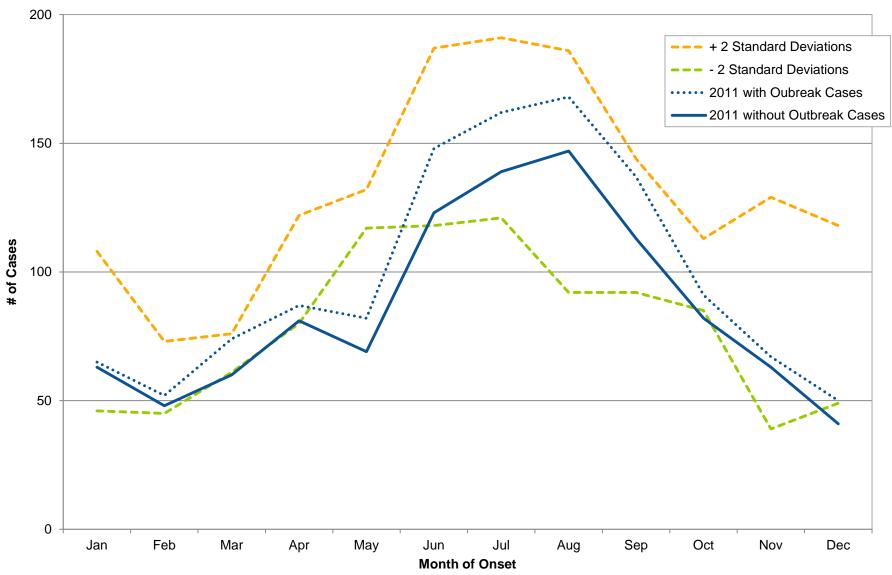
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Meningitis, Other Bacterial



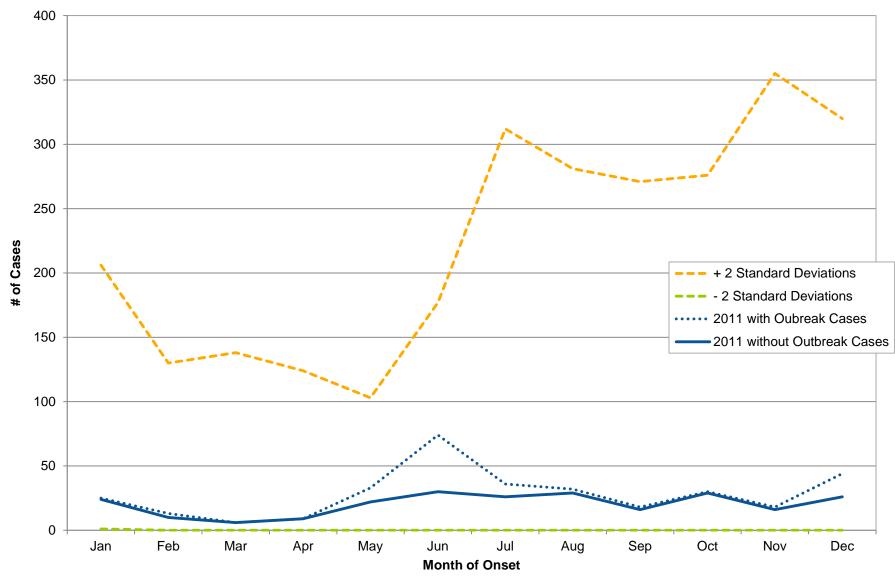
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Pertussis



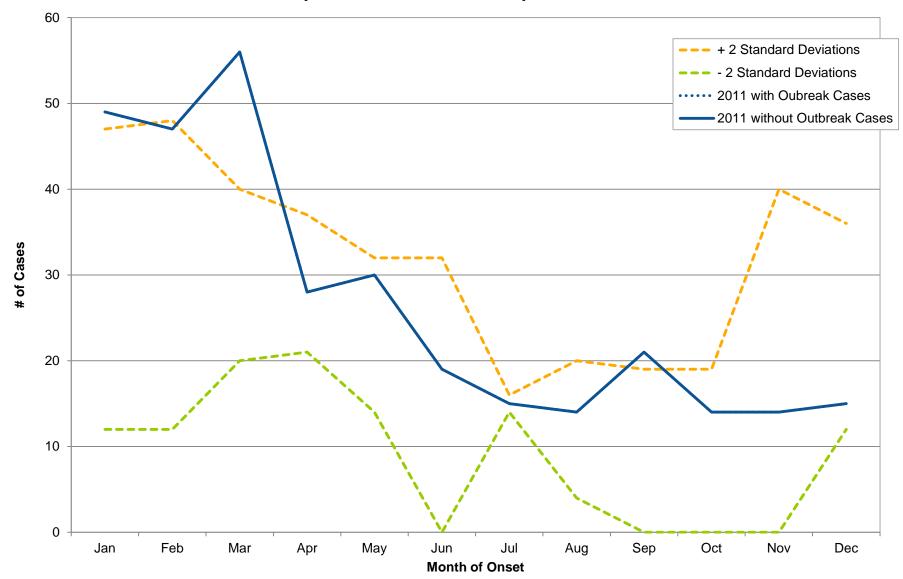
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Rocky Mountain Spotted Fever (RMSF)



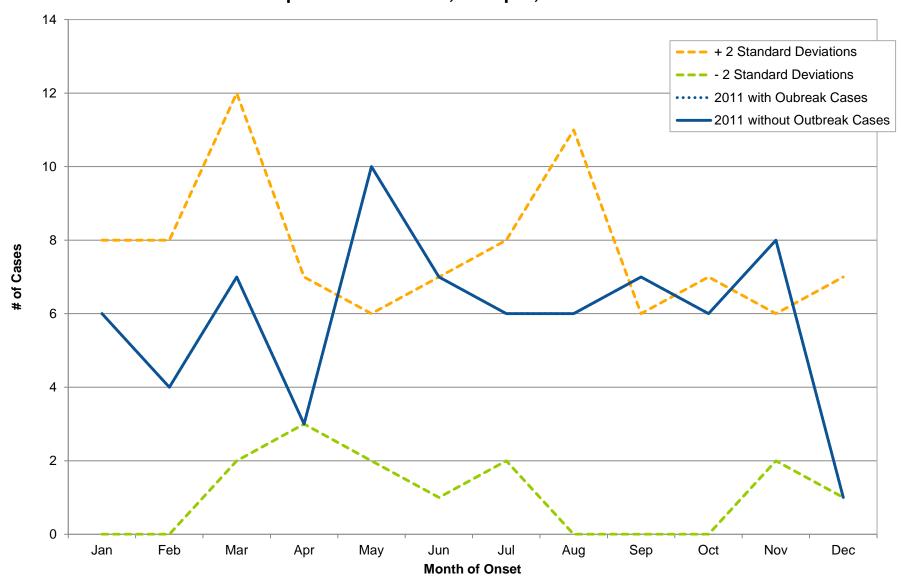
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Salmonellosis



INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Shigellosis



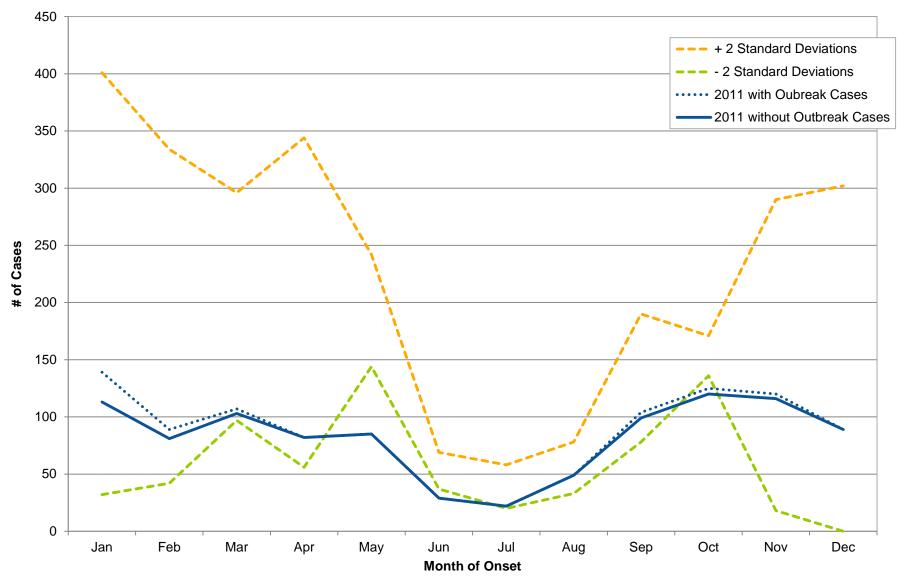
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Streptococcal Disease, Group A, Invasive



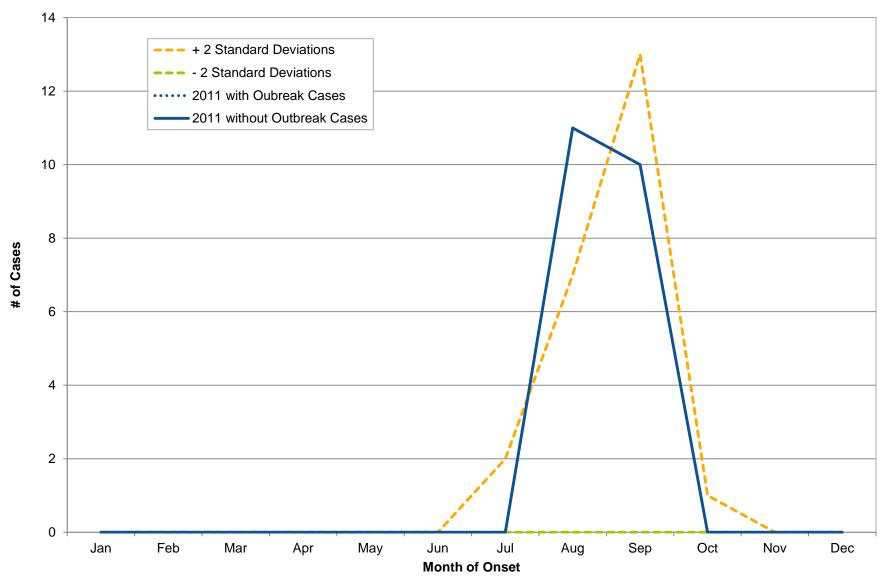
INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Streptococcal Disease, Group B, in Newborn

250 + 2 Standard Deviations - 2 Standard Deviations •••••• 2011 with Oubreak Cases 2011 without Outbreak Cases 200 150 # of Cases 100 50 0 Oct Jan Feb Mar Apr May Jun Jul Aug Sep Nov Dec Month of Onset

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



INCIDENCE TRENDS BY MONTH OF ONSET, OHIO, 2011 Varicella



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

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

PROFILES OF SELECTED NOTIFIABLE DISEASES

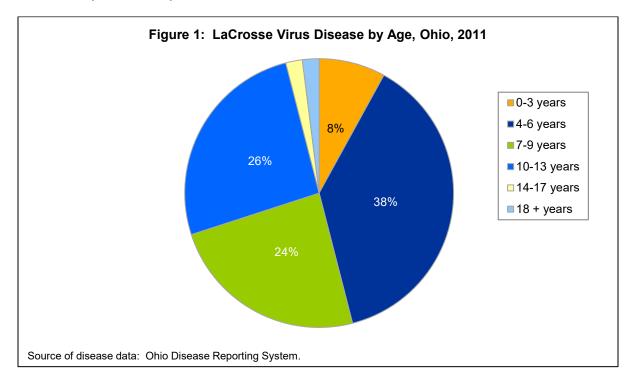
LACROSSE VIRUS DISEASE

Number of cases in 2011:	50	Rate in 2011:	0.4
Number of cases in 2010:	24	Rate in 2010:	0.2

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

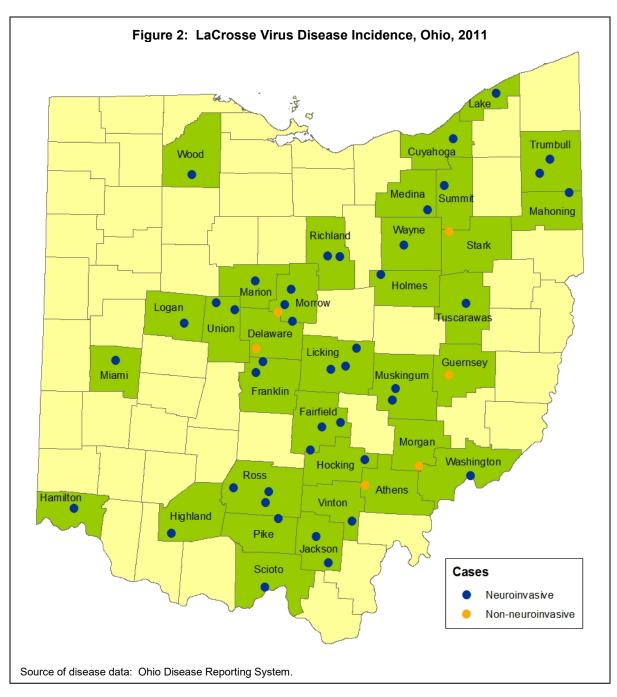
LaCrosse virus disease is a viral illness transmitted through the bite of an infected mosquito, specifically the eastern treehole mosquito, *Aedes triseriatus*. People infected with LaCrosse virus disease usually experience fever, headache, nausea, vomiting and lethargy; however, severe disease can occur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

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



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

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



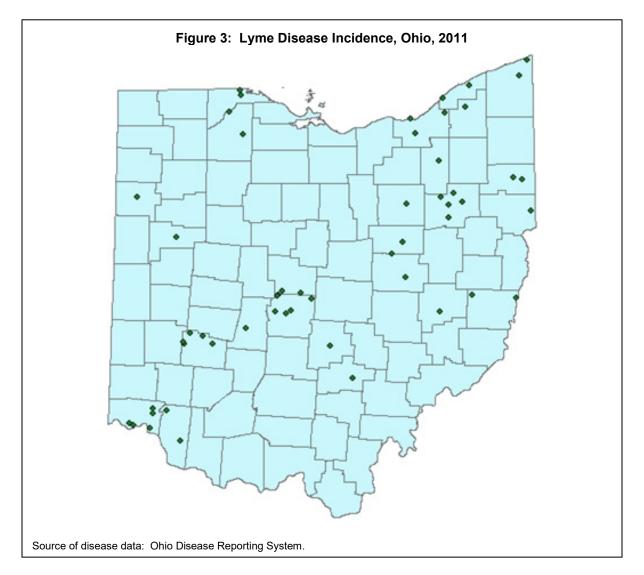
LYME DISEASE

Number of cases in 2011:	52	Rate in 2011:	0.5
Number of cases in 2010:	37	Rate in 2010:	0.3

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

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

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



SALMONELLOSIS

Number of cases in 2011:	1,183	Rate in 2011:	10.2
Number of cases in 2010:	1,309	Rate in 2010:	11.3

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

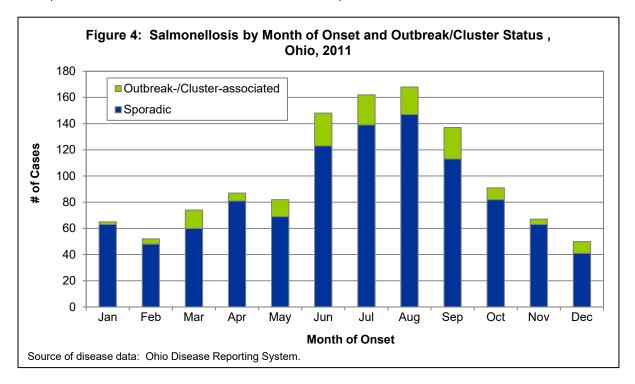
Table 1 demonstrates the proportion of salmonellosis cases linked to a known outbreak or cluster 2007-2011. From 2007-2010, 4 to 9 percent of cases were linked to a known outbreak or cluster; however this increased in 2011 to 13 percent. The increase is likely due to funding provided to the Ohio Department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

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

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

Source of disease data: Ohio Disease Reporting System.

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



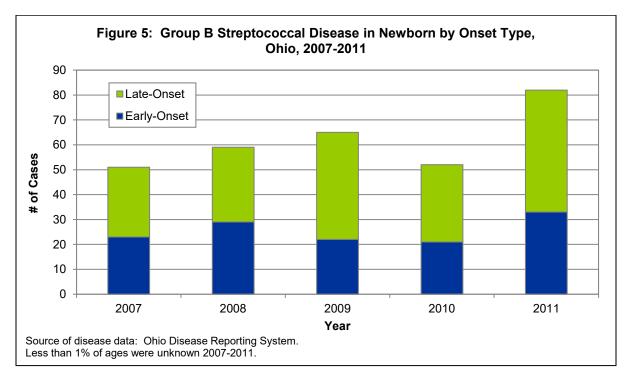
STREPTOCOCCAL DISEASE, GROUP B, IN NEWBORN

Number of cases in 2011:	71	Rate in 2011:	0.6
Number of cases in 2010:	41	Rate in 2010:	0.4

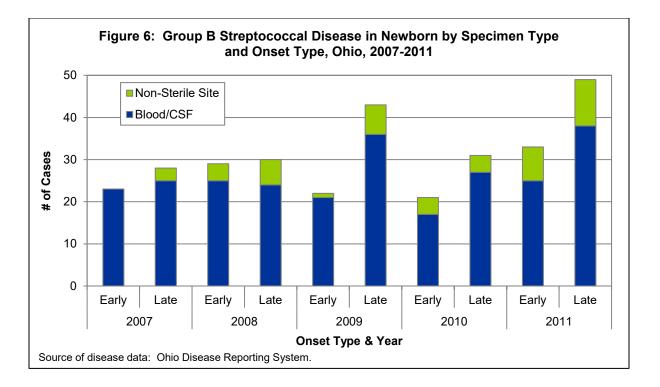
* Rates are based on the U.S. Census births reported for Ohio and are per 1,000 population.

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

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



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



OUTBREAK SUMMARIES

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

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

This is the second year that Norovirus sequencing data has been available in the annual summary. Viral sequencing, as well as most serotyping, was performed at the Ohio Department of Health Laboratory.

Details on the types of 2011 outbreaks are discussed below.

COMMUNITY OUTBREAKS

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

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

Table 1: Confirmed Community Outbreaks, Ohio, 2011					
Month of Onset	Causative Agent	County	# 111		
November 2010	<i>Giardia</i> spp.	Franklin	9		
December 2010	Methicillin-resistant Staphylococcus aureus	Franklin	3		
December 2010	Norovirus GII.1 Hawaii	Delaware	4		
February 2011	Norovirus GII.1	Franklin	135		
March 2011	Norovirus GII.4 New Orleans	Miami	66		
April 2011	Sarcoptes scabiei	Crawford	4		
April 2011	Histoplasma capsulatum	Logan	3		
April 2011	Bordetella pertussis	Franklin	3		

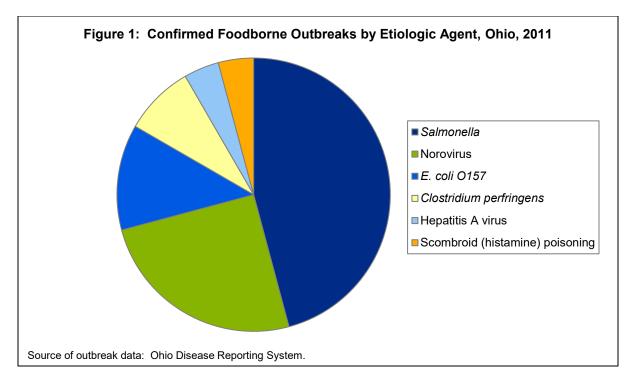
Month of Onset	Causative Agent	County	# III
May 2011	Bordetella pertussis	Franklin	4
May 2011	Bordetella pertussis	Franklin	5
June 2011	Bordetella pertussis	Franklin	3
June 2011	Escherichia coli O157	Auglaize	3
July 2011	Methicillin-resistant Staphylococcus aureus	Franklin	4
July 2011	Bordetella pertussis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

Source of outbreak data: Ohio Disease Reporting System.

FOODBORNE OUTBREAKS

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

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



The 24 confirmed	foodborne	outbreaks a	are detailed i	n Table 2.
------------------	-----------	-------------	----------------	------------

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

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

Source of outbreak data: Ohio Disease Reporting System.

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

Multistate Outbreak of E. coli O157:H7 Infections Associated with Lebanon Bologna

Multistate Outbreak of Human Salmonella Hadar Infections Associated with Turkey Burgers

Multistate Outbreak of Human Salmonella Agona Infections Linked to Whole, Fresh Imported Papayas

Multistate Outbreak of Human Salmonella Heidelberg Infections Linked to Ground Turkey

HEALTHCARE-ASSOCIATED OUTBREAKS

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

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

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

Source of outbreak data: Ohio Disease Reporting System.

INSTITUTIONAL OUTBREAKS

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

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

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

Source of outbreak data: Ohio Disease Reporting System.

WATERBORNE OUTBREAKS

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

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

Source of outbreak data: Ohio Disease Reporting System.

ZOONOTIC OUTBREAKS

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

Table 6: Confirmed Zoonotic Outbreaks, Ohio, 2011							
Month of Onset	Causative Agent	County	# 111	Type of Animal			
January 2011	Salmonella (I) 4,5,12:i:-	Multistate	3	Snakes, mice			
March 2011	Salmonella Altona, Salmonella Johannesburg	Multistate	16	Chicks, ducklings			
September 2011	Salmonella Paratyphi B	Cuyahoga	2	Aquarium fish			
November 2011	<i>Microsporum canis</i> , var canis	Franklin	16	Kittens			

Source of outbreak data: Ohio Disease Reporting System.

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

Multistate Outbreak of Human Salmonella I 4,5,12:i:-Infections Associated with Frozen Rodents

Multistate Outbreak of Human Salmonella Altona and Salmonella Johannesburg Infections Linked to Chicks and Ducklings

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

PROFILES OF SELECTED HEALTH EVENTS DETECTED IN EPICENTER

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

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

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

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

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

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

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

County		nmental n Event	Occu Dise	irally irring ease oreak	Seasonal Illness Health Event Health Event		Total			
	Ν	%	N	%	N	%	Ν	%	Ν	%
Warren	0	0%	7	19%	29	81%	0	0%	36	2%
Washington	0	0%	0	0%	0	0%	0	0%	0	0%
Wayne	0	0%	0	0%	11	100%	0	0%	11	1%
Williams	0	0%	0	0%	0	0%	0	0%	0	0%
Wood	0	0%	0	0%	20	100%	0	0%	20	1%
Wyandot	0	0%	0	0%	0	0%	0	0%	0	0%
State of Ohio	0	0%	0	0%	82	100%	0	0%	82	5%
Total	12	1%	116	7%	1,264	71%	379	21%	1,771	100%

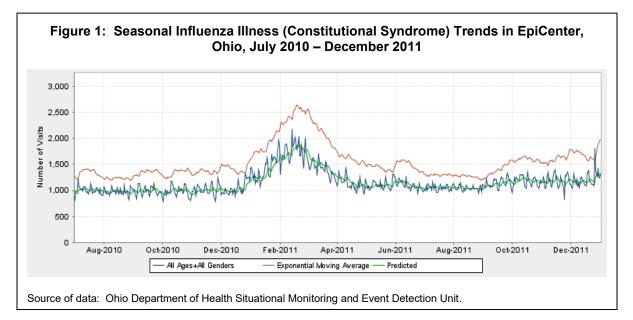
Data based on anomalies generated in the EpiCenter system 01/01/11 to 12/31/11.

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

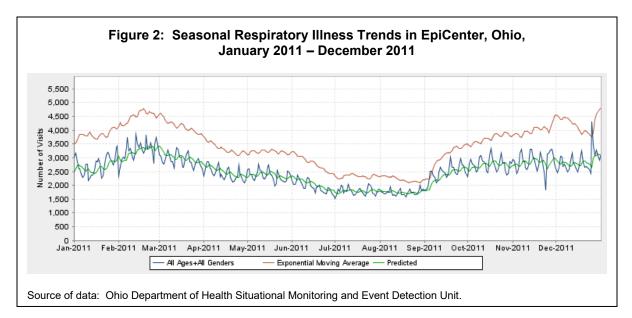
TRACKING OF SEASONAL TRENDS

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

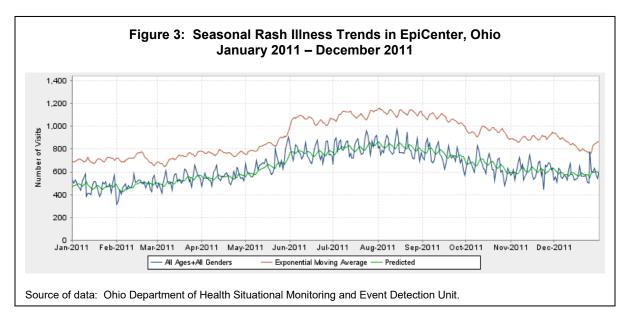
As illustrated in Figure 1, constitutional symptoms returned to its typical peak in mid- to late February



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



TECHNICAL NOTES

NOTES ON SPECIFIC DISEASES:

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

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

Ehrlichia ewingii: formerly known as other human ehrlichiosis.

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

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

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

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

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

LaCrosse Virus Disease: also known as California serogroup virus disease.

Meningitis, Other Bacterial: includes cases of bacterial meningitis for which the agent was specified, excluding Group A *Streptococcus*, Group B *Streptococcus* (in newborns less than 3 months of age), *Haemophilus influenzae*, *Listeria monocytogenes*, *Mycobacterium tuberculosis*, *Neisseria meningitidis* and *Streptococcus pneumoniae*. Cases of meningitis due to these agents are reported as those specific conditions.

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

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

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

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

NOTES ON OUTBREAKS:

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

Outbreak data are not included in the "Age in Years" and "Sex" tables, and rates were not calculated in any table. Outbreak data are by year of report, so "Month" refers to the month of report, except as noted. The source of outbreak data is the ODH Bureau of Infectious Diseases and the Ohio Disease Reporting System. *Eight multistate outbreaks are not included in the "County" table; thus, county totals do not match totals.* A multistate outbreak is an outbreak where the exposure occurred in more than one state.

Definitions for the six categories of outbreaks are from the ODH <u>Infectious Disease Control Manual</u> (IDCM); foodborne outbreaks and waterborne outbreaks are also defined on the CDC's Nationally Notifiable Disease Surveillance System's <u>website</u>. Outbreak definitions for VPDs are located in the <u>disease-specific chapters</u> of the IDCM.

Community: became a Class C reportable outbreak on Jan. 1, 2009. A community outbreak is defined as two or more cases of similar illness with a common exposure in the community and not considered a foodborne or waterborne disease outbreak.

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

Foodborne: An incident in which two or more persons experience a similar illness after ingestion of a common food, and epidemiologic analysis implicates the food as the source of the illness. Agent-specific criteria to confirm foodborne outbreaks can be found at: <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 is any outbreak of an infectious disease, chemical poisoning or toxin-mediated illness where water is indicated as the source by an epidemiological investigation

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

NOTES ON RATE CALCULATIONS:

Population estimates for rates in the "Age in Years," "Sex" and "County of Residence" tables come from the 2011 U.S. Census estimates. Population data for rates in the "Year of Onset" table come from the U.S. Census estimates for each year except 2010, which uses the actual count. Rates were not calculated for the following conditions because they pertain to selected age populations and not the entire population. Rates were calculated in the "Age in Years" table only for the conditions below containing an asterisk (*) because appropriate population data were available for the denominator:

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

DISEASES NOT INCLUDED IN TABLES:

There were no known cases in Ohio of the following reportable diseases during at least the past five years; thus, they are not included in the 2007-2011 disease tables (pp. 6-8):

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

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

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

- Blastomycosis
- Histoplasmosis

- Sporotrichosis
- Toxoplasmosis

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

NOTE ON SALMONELLA SEROTYPES AND MENINGOCOCCAL DISEASE SEROGROUPS:

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

REFERENCES

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