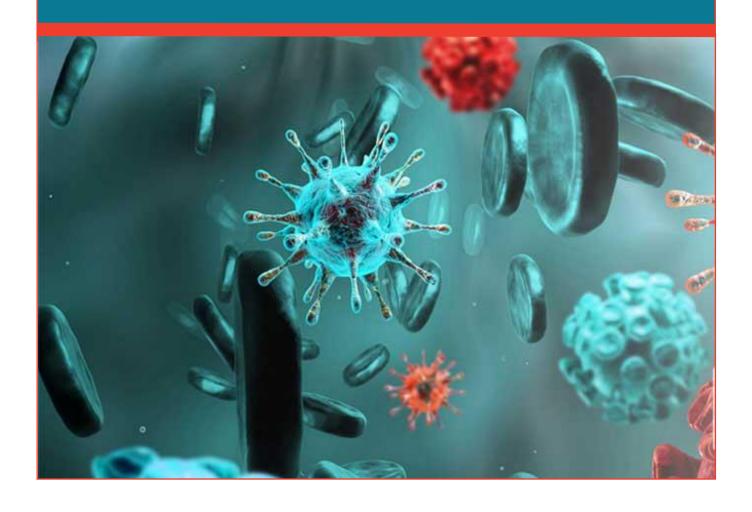
# 2017

# Utah Annual Communicable Disease Report





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# Contents

1	Intr	oduction	2
	1.1	Acknowledgements	2
	1.2	Preface	2
	1.3	Important note about influenza	2
	1.4	Background	3
	Repo	ortable Communicable Diseases in Utah, 2017	3
2	Higl	hlights	6
	2.1	Chlamydia	6
	2.2	Gonorrhea	6
	2.3	Hepatitis A	6
	2.4	Influenza-Associated Hospitalizations	6
	2.5	Mumps	6
	2.6	West Nile	7
	2.7	Spotted Fever Rickettsiosis	7
	2.8	Shiga toxin-producing $E.\ coli/$ Hemolytic Uremic Syndrome	7
3	Stat	e Disease Activity	8
	3.1	· · · · · · · · · · · · · · · · · · ·	8
	3.2	2017 State Disease Table	9
4	Year	rly Disease Comparison 1	.3
	4.1	Top Five Disease Trends by Count	13
	4.2	Yearly Disease Counts	13
	4.3		١7
	4.4	Yearly Disease Rates	
		·	
5		sdiction Disease Activity 2	
	5.1	Bear River	
	5.2		25
	5.3		29
	5.4	v	33
	5.5	San Juan County	37
	5.6	Southeastern Utah	11
	5.7	Southwest Utah	15
	5.8	Summit County	19
	5.9	Tooele County	53
	5.10	TriCounty	57
	5.11	Utah County	31
	5.12	Wasatch County	35
			30

#### 1 Introduction

The Utah Communicable Disease Report 2017 is a web-based book. You can navigate through the different chapters by using the table of contents at the top of the screen.

#### 1.1 Acknowledgements

The UDOH recognizes the efforts of local health department (LHD) personnel throughout the state who play a critical role in data collection and case investigation; their work allows for accurate and timely reporting of communicable disease data.

UDOH also recognizes the efforts of other reporting partners, including laboratories, healthcare facilities, healthcare providers, and the public, in the provision of communicable disease data that have contributed to this report.

Reportable communicable disease data for Utah are published by the Utah Department of Health, Bureau of Epidemiology.

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#### 1.2 Preface

The Communicable Disease Annual Report for Utah, 2017 contains data for Utah's reportable diseases and conditions for 2017. The data reported are collected from Utah's local health departments (LHDs), laboratories, healthcare providers, hospitals, and other healthcare facilities. The Utah Department of Health (UDOH) tracks more than 75 communicable diseases in Utah annually. Each case of disease is investigated in collaboration with the LHDs.

The Highlights section presents noteworthy epidemiologic information from 2017 for selected diseases and additional information to aid in the interpretation of surveillance data. Incidence data, which are new cases of reportable conditions in 2017, historical 5-year averages, and the incidence rates are presented in State Disease Activity table. In addition, a summary of cases of reportable disease by LHD is presented in the Jurisdiction Disease Activity section, and historical case counts and rates are presented in Yearly Disease Comparison section. Cases are counted by the year the disease occurred as determined by the Morbidity and Mortality Weekly Report (MMWR) week assigned by the Centers for Disease Control and Prevention (CDC).

### 1.3 Important note about influenza

Throughout this report, influenza data are presented in the year that the influenza season **ended**, and represent data for the CDC defined influenza season. Influenza season typically begins in October and surveillance extends through May of the following year. For example, data presented for the year 2017 is indicative of data collected from the 2016-2017 influenza season. Presenting data in this way provides accurate measures for annual influenza activity. Sporadic cases of influenza that occur outside of the traditional influenza season are assigned to the previous season (i.e., an influenza case reported in MMWR week 30 of 2017 would be assigned to the 2016-2017 influenza season). This report reflects activity for the 2016-2017 influenza season.

#### 1.4 Background

A multidisciplinary approach to communicable disease control has been established in Utah and includes prompt reporting, data analysis, data interpretation, case investigation, identification of common risk factors, treatment, and implementation of disease prevention interventions. The successes of medicine and public health have dramatically reduced the risk of illnesses, hospitalizations, and deaths due to infectious agents during the 20th century. However, emergence of new diseases and the rapid spread of diseases globally, made possible by advances in transportation, trade, food production, and other factors, highlight the continual threat to health from infectious diseases. Attention to these threats and cooperation among all healthcare providers, government agencies, and other entities that are partners in protecting the public's health are crucial to maintaining and improving the health of Utah's citizens. <sup>1</sup>

The important role that disease surveillance plays in protecting the public's health has been expressed by the CDC as follows:

"Case-reporting of reportable diseases at the local level protects the public's health by ensuring the proper identification and follow-up of cases. Public health workers ensure that persons who are already ill receive appropriate treatment; trace contacts who need vaccines, treatment, quarantine, or education; investigate and halt outbreaks; eliminate environmental hazards; and close premises where spread may occur. Surveillance of notifiable conditions helps public health authorities monitor the effect of notifiable conditions, measure disease trends, assess the effectiveness of control and prevention measures, identify populations or geographic areas at high risk, allocate resources appropriately, formulate prevention strategies, and develop public health policies. Monitoring surveillance data enables public health authorities to detect sudden changes in disease occurrence and distribution, identify changes in agents and host factors, and detect changes in health-care practices." <sup>2</sup>

#### Reportable Communicable Diseases in Utah, 2017<sup>3</sup>

Acinetobacter species with resistance or intermediate resistance to carbapenems

Acute Flaccid Myelitis

Acquired Immunodeficiency Syndrome (AIDS)

Adverse event resulting from smallpox vaccination

Anaplasmosis

Anthrax

Arbovirus infection, including Saint Louis encephalitis and West Nile virus

Babesiosis

Botulism

Botulism, infant

Brucellosis

Campylobacteriosis

#### Chancroid

<sup>&</sup>lt;sup>2</sup>Centers for Disease and Prevention (2014). Summary of Notifi able Diseases-United States, 2012. Morbidity and Mortality Weekly Report (MMWR), 61(53). Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6153a1.htm

<sup>&</sup>lt;sup>3</sup>Disease reporting is mandated by state legislation and administrative code. This list reflects the diseases, illnesses, and conditions to be of concern to the public health and reportable as specified in the Utah Administrative Code Rule R386-702, and required or authorized by Section 26-6-6 and Title 26, Chapter 23b of the Utah Health Code for the year 2017. The list of reportable diseases and conditions in Utah is revised periodically. A disease may be added to the list as a new public health threat emerges, or a disease may be removed as its incidence declines.

Chickenpox Chlamydia trachomatis infection Cholera Coccidioidomycosis Colorado tick fever Creutzfeldt-Jacob disease and other transmissible human spongiform encephalopathies Cryptosporidiosis Cyclosporiasis Dengue fever Diphtheria Ehrlichiosis, human granulocytic, human monocytic, or unspecified Encephalitis Enterobacter species with resistance or intermediate resistance to carbapenems Escherichia coli with resistance or intermediate resistance to carbapenems Giardiasis Gonorrhea Haemophilus influenzae, invasive disease Hansen's disease (Leprosy) Hantavirus pulmonary syndrome Hemolytic uremic syndrome, post-diarrheal Hepatitis A Hepatitis B, cases and carriers Hepatitis C, acute and chronic Hepatitis, other viral Human Immunodeficiency Virus (HIV) infection Influenza-associated hospitalization Influenza-associated pediatric death Klebsiella species with resistance or intermediate resistance to carbapenems Legionellosis Listeriosis Lyme disease Malaria Measles Meningitis (aseptic, bacterial, fungal, parasitic, protozoan, and viral)

Meningococcal disease

Mumps

Mycobacteria other than tuberculosis Norovirus Pertussis (whooping cough) Plague Poliomyelitis, paralytic Poliovirus infection, nonparalytic [Pregnancy associated with Hepatitis B, Hepatitis C, HIV, Listeria, Rubella, Syphilis, or Zika virus infection] Psittacosis Q Fever Rabies, human and animal Relapsing fever, tick-borne and louse-borne Rubella Rubella, congenital syndrome Salmonellosis Severe acute respiratory syndrome (SARS) Shiga toxin-producing Escherichia coli (STEC) infection Shigellosis Smallpox Spotted fever rickettsioses, including Rocky Mountain spotted fever Staphylococcus aureus with resistance (VRSA) or Intermediate resistance (VISA) to vancomycin Streptococcal disease, invasive, including: Streptococcus pneumoniae and Groups A, B, C, and G streptococci isolated from a normally sterile site Syphilis, all stages and congenital Tetanus Toxic-shock syndrome, staphylococcal or streptococcal Trichinellosis **Tuberculosis** Tularemia Typhoid, cases and carriers Vibriosis

Viral hemorrhagic fevers, including Ebola, Lassa, Marburg, and Nipah virus-related illnesses

Yellow fever

Zika Virus

## 2 Highlights

The following are summaries for selected communicable diseases which are intended to high-light conditions that had notable incidence, outbreaks, or other factors.

#### 2.1 Chlamydia

The number of chlamydia cases increased slightly in Utah in 2017, with 10,135 cases reported, compared to 9,472 in 2016. This sexually transmitted infection continues to be the most frequently reported communicable disease both nationally and in Utah. Chlamydia primarily affects younger populations, and the majority of infected individuals experience no signs or symptoms. Testing is the only way to know with certainty if a person is infected. Untreated chlamydia can lead to infertility.

#### 2.2 Gonorrhea

The reported rate of gonorrhea has experienced a 736% increase since 2011. In 2017, there were 2,545 cases of gonorrhea reported compared to 2,110 cases reported in 2016. Gonorrhea infections are commonly asymptomatic and re-infection after treatment is possible. UDOH and Utah's LHDs are closely monitoring the increase. LHD Disease Intervention Specialists (DIS) investigate all reported cases of gonorrhea, ensure appropriate treatment and provide partner services.

#### 2.3 Hepatitis A

In 2017, Utah public health experienced an outbreak of hepatitis A virus (HAV) that primarily affected community members experiencing temporary homelessness and/or individuals that use illicit substances. The majority of the cases reported in 2017 (70%) were outbreak-associated and resulted in an increase from 12 cases in 2016 to 161 cases in 2017. On average, less than 10 hepatitis A cases are reported in Utah every year. Hepatitis A infection is a vaccine-preventable, communicable disease of the liver caused by the hepatitis A virus. It is usually transmitted person-to-person through the fecal-oral route or consumption of contaminated food or water. Utah's outbreak is linked to a national HAV outbreak involving several other states.

#### 2.4 Influenza-Associated Hospitalizations

Seasonal influenza epidemics are a major cause of morbidity (disease) and mortality (death) in Utah. Influenza-associated hospitalization is a reportable condition in Utah and includes people who have been hospitalized (for any length of time) and have a positive influenza diagnostic test.

This report contains information for the 2016-2017 influenza season that ran from October 2, 2016 to May 20, 2017. During the 2016-2017 season, influenza activity peaked during late December, 2016. The total number of influenza-associated hospitalizations, 1,492, was second-highest out of the previous five years, just behind the 2014-2015 season. Older adults had the highest percentage of influenza-associated hospitalizations (57%) and highest rates by population size. The 2016-17 season was less severe in terms of the percentage of pneumonia and influenza deaths, and reported rate of outpatient influenza-like illness, which had overall lower reported cases compared to the previous five seasons. The predominant influenza virus strain for all types of influenza conditions was influenza A (87%), with a majority subtype determined to be A(H3) subtype.

#### 2.5 Mumps

The number of mumps cases reported in Utah increased from two cases in 2016 to 40 cases in 2017. The majority of the cases (70%) reported in 2017 were outbreak-associated. On average, four cases of mumps are reported in Utah every year. Mumps infection is caused by a virus and is highly contagious. Symptoms typically begin within a few days of exposure and may include fever, headache, muscle aches, tiredness, and loss of appetite, followed by swollen salivary glands. While the MMR vaccine has drastically reduced mumps cases, outbreaks in the U.S. continue to occur.

#### 2.6 West Nile

Higher numbers of mosquitoes, humans, and horses tested positive for WNV in 2017 than in the previous nine seasons. Of the 62 reported human cases, six people died (9.7%)—this approaches numbers reported during the 2007 WNV season, in which 70 infected persons and two deaths were reported. A total of 443 mosquito pools tested positive with the vast majority of activity occurring along the Wasatch Front with a five year average of 156 positive mosquito pools per year. On average, five horses per year test positive for WNV, and in 2017, 35 horses tested positive.

#### 2.7 Spotted Fever Rickettsiosis

In 2017, the Centers for Disease Control and Prevention reported a national a rise in tickborne diseases. In Utah, there was an increase in spotted fever rickettsiosis, including Rocky Mountain spotted fever. This bacterial disease is transmitted to humans by several types of ticks, including the American dog tick (*Dermacentor variabilis*), Rocky Mountain wood tick (*Dermacentor andersoni*) and the brown dog tick (*Rhipicephalus sanguineus*). In 2017, 10 cases of spotted fever rickettsiosis infection were reported with outdoor exposures in Utah and other western states. Over the past five years, Utah averaged six cases of spotted fever rickettsiosis infection per year.

#### 2.8 Shiga toxin-producing E. coli/Hemolytic Uremic Syndrome

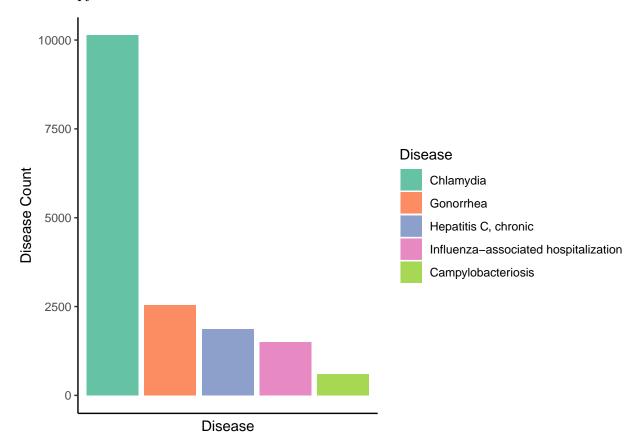
Shiga toxin-producing *E. coli* (STEC) and associated cases of Hemolytic Uremic Syndrome (HUS) were elevated for Utah in 2017. STEC can cause a serious complication (HUS) that affects the kidneys. Typically, reported HUS cases associated with STEC are around 5%; however, in 2017 8.5% of STEC cases were associated with HUS. This increase was caused by an outbreak that was attributed to animal exposure in southwest Utah. Staying hydrated and seeking proper medical care when infected with STEC reduces the likelihood of developing HUS. There are also several bacterial genetic factors that may lead to higher levels of HUS. Utah Public Health Laboratory (UPHL) is working with a new laboratory technique called Whole Genome Sequencing (WGS) and will be better able to identify these virulence genes in the future, hopefully leading to better treatment and less cases of HUS.

# 3 State Disease Activity

# 3.1 Top Diseases of 2017

The top five highest disease counts in the state of Utah were:

- 1. Chlamydia with 10,133 cases.
- 2. Gonorrhea with 2,541 cases.
- 3. Hepatitis C, chronic with 1,868 cases.
- 4. Influenza-associated hospitalization with 1,492 cases.
- 5. Campylobacteriosis with 596 cases.



#### 3.2 2017 State Disease Table

The State Disease Table includes the 2017  $\rm Count^4$ , Previous 5 Year Count Average<sup>5</sup>, Utah 2017  $\rm Rate^6$ , and the Disease Trend<sup>7</sup>.

Disease	2017 Count	Previous 5 Year Count Average	Utah 2017 Rate	Trend
Acinetobacter species resistant to carbapenems	2	2.4	0.1	Consistent
Acute Flaccid Myelitis	2	0.8	0.1	Consistent
Adverse event resulting from smallpox vaccination	1	0	0	Not enough information
Anthrax	0	0	0	Not enough information
Arbovirus infection (not including West Nile, Dengue, or Yellow Fever)	0	0.8	0	Consistent
Babesiosis	1	0	0	Not enough information
Botulism, total	1	6.2	0	Consistent
Botulism, foodborne	0	0.4	0	Consistent
Botulism, infant	1	5.6	0	Consistent
Botulism, other (wound/unspecified)	0	0.2	0	Consistent
Brucellosis	0	0.8	0	Consistent
Campylobacteriosis	596	505.6	19.2	Consistent
Chancroid	0	0	0	Not enough information
Chickenpox	253	241.4	8.2	Consistent
Chlamydia	10,133	8,279	326.7	Increasing
Cholera	0	0	0	Not enough information
Coccidioidomycosis	74	50.6	2.4	Increasing
Colorado tick fever	0	0.4	0	Consistent
Creutzfeldt-Jakob disease and other transmissible human spongiform encephalopathies	7	3.6	0.2	Consistent
Cryptosporidiosis	125	142.4	4	Consistent
Cyclosporiasis	14	2.4	0.5	Increasing
Dengue	6	5.6	0.2	Consistent
Diphtheria	0	0	0	Not enough information
Ehrlichiosis/Anaplasmosis	2	0.8	0.1	Consistent
Encephalitis	6	4	0.2	Consistent

<sup>&</sup>lt;sup>4</sup>Count is the total disease count in 2017. For influenza, Count is the total disease count in the 2016-2017 influenza season

<sup>&</sup>lt;sup>5</sup>The average disease counts for the 5 years prior to 2017

 $<sup>^6</sup>$ The "Rate" indicates infections per 100,000 population. Caution should be used when interpreting rates in italics, the estimate has a relative standard error greater than 30% and does not meet UDOH standards for reliability.

<sup>&</sup>lt;sup>7</sup>Changes in Trend are based on statistical significance (using a p-value of 0.10), i.e., higher or lower than the 5 year average. Trends that show a gray "X" indicate that there was not enough historical data to statistically test for a change in the trend.

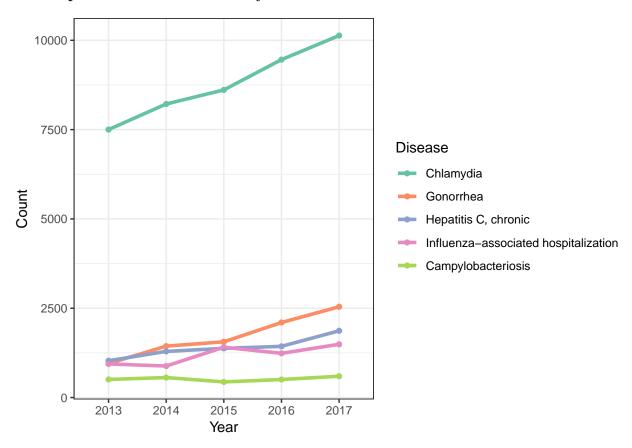
Disease	2017 Count	Previous 5 Year Count Average	Utah 2017 Rate	Trend
Enterobacter species resistant to carbapenems	0	0.8	0	Consistent
Escherichia coli resistant to carbapenems	1	0.2	0	Consistent
Giardiasis	208	222.8	6.7	Consistent
Gonorrhea	2,541	1,306.6	81.9	Consistent
HIV infection	116	122.4	3.7	Consistent
Haemophilus influenzae, all ages, invasive disease	64	45	2.1	Consistent
nonserotype B, age <5 years	10	3.6	0.3	Consistent
serotype $\hat{B}$ , age $<5$ years	0	0.4	0	Consistent
unknown serotype, age $<$ 5 years	1	0	0	Not enough information
Hansen's disease (Leprosy)	1	0.8	0	Consistent
Hantavirus infection	2	1.8	0.1	Consistent
Hemolytic uremic syndrome,	12	5.2	0.4	Increasing
Hepatitis A	160	8.8	5.2	Increasing
Hepatitis B, acute	20	9	0.6	Increasing
Hepatitis B, chronic	95	42.6	3.1	Consistent
Hepatitis C, acute	101	43.8	3.3	Consistent
Hepatitis C, chronic	1,868	1,977.6	60.2	Consistent
Hepatitis, other viral	1	1	0	Consistent
Influenza-associated nospitalization	1,492	1,191.4	48.1	Consistent
Influenza-associated pediatric mortality	0	2.2	0	Consistent
Klebsiella species resistant to carbapenems	7	3	0.2	Consistent
Legionellosis	31	27.8	1	Consistent
Leptospirosis	1	0.4	0	Consistent
Listeriosis	6	3.6	0.2	Consistent
Lyme disease	25	13.4	0.8	Consistent
Malaria	9	8	0.3	Consistent
Measles	3	1	0.1	Consistent
Meningitis, aseptic	94	40	3	Increasing
Meningitis, bacterial, other	36	14.6	1.2	Increasing
Meningitis, viral	94	43.6	3	Consistent
Meningococcal Disease (Neisseria meningitidis)	2	3.8	0.1	Consistent
Mumps	40	2.8	1.3	Increasing
Pertussis	447	924.6	14.4	Consistent
Plague	0	0.2	0	Consistent
Poliomyelitis, paralytic and nonparalytic	0	0	0	Not enough information

Disease	2017 Count	Previous 5 Year Count Average	Utah 2017 Rate	Trend
Psittacosis	1	0	0	Not enough information
Q fever	2	4	0.1	Consistent
Rabies, animal	23	17.6	0.7	Consistent
Rabies, human	0	0	0	Not enough information
Relapsing fever, tick-borne and louse-borne	3	0.4	0.1	Increasing
Rubella	0	0.2	0	Consistent
Rubella, congenital syndrome	0	0	0	Not enough information
Salmonellosis	388	349.4	12.5	Consistent
Severe Acute Respiratory Syndrome (SARS)	0	0	0	Not enough information
Shiga toxin-producing Escherichia coli (STEC) infection	140	91	4.5	Increasing
Shigellosis	44	42.8	1.4	Consistent
Smallpox	0	0	0	Not enough information
Spotted fever rickettsiosis (including Rocky Mountain Spotted Fever)	10	6	0.3	Increasing
Streptococcal disease, invasive, group A	222	143	7.2	Consistent
Streptococcal disease, invasive, group B	225	149.2	7.3	Increasing
Streptococcal disease, invasive, other	436	336	14.1	Consistent
Streptococcus pneumoniae, invasive disease	268	206	8.6	Increasing
age <5 years	17	22	0.5	Consistent
Syphilis, congenital	0	0	0	Not enough information
Syphilis, early (infection $< 12$ months)	203	106.2	6.5	Increasing
primary & secondary	117	66.2	3.8	Increasing
early latent	86	40	2.8	Increasing
Syphilis, latent (infection > 12 months)	97	65.8	3.1	Consistent
Tetanus	0	0	0	Not enough information
Toxic shock syndrome (staphylococcal or streptococcal)	31	20.6	1	Consistent
Trichinellosis	0	0.4	0	Consistent
Tuberculosis, active	29	31.4	0.9	Consistent
Tularemia	7	3	0.2	Consistent

Disease	2017 Count	Previous 5 Year Count Average	Utah 2017 Rate	Trend
Typhoid fever	0	1.6	0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.2	0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0	0	Not enough information
Vibriosis	15	5.2	0.5	Consistent
Viral hemorrhagic fevers	0	0	0	Not enough information
West Nile virus, total	62	7.4	2	Increasing
Yellow fever	0	0	0	Not enough information
Zika virus, congenital infection	0	0.2	0	Consistent
Zika Virus Disease	9	6.8	0.3	Consistent

# 4 Yearly Disease Comparison

# 4.1 Top Five Disease Trends by Count



# 4.2 Yearly Disease Counts <sup>8</sup>

Disease	2013	2014	2015	2016	2017
Acinetobacter species resistant to carbapenems	2	1	5	3	2
Acute Flaccid Myelitis	0	0	1	3	2
Adverse event resulting from smallpox vaccination	0	0	0	0	1
Anthrax	0	0	0	0	0
Arbovirus infection (not including West Nile, Dengue, or Yellow Fever)	0	2	2	0	0
Babesiosis	0	0	0	0	1
Botulism, total	2	6	8	6	1
Botulism, foodborne	0	0	2	0	0
Botulism, infant	2	6	6	5	1
Botulism, other (wound/unspecified)	0	0	0	1	0
Brucellosis	0	0	3	0	0

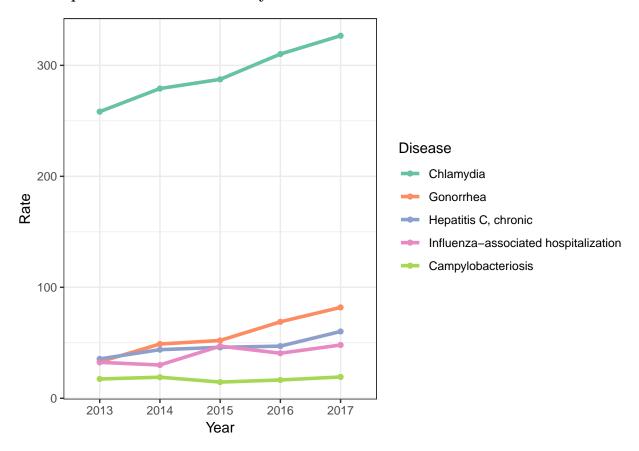
 $<sup>^8</sup>$ Note about hepatitis B and hepatitis C: From 2013-2016, only confirmed cases were reported; in 2017 confirmed and probable cases were reported.

Disease	2013	2014	2015	2016	2017
Campylobacteriosis	506	559	437	504	596
Chancroid	0	0	0	0	0
Chickenpox	227	216	219	233	253
Chlamydia	7,501	8,217	8,611	$9,\!459$	10,133
Cholera	0	0	0	0	0
Coccidioidomycosis	44	54	55	41	74
Colorado tick fever	0	0	0	1	0
Creutzfeldt-Jakob disease and other transmissible human spongiform encephalopathies	0	3	9	2	7
Cryptosporidiosis	90	73	175	170	125
Cyclosporiasis	0	1	8	3	14
Dengue	8	3	5	7	6
Diphtheria	0	0	0	0	0
Ehrlichiosis/Anaplasmosis	1	0	2	0	2
Encephalitis	2	4	2	6	6
Enterobacter species resistant to carbapenems	0	0	2	2	0
Escherichia coli resistant to carbapenems	0	1	0	0	1
Giardiasis	231	229	204	161	208
Gonorrhea	951	1,439	1,560	2,100	2,541
HIV infection	110	119	123	137	116
Haemophilus influenzae, all ages, invasive disease	42	59	51	40	64
nonserotype B, age <5 years	0	1	9	8	10
serotype B, age <5 years	0	1	0	1	0
unknown serotype, age $<5$ years	0	0	0	0	1
Hansen's disease (Leprosy)	0	2	0	0	1
Hantavirus infection	0	3	2	2	2
Hemolytic uremic syndrome, post-diarrheal	3	8	4	6	12
Hepatitis A	12	8	8	12	160
Hepatitis B, acute	5	11	11	5	20
Hepatitis B, chronic	25	37	64	72	95
Hepatitis C, acute	22	43	34	80	101
Hepatitis C, chronic	1,030	1,291	$1,\!376$	1,433	1,868
Hepatitis, other viral	1	1	1	0	1
Influenza-associated hospitalization	940	882	1,408	1,237	1,490
Influenza-associated pediatric mortality	5	3	2	1	0
Klebsiella species resistant to carbapenems	1	1	8	5	7
Legionellosis	22	28	31	30	31
Leptospirosis	0	1	0	1	1
Listeriosis	3	9	0	4	6
Lyme disease	18	13	12	19	25
Malaria	7	5	6	8	9
Measles	0	3	1	0	3
Meningitis, aseptic	38	40	22	48	94

Disease	2013	2014	2015	2016	2017
Meningitis, bacterial, other	25	16	13	11	36
Meningitis, viral	25	34	60	77	94
Meningococcal Disease (Neisseria meningitidis)	9	1	2	3	2
Mumps	2	5	2	2	40
Pertussis	1,307	947	509	268	447
Plague	0	0	1	0	0
Poliomyelitis, paralytic and nonparalytic	0	0	0	0	0
Psittacosis	0	0	0	0	1
Q fever	3	9	0	3	2
Rabies, animal	12	22	21	18	23
Rabies, human	0	0	0	0	0
Relapsing fever, tick-borne and louse-borne	0	1	0	0	3
	0	4	0	0	0
Rubella  Pubella congenital gundrome	0	1	0	0	0
Rubella, congenital syndrome Salmonellosis	$\frac{0}{323}$	$\frac{0}{371}$	$\frac{0}{460}$	$\frac{0}{332}$	$\frac{0}{388}$
Severe Acute Respiratory Syndrome	323 0	0	0	0	0
(SARS)					
Shiga toxin-producing Escherichia coli (STEC) infection	83	91	97	78	140
Shigellosis	25	40	36	79	44
Smallpox	0	0	0	0	0
Spotted fever rickettsiosis (including Rocky Mountain Spotted Fever)	5	8	5	5	10
Streptococcal disease, invasive, group A	120	115	169	217	222
Streptococcal disease, invasive, group B	129	132	155	200	225
Streptococcal disease, invasive, other	295	287	368	421	436
Streptococcus pneumoniae, invasive disease	205	205	191	246	268
age < 5 years	24	25	14	24	17
Syphilis, congenital	0	0	0	0	0
Syphilis, early (infection $< 12$ months)	130	92	102	154	203
primary & secondary	78	51	66	93	117
early latent	52	41	36	61	86
Syphilis, latent (infection > 12 months)	21	66	85	106	97
Tetanus	0	0	0	0	0
Toxic shock syndrome (staphylococcal or streptococcal)	12	14	23	34	31
Trichinellosis	0	1	1	0	0
Tuberculosis, active	33	31	37	20	29
Tularemia	2	1	5	5	7
Typhoid fever	1	3	1	1	0
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	1	0	0	0
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0	0	0	0

Disease	2013	2014	2015	2016	2017
Vibriosis	2	3	9	11	15
Viral hemorrhagic fevers	0	0	0	0	0
West Nile virus, total	7	2	10	13	62
Yellow fever	0	0	0	0	0
Zika virus, congenital infection	0	0	1	0	0
Zika Virus Disease	0	0	5	29	9

# 4.3 Top Five Disease Trends by Rate



# 4.4 Yearly Disease Rates 9 10

Disease	2013	2014	2015	2016	2017
Acinetobacter species resistant to carbapenems	0.1	0	0.2	0.1	0.1
Acute Flaccid Myelitis	0	0	0	0.1	0.1
Adverse event resulting from smallpox vaccination	0	0	0	0	0
Anthrax	0	0	0	0	0
Arbovirus infection (not including West Nile, Dengue, or Yellow Fever)	0	0.1	0.1	0	0
Babesiosis	0	0	0	0	0
Botulism, total	0.1	0.2	0.3	0.2	0
Botulism, foodborne	0	0	0.1	0	0
Botulism, infant	0.1	0.2	0.2	0.2	0
Botulism, other (wound/unspecified)	0	0	0	0	0
Brucellosis	0	0	0.1	0	0
Campylobacteriosis	17.4	19	14.6	16.5	19.2
Chancroid	0	0	0	0	0
Chickenpox	7.8	7.3	7.3	7.6	8.2
Chlamydia	258.3	279.1	287.4	310.2	326.7
Cholera	0	0	0	0	0
Coccidioidomycosis	1.5	1.8	1.8	1.3	2.4
Colorado tick fever	0	0	0	0	0
Creutzfeldt-Jakob disease and other transmissible human spongiform encephalopathies	0	0.1	0.3	0.1	0.2
Cryptosporidiosis	3.1	2.5	5.8	5.6	4
Cyclosporiasis	0	0	0.3	0.1	0.5
Dengue	0.3	0.1	0.2	0.2	0.2
Diphtheria	0	0	0	0	0
Ehrlichiosis/Anaplasmosis	0	0	0.1	0	0.1
Encephalitis	0.1	0.1	0.1	0.2	0.2
Enterobacter species resistant to carbapenems	0	0	0.1	0.1	0
Escherichia coli resistant to carbapenems	0	0	0	0	0
Giardiasis	8	7.8	6.8	5.3	6.7
Gonorrhea	32.8	48.9	52.1	68.9	81.9
HIV infection	3.8	4	4.1	4.5	3.7
Haemophilus influenzae, all ages, invasive disease	1.4	2	1.7	1.3	2.1
nonserotype B, age <5 years	0	0	0.3	0.3	0.3
serotype B, age <5 years	0	0	0	0	0
unknown serotype, age $<5$ years	0	0	0	0	0
Hansen's disease (Leprosy)	0	0.1	0	0	0
Hantavirus infection	0	0.1	0.1	0.1	0.1
Hemolytic uremic syndrome, post-diarrheal	0.1	0.3	0.1	0.2	0.4
Hepatitis A	0.4	0.3	0.3	0.4	5.2

 $<sup>^9</sup>$ Rates are defined as infections per 100,000 population. Caution should be used when interpreting rates in *italics*. The estimate has a relative standard error greater than 30% and does not meet UDOH standards for reliability.

<sup>&</sup>lt;sup>10</sup>Note about hepatitis B and hepatitis C: From 2013-2016, only confirmed cases were reported; in 2017 confirmed and probable cases were reported.

Disease	2013	2014	2015	2016	2017
Hepatitis B, acute	0.2	0.4	0.4	0.2	0.6
Hepatitis B, chronic	0.9	1.3	2.1	2.4	3.1
Hepatitis C, acute	0.8	1.5	1.1	2.6	3.3
Hepatitis C, chronic	35.5	43.8	45.9	47	60.2
Hepatitis, other viral	0	0	0	0	0
Influenza-associated hospitalization	32.4	30	47	40.6	48
Influenza-associated pediatric mortality	0.2	0.1	0.1	0	0
Klebsiella species resistant to carbapenems	0	0	0.3	0.2	0.2
Legionellosis	0.8	1	1	1	1
Leptospirosis	0	0	0	0	0
Listeriosis	0.1	0.3	0	0.1	0.2
Lyme disease	0.6	0.4	0.4	0.6	0.8
Malaria	0.2	0.2	0.2	0.3	0.3
Measles	0	0.1	0	0	0.1
Meningitis, aseptic	1.3	1.4	0.7	1.6	3
Meningitis, bacterial, other	0.9	0.5	0.4	0.4	1.2
Meningitis, viral	0.9	1.2	2	2.5	3
Meningococcal Disease (Neisseria	0.3	0	0.1	0.1	0.1
meningitidis)	0.0	O	0.1	0.1	0.1
Mumps	0.1	0.2	0.1	0.1	1.3
Pertussis	45	32.2	17	8.8	14.4
Plague	0	0	0	0	0
Poliomyelitis, paralytic and nonparalytic	0	0	0	0	0
Psittacosis	0	0	0	0	0
Q fever	0.1	0.3	0	0.1	0.1
Rabies, animal	0.4	0.7	0.7	0.6	0.7
Rabies, human	0.4	0.7	0.7	0.0	0.1
Relapsing fever, tick-borne and	0	0	0	0	0.1
louse-borne					
Rubella	0	0	0	0	0
Rubella, congenital syndrome	0	0	0	0	0
Salmonellosis	11.1	12.6	15.4	10.9	12.5
Severe Acute Respiratory Syndrome (SARS)	0	0	0	0	0
Shiga toxin-producing Escherichia coli (STEC) infection	2.9	3.1	3.2	2.6	4.5
Shigellosis	0.9	1.4	1.2	2.6	1.4
Smallpox	0	0	0	0	0
Spotted fever rickettsiosis (including	0.2	0.3	0.2	0.2	0.3
Rocky Mountain Spotted Fever)		0.0			
Streptococcal disease, invasive, group A	4.1	3.9	5.6	7.1	7.2
Streptococcal disease, invasive, group B	4.4	4.5	5.2	6.6	7.3
Streptococcal disease, invasive, other	10.2	9.7	12.3	13.8	14.1
Streptococcus pneumoniae, invasive disease	7.1	7	6.4	8.1	8.6
age <5 years	0.8	0.8	0.5	0.8	0.5
Syphilis, congenital	0	0	0	0	0
	4 5	3.1	3.4	5	6.5
Syphilis, early (infection < 12 months)	4.5	0.1	U.T	9	0.0
Syphilis, early (infection < 12 months) primary and secondary	2.7	1.7	2.2	3	
Syphilis, early (infection < 12 months) primary and secondary early latent					3.8 2.8

Disease	2013	2014	2015	2016	2017
Tetanus	0	0	0	0	0
Toxic shock syndrome (staphylococcal or	0.4	0.5	0.8	1.1	1
streptococcal)					
Trichinellosis	0	0	0	0	0
Tuberculosis, active	1.1	1.1	1.2	0.7	0.9
Tularemia	0.1	0	0.2	0.2	0.2
Typhoid fever	0	0.1	0	0	0
Vancomycin-intermediate Staphylococcus	0	0	0	0	0
aureus (VISA)					
Vancomycin-resistant Staphylococcus	0	0	0	0	0
aureus (VRSA)					
Vibriosis	0.1	0.1	0.3	0.4	0.5
Viral hemorrhagic fevers	0	0	0	0	0
West Nile virus, total	0.2	0.1	0.3	0.4	2
Yellow fever	0	0	0	0	0
Zika virus, congenital infection	0	0	0	0	0
Zika Virus Disease	0	0	0.2	1	0.3

# 5 Jurisdiction Disease Activity

Yearly totals for each local health jurisdiction are listed below. A map of the local health jurisdiction boundaries can be found in [Appendix A]. The tables below list the disease count, <sup>11</sup> yearly rate <sup>12</sup>, the 2017 Utah Rate <sup>13</sup>, and a comparison arrow <sup>14</sup> to signify if the Jurisdiction Rate is statistically significantly, i.e., higher or lower, compared to the Utah State Rate.

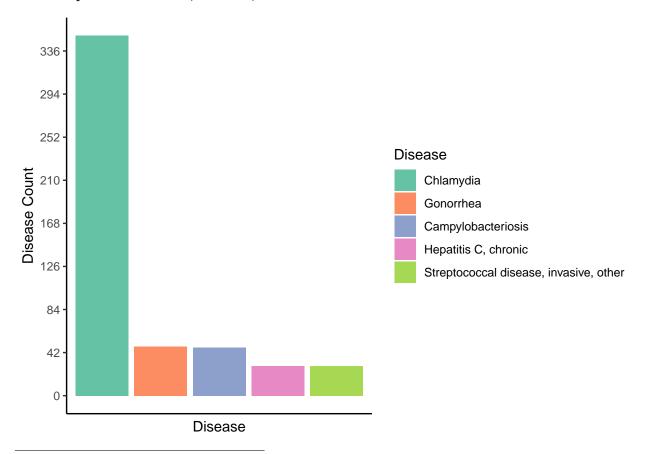
#### 5.1 Bear River

The Bear River Health Jurisdiction covers the three most northern counties of Utah, including Box Elder County, Cache County, and Rich County. The 2017 population estimate for this region is 180,908.

#### 5.1.1 Bear River Top Five Disease

The top five highest disease counts for the Bear River area were:

- 1. Chlamydia with 351 cases.
- 2. Gonorrhea with 48 cases.
- 3. Campylobacteriosis with 47 cases.
- 4. Hepatitis C, chronic with 29 cases.
- 5. Streptococcal disease, invasive, other with 29 cases.



 $<sup>^{11}</sup>$ Count is defined as the total number of cases in 2017. For influenza, counts are based on the number of cases in the 2016-2017 flu season

 $<sup>^{12}</sup>$ Annual rate is defined as infections per 100,000 population in the given jurisdiction during 2017. Influenza rates are based on the 2016-2017 influenza season

 $<sup>^{13}</sup>$ The Utah Rate is defined as infections per 100,000 population for the state during 2017

 $<sup>^{14}</sup>$ Indicates if the jurisdiction rate is statistically significantly higher or lower than the 2017 Utah Rate based on a proportions test with a 95% confidence level.

# 5.1.2 Bear River Communicable Disease Table

Adverse event resulting from smallpox vaccination         0         0.0         0.0         0           Anthrax         0         0         0         0         0           Arbovirus infection (not including West         0         0.0         0.0         0.0           Nile, Dengue, or Yellow Fever)         0         0.0         0.0         0.0           Babesiosis         0         0.0         0.0         0.0           Botulism, total         0         0.0         0.0         0.0           Botulism, foodborne         0         0.0         0.0         0.0           Botulism, other (wound/unspecified)         0         0.0         0.0         0.0           Brucellosis         0         0.0         0.0         0.0         0.0           Campylobacteriosis         47         26.0         19.2         0.0           Chancroid         0         0.0         0.0         0.0           Chickenpox         10         5.5         8.2         0.0           Chlamydia         351         194.0         326.7           Cholera         0         0.0         0.0         0.0           Cocidioidomycosis         3         1.7	
Acute Flaccid Myelitis       1       0.6       0.1       C         Adverse event resulting from smallpox vaccination       0       0.0       0.0       0         Anthrax       0       0       0       0       0         Arbovirus infection (not including West       0       0.0       0.0       0         Nile, Dengue, or Yellow Fever)       0       0.0       0.0       0.0         Babesiosis       0       0.0       0.0       0.0         Botulism, total       0       0.0       0.0       0         Botulism, foodborne       0       0.0       0.0       0         Botulism, other (wound/unspecified)       0       0.0       0.0       0         Brucellosis       0       0.0       0.0       0       0         Campylobacteriosis       47       26.0       19.2       0         Chancroid       0       0.0       0.0       0         Chickenpox       10       5.5       8.2       0         Chlamydia       351       194.0       326.7         Cholera       0       0.0       0.0       0         Coccidioidomycosis       3       1.7       2.4       0 <td>Below</td>	Below
Adverse event resulting from smallpox vaccination       0       0.0       0.0       0         Anthrax       0       0       0       0       0         Arbovirus infection (not including West       0       0.0       0.0       0         Nile, Dengue, or Yellow Fever)       0       0.0       0.0       0         Babesiosis       0       0.0       0.0       0         Botulism, total       0       0.0       0.0       0         Botulism, foodborne       0       0.0       0.0       0         Botulism, other (wound/unspecified)       0       0.0       0.0       0         Brucellosis       0       0.0       0.0       0         Campylobacteriosis       47       26.0       19.2       0         Chancroid       0       0.0       0.0       0         Chickenpox       10       5.5       8.2       0         Chlamydia       351       194.0       326.7         Cholera       0       0.0       0.0       0         Coccidioidomycosis       3       1.7       2.4       0         Colorado tick fever       0       0.0       0.0       0       0	
vaccination         Anthrax         0         0         0         0           Arbovirus infection (not including West         0         0.0         0.0         0.0           Nile, Dengue, or Yellow Fever)         Separation         0         0.0         0.0         0.0           Babesiosis         0         0.0         0.0         0.0         0.0         0.0           Botulism, total         0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Consistent
Anthrax       0       0       0       0         Arbovirus infection (not including West       0       0.0       0.0       0         Nile, Dengue, or Yellow Fever)       0       0.0       0.0       0         Babesiosis       0       0.0       0.0       0         Botulism, total       0       0.0       0.0       0         Botulism, foodborne       0       0.0       0.0       0         Botulism, infant       0       0.0       0.0       0         Botulism, other (wound/unspecified)       0       0.0       0.0       0         Brucellosis       0       0.0       0.0       0       0         Chancroid       0       0.0       0.0       0       0         Chickenpox       10       5.5       8.2       0         Chlamydia       351       194.0       326.7         Cholera       0       0.0       0.0       0         Coccidioidomycosis       3       1.7       2.4       0         Colorado tick fever       0       0.0       0.0       0         Creutzfeldt-Jakob disease and other       1       0.6       0.2       0 </td <td>Consistent</td>	Consistent
Arbovirus infection (not including West       0       0.0       0.0       0.0         Nile, Dengue, or Yellow Fever)       0       0.0       0.0       0.0         Babesiosis       0       0.0       0.0       0.0         Botulism, total       0       0.0       0.0       0.0         Botulism, infant       0       0.0       0.0       0.0         Botulism, other (wound/unspecified)       0       0.0       0.0       0.0         Brucellosis       0       0.0       0.0       0.0         Campylobacteriosis       47       26.0       19.2       0         Chancroid       0       0.0       0.0       0.0         Chickenpox       10       5.5       8.2       0         Chlamydia       351       194.0       326.7         Cholera       0       0.0       0.0       0.0         Coccidioidomycosis       3       1.7       2.4       0         Colorado tick fever       0       0.0       0.0       0.0         Creutzfeldt-Jakob disease and other       1       0.6       0.2       0.2	
Nile, Dengue, or Yellow Fever)       Babesiosis       0       0.0       0.0       0.0         Botulism, total       0       0.0       0.0       0.0         Botulism, foodborne       0       0.0       0.0       0.0         Botulism, infant       0       0.0       0.0       0.0         Botulism, other (wound/unspecified)       0       0.0       0.0       0.0         Brucellosis       0       0.0       0.0       0.0         Campylobacteriosis       47       26.0       19.2       0         Chancroid       0       0.0       0.0       0         Chickenpox       10       5.5       8.2       0         Chlamydia       351       194.0       326.7         Cholera       0       0.0       0.0       0         Coccidioidomycosis       3       1.7       2.4       0         Colorado tick fever       0       0.0       0.0       0         Creutzfeldt-Jakob disease and other       1       0.6       0.2       0	Consistent
Botulism, total       0       0.0       0.0       0.0         Botulism, foodborne       0       0.0       0.0       0.0         Botulism, infant       0       0.0       0.0       0.0         Botulism, other (wound/unspecified)       0       0.0       0.0       0.0         Brucellosis       0       0.0       0.0       0.0         Campylobacteriosis       47       26.0       19.2       0         Chancroid       0       0.0       0.0       0.0         Chickenpox       10       5.5       8.2       0         Chlamydia       351       194.0       326.7         Cholera       0       0.0       0.0       0.0         Coccidioidomycosis       3       1.7       2.4       0         Colorado tick fever       0       0.0       0.0       0.0         Creutzfeldt-Jakob disease and other       1       0.6       0.2       0.2	Consistent
Botulism, foodborne         0         0.0         0.0         0.0           Botulism, infant         0         0.0         0.0         0.0           Botulism, other (wound/unspecified)         0         0.0         0.0         0.0           Brucellosis         0         0.0         0.0         0.0         0.0           Campylobacteriosis         47         26.0         19.2         0           Chancroid         0         0.0         0.0         0.0           Chickenpox         10         5.5         8.2         0           Chlamydia         351         194.0         326.7           Cholera         0         0.0         0.0         0.0           Coccidioidomycosis         3         1.7         2.4         0           Colorado tick fever         0         0.0         0.0         0.0           Creutzfeldt-Jakob disease and other         1         0.6         0.2         0.0	Consistent
Botulism, infant         0         0.0         0.0         0.0           Botulism, other (wound/unspecified)         0         0.0         0.0         0.0           Brucellosis         0         0.0         0.0         0.0           Campylobacteriosis         47         26.0         19.2         0           Chancroid         0         0.0         0.0         0.0           Chickenpox         10         5.5         8.2         0           Chlamydia         351         194.0         326.7           Cholera         0         0.0         0.0         0.0           Coccidioidomycosis         3         1.7         2.4         0           Colorado tick fever         0         0.0         0.0         0           Creutzfeldt-Jakob disease and other         1         0.6         0.2         0	Consistent
Botulism, infant         0         0.0         0.0         0.0           Botulism, other (wound/unspecified)         0         0.0         0.0         0.0           Brucellosis         0         0.0         0.0         0.0           Campylobacteriosis         47         26.0         19.2         0           Chancroid         0         0.0         0.0         0.0           Chickenpox         10         5.5         8.2         0           Chlamydia         351         194.0         326.7           Cholera         0         0.0         0.0         0.0           Coccidioidomycosis         3         1.7         2.4         0           Colorado tick fever         0         0.0         0.0         0           Creutzfeldt-Jakob disease and other         1         0.6         0.2         0	Consistent
Botulism, other (wound/unspecified)       0       0.0       0.0       0.0         Brucellosis       0       0.0       0.0       0.0         Campylobacteriosis       47       26.0       19.2       0         Chancroid       0       0.0       0.0       0.0         Chickenpox       10       5.5       8.2       0         Chlamydia       351       194.0       326.7         Cholera       0       0.0       0.0       0.0         Coccidioidomycosis       3       1.7       2.4       0         Colorado tick fever       0       0.0       0.0       0.0         Creutzfeldt-Jakob disease and other       1       0.6       0.2       0	Consistent
Brucellosis         0         0.0         0.0         0.0           Campylobacteriosis         47         26.0         19.2         0           Chancroid         0         0.0         0.0         0.0           Chickenpox         10         5.5         8.2         0           Chlamydia         351         194.0         326.7           Cholera         0         0.0         0.0         0           Coccidioidomycosis         3         1.7         2.4         0           Colorado tick fever         0         0.0         0.0         0           Creutzfeldt-Jakob disease and other         1         0.6         0.2         0	Consistent
Campylobacteriosis       47       26.0       19.2       C         Chancroid       0       0.0       0.0       0.0         Chickenpox       10       5.5       8.2       C         Chlamydia       351       194.0       326.7         Cholera       0       0.0       0.0       0.0         Coccidioidomycosis       3       1.7       2.4       C         Colorado tick fever       0       0.0       0.0       0.0         Creutzfeldt-Jakob disease and other       1       0.6       0.2       C	Consistent
Chancroid         0         0.0         0.0         0.0           Chickenpox         10         5.5         8.2         0           Chlamydia         351         194.0         326.7           Cholera         0         0.0         0.0         0.0           Coccidioidomycosis         3         1.7         2.4         0           Colorado tick fever         0         0.0         0.0         0.0           Creutzfeldt-Jakob disease and other         1         0.6         0.2         0	Consistent
Chickenpox       10       5.5       8.2       C         Chlamydia       351       194.0       326.7         Cholera       0       0.0       0.0       0         Coccidioidomycosis       3       1.7       2.4       0         Colorado tick fever       0       0.0       0.0       0         Creutzfeldt-Jakob disease and other       1       0.6       0.2       0	Consistent
Chlamydia         351         194.0         326.7           Cholera         0         0.0         0.0         0           Coccidioidomycosis         3         1.7         2.4         0           Colorado tick fever         0         0.0         0.0         0           Creutzfeldt-Jakob disease and other         1         0.6         0.2         0	Consistent
Cholera         0         0.0         0.0         0.0           Coccidioidomycosis         3         1.7         2.4         0           Colorado tick fever         0         0.0         0.0         0.0           Creutzfeldt-Jakob disease and other         1         0.6         0.2         0.0	Below
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Consistent
Colorado tick fever00.00.00.0Creutzfeldt-Jakob disease and other10.60.20.2	Consistent
Creutzfeldt-Jakob disease and other 1 0.6 0.2	Consistent
	Consistent
	Olisistelli
encephalopathies	
	Consistent
	Consistent
Dengue 0 0.0 0.2	Below
	Consistent
Ehrlichiosis/Anaplasmosis 0 0.0 0.1	Below
, -	Consistent
•	Consistent
	Consistent
•	Consistent
Gonorrhea 48 26.5 81.9	Below
HIV infection 1 0.6 3.7	Below
disease	Consistent
V1 / G V	Consistent
VI / O V	Consistent
	Consistent
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Consistent
Hantavirus infection $0$ $0.0$ $0.1$	Below
Hemolytic uremic syndrome, 2 1.1 0.4 0 post-diarrheal	Consistent
Hepatitis A 5 2.8 5.2	Below
Hepatitis B, acute 0 0.0 0.6	Below
Hepatitis B, chronic 0 0.0 3.1	Below
Hepatitis C, acute 3 1.7 3.3	

Disease	Count	Rate	Utah Rate	Comparison to UT rate
Hepatitis C, chronic	29	16.0	60.2	Below
Hepatitis, other viral	0	0.0	0.0	Consistent
Influenza-associated hospitalization	80	2.6	48.1	Above
Influenza-associated pediatric mortality	0	0.0	0.0	Consistent
Klebsiella species resistant to carbapenems	0	0.0	0.2	Below
Legionellosis	2	1.1	1.0	Consistent
Leptospirosis	0	0.0	0.0	Consistent
Listeriosis	1	0.6	0.2	Consistent
Lyme disease	2	1.1	0.8	Consistent
Malaria	1	0.6	0.3	Consistent
Measles	0	0.0	0.1	Below
Meningitis, aseptic	2	1.1	3.0	Below
Meningitis, bacterial, other	2	1.1	1.2	Consistent
Meningitis, viral	5	2.8	3.0	Consistent
Meningococcal Disease (Neisseria meningitidis)	0	0.0	0.1	Below
Mumps	0	0.0	1.3	Below
Pertussis	14	7.7	14.4	Below
Plague	0	0.0	0.0	Consistent
Poliomyelitis, paralytic and nonparalytic	0	0.0	0.0	Consistent
Psittacosis	0	0.0	0.0	Consistent
Q fever	0	0.0	0.1	Below
Rabies, animal	4	2.2	0.7	Consistent
Rabies, human	0	0.0	0.0	Consistent
Relapsing fever, tick-borne and	0	0.0	0.1	Below
louse-borne	Ü	0.0	0.1	Below
Rubella	0	0.0	0.0	Consistent
Rubella, congenital syndrome	0	0.0	0.0	Consistent
Salmonellosis	24	13.3	12.5	Consistent
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0.0	Consistent
Shiga toxin-producing Escherichia coli (STEC) infection	8	4.4	4.5	Consistent
Shigellosis	1	0.6	1.4	Consistent
Smallpox	0	0.0	0.0	Consistent
Spotted fever rickettsiosis (including Rocky Mountain Spotted Fever)	0	0.0	0.3	Below
Streptococcal disease, invasive, group A	3	1.7	7.2	Below
Streptococcal disease, invasive, group B	16	8.8	7.3	Consistent
Streptococcal disease, invasive, other	29	16.0	14.1	Consistent
Streptococcus pneumoniae, invasive disease	15	8.3	8.6	Consistent
age <5 years	1	0.6	0.5	Consistent
Syphilis, congenital	0	0.0	0.0	Consistent
Syphilis, early (infection < 12 months)	$\frac{1}{2}$	1.1	6.5	Below
primary and secondary	2	1.1	3.8	Below
early latent	0	0.0	2.8	Below
Syphilis, latent (infection > 12 months)	1	0.6	3.1	Below
Tetanus	0	0.0	0.0	Consistent

Disease	Count	Rate	Utah Rate	Comparison to UT rate
Toxic shock syndrome (staphylococcal or streptococcal)	1	0.6	1.0	Consistent
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	1	0.6	0.9	Consistent
Tularemia	1	0.6	0.2	Consistent
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	1	0.6	0.5	Consistent
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	8	4.4	2.0	Consistent
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	0	0.0	0.3	Below

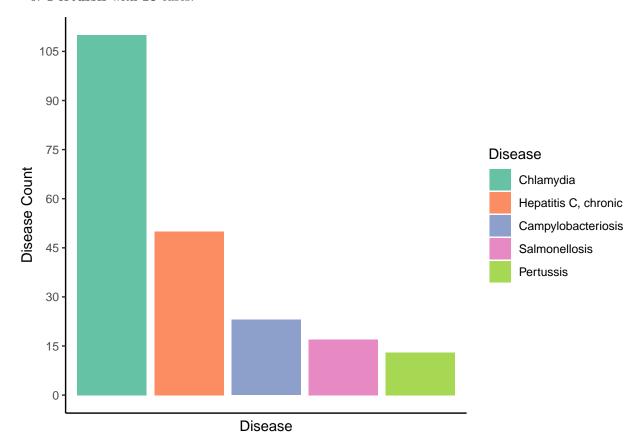
#### 5.2 Central Utah

The Central Utah Health Jurisdiction covers six counties of Utah, including Juab County, Millard County, Piute County, Sanpete County, Sevier County, and Wayne County. The 2017 population estimate for this region is 79,603.

#### 5.2.1 Central Utah Top Five Disease

The top five highest disease counts for the Central Utah area were:

- 1. Chlamydia with 110 cases.
- 2. Hepatitis C, chronic with 50 cases.
- 3. Campylobacteriosis with 23 cases.
- 4. Salmonellosis with 17 cases.
- 5. **Pertussis** with **13** cases.



# 5.2.2 Central Utah Communicable Disease Table

Disease	Count	Rate	UtahRate	Comparison to UT rate
Acinetobacter species resistant to	0	0.0	0.1	Below
carbapenems				
Acute Flaccid Myelitis	0	0.0	0.1	Below
Adverse event resulting from smallpox	0	0.0	0.0	Consistent
vaccination				
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West	0	0.0	0.0	Consistent
Nile, Dengue, or Yellow Fever)				
Babesiosis	0	0.0	0.0	Consistent
Botulism, total	0	0.0	0.0	Consistent
Botulism, foodborne	0	0.0	0.0	Consistent
Botulism, infant	0	0.0	0.0	Consistent
Botulism, other (wound/unspecified)	0	0.0	0.0	Consistent
Brucellosis	0	0.0	0.0	Consistent
Campylobacteriosis	23	28.9	19.2	Consistent
Chancroid	0	0.0	0.0	Consistent
Chickenpox	5	6.3	8.2	Consistent
Chlamydia	110	138.2	326.7	Below
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	5	6.3	2.4	Consistent
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other	0	0.0	0.2	Below
transmissible human spongiform	· ·	0.0	0	
encephalopathies				
Cryptosporidiosis	7	8.8	4.0	Consistent
Cyclosporiasis	0	0.0	0.5	Below
Dengue	0	0.0	0.2	Below
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	0	0.0	0.1	Below
Encephalitis	0	0.0	0.2	Below
Enterobacter species resistant to carbapenems	0	0.0	0.0	Consistent
Escherichia coli resistant to carbapenems	0	0.0	0.0	Consistent
Giardiasis	$\frac{\circ}{2}$	2.5	6.7	Below
Gonorrhea	12	15.1	81.9	Below
HIV infection	2	2.5	3.7	Consistent
Haemophilus influenzae, all ages, invasive	1	1.3	2.1	Consistent
disease				
nonserotype B, age $<5$ years	0	0.0	0.3	Below
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age $<5$ years	0	0.0	0.0	Consistent
Hansen's disease (Leprosy)	0	0.0	0.0	Consistent
Hantavirus infection	0	0.0	0.1	Below
Hemolytic uremic syndrome, post-diarrheal	0	0.0	0.4	Below
Hepatitis A	2	2.5	5.2	Consistent
Hepatitis B, acute	0	0.0	0.6	Below
Hepatitis B, chronic	0	0.0	3.1	Below
Hepatitis C, acute	1	1.3	3.3	Consistent
Tropasisis C, acuse	1	1.0	0.0	COMMENT

Disease	Count	Rate	UtahRate	Comparison to UT rate
Hepatitis C, chronic	50	62.8	60.2	Consistent
Hepatitis, other viral	0	0.0	0.0	Consistent
Influenza-associated hospitalization	38	1.2	48.1	Below
Influenza-associated pediatric mortality	0	0.0	0.0	Consistent
Klebsiella species resistant to carbapenems	0	0.0	0.2	Below
Legionellosis	0	0.0	1.0	Below
Leptospirosis	0	0.0	0.0	Consistent
Listeriosis	0	0.0	0.2	Below
Lyme disease	1	1.3	0.8	Consistent
Malaria	0	0.0	0.3	Below
Measles	0	0.0	0.1	Below
Meningitis, aseptic	2	2.5	3.0	Consistent
Meningitis, bacterial, other	0	0.0	1.2	Below
Meningitis, viral	2	2.5	3.0	Consistent
Meningococcal Disease (Neisseria meningitidis)	0	0.0	0.1	Below
Mumps	0	0.0	1.3	Below
Pertussis	13	16.3	14.4	Consistent
Plague	0	0.0	0.0	Consistent
Poliomyelitis, paralytic and nonparalytic	0	0.0	0.0	Consistent
Psittacosis	0	0.0	0.0	Consistent
Q fever	0	0.0	0.1	Below
Rabies, animal	1	1.3	0.7	Consistent
Rabies, human	0	0.0	0.0	Consistent
Relapsing fever, tick-borne and	0	0.0	0.1	Below
louse-borne	O .	0.0	0.1	Below
Rubella	0	0.0	0.0	Consistent
Rubella, congenital syndrome	0	0.0	0.0	Consistent
Salmonellosis	17	21.4	12.5	Consistent
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0.0	Consistent
Shiga toxin-producing Escherichia coli (STEC) infection	5	6.3	4.5	Consistent
Shigellosis	1	1.3	1.4	Consistent
Smallpox	0	0.0	0.0	Consistent
Spotted fever rickettsiosis (including	0	0.0	0.3	Below
Rocky Mountain Spotted Fever)				
Streptococcal disease, invasive, group A	3	3.8	7.2	Consistent
Streptococcal disease, invasive, group B	8	10.0	7.3	Consistent
Streptococcal disease, invasive, other	12	15.1	14.1	Consistent
Streptococcus pneumoniae, invasive disease	5	6.3	8.6	Consistent
age <5 years	0	0.0	0.5	Below
Syphilis, congenital	0	0.0	0.0	Consistent
Syphilis, early (infection < 12 months)	1	1.3	6.5	Below
primary and secondary	0	0.0	3.8	Below
early latent	1	1.3	2.8	Consistent
Syphilis, latent (infection > 12 months)	0	0.0	3.1	Below
Sydning, latent timechon > 12 months				

Disease	Count	Rate	UtahRate	Comparison to UT rate
Toxic shock syndrome (staphylococcal or streptococcal)	0	0.0	1.0	Below
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	0	0.0	0.9	Below
Tularemia	2	2.5	0.2	Consistent
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	1	1.3	0.5	Consistent
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	1	1.3	2.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	0	0.0	0.3	Below

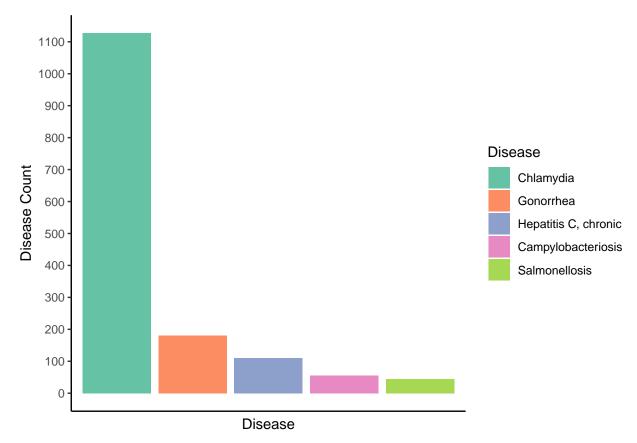
#### 5.3 Davis

The Davis Health Jurisdiction covers Davis County. The 2017 population estimate for this region is 347,637.

#### 5.3.1 Davis Top Five Disease

The top five highest disease counts for the Davis area were:

- 1. Chlamydia with 1,127 cases.
- 2. Gonorrhea with 181 cases.
- 3. Hepatitis C, chronic with 110 cases.
- 4. Campylobacteriosis with 55 cases.
- 5. Salmonellosis with 44 cases.



# 5.3.2 Davis County Communicable Disease Table

Disease	Count	Rate	${f UtahRate}$	Comparison to UT Rate
Acinetobacter species resistant to	0	0.0	0.1	Below
carbapenems	0	0.0	0.1	Below
Advance event resulting from small or	0	0.0	0.0	Consistent
Adverse event resulting from smallpox vaccination	0			
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West	0	0.0	0.0	Consistent
Nile, Dengue, or Yellow Fever)				
Babesiosis	0	0.0	0.0	Consistent
Botulism, total	0	0.0	0.0	Consistent
Botulism, foodborne	0	0.0	0.0	Consistent
Botulism, infant	0	0.0	0.0	Consistent
Botulism, other (wound/unspecified)	0	0.0	0.0	Consistent
Brucellosis	0	0.0	0.0	Consistent
Campylobacteriosis	55	15.8	19.2	Consistent
Chancroid	0	0.0	0.0	Consistent
Chickenpox	25	7.2	8.2	Consistent
Chlamydia	1,127	324.2	326.7	Consistent
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	3	0.9	2.4	Below
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other transmissible human spongiform encephalopathies	0	0.0	0.2	Below
Cryptosporidiosis	12	3.5	4.0	Consistent
Cyclosporiasis	3	0.9	0.5	Consistent
Dengue	2	0.6	0.2	Consistent
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	0	0.0	0.1	Below
Encephalitis	0	0.0	0.2	Below
Enterobacter species resistant to carbapenems	0	0.0	0.0	Consistent
Escherichia coli resistant to carbapenems	1	0.3	0.0	Consistent
Giardiasis	19	5.5	6.7	Consistent
Gonorrhea	181	52.1	81.9	Below
HIV infection	8	2.3	3.7	Consistent
Haemophilus influenzae, all ages, invasive disease	5	1.4	2.1	Consistent
nonserotype B, age <5 years	1	0.3	0.3	Consistent
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age <5 years	0	0.0	0.0	Consistent
Hansen's disease (Leprosy)	1	0.3	0.0	Consistent
Hantavirus infection	0	0.0	0.1	Below
Hemolytic uremic syndrome,	0	0.0	0.4	Below
post-diarrheal	Ÿ	3.0	0.1	231011
Hepatitis A	4	1.2	5.2	Below
Hepatitis B, acute	3	0.9	0.6	Consistent
Hepatitis B, chronic	8	2.3	3.1	Consistent

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Hepatitis C, acute	5	1.4	3.3	Below
Hepatitis C, chronic	110	31.6	60.2	Below
Hepatitis, other viral	0	0.0	0.0	Consistent
Influenza-associated hospitalization	116	3.7	48.1	Below
Influenza-associated pediatric mortality	0	0.0	0.0	Consistent
Klebsiella species resistant to carbapenems	0	0.0	0.2	Below
Legionellosis	3	0.9	1.0	Consistent
Leptospirosis	0	0.0	0.0	Consistent
Listeriosis	0	0.0	0.2	Below
Lyme disease	6	1.7	0.8	Consistent
Malaria	1	0.3	0.3	Consistent
Measles	0	0.0	0.1	Below
Meningitis, aseptic	13	3.7	3.0	Consistent
Meningitis, bacterial, other	4	1.2	1.2	Consistent
Meningitis, viral	10	2.9	3.0	Consistent
Meningococcal Disease (Neisseria	0	0.0	0.1	Below
meningitidis)	O .	0.0	0.1	Bolow
Mumps	2	0.6	1.3	Consistent
Pertussis	33	9.5	14.4	Below
Plague	0	0.0	0.0	Consistent
Poliomyelitis, paralytic and nonparalytic	0	0.0	0.0	Consistent
Psittacosis	0	0.0	0.0	Consistent
Q fever	0	0.0	0.0	Below
Rabies, animal	5	1.4	0.7	Consistent
Rabies, human	0	0.0	0.0	Consistent
Relapsing fever, tick-borne and	0	0.0	0.1	Below
louse-borne				
Rubella	0	0.0	0.0	Consistent
Rubella, congenital syndrome	0	0.0	0.0	Consistent
Salmonellosis	44	12.7	12.5	Consistent
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0.0	Consistent
Shiga toxin-producing Escherichia coli (STEC) infection	13	3.7	4.5	Consistent
Shigellosis	2	0.6	1.4	Below
Smallpox	0	0.0	0.0	Consistent
Spotted fever rickettsiosis (including Rocky Mountain Spotted Fever)	2	0.6	0.3	Consistent
Streptococcal disease, invasive, group A	14	4.0	7.2	Below
Streptococcal disease, invasive, group B	18	5.2	7.3	Consistent
Streptococcal disease, invasive, other	42	12.1	14.1	Consistent
Streptococcus pneumoniae, invasive disease	25	7.2	8.6	Consistent
age <5 years	1	0.3	0.5	Consistent
Syphilis, congenital	0	0.0	0.0	Consistent
Syphilis, early (infection < 12 months)	14	4.0	6.5	Below
primary and secondary	5	1.4	3.8	Below
early latent	9	2.6	2.8	Consistent
Syphilis, latent (infection > 12 months)	10	2.9	3.1	Consistent

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Tetanus	0	0.0	0.0	Consistent
Toxic shock syndrome (staphylococcal or streptococcal)	3	0.9	1.0	Consistent
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	3	0.9	0.9	Consistent
Tularemia	0	0.0	0.2	Below
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	2	0.6	0.5	Consistent
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	8	2.3	2.0	Consistent
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	1	0.3	0.3	Consistent

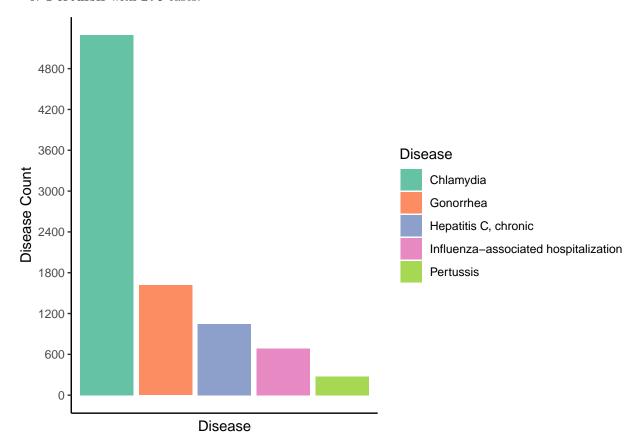
# 5.4 Salt Lake County

The Salt Lake Health Jurisdiction covers Salt Lake County. The 2017 population estimate for this region is 1,135,649.

# 5.4.1 Salt Lake County Top Five Disease

The top five highest disease counts for the Salt Lake County area were:

- 1. Chlamydia with 5,293 cases.
- 2. Gonorrhea with 1,615 cases.
- 3. Hepatitis C, chronic with 1,045 cases.
- 4. Influenza-associated hospitalization with 685 cases.
- 5. Pertussis with 276 cases.



5.4.2 Salt Lake County Communicable Disease Table

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Acinetobacter species resistant to	1	0.1	0.1	Consistent
carbapenems	0	0.0	0.1	D 1
Acute Flaccid Myelitis	0	0.0	0.1	Below
Adverse event resulting from smallpox vaccination	0	0.0	0.0	Consistent
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West	0	0.0	0.0	Consistent
Nile, Dengue, or Yellow Fever)				
Babesiosis	0	0.0	0.0	Consistent
Botulism, total	1	0.1	0.0	Consistent
Botulism, foodborne	0	0.0	0.0	Consistent
Botulism, infant	1	0.1	0.0	Consistent
Botulism, other (wound/unspecified)	0	0.0	0.0	Consistent
Brucellosis	0	0.0	0.0	Consistent
Campylobacteriosis	235	20.7	19.2	Consistent
Chancroid	0	0.0	0.0	Consistent
Chickenpox	95	8.4	8.2	Consistent
Chlamydia	5,293	466.1	326.7	Above
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	18	1.6	2.4	Below
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other transmissible human spongiform encephalopathies	4	0.4	0.2	Consistent
Cryptosporidiosis	23	2.0	4.0	Below
Cyclosporiasis	5	0.4	0.5	Consistent
Dengue	4	0.4	0.2	Consistent
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	2	0.2	0.1	Consistent
Encephalitis	4	0.4	0.2	Consistent
Enterobacter species resistant to carbapenems	0	0.0	0.0	Consistent
Escherichia coli resistant to carbapenems	0	0.0	0.0	Consistent
Giardiasis	67	5.9	6.7	Consistent
Gonorrhea	1,615	142.2	81.9	Above
HIV infection	80	7.0	3.7	Above
Haemophilus influenzae, all ages, invasive disease	23	2.0	2.1	Consistent
nonserotype B, age <5 years	2	0.2	0.3	Consistent
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age <5 years	0	0.0	0.0	Consistent
Hansen's disease (Leprosy)	0	0.0	0.0	Consistent
Hantavirus infection	1	0.0	0.1	Consistent
Hemolytic uremic syndrome,	2	0.1	0.4	Consistent
post-diarrheal	4.6			
Hepatitis A	108	9.5	5.2	Above
Hepatitis B, acute	15	1.3	0.6	Above
Hepatitis B, chronic	56	4.9	3.1	Above

Count	Rate	UtahRate	Comparison to UT Rate
63	5.5	3.3	Above
1,045	92.0	60.2	Above
1	0.1	0.0	Consistent
685	22.1	48.1	Below
0	0.0	0.0	Consistent
5	0.4	0.2	Consistent
			Consistent
1			Consistent
3			Consistent
			Consistent
-	0.2	0.1	Compression
39	2.8	1 3	Above
			Above
			Consistent
			Below
			Consistent
			Consistent
			Consistent
			Consistent
			Consistent
0		0.0	Consistent
42	3.7	4.5	Consistent
22	1.9	1.4	Consistent
0	0.0	0.0	Consistent
6	0.5	0.3	Consistent
146	12.9	7.2	Above
81	7.1	7.3	Consistent
166	14.6	14.1	Consistent
127	11.2	8.6	Above
6	0.5	0.5	Consistent
0	0.0	0.0	Consistent
143	12.6	6.5	Above
			Above
57			Above
59	5.2	3.1	Above
	63 1,045 1 685 0 5 12 1 3 8 2 3 36 19 47 2 32 276 0 0 0 1 1 4 0 0 1 1 0 0 1 6 1 6 1 6 6 1 7 6 6 7 7 7 8 8 8 1 9 6 7 8 7 8 9 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9	63	63

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Tetanus	0	0.0	0.0	Consistent
Toxic shock syndrome (staphylococcal or streptococcal)	23	2.0	1.0	Above
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	21	1.8	0.9	Above
Tularemia	0	0.0	0.2	Below
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	4	0.4	0.5	Consistent
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	30	2.6	2.0	Consistent
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	5	0.4	0.3	Consistent

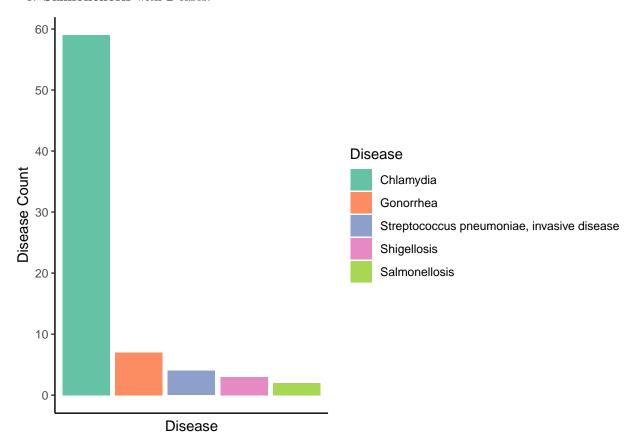
# 5.5 San Juan County

The San Juan Health Jurisdiction covers San Juan County. The 2017 population estimate for this region is 15,356.

### 5.5.1 San Juan County Top Five Disease

The top five highest disease counts for the San Juan County area were:

- 1. Chlamydia with 59 cases.
- 2. Gonorrhea with 7 cases.
- 3. Streptococcus pneumoniae, invasive disease with 4 cases.
- 4. Shigellosis with 3 cases.
- 5. Salmonellosis with 2 cases.



5.5.2 San Juan County Communicable Disease Table

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Acinetobacter species resistant to	0	0.0	0.1	Below
carbapenems				D 1
Acute Flaccid Myelitis	0	0.0	0.1	Below
Adverse event resulting from smallpox vaccination	0	0.0	0.0	Consistent
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West	0	0.0	0.0	Consistent
Nile, Dengue, or Yellow Fever)		0.0	0.0	Q
Babesiosis	0	0.0	0.0	Consistent
Botulism, total	0	0.0	0.0	Consistent
Botulism, foodborne	0	0.0	0.0	Consistent
Botulism, infant	0	0.0	0.0	Consistent
Botulism, other (wound/unspecified)	0	0.0	0.0	Consistent
Brucellosis	0	0.0	0.0	Consistent
Campylobacteriosis	0	0.0	19.2	Below
Chancroid	0	0.0	0.0	Consistent
Chickenpox	0	0.0	8.2	Below
Chlamydia	59	384.2	326.7	Consistent
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	1	6.5	2.4	Consistent
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other transmissible human spongiform encephalopathies	0	0.0	0.2	Below
Cryptosporidiosis	0	0.0	4.0	Below
Cyclosporiasis	0	0.0	0.5	Below
Dengue	0	0.0	0.2	Below
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	0	0.0	0.1	Below
Encephalitis	0	0.0	0.2	Below
Enterobacter species resistant to carbapenems	0	0.0	0.0	Consistent
Escherichia coli resistant to carbapenems	0	0.0	0.0	Consistent
Giardiasis	0	0.0	6.7	Below
Gonorrhea	7	45.6	81.9	Below
HIV infection	0	0.0	3.7	Below
Haemophilus influenzae, all ages, invasive disease	0	0.0	2.1	Below
nonserotype B, age <5 years	0	0.0	0.3	Below
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age <5 years	0	0.0	0.0	Consistent
Hansen's disease (Leprosy)	0	0.0	0.0	Consistent
Hantavirus infection	0	0.0	0.0	Below
Hemolytic uremic syndrome,	0	0.0	0.4	Below
post-diarrheal	^	0.0		D.I.
Hepatitis A	0	0.0	5.2	Below
Hepatitis B, acute	0	0.0	0.6	Below
Hepatitis B, chronic	0	0.0	3.1	Below

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Hepatitis C, acute	0	0.0	3.3	Below
Hepatitis C, chronic	1	6.5	60.2	Below
Hepatitis, other viral	0	0.0	0.0	Consistent
Influenza-associated hospitalization	1	0.0	48.1	Below
Influenza-associated pediatric mortality	0	0.0	0.0	Consistent
Klebsiella species resistant to carbapenems	0	0.0	0.2	Below
Legionellosis	0	0.0	1.0	Below
Leptospirosis	0	0.0	0.0	Consistent
Listeriosis	0	0.0	0.2	Below
Lyme disease	0	0.0	0.8	Below
Malaria	0	0.0	0.3	Below
Measles	0	0.0	0.1	Below
Meningitis, aseptic	0	0.0	3.0	Below
Meningitis, bacterial, other	0	0.0	1.2	Below
Meningitis, viral	0	0.0	3.0	Below
Meningococcal Disease (Neisseria meningitidis)	0	0.0	0.1	Below
Mumps	0	0.0	1.3	Below
Pertussis	0	0.0	14.4	Below
Plague	0	0.0	0.0	Consistent
Poliomyelitis, paralytic and nonparalytic	0	0.0	0.0	Consistent
Psittacosis	0	0.0	0.0	Consistent
Q fever	0	0.0	0.1	Below
Rabies, animal	0	0.0	0.7	Below
Rabies, human	0	0.0	0.0	Consistent
Relapsing fever, tick-borne and louse-borne	0	0.0	0.1	Below
Rubella	0	0.0	0.0	Consistent
Rubella, congenital syndrome	0	0.0	0.0	Consistent
Salmonellosis	2	13.0	12.5	Consistent
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0.0	Consistent
Shiga toxin-producing Escherichia coli (STEC) infection	0	0.0	4.5	Below
Shigellosis	3	19.5	1.4	Consistent
Smallpox	0	0.0	0.0	Consistent
Spotted fever rickettsiosis (including Rocky Mountain Spotted Fever)	0	0.0	0.3	Below
Streptococcal disease, invasive, group A	1	6.5	7.2	Consistent
Streptococcal disease, invasive, group B	0	0.0	7.3	Below
Streptococcal disease, invasive, other	0	0.0	14.1	Below
Streptococcus pneumoniae, invasive disease	4	26.0	8.6	Consistent
age < 5 years	0	0.0	0.5	Below
Syphilis, congenital	0	0.0	0.0	Consistent
Syphilis, early (infection $< 12$ months)	0	0.0	6.5	Below
primary and secondary	0	0.0	3.8	Below
early latent	0	0.0	2.8	Below
Syphilis, latent (infection $> 12$ months)	1	6.5	3.1	Consistent

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Tetanus	0	0.0	0.0	Consistent
Toxic shock syndrome (staphylococcal or streptococcal)	0	0.0	1.0	Below
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	0	0.0	0.9	Below
Tularemia	0	0.0	0.2	Below
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	0	0.0	0.5	Below
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	1	6.5	2.0	Consistent
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	0	0.0	0.3	Below

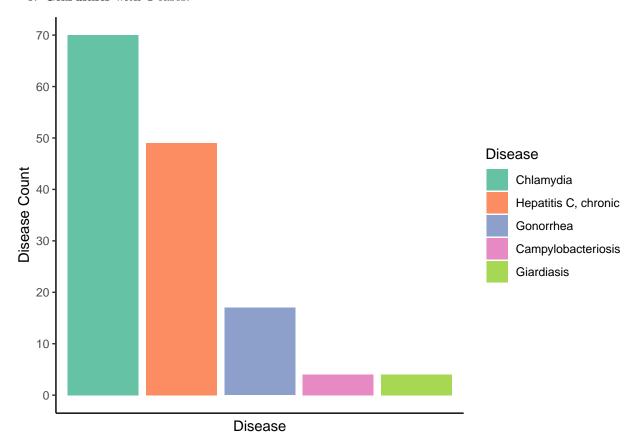
### 5.6 Southeastern Utah

The Southeastern Health Jurisdiction covers three counties, including Carbon County, Emery County, and Grand County. The 2017 population estimate for this region is 40,046.

### 5.6.1 Southeastern Utah Top Five Disease

The top five highest disease counts for the Southeastern Utah area were:

- 1. Chlamydia with 70 cases.
- 2. Hepatitis C, chronic with 49 cases.
- 3. Gonorrhea with 17 cases.
- 4. Campylobacteriosis with 4 cases.
- 5. Giardiasis with 4 cases.



5.6.2 Southeastern Utah Communicable Disease Table

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Acinetobacter species resistant to	0	0.0	0.1	Below
carbapenems				
Acute Flaccid Myelitis	0	0.0	0.1	Below
Adverse event resulting from smallpox	0	0.0	0.0	Consistent
vaccination				
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West	0	0.0	0.0	Consistent
Nile, Dengue, or Yellow Fever)				
Babesiosis	0	0.0	0.0	Consistent
Botulism, total	0	0.0	0.0	Consistent
Botulism, foodborne	0	0.0	0.0	Consistent
Botulism, infant	0	0.0	0.0	Consistent
Botulism, other (wound/unspecified)	0	0.0	0.0	Consistent
Brucellosis	0	0.0	0.0	Consistent
Campylobacteriosis	4	10.0	19.2	Consistent
Chancroid	0	0.0	0.0	Consistent
Chickenpox	2	5.0	8.2	Consistent
Chlamydia	70	174.8	326.7	Below
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	0	0.0	2.4	Below
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other	0	0.0	0.2	Below
transmissible human spongiform encephalopathies	Ů	0.0	0.2	
Cryptosporidiosis	0	0.0	4.0	Below
Cyclosporiasis	0	0.0	0.5	Below
Dengue	0	0.0	0.2	Below
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	0	0.0	0.1	Below
Encephalitis	0	0.0	0.2	Below
Enterobacter species resistant to	0	0.0	0.0	Consistent
carbapenems				
Escherichia coli resistant to carbapenems	0	0.0	0.0	Consistent
Giardiasis	4	10.0	6.7	Consistent
Gonorrhea	17	42.5	81.9	Below
HIV infection	0	0.0	3.7	Below
Haemophilus influenzae, all ages, invasive disease	0	0.0	2.1	Below
nonserotype B, age <5 years	0	0.0	0.3	Below
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age <5 years	0	0.0	0.0	Consistent
Hansen's disease (Leprosy)	0	0.0	0.0	Consistent
Hantavirus infection	0	0.0	0.1	Below
Hemolytic uremic syndrome,	0	0.0	0.4	Below
post-diarrheal				
Hepatitis A	1	2.5	5.2	Consistent
Hepatitis B, acute	0	0.0	0.6	Below
Hepatitis B, chronic	0	0.0	3.1	Below

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Hepatitis C, acute	2	5.0	3.3	Consistent
Hepatitis C, chronic	49	122.4	60.2	Above
Hepatitis, other viral	0	0.0	0.0	Consistent
Influenza-associated hospitalization	16	0.5	48.1	Below
Influenza-associated pediatric mortality	0	0.0	0.0	Consistent
Klebsiella species resistant to carbapenems	0	0.0	0.2	Below
Legionellosis	0	0.0	1.0	Below
Leptospirosis	0	0.0	0.0	Consistent
Listeriosis	0	0.0	0.2	Below
Lyme disease	0	0.0	0.8	Below
Malaria	0	0.0	0.3	Below
Measles	0	0.0	0.1	Below
Meningitis, aseptic	0	0.0	3.0	Below
Meningitis, bacterial, other	0	0.0	1.2	Below
Meningitis, viral	0	0.0	3.0	Below
Meningococcal Disease (Neisseria meningitidis)	0	0.0	0.1	Below
Mumps	0	0.0	1.3	Below
Pertussis	0	0.0	14.4	Below
Plague	0	0.0	0.0	Consistent
Poliomyelitis, paralytic and nonparalytic	0	0.0	0.0	Consistent
Psittacosis	0	0.0	0.0	Consistent
Q fever	0	0.0	0.1	Below
Rabies, animal	0	0.0	0.7	Below
Rabies, human	0	0.0	0.0	Consistent
Relapsing fever, tick-borne and louse-borne	0	0.0	0.1	Below
Rubella	0	0.0	0.0	Consistent
Rubella, congenital syndrome	0	0.0	0.0	Consistent
Salmonellosis	2	5.0	12.5	Below
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0.0	Consistent
Shiga toxin-producing Escherichia coli (STEC) infection	1	2.5	4.5	Consistent
Shigellosis	0	0.0	1.4	Below
Smallpox	0	0.0	0.0	Consistent
Spotted fever rickettsiosis (including Rocky Mountain Spotted Fever)	0	0.0	0.3	Below
Streptococcal disease, invasive, group A	1	2.5	7.2	Consistent
Streptococcal disease, invasive, group B	1	2.5	7.3	Consistent
Streptococcal disease, invasive, other	2	5.0	14.1	Below
Streptococcus pneumoniae, invasive disease	3	7.5	8.6	Consistent
age <5 years	1	2.5	0.5	Consistent
Syphilis, congenital	0	0.0	0.0	Consistent
Syphilis, early (infection < 12 months)	1	2.5	6.5	Consistent
primary and secondary	1	2.5	3.8	Consistent
early latent	0	0.0	2.8	Below
Syphilis, latent (infection > 12 months)	0	0.0	3.1	Below
,			-	

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Tetanus	0	0.0	0.0	Consistent
Toxic shock syndrome (staphylococcal or streptococcal)	0	0.0	1.0	Below
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	0	0.0	0.9	Below
Tularemia	0	0.0	0.2	Below
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	0	0.0	0.5	Below
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	0	0.0	2.0	Below
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	0	0.0	0.3	Below

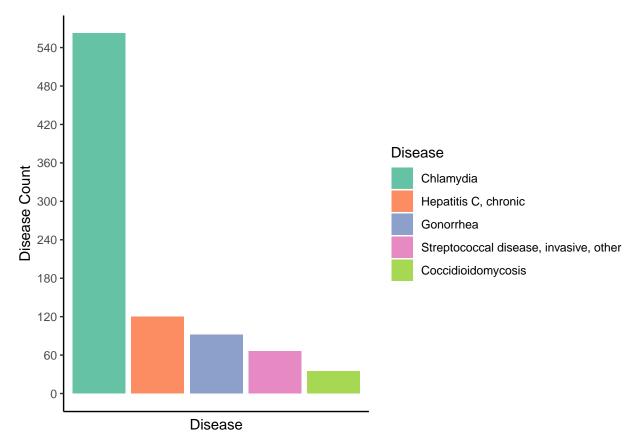
### 5.7 Southwest Utah

The Southwest Health Jurisdiction covers five counties, including Beaver County, Garfield County, Iron County, Kane County, and Wasington County. The 2017 population estimate for this region is 235,694.

#### 5.7.1 Southwest Utah Top Five Disease

The top five highest disease counts for the Southwest Utah area were:

- 1. Chlamydia with 562 cases.
- 2. Hepatitis C, chronic with 120 cases.
- 3. Gonorrhea with 92 cases.
- 4. Streptococcal disease, invasive, other with 66 cases.
- 5. Coccidioidomycosis with 35 cases.



# 5.7.2 Southwest Utah Communicable Disease Table

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Acinetobacter species resistant to	1	0.4	0.1	Consistent
carbapenems				
Acute Flaccid Myelitis	0	0.0	0.1	Below
Adverse event resulting from smallpox	0	0.0	0.0	Consistent
vaccination				
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West Nile, Dengue, or Yellow Fever)	0	0.0	0.0	Consistent
Babesiosis	0	0.0	0.0	Consistent
Botulism, total	0	0.0	0.0	Consistent
·		0.0	0.0	Consistent
Botulism, foodborne	0			
Botulism, infant	0	0.0	0.0	Consistent
Botulism, other (wound/unspecified)	0	0.0	0.0	Consistent
Brucellosis	0	0.0	0.0	Consistent
Campylobacteriosis	34	14.4	19.2	Consistent
Chancroid	0	0.0	0.0	Consistent
Chickenpox	33	14.0	8.2	Above
Chlamydia	562	238.4	326.7	Below
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	35	14.8	2.4	Above
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other	1	0.4	0.2	Consistent
transmissible human spongiform				
encephalopathies				
Cryptosporidiosis	13	5.5	4.0	Consistent
Cyclosporiasis	0	0.0	0.5	Below
Dengue	0	0.0	0.2	Below
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	0	0.0	0.1	Below
Encephalitis	1	0.4	0.2	Consistent
Enterobacter species resistant to	0	0.0	0.0	Consistent
carbapenems  Eask picking acli registant to carban anoma	0	0.0	0.0	Consistent
Escherichia coli resistant to carbapenems Giardiasis	0 16	$0.0 \\ 6.8$	0.0	Consistent
			6.7	
Gonorrhea HIV infection	92	39.0	81.9	Below
	6	2.5	3.7	Consistent
Haemophilus influenzae, all ages, invasive disease	6	2.5	2.1	Consistent
nonserotype B, age <5 years	1	0.4	0.3	Consistent
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age <5 years	0	0.0	0.0	Consistent
Hansen's disease (Leprosy)	0	0.0	0.0	Consistent
Hantavirus infection	0	0.0	0.1	Below
Hemolytic uremic syndrome,	5	2.1	0.4	Consistent
post-diarrheal			V	
Hepatitis A	3	1.3	5.2	Below
Hepatitis B, acute	0	0.0	0.6	Below
Hepatitis B, chronic	4	1.7	3.1	Consistent

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Hepatitis C, acute	6	2.5	3.3	Consistent
Hepatitis C, chronic	120	50.9	60.2	Below
Hepatitis, other viral	0	0.0	0.0	Consistent
Influenza-associated hospitalization	120	3.9	48.1	Below
Influenza-associated pediatric mortality	0	0.0	0.0	Consistent
Klebsiella species resistant to carbapenems	1	0.4	0.2	Consistent
Legionellosis	1	0.4	1.0	Consistent
Leptospirosis	0	0.0	0.0	Consistent
Listeriosis	1	0.4	0.2	Consistent
Lyme disease	1	0.4	0.8	Consistent
Malaria	0	0.0	0.3	Below
Measles	0	0.0	0.1	Below
Meningitis, aseptic	0	0.0	3.0	Below
Meningitis, bacterial, other	0	0.0	1.2	Below
Meningitis, viral	2	0.8	3.0	Below
Meningococcal Disease (Neisseria meningitidis)	0	0.0	0.1	Below
Mumps	1	0.4	1.3	Below
Pertussis	3	1.3	14.4	Below
Plague	0	0.0	0.0	Consistent
Poliomyelitis, paralytic and nonparalytic	0	0.0	0.0	Consistent
Psittacosis	0	0.0	0.0	Consistent
Q fever	0	0.0	0.1	Below
Rabies, animal	1	0.4	0.7	Consistent
Rabies, human	0	0.0	0.0	Consistent
Relapsing fever, tick-borne and louse-borne	1	0.4	0.1	Consistent
Rubella	0	0.0	0.0	Consistent
Rubella, congenital syndrome	0	0.0	0.0	Consistent
Salmonellosis	22	9.3	12.5	Consistent
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0.0	Consistent
Shiga toxin-producing Escherichia coli (STEC) infection	27	11.5	4.5	Above
Shigellosis	4	1.7	1.4	Consistent
Smallpox	0	0.0	0.0	Consistent
Spotted fever rickettsiosis (including Rocky Mountain Spotted Fever)	0	0.0	0.3	Below
Streptococcal disease, invasive, group A	9	3.8	7.2	Below
Streptococcal disease, invasive, group B	19	8.1	7.3	Consistent
Streptococcal disease, invasive, other	66	28.0	14.1	Above
Streptococcus pneumoniae, invasive disease	21	8.9	8.6	Consistent
age <5 years	1	0.4	0.5	Consistent
Syphilis, congenital	0	0.0	0.0	Consistent
Syphilis, early (infection < 12 months)	15	6.4	6.5	Consistent
primary and secondary	8	3.4	3.8	Consistent
early latent	7	3.0	2.8	Consistent
Syphilis, latent (infection > 12 months)	4	1.7	3.1	Consistent
V 1 ( )	_			

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Tetanus	0	0.0	0.0	Consistent
Toxic shock syndrome (staphylococcal or streptococcal)	1	0.4	1.0	Consistent
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	1	0.4	0.9	Consistent
Tularemia	0	0.0	0.2	Below
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	1	0.4	0.5	Consistent
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	0	0.0	2.0	Below
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	1	0.4	0.3	Consistent

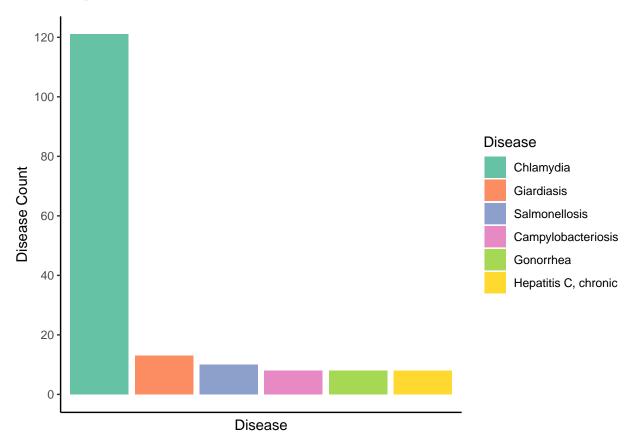
# 5.8 Summit County

The Summit County Health Jurisdiction covers Summit County. The 2017 population estimate for this region is 41,106.

### 5.8.1 Summit County Utah Top Five Disease

The top five highest disease counts for the Summit County area were:

- 1. Chlamydia with 121 cases.
- 2. Giardiasis with 13 cases.
- 3. Salmonellosis with 10 cases.
- 4. Campylobacteriosis with 8 cases, which is tied with
- 5. Gonorrhea with 8 cases, and
  - 5a. Hepatitis C, chronic with 8 cases.



# 5.8.2 Summit County Communicable Disease Table

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Acinetobacter species resistant to	0	0.0	0.1	Below
carbapenems				
Acute Flaccid Myelitis	0	0.0	0.1	Below
Adverse event resulting from smallpox vaccination	0	0.0	0.0	Consistent
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West Nile, Dengue, or Yellow Fever)	0	0.0	0.0	Consistent
Babesiosis	1	2.4	0.0	Consistent
Botulism, total	0	0.0	0.0	Consistent
·	0	0.0	0.0	Consistent
Botulism, foodborne	-			
Botulism, infant	0	0.0	0.0	Consistent Consistent
Botulism, other (wound/unspecified)	0			Consistent
Brucellosis	0	0.0	0.0	
Campylobacteriosis	8	19.5	19.2	Consistent
Chancroid	0	0.0	0.0	Consistent
Chickenpox	4	9.7	8.2	Consistent
Chlamydia	121	294.4	326.7	Consistent
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	0	0.0	2.4	Below
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other transmissible human spongiform encephalopathies	1	2.4	0.2	Consistent
Cryptosporidiosis	4	9.7	4.0	Consistent
Cyclosporiasis	1	2.4	0.5	Consistent
Dengue	0	0.0	0.2	Below
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	0	0.0	0.1	Below
Encephalitis	0	0.0	0.2	Below
Enterobacter species resistant to carbapenems	0	0.0	0.0	Consistent
Escherichia coli resistant to carbapenems	0	0.0	0.0	Consistent
Giardiasis	13	31.6	6.7	Above
Gonorrhea	8	19.5	81.9	Below
HIV infection	1	2.4	3.7	Consistent
Haemophilus influenzae, all ages, invasive disease	1	2.4	2.1	Consistent
nonserotype B, age <5 years	0	0.0	0.3	Below
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age <5 years	0	0.0	0.0	Consistent
Hansen's disease (Leprosy)	0	0.0	0.0	Consistent
Hantavirus infection	0	0.0	0.1	Below
Hemolytic uremic syndrome, post-diarrheal	0	0.0	0.4	Below
Hepatitis A	0	0.0	5.2	Below
Hepatitis B, acute	0	0.0	0.6	Below
Hepatitis B, chronic	2	4.9	3.1	Consistent

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Hepatitis C, acute	0	0.0	3.3	Below
Hepatitis C, chronic	8	19.5	60.2	Below
Hepatitis, other viral	0	0.0	0.0	Consistent
Influenza-associated hospitalization	27	0.9	48.1	Below
Influenza-associated pediatric mortality	0	0.0	0.0	Consistent
Klebsiella species resistant to carbapenems	0	0.0	0.2	Below
Legionellosis	3	7.3	1.0	Consistent
Leptospirosis	0	0.0	0.0	Consistent
Listeriosis	0	0.0	0.2	Below
Lyme disease	3	7.3	0.8	Consistent
Malaria	0	0.0	0.3	Below
Measles	0	0.0	0.1	Below
Meningitis, aseptic	2	4.9	3.0	Consistent
Meningitis, bacterial, other	0	0.0	1.2	Below
Meningitis, viral	4	9.7	3.0	Consistent
Meningococcal Disease (Neisseria	0	0.0	0.1	Below
meningitidis)	· ·	0.0	0.1	Bolow
Mumps	0	0.0	1.3	Below
Pertussis	1	$\frac{0.0}{2.4}$	14.4	Below
Plague	0	0.0	0.0	Consistent
Poliomyelitis, paralytic and nonparalytic	0	0.0	0.0	Consistent
Psittacosis	0	0.0	0.0	Consistent
Q fever	0	0.0	0.0	Below
Rabies, animal	0	0.0	0.7	Below
Rabies, human	0	0.0	0.0	Consistent
Relapsing fever, tick-borne and	1	$\frac{0.0}{2.4}$	0.1	Consistent
louse-borne				
Rubella	0	0.0	0.0	Consistent
Rubella, congenital syndrome	0	0.0	0.0	Consistent
Salmonellosis	10	24.3	12.5	Consistent
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0.0	Consistent
Shiga toxin-producing Escherichia coli (STEC) infection	0	0.0	4.5	Below
Shigellosis	1	2.4	1.4	Consistent
Smallpox	0	0.0	0.0	Consistent
Spotted fever rickettsiosis (including Rocky Mountain Spotted Fever)	0	0.0	0.3	Below
Streptococcal disease, invasive, group A	1	2.4	7.2	Consistent
Streptococcal disease, invasive, group B	2	4.9	7.3	Consistent
Streptococcal disease, invasive, other	1	2.4	14.1	Below
Streptococcus pneumoniae, invasive disease	3	7.3	8.6	Consistent
age <5 years	1	2.4	0.5	Consistent
Syphilis, congenital	0	0.0	0.0	Consistent
Syphilis, early (infection < 12 months)	0	0.0	6.5	Below
primary and secondary	0	0.0	3.8	Below
early latent	0	0.0	2.8	Below
Syphilis, latent (infection $> 12$ months)	0	0.0	3.1	Below
,				

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Tetanus	0	0.0	0.0	Consistent
Toxic shock syndrome (staphylococcal or streptococcal)	0	0.0	1.0	Below
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	0	0.0	0.9	Below
Tularemia	0	0.0	0.2	Below
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	0	0.0	0.5	Below
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	0	0.0	2.0	Below
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	0	0.0	0.3	Below

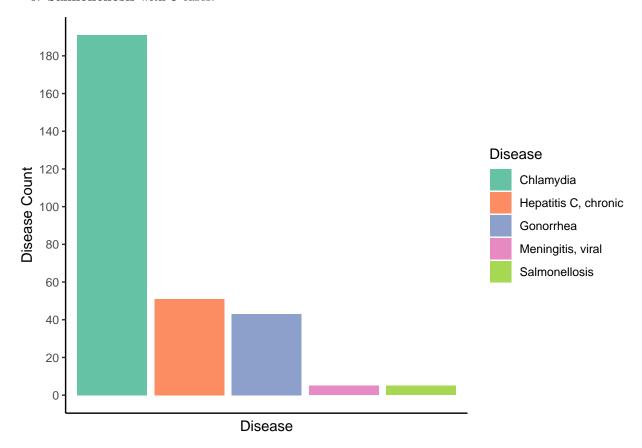
# 5.9 Tooele County

The Tooele County Health Jurisdiction covers Tooele County. The 2017 population estimate for this region is  $67,\!456$ .

### 5.9.1 Tooele County Top Five Disease

The top five highest disease counts for the Tooele County area were:

- 1. Chlamydia with 191 cases.
- 2. Hepatitis C, chronic with 51 cases.
- 3. Gonorrhea with 43 cases.
- 4. Meningitis, viral with 5 cases.
- 5. Salmonellosis with 5 cases.



 ${\bf 5.9.2}\quad {\bf Tooele~County~Communicable~Disease~Table}$ 

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Acinetobacter species resistant to	0	0.0	0.1	Below
carbapenems				
Acute Flaccid Myelitis	0	0.0	0.1	Below
Adverse event resulting from smallpox vaccination	0	0.0	0.0	Consistent
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West Nile, Dengue, or Yellow Fever)	0	0.0	0.0	Consistent
Babesiosis	0	0.0	0.0	Consistent
Botulism, total	0	0.0	0.0	Consistent
Botulism, foodborne	0	0.0	0.0	Consistent
Botulism, infant	0	0.0	0.0	Consistent
Botulism, other (wound/unspecified)	0	0.0	0.0	Consistent
Brucellosis	-	0.0	0.0	Consistent
	0			
Clampylobacteriosis	3	4.4	19.2	Below
Chancroid	0	0.0	0.0	Consistent
Chickenpox	0	0.0	8.2	Below
Chlamydia	191	283.1	326.7	Below
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	1	1.5	2.4	Consistent
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other transmissible human spongiform encephalopathies	0	0.0	0.2	Below
Cryptosporidiosis	0	0.0	4.0	Below
Cyclosporiasis	3	4.4	0.5	Consistent
Dengue	0	0.0	0.2	Below
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	0	0.0	0.1	Below
Encephalitis	0	0.0	0.2	Below
Enterobacter species resistant to carbapenems	0	0.0	0.0	Consistent
Escherichia coli resistant to carbapenems	0	0.0	0.0	Consistent
Giardiasis	0	0.0	6.7	Below
Gonorrhea	43	63.7	81.9	Consistent
HIV infection	1	1.5	3.7	Consistent
Haemophilus influenzae, all ages, invasive disease	0	0.0	2.1	Below
nonserotype B, age <5 years	0	0.0	0.3	Below
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age <5 years	0	0.0	0.0	Consistent
Hansen's disease (Leprosy)	0	0.0	0.0	Consistent
Hantavirus infection	0	0.0	0.1	Below
Hemolytic uremic syndrome, post-diarrheal	0	0.0	0.4	Below
Hepatitis A	2	3.0	5.2	Consistent
Hepatitis B, acute	0	0.0	0.6	Below
Hepatitis B, chronic	1	1.5	3.1	Consistent

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Hepatitis C, acute	0	0.0	3.3	Below
Hepatitis C, chronic	51	75.6	60.2	Consistent
Hepatitis, other viral	0	0.0	0.0	Consistent
Influenza-associated hospitalization	32	1.0	48.1	Below
Influenza-associated pediatric mortality	0	0.0	0.0	Consistent
Klebsiella species resistant to carbapenems	0	0.0	0.2	Below
Legionellosis	1	1.5	1.0	Consistent
Leptospirosis	0	0.0	0.0	Consistent
Listeriosis	0	0.0	0.2	Below
Lyme disease	0	0.0	0.8	Below
Malaria	1	1.5	0.3	Consistent
Measles	0	0.0	0.1	Below
Meningitis, aseptic	0	0.0	3.0	Below
Meningitis, bacterial, other	0	0.0	1.2	Below
Meningitis, viral	5	7.4	3.0	Consistent
Meningococcal Disease (Neisseria	0	0.0	0.1	Below
meningitidis)				
Mumps	0	0.0	1.3	Below
Pertussis	0	0.0	14.4	Below
Plague	0	0.0	0.0	Consistent
Poliomyelitis, paralytic and nonparalytic	0	0.0	0.0	Consistent
Psittacosis	0	0.0	0.0	Consistent
Q fever	0	0.0	0.1	Below
Rabies, animal	0	0.0	0.7	Below
Rabies, human	0	0.0	0.0	Consistent
Relapsing fever, tick-borne and	0	0.0	0.1	Below
louse-borne				
Rubella	0	0.0	0.0	Consistent
Rubella, congenital syndrome	0	0.0	0.0	Consistent
Salmonellosis	5	7.4	12.5	Consistent
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0.0	Consistent
Shiga toxin-producing Escherichia coli (STEC) infection	3	4.4	4.5	Consistent
Shigellosis	0	0.0	1.4	Below
Smallpox	0	0.0	0.0	Consistent
Spotted fever rickettsiosis (including Rocky Mountain Spotted Fever)	0	0.0	0.3	Below
Streptococcal disease, invasive, group A	3	4.4	7.2	Consistent
Streptococcal disease, invasive, group B	3	4.4	7.3	Consistent
Streptococcal disease, invasive, other	2	3.0	14.1	Below
Streptococcus pneumoniae, invasive disease	3	4.4	8.6	Consistent
age <5 years	1	1.5	0.5	Consistent
Syphilis, congenital	0	0.0	0.0	Consistent
Syphilis, early (infection < 12 months)	1	1.5	6.5	Below
primary and secondary	1	1.5	3.8	Consistent
early latent	0	0.0	2.8	Below
Syphilis, latent (infection > 12 months)	4	5.9	3.1	Consistent

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Tetanus	0	0.0	0.0	Consistent
Toxic shock syndrome (staphylococcal or streptococcal)	0	0.0	1.0	Below
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	0	0.0	0.9	Below
Tularemia	1	1.5	0.2	Consistent
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	0	0.0	0.5	Below
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	0	0.0	2.0	Below
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	0	0.0	0.3	Below

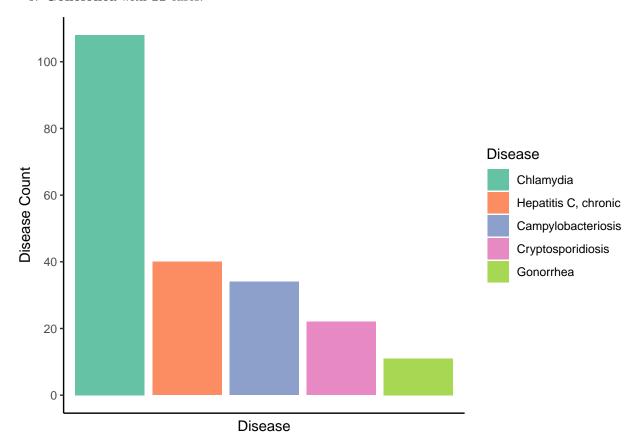
### 5.10 TriCounty

The TriCounty Health Jurisdiction covers three counties, including Daggett County, Duchesne County, and Uintah County. The 2017 population estimate for this region is 56,205.

### 5.10.1 TriCounty Top Five Disease

The top five highest disease counts for the TriCounty area were:

- 1. Chlamydia with 108 cases.
- 2. Hepatitis C, chronic with 40 cases.
- 3. Campylobacteriosis with 34 cases.
- 4. Cryptosporidiosis with 22 cases.
- 5. Gonorrhea with 11 cases.



 ${\bf 5.10.2} \quad {\bf TriCounty} \ {\bf Communicable} \ {\bf Disease} \ {\bf Table}$ 

Disease	Count	Rate	${f UtahRate}$	Comparison to UT Rate
Acinetobacter species resistant to	0	0.0	0.1	Below
carbapenems	0	0.0	0.1	Below
Advance event regulting from small or	0	0.0	0.0	Consistent
Adverse event resulting from smallpox vaccination	0			
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West	0	0.0	0.0	Consistent
Nile, Dengue, or Yellow Fever)				
Babesiosis	0	0.0	0.0	Consistent
Botulism, total	0	0.0	0.0	Consistent
Botulism, foodborne	0	0.0	0.0	Consistent
Botulism, infant	0	0.0	0.0	Consistent
Botulism, other (wound/unspecified)	0	0.0	0.0	Consistent
Brucellosis	0	0.0	0.0	Consistent
Campylobacteriosis	34	60.5	19.2	Above
Chancroid	0	0.0	0.0	Consistent
Chickenpox	2	3.6	8.2	Consistent
Chlamydia	108	192.2	326.7	Below
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	4	7.1	2.4	Consistent
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other transmissible human spongiform encephalopathies	0	0.0	0.2	Below
Cryptosporidiosis	22	39.1	4.0	Above
Cyclosporiasis	0	0.0	0.5	Below
Dengue	0	0.0	0.2	Below
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	0	0.0	0.1	Below
Encephalitis	0	0.0	0.2	Below
Enterobacter species resistant to carbapenems	0	0.0	0.0	Consistent
Escherichia coli resistant to carbapenems	0	0.0	0.0	Consistent
Giardiasis	6	10.7	6.7	Consistent
Gonorrhea	11	19.6	81.9	Below
HIV infection	0	0.0	3.7	Below
Haemophilus influenzae, all ages, invasive disease	2	3.6	2.1	Consistent
nonserotype B, age <5 years	1	1.8	0.3	Consistent
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age <5 years	0	0.0	0.0	Consistent
Hansen's disease (Leprosy)	0	0.0	0.0	Consistent
Hantavirus infection	1	1.8	0.1	Consistent
Hemolytic uremic syndrome,	0	0.0	0.4	Below
post-diarrheal	J	0.0	0.1	Dolow
Hepatitis A	0	0.0	5.2	Below
Hepatitis B, acute	0	0.0	0.6	Below
Hepatitis B, chronic	$\frac{\sigma}{2}$	3.6	3.1	Consistent

Count	Rate	UtahRate	Comparison to UT Rate
0	0.0	3.3	Below
40	71.2	60.2	Consistent
0	0.0	0.0	Consistent
37	1.2	48.1	Below
0	0.0	0.0	Consistent
0	0.0	0.2	Below
0	0.0	1.0	Below
0	0.0	0.0	Consistent
0	0.0	0.2	Below
1	1.8	0.8	Consistent
0			Below
0			Below
0			Below
			Consistent
			Below
0			Below
2	3.6	1.3	Consistent
			Below
			Consistent
			Consistent
			Consistent
			Below
			Consistent
			Consistent
			Below
O	0.0	0.1	Below
0	0.0	0.0	Consistent
0	0.0	0.0	Consistent
6	10.7	12.5	Consistent
0	0.0	0.0	Consistent
3	5.3	4.5	Consistent
0	0.0	1.4	Below
0	0.0	0.0	Consistent
1	1.8	0.3	Consistent
1	1.8	7.2	Below
3	5.3	7.3	Consistent
3	5.3	14.1	Below
4	7.1	8.6	Consistent
1	1.8	0.5	Consistent
0	0.0	0.0	Consistent
1	1.8	6.5	Below
1	1.8	3.8	Consistent
0	0.0	2.8	Below
0	0.0	3.1	Below
	0 40 0 37 0 0 0 0 0 0 0 1 0 0 0 0 2 2 0 0 0 0 0 0	0       0.0         40       71.2         0       0.0         37       1.2         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       0.0         0       0.0         0       0.0         0       0.0         0       0.0         0       0.0         0       0.0         0       0.0         1       1.8         0       0.0         1       1.8         1       1.8         0       0.0         1       1.8         1       1.8         0       0.0         1       1.8         0       0.0         1       1.8         1       1.8         0       0.0         1       1.8 </td <td>0       0.0       3.3         40       71.2       60.2         0       0.0       0.0         37       1.2       48.1         0       0.0       0.0         0       0.0       0.2         0       0.0       0.2         0       0.0       0.0         0       0.0       0.2         1       1.8       0.8         0       0.0       0.2         1       1.8       0.8         0       0.0       0.2         1       1.8       0.8         0       0.0       0.3         0       0.0       0.3         0       0.0       0.1         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</td>	0       0.0       3.3         40       71.2       60.2         0       0.0       0.0         37       1.2       48.1         0       0.0       0.0         0       0.0       0.2         0       0.0       0.2         0       0.0       0.0         0       0.0       0.2         1       1.8       0.8         0       0.0       0.2         1       1.8       0.8         0       0.0       0.2         1       1.8       0.8         0       0.0       0.3         0       0.0       0.3         0       0.0       0.1         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

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Tetanus	0	0.0	0.0	Consistent
Toxic shock syndrome (staphylococcal or streptococcal)	0	0.0	1.0	Below
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	0	0.0	0.9	Below
Tularemia	2	3.6	0.2	Consistent
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	0	0.0	0.5	Below
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	5	8.9	2.0	Consistent
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	0	0.0	0.3	Below

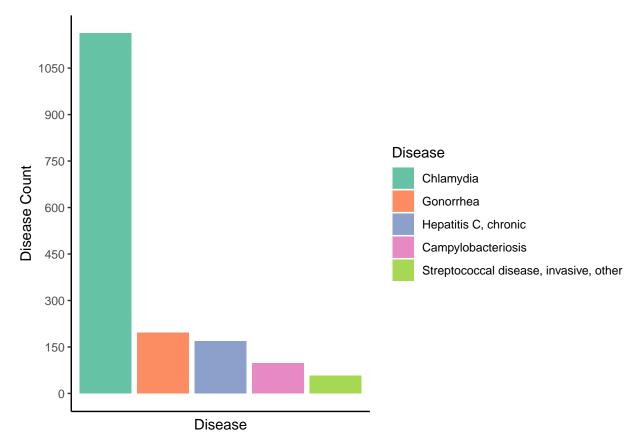
### 5.11 Utah County

The Utah County Health Jurisdiction covers Utah County. The 2017 population estimate for this region is 606,425.

# 5.11.1 Utah County Top Five Disease

The top five highest disease counts for the Utah County area were:

- 1. Chlamydia with 1,162 cases.
- 2. Gonorrhea with 196 cases.
- 3. Hepatitis C, chronic with 168 cases.
- 4. Campylobacteriosis with 97 cases.
- 5. Streptococcal disease, invasive, other with 57 cases.



5.11.2 Utah County Communicable Disease Table

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Acinetobacter species resistant to	0	0.0	0.1	Below
carbapenems				
Acute Flaccid Myelitis	1	0.2	0.1	Consistent
Adverse event resulting from smallpox vaccination	1	0.2	0.0	Consistent
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West	0	0.0	0.0	Consistent
Nile, Dengue, or Yellow Fever)				
Babesiosis	0	0.0	0.0	Consistent
Botulism, total	0	0.0	0.0	Consistent
Botulism, foodborne	0	0.0	0.0	Consistent
Botulism, infant	0	0.0	0.0	Consistent
Botulism, other (wound/unspecified)	0	0.0	0.0	Consistent
Brucellosis	0	0.0	0.0	Consistent
Campylobacteriosis	97	16.0	19.2	Below
Chancroid	0	0.0	0.0	Consistent
Chickenpox	56	9.2	8.2	Consistent
Chlamydia	1,162	191.6	326.7	Below
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	1	0.2	2.4	Below
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other transmissible human spongiform encephalopathies	0	0.0	0.2	Below
Cryptosporidiosis	20	3.3	4.0	Consistent
Cyclosporiasis	1	0.2	0.5	Below
Dengue	0	0.0	0.2	Below
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	0	0.0	0.1	Below
Encephalitis	0	0.0	0.2	Below
Enterobacter species resistant to carbapenems	0	0.0	0.0	Consistent
Escherichia coli resistant to carbapenems	0	0.0	0.0	Consistent
Giardiasis	46	7.6	6.7	Consistent
Gonorrhea	196	32.3	81.9	Below
HIV infection	9	1.5	3.7	Below
Haemophilus influenzae, all ages, invasive disease	15	2.5	2.1	Consistent
nonserotype B, age <5 years	2	0.3	0.3	Consistent
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age <5 years	1	0.0	0.0	Consistent
Hansen's disease (Leprosy)	0	0.0	0.0	Consistent
Hantavirus infection	0	0.0	0.0	Below
Hemolytic uremic syndrome,	3	0.5	0.4	Consistent
post-diarrheal				
Hepatitis A	32	5.3	5.2	Consistent
Hepatitis B, acute	2	0.3	0.6	Consistent
Hepatitis B, chronic	14	2.3	3.1	Consistent

Count	Rate	UtahRate	Comparison to UT Rate
8	1.3	3.3	Below
168	27.7	60.2	Below
0	0.0	0.0	Consistent
185	6.0	48.1	Below
0	0.0	0.0	Consistent
0	0.0	0.2	Below
2			Below
0			Consistent
0			Below
3			Consistent
			Consistent
			Below
			Consistent
7			Consistent
			Consistent
			Below
O .	0.0	0.1	Bolow
3	0.5	1 3	Below
			Below
			Consistent
			Below
			Consistent
			Consistent
			Below
0	0.0	0.0	Consistent
25	4.1	4.5	Consistent
6	1.0	1.4	Consistent
0	0.0	0.0	Consistent
1	0.2	0.3	Consistent
23	3.8	7.2	Below
42	6.9	7.3	Consistent
57	9.4	14.1	Below
31	5.1	8.6	Below
3	0.5	0.5	Consistent
0	0.0	0.0	Consistent
12	2.0	6.5	Below
	1.3	3.8	Below
4	0.7	2.8	Below
10	1.6	3.1	Below
	8 168 0 185 0 0 185 0 0 0 2 0 0 3 2 0 28 7 12 0 3 46 0 0 0 0 1 6 0 0 0 53 0 25 6 0 1 23 42 57 31	8       1.3         168       27.7         0       0.0         185       6.0         0       0.0         2       0.3         0       0.0         2       0.3         0       0.0         3       0.5         2       0.3         0       0.0         28       4.6         7       1.2         12       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       0.0         1       0.2         25       4.1         6       1.0         0       0.0         1       0.2         23       3.8         42       6.9         57       9.4         31       5.1          3       <	8       1.3       3.3         168       27.7       60.2         0       0.0       0.0         185       6.0       48.1         0       0.0       0.0         0       0.0       0.2         2       0.3       1.0         0       0.0       0.2         3       0.5       0.8         2       0.3       0.3         0       0.0       0.1         28       4.6       3.0         7       1.2       1.2         12       2.0       3.0         0       0.0       0.1         3       0.5       1.3         46       7.6       14.4         0       0.0       0.0         0       0.0       0.0         0       0.0       0.0         0       0.0       0.0         0       0.0       0.0         0       0.0       0.0         0       0.0       0.0         0       0.0       0.0         0       0.0       0.0         0       0.0       0.0         0

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Tetanus	0	0.0	0.0	Consistent
Toxic shock syndrome (staphylococcal or streptococcal)	2	0.3	1.0	Below
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	3	0.5	0.9	Consistent
Tularemia	0	0.0	0.2	Below
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	2	0.3	0.5	Consistent
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	7	1.2	2.0	Consistent
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	2	0.3	0.3	Consistent

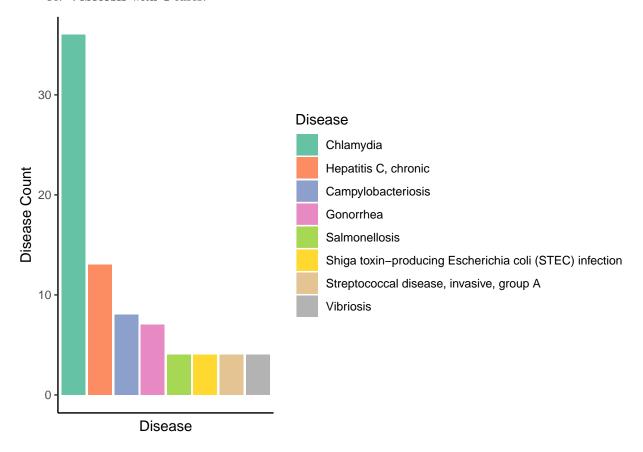
### 5.12 Wasatch County

The Wasatch County Health Jurisdiction covers Wasatch County. The 2017 population estimate for this region is 32,106.

#### 5.12.1 Wasatch County Top Five Disease

The top five highest disease counts for the Wasatch County area were:

- 1. Chlamydia with 36 cases.
- 2. Hepatitis C, chronic with 13 cases.
- 3. Campylobacteriosis with 8 cases.
- 4. Gonorrhea with 7 cases.
- 5. Salmonellosis with 4 cases, which is tied with
  - 5a. Shiga toxin-producing Escherichia coli (STEC) infection with 4 cases,
  - 5b. Streptococcal disease, invasive, group A with 4 cases, and
  - 5c. Vibriosis with 4 cases.



 ${\bf 5.12.2}\quad {\bf Was atch\ County\ Communicable\ Disease\ Table}$ 

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Acinetobacter species resistant to	0	0.0	0.1	Below
carbapenems				D 1
Acute Flaccid Myelitis	0	0.0	0.1	Below
Adverse event resulting from smallpox vaccination	0	0.0	0.0	Consistent
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West	0	0.0	0.0	Consistent
Nile, Dengue, or Yellow Fever)				
Babesiosis	0	0.0	0.0	Consistent
Botulism, total	0	0.0	0.0	Consistent
Botulism, foodborne	0	0.0	0.0	Consistent
Botulism, infant	0	0.0	0.0	Consistent
Botulism, other (wound/unspecified)	0	0.0	0.0	Consistent
Brucellosis	0	0.0	0.0	Consistent
Campylobacteriosis	8	24.9	19.2	Consistent
Chancroid	0	0.0	0.0	Consistent
Chickenpox	1	3.1	8.2	Consistent
Chlamydia	36	112.1	326.7	Below
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	0	0.0	2.4	Below
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other	0	0.0	0.2	Below
transmissible human spongiform encephalopathies	v	0.0	0.2	Bolow
Cryptosporidiosis	1	3.1	4.0	Consistent
Cyclosporiasis	0	0.0	0.5	Below
Dengue	0	0.0	0.2	Below
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	0	0.0	0.1	Below
Encephalitis	0	0.0	0.2	Below
Enterobacter species resistant to carbapenems	0	0.0	0.0	Consistent
Escherichia coli resistant to carbapenems	0	0.0	0.0	Consistent
Giardiasis	0	0.0	6.7	Below
Gonorrhea	7	21.8	81.9	Below
HIV infection	0	0.0	3.7	Below
Haemophilus influenzae, all ages, invasive disease	0	0.0	2.1	Below
nonserotype B, age <5 years	0	0.0	0.3	Below
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age <5 years	0	0.0	0.0	Consistent
Hansen's disease (Leprosy)	0	0.0	0.0	Consistent
Hantavirus infection	0	0.0	0.0	Below
Hemolytic uremic syndrome,	0	0.0	0.4	Below
post-diarrheal				
Hepatitis A	0	0.0	5.2	Below
Hepatitis B, acute	0	0.0	0.6	Below
Hepatitis B, chronic	1	3.1	3.1	Consistent

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Hepatitis C, acute	1	3.1	3.3	Consistent
Hepatitis C, chronic	13	40.5	60.2	Consistent
Hepatitis, other viral	0	0.0	0.0	Consistent
Influenza-associated hospitalization	14	0.5	48.1	Below
Influenza-associated pediatric mortality	0	0.0	0.0	Consistent
Klebsiella species resistant to carbapenems	0	0.0	0.2	Below
Legionellosis	1	3.1	1.0	Consistent
Leptospirosis	0	0.0	0.0	Consistent
Listeriosis	0	0.0	0.2	Below
Lyme disease	0	0.0	0.8	Below
Malaria	0	0.0	0.3	Below
Measles	0	0.0	0.1	Below
Meningitis, aseptic	0	0.0	3.0	Below
Meningitis, bacterial, other	0	0.0	1.2	Below
Meningitis, viral	0	0.0	3.0	Below
Meningococcal Disease (Neisseria	0	0.0	0.1	Below
meningitidis)			-	
Mumps	0	0.0	1.3	Below
Pertussis	$\frac{\circ}{2}$	6.2	14.4	Consistent
Plague	0	0.0	0.0	Consistent
Poliomyelitis, paralytic and nonparalytic	0	0.0	0.0	Consistent
Psittacosis	0	0.0	0.0	Consistent
Q fever	0	0.0	0.1	Below
Rabies, animal	0	0.0	0.7	Below
Rabies, human	0	0.0	0.0	Consistent
Relapsing fever, tick-borne and	0	0.0	0.1	Below
louse-borne	Ü	0.0	0.1	Below
Rubella	0	0.0	0.0	Consistent
Rubella, congenital syndrome	0	0.0	0.0	Consistent
Salmonellosis	4	12.5	12.5	Consistent
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0.0	Consistent
Shiga toxin-producing Escherichia coli (STEC) infection	4	12.5	4.5	Consistent
Shigellosis	2	6.2	1.4	Consistent
Smallpox	0	0.0	0.0	Consistent
Spotted fever rickettsiosis (including Rocky Mountain Spotted Fever)	0	0.0	0.3	Below
Streptococcal disease, invasive, group A	4	12.5	7.2	Consistent
Streptococcal disease, invasive, group B	$\frac{1}{2}$	6.2	7.3	Consistent
Streptococcal disease, invasive, other	2	6.2	14.1	Consistent
Streptococcus pneumoniae, invasive disease	1	3.1	8.6	Consistent
age <5 years	0	0.0	0.5	Below
Syphilis, congenital	0	0.0	0.0	Consistent
Syphilis, early (infection < 12 months)	0	0.0	6.5	Below
primary and secondary	0	0.0	3.8	Below
early latent	0	0.0	2.8	Below
Syphilis, latent (infection > 12 months)	1	3.1	3.1	Consistent
~ J Pilino, Ideolie (Infection / 12 moneth)	1	9.1	0.1	COIDIDUCIIO

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Tetanus	0	0.0	0.0	Consistent
Toxic shock syndrome (staphylococcal or streptococcal)	1	3.1	1.0	Consistent
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	0	0.0	0.9	Below
Tularemia	0	0.0	0.2	Below
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	4	12.5	0.5	Consistent
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	0	0.0	2.0	Below
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	0	0.0	0.3	Below

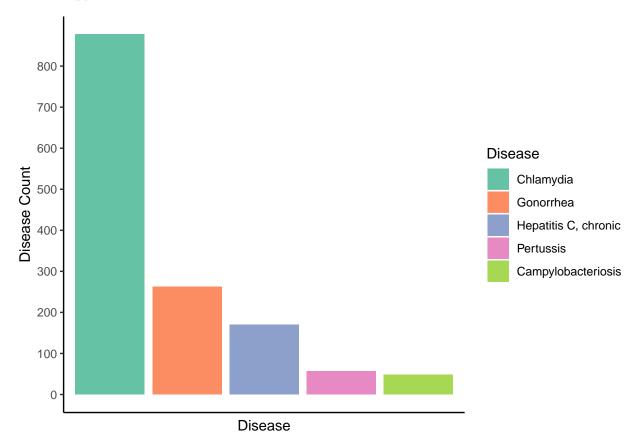
### 5.13 Weber-Morgan

The Weber-Morgan Health Jurisdiction covers Weber County and Morgan County. The 2017 population estimate for this region is 263,642.

#### 5.13.1 Weber-Morgan Top Five Disease

The top five highest disease counts for the Weber-Morgan area were:

- 1. Chlamydia with 877 cases.
- 2. Gonorrhea with 262 cases.
- 3. Hepatitis C, chronic with 170 cases.
- 4. **Pertussis** with **57** cases.
- 5. Campylobacteriosis with 48 cases.



5.13.2 Weber-Morgan Communicable Disease Table

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Acinetobacter species resistant to	0	0.0	0.1	Below
carbapenems				
Acute Flaccid Myelitis	0	0.0	0.1	Below
Adverse event resulting from smallpox vaccination	0	0.0	0.0	Consistent
Anthrax	0	0.0	0.0	Consistent
Arbovirus infection (not including West	0	0.0	0.0	Consistent
Nile, Dengue, or Yellow Fever)				
Babesiosis	0	0.0	0.0	Consistent
Botulism, total	0	0.0	0.0	Consistent
Botulism, foodborne	0	0.0	0.0	Consistent
Botulism, infant	0	0.0	0.0	Consistent
Botulism, other (wound/unspecified)	0	0.0	0.0	Consistent
Brucellosis	0	0.0	0.0	Consistent
Campylobacteriosis	48	18.2	19.2	Consistent
Chancroid	0	0.0	0.0	Consistent
Chickenpox	19	7.2	8.2	Consistent
Chlamydia	877	332.6	326.7	Consistent
Cholera	0	0.0	0.0	Consistent
Coccidioidomycosis	3	1.1	2.4	Consistent
Colorado tick fever	0	0.0	0.0	Consistent
Creutzfeldt-Jakob disease and other transmissible human spongiform encephalopathies	0	0.0	0.2	Below
Cryptosporidiosis	11	4.2	4.0	Consistent
Cyclosporiasis	0	0.0	0.5	Below
Dengue	0	0.0	0.2	Below
Diphtheria	0	0.0	0.0	Consistent
Ehrlichiosis/Anaplasmosis	0	0.0	0.1	Below
Encephalitis	0	0.0	0.2	Below
Enterobacter species resistant to carbapenems	0	0.0	0.0	Consistent
Escherichia coli resistant to carbapenems	0	0.0	0.0	Consistent
Giardiasis	18	6.8	6.7	Consistent
Gonorrhea	262	99.4	81.9	Above
HIV infection	3	1.1	3.7	Below
Haemophilus influenzae, all ages, invasive disease	6	2.3	2.1	Consistent
nonserotype B, age <5 years	2	0.8	0.3	Consistent
serotype B, age <5 years	0	0.0	0.0	Consistent
unknown serotype, age <5 years	0	0.0	0.0	Consistent
Hansen's disease (Leprosy)	0	0.0	0.0	Consistent
Hantavirus infection	0	0.0	0.1	Below
Hemolytic uremic syndrome, post-diarrheal	0	0.0	0.4	Below
Hepatitis A	2	0.8	5.2	Below
Hepatitis B, acute	0	0.0	0.6	Below
Hepatitis B, chronic	7	2.7	3.1	Consistent

Disease	Count	Rate	UtahRate	Comparison to UT Rate
Hepatitis C, acute	12	4.6	3.3	Consistent
Hepatitis C, chronic	170	64.5	60.2	Consistent
Hepatitis, other viral	0	0.0	0.0	Consistent
Influenza-associated hospitalization	139	4.5	48.1	Below
Influenza-associated pediatric mortality	0	0.0	0.0	Consistent
Klebsiella species resistant to carbapenems	0	0.0	0.2	Below
Legionellosis	6	2.3	1.0	Consistent
Leptospirosis	0	0.0	0.0	Consistent
Listeriosis	1	0.4	0.2	Consistent
Lyme disease	0	0.0	0.8	Below
Malaria	1	0.4	0.3	Consistent
Measles	0	0.0	0.1	Below
Meningitis, aseptic	11	4.2	3.0	Consistent
Meningitis, bacterial, other	2	0.8	1.2	Consistent
Meningitis, viral	7	$\frac{2.7}{2.7}$	3.0	Consistent
Meningococcal Disease (Neisseria	0	0.0	0.1	Below
meningitidis)	· ·	0.0	0.1	Bolow
Mumps	0	0.0	1.3	Below
Pertussis	57	21.6	14.4	Above
Plague	0	0.0	0.0	Consistent
Poliomyelitis, paralytic and nonparalytic	0	0.0	0.0	Consistent
Psittacosis	0	0.0	0.0	Consistent
Q fever	0	0.0	0.0	Below
-		0.0	0.7	Consistent
Rabies, animal	1	0.4		Consistent
Rabies, human	0		0.0	
Relapsing fever, tick-borne and louse-borne	0	0.0	0.1	Below
Rubella	0	0.0	0.0	Consistent
Rubella, congenital syndrome	0	0.0	0.0	Consistent
Salmonellosis	34	12.9	12.5	Consistent
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0.0	Consistent
Shiga toxin-producing Escherichia coli (STEC) infection	9	3.4	4.5	Consistent
Shigellosis	2	0.8	1.4	Consistent
Smallpox	0	0.0	0.0	Consistent
Spotted fever rickettsiosis (including Rocky Mountain Spotted Fever)	0	0.0	0.3	Below
Streptococcal disease, invasive, group A	13	4.9	7.2	Consistent
Streptococcal disease, invasive, group B	29	11.0	7.3	Consistent
Streptococcal disease, invasive, other	32	12.1	14.1	Consistent
Streptococcus pneumoniae, invasive disease	26	9.9	8.6	Consistent
age <5 years	1	0.4	0.5	Consistent
Syphilis, congenital	0	0.0	0.0	Consistent
Syphilis, early (infection < 12 months)	12	4.6	6.5	Consistent
primary and secondary	4	1.5	3.8	Below
early latent	8	3.0	2.8	Consistent
Syphilis, latent (infection > 12 months)	7	2.7	3.1	Consistent
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Disease	Count	Rate	UtahRate	Comparison to UT Rate
Tetanus	0	0.0	0.0	Consistent
Toxic shock syndrome (staphylococcal or streptococcal)	0	0.0	1.0	Below
Trichinellosis	0	0.0	0.0	Consistent
Tuberculosis, active	0	0.0	0.9	Below
Tularemia	0	0.0	0.2	Below
Typhoid fever	0	0.0	0.0	Consistent
Vancomycin-intermediate Staphylococcus aureus (VISA)	0	0.0	0.0	Consistent
Vancomycin-resistant Staphylococcus aureus (VRSA)	0	0.0	0.0	Consistent
Vibriosis	0	0.0	0.5	Below
Viral hemorrhagic fevers	0	0.0	0.0	Consistent
West Nile virus, total	2	0.8	2.0	Below
Yellow fever	0	0.0	0.0	Consistent
Zika virus, congenital infection	0	0.0	0.0	Consistent
Zika Virus Disease	0	0.0	0.3	Below