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## Communicable Disease Summary

Communicable diseases are a continuing threat to all people, regardless of age, gender, lifestyle, ethnic background, or socioeconomic status. They cause illness, suffering and death, and place an enormous financial burden on society. Currently over 90 diseases or conditions are reportable in Nevada. In 2023, over 17,000 cases were reported to Northern Nevada Public Health. The numbers dramatically increased between 2020 and 2022 due to COVID [Fig. 1]. Table 1 on the following page shows selected communicable disease cases reported during the last five years for diseases. Only communicable diseases with at least five cases per year for one of the past five years are displayed. To obtain case counts for less frequently occurring conditions visit this page: <https://www.nnph.org/files/ephp/communicable-diseases/weekly/washoecounty.html>.

Figure 1. Annual Communicable Disease Total (Including COVID-19), 2019-2023

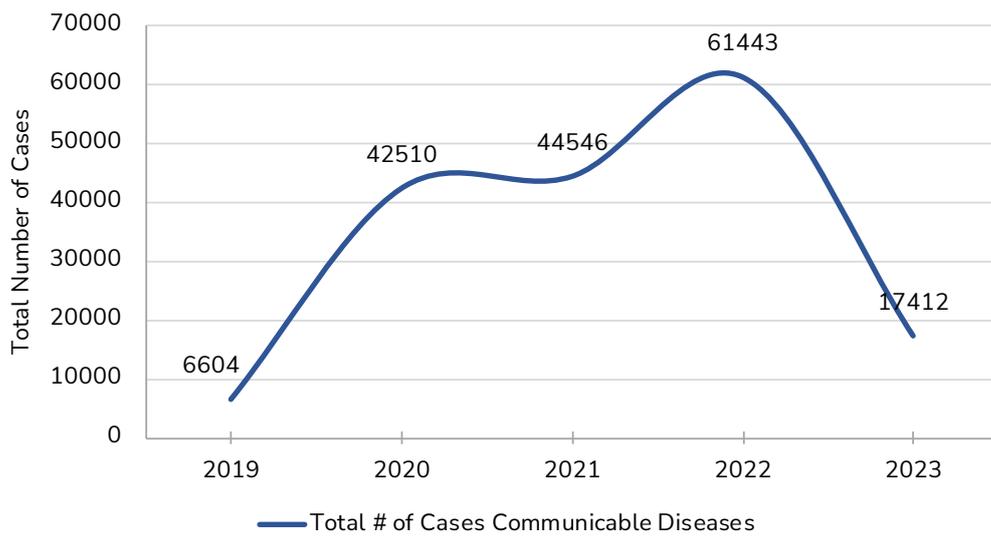
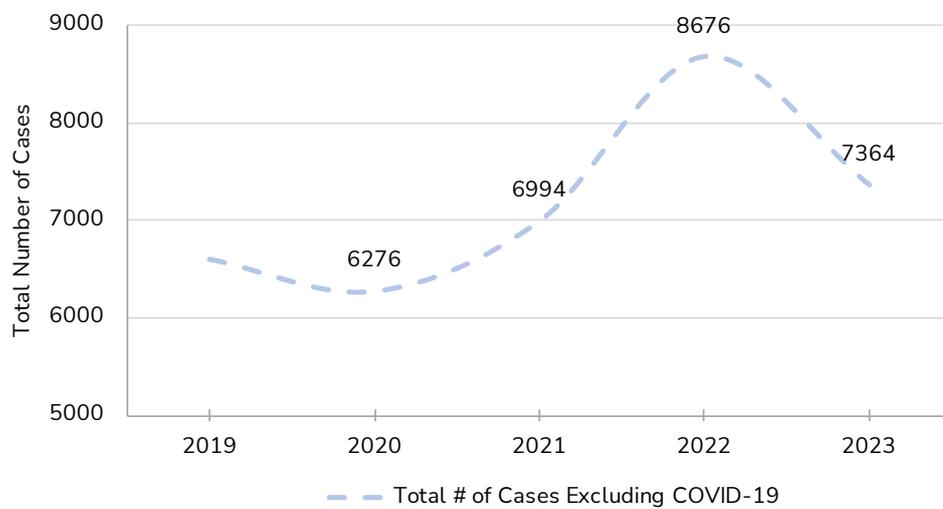


Figure 2. Annual Communicable Disease Total (Excluding COVID-19), 2019-2023



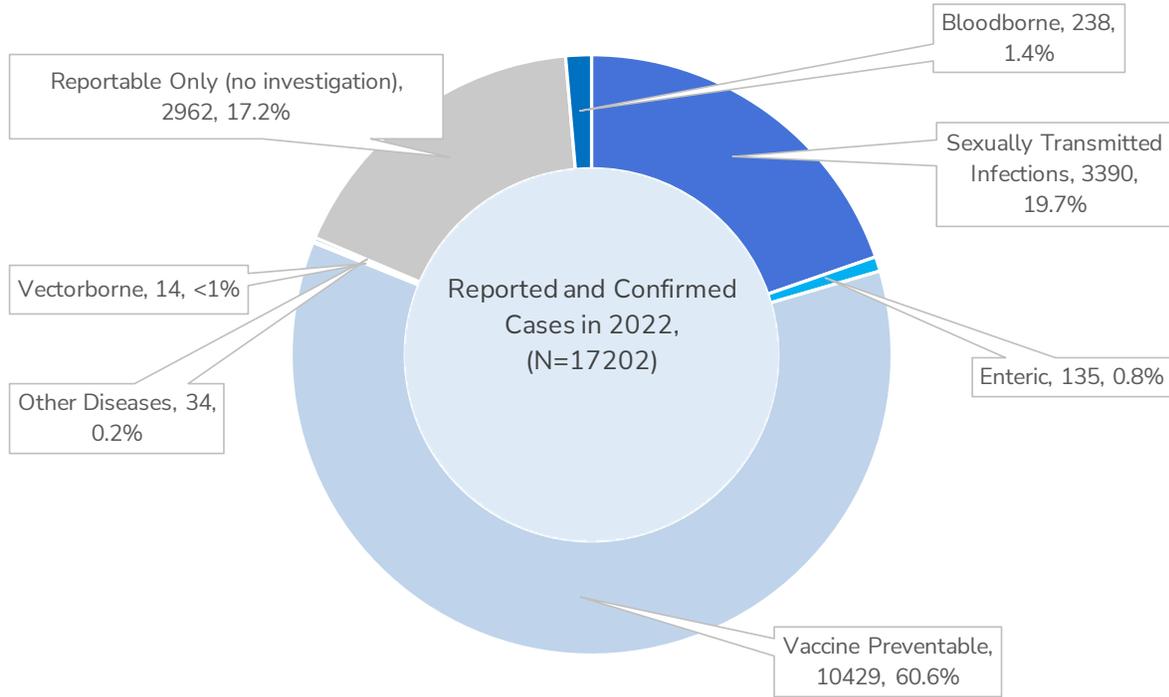
**Table 1. Total Reportable Cases of Selected Communicable Diseases by Year, Washoe County, 2019-2023**

	2019	2020	2021	2022	2023
Campylobacteriosis	48	28	92	61	54
Carbapenemase producing organism (CPO)	7	5	5	4	5
Chlamydia	2682	2526	2451	2448	2300
Coccidioidomycosis	8	15	9	8	11
COVID-19		36324	37552	52767	10048
Cryptosporidium	18	5	5	12	10
Escherichia coli-Shiga-toxin producing	4	5	7	8	12
Giardiasis	10	20	17	15	16
Gonorrhea	864	1131	1054	824	607
Hepatitis B (Acute)	5	1	0	4	7
Hepatitis B (Chronic)	65	60	48	56	79
Hepatitis C (Acute)	3	5	0	8	6
Hepatitis C (Chronic)	680	476	332	466	232
Human Immunodeficiency Virus (HIV)	37	31	24	27	38
Hospitalized with Influenza	266	11	148	450	210
Lyme	1	1	5	5	8
Pertussis	27	13	5	10	5
Invasive Pneumococcal Disease	100	67	53	79	57
Rotavirus	9	7	1	9	12
RSV	720	622	959	2141	1638
Salmonellosis	30	25	31	20	30
Shigellosis	5	13	4	3	5
Stage 3 HIV Infection (AIDS)	12	11	14	16	14
Stage 3 HIV Infection-Progressed to Stage 3	N/A	N/A	N/A	N/A	7
Syphilis (primary and secondary)	160	133	159	153	146
Tuberculosis	8	4	7	6	9
Varicella Complicated	4	4	0	3	10

\*Table 1 displays disease with count  $\geq 5$  in the most recent years

# Type of Disease Reported

Total Number of Cases Reported by Type, Washoe County, 2023



STI	Enteric	VPD	Bloodborne	Vectorborne	Other	Reportable Only (investigation if outbreak)
Chlamydia 2300	Campylobacteriosis 54	COVID 10048	Hepatitis C, Acute 6	Dengue Fever 2	Candida auris 3	Animal Bites 1246
Gonorrhea 607	Cryptosporidiosis 10	Hepatitis B, Acute 7	Hepatitis C, Chronic 232	Ehrlichiosis 1	Coccidioidomycosis 11	EBLL* 60
HIV 38	EHEC/STEC* 12	Hepatitis B, Chronic 79		Hantavirus 2	CPO* 5	Invasive H. flu , not type b 18
Stage 3 HIV Infection (AIDS) 14	Giardiasis 16	Influenza** 210		Lyme 8	Legionellosis 4	RSV* 1638
Stage 3 HIV Infection-Progressed to Stage 3 7	Listeriosis 1	Invasive Pneu. Disease 57		West Nile Neuroinvasive 1	Streptococcal Toxic Shock Syndrome 2	
Syphilis 424	Salmonellosis 30	Meningococcal 1			Tuberculosis 9	
	Shigellosis 5	Pertussis 5				
	Vibriosis 4	Rotavirus 12				
	Yersiniosis 3	Varicella 10				
<b>Total 3390</b>	<b>Total 135</b>	<b>Total 10429</b>	<b>Total 238</b>	<b>Total 14</b>	<b>Total 34</b>	<b>Total 2962</b>

EHEC/STEC - *Escherichia coli*/ Shiga toxin-producing *Escherichia coli*

CPO - Carbapenemase producing organisms

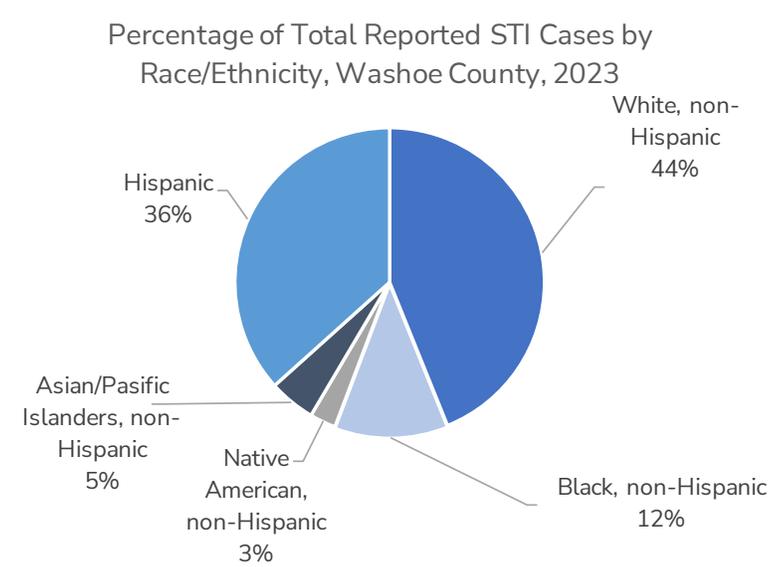
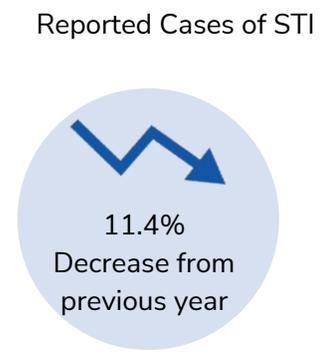
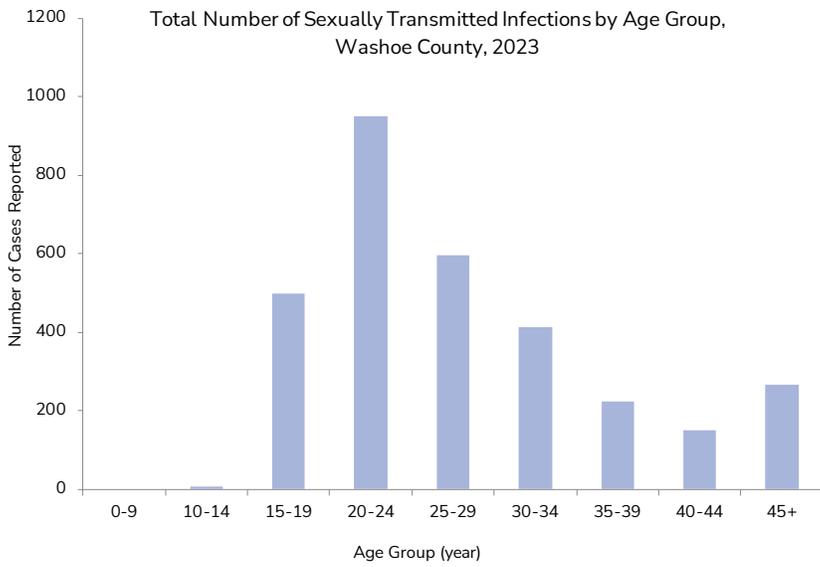
RSV - Respiratory Syncytial Virus

EBLL – Elevated Blood Lead Level

\*\*Influenza count includes only hospitalized cases

# Sexually Transmitted Infections

Condition	Count	2023 Incidence Rate per 100K Population	2018-2022 Incidence Rate per 100K Population
Chlamydia	2300	454.7	537.7
Gonorrhea	607	120.0	210.3
Primary and Secondary Syphilis	146	28.9	25.0
HIV	38	7.5	6.1
Stage 3 HIV Infection (AIDS)	14	2.8	2.8
Stage 3 HIV Infection-Progressed to Stage 3	7	1.4	NA



# Chlamydia

The bacteria, *Chlamydia trachomatis* causes the infection commonly known as chlamydia and is the most common sexually transmitted infection (STI) required to be reported in the United States. Many people will not exhibit any signs or symptoms of illness, so regular screenings are important.

Symptoms can include abnormal discharge, burning sensation while urinating, and if infected rectally, rectal pain, discharge, and/or bleeding may be present.

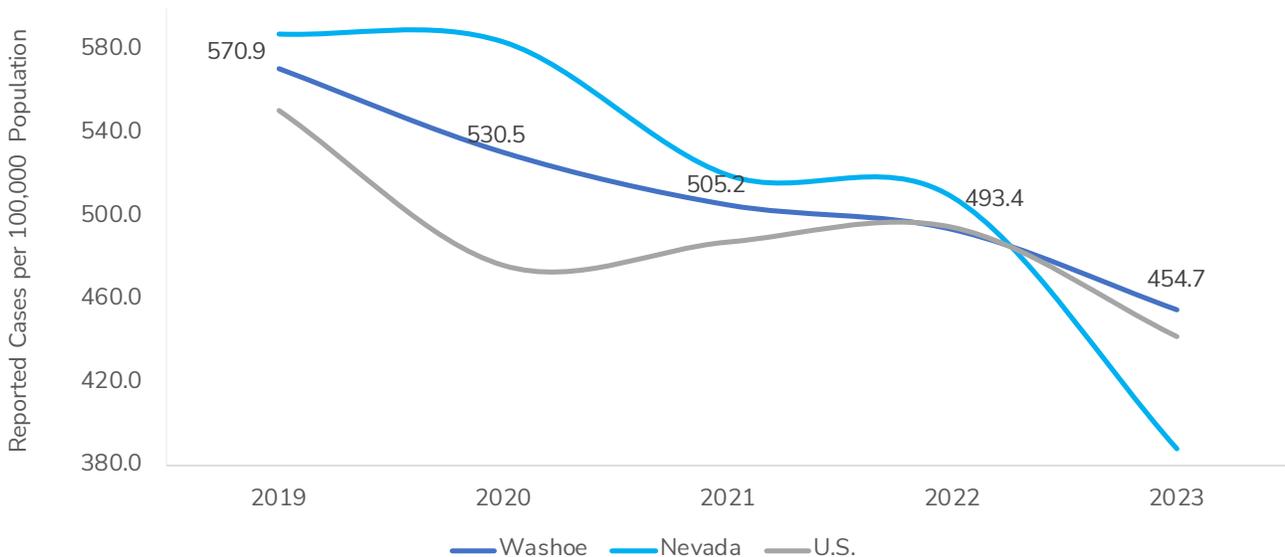
Untreated chlamydia can lead to complications such as infertility in males and females, pelvic inflammatory disease, ectopic pregnancy, epididymitis and complications for newborns from vertical transmission (pneumonia, eye infections)

Chlamydia is treatable with antibiotics, which must be completed before engaging in sexual activity and is best if sexual partners also complete treatment or reinfection is possible.

Total Number of Chlamydia Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	896	353.3
Female	1404	556.7
<b>Age Groups</b>		
0-9	0	0.0
10-14	8	26.3
15-19	426	1171.2
20-24	817	2053.5
25-29	443	1220.6
30-34	268	794.5
35-39	144	413.8
40-44	76	239.2
45+	118	57.7
<b>Race/Ethnicity</b>		
White, non-Hispanic	929	302.0
Black, non-Hispanic	222	1597.2
Native American, non-Hispanic	60	851.9
Asian/Pacific Islanders, non-Hispanic	108	280.2
Hispanic	821	591.8
Unknown	160	NA
<b>Total</b>	<b>2300</b>	<b>454.7</b>

Rate of Reported Chlamydia Cases, 2019-2023



# Gonorrhea

Gonorrhea, caused by *Neisseria gonorrhoeae*, is second only to chlamydia infections in the number of STD cases reported to the CDC annually. Gonorrhea is a bacterial STI, that is curable with appropriate treatment.

Symptoms of gonorrhea may vary between sex and body site that is affected. The bacteria infects body sites that have been exposed such as the throat, vagina, penis, and rectum. Often, males (85%) have symptoms that include: dysuria, discharge, discoloration, rectal bleeding/discharge and swelling of the urethra. Females are often asymptomatic yet may experience pain during sex, dysuria, frequency and urgency of urination, discharge that is different from their norm, and heavier periods or spotting.

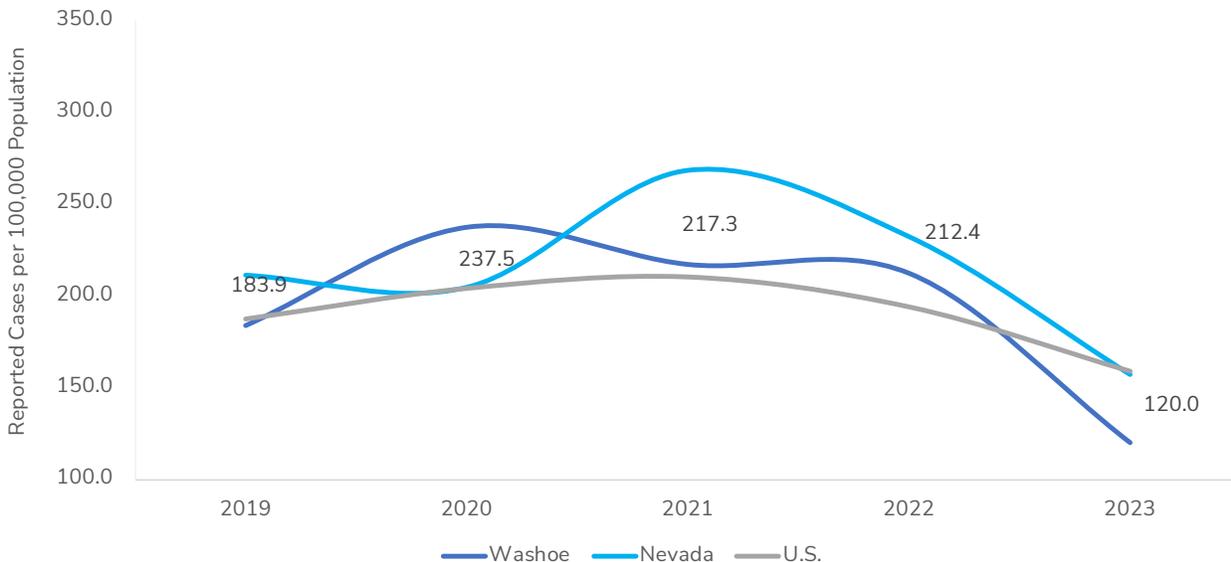
Complications of gonorrhea may also include dissemination throughout the body and be found in joints and blood. Disseminated gonorrhea can also lead to sepsis and be fatal.

Gonorrhea is treatable with proper antibiotic regimens; however antibiotic resistance is a growing complication for treating this condition. If left untreated, other complications are the same as untreated chlamydia.

Total Number of Gonorrhea Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	388	153.0
Female	219	86.8
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	64	176.0
20-24	111	279.0
25-29	125	344.4
30-34	109	323.1
35-39	60	172.4
40-44	50	157.4
45+	88	43.1
<b>Race/Ethnicity</b>		
White, non-Hispanic	270	87.8
Black, non-Hispanic	98	705.1
Native American, non-Hispanic	18	255.6
Asian/Pacific Islanders, non-Hispanic	22	57.1
Hispanic	176	126.9
Unknown	23	NA
<b>Total</b>	<b>607</b>	<b>120.0</b>

Rate of Reported Gonorrhea Cases, 2019-2023



# Syphilis

Syphilis is a complex STI caused by the bacterium *Treponema pallidum*. Syphilis infection follows stages based on clinical findings. Treatment is determined based on stage of infection.

Symptoms vary based on the stage of infection, however during the primary stage sores may be present near or on the penis, vagina, anus, rectum, lips and/or mouth. These may be firm, round, and painless and last anywhere from 3 to 6 weeks. During the secondary stage skin rashes and sores may appear while primary sores are healing or up to several weeks after. The rash may be present on palms of hands or bottoms of feet and be rough, red, or reddish-brown. Latent and tertiary stages do not present with obvious symptoms and involve ongoing damage to organs and vascular systems.

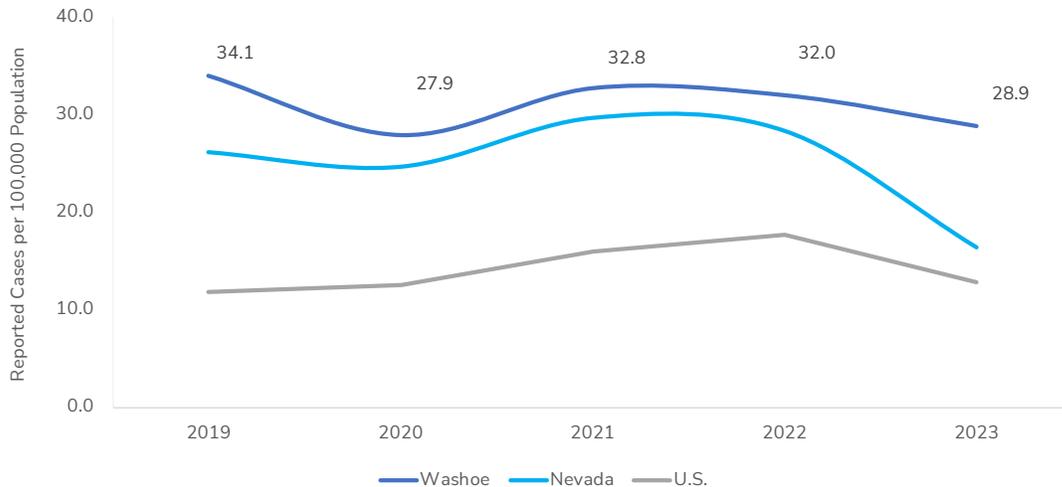
Syphilis is contagious within the first year of infection, mostly during the primary and secondary stages. In the tertiary stage, the infection is not contagious but can cause damage to multiple organ systems and can be fatal. Syphilis infection is curable but any damage that is done to the body may not be reversible. Syphilis can also invade the nervous system during any stage, which is considered neurosyphilis.

Congenital syphilis is caused by vertical transmission from a pregnant person to their unborn baby. While some infants may not exhibit symptoms or syphilis, serious issues may develop within a few weeks. Cases can be fatal. Depending on how long a pregnant person has had syphilis, they may be at high risk of having a stillbirth.

Total Number of Primary and Secondary Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	101	39.8
Female	45	17.8
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	7	19.2
20-24	14	35.2
25-29	20	55.1
30-34	23	68.2
35-39	18	51.7
40-44	17	53.5
45+	47	23.0
<b>Race/Ethnicity</b>		
White, non-Hispanic	67	21.8
Black, non-Hispanic	18	129.5
Native American, non-Hispanic	2	28.4
Asian/Pacific Islanders, non-Hispanic	8	20.8
Hispanic	50	36.0
Unknown	1	NA
<b>Total</b>	<b>146</b>	<b>28.9</b>

Rate of Reported Primary and Secondary Syphilis Cases, 2019-2023



# Human Immunodeficiency Virus

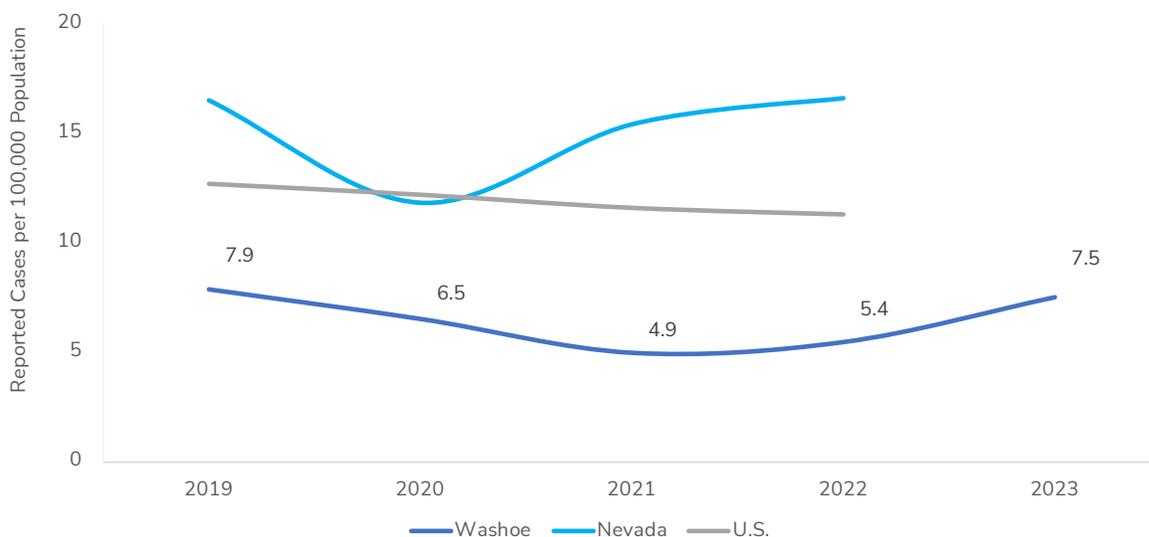
The goal of HIV surveillance is to identify people who are living with HIV, ensure they receive the care they need, and offer testing to those at risk. HIV is transmitted through vaginal sex, anal sex, and/or from sharing needles or syringes. Some individuals will experience acute HIV symptoms, similar to flu-like illness within the first 2-4 weeks after exposure. If left untreated or undiagnosed, HIV progresses to stage 3. HIV stage 3 is formerly known as Acquired Immunodeficiency Syndrome (AIDS). HIV stage 3 replaces Acquired Immunodeficiency Syndrome (AIDS) as a disease surveillance definition. This progression can occur years after the initial exposure. In HIV stage 3, the immune system is damaged and people are more likely to become ill from infections not usually experienced by immune-typical persons. These are known as opportunistic infections.

Individuals who are diagnosed with HIV are linked to care. There is currently no cure for HIV, however with effective and sustained treatment the disease is manageable. When a person takes their medication and achieves an undetectable amount of virus in their body, they will not transmit HIV sexually. There will also be other healthier outcomes such as living the same life span as someone who is not living with HIV and reducing the chances of opportunistic infections because the immune system is sustained

Total Number of Human Immunodeficiency Virus Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	32	12.6
Female	5	2.0
Transgender	1	NA
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	1	2.7
20-24	5	12.6
25-29	7	19.3
30-34	9	26.7
35-39	3	8.6
40-44	6	18.9
45+	7	3.4
<b>Race/Ethnicity</b>		
White, non-Hispanic	13	4.2
Black, non-Hispanic	7	50.4
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	1	2.6
Hispanic	16	11.5
Unknown	1	NA
<b>Total</b>	<b>38</b>	<b>7.5</b>

Rate of Reported HIV Cases, 2019-2023



## HIV Infection Stage 3

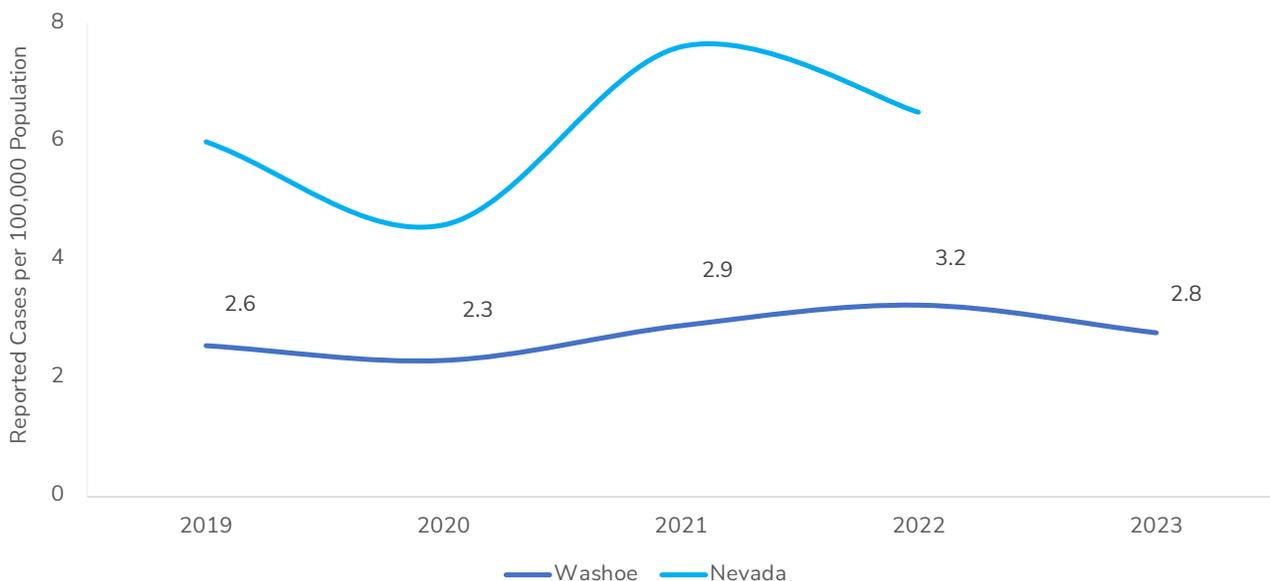
HIV infection, stage 3 indicates that HIV disease has progressed in a person, likely over a long period of time. Cases diagnosed as stage 3 must have documentation of a stage 3 defining opportunistic infection and/or a CD4 T-lymphocyte count of <200. A CD4 T-lymphocyte percentage of <14% can be used if the count is missing.

An individual can be diagnosed with HIV and stage 3 at the same time in the event they have unknowingly had HIV and it has progressed to stage 3. These are considered to be "late testers." This is often due to missed testing opportunities on the part of the individual or their care team.

Total Number of Diagnosed Stage 3 at time of initial HIV diagnosis by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	11	4.3
Female	13	5.2
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	0	0.0
20-24	2	5.0
25-29	0	0.0
30-34	3	8.9
35-39	0	0.0
40-44	3	9.4
45+	6	2.9
<b>Race/Ethnicity</b>		
White, non-Hispanic	3	1.0
Black, non-Hispanic	1	7.2
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	3	7.8
Hispanic	7	5.0
Unknown	0	NA
<b>Total</b>	<b>14</b>	<b>2.8</b>

Rate of Reported Diagnosed Stage 3 Cases at time of initial HIV diagnosis, 2019-2023



## HIV Infection-Progressed to Stage 3

A previously diagnosed HIV positive individual can progress to stage 3 many months or years later.

This can happen when they are out of HIV care or have another health condition compromising their immune system.

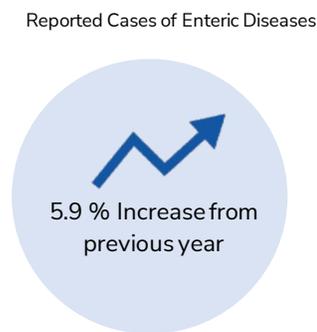
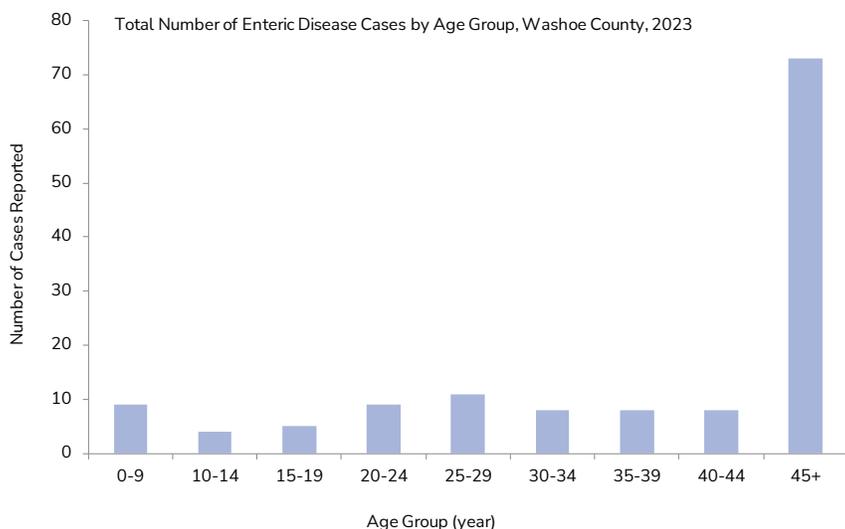
The goal of HIV surveillance is to identify people who are living with HIV, and to offer testing to those at high risk. If a person has acquired HIV, they are linked to HIV specific care. When a person takes HIV medication and achieves an undetectable amount of HIV in their body, they will not transmit HIV sexually. There will also be other healthier outcomes such as living the same life span as someone who is not living with HIV and reducing the chances of opportunistic infections because the immune system is sustained.

Total Number of Diagnosed Stage 3 more than one year after initial HIV diagnosis by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	6	2.4
Female	1	0.4
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	0	0.0
20-24	0	0.0
25-29	0	0.0
30-34	0	0.0
35-39	1	2.9
40-44	1	3.1
45+	5	2.4
<b>Race/Ethnicity</b>		
White, non-Hispanic	3	1.0
Black, non-Hispanic	1	7.2
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	0	0.0
Hispanic	3	2.2
Unknown	0	NA
<b>Total</b>	<b>7</b>	<b>1.4</b>

# Enteric Diseases

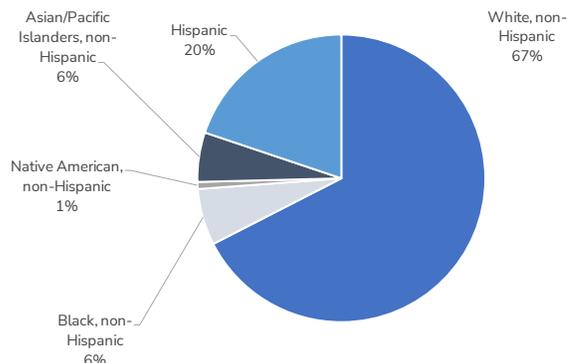
Condition	Count	2023 Incidence Rate per 100K Population	2018-2022 Incidence Rate per 100K Population
Campylobacteriosis	54	10.7	11.5
Cryptosporidiosis	10	2.0	2.4
EHEC/STEC	12	2.4	0.8
Listeriosis	1	0.2	0.1
Salmonellosis	30	5.9	6.3
Shigellosis	5	1.0	1.3
Giardiasis	16	3.2	3.5
Vibriosis	4	0.8	0.3
Yersiniosis	3	0.6	0.4
Typhoid Fever	0	0.0	0.2



## Percentage of Cases by Sex



## Percentage of Total Reported Enteric Disease Cases by Race/Ethnicity, Washoe County, 2023



# Campylobacteriosis

The bacteria *Campylobacter* causes campylobacteriosis in humans and according to CDC estimates, is the number one cause of bacterial diarrheal illness in the United States.

People with *Campylobacter* may experience bloody diarrhea, fever, stomach cramps, nausea and vomiting.

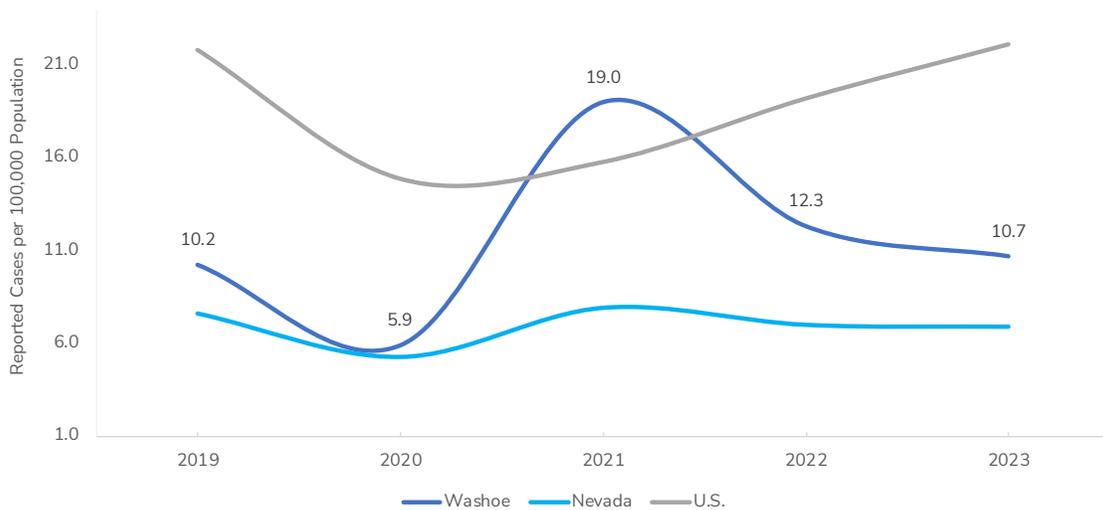
*Campylobacter* is carried in the intestines of animals and is most often acquired through slaughter of animals, or cross contamination of fruits or vegetables or milk that has contacted untreated, contaminated water or soil that contains feces. People preparing food may also inadvertently contaminate food through cutting or preparing on surfaces that came into contact with raw or undercooked poultry.

Antibiotics are available to help lessen the duration of symptoms, however most recover without antibiotic treatment, while focusing on rehydrating.

Total Number of Campylobacteriosis Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	31	12.2
Female	23	9.1
<b>Age Groups</b>		
0-9	3	5.1
10-14	2	6.6
15-19	0	0.0
20-24	2	5.0
25-29	2	5.5
30-34	2	5.9
35-39	5	14.4
40-44	4	12.6
45+	34	16.6
<b>Race/Ethnicity</b>		
White, non-Hispanic	34	11.1
Black, non-Hispanic	3	21.6
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	3	7.8
Hispanic	10	7.2
Unknown	4	NA
<b>Total</b>	<b>54</b>	<b>10.7</b>

Rate of Reported Campylobacteriosis Cases, 2019-2023



# Cryptosporidiosis

Cryptosporidiosis is caused by a parasite, *Cryptosporidium*, which is most often spread through drinking water or recreational water contaminated by fecal matter and is the leading cause of waterborne illness in the United States.

Symptoms of cryptosporidiosis include watery diarrhea, stomach cramps, dehydration, nausea, vomiting, fever, and weight loss.

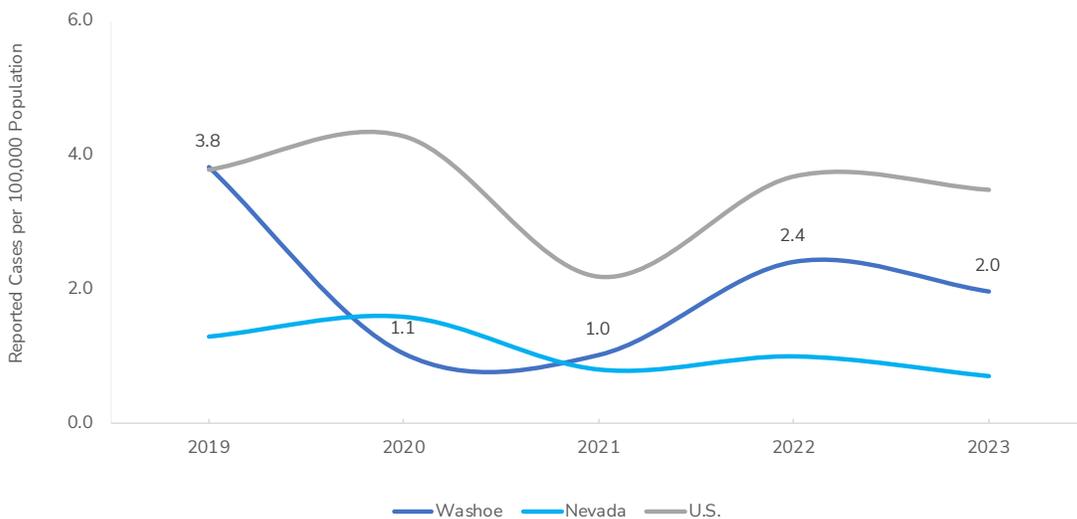
Most people with healthy immune systems recover without treatment, however those in poor health or with weakened immune systems are at risk for more severe and longer duration of illness and may benefit from treatment.

Prevent infection by hand washing with soap and water, alcohol-based sanitizers are not effective against *Cryptosporidium*. Do not swallow untreated water or unpasteurized milk products.

Total Number of Cryptosporidiosis Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	6	2.4
Female	4	1.6
<b>Age Groups</b>		
0-9	1	1.7
10-14	1	3.3
15-19	0	0.0
20-24	2	5.0
25-29	1	2.8
30-34	0	0.0
35-39	0	0.0
40-44	1	3.1
45+	4	2.0
<b>Race/Ethnicity</b>		
White, non-Hispanic	6	2.0
Black, non-Hispanic	1	7.2
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	0	0.0
Hispanic	3	2.2
Unknown	0	NA
<b>Total</b>	<b>10</b>	<b>2.0</b>

Rate of Reported Cryptosporidiosis Cases, 2019-2023



## Escherichia coli/Shiga toxin-producing Escherichia coli (EHEC/STEC)

*Escherichia coli*, commonly known as *E. coli*, are bacteria which live in the intestines of humans and animals. Most *E. coli* are an important part of a healthy human intestinal tract, however some types are known to be pathogenic, meaning they can cause diarrheal illness.

Shiga toxin producing *E. coli* (STEC) are reportable and are referred to as verocytotoxic (VTEC) or enterohemorrhagic *E. coli* (EHEC). *E. coli* O157:H7 or “O157” is the most commonly identified STEC.

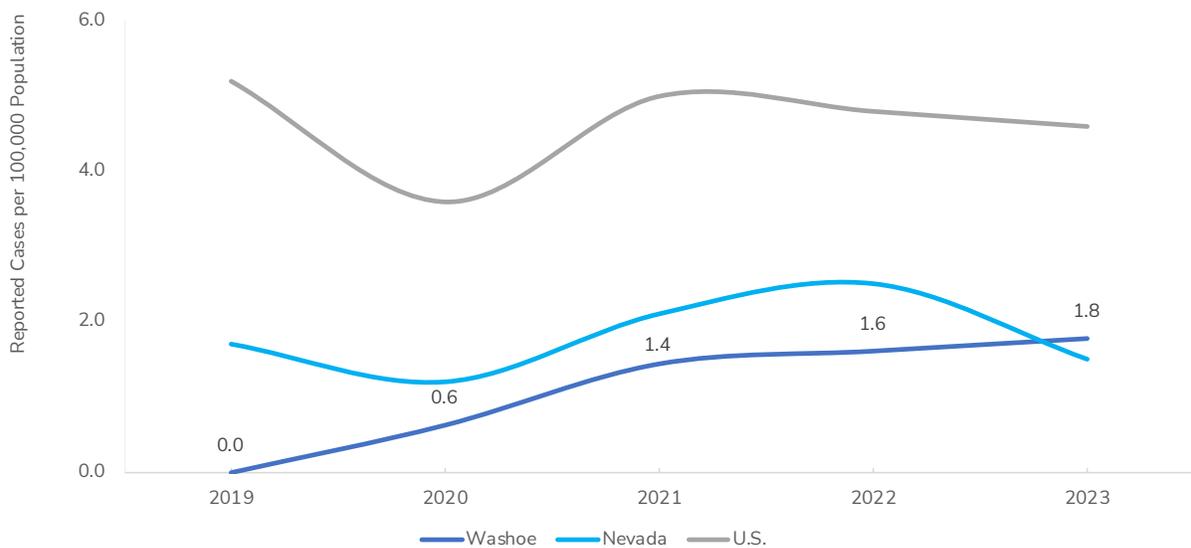
In about 5-10% of cases, STEC can cause a possibly life-threatening condition called hemolytic uremic syndrome (HUS), which impacts the kidneys and may cause them to stop working.

Prevent pathogenic *E. coli* by washing hands, safely prepare foods including cleaning, separating foods which may cross contaminate, cook to temperature, and chill and store properly. Avoid unpasteurized milk products and do not swallow untreated water.

Total Number of EHEC/STEC Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	3	1.2
Female	9	3.6
<b>Age Groups</b>		
0-9	1	1.7
10-14	0	0.0
15-19	2	5.5
20-24	0	0.0
25-29	3	8.3
30-34	1	3.0
35-39	0	0.0
40-44	1	3.1
45+	4	2.0
<b>Race/Ethnicity</b>		
White, non-Hispanic	9	2.9
Black, non-Hispanic	2	14.4
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	0	0.0
Hispanic	1	0.7
Unknown	0	NA
<b>Total</b>	<b>12</b>	<b>2.4</b>

Rate of Reported EHEC/STEC Cases, 2019-2023



# Giardiasis

Giardiasis is caused by the parasite *Giardia*, which when infected, causes diarrheal illness in humans.

Symptoms of giardiasis include diarrhea, gas, foul smelling, greasy stools that tend to float, stomach cramps or pain, upset stomach or nausea, vomiting, and dehydration. Treatment is available, however most people recover on their own within 2 to 6 weeks.

Sometimes symptoms return after several days or weeks and some people can experience long-term complications including arthritis, irritable bowel syndrome, and recurring diarrhea which can last for years.

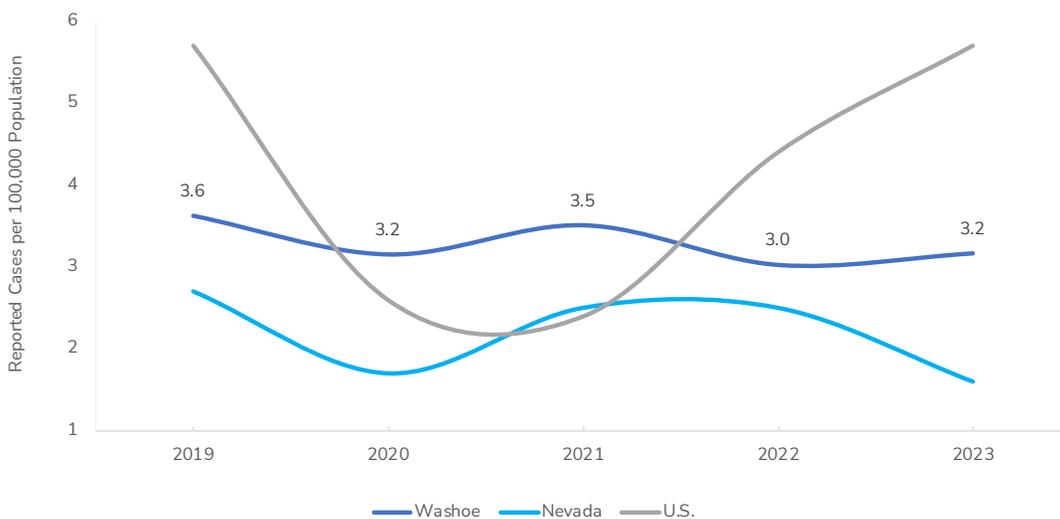
*Giardia* can spread easily from person-to-person and through contaminate water, food, surfaces or objects. Most persons in the United States are infected through contaminated water, such as recreational sources— rivers, lakes, pools.

Prevent giardiasis by taking care to not swallow water from pools, lakes, or other sources of untreated water. Do not permit children with diarrhea to attend daycare or childcare settings until diarrhea has stopped.

Total Number of Giardiasis Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	5	2.0
Female	11	4.4
<b>Age Groups</b>		
0-9	2	3.4
10-14	0	0.0
15-19	1	2.7
20-24	0	0.0
25-29	3	8.3
30-34	3	8.9
35-39	0	0.0
40-44	0	0.0
45+	7	3.4
<b>Race/Ethnicity</b>		
White, non-Hispanic	13	4.2
Black, non-Hispanic	0	0.0
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	0	0.0
Hispanic	2	1.4
Unknown	1	NA
<b>Total</b>	<b>16</b>	<b>3.2</b>

Rate of Reported Giardiasis Cases, 2019-2023



# Salmonellosis

*Salmonella* bacteria can cause a diarrheal illness known as salmonellosis, however some *Salmonella* bacteria cause typhoid or paratyphoid fever.

Symptoms of salmonellosis include diarrhea, fever, and stomach cramps. *Salmonella* live in the intestines of animals and humans and typically it spreads through contaminated food or drinking water or coming into contact with infected animals or fecal matter.

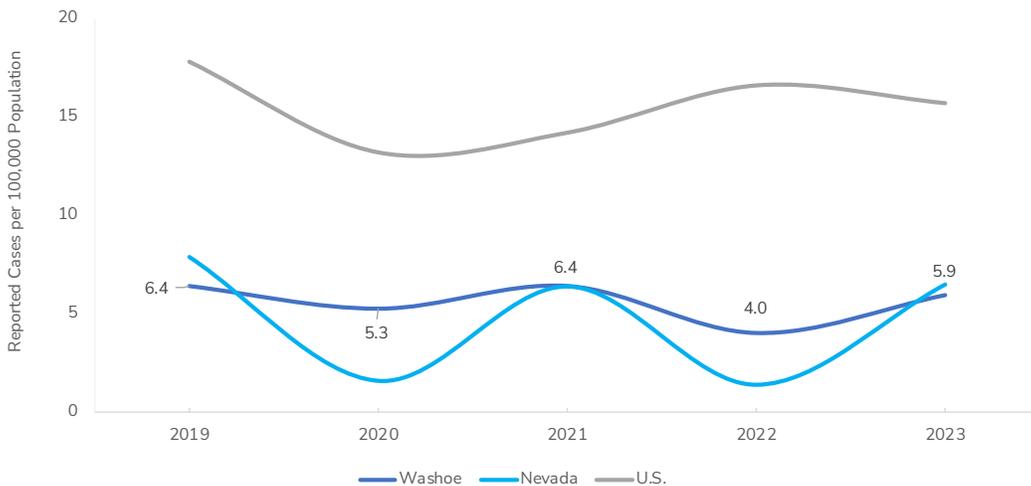
Most people recover without treatment, however children under the age of 5 years, and adults over 65 years with weakened immune systems are more likely to experience severe illness. Unfortunately, *Salmonella* is becoming increasingly resistant to antibiotics. Appropriate use of antibiotics, such as using only as needed and exactly as prescribed, is necessary in order to reduce and prevent increasing antibiotic resistance.

Animals, including pets, can carry *Salmonella* so it is important to wash hands after petting animals, coming into contact with their food, water, fecal matter, toys, bowls, or habitats including beds, cages, terrariums, coops or stalls. Do not kiss pets or other animals and keep pet living spaces clean.

Total Number of Salmonellosis Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	14	5.5
Female	16	6.3
<b>Age Groups</b>		
0-9	1	1.7
10-14	1	3.3
15-19	1	2.7
20-24	4	10.1
25-29	2	5.5
30-34	1	3.0
35-39	1	2.9
40-44	2	6.3
45+	17	8.3
<b>Race/Ethnicity</b>		
White, non-Hispanic	15	4.9
Black, non-Hispanic	1	7.2
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	3	7.8
Hispanic	7	5.0
Unknown	4	NA
<b>Total</b>	<b>30</b>	<b>5.9</b>

Rate of Reported Salmonellosis Cases, 2019-2023



# Shigellosis

Shigellosis is caused by the bacteria *Shigella*. In the United States, the most common species is *Shigella sonnei* or *Shigella flexneri*.

Symptoms onset occurs 1-2 days from exposure but can be up to 7 days post exposure. Symptoms typically include diarrhea that can be bloody and prolonged (lasting more than 3 days), fever, abdominal pain, and feeling one needs to defecate even when the bowels are empty. Symptoms can last 5-7 days. Most people recover with only fluids and rest but some may require antimicrobial therapies. Use of anti-diarrheal medications is not recommended as it can worsen symptoms.

*Shigella* is spread person-to-person. Infection occurs when bacteria is swallowed. Exposure can occur by touching surfaces containing the bacteria and then touching food or mouth. This can also occur by touching a surface or item that is contaminated with infected fecal matter. Exposure can also occur by eating food contaminated with infected feces or that has been prepared by someone infected with shigellosis. Another source of exposure can occur when swallowing recreational water (river or lake) that has been contaminated with infected fecal matter.

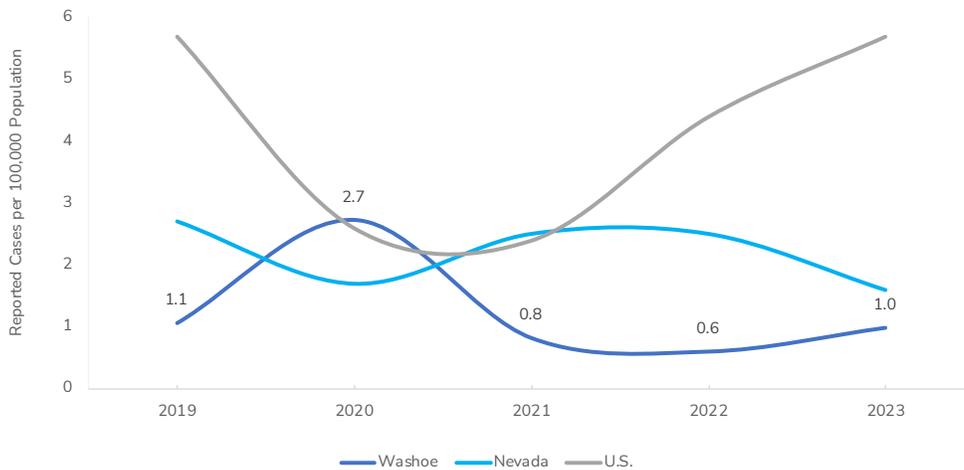
Lastly, exposure can occur by coming into contact with feces during sexual contact.

Prevention includes washing hands with soap and water before sexual activity, before preparing food or eating, after using the bathroom, changing a diaper, or cleaning up after someone in the bathroom; avoid swallowing any water from ponds, lakes, or swimming pools; follow safe food and water habits while traveling internationally; and wait at least 2 weeks after diarrhea stops to swim or to have sexual contact.

Total Number of Shigellosis Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	4	1.6
Female	1	0.4
<b>Age Groups</b>		
0-9	1	1.7
10-14	0	0.0
15-19	1	2.7
20-24	1	2.5
25-29	0	0.0
30-34	1	3.0
35-39	0	0.0
40-44	0	0.0
45+	1	0.5
<b>Race/Ethnicity</b>		
White, non-Hispanic	2	0.7
Black, non-Hispanic	1	7.2
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	0	0.0
Hispanic	2	1.4
Unknown	0	NA
<b>Total</b>	<b>5</b>	<b>1.0</b>

Rate of Reported Shigellosis Cases, 2019-2023



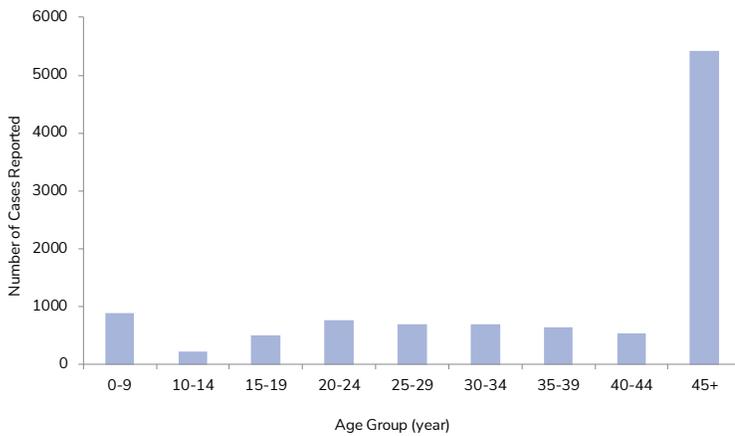
# Vaccine Preventable Diseases

Condition	Count	2023 Incidence Rate per 100K Population	2018-2022 Incidence Rate per 100K Population
COVID*	10048	1986.5	9204.6
Hepatitis B, Acute	7	1.4	0.5
Hepatitis B, Chronic	79	15.6	12.2
Influenza**	210	41.5	46.9
Invasive Pneumococcal Disease	57	11.3	15.5
Meningococcal	1	0.2	0.1
Pertussis	5	1.0	2.7
Rotavirus	12	2.4	1.7
Varicella	10	2.0	0.6

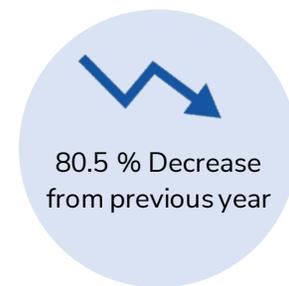
\*COVID Rate only for 2020-2023

\*\* Influenza count included only hospitalized cases

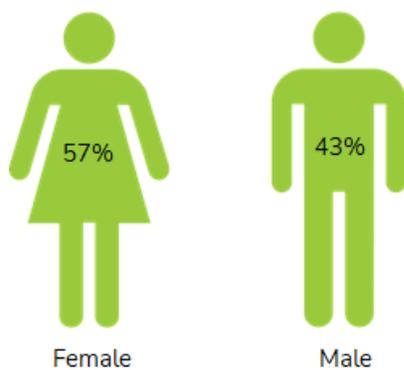
Total Number of Vaccine Preventable Disease Cases by Age Group, Washoe County, 2023



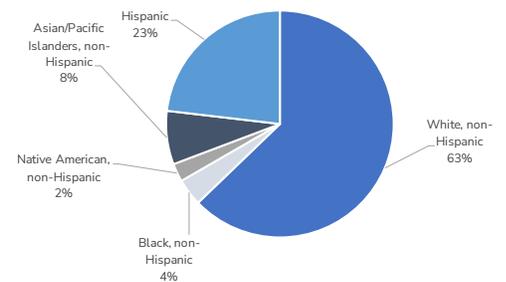
Reported Cases of VPD



Percentage of Cases by Sex



Percentage of Total Reported VPD Cases by Race/Ethnicity, Washoe County, 2023



# COVID-19

Coronavirus disease 2019, commonly known as COVID-19, is a respiratory disease caused by the SARS-CoV-2 virus. Like many other respiratory viruses, it is spread by people encountering respiratory droplets from individuals who are infectious.

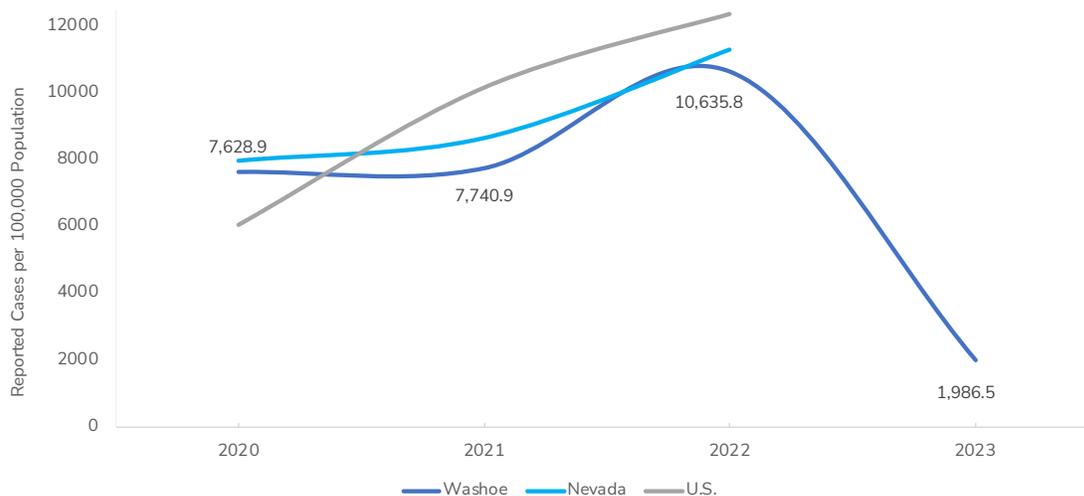
Symptomology of COVID-19 is broad, ranging from mild symptoms to severe illness. The more common symptoms include fever, chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, loss of taste or smell, congestion, sore throat, nausea or vomiting, and diarrhea. These symptoms may worsen, and emergency medical attention may be needed if signs, such as trouble breathing, persistent pain or pressure in the chest, new confusion, inability to wake or stay awake, or a pale, grey, or blue coloration in the skin, lips, or nail beds, occur. Risk factors for higher susceptibility to severe illness include individuals with underlying health conditions, immunocompromised individuals or those with a weakened immune system, and older adults.

Prevent COVID-19 infection or severe illness by staying up to date with COVID-19 vaccines, washing hands and using alcohol-based sanitizer, wearing a mask if infected or exposed, improving ventilation, and conducting group activities outdoors.

Total Number of COVID-19 Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	4286	1689.9
Female	5762	2284.7
<b>Age Groups</b>		
0-9	861	1477.3
10-14	232	763.8
15-19	500	1374.7
20-24	768	1930.4
25-29	683	1881.9
30-34	682	2021.9
35-39	630	1810.2
40-44	522	1643.2
45+	5170	2529.2
<b>Race/Ethnicity</b>		
White, non-Hispanic	6034	1961.7
Black, non-Hispanic	365	2626.0
Native American, non-Hispanic	253	3592.1
Asian/Pacific Islanders, non-Hispanic	717	1859.9
Hispanic	2262	1630.4
Unknown	417	NA
<b>Total</b>	<b>10048</b>	<b>1986.5</b>

Rate of Reported COVID Cases, 2020-2023



# Hepatitis B, Acute

Acute hepatitis B is a vaccine preventable liver infection caused by the hepatitis B virus (HBV). Hepatitis B is highly infectious and spreads through contact with infected blood and body fluids. The virus causes inflammation of the liver and can lead to a lifelong infection known as chronic hepatitis B.

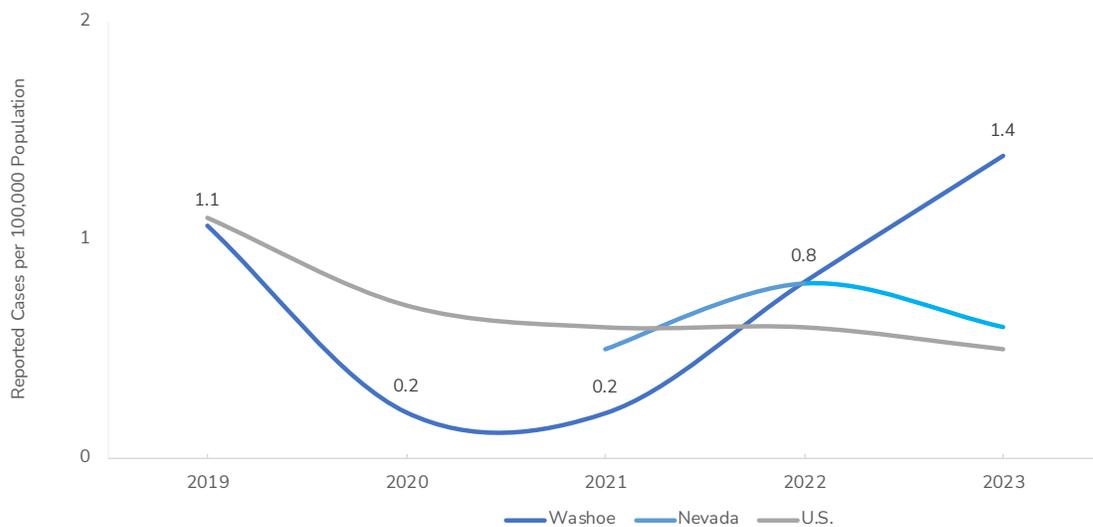
An acute HBV infection is a short-term illness that occurs within the first six months after exposure. It can range in severity from a mild illness with few or no symptoms to a serious condition requiring hospitalization.

Some adults can clear, or get rid of, the virus without treatment. People who clear the virus are considered immune and cannot get infected with the Hepatitis B virus again. Vaccination is the most effective way to prevent infection.

Total Number of Acute Hepatitis B Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	6	2.4
Female	1	0.4
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	0	0.0
20-24	0	0.0
25-29	1	2.8
30-34	0	0.0
35-39	2	5.7
40-44	0	0.0
45+	4	2.0
<b>Race/Ethnicity</b>		
White, non-Hispanic	2	0.7
Black, non-Hispanic	0	0.0
Native American, non-Hispanic	1	14.2
Asian/Pacific Islanders, non-Hispanic	0	0.0
Hispanic	4	2.9
Unknown	0	NA
<b>Total</b>	<b>7</b>	<b>1.4</b>

Rate of Reported Acute Hepatitis B Cases, 2019-2023



# Hepatitis B, Chronic

Hepatitis B is a vaccine-preventable liver infection caused by the hepatitis B virus (HBV). Hepatitis B can become long-term or chronic, and can lead to serious, even life-threatening, health issues like cirrhosis or liver cancer.

Most people with chronic HBV are asymptomatic and have no evidence of liver disease or injury. However, some develop cirrhosis or hepatocellular carcinoma (i.e., primary liver cancer). Approximately 25% of people who become infected during childhood and 15% who become chronically infected after childhood die prematurely from cirrhosis, and most remain asymptomatic until onset of end-stage liver disease.

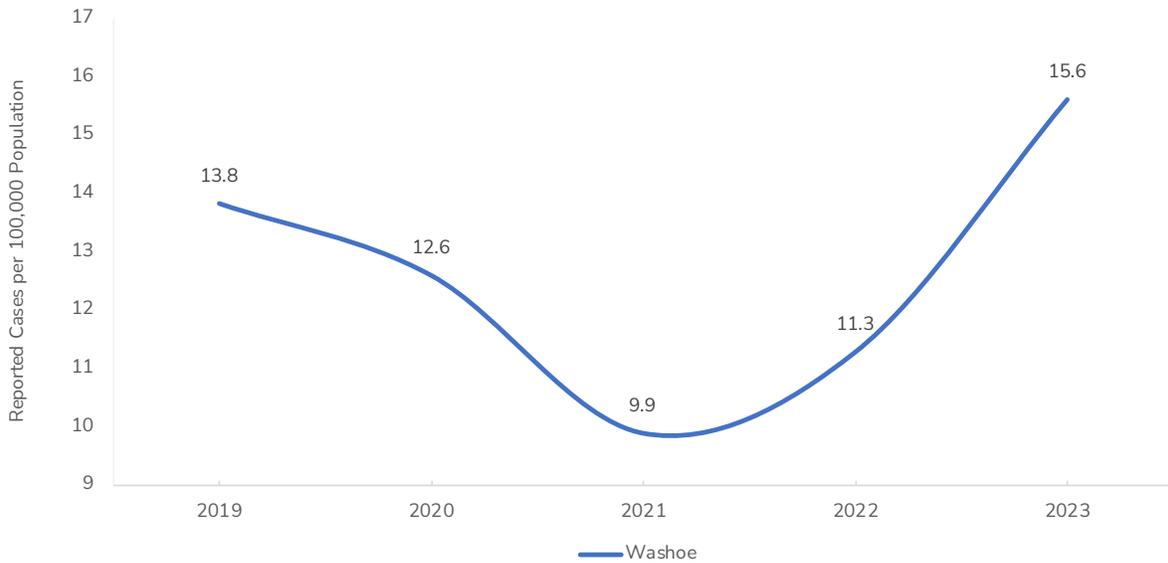
HBV can be transmitted through sexual contact with an infected partner, contact with infectious body fluids, sharing items with a person with HBV infection that can break the skin such as sharing razors, toothbrushes, needles, or exposure to needle sticks.

HBV infection can be prevented by getting vaccinated.

Total Number of Chronic Hepatitis B Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	40	15.8
Female	39	15.5
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	0	0.0
20-24	2	5.0
25-29	1	2.8
30-34	9	26.7
35-39	9	25.9
40-44	10	31.5
45+	48	23.5
<b>Race/Ethnicity</b>		
White, non-Hispanic	32	10.4
Black, non-Hispanic	5	36.0
Native American, non-Hispanic	2	28.4
Asian/Pacific Islanders, non-Hispanic	29	75.2
Hispanic	5	3.6
Unknown	6	NA
<b>Total</b>	<b>79</b>	<b>15.6</b>

Rate of Reported Chronic Hepatitis B Cases, 2019-2023



# Influenza

Influenza “flu” is caused by two main types of influenza viruses: types A and B. Influenza is a respiratory illness that routinely spreads in humans, causing seasonal flu epidemics each year. Influenza can cause mild to severe illness, sometimes leading to death. Symptoms are usually sudden and include fever/feeling feverish, chills, cough, sore throat, runny/stuffy nose, muscle/body aches, headaches, fatigue, and sometimes vomiting and diarrhea.

Influenza typically spreads person to person, mainly through respiratory droplets released when people with flu cough, sneeze or talk. These droplets land in the mouths or noses of those nearby or are inhaled into the lungs. Less commonly, a person might get flu by touching a surface or object with the flu virus on it, then touching their own mouth, nose, or eyes.

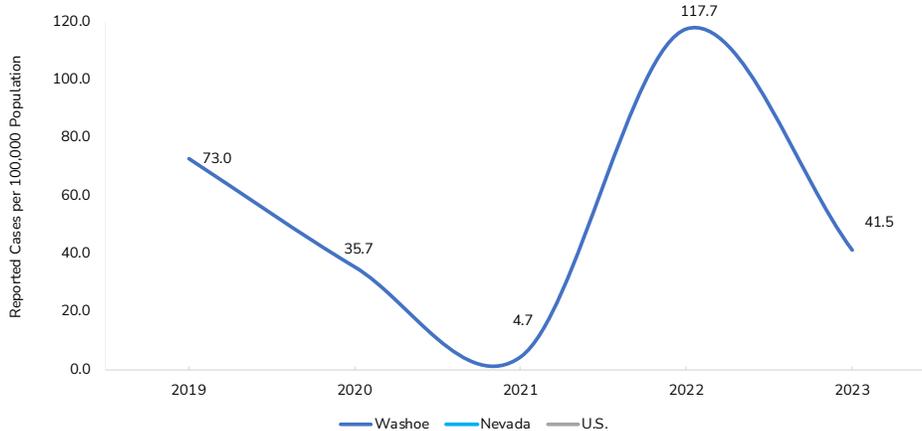
Antiviral drugs are a treatment option but work best if started one to two days after symptoms begin. People at higher risk of flu complications include young children, adults 65 years of age and older, pregnant people, and people with certain medical conditions such as asthma, diabetes and heart disease.

A yearly flu vaccine is the best preventive action. Other prevention methods include avoid contact with people who are sick, cover coughs/sneezes, wash hands often with soap and water, clean/disinfect surfaces and objects that may be contaminated with flu, and if sick, stay home for at least 24 hours after your fever has gone without fever reducing medicines.

Total Number of Hospitalized Cases of Influenza by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	98	38.6
Female	112	44.4
<b>Age Groups</b>		
0-9	25	42.9
10-14	1	3.3
15-19	6	16.5
20-24	5	12.6
25-29	5	13.8
30-34	4	11.9
35-39	10	28.7
40-44	7	22.0
45+	147	71.9
<b>Race/Ethnicity</b>		
White, non-Hispanic	148	48.1
Black, non-Hispanic	13	93.5
Native American, non-Hispanic	2	28.4
Asian/Pacific Islanders, non-Hispanic	10	25.9
Hispanic	33	23.8
Unknown	4	NA
<b>Total</b>	<b>210</b>	<b>41.5</b>

Rate of Reported Hospitalized Influenza Cases, 2019-2023



# Invasive Pneumococcal Disease

Pneumococcal disease is caused by the bacteria *Streptococcus pneumoniae*. When the bacteria are found in a site that is considered normally sterile (e.g., blood, cerebrospinal fluid, bone), the disease is referred to as invasive pneumococcal disease. Transmission occurs from person to person through inhalation of respiratory droplets from an infected individual.

Pneumococcal disease can infect multiple parts of the body and cause pneumonia, otitis, sinusitis, meningitis, and bacteremia. Symptoms may vary depending on the type of pneumococcal infection and can include fever, cough, chills, confusion, ear pain, and photophobia. Severe pneumococcal infections can result in hearing loss, brain damage or death. People most likely to experience complications are those who are immunocompromised, under the age of 2 years, and those over the age of 65 years.

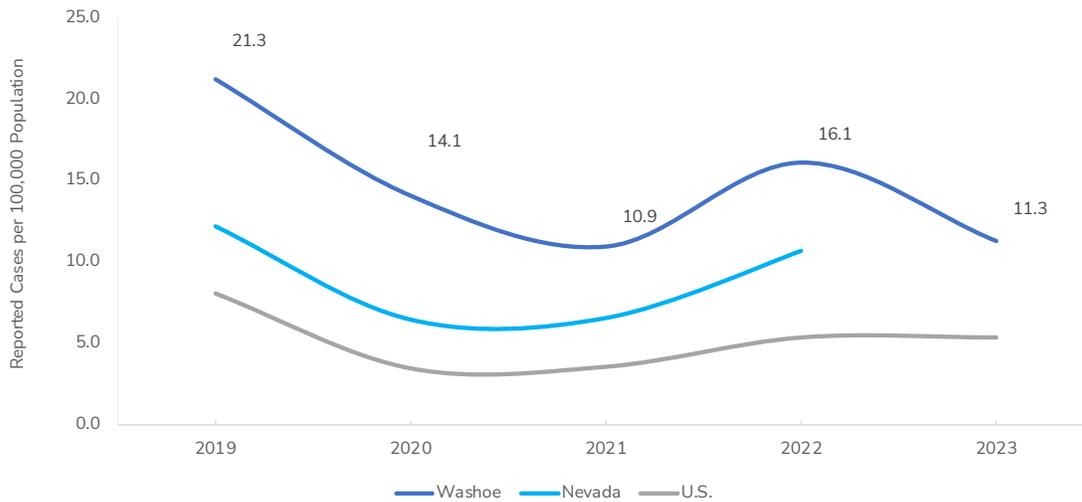
Invasive pneumococcal disease is treated with antibiotics; however, there is a chance the bacteria may be resistant to the antibiotics. Because of this, broad-spectrum antibiotic and sensitivity testing should be used for severe cases.

Pneumococcal vaccination is recommended as the best way to prevent pneumococcal disease. Good health hygiene practices, such as proper hand washing and covering mouth during cough or sneezing, can also prevent the further spread of sickness.

Total Number of Invasive Pneumococcal Disease Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	33	13.0
Female	24	9.5
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	1	2.7
20-24	2	5.0
25-29	4	11.0
30-34	2	5.9
35-39	1	2.9
40-44	3	9.4
45+	44	21.5
<b>Race/Ethnicity</b>		
White, non-Hispanic	41	13.3
Black, non-Hispanic	3	21.6
Native American, non-Hispanic	1	14.2
Asian/Pacific Islanders, non-Hispanic	5	13.0
Hispanic	6	4.3
Unknown	1	NA
<b>Total</b>	<b>57</b>	<b>11.3</b>

Rate of Reported Invasive Pneumococcal Disease Cases, 2019-2023



# Pertussis

Pertussis (also known as whooping cough) is a highly contagious bacterial infection caused by *Bordetella pertussis*. Transmission occurs through person-to-person contact with respiratory droplets of infected persons. Humans are the only known reservoir. It is considered endemic and can occur year-round, with a later summer-autumn peak.

Once exposed, the incubation period is 7 to 10 days.

Illness can last between 6 to 10 weeks and occurs in stages. During the catarrhal stage symptoms mimic those of the common cold including runny nose, low-grade fever, and mild cough. Illness progresses to the paroxysmal stage which can include fits of coughing, followed by gasping for air (or “whoop”), and may experience post-tussis vomiting. The final stage is the convalescent stage where cough lessens but may linger for 2 to 3 weeks. Those at highest risk for severe complications include infants under one year old, pregnant women in their third trimester, and those with chronic respiratory illnesses.

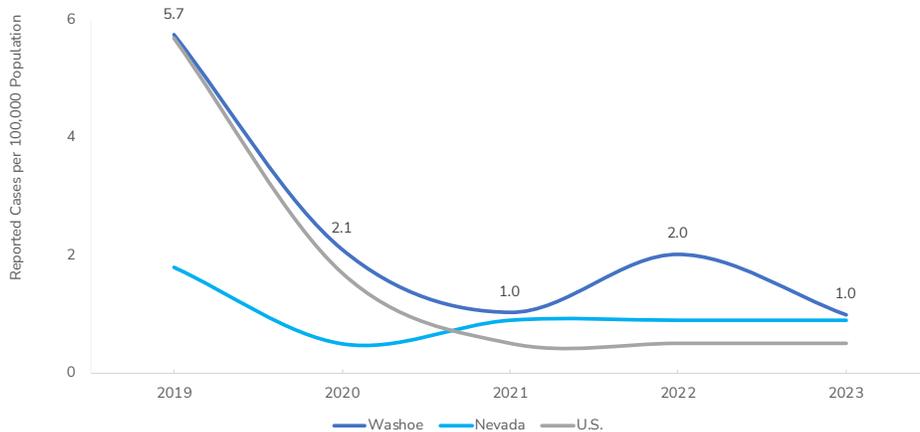
The best way to avoid whooping cough is to get vaccinated.

To further prevent the spread of bacteria, practice good hand hygiene by washing hand frequently as well as covering mouth and nose when sneezing or coughing. Preventive postexposure antimicrobial prophylaxis may be given to contacts to infected individuals. Close contacts include those that live with the infected person and those at risk for serious illness or who have contact with someone who is at increased risk of severe complications.

Total Number of Pertussis Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	2	0.8
Female	3	1.2
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	1	2.7
20-24	0	0.0
25-29	0	0.0
30-34	1	3.0
35-39	0	0.0
40-44	1	3.1
45+	2	1.0
<b>Race/Ethnicity</b>		
White, non-Hispanic	5	1.6
Black, non-Hispanic	0	0.0
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	0	0.0
Hispanic	0	0.0
Unknown	0	NA
<b>Total</b>	<b>5</b>	<b>1.0</b>

Rate of Reported Pertussis Cases, 2019-2023



# Rotavirus

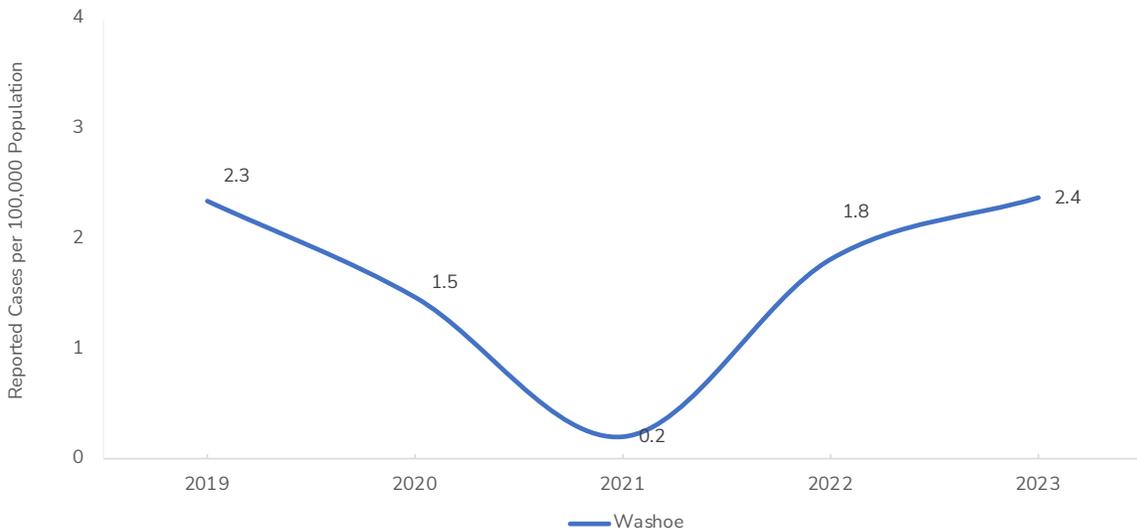
Rotavirus is a gastrointestinal viral infection that is common in infants and young children. Transmission mainly occurs person-to-person in the fecal-oral route but can also occur by ingesting contaminated food or water. Infections in children typically occur in winter and spring months. The incubation period is 2 days once exposed. Typical symptoms include severe, watery diarrhea, vomiting, fever, and/or abdominal pain.

Symptoms can last between 3 to 8 days. Treatment is non-specific and focuses on treating symptoms, mainly dehydration. Vaccination is the best way to prevent rotavirus infection. There are currently 2 vaccinations that are available. However, vaccination or infection does not provide full immunity. Thoroughly wash hands especially after using the bathroom.

Total Number of Rotavirus Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	6	2.4
Female	6	2.4
<b>Age Groups</b>		
0-9	5	8.6
10-14	0	0.0
15-19	0	0.0
20-24	0	0.0
25-29	0	0.0
30-34	0	0.0
35-39	0	0.0
40-44	0	0.0
45+	7	3.4
<b>Race/Ethnicity</b>		
White, non-Hispanic	8	2.6
Black, non-Hispanic	0	0.0
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	1	2.6
Hispanic	3	2.2
Unknown	0	NA
<b>Total</b>	<b>12</b>	<b>2.4</b>

Rate of Reported Rotavirus Cases, 2019-2023



# Varicella

Varicella, also known as chickenpox, is a highly contagious vaccine-preventable disease caused by the varicella-zoster virus (VZV). Varicella is mainly spread through close contact with someone who has chickenpox.

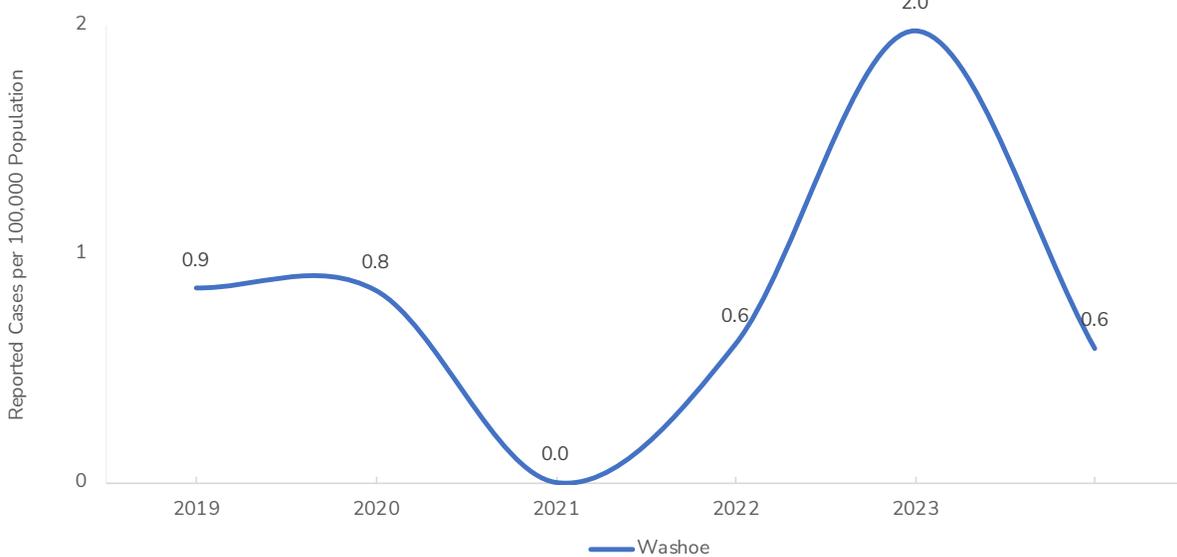
The primary symptom of varicella is a rash which progresses into itchy, fluid-filled blisters that eventually turn into scabs. Other symptoms can include fever, headache, or generally feeling unwell (malaise). The disease is typically mild in children; however, it can be severe or even fatal. Those at risk for more severe disease include pregnant persons, babies, adolescents, adults, and immunocompromised persons. After people recover from varicella, the virus remains dormant in the body. If the virus reactivates later in life it causes shingles.

The best way to prevent chickenpox is to get the chickenpox vaccine.

Total Number of Varicella Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	4	1.6
Female	6	2.4
<b>Age Groups</b>		
0-9	5	8.6
10-14	0	0.0
15-19	0	0.0
20-24	1	2.5
25-29	3	8.3
30-34	1	3.0
35-39	0	0.0
40-44	0	0.0
45+	0	0.0
<b>Race/Ethnicity</b>		
White, non-Hispanic	4	1.3
Black, non-Hispanic	1	7.2
Native American, non-Hispanic	1	14.2
Asian/Pacific Islanders, non-Hispanic	2	5.2
Hispanic	2	1.4
Unknown	0	NA
<b>Total</b>	<b>10</b>	<b>2.0</b>

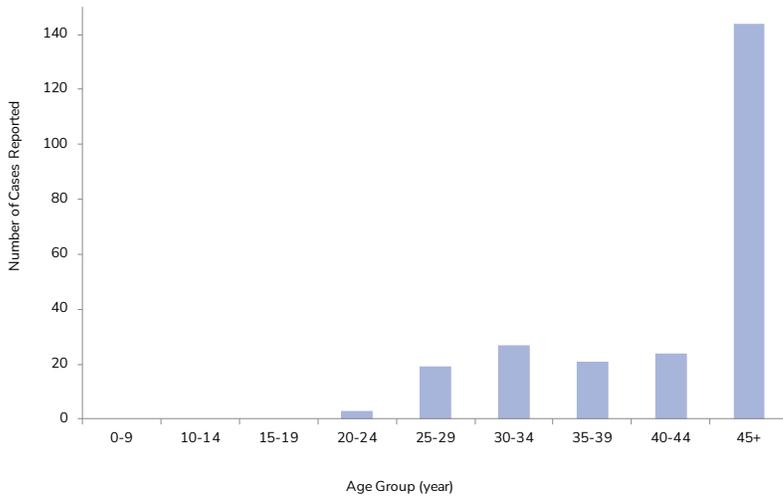
Rate of Reported Varicella Cases, 2019-2023



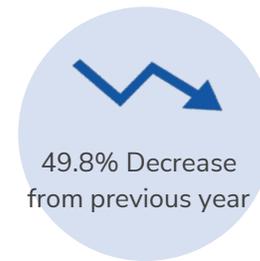
# Bloodborne Diseases

Condition	Count	2023 Incidence Rate per 100K Population	2018-2022 Incidence Rate per 100K Population
Hepatitis C, Acute	6	1.2	1.1
Hepatitis C, Chronic	232	45.9	109.0

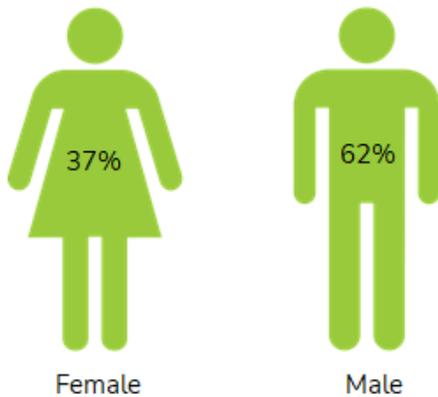
Total Number of Bloodborne Diseases by Age Group, Washoe County, 2023



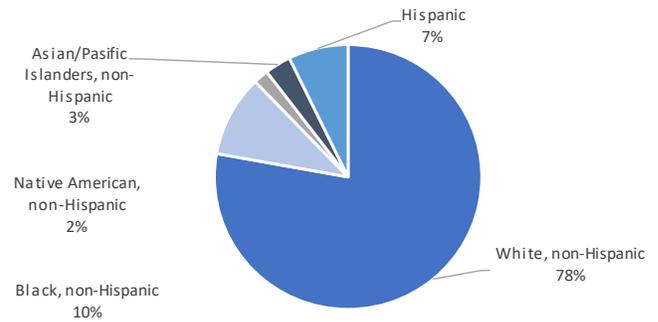
## Reported Cases of Bloodborne Diseases



## Percentage of Cases by Sex



## Percentage of Total Reported Bloodborne Diseases Cases by Race/Ethnicity, Washoe County, 2023



# Hepatitis C, Acute

Hepatitis C is a liver infection caused by the hepatitis C virus (HCV). Hepatitis C is often described as “acute,” meaning a new infection, or “chronic,” meaning a long-term infection. Acute hepatitis C occurs within the first 6 months after someone is infected with HCV.

While many people experience a short-term illness, more than half of people who become infected with HCV will develop a chronic infection that can be lifelong if not treated. Signs and symptoms of acute disease can include fever, nausea, vomiting, abdominal pain, dark urine, jaundice, light-colored stool, joint pain, and fatigue. However, many people with HCV do not have symptoms and do not feel sick.

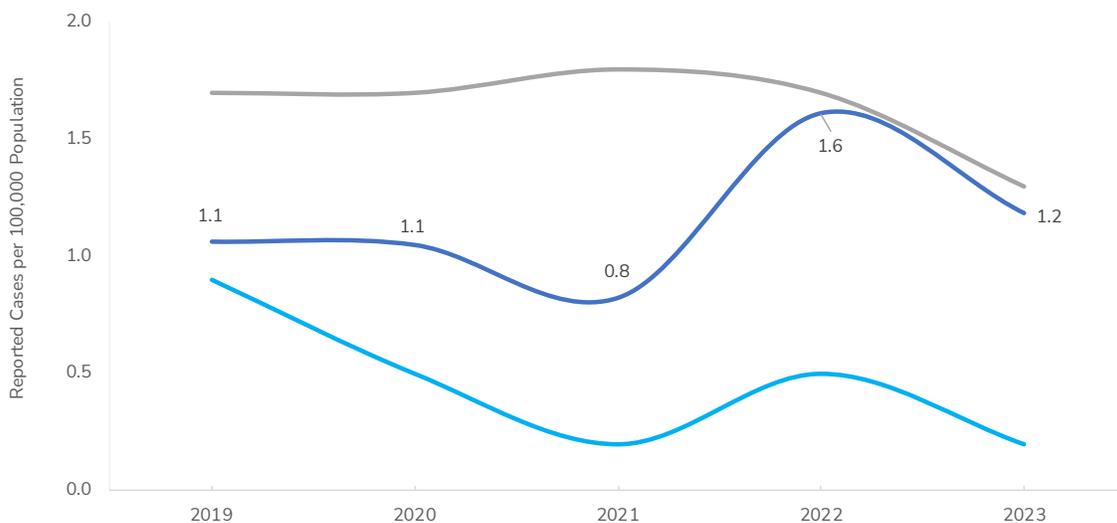
HCV transmission occurs through contact with blood from an infected person. Most acute infections in the US today are caused by injection drug use. Less frequently HCV can be spread through sexual contact, healthcare exposures, birth, and sharing items that can break the skin such as razors.

Currently, there is no vaccine to prevent HCV. Treatment usually involves 8–12 weeks of oral therapy (pills) and cures over 90% of cases.

Total Number of Acute Hepatitis C Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	4	1.6
Female	2	0.8
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	0	0.0
20-24	0	0.0
25-29	0	0.0
30-34	2	5.9
35-39	1	2.9
40-44	0	0.0
45+	3	1.5
<b>Race/Ethnicity</b>		
White, non-Hispanic	4	1.3
Black, non-Hispanic	1	7.2
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	0	0.0
Hispanic	1	0.7
Unknown	0	NA
<b>Total</b>	<b>6</b>	<b>1.2</b>

Rate of Reported Acute Hepatitis C Cases, 2019-2023



# Hepatitis C, Chronic

Hepatitis C can range from a mild illness lasting a few weeks to a serious, long-term, or chronic illness. More than half of people who become infected with HCV will develop a chronic infection. Chronic hepatitis C can result in serious, even life-threatening health problems like cirrhosis and liver cancer.

Most people with chronic hepatitis C do not have any symptoms or have only general symptoms like chronic fatigue and depression.

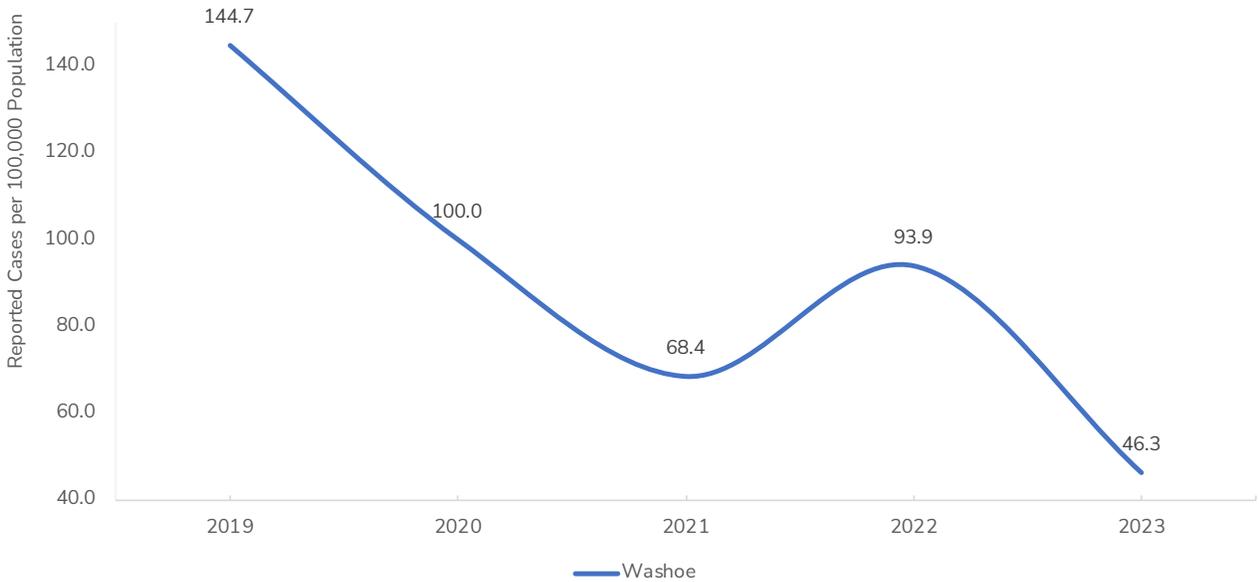
HCV transmission can occur through contact with blood from an infected person. This can include sharing drug-injection equipment, sexual contact, healthcare exposures, birth, and sharing items that can break the skin such as razors and toothbrushes.

Currently, there is no vaccine to prevent HCV. Treatment usually involves 8–12 weeks of oral therapy (pills) and cure over 90% of cases, with few side effects.

Total Number of Chronic Hepatitis C Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	144	56.8
Female	86	34.1
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	0	0.0
20-24	3	7.5
25-29	19	52.4
30-34	25	74.1
35-39	20	57.5
40-44	24	75.6
45+	141	69.0
<b>Race/Ethnicity</b>		
White, non-Hispanic	168	54.6
Black, non-Hispanic	21	151.1
Native American, non-Hispanic	4	56.8
Asian/Pacific Islanders, non-Hispanic	7	18.2
Hispanic	15	10.8
Unknown	17	NA
<b>Total</b>	<b>232</b>	<b>45.9</b>

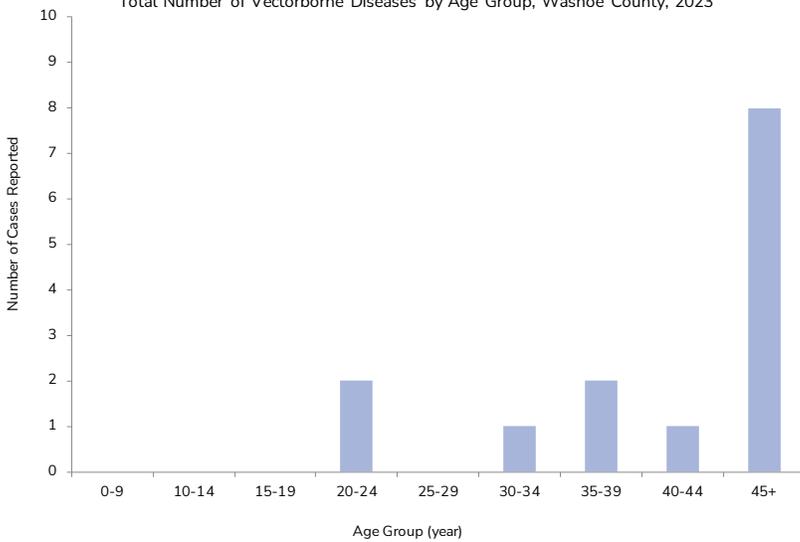
Rate of Reported Chronic Hepatitis C Cases, 2019-2023



# Vectorborne Diseases

Condition	Count	2023 Incidence Rate per 100K Population	2018-2022 Incidence Rate per 100K Population
Denge Fever	2	0.4	0.2
Ehrlichiosis	1	0.2	0.0
Hantavirus	2	0.4	0.2
Lyme	8	1.6	0.7
West Nile Neuroinvasive	1	0.2	0.2

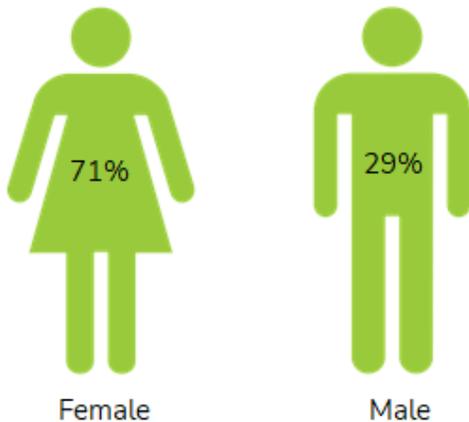
Total Number of Vectorborne Diseases by Age Group, Washoe County, 2023



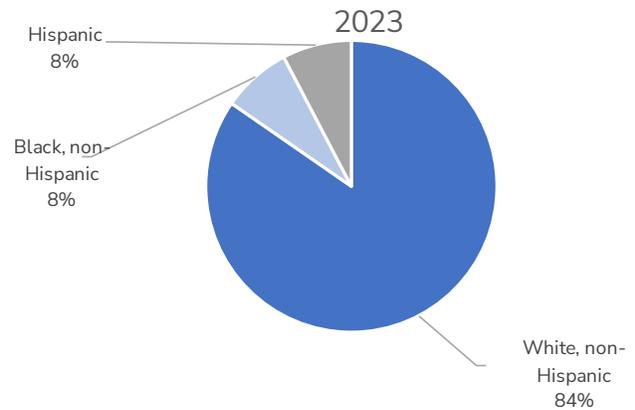
Reported Cases of Vectorborne Diseases



Percentage of Cases by Sex



Percentage of Total Reported Vectorborne Cases by Race/Ethnicity, Washoe County, 2023



# Lyme

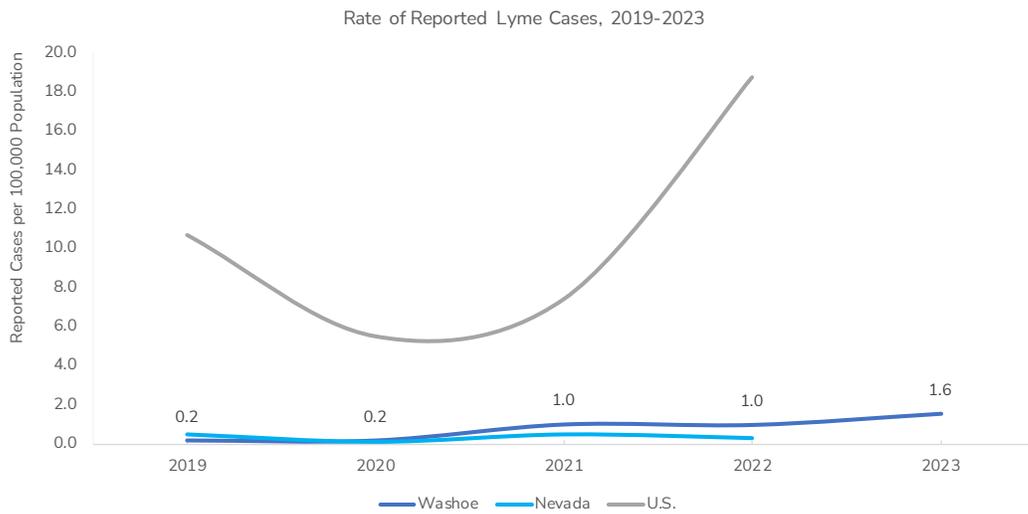
Lyme disease, the most common vector-borne disease in the United States, is caused by two species of bacteria: *Borrelia burgdorferi* and *Borrelia mayonii*. The blacklegged tick (*Ixodes scapularis* and *Ixodes pacificus*) is the primary vector for Lyme disease transmission. Though they can attach to any part of the body, they are often found in hard-to-see areas and must be attached for 36 to 48 hours for the Lyme disease bacterium to be transmitted.

Typical signs and symptoms of Lyme disease, including fever, chills, headache, fatigue, myalgia, erythema migrans rash, or swollen lymph nodes, occur three to 30 days after a tick bite. If left untreated the infection can spread to the joints, heart, and nervous system. The four major manifestations of Lyme disease are erythema migrans, neurologic Lyme disease, Lyme carditis, or Lyme arthritis.

Timely tick removal and testing is essential for prevention and early diagnosis. Antibiotic treatment based on the manifestation of Lyme disease is important and can help prevent chronic Lyme disease. Other methods of prevention include use of insect repellent, applying pesticides, and reducing tick habitat.

Total Number of Lyme Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	1	0.4
Female	7	2.8
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	0	0.0
20-24	1	2.5
25-29	0	0.0
30-34	0	0.0
35-39	2	5.7
40-44	1	3.1
45+	4	2.0
<b>Race/Ethnicity</b>		
White, non-Hispanic	6	2.0
Black, non-Hispanic	1	7.2
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hispanic	0	0.0
Hispanic	0	0.0
Unknown	1	NA
<b>Total</b>	<b>8</b>	<b>1.6</b>



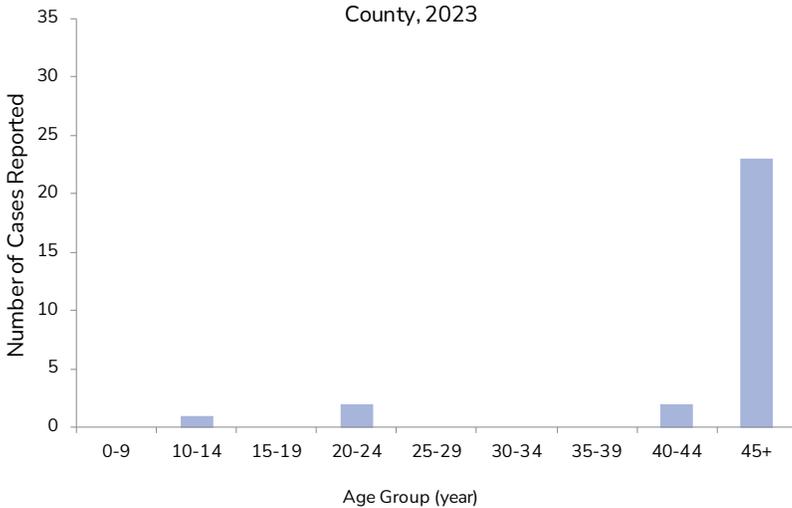
# Other Diseases

Condition	Count	2023 Incidence Rate per 100K Population	2018-2022 Incidence Rate per 100K Population
Candida auris*	3	0.6	0.0
Coccidioidomycosis	11	2.2	2.0
CPO**	5	1.0	1.3
Legionellosis	4	0.8	0.5
Streptococcal Toxic Shock Syndrome	2	0.4	0.0
Tuberculosis	9	1.8	1.4

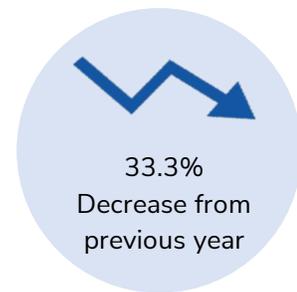
\*Candida auris only for 2020-2022

\*\*CPO - Carbapenemase producing organisms

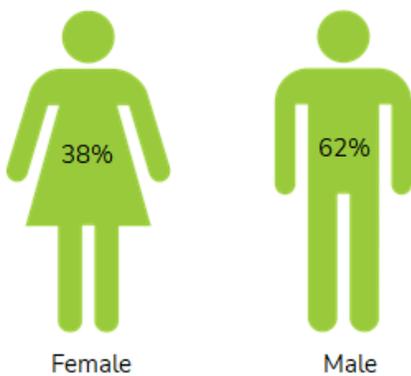
Total Number of Other Disease Cases by Age Group, Washoe County, 2023



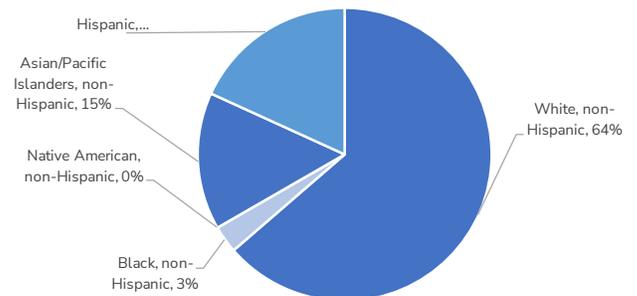
Reported Cases of Other Diseases



Percentage of Cases by Sex



Percentage of Total Reported Other Disease Cases by Race/Ethnicity, Washoe County, 2023



# Coccidioidomycosis

Coccidioidomycosis (also known as valley fever) is a fungal infection caused by *Coccidioides*. *Coccidioides* is typically found in the soil in southwestern United States, parts of Mexico and Central and South America, and as far north as south-central Washington. Infection occurs most frequently following rainy seasons during hot and dry periods, especially after wind and dust storms. Valley fever is not spread from person-to-person. Infection occurs by breathing in the fungal spores from the air. Valley fever is most common in adults aged 60 years and older. Once exposed, the incubation period is 1 to 3 weeks.

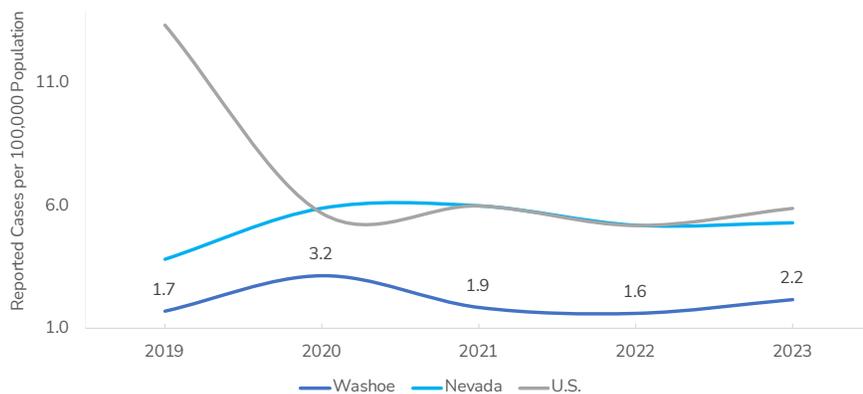
Symptoms can include fatigue, cough, fever, shortness of breath, headache, night sweats, muscle aches or joint pain, and rash on the upper body and legs. Those at highest risk of severe illness include people with weakened immune systems (HIV, organ transplant, and those taking immunosuppressant medications), pregnant women, people who are diagnosed with diabetes, and those of Black or Filipino descent.

Prevent valley fever by avoiding areas with a lot of dust such as construction or excavation sites, wear an N95 respirator if needed when coming into contact with dust, stay indoors during dust storms and close windows and doors, avoid activities that include coming into close contact with dirt or dust such as gardening, yard work, or digging, maintain indoor air filters, and wash cuts or scrapes with soap and water to reduce risk of skin infection if exposed to dirt or dust.

Total Number of Coccidioidomycosis Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	6	2.4
Female	5	2.0
<b>Age Groups</b>		
0-9	0	0.0
10-14	1	3.3
15-19	0	0.0
20-24	1	2.5
25-29	0	0.0
30-34	1	3.0
35-39	0	0.0
40-44	2	6.3
45+	6	2.9
<b>Race/Ethnicity</b>		
White, non-Hispanic	8	2.6
Black, non-Hispanic	0	0.0
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hisp	0	0.0
Hispanic	3	2.2
Unknown	0	NA
<b>Total</b>	<b>11</b>	<b>2.2</b>

Rate of Reported Coccidioidomycosis Cases, 2019-2023



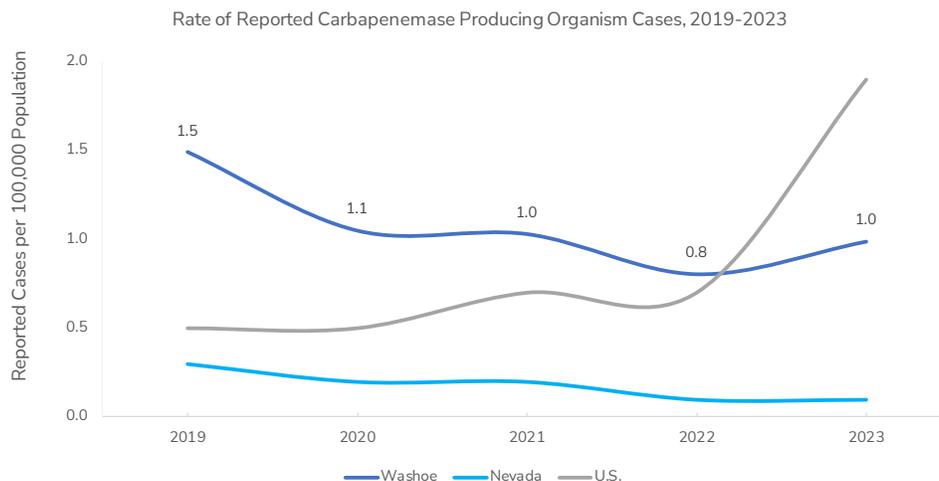
## Carbapenemase Producing Organism

Carbapenemase producing organisms (CPO) are bacteria that produce an enzyme called carbapenemase and are resistant to carbapenems and other  $\beta$ -lactam antibiotics as a result. CPOs may also be non-susceptible to additional classes of antibiotics, making them multidrug resistant organisms. Carbapenemase production has been found in gram-negative bacilli, such as *Enterobacteriaceae*, *Pseudomonas aeruginosa*, and *Acinetobacter baumannii*. Although a variety of carbapenemase exist, the most notable are *Klebsiella pneumoniae* carbapenemase (KPC), New Delhi Metallo-beta-lactamase (NDM), Verona Integron-Encoded Metallo-beta-lactamase (VIM), Imipenemase (IMP), and Oxacillinase-48 (OXA-48). The genes that code for carbapenemase production can be exchanged to other bacteria, making CPO a public health risk, especially in healthcare settings.

CPO cases may be classified as clinical or colonized. A clinical case shows evidence of an active infection and specimens tested are taken from clinical sources (e.g. urine, wound). Colonized cases do not show signs of infection but carry the bacteria on their body. CPOs can spread from person to person with both clinical and colonized cases capable of transmitting the disease. Additional propagation can occur through contact with surfaces contaminated with the pathogen. Symptoms of CPO may vary depending on the site of infection.

Total Number of CPO Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	2	0.8
Female	3	1.2
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	0	0.0
20-24	0	0.0
25-29	0	0.0
30-34	0	0.0
35-39	0	0.0
40-44	0	0.0
45+	5	2.4
<b>Race/Ethnicity</b>		
White, non-Hispanic	3	1.0
Black, non-Hispanic	1	7.2
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hisp.	0	0.0
Hispanic	0	0.0
Unknown	1	NA
<b>Total</b>	<b>5</b>	<b>1.0</b>



# Tuberculosis

Tuberculosis (TB) is caused by bacteria of the *Mycobacterium tuberculosis* complex: *Mycobacterium tuberculosis*, *Mycobacterium africanum*, *Mycobacterium bovis*, *Mycobacterium canetti*, *Mycobacterium microti*, *Mycobacterium pinnipedii*, *Mycobacterium caprae*. All of these species of mycobacterium are thought to be capable of causing disease. *M.tb* is the most common cause, followed by *M. bovis* and *M. africanum*.

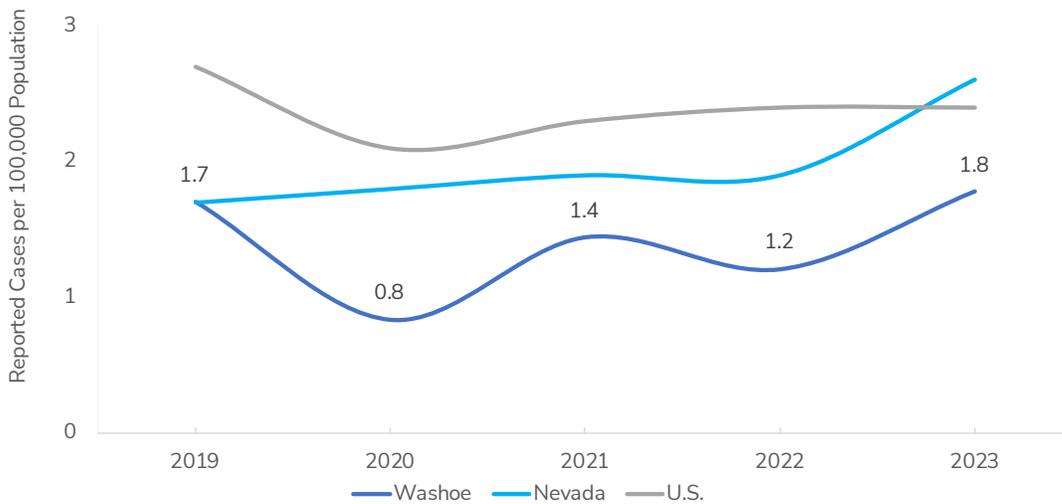
TB is spread by droplet nuclei through the air when a person with pulmonary or laryngeal tuberculosis cough, sneeze, or shout. Normal air currents can keep them airborne for prolonged periods and spread them throughout a room or building.

Not all individuals exposed to TB bacteria experience symptoms. There are two TB-related conditions: Latent Tuberculosis Infection (LTBI) and TB disease. Individuals with LTBI are not infectious and have no symptoms but may eventually progress to TB disease in which they experience symptoms and can spread the disease. Symptoms for TB disease include persistent cough, fatigue, decreased appetite, weight loss, fever/chills, night sweats, chest pain, and hemoptysis. TB disease is fully treatable with a variety of treatment regimens.

Total Number of Tuberculosis Cases by Selected Characteristics, Washoe County, 2023

Characteristics	Count	Incidence Rate per 100K Population
<b>Sex</b>		
Male	8	3.2
Female	1	0.4
<b>Age Groups</b>		
0-9	0	0.0
10-14	0	0.0
15-19	0	0.0
20-24	1	2.5
25-29	1	2.8
30-34	2	5.9
35-39	0	0.0
40-44	0	0.0
45+	5	2.4
<b>Race/Ethnicity</b>		
White, non-Hispanic	3	1.0
Black, non-Hispanic	0	0.0
Native American, non-Hispanic	0	0.0
Asian/Pacific Islanders, non-Hisp:	5	13.0
Hispanic	1	0.7
Unknown	0	NA
<b>Total</b>	<b>9</b>	<b>1.8</b>

Rate of Reported Tuberculosis Cases, 2019-2023



## Variable Completeness

Variable completeness is an indicator used to assess quality assurance to verify if key data elements are reported by laboratories or clinicians and, if not, if the epidemiology program and other communicable disease staff are asking for the information during the investigations. Age, race, ethnicity, and sex are important in identifying populations impacted by for illnesses and are measures used to assess healthy equity in the community.

	Age	Race/Ethnicity	Sex	Disease Diagnosed Date
Campylobacteriosis	100%	93%	100%	80%
Carbapenemase producing organism (CPO)	100%	80%	100%	100%
Chlamydia	100%	93%	100%	100%
Coccidioidomycosis	100%	100%	100%	82%
COVID-19	100%	96%	100%	100%
Cryptosporidium	100%	100%	100%	100%
Escherichia coli-Shiga-toxin-producing	100%	100%	100%	100%
Giardiasis	100%	100%	94%	75%
Gonorrhea	100%	96%	100%	100%
Hepatitis B (Acute)	100%	100%	100%	100%
Hepatitis B (Chronic)	100%	92%	100%	99%
Hepatitis C (Acute)	100%	100%	100%	100%
Hepatitis C (Chronic)	100%	93%	99%	100%
Human Immunodeficiency Virus (HIV)	100%	100%	100%	100%
Hospitalized with Influenza	100%	98%	100%	100%
Lyme	100%	88%	100%	75%
Pertussis	100%	100%	100%	100%
Invasive Pneumococcal Disease	100%	98%	100%	100%
Salmonellosis	100%	87%	100%	100%
Shigellosis	100%	100%	100%	100%
Stage 3 HIV Infection (AIDS)	100%	100%	100%	100%
Stage 3 HIV Infection-Progressed to Stage 3	100%	100%	100%	100%
Syphilis (primary and secondary)	100%	99%	100%	100%
Tuberculosis	100%	100%	100%	100%
Varicella Complicated	100%	100%	100%	100%