

Klamath County Public Health

Quarterly Communicable Disease Report

Quarter 4: 2022

2022 Communicable Disease Year-in-Review

The table below summarizes 2022 case counts and estimated rates for select reportable communicable diseases in Klamath County. Diseases are listed in order of prevalence in Klamath County in 2022, diseases with case counts under five are suppressed to protect confidentiality. Five-year rates and average annual case counts for 2017-2021 are also provided for comparison.

Communicable Disease Case Counts and Rates								
Reportable Disease or Condition	2022				2017-2021			
	Oregon		Klamath		Oregon		Klamath	
	Case count	Rate per 100,000 population	Case count	Rate per 100,000 population	Average annual case count	5-year rate per 100,000 population	Average annual case count	5-year rate per 100,000 population
Chlamydia	14,896	349.0	218	320.2	17,687.2	418.1	315.6	464.1
Gonorrhea	5,456	127.8	101	148.4	5,943.8	140.5	121.2	178.2
Animal Bite	2,685	62.9	73	107.2	2,513.4	59.4	76.6	112.7
Hepatitis C (chronic)	3,414	80.0	64	94.0	4,638.2	109.7	79.2	116.5
Syphilis	2,391	56.0	23	33.8	1,299.2	30.7	6.2	9.1
CRE*	195	4.6	10	14.7	151.4	3.6	3.8	5.6
Campylobacteriosis	984	23.1	8	11.8	998.4	23.6	18.4	27.1
E. coli (STEC)*	272	6.4	7	10.3	276.8	6.5	4.8	7.1
Lead Poisoning	347	8.1	<5	Supressed	440.6	10.4	4.0	5.9
Salmonellosis	484	11.3	<5	Supressed	466.0	11.0	6.2	9.1
Lyme Disease	67	1.6	<5	Supressed	69.8	1.7	2.6	3.8
Coccidioidomycosis	28	0.7	<5	Supressed	39.0	0.9	0.4	0.6
Haemophilis influenzae	76	1.8	<5	Supressed	75.4	1.8	2.2	3.2
Hepatitis B (acute)	23	1	<5	Supressed	21.4	0.5	0.4	0.6
Botulism	3	0.1	<5	Supressed	3.0	0.1	0.0	0.0
Cryptococcosis	66	1.5	<5	Supressed	57.0	1.3	0.2	0.3
Cryptosporidiosis	115	2.7	<5	Supressed	212.8	5.0	7.8	11.5
Giardiasis	332	7.8	<5	Supressed	310.4	7.3	3.4	5.0
Leptosporidiosis	2	0.0	<5	Supressed	2.8	0.1	0.0	0.0
NTM*	33	0.8	<5	Supressed	40.2	1.0	0.0	0.0
Q Fever*	3	0	<5	Supressed	5.0	0.1	0.2	0.3
West Nile Virus	5	0.1	<5	Supressed	4.6	0.1	0.2	0.3
Yersiniosis	50	1.2	<5	Supressed	46.4	1.1	0.2	0.3

Case counts include both confirmed and presumptive cases. Case counts are preliminary as of February 1, 2023. 2022 rates are calculated using 2021 mid-year population estimates from the Population Research Center at Portland State University.

*Q fever is the abbreviation for query fever caused by bacteria Coxiella burnetii, NTM is the abbreviation for Non-tuberculosis mycobacteria, E. coli (STEC) is the abbreviation for Shiga toxin-producing Escherichia coli, and CRE is the abbreviation for carbapenem-resistant Enterobacterales.

Disease data is collected through the Oregon Public Health Epidemiologists' User System (Orpheus). Orpheus is an integrated electronic disease surveillance system intended for local and state public health epidemiologists and disease investigators to efficiently manage communicable disease reports.

2022 Klamath County Highlights

❖ The most prevalent 2022 disease in Klamath County was chlamydia.

- Klamath County has proportionally fewer chlamydia infections compared to statewide, rate of 320 per 100k compared to 349 per 100k statewide.

❖ The second most prevalent disease in Klamath County was gonorrhea.

- Klamath County has proportionally more gonorrhea infections compared to statewide, rate of 148 per 100k compared to 128 per 100k statewide.

❖ Between 2017 and 2021, the annual average number of syphilis cases is six. In 2022 alone, there were 73 cases, which is 12 times the annual average.

- Nationally, syphilis cases are increasing among females of child-bearing age and consequently there is more congenital syphilis. Oregon and Klamath County is seeing this increase as well.

❖ Chronic Hepatitis C is more prevalent in Klamath County than statewide, though there were fewer cases in 2022 compared to the annual average.

Disease Spotlight: Sexually Transmitted Infections (STI)

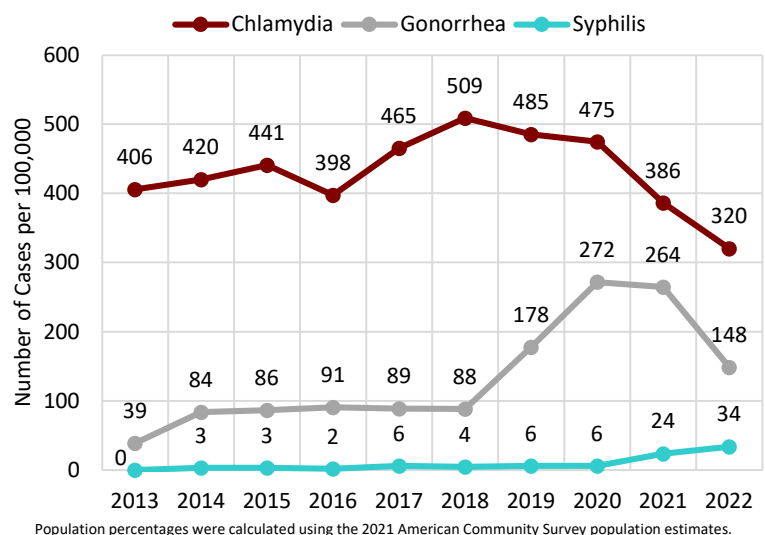
Gonorrhea and syphilis rates tripled during the pandemic, while chlamydia significantly decreased.

Chlamydia rates continue to decline and the 2022 rate is the lowest it has been in a decade. Health-seeking behavior has altered since 2020, people have delayed medical care or did not seek care during the pandemic.

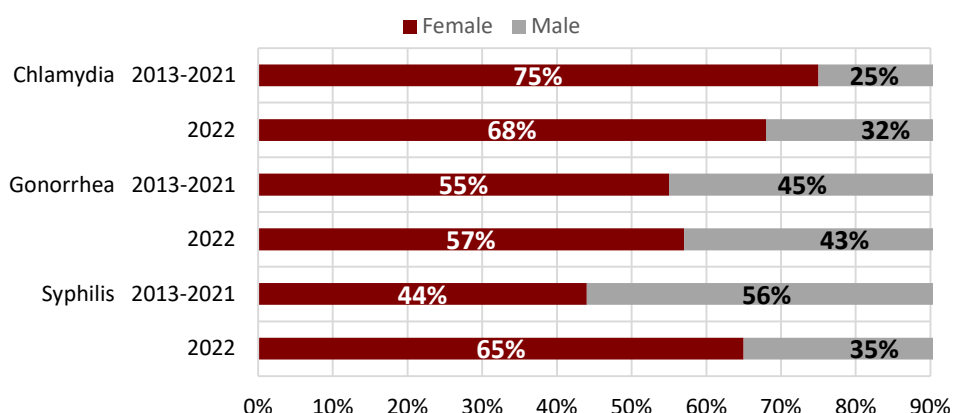
The gonorrhea rate increased between 2019-2021. A growing concern among medical providers is the spread of antibiotic-resistant gonorrhea strains that make treatment difficult and may result in increased spread of the infection.

The syphilis rate has more than tripled since 2020 and continuing to trend upward.

Annual STI Rates per 100,000 population, Klamath County, Oregon, 2013-2022



Percentage of STI Cases by Sex, Klamath County, Oregon, 2013-2022



The percentage of female syphilis cases significantly increased in 2022.

Between 2013-2022, the majority of chlamydia cases are female and about half of gonorrhea cases are female. Historically, the majority of syphilis cases have been male, however in 2022 the vast majority of cases were female. This trend increases the risk for congenital syphilis.

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Communicable Disease by Mode of Transmission

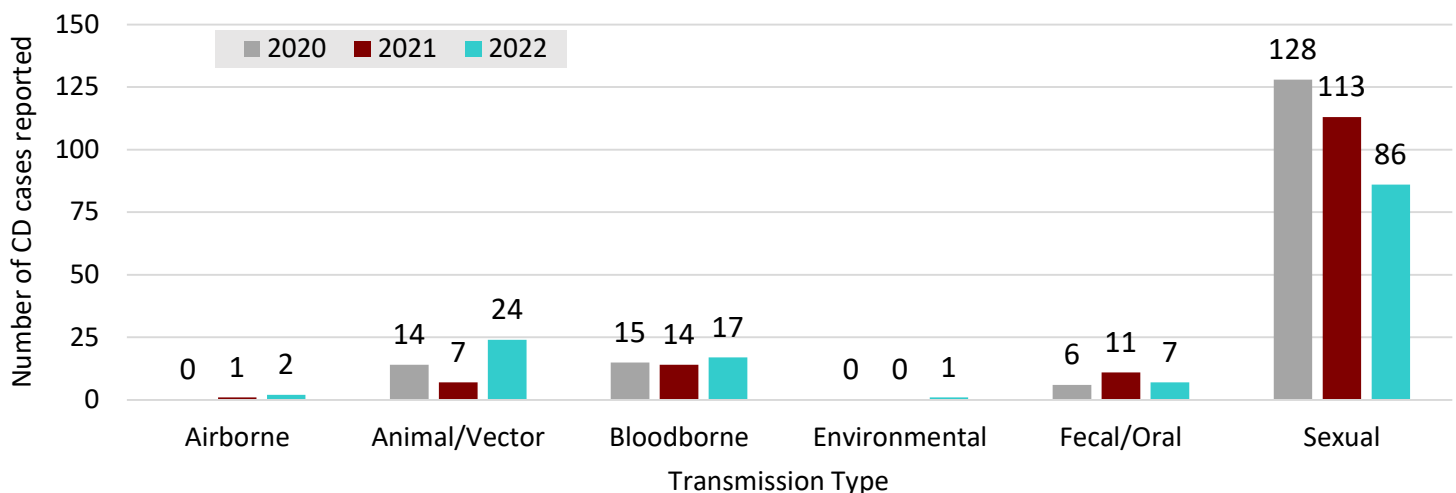
A communicable disease (CD) is an illness that is caused by an infectious agent or toxin [1]. These agents and toxins can spread from person to person or from a different source, such as an animal to human. Communicable disease can spread rapidly in a population, which is why communicable disease trends are monitored in order to prevent outbreaks and epidemics.

The data in this report is the number of communicable disease cases, by their primary mode of transmission, confirmed by a public health or clinic laboratory from October 1, 2022 to December 31, 2022. This report excludes influenza and COVID-19 cases.

Communicable disease can be spread by different modes, a disease may be spread through multiple modes of transmission. The graph below classifies the reported diseases by their primary mode of transmission. The different modes are defined as follows:

- **Airborne:** when pathogens travel via dust particles, spores or small respiratory droplets that become aerosolized, such as when an infected person sneezes or coughs, and a healthy person inhales the infectious agent. Diseases with airborne transmission capabilities include Haemophilis influenzae, tuberculosis, and pertussis.
- **Animal or Vectorborne:** when pathogens are transmitted to humans by vectors, such as mosquitos, ticks, and fleas, when an infected vector bites a human. Infected animals may indirectly transmit disease as is often the case with, for example, rabies via dog bite. Diseases with vectorborne transmission capabilities include Lyme disease, tularemia, and West Nile Virus.
- **Bloodborne:** when pathogens spread by the bodily fluids of an infected person into the bloodstream of another person. Disease with bloodborne transmission capabilities include hepatitis B, hepatitis C, and HIV.
- **Environmental:** when disease is caused by environmental exposure, such as when a person is exposed to high levels of lead which leads to elevated blood lead levels and the diagnosis of lead poisoning.
- **Fecal/Oral:** when the pathogen is present in feces and are transmitted (such as via inadequately washed hands) to a vehicle such as food, water, or utensil, and enters through the mouth.
- **Sexual:** when pathogens are transmitted from person to person through sexual contact, including vaginal, oral, or anal sex.

Number of communicable disease (CD) cases reported by transmission type and age group (excluding influenza & COVID-19), Klamath County residents, October 1 to December 31, 2022



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