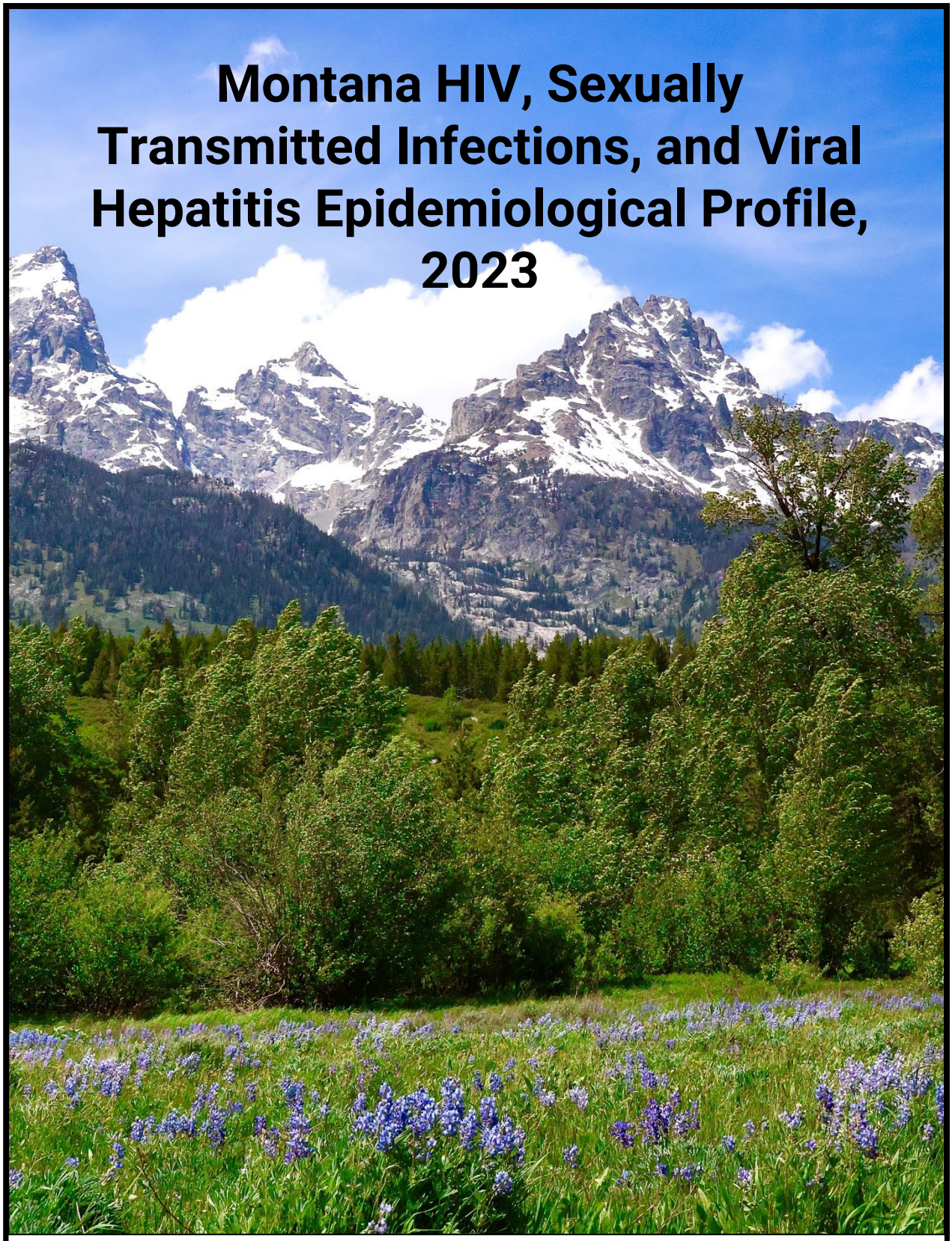
Montana HIV, Sexually Transmitted Infections, and Viral Hepatitis Epidemiological Profile, 2023



DEPARTMENT OF
PUBLIC HEALTH &
HUMAN SERVICES

Table of Contents

INTRODUCTION

This report was prepared by the Communicable Disease Epidemiology Section (CDEpi) at the Montana Department of Public Health and Human Services (DPHHS) and presents data for HIV, sexually transmitted infections (chlamydia, gonorrhea, and syphilis), and viral hepatitis in Montana. In addition, this report describes the demographics of Montana and in context of each disease.

All reportable conditions in this report meet the current case definitions provided by the Centers for Disease Control and Prevention (CDC) and the Council of State and Territorial Epidemiologists (CSTE). Communicable diseases that must be reported by diagnostic laboratories and health care professionals to public health authorities are specified by the Administrative Rules of Montana (ARM 37.114.203). Laboratories that perform testing associated with HIV infection must report:

a. Any test result or combination of test results that indicate HIV infection
b. All CD4 T-lymphocyte test results
c. HIV nucleic acid tests, RNA or DNA, irrespective of result
d. All test results for assays designed to assess HIV infection subtype and resistance to antiretroviral drugs, including nucleotide sequences

The Montana HIV, Sexually Transmitted Infections, and Viral Hepatitis Epidemiological Profile relies on data from the Electronic HIV/AIDS Reporting System (eHARS) and the Montana Infectious Disease Information System (MIDIS). As the primary data collection and reporting system for HIV data, eHARS provides information on HIV cases that includes patient demographics, laboratory results, disease stage, antiretroviral (ARV) use and transmission risk(s). MIDIS serves as the surveillance system for all reportable diseases and conditions for the state of Montana. For diseases with low number of events, aggregate time periods may be used in describing conditions and data may be suppressed when the number of events is between 1 and 4. When possible, data for calendar year 2023 is used. If not available, the year with the most recent data is provided. Disease data from correctional facilities are included in the county of their location. This may impact disease counts in those locations, particularly in counties which house Montana's largest correctional facilities (Powell and Deer Lodge counties).

This report also includes information from the 2023 Montana State Health Assessment in describing state demographics. This assessment presents data from a variety of sources that describes physical and mental health, communicable disease, and chronic conditions of Montanans.

Other data sources include the National Center for Health Statistics (NCHS) for bridged-race population estimates of the resident population of the United States for use in calculating rates and demographic data such as race and rurality, as well as the Behavioral Risk Factor

Surveillance System that collects prevalence data regarding health-related risk behaviors, chronic health conditions, and the use of preventive services.

Data from other state of Montana departments are also used in this report. The Montana Department of Commerce Census and Economic Information Center (CEIC) provides current economic and demographic analysis, data, and maps. The Montana Department of Labor and Industry (DLI) offers data on housing, inflation, wage and workplace statistics.

DPHHS CONTRIBUTERS

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FIGURES

TABLES

NOTABLE EVENTS

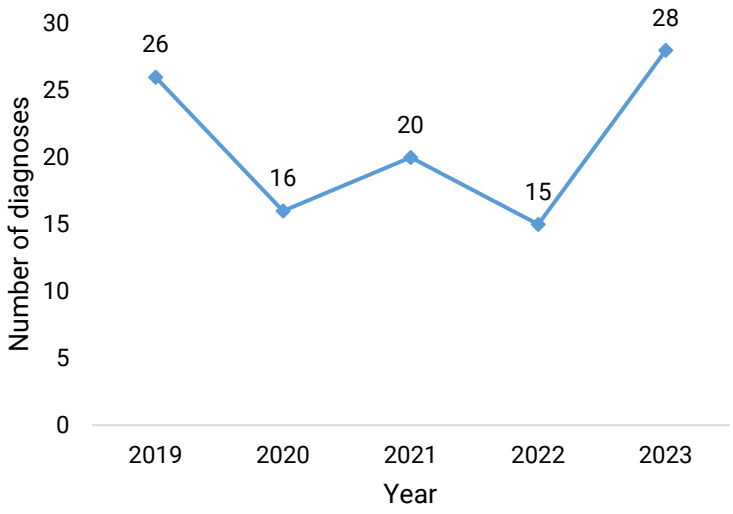
Impact of the COVID-19 Pandemic

COVID-19 is an infectious respiratory disease that was discovered in December 2019 in Wuhan, China and ultimately resulted in a pandemic classification and response. Montana identified its first case of COVID-19 on March 13, 2020. As of June 26, 2024, Montana has reported 357,766 cases, 15,788 hospitalizations, and 3,877 deaths due to COVID-19. COVID-19 response in Montana strained public health staff and resources and disrupted health care utilization and community testing events for the diseases included in this report. As a result, data from 2020 and 2021 should be interpreted with caution. Pandemic-related stay-at-home orders suspended or delayed many routine healthcare visits and patients avoided seeking medical and preventative services.

Beginning in 2020, diagnoses of HIV in the United States decreased by 17% likely due, in part, to COVID-19-related disruptions in testing. In Montana, the number of new diagnoses also decreased in 2020 (Figure 1).[1]

After the number of new HIV diagnoses decreased in 2020, Montana saw an increase in new infections in 2023. During that year, 28 new HIV diagnoses were reported to the Montana Department of Public Health and Human Services (DPHHS) compared to 15 cases in 2022. Because of the small number of events, cases from 2023 were compared to the most recent 5-year average (2018-2022) in Table 1.

Figure 1. Number of new HIV diagnoses, Montana, 2019-2023



The percentage of new diagnoses by sex remained unchanged when comparing 2023 with 2018-2022, with men making up most cases (89% and 88% respectively). Additional demographic characteristics of new HIV diagnoses for 2023 and the 2018-2022 time period are summarized in Table 1. Men who reported men who have sex with men (MSM) remained the population most affected by HIV in Montana. However, it was notable that the new HIV diagnoses in 2023 tended to be younger than those diagnosed in the previous five years with 64% of new diagnoses younger than 34 compared to 54% during 2018-2022 period.

[1] Viguerie A, Song R, Johnson AS, Lyles CM, Hernandez A, Farnham PG. Isolating the Effect of COVID-19-Related Disruptions on HIV Diagnoses in the United States in 2020. J Acquir Immune Defic Syndr. 2023 Apr 1;92(4):293-299.

Table 1. New HIV diagnoses by transmission risk and age group, Montana, 2023 and 2018-2022

	Percent of total 2023 cases (N=28)	Percent of 2018-2022 cases (N=102)
Transmission risk		
MSM	57%	55%
MSM/IDU	11%	16%
IDU	7%	10%
High Risk Heterosexual Contact (HRH)	7%	5%
Risk not identified/risk not reported	18%	14%
Age group (years)		
15-24	14%	17%
25-34	50%	38%
35-44	18%	23%
45-54	11%	13%
55+	7%	10%

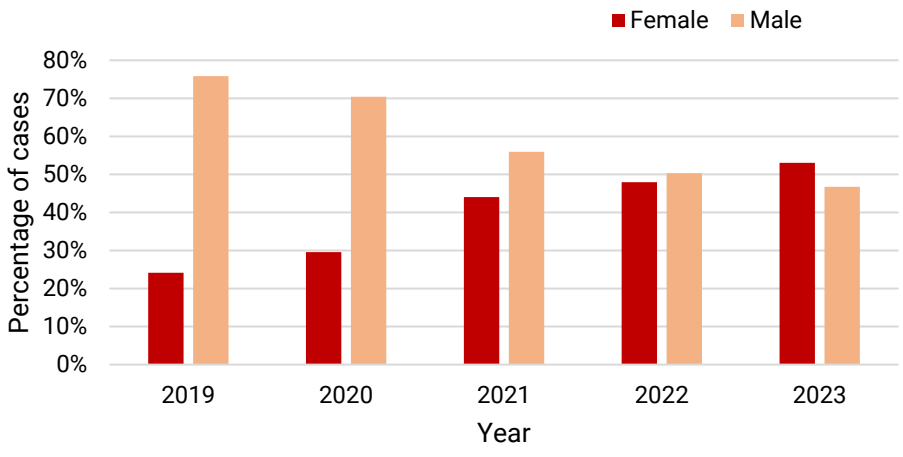
MSM: Men who have sex with men, only
IDU: Injecting drug use, only
MSM/IDU: Men who have sex with men and injecting drug use
HRH: High-risk heterosexual contact with a person with known HIV, only
NIR/NRR: No identified risk/no risk reported

Montana Syphilis Cases

While there was a decrease in other sexually transmitted infections (e.g., chlamydia and gonorrhea) in the past five-year period, syphilis cases increased to the highest levels in Montana since 1929. There was a 559% increase in syphilis cases between 2019 (116 cases) and 2023 (765 cases).

The CDC reports that cases of syphilis in the United States are more common in

Figure 2. Percentage of syphilis cases (all stages) by sex, Montana 2019-2023



men and, of those, men who have sex with men (MSM) are disproportionately impacted[2]. In Montana, however, the percentage of syphilis cases (all stages) has shifted from a disease primarily diagnosed in males in 2019 (76%) to over half (53%) being diagnosed in females in 2023 (Figure 2).

Transmission risk for syphilis has also shifted during the most recent five years. Local tribal and county health jurisdictions (LHJ) document the completion of a risk assessment for patients with syphilis in MIDIS. During the 2019-2023 period, 68% of syphilis cases had documentation that a risk assessment was completed. Among the syphilis cases in which the assessment was completed, the percent of men with syphilis reporting MSM as at least one transmission risk decreased from 45% in 2019 to 8% in 2023.

[2] CDC Sexually Transmitted Infections, Surveillance Report, https://www.cdc.gov/std/statistics/2022/overview.htm

MONTANA DEMOGRAPHICS

Population (2022)	Counties	Tribal Nations	American Indian Reservations
1,122,867	56	12	7

Montana is the fourth-largest state by area, the eighth-least populous state, and the third-least densely populated state. In 2022, there were an estimated 1,122,867 people living in Montana.

Montana's population increased 7% between 2017 and 2022 (Figure 4). This was a greater population growth than the overall United States (US) population, which increased of 3% during the same period.

Figure 3. Montana population by county, 2022

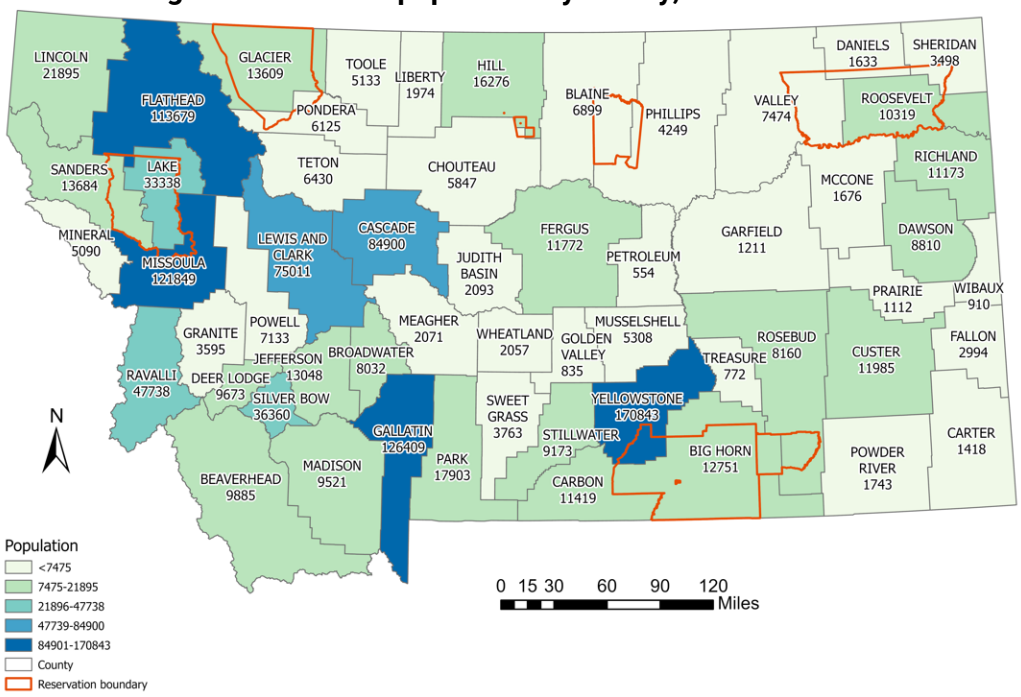
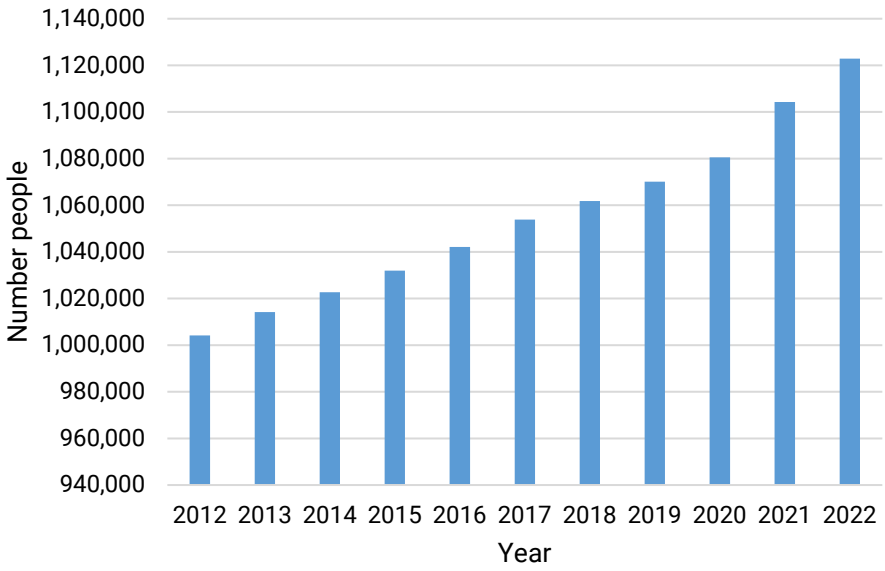


Figure 4. Population size in Montana by year, 2012-2022



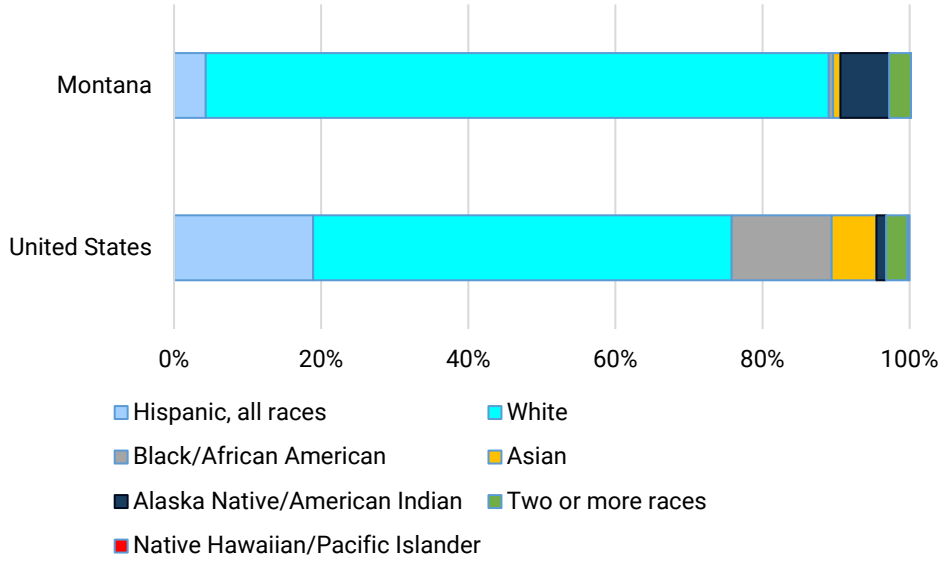
The percentage of population increase was not evenly distributed among Montana counties. Gallatin County had the highest percent increase in population, increasing by 33% between 2010 and 2020. This was followed by Flathead County (15 % increase), Lewis and Clark County (12% increase), Yellowstone County (11% increase) and Missoula County (8% increase).

Race and Ethnicity

Most Montanans identify as white (85%) and 7% identify as American Indian/Alaska Native. A smaller percentage reporting a single race identify as Asian (1.0%), Black (0.6%), and Pacific Islander and Native Hawaiian (0.1%). About 3% of Montanans identify as more than one race and 4% identify as being of Hispanic or Latino ethnicity, all races. Figure 5 describes the distribution of Montana residents by race and ethnicity compared to the United States (U.S.).

Find the most recent statewide and community-specific demographic changes in the Montana Department of Commerce Community Profiles for demographic, economic, and social characteristics.

Figure 5. Montana and U.S. residents by race and ethnicity, 2022

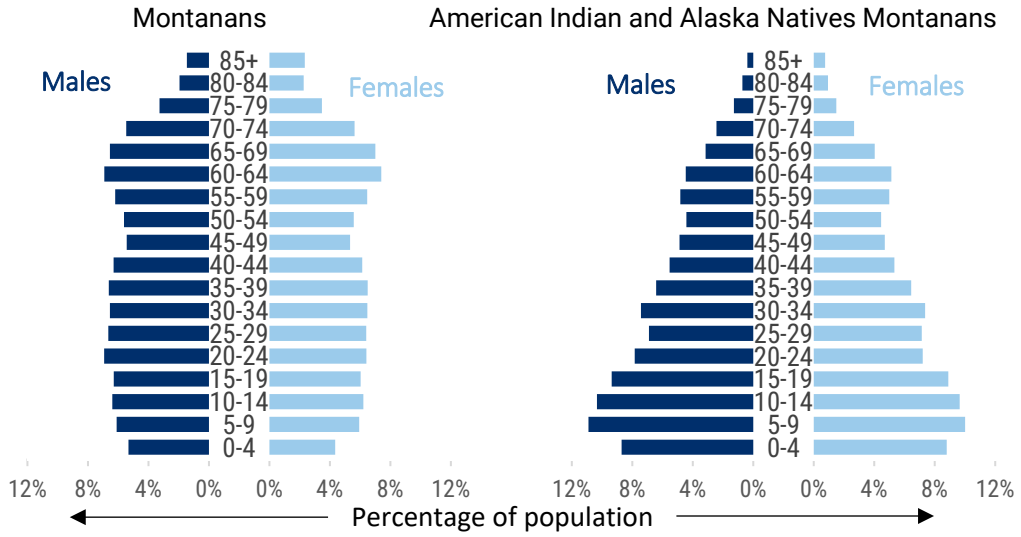


Montana is home to twelve American Indian tribes that are recognized as sovereign nations by the United States. This recognition is evident in the treaties and executive orders that established the seven reservations in the state. The Little Shell Chippewa Tribe, which has no reservation in Montana, is recognized by the state and received federal recognition in December 2019. The majority of the American Indian population comes from Assiniboine, Blackfeet, Chippewa, Cree, Crow, Gros Ventre, Kootenai, Little Shell Chippewa, Northern Cheyenne, Pend d'Oreille, Salish and Sioux tribal nations. Most of Montana American Indians reside on one of the seven Indian reservations, while others live in urban areas such as Missoula, Billings, Great Falls, Butte, and Helena.

While the median age of Montanans overall is 40 years, the median age of American Indians and Alaska Natives in Montana is significantly younger at 28 years (Figure 6).

See Key Social Factors Influencing Native American Health in Indian Country (2022) for a report on the unique factors impacting health disparities of the American Indian population in Montana

Figure 6. Percentage of population of American Indian and Alaska Natives in Montana and of Montanans overall, 2022

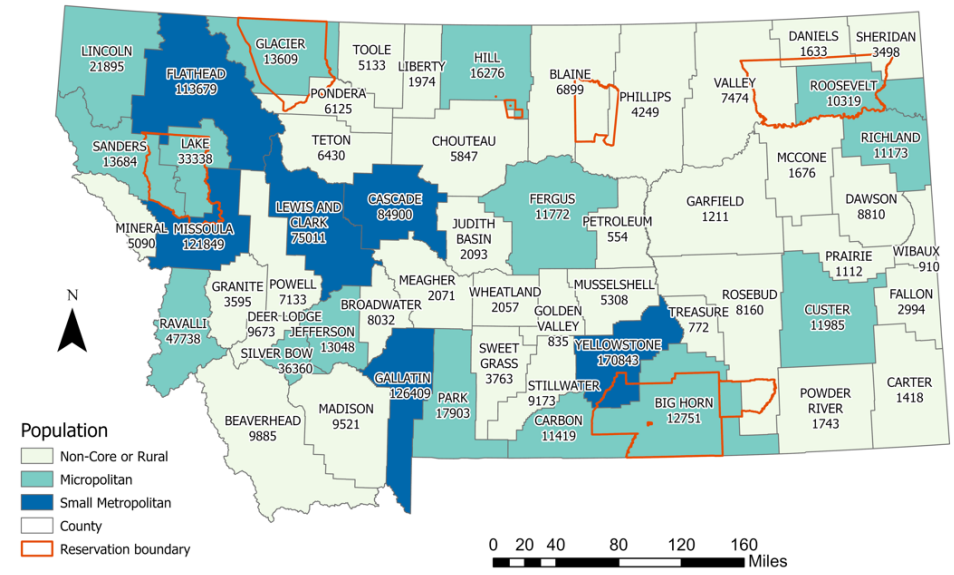


Rurality

The National Center for Health Statistics (NCHS) categorizes Montana counties into three levels (Figure 7):

- Non-core or rural (population less than 10,000)
- Micropolitan (population between 10,000 and 49,000)
- Small metropolitan (population of 50,000 to 249,999)

Figure 7. Montana counties according to National Center for Health Statistics Urban-Rural classification scheme, 2022



The 2023 Montana State Health Assessment reports that rural areas face unique challenges in accessing and affording resources such as healthcare. According to U.S. Census Bureau data (2020), about 33% of people living in MT live in rural areas. About 1 in 4 (23%) rural adults in MT are age 65 or older, and 21% have an annual household income less than $25,000.

Employment and Housing

Montanans overall had a lower unemployment rate than the national average (3% vs 4%) but have a median household income that is about 10% less than the national average ($63,357 vs $69,717) (MT DLI, 2023b; MT CEIC, 2021b). While Montana was ranked fourth out of the 50 states for wage growth from 2021 to 2022, the state has above average employment in many industries with low average wages, including retail, accommodations, and food service, and below average employment in many high-wage industries, such as finance and insurance, management of companies and enterprises, and professional and technical services (MT DLI, 2023c). In 2021, 22% of all Montanans were living at or below 138% of the federal poverty limit (BRFSS, 2021).

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Montana Behavioral Risk Factor Surveillance System (BRFSS), 2021

Montana Income and Poverty Dashboard and Local Area Economic Profiles Dashboard provides economic and income profiles for each county.

The ratio of median home values to median household income is higher in Montana than the U.S. average, which suggests Montana is less affordable than most states for purchasing a home. Housing affordability is a larger issue in western Montana than in other parts of the state. (MT DLI, 2022a)

Health Care Access

The 2023 Montana State Health Assessment finds that the lack of or inadequate health insurance coverage, limited availability of health care resources, and inconvenient or unreliable transportation to health care services are all well-documented barriers to timely and quality health care that result in poor health outcomes (US Department of Health and Human Services and the Office of Disease Prevention and Health Promotion, 2020b, 2020c). The 2021 Montana Rural Health Plan describes challenges faced when seeking health care services, stating "long distances, isolated and small populations, and difficulty in recruiting medical professionals make it difficult to sustain health care services" (MT DPHHS Office of Inspector General [OIG], 2021, page 9).

In 2022, the Center for Health Workforce Studies (CHWS) at University of Washington (UW) noted that, compared with urban areas, most rural areas of Montana had fewer physicians per 100,000 population and many rural counties had high percentages of physicians aged 55 years and older. However, from 2016 to 2021, the estimated number of physicians providing care increased from 205 per 100,000 people to 238 per 100,000 people (UW CHWS, 2022).

The 2023 Montana State Health Assessment notes that this analysis using 2021 data was published in 2022 and may not reflect the state of health care provider availability by the end of the COVID-19 public health emergency. Additionally, even though 13 counties in 2021 had no practicing physician, those counties did have other types of health care providers, such as registered nurses, physician assistants, and paramedics. While only eight counties had no physicians licensed by the Montana Board of Medical Examiners in 2022, any health care provider may be licensed but not practicing; these data also do not reflect health care providers who travel to rural areas periodically to provide care. (MT DLI, 2022b)

Figure 8. Physician Access in Selected Montana Counties, 2021

Counties with no practicing physicians (MT Board of Medical Examiners)*	Counties with more physicians overall per 100,000 people than the US average (248 per 100,000)	Counties with more primary care physicians per 100,000 than the US average (94 per 100,000)
• Carter • Chouteau • Daniels • Garfield • Judith Basin • McCone • Petroleum • Powder River • Prairie • Teton • Treasure • Wheatland • Wibaux	• Cascade • Deer Lodge • Flathead • Gallatin • Missoula • Yellowstone	• Beaverhead • Deer Lodge • Fallon • Golden Valley • Meagher • Missoula • Park • Yellowstone

*Note: Data does not include health care providers who travel to rural areas to provide care.

HUMAN IMMUNODEFIENCY VIRUS (HIV)

HIV (human immunodeficiency virus) is spread through many body fluids, including blood, semen, and breastmilk, and targets parts of the immune system. While there is no cure, persons infected with HIV can be treated with antiretroviral therapy (ART), which can reduce viral load and prevent transmission to others. Left untreated, opportunistic infections or cancers take advantage of the weakened immune system, indicating that the person has entered the late clinical stage known as stage 3 HIV or Acquired Immune Deficiency Syndrome (AIDS).

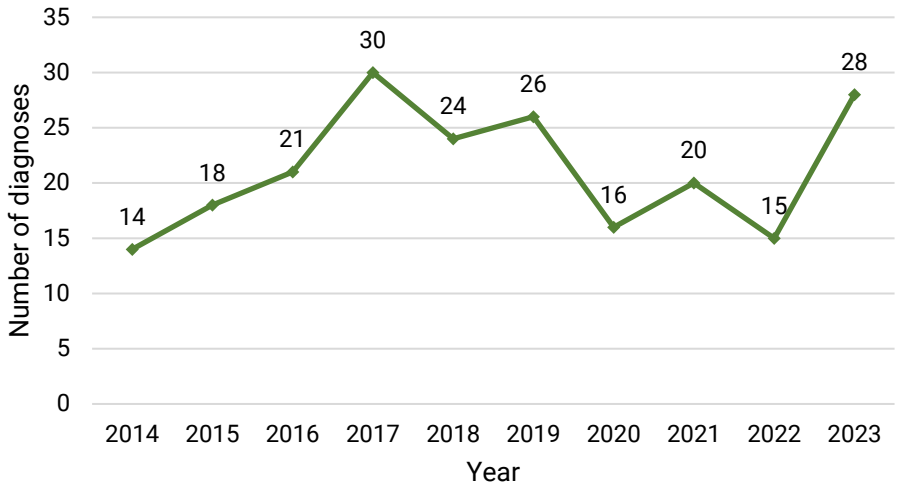
Montana Quick Facts:

- ✓ About 840 people were living with HIV in Montana in 2023.
- ✓ There was an average of 21 persons receiving a new HIV diagnosis each year (2019-2023).
- ✓ Men (89%) made up the majority of new HIV diagnoses from 2019 through 2023.

Demographics

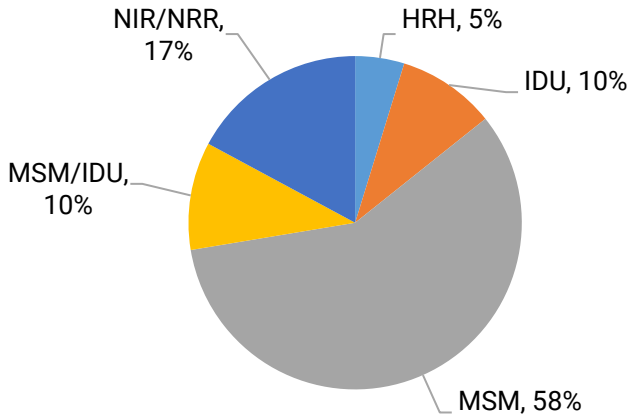
In 2023, 28 newly diagnosed HIV cases were reported in Montana (Figure 9). Four new HIV cases were diagnosed with Stage 3 HIV at the same time as their initial diagnosis, indicating that there remains a need for recognition of risk factors and early testing. Diagnosing HIV as early as possible improves effective treatment options and allows timely notification of partners to reduce the possibility of transmission to other people. While the number of HIV cases has gradually increased during the past 10 years, cases declined between 2019 and 2022. This decrease may reflect the impact of the COVID-19 pandemic, which decreased HIV testing and diagnosis.

Figure 9. Number of new HIV diagnoses, Montana, 2014-2023



Men who have sex with men (MSM) were the population most affected by HIV in Montana during the 2019-2024 time period (Figure 10). Twenty percent of new cases reported injecting drug use (IDU) as at least one transmission risk.

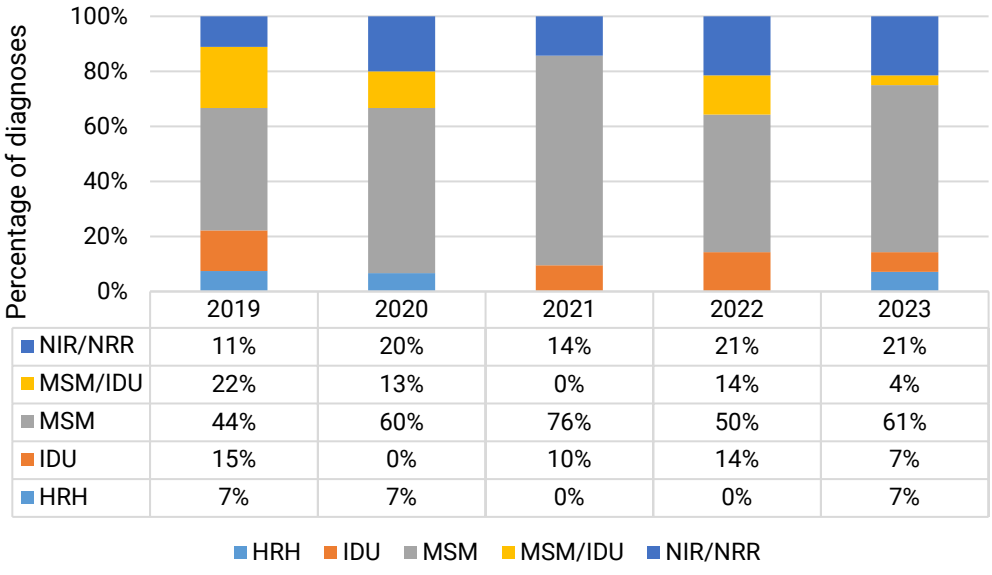
Figure 10. Percentage of new HIV diagnoses by transmission risk, Montana, 2019-2023



MSM: Men who have sex with men, only
IDU: Injecting drug use, only
MSM/IDU: Men who have sex with men and injecting drug use
HRH: High-risk heterosexual contact with a person with known HIV, only
NIR/NRR: No identified risk/no risk reported

Figure 11 shows the percentage of new HIV diagnoses by transmission risk between 2019 and 2023. Of those with an identified risk, the most common transmission risk is MSM, followed by MSM and Injecting drug use (IDU) and IDU alone.

Figure 11. Percentage of new HIV diagnoses by transmission risk, by year, Montana, 2019-2023



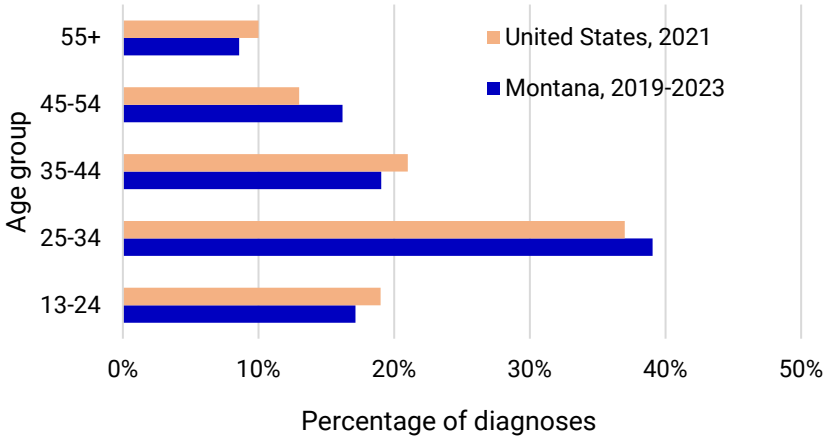
	2019	2020	2021	2022	2023
NIR/NRR	11%	20%	14%	21%	21%
MSM/IDU	22%	13%	0%	14%	4%
MSM	44%	60%	76%	50%	61%
IDU	15%	0%	10%	14%	7%
HRH	7%	7%	0%	0%	7%

Most Montana HIV cases during the 2019-2023 time period were among white, non-Hispanic persons (Table 2). Unlike other sexually transmitted infections (STIs), HIV infection did not disproportionately impact the American Indian population in Montana. During 2019-2023, 7% of new diagnoses were among the American Indian population. The U.S. Census reports that American Indians made up 7% of the Montana population in 2022.

Table 2. Percentage of new HIV diagnoses by race and ethnicity, Montana, 2019-2023		
	Percentage of HIV new diagnoses, 2019-2023	Montana population, 2022
White, Non-Hispanic	79%	85%
Hispanic, any race	7%	4%
American Indian, Non-Hispanic	7%	7%
Other, Non-Hispanic	5%	4%
Black/African American, Non-Hispanic	2%	0.6%

Nearly 40% of persons diagnosed with HIV in Montana were between 25 and 34 years old during the 2019–2023 time period (Figure 12). Similarly, in the U.S., 37% of persons diagnosed with HIV were in the same age group (25-34 years) in 2021.

Figure 12. Percentage of new HIV diagnoses by age group, Montana, 2019-2023 and United States, 2021



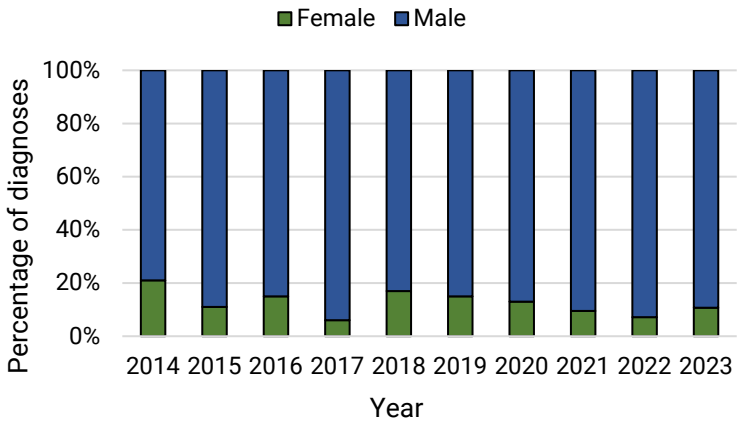
New HIV diagnoses in 2023 tended to be younger than those diagnosed in the previous five years with 64% of new diagnoses younger than 34 years compared to 54% during 2018-2022 time period (Table 3).

Table 3. New HIV diagnoses by age group, Montana, 2023 and 2018-2022

	Percent of total 2023 cases (N=28)	Percent of 2018-2022 cases (N=101)
Age group (years)		
15-24	14.3%	16.8%
25-34	50.0%	37.6%
35-44	17.9%	21.8%
45-54	10.7%	13.9%
55+	7.1%	9.9%

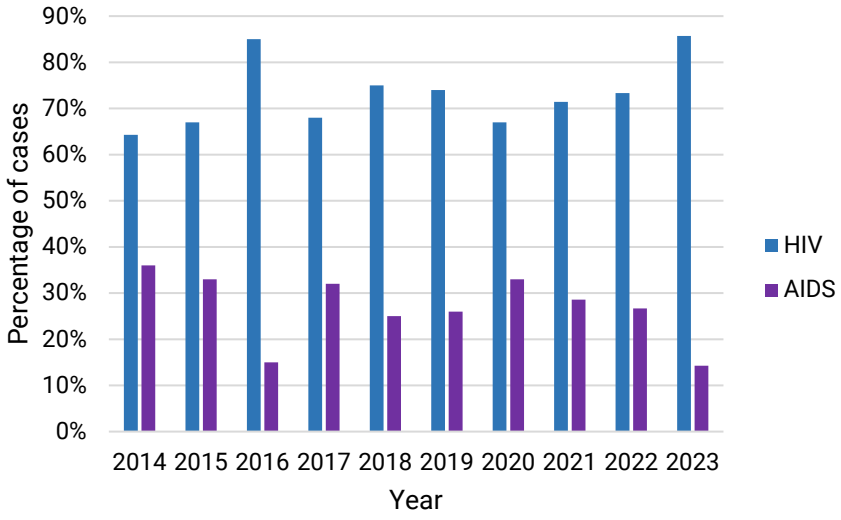
In Montana, most new HIV diagnoses were among men, accounting for 90% of cases in 2023 (Figure 13). From 2014 to 2023, an average of 13% of new HIV cases were diagnosed among women.

Figure 13. Percentage of new HIV diagnoses by sex, Montana, 2014-2023



Persons who have stage 3 HIV disease (AIDS) at the time of their HIV diagnosis indicate a delayed diagnosis of HIV infection, and subsequent delay in partner notification and treatment. From 2014 to 2016, there was a significant decrease in the number of persons with Stage 3 HIV at the time of their diagnosis, from 36% to 15% of cases (Figure 14).

Figure 14. Percentage of HIV cases by disease stage at the time of diagnosis, Montana, 2014-2023



HIV Treatment and Viral Suppression

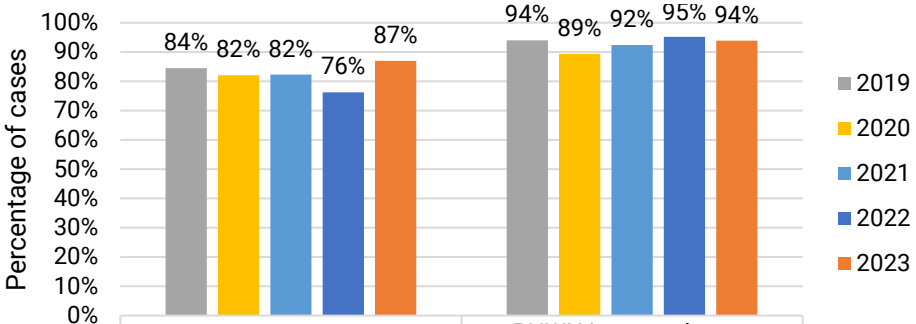
Rapid treatment of HIV disease and viral suppression are two key strategies to end the HIV epidemic. In 2022 in Montana, 91% of new HIV cases had additional HIV labs within 30 days of initial diagnosis indicating receipt of care. This is greater than the U.S. average in 2019, where 81% of patients received additional HIV labs within in 30 days of diagnosis.

Persons living with HIV (PLWH) who are virally suppressed cannot transmit HIV through sexual contact. The HIV continuum of care is a series of steps from a person's HIV diagnosis to

successful treatment to achievement of viral suppression. Montana's continuum of care shows that of the 840 persons living with HIV/AIDS in 2023, 87% were in care, and of those, 94% were virally suppressed. The definition of being in care is having at least one documented HIV-related lab within the previous 12 months.

The percent of persons living with HIV who are in care declined between 2019 and 2023, before increasing to 87%. During the five year time period, the percentage of persons in care who were virally suppressed remained stable (Figure 15).

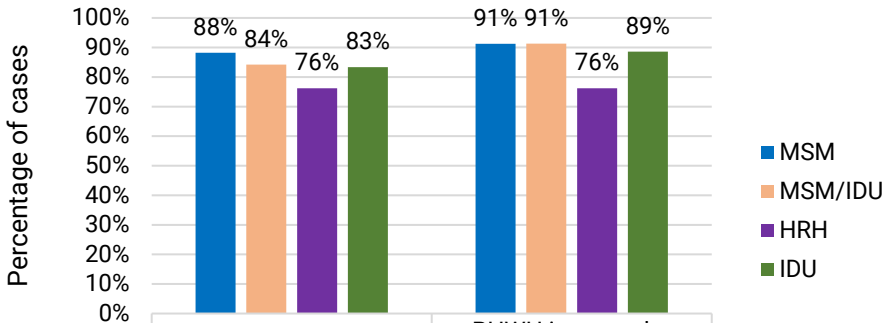
Figure 15. Percentage of persons living with HIV (PLWH) by care status and viral suppression, Montana, 2019-2023



	PLWH in care	PHWH in care who are virally suppressed
2019	84%	94%
2020	82%	89%
2021	82%	92%
2022	76%	95%
2023	87%	94%

In 2023, the percentage of persons in HIV care was highest among persons with MSM as at least one transmission risk. Viral suppression by transmission risk also varies, with MSM having the highest percentage of viral suppression (Figure 16).

Figure 16. Percentage of persons living with HIV (PLWH) by care status and viral suppression, by transmission risk, Montana, 2023



	PLWH in care	PHWH in care who are virally suppressed
MSM	88%	91%
MSM/IDU	84%	91%
HRH	76%	76%
IDU	83%	89%

Persons Living with HIV

As of December 31, 2023, 1,970 cumulative cases of HIV infection have been reported to the Montana DPHHS since 1985 when the Department began collecting HIV data. Of those cases, 45% were Montana residents at the time of their diagnosis. Of the total cases reported to DPHHS, more than 32% are known to have died from any cause.

Table 4 describes characteristics of the 840 people living with HIV/AIDS in Montana as of December 2023. People living with HIV in Montana are older than those with new diagnoses. While 44% of persons with a new HIV diagnosis are older than 45 years, 62% of persons living with HIV are older than 45.

Table 4. Demographic characteristics of persons living with HIV/AIDS. Montana. 2023

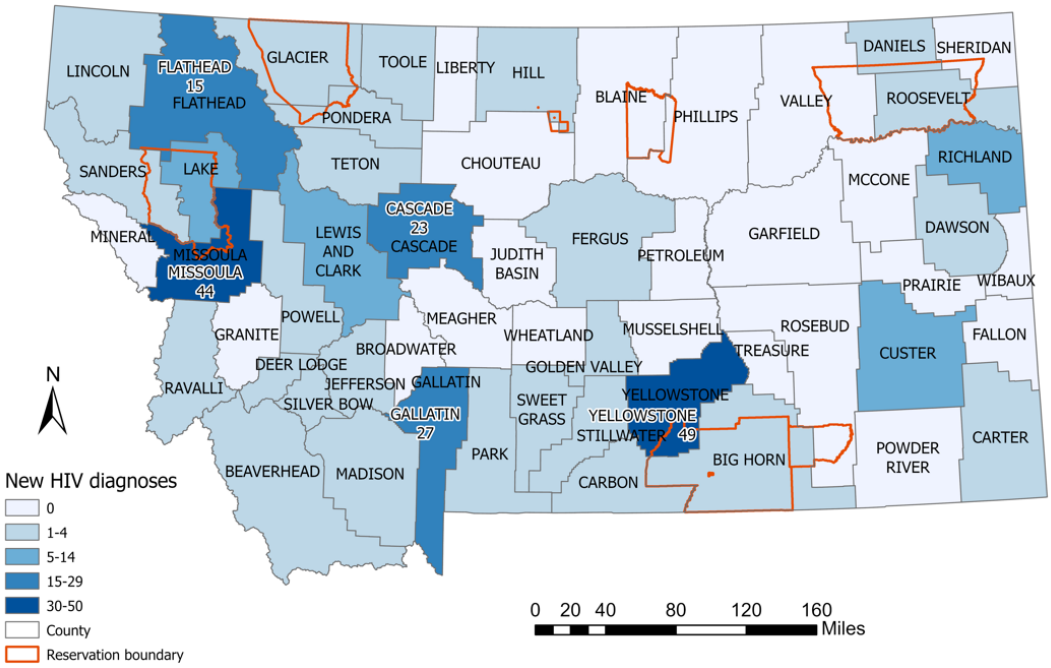
Characteristics	Total (HIV and AIDS)	%
Sex		
Male	710	85%
Female	124	15%
Total	**834**	**100%**
Frequency missing = 6		
Transmission risk		
MSM	465	55%
IDU	79	10%
MSM&IDU	97	12%
HRH	78	10%
Other*/Risk Not Specified	121	14%
Total	**840**	**100%**
Age group (years)		
≤12	≤5	NA
13-24	13	2%
25-34	115	14%
35-44	185	22%
45-54	161	19%
≥55	355	43%
Total	**832**	**100%**
Frequency missing = 8		
Race		
White, non-Hispanic	664	80%
American Indian, non-Hispanic	38	5%
Hispanic, any race	56	7%
Other	76	9%
Total	**834**	**100 %**
Frequency missing = 6		

**Other includes hemophilia, blood transfusion, and perinatal exposure*

Geography

Figure 17 shows the geographic distribution of new HIV diagnoses by county of residence in Montana during the 2013-2023 time period. New diagnoses are not evenly distributed among Montana's counties. Yellowstone County (18%), Missoula County 17%), Cascade County (10%), Gallatin County (9%) and Flathead County (6%) accounted for almost two-thirds of persons with new HIV diagnoses.

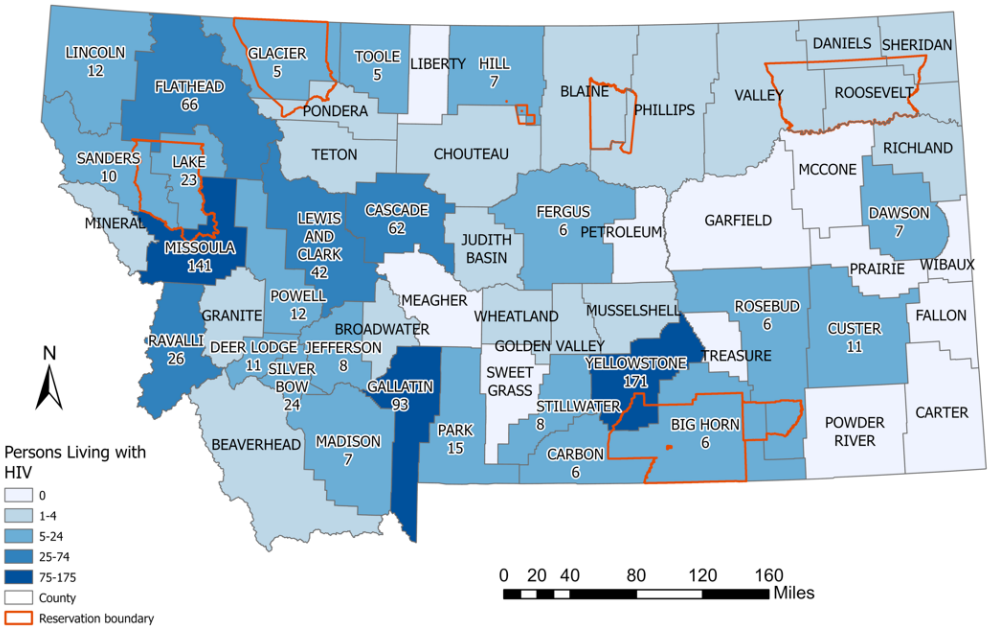
Figure 17. Number of new HIV diagnoses by county of residence, Montana, 2013- 2023



Case counts between 1-4 are suppressed for chronic conditions

Similar to the geographic distribution of new HIV diagnoses, the number of persons living with HIV remained largely in the most populous Montana counties (Figure 18). Disease data from correctional facilities are included in the county of their location. This may impact disease counts in those locations, particularly in Powell County which houses the Montana State Prison.

Figure 18. Number of persons living with HIV by county of residence, Montana, 2023



Case counts between 1-4 are suppressed for chronic conditions

CHLAMYDIA

Chlamydia is a sexually transmitted infection caused by the bacterium Chlamydia trachomatis*. Chlamydia infections are usually asymptomatic and may go unnoticed. In women, it can result in pelvic inflammatory disease (PID), a major cause of infertility, ectopic pregnancy, and chronic pelvic pain. Chlamydia infection can also facilitate the transmission of HIV.*

Demographics

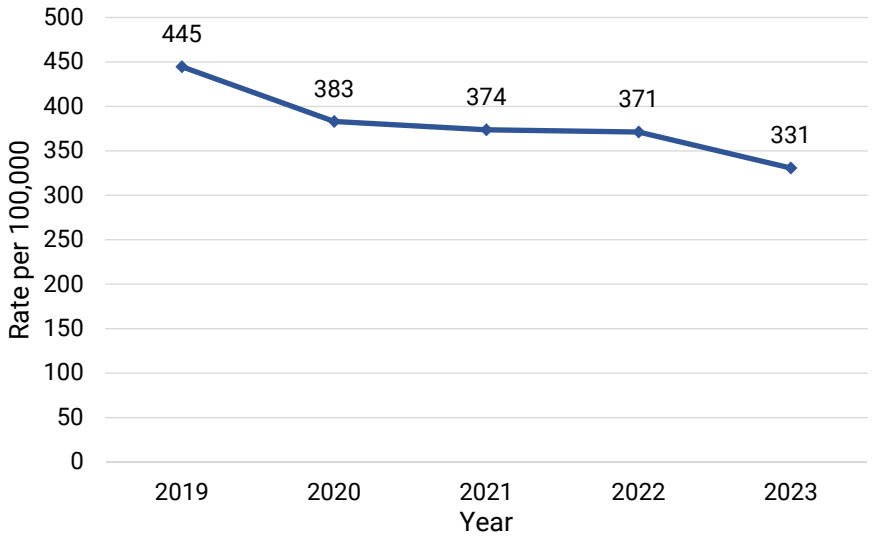
In Montana in 2023, chlamydia was the second most common reported disease following COVID-19. In 2023, 3,681 cases of chlamydia were reported, representing a rate of 330.6 cases per 100,000 population, compared to 495 cases per 100,000 for the U.S. in 2022.

From 2019-2018, there has been a downward trend in the number of chlamydia cases in Montana, with the number of cases decreasing by 23% between 2019 and 2023 (Figure 19). It is possible that the decreased number of cases in 2020 was due to reduced testing and uptake of healthcare services during the COVID-19 pandemic. It is unclear if this is contributing to the continued decline in cases.

Montana Quick Facts, 2023:

- ✓ There were 3,681 cases of chlamydia.
- ✓ The number of cases decreased 23% between 2019 and 2023.
- ✓ The majority of cases were diagnosed in females (65%)
- ✓ Over two-thirds of diagnoses were in persons 15-24 years old.

Figure 19. Chlamydia cases per 100,000 population, Montana, 2019-2023



In 2023, 2,388 chlamydia cases (65%) were reported among females (Figure 20). The greater proportion of cases among females may, in part, be attributed to STI screening recommendations resulting in females seeking medical care at greater rates than males, and therefore being tested more often.

Despite accounting for about 7% of the Montana population, American Indians made up 27% the chlamydia cases in the state in 2023 (Figure 21). Broad screening efforts among persons seeking services at Indian Health Service and tribal clinics may contribute to the higher reported chlamydia incidence in this population.

Figure 20. Percentage of chlamydia cases by sex, Montana,

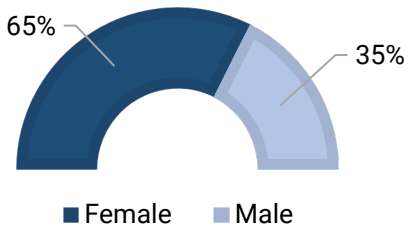
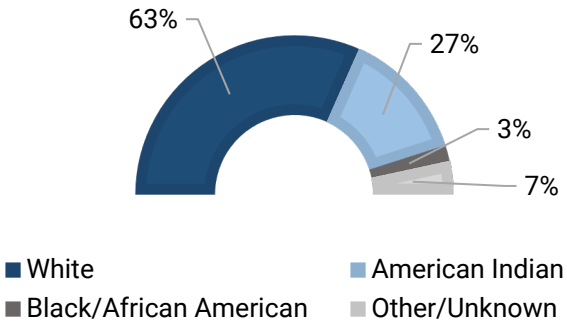
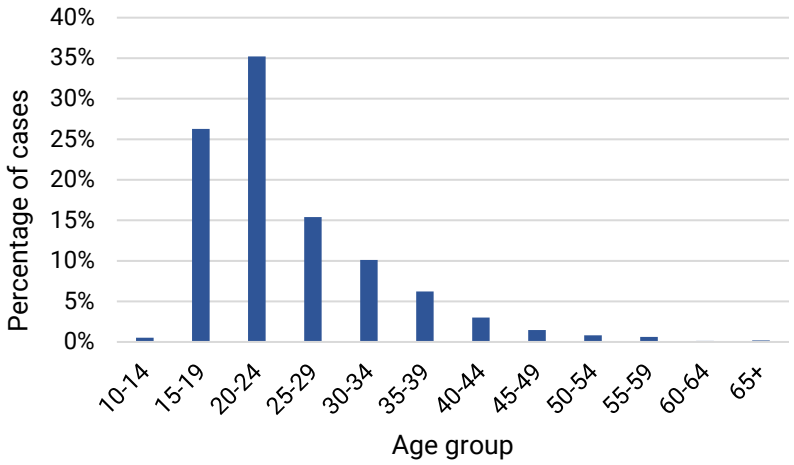


Figure 21. Percentage of chlamydia cases by race, Montana, 2023



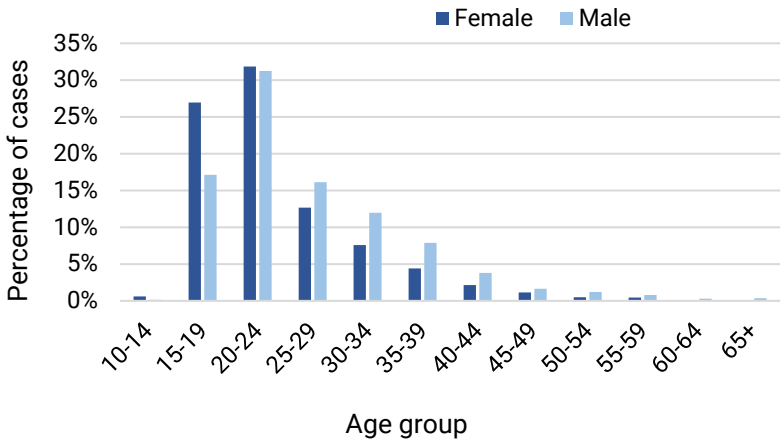
Incidence of chlamydia was highest among persons aged 20–24 years, which accounted for 35% of the cases reported in 2023 (Figure 22).

Figure 22. Percentage of chlamydia cases by age group, Montana, 2023



In 2023, females in Montana who are diagnosed with chlamydia were younger when compared to males (Figure 23). While over 60% of female cases were diagnosed in the 15-24 year age group, 48% of male cases were in the same age group. The average age of all chlamydia cases in 2023 was 25 years old. The average age for females with chlamydia was younger (24 years old) than males (27 years old). Women of reproductive age (15 to 45 years old) made up over 95% of females with chlamydia in Montana in 2023.

Figure 23. Percentage of chlamydia cases by sex and age group, Montana, 2023



Geography

Chlamydia cases were common among Montana's counties with 93% reporting at least one case in 2023 (Figure 24). Chlamydia diagnoses generally followed the population distribution of the state with Yellowstone County having the highest percentage of cases (17%) followed by Gallatin County (14%), Missoula County (10%), Cascade County (9%), and Flathead County (6%). Because chlamydia disproportionately impacts the American Indian population in Montana, many counties with tribal jurisdictions also saw a high number of cases. Visualizing the number of cases by county provides insight into public health staffing needs for disease follow-up, case investigations and partner services.

Figure 24. Number of chlamydia cases by county, Montana, 2023

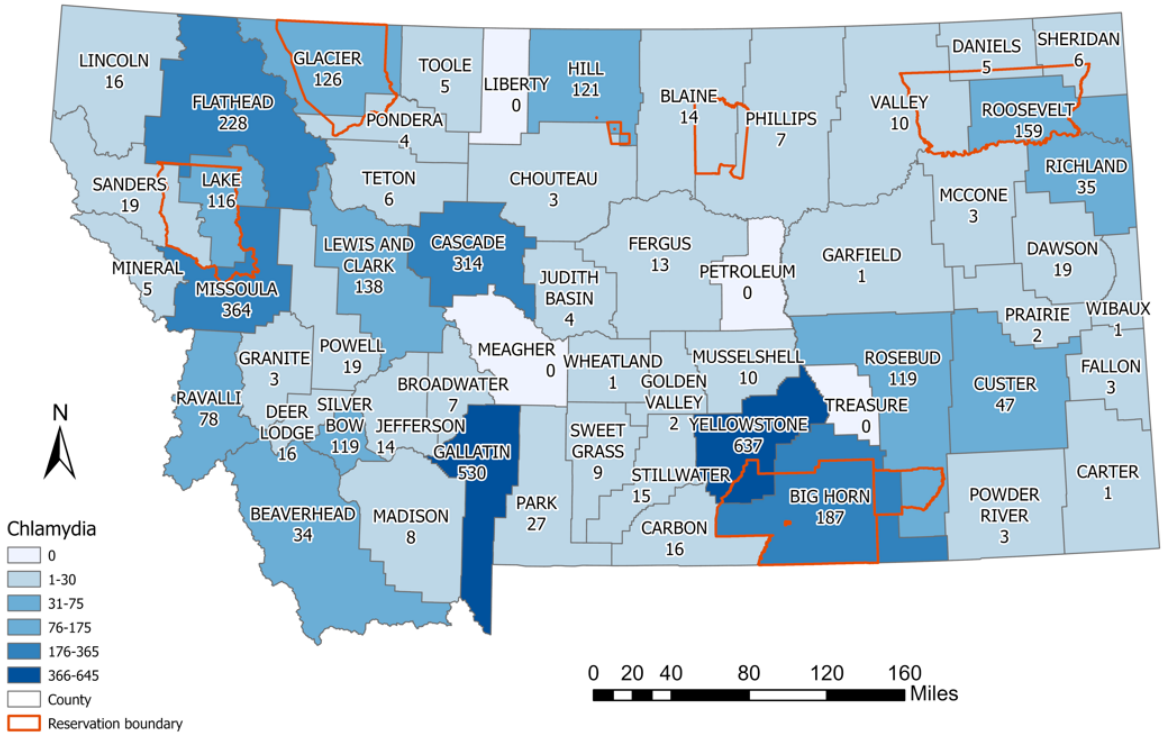
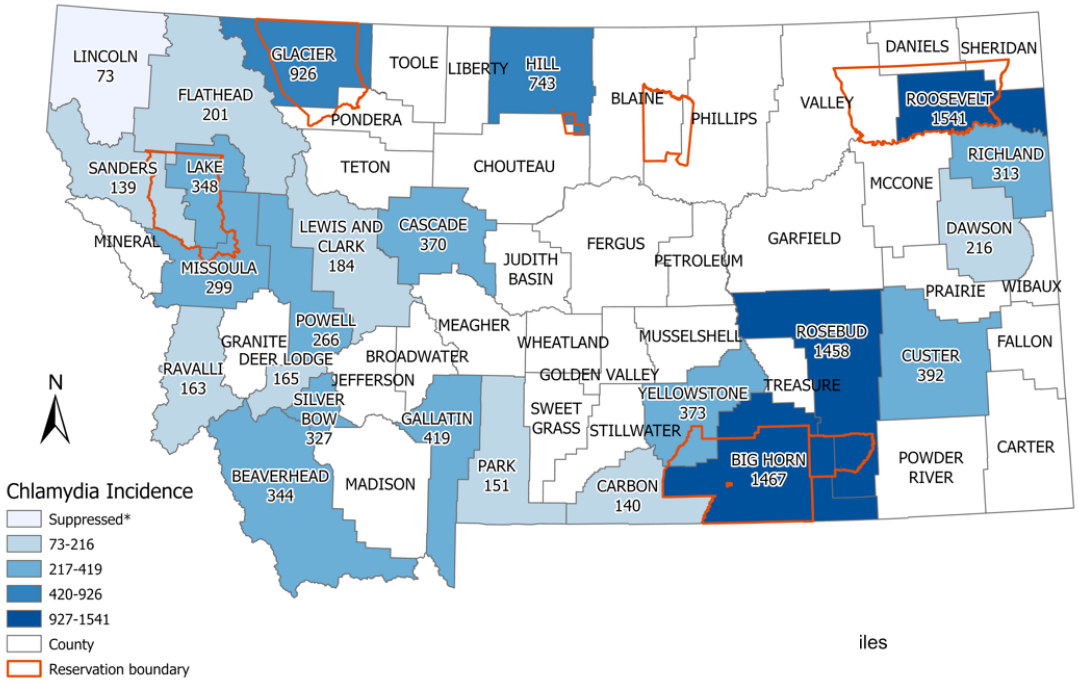


Figure 25 shows the rate of chlamydia cases per 100,000 population for the same 2023. While Yellowstone and Gallatin counties had the largest number of cases, Roosevelt, Big Horn and Rosebud counties had the highest incidence of chlamydia in 2023.

Figure 25. Number of chlamydia cases per 100,000 population, by county, Montana, 2023



Rates per 100,000 are not calculated if the number of cases in a county is ≤15

GONORRHEA

Gonorrhea is a sexually transmitted infection caused by the bacterium Neisseria gonorrhoeae. *While persons infected are often asymptomatic, gonorrhea causes infections in the genitals, rectum, and throat. Gonorrhea infections are a major cause of pelvic inflammatory disease (PID) which can cause in fertility in women. In addition, epidemiologic and biologic studies provide strong evidence that gonococcal infections facilitate the transmission of HIV.*

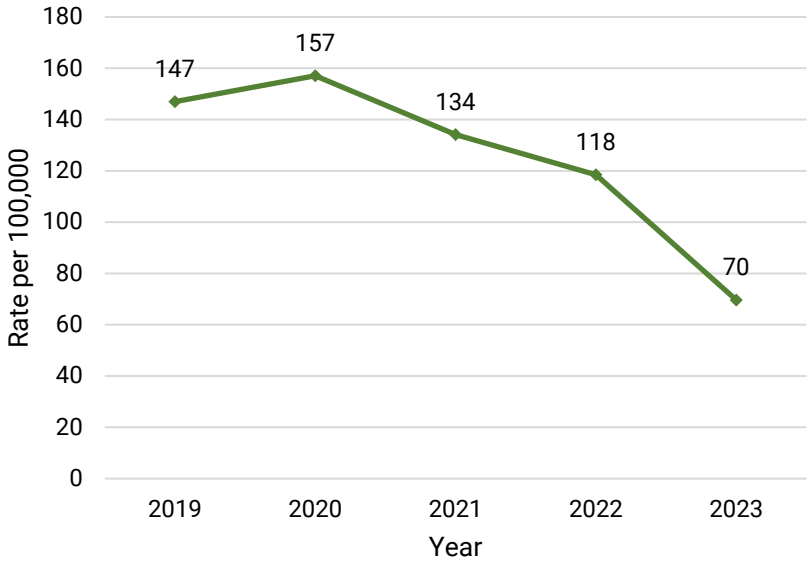
Demographics

Since 2020, there has been a downward trend in gonorrhea diagnoses, with the number of cases decreasing by 50% between 2019 and 2023 (Figure 26). In 2023, Montana reported 769 cases of gonorrhea for a rate of 70 cases per 100,000 population compared to 194 cases per 100,000 for the U.S. in 2022. It is possible that the decreased number of cases in 2020 was a result of reduced testing and disruption of healthcare services due to the COVID-19 pandemic. It is not clear if this has led to the continued decrease in cases through 2023.

Montana Quick Facts, 2023:

- ✓ There were 769 cases of gonorrhea.
- ✓ The number of cases decreased 50% between from 2020 through 2023.
- ✓ Gonorrhea cases were divided evenly between males and females.
- ✓ About one-third of diagnoses were in persons 15-24 years old.

Figure 26. Gonorrhea cases per 100,000 population, Montana, 2019-2023



In 2023, the percentage of gonorrhea cases were split evenly among males and females (Figure 27). Gonorrhea infections were significantly and disproportionately higher among the American Indian population in Montana. While accounting for about 7% of the Montana population, American Indians made up 50% of the gonorrhea cases in in 2023 (Figure 28). Broad screening efforts among American Indians seeking services at Indian Health Service and tribal clinics may have contributed to the higher reported gonorrhea incidence in this population.

Figure 27. Percentage of gonorrhea cases by sex, Montana,

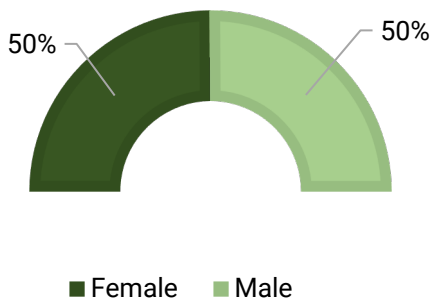
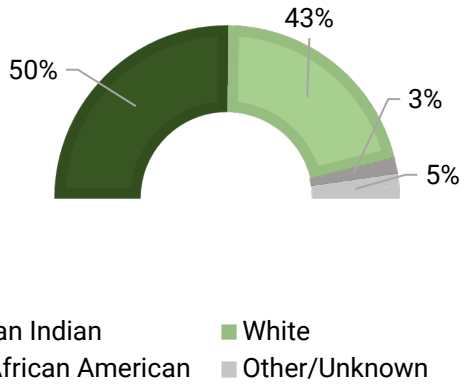


Figure 28. Percentage of gonorrhea cases by race, Montana, 2023



In 2023, 23% of gonorrhea cases were aged 15-24 years (Figure 29). The average age of all gonorrhea cases in 2023 was 31 years old.

In 2023, females diagnosed with gonorrhea in Montana were younger when compared to males (Figure 30). While 23% of females diagnosed with gonorrhea were in the 20-24 year age group, 17% of males were in the same age group. The average age for females with gonorrhea was younger (29 years old) than males (33 years old). Women of reproductive age (15-45 years old) made up 93% of female gonorrhea cases in 2023.

Figure 29. Percentage of gonorrhea cases by age group, Montana, 2023

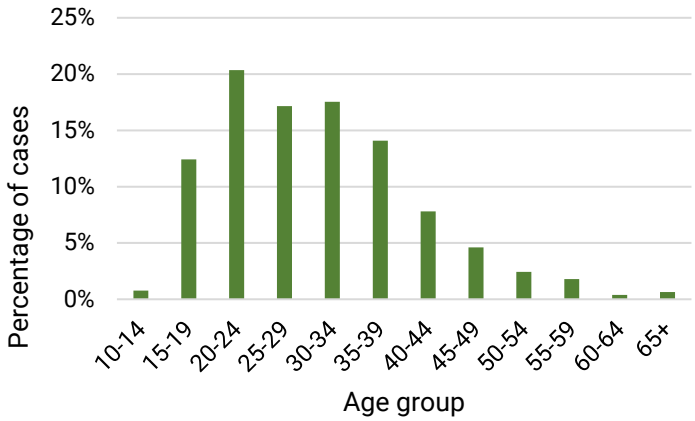
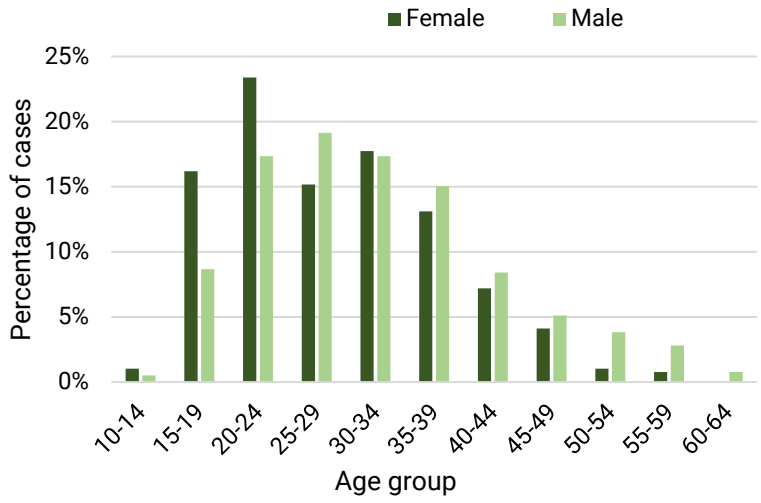


Figure 29. Percentage of gonorrhea cases by sex and age group,



Geography

In 2023, more than half of the counties (57%) in Montana had at least once case of gonorrhea. Yellowstone County (19%) had the highest percentage of cases followed by Glacier County (14%), Big Horn County (10%) and Missoula County (8%). Understanding the number of cases by county provides insight into public health staffing needs for disease follow-up, case investigations and partner services.

Because of the disproportionate impact of gonorrhea on the American Indian population in Montana, many counties with tribal jurisdictions experienced a high number of cases. Broad screening efforts among American Indians seeking services at Indian Health Service and tribal clinics have the benefit of identifying cases of gonorrhea and may have contributed to the higher reported gonorrhea incidence in this population.

Figure 31. Number of gonorrhea cases by county, Montana, 2023

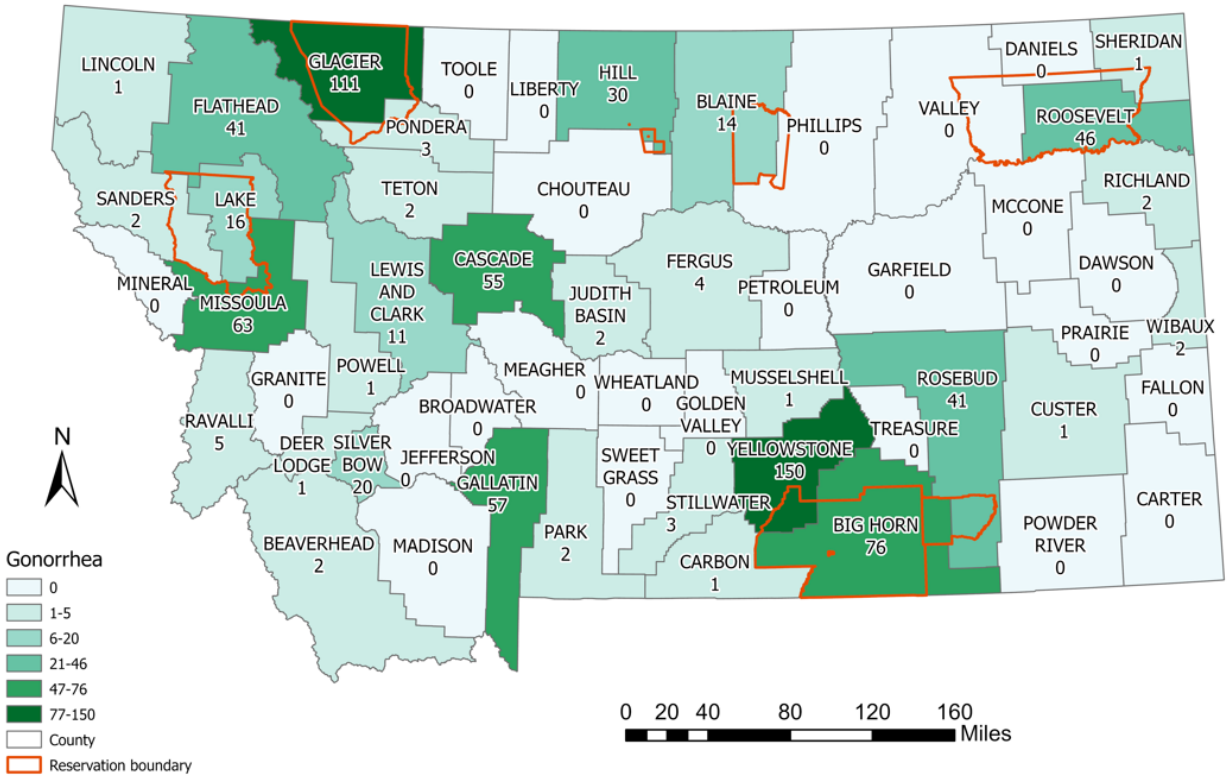
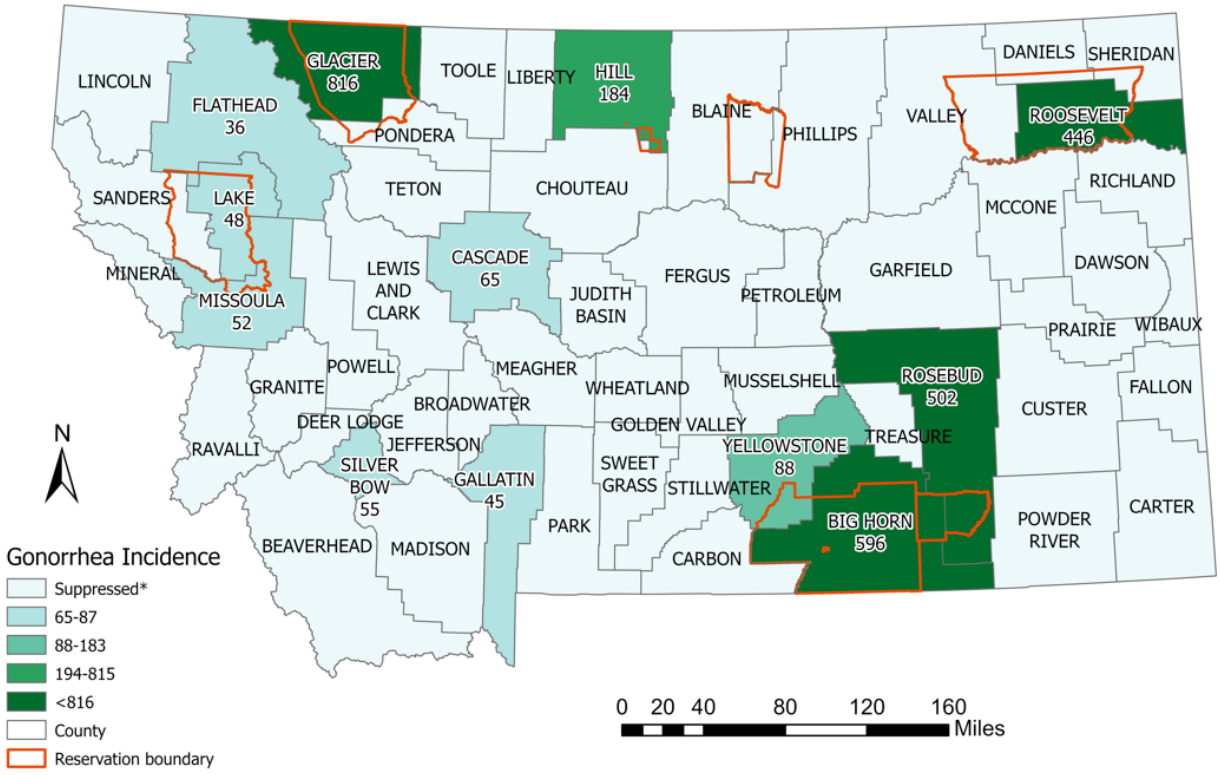


Figure 32 shows the rate of gonorrhea cases per 100,000 population during 2023. While Yellowstone county had the largest number of cases, Glacier, Roosevelt, Big Horn and Rosebud counties had the highest incidence of gonorrhea in that year.

Figure 32. Number of gonorrhea cases per 100,000 population by county, Montana, 2023



Rates per 100,000 are not calculated if the number of cases in a county is ≤15

SYPHILIS

Syphilis is a genital ulcerative sexually transmitted infection caused by the bacterium Treponema pallidum *and many of the signs and symptoms of illness are indistinguishable from those of other diseases. Syphilis is passed from person to person through direct contact with a syphilis lesion. Infected pregnant women can also transmit the disease to the fetus. Without treatment, syphilis infection during pregnancy can lead to stillbirth, neonatal death, or infant disorders such as deafness, neurologic impairment, and bone deformities. About 25 to 40 percent of adults who remain untreated for syphilis can develop late disease affecting the heart, bones, internal organs, skin, and the central nervous system.*

Syphilis can be divided into stages for the purposes of treatment and follow-up. Patients with early stages of syphilis (primary and secondary) represent recent infection and pose an increased risk of transmission to others.

Montana Quick Facts, 2023:

- ✓ There were 765 cases of syphilis and, of those, 312 (41%) were primary and secondary cases.
- ✓ The number of all stages of syphilis increased 559% between 2019 and 2023.
- ✓ Over half of new cases were in females (53%) and about two-thirds of cases were in persons 25-34 years old.
- ✓ Among the syphilis cases in which a risk assessment was completed, the percent of men reporting MSM as at least one transmission risk decreased from 45% in 2019 to 8% in 2023.

Demographics

In 2023, there were 765 cases of syphilis reported in Montana and, of those, 312 (41%) were primary and secondary cases. The number of cases dramatically increased from 116 in 2019 to 765 in 2023, representing a 559% increase. The rate of syphilis cases per 100,000 population in Montana increased from 11 in 2019 to 69 in 2023 (Figure 33). Similarly, the syphilis rate in the U.S. was 62 cases per 100,000 in 2022. The number of cases reported in 2023 was the highest case count of syphilis that Montana has reported since 1929 (Figure 34).

Figure 33. Syphilis cases per 100,000 population, Montana, 2019-2023

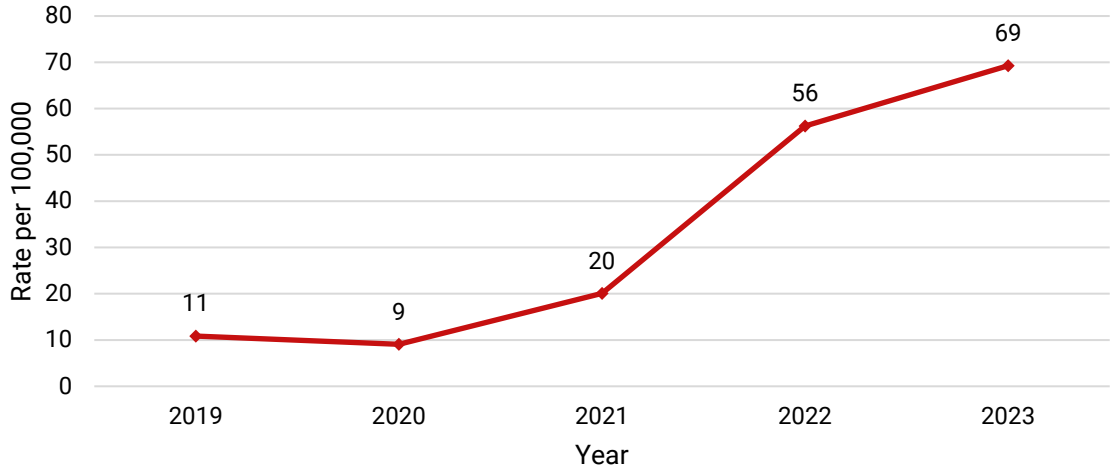
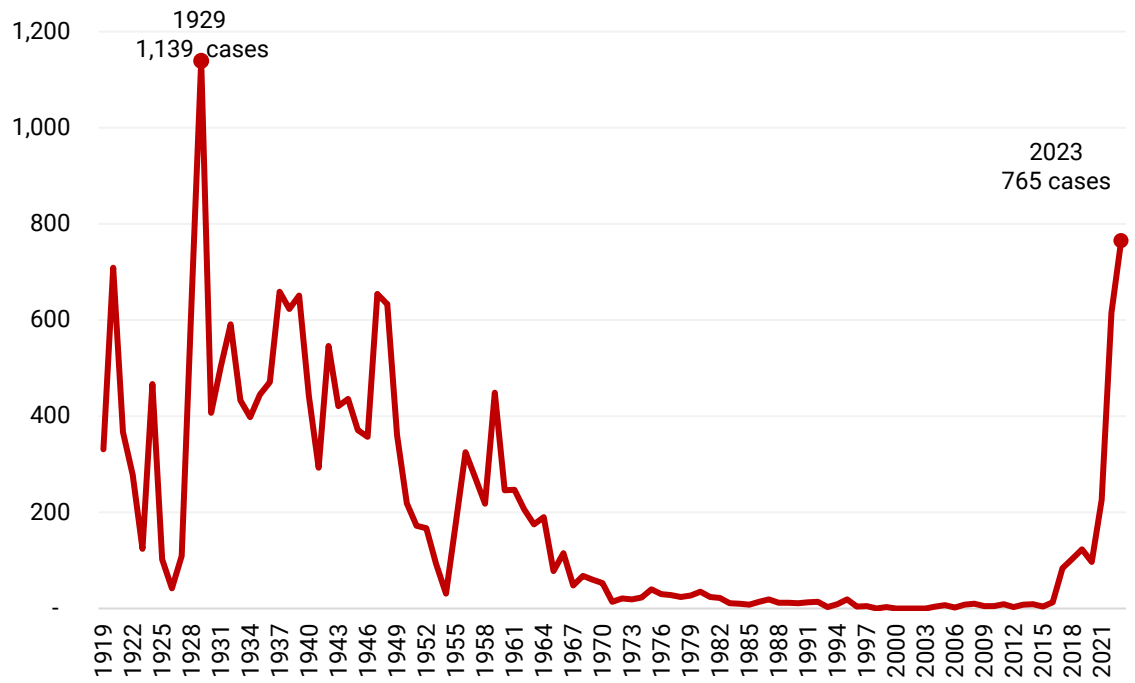


Figure 34. Number of syphilis cases, Montana, 1919-2023



In 2023, females made up over 50% of syphilis cases (Figure 35). More than other STIs, syphilis cases were significantly higher among the American Indian population in Montana compared to other Montanans. While comprising 6.6% of the Montana population, 70% of syphilis cases in Montana were reported among American Indians in 2023 (Figure 36). Disparities in syphilis rates by race are not explained by differences in sexual behaviors, but may rather reflect access to sexual health care.

Figure 35. Percentage of syphilis cases by sex, Montana, 2023

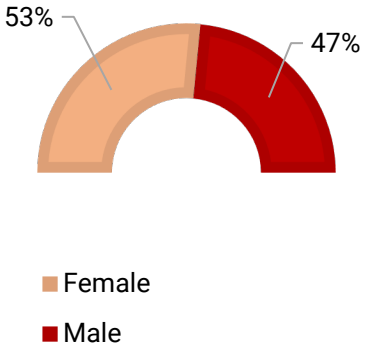
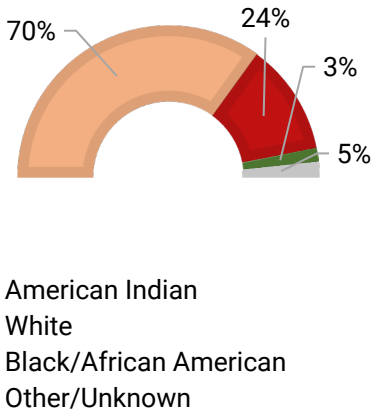
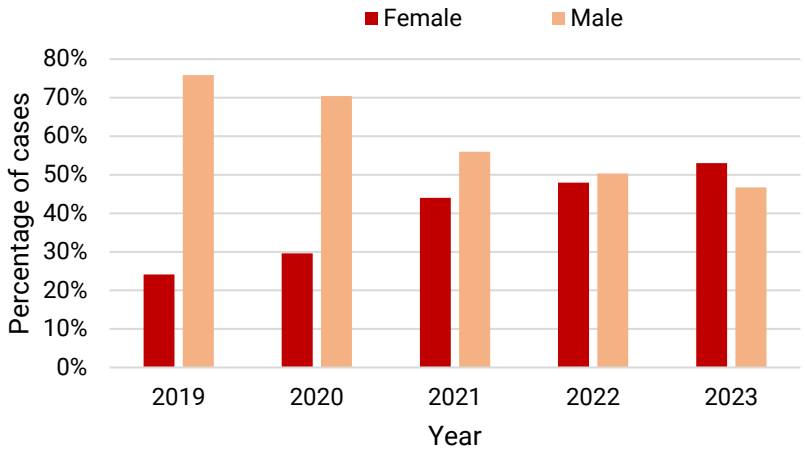


Figure 36. Percentage of syphilis cases by race, Montana, 2023



In Montana, between 2019 and 2023, the percentage of syphilis cases diagnosed in women increased from 24% to 53% (Figure 37). This contrasts with national data reported from CDC which shows that, while rates among women have increased, men account for most cases of syphilis, with most of those male cases occurring among gay, bisexual, and other men who have sex with men (MSM).

Figure 37. Percentage of syphilis cases by sex, Montana, 2019-2023



In 2023, the percentage of syphilis cases was highest in the 30-34 year age group, accounting for 22% of the cases reported in Montana (Figure 38). In 2023, the average age of all syphilis cases was 34 years old and did not differ by stage of disease.

Figure 38. Percentage of syphilis cases by age group, Montana, 2023

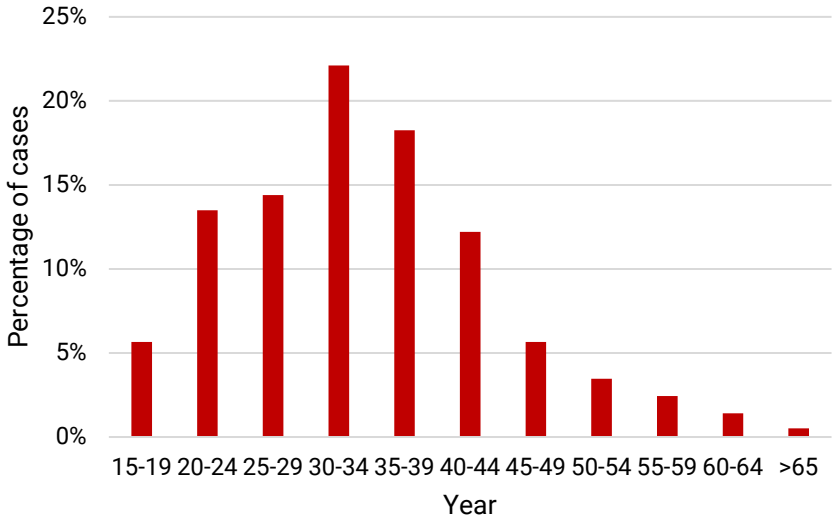
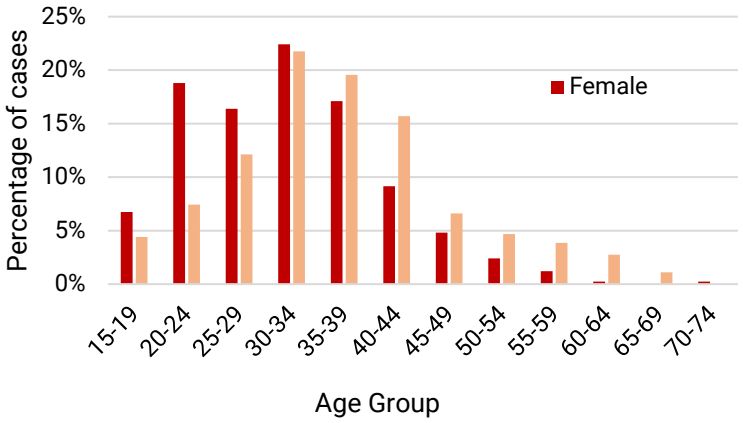


Figure 39 shows the percentage of syphilis cases by sex and age group in Montana in 2023. Females diagnosed with syphilis were younger when compared to males. Over 60% of females with syphilis were less than 34 years old when diagnosed compared to 46% of men. In 2023, the average age of females with syphilis was 26 years compared to males who were an average age of 30 years. Over 90% of females with syphilis in 2023 were of reproductive age (15-45 years old).

Figure 39. Percentage of syphilis cases by age group and sex, Montana, 2023



In Montana, the stage of syphilis differs by sex. In 2023, males (64%) were more likely to be diagnosed with early non-primary and non-secondary syphilis when compared to females (Table 5). The percentage of primary and secondary syphilis is evenly distributed by male and female.

Table 5. Percentage of syphilis cases by stage of disease and sex, Montana, 2023

	Number and percentage of male cases (N=406)		Number and percentage of female cases (N=359)	
Syphilis, early non-primary, non-secondary	90	64%	51	36%
Syphilis, primary and secondary	155	50%	157	50%
Syphilis, unknown duration or late	161	52%	151	48%

Local and tribal health jurisdictions (LHJ) use the Montana Infectious Disease Information System (MIDIS) to document the completion of a risk assessment for patients with syphilis as part of a case investigation. In 2023, 77% of syphilis cases had documentation that a risk assessment was completed after diagnosis and that risk factors were identified
Local health jurisdictions also use MIDIS to document specific risk factors, such as whether a patient exchanged drugs/money for sex or if they had sex while intoxicated or high during the previous 12 months (Table 6). Of patients with a completed risk assessment, 5% of patients reported exchanging drugs/money for sex in 2023. By comparison, 65% of patients in 2023 with a completed risk assessment reported having sex while intoxicated or high, an increase from 2019 when 59% reported the same risk.

Table 6. Percentage of patients with syphilis who report select risk factors in the past 12 months, Montana, 2019-2023*

Year	Exchanged drugs or money for sex	Had sex while intoxicated or high
2019	4%	59%
2020	3%	52%
2021	8%	53%
2022	5%	67%
2023	5%	65%

*Of patients with a completed risk assessment

Congenital Syphilis

In the last five years, Montana has had a dramatic increase in congenital syphilis cases, from 1 case in 2019 to 19 cases in 2023 (Table 7). The American Indian population was significantly and disproportionately impacted by cases of congenital syphilis with 78% of all cases during the 2020-2023 time period. Given what is known about disparities in syphilis rates by race and ethnicity, it is likely the observed disparities in congenital syphilis cases by race in Montana may also reflect maternal access to sexual health care.

Table 7. Number of congenital syphilis cases, Montana, 2020-2023

Year	Number of cases
2019	1
2020	2
2021	8
2022	16
2023	19

Geography

Figure 40 shows the geographic distribution of syphilis cases in Montana in 2023. The largest percentage of cases were found in Yellowstone County (26%), Roosevelt County (18%), Big Horn County (14%), and Rosebud County (14%). Understanding the number of cases by county provides insight into public health staffing needs for disease follow-up, case investigations and partner services.

Because of the disproportionate impact of syphilis on the American Indian population in Montana, many counties with tribal jurisdictions experienced cases at higher rates (Figure 41). While Yellowstone County has the highest percentage of cases, the syphilis rate per 100,000 population is higher in Roosevelt County (1,267 per 100,000), Rosebud County (1,263 per 100,000) and Big Horn County (827 per 100,000) when compared to Yellowstone County (118 per 100,000). Broad screening efforts among American Indians seeking services at Indian Health Service and tribal clinics have the benefit of identifying cases and may have contributed to the higher reported syphilis incidence in this population.

Figure 40. Number of syphilis cases (all stages) by county, Montana, 2023

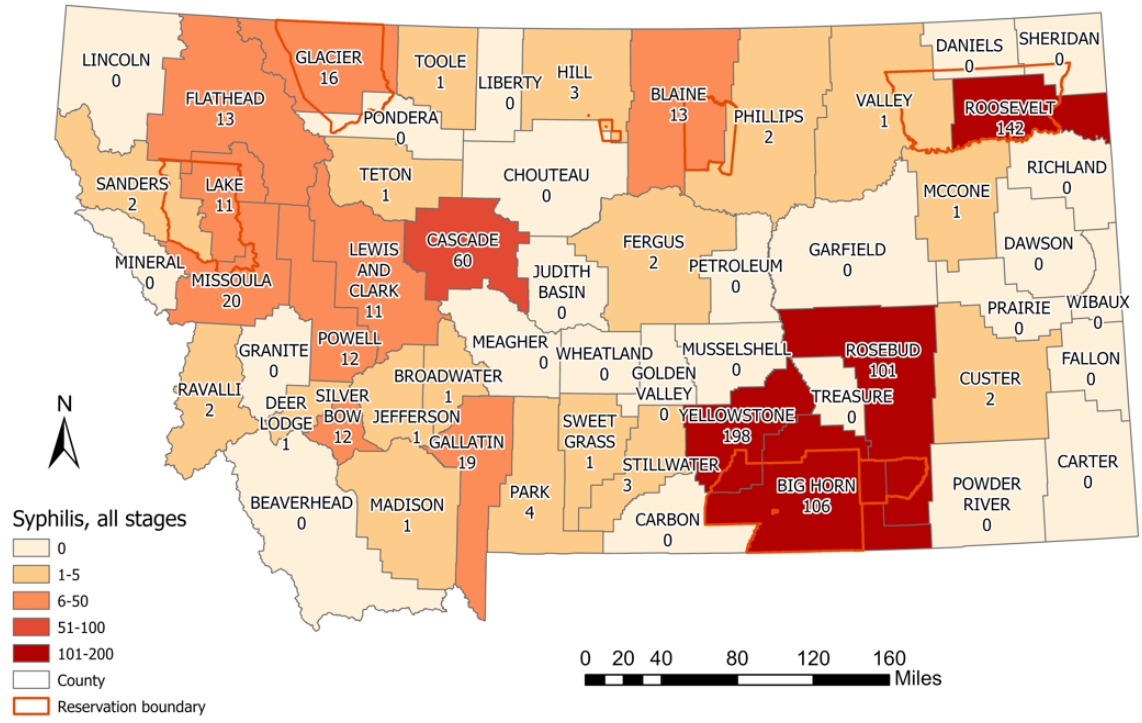
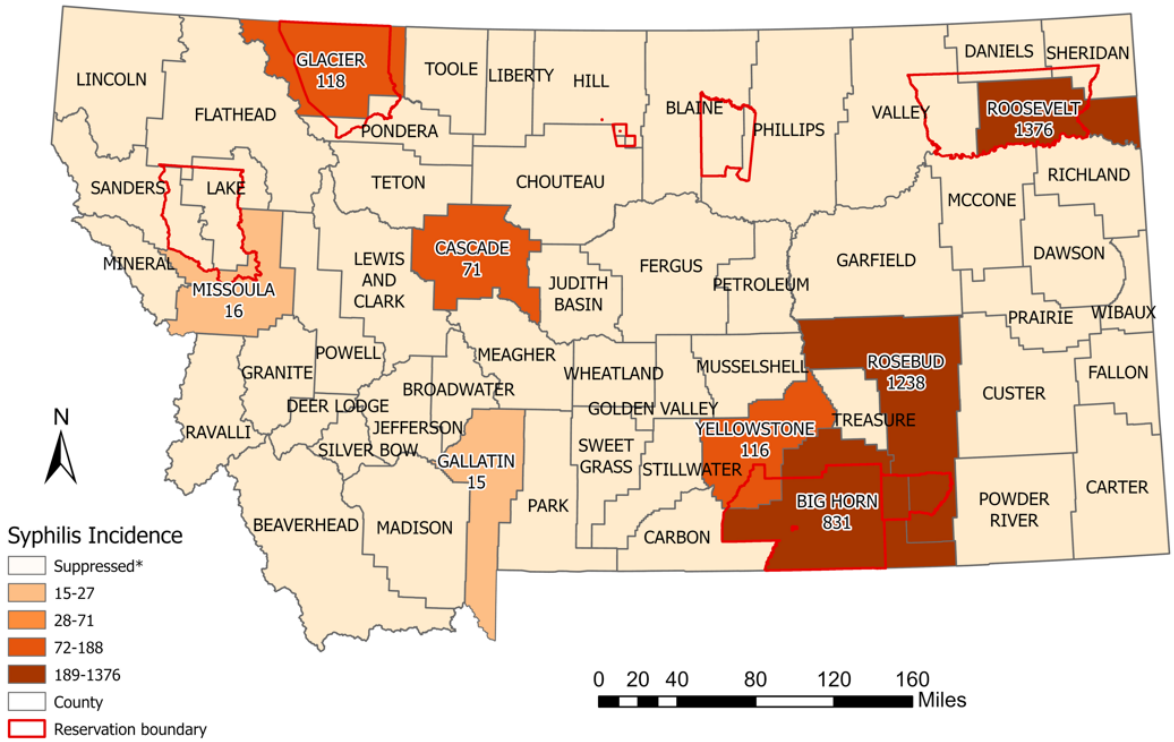


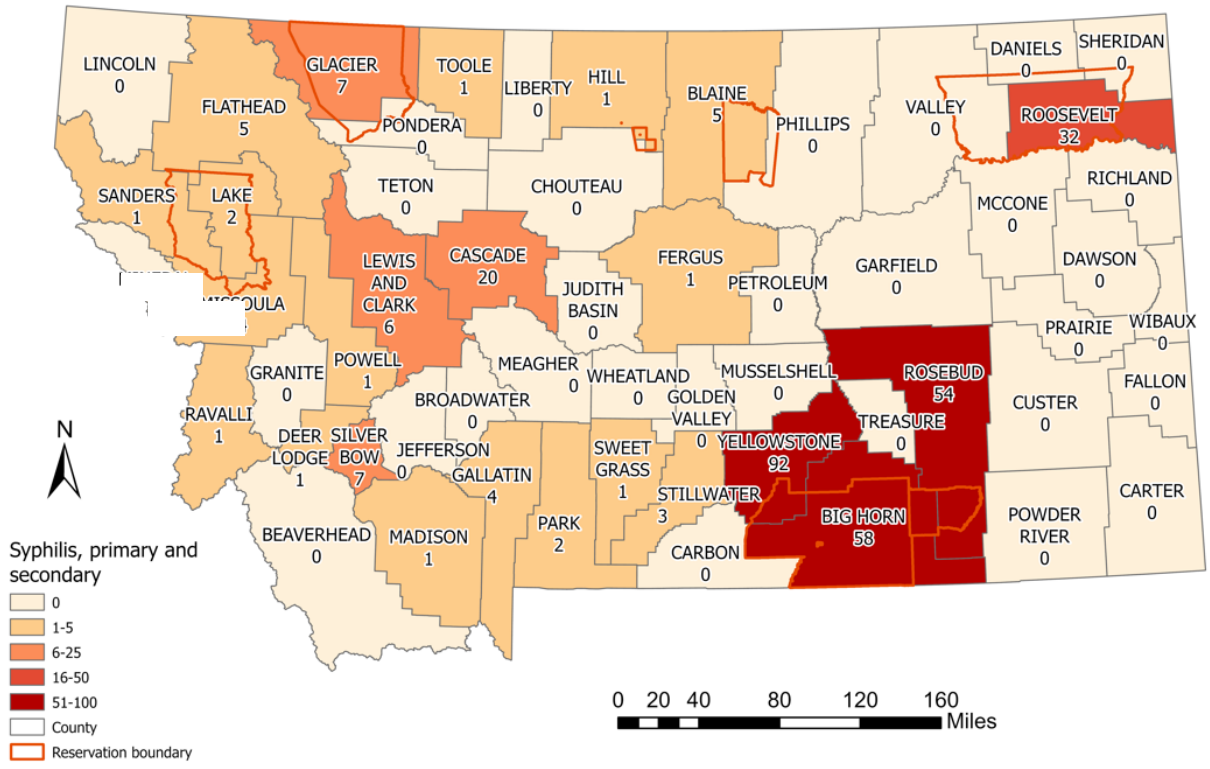
Figure 41. Number of syphilis cases (all stages) per 100,000 population, by county, Montana, 2023



Rates per 100,000 are not calculated if the number of cases in a county is ≤15

People with primary and secondary syphilis can easily transmit the infection to their sexual partners and represent early diagnosis. Figure 42 shows the number of primary and secondary syphilis cases by Montana county in 2023. Counties with the largest percentage of cases are Yellowstone County (28%), Big Horn County (18%), and Rosebud County (17%). As with the number of all syphilis cases, many counties with tribal jurisdictions experience a disproportionate number of cases.

Figure 42. Number of syphilis cases (primary and secondary) by county, Montana, 2023



VIRAL HEPATITIS

Hepatitis refers to an inflammation of the liver. Heavy alcohol use, toxins, some medications, certain medical conditions and viruses can cause hepatitis. The most common types of viruses that cause hepatitis are hepatitis A, B, and C. Symptoms of hepatitis may include fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, grey-colored stools, joint pain, jaundice, elevated liver enzymes, or elevated bilirubin. Symptoms of acute viral hepatitis appear any time from 2 weeks to 6 months after exposure. Symptoms of chronic viral hepatitis can take decades to develop, and many people with viral hepatitis are asymptomatic.

HEPATITIS A

Hepatitis A virus (HAV) infection is primarily transmitted by the fecal-oral route through consumption of contaminated food or water or by person-to-person contact. Although viremia occurs early in infection and can persist for several weeks after onset of symptoms, bloodborne transmission of HAV is uncommon. Symptoms of hepatitis A infection include diarrhea, fatigue, nausea, stomach pain, and jaundice; most symptoms are gone within two months, but some people can feel sick for as long as six months. Hepatitis A does not progress to a chronic infection and there is an effective vaccine against HAV.

Montana Quick Facts, 2023:

- ✓ Montana experiences a low number of acute HAV cases, with 2 acute cases reported in 2023.
- ✓ Fifteen HAV cases were reported in 2019, and 8 cases reported in 2020 representing an outbreak primarily among people experiencing homelessness and injecting drug user (IDU) populations.

Demographics

Montana has few cases of confirmed hepatitis A annually. There were 2 cases of hepatitis A reported in Montana in 2023 (Figure 43). There were 23 cases reported in 2019 and 2020 due to an outbreak primarily among people experiencing homelessness and injecting drug user (IDU) populations.

Figure 43. Number of confirmed acute hepatitis A cases, Montana 2014-2023

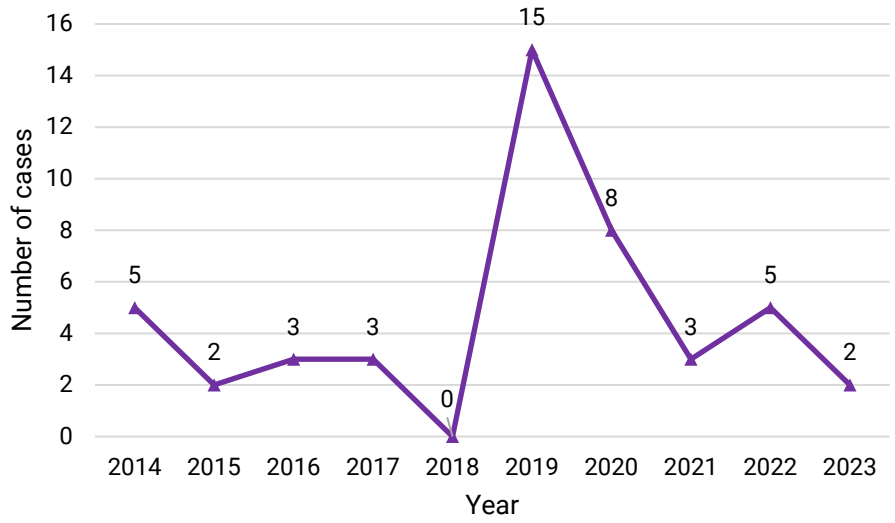


Table 8 summarizes the demographic characteristics of hepatitis A cases for the 2019 to 2023 time period. Cases were almost evenly diagnosed among males (52%) and females (48%) and persons over 60 years old had the largest percentage of cases (16%).

Table 8. Number and percentage of confirmed acute hepatitis A cases by select demographics, Montana, 2019-2023

Sex	Total	% of cases
Female	16	52%
Male	15	48%
Total	**31**	**100%**
Age group (years)		
≤29	7	23%
30-39	9	29%
40-49	4	13%
50-59	6	19%
≥60	5	16%
Total	**31**	**100%**
Race/Ethnicity		
White	25	81%
American Indian	3	9.5%
Other	3	9.5%
Total	**31**	**100%**

HEPATITIS B

Hepatitis B is a liver infection caused by the hepatitis B virus (HBV). Hepatitis B is transmitted when blood, semen, or another body fluid from a person infected with the virus enters the body of someone who is not infected. This can happen through sexual contact, injection drug use (IDU), or from mother to baby at birth. For some, HBV is an acute, or short-term, illness but for others, it can become a long-term, chronic infection. Chronic hepatitis B can lead to serious health issues, including cirrhosis or liver cancer. An effective vaccine is available.

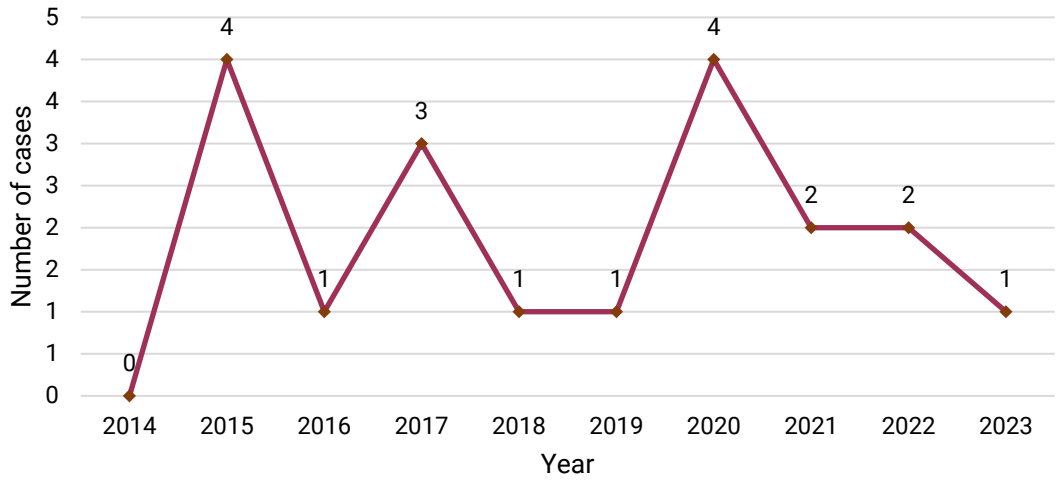
Montana Quick Facts, 2023:

- ✓ Montana reported 16 chronic cases and 1 acute HBV case.
- ✓ There were no perinatal cases reported.
- ✓ In Montana, Asian persons were disproportionately affected by chronic HBV with one in four cases reported in this population.

Demographics

One acute HBV case was reported in Montana in 2023 indicating recent infection (Figure 44). Also in 2023, 16 cases of chronic hepatitis B cases reported during the same year. It is possible that some of the chronic cases may have had the disease for years but were only identified that year. There were no perinatal hepatitis B infections reported in 2023. However, in 2023, there were four infants who were born to females with hepatitis B infection at the time of birth received prophylaxis to prevent infection.

Figure 44. Number of acute hepatitis B cases, Montana, 2014-2023



Tables 9 and 10 present demographic characteristics of acute and chronic hepatitis B cases for 2019-2023 time period. Cases were split nearly evenly between males and females for both conditions. Nationally, the rate of newly reported chronic hepatitis B was highest among non-Hispanic Asian/Pacific Islander persons (2022). Because the majority of chronic hepatitis B virus infections in the United States are among persons who are non-US-born, differences in the rates of newly reported chronic hepatitis B by race and ethnicity are likely influenced by country of birth. In Montana, the Asian population was disproportionately affected by chronic hepatitis B with one in four cases reported in this population during the 2019-2023 time period.

Table 9. Number of acute hepatitis B cases by select demographics, Montana, 2019-2023

Sex	Total	% of cases
Female	6	55%
Male	5	45%
Total	**11**	**100%**
Age group (years)		
35-39	3	27%
40-44	4	36%
45-49	2	18%
≥50	2	18%
Total	11	100%
Race/Ethnicity		
White, non-Hispanic	9	82%
American Indian, non-Hispanic	2	18%
Total	**11**	**100%**

Table 10. Number of chronic hepatitis B cases by select demographics, Montana, 2019-2023

Sex	Total	% of cases
Female	59	50%
Male	58	50%
Total	**117**	100%
Age group (years)		
20-29	12	10%
30-39	28	24%
40-49	23	20%
50-59	19	16%
60-69	26	22%
70-79	9	8%
Total		
Race/Ethnicity		
White, non-Hispanic	64	55%
Asian, non-Hispanic	30	26%
American Indian, non-Hispanic	6	5%
Other	16	14%
Unknown	1	1%
Total	**117**	**100%**

HEPATITIS C

Hepatitis C virus infection (HCV) is a liver disease that ranges in severity from a mild illness lasting a few weeks to a serious, lifelong illness. It results from infection with the hepatitis C virus and is spread through contact with blood of an infected person. Today, in the U.S., the majority of persons become infected with HCV by sharing needles or other equipment used to inject drugs.

Like hepatitis B, HCV can be either acute or chronic. Acute HCV occurs within the first six months after someone is exposed to the HCV virus. However, 70% to 80% of people with acute disease do not present with symptoms at the time of diagnosis. Because of this, HCV cases are underdiagnosed. Up to 45% of persons will spontaneously clear the infection. Those who do not clear the disease develop chronic HCV infection that can last a lifetime and lead to serious liver problems, including cirrhosis or liver cancer. While there is highly effective treatment for HCV, there is no vaccine or post-exposure prophylaxis available.

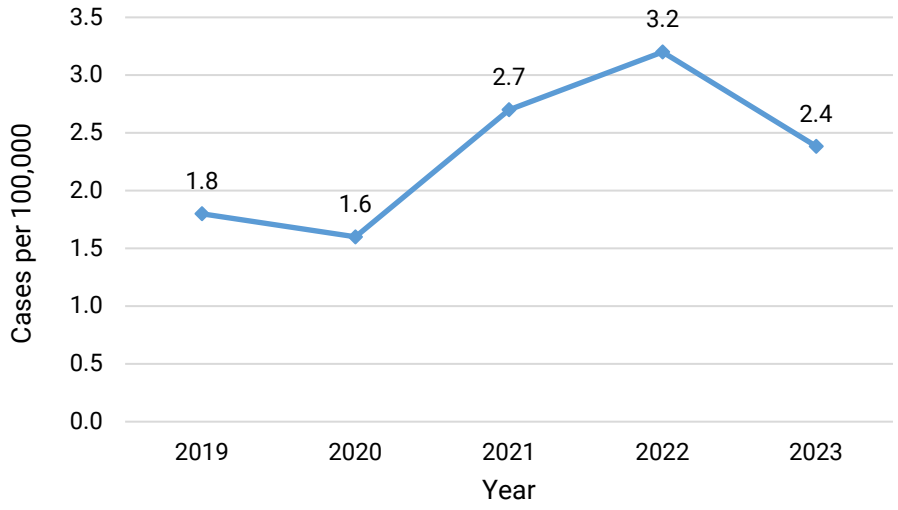
Acute HCV Demographics

Between 2019 and 2022, the rates of acute HCV increased in Montana (Figure 45). The increase may have been influenced by the COVID-19 pandemic leading to disruption of health care usage, as well as an increase in substance use. Between 2022 and 2023, the rate of acute HCV cases in Montana declined (2.4 per 100,000 population) and was higher than the United States rate in 2021 (1.6 per 100,000).

Montana Quick Facts, 2023:

- ✓ There were 27 cases of acute HCV.
- ✓ Acute HCV is often used as a marker for injecting drug use, particularly for young adults. Over two-thirds of acute HCV cases in Montana were younger than 40 years old.

Figure 45. Rate per 100,000 of acute HCV cases, Montana, 2019-2023



During 2019-2023, more males were diagnosed with acute HCV (58%) than females (Figure 46). The American Indian population in Montana was disproportionately affected by acute HCV. While accounting for 7% of the Montana population, American Indians made up 38% of the acute HCV cases in in 2023 (Figure 47).

Figure 46. Percentage of acute HCV cases by sex, Montana, 2023

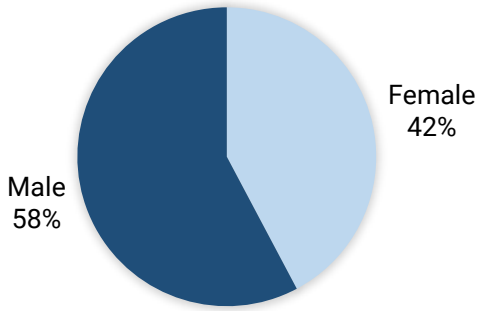
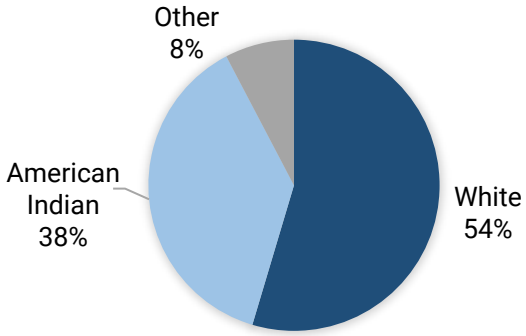


Figure 47. Percentage of acute HCV cases, by race, Montana, 2023



While previously a "baby boomer" disease in persons born between 1946-1964 and largely affecting persons who received unscreened blood products prior to 1992, acute HCV increasingly affects a younger population. This is seen in the high percentage of acute HCV infections diagnosed in a younger population when compared to chronic HCV. In Montana, nearly 75% of acute HCV cases were in people younger than 40 years old in 2023 (Figure 48).

Figure 48. Percentage of acute HCV cases by age group, Montana, 2019-2023

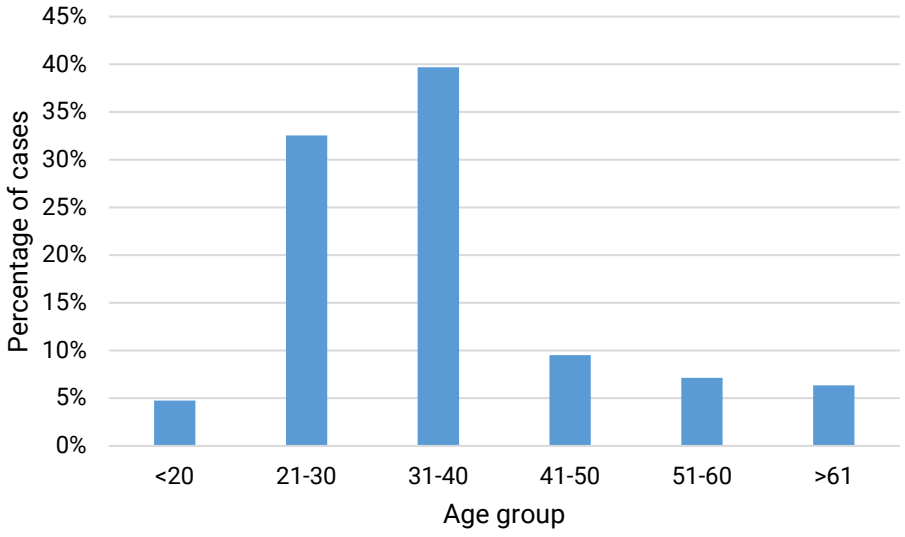
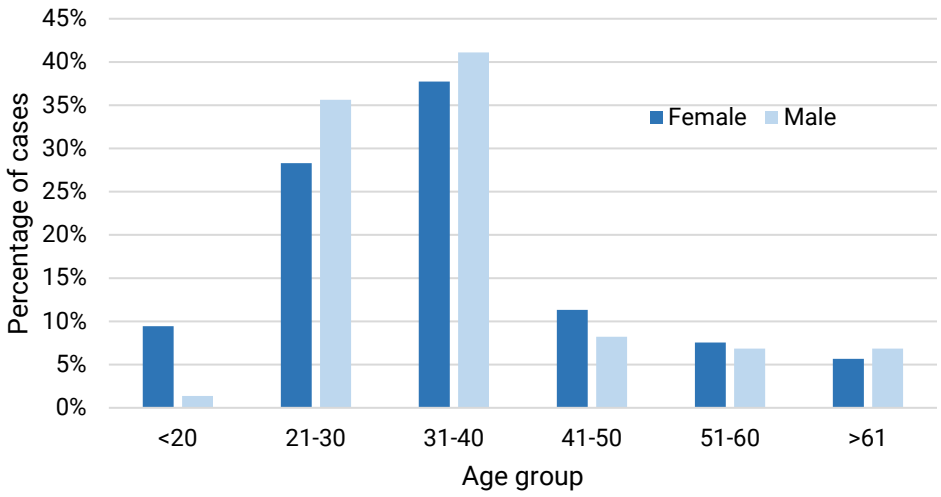


Figure 49 shows the percentage of acute HCV cases by sex and age group in Montana. During the 2019-2013 time period, acute HCV infections affected a young population, among both males and females. Males less than 40 years old comprised 78% of cases and 75% of female cases were less than 40 years old. Over 90% of female diagnosed with acute HCV in Montana were among women of reproductive age (15-45), increasing the risk of perinatal transmission.

Figure 49. Percentage of acute HCV cases by age group and sex, Montana, 2019-2023



CHRONIC HEPATITIS C

For certain persons, hepatitis C is a short-term illness, but for more than 55% of persons who become infected with HCV, it becomes a long-term, chronic infection.

Left untreated, chronic hepatitis C can cause serious health problems including liver disease, liver failure, liver cancer, and death. Chronic hepatitis C is a leading cause of liver cancer and liver transplants in the United States.

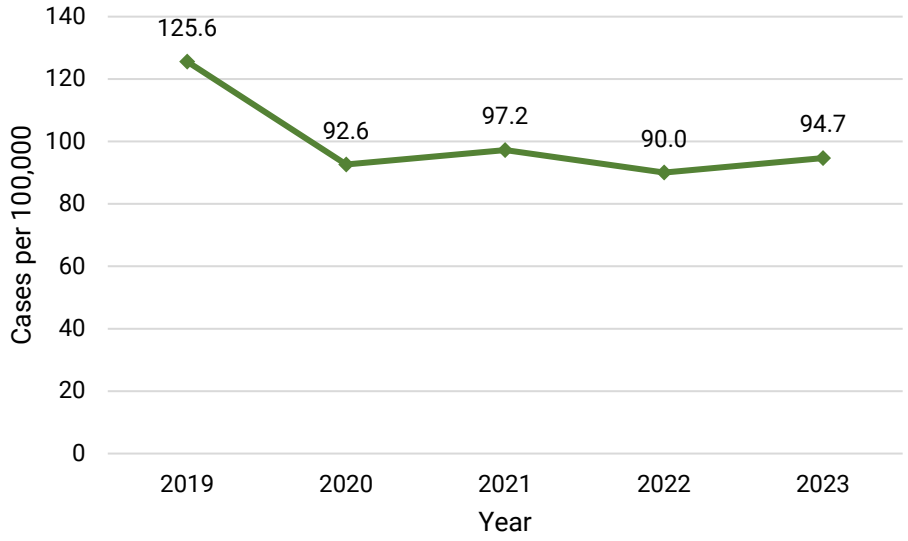
Montana Quick Facts, 2023:

- ✓ Chronic HCV was the third most reported communicable disease.
- ✓ There were 1,063 cases of chronic HCV and 63% of cases were male.
- ✓ Chronic hepatitis C affects multiple generations with infections highest among two age groups: 25-40 years old and those 59 years and older.

Demographics

In 2023, there were 1,063 cases of chronic HCV in Montana. Between 2019 and 2023, the rate of chronic HCV decreased from 125.6 per 100,000 population to 94.7 per 100,000 (Figure 50). The decrease may have been influenced by the COVID-19 pandemic causing a disruption in health care usage and community screening events. Whether the impact of the pandemic has continued through 2023 is uncertain.

Figure 50. Rate per 100,000 of chronic HCV cases, Montana, 2019-2023



In Montana, more males were diagnosed with chronic HCV (63%) than females in 2023 (Figure 51). This is slightly higher than acute HCV cases where 59% of cases were male (2019-2023). Similar to acute HCV, chronic HCV disproportionately impacts the American Indian population which made 40% of total cases while accounting for 7% of the Montana population (Figure 52).

While case counts are sensitive to robust screening activities on tribal nations, these health disparities may also stem from challenges including poverty and substance use.

Figure 51. Percentage of chronic HCV cases by sex, Montana, 2023

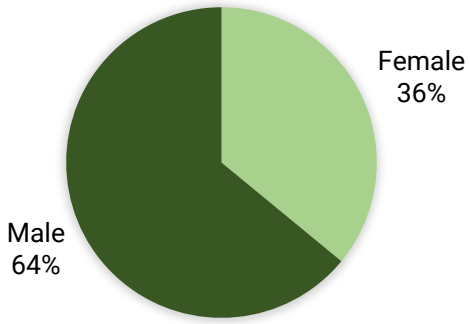
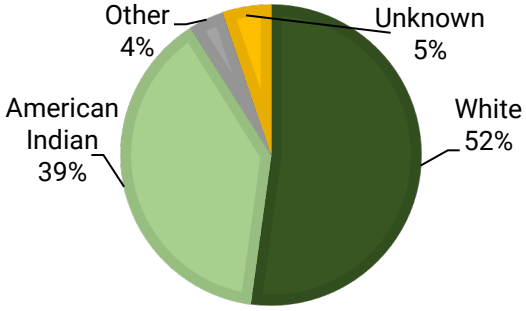
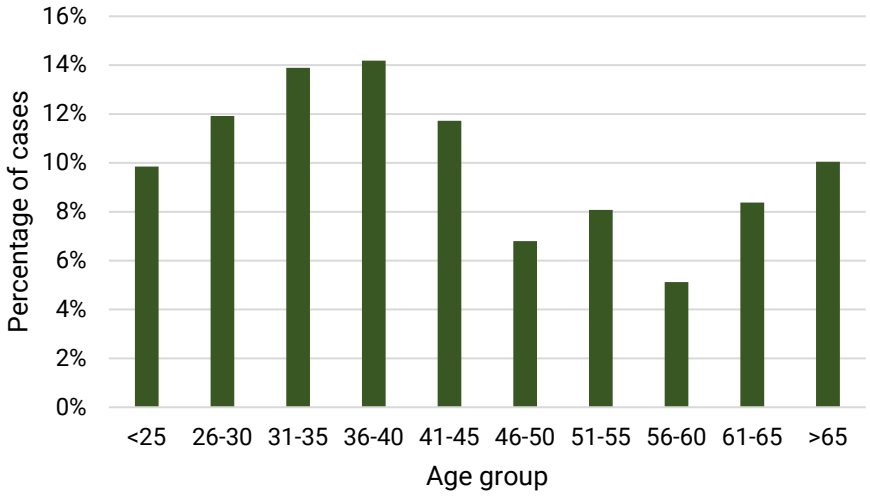


Figure 52. Percentage of chronic HCV cases by race, Montana, 2023



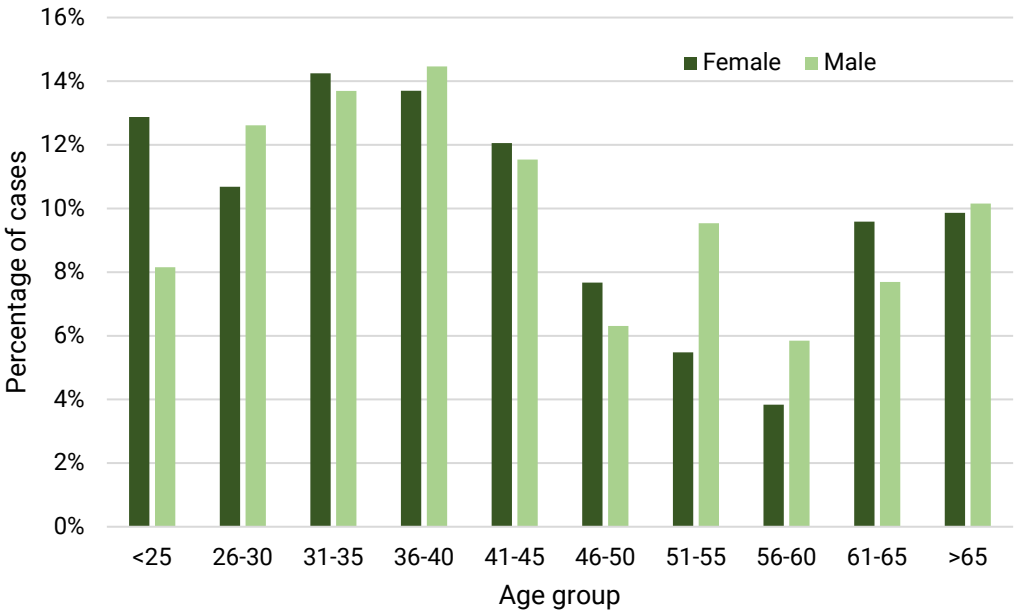
Chronic HCV affects multiple generations with infections highest among two age groups: persons 26–40 years old and persons 61 years and older (Figure 53). Younger populations typically acquire the disease through injecting drug use, while persons 59 and older are more likely to have developed chronic HCV through unscreened blood products prior to 1992.

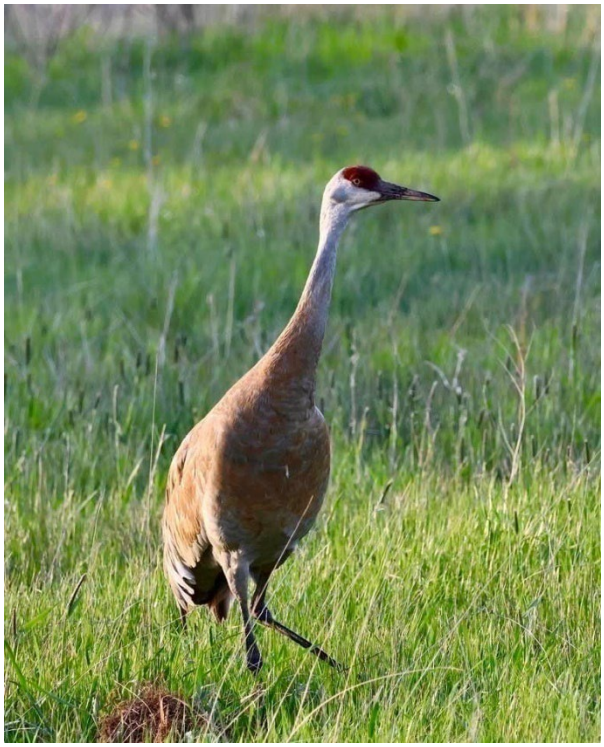
Figure 53. Percentage of chronic HCV cases by age group, Montana, 2023



As chronic HCV shifts from being a 'baby boomer' disease, both male and female chronic HCV cases affected a young population in 2023 (Figure 54). Males less than 40 years old comprised 49% of cases and 52% of female cases were less than 40 years old. Nearly 65% of female cases were among women of reproductive age (15-45 years old), increasing the risk of perinatal transmission.

Figure 54. Percentage of chronic HCV cases by age group and sex, Montana, 2023





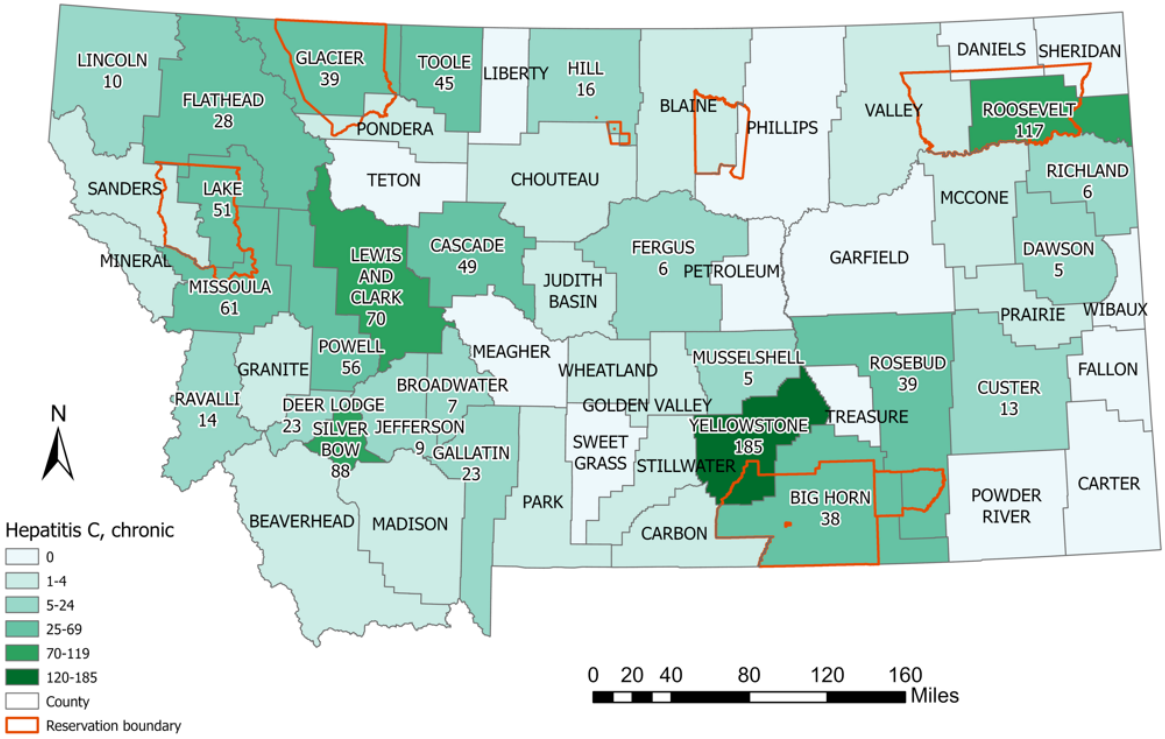
Geography

Forty-three (77%) of Montana's 56 counties had at least one HCV diagnosis in 2023 and cases were largely diagnosed in the state's most populous counties (Figure 55). Yellowstone County had the highest percentage (19%) of cases followed by Cascade County (8%), Missoula County (8%), and Flathead County (6%).

Other counties that reported high case counts relative to their population include Roosevelt County (10,808 population, 2022), Big Horn County (12,932 population, 2022) and Glacier County (13,743 population, 2022). Powell County also experienced higher case counts relative to its population size (7,012 population, 2022) due to the Montana State Prison located in that jurisdiction.

Because of the disproportionate impact of HCV on the American Indian population in Montana, counties with tribal jurisdictions reported cases at much higher rates compared to counties without tribal jurisdictions. Further, because chronic HCV is often asymptomatic, jurisdictions with robust HCV screening practices have the benefit of identifying new cases and may, as a result, experience higher reported disease counts.

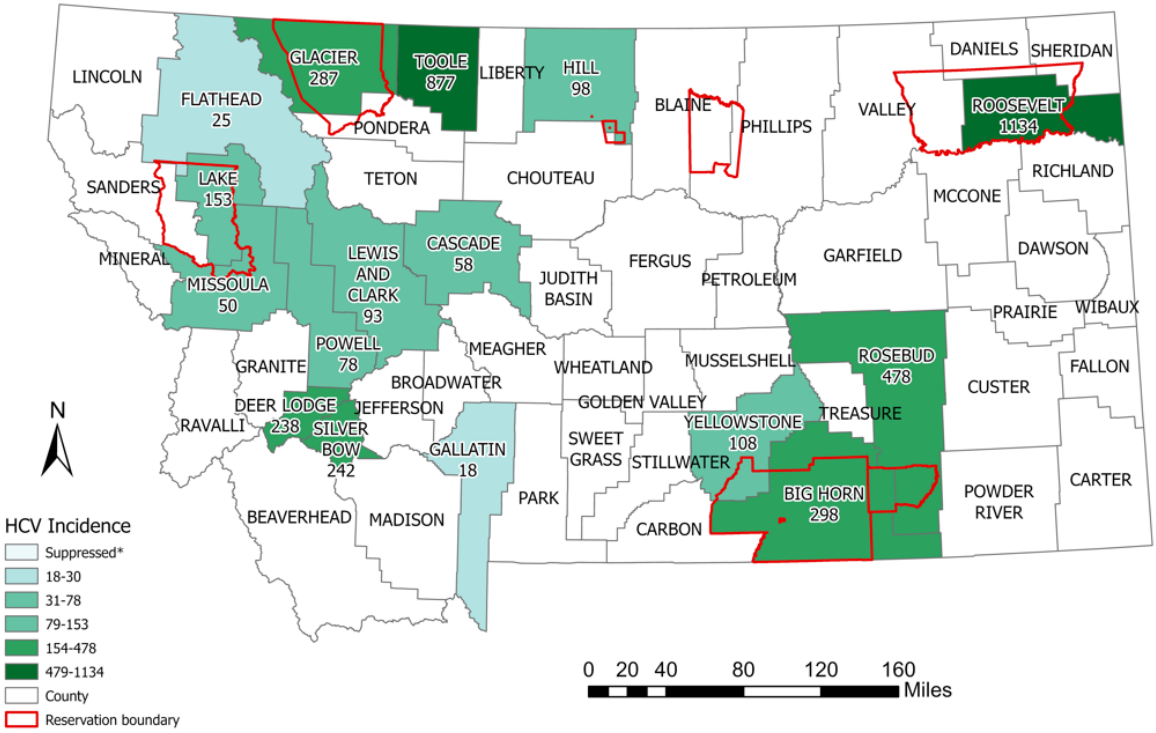
Figure 55. Number of chronic HCV cases by county of residence, Montana, 2023



Case counts between 1-4 are suppressed for chronic conditions

Figure 56 shows the number of chronic HCV cases per 100,000 population during 2023. While Yellowstone county had the largest number of cases, Roosevelt, Big Horn, Rosebud, Toole, and Glacier counties had the highest incidence of HCV in 2023.

Figure 56. Number of chronic HCV cases per 100,000 population by county of residence, Montana, 2023



Rates per 100,000 are not calculated if the number of cases in a county is ≤15