
MISSOULA
PUBLIC HEALTH
2024 COMMUNITY HEALTH ASSESSMENT
Missoula County, Montana
ACCREDITED HEALTH DEPARTMENT
PHAB
Advancing public health performance
PUBLIC HEALTH ACCREDITATION BOARD

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A Message to the Community

Missoula Public Health (MPH) is proud to present the 2024 Community Health Assessment (CHA). This document represents a comprehensive review and analysis of data regarding health issues and the needs of individuals and communities throughout Missoula County, the jurisdiction that Missoula Public Health serves. The whole of Missoula County is referred to as "Missoula" unless otherwise noted.

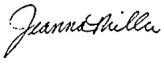
The CHA represents the data, opinions, observations, and perspectives of the people who live, work, play, and learn in our communities. The information contained within this report can help community partners, residents, businesses, and other interested persons determine the priority health needs within Missoula. It is based primarily on 2017–2021 secondary health data and primary health data collected by MPH in 2023 and ongoing community input from 2024.

Knowing our health priorities, in turn, helps mobilize organizational and community resources to address these issues. MPH intends for this CHA to provide useful information to public health programs, healthcare providers, policymakers, area organizations, community groups, and individuals interested in improving health, wellness, and prevention in the community. This information can be used for collaboration, planning, grant writing, advocacy, and other areas to improve health.

We are excited about the new additions to this assessment that more fully reflect what factors affect health. These additions expanded data from rural communities, more health indicators, more community input, expanding the CHA survey to ask about the impacts of climate change, new sections on LGBTQ+ Health and Health Equity, and including Healthy People 2030 goals so people reading the report can know what national health objectives are for priority health topics. To provide additional information about other plans impacting health, a list of existing City, County, and Community plans was included as a new section.

From here, MPH will work in partnership with the community and begin outlining a Community Health Improvement Plan (CHIP) to address priority health issues. The CHIP will provide a vision and lay the groundwork for community partners to come together to implement a systematic approach to addressing the priority health issues identified in the CHA. It will provide a foundation to stimulate strategic new partnerships and collectively, elevate and maximize the health status of all people in our community.

Please join us in this groundbreaking work and exciting journey toward better health.



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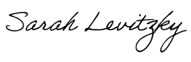

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Acknowledgments

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Participating Partners

Participating partners involved in the CHA process through participating in a workgroup for conducting the CHA, contributing to data collection, contributing to data interpretation, and contributing to data prioritization for planning purposes, and participated in the first two meetings for the CHIP:

All Nations Health Center
830 W Central Ave, Missoula, MT 59801
(406) 829-9515

American Cancer Society American Cancer Society
3550 Mullan Rd Suite 103
Missoula, MT 59808
(406) 360-8752

American Society for Suicide Prevention Montana Chapter
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Missoula, MT 59808
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City of Missoula
435 Ryman St., Missoula, MT 59802
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Climate Smart Missoula
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Empower Montana
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Missoula, MT 59801
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1235 34th St, Missoula, MT 59801
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Partnership Health Center
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Providence St. Patrick Hospital
500 W Broadway St, Missoula, MT 59802
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Summit Independent Living
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Missoula, MT 59803
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Tamarack Grief Resource Center
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Missoula, MT 59801
(406) 541-8472

The Parenting Place
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Missoula, MT 59801
(406) 728-5437

United Way of Missoula County
412 W Alder St
Missoula, MT 59802
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University of Montana Rural Institute for Inclusive Communities
Corbin Hall, 52
Missoula, MT 59812
(406) 243-4131

Watson Children's Shelter
4978 Buckhouse Ln
Missoula, MT 59804
(406) 549-0058

Western Montana LGBTQ+ Community Center
500 N Higgins Ave Unit 105
Missoula, MT 59802
(406) 543-2224

Consulted entities specific to rural health areas:

1. Bonner Milltown Community Council;
2. Evaro Finley O'Keefe Community Council;
3. Lolo Community Council;
4. Seeley Lake Community Council; and
5. All Community Council Meeting.

Many people provided expertise, took part in working groups, and participated in the survey. This list does not include everyone. Thank you to all who helped in any part of the process.

Executive Summary

Introduction

Missoula Public Health (MPH) is honored to present the 2024 Community Health Assessment (CHA) for Missoula. This is the fourth CHA MPH has completed. The others were in 2017, 2014, and 2011. For the 2024 CHA, MPH built upon the foundation created through previous efforts in multiple ways. MPH strove to evolve the CHA process to include partnerships that were more diverse, equitable, and inclusive. This is an ongoing effort MPH is continuing to grow.

MPH is a data-driven health department. We strived to create a data-driven CHA to provide the framework for a Community Health Improvement Plan (CHIP) and other community-driven proposals that target improving the community's health.

The secondary data utilized for this CHA were from 2017 through 2021 (although data from different years were included where available and relevant). Wherever possible the data included trends and comparisons. Community input through 2024 was included. Data in this report is for Missoula, including within and outside of Missoula City Limits, unless specifically noted otherwise.

Numerous additions were made to expand the scope of the 2024 CHA from previous CHAs. These included:

1. **Data from rural communities:**

This CHA report includes information from rural and urban areas of Missoula. The same CHA survey was used both *within* and *outside* of Missoula City Limits. A different survey methodology was utilized based on location, explained in more detail in Appendix 3: Survey Methods. The main difference in how the survey was conducted was that people within City Limits were *sent postcards* through a randomized process and only those with postcards could respond to the survey. In areas outside City Limits, people were *not* sent postcards but were instead *asked to participate by following an online link* to answer survey questions. *Anyone* in the outlying communities could participate. The CHA Survey Results in Appendix 4 show the breakdown of these survey results.

For the next CHA, the same method of survey delivery will be used for both *within* City Limits and those *outside* City Limits. Efforts will be made to build upon the rural relationships established in this CHA to have more rural partnership involvement throughout the CHA process.

2. **Expansion of health indicators:**

The 2024 CHA incorporates health indicators used in prior CHAs. It also expanded indicators to include new ones that impact health and can lead to inequities and disparities, such as environmental climate factors, employment, housing, and childcare costs.

For the next CHA, MPH is strategizing on how to better involve and gather data not currently available for groups that face unique health challenges, such as individuals who are transgender.

3. **Inclusion of Healthy People 2030 goals:**

The 2024 CHA includes health objectives and goals from the national Healthy People 2030 program (HP 2030) for the first time. HP 2030 is a roadmap to health provided by the Office of Disease Prevention and Health Promotion at the U.S. Department of Health and Human Services. It is a program that identifies public health priorities to help individuals, organizations, and communities across the US improve health and well-being. Healthy People 2030 provides measurable goals and tools to track progress toward the goals. The information provides additional data to partners and community organizations seeking to use the 2024 CHA in efforts to achieve healthier communities in a more diverse, equitable, and inclusive way. More information is available at the Healthy People 2030 website, health.gov/healthypeople.

The Healthy People 2030 targets and goals provided in the CHA were set nationally, not by MPH. They are not MPH-established goals and may not be goals MPH is pursuing.

4. **Expanded community input:**

Expanded community input was included in the 2024 CHA in various ways. Dedicated outreach to rural communities was done to include more rural, outside City Limits, input than before. To be more inclusive of rural communities, MPH staff contacted rural community councils to discuss the CHA, invited them to participate in the CHA survey, and invited them to be involved in the community health improvement planning process that uses CHA data to improve health.

Community input also involved data gathering and sharing, planning what data to include in the CHA, planning what questions to ask in the CHA survey, and having community members complete the CHA survey. Outreach for the community survey was done through various methods (see Appendix 3) to encourage community members in rural and urban areas to complete the CHA survey.

Community input was gathered on the draft CHA report after it was released to the public for over four weeks. Input was requested from community members and community partners, organizations, groups, and individuals. Input was requested through an online newsletter, through an online portal, through emails to community organizations, and

through paper copies available at the local public library. The input was incorporated in this final CHA report.

5. **Addition of Health Equity section**

MPH is dedicated to providing health equity in its services. A new section was added to the CHA that discusses health inequities, race, ethnicity, and racism. Understanding systemic racism and its negative impacts is essential to achieve health equity. Inequities experienced by rural residents (outside City Limits) as compared to urban residents (inside City Limits) were shown for the first time in the CHA and elucidated the unique challenges and disparities facing different geographic areas of Missoula.

6. **Expansion of Climate Change section:**

What impact climate shifts have on individuals and health, and what steps can be taken to mitigate those effects were explored for the first time through the CHA survey questions. Disparities and inequities that may be present were shown in this data.

7. **Inclusion of section on LGBTQ+ Health:**

The new section on LGBTQ+ Health was included to reflect the health and experiences of the LGBTQ+ population in Missoula and provide a fuller picture of health. This addition was important because individuals who are LGBTQ+ face health inequities and challenges that other groups do not.

8. **Inclusion of list of existing plans**

To provide additional information about other plans impacting health, a list of existing City, County, and Community plans was included as a new section. This list, although not all-encompassing, allows readers access to other plans that may impact topics they care about.

As in the past, the CHA will be the foundation for creating a Community Health Improvement Plan (CHIP). The CHIP will focus on health issues selected by working groups made up of MPH staff, community partners, and community members. It will outline a plan for how the community can work together to improve on the selected health issues.

MPH hopes the information presented within the 2024 CHA is useful to other community groups working on providing services, collaborating, planning, advocating, and applying for grants. It is an exciting opportunity to harness the power of the Missoula community for collective good.

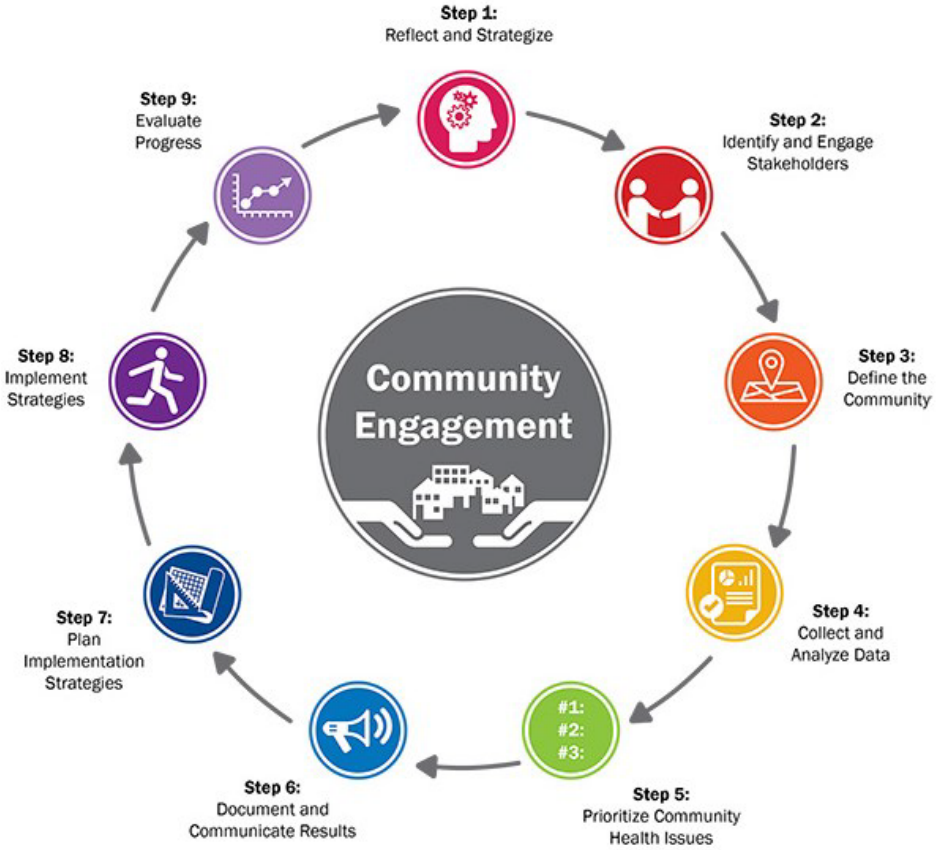
Why the CHA is Important

Health is created by several factors. "The health of an individual or a population is largely determined by where they live, work, play, and learn."[1] The MPH CHA sought to capture this, providing a high-level look at the many factors influencing health.

The Process

This report is part of a community engagement process following the steps outlined in the Association for Community Health Improvement Toolkit (see graphic below). Due to the impacts of the COVID pandemic, and associated staff turnover, the 2024 CHA was delayed. This resulted in the 2024 CHA being a learning process for MPH. The need for a clear framework for conducting a CHA was identified as a necessity when staff turnover occurs and those with historical knowledge are no longer involved in the CHA process. MPH is in the process of creating such a framework for future CHAs.

The collaborative process, especially with those populations who may be disproportionately affected by conditions that contribute to poorer health outcomes, was an identified area needing improvement for the next CHA. Issues dealing with equity and data sovereignty were identified as areas needing improvement. Steps, including collaborating with experts and specialized organizations, were taken to improve the approach to these topics. MPH will continue to build on established relationships and expand collaboration for future CHAs.



Methodology

When the 2024 CHA process began, the decision was made to change the previously used CHA approach and work with community organizations more fully *after* the draft CHA was released to have community involvement in a way that previous CHAs had not. This draft was modified and added to following community input.

The new process expanded input and allowed more community members and organizations to collaborate in the CHA process over a longer timeframe. Because the CHA draft was released in January 2024 but the secondary data in the CHA was from 2017 to 2021, MPH believed it was important to provide an avenue for updated engagement and data from community members beyond the 2017 to 2021 timeframe. In addition, MPH used the additional time to reconnect with All Nations Health Center about the CHA and more inclusively include its input. This was key for the Indigenous Health section.

The unique needs of rural communities in Missoula (those outside Missoula City Limits) had not been focused on with previous CHAs. The decision was made to include these in the 2024 CHA as an area of focus. The health of Missoula's communities was examined through analysis of secondary data. Primary data was gathered from rural communities through the CHA survey. Rural community involvement was encouraged through personal outreach and appearances by MPH staff at five rural Community Councils to discuss the process with them and encourage their involvement. These councils were:

1. Bonner Milltown Community Council;
2. Evaro Finley O'Keefe Community Council;
3. Lolo Community Council;
4. Seeley Lake Community Council; and
5. All Community Council Meeting.

As part of the community engagement process, MPH released the first draft of the 2024 CHA in January 2024. Public notice of the draft CHA and the opportunity for input was accomplished through a press release regarding publication of the initial CHA draft. Also provided were an electronic link for individuals to provide feedback, paper copies of a

feedback form, and paper CHA copies for public review at the local Missoula Public Library with a paper form to provide input. These forms were later gathered and included as input.

Comprehensive, broad-based data including both primary data (Data that MPH generated) and secondary data (data from sources other than MPH), were used in the CHA. First, MPH collected and analyzed secondary data from numerous local, state, and national existing data sources. The individual sources are noted throughout the CHA with the data and at the end in the Appendix. MPH collected and analyzed primary data collected through the CHA survey. The CHA survey was an online survey accessible to all living in rural areas (outside City Limits) and to those living in the City Limits who received a postcard inviting them to participate. CHA survey answers were then analyzed. Additional information about the survey can be found in Appendix 3. The survey provided primary data from individuals living within Missoula City Limits and outside those limits but within Missoula County. This was a better representation of the entire Missoula community than before because of the inclusion of rural areas (outside City Limits).

Community feedback was provided throughout the CHA process and during the first two meetings of the CHIP process. Specific notes about that community feedback, such as what residents answered in response to the CHA survey, are included throughout this report. Specific community feedback was also provided in the feedback received through the process of having the draft CHA open and available for public comment. The Appendices show details of community input for individuals.

Why does a CHA involve such a large process?

In this modern digital age, a lot of data about our communities is readily available. Analyzing that data and using it to plan to improve the health of our community is a large process. Involving partners throughout the community enriches the outcomes. Specific benefits of the CHA process are that:

1) Unlikely partners work together and know each other in different and deeper ways.

2) We can understand the public health status and needs of our community better using quantitative and qualitative data and through discussions and interactions.

3) The process creates the foundation to work together on important and timely issues of public health and well-being in the county.

4) The final report can be used by community members and organizations to benefit the specific work they are interested in.

By viewing all this data at once and involving community input, MPH can work with partners to develop a CHIP to better coordinate the different programs and resources the community has available. MPH operates on a Community Participatory model for the evaluation and implementation of programs and priorities. Surveying the health needs and strengths of the community is part of this model. MPH is additionally required to conduct the CHA and CHIP process to maintain accreditation.

If this is a health assessment, why are issues such as employment and housing included?

Health is a broad area that is impacted by many factors. The American Public Health Association (APHA) defines public health as promoting and protecting the health of people where they live, work, and play. Genetics and individual choices influence health but so do other factors. To fully examine public health, we must focus on issues such as economic insecurity caused by a lack of safe and affordable housing, food availability, ability to access and afford health care coverage, or ability to have a job that pays well enough to allow one to meet their basic needs. These are called "social determinants of health."

Social Determinants of Health

"Social determinants of health" are nonmedical factors that influence health outcomes.[2] These are a wider set of forces and systems that shape the conditions of our daily lives. They include such things as where one is born, climate change, economic stability, social policies, and racism. Social determinants of health impact education levels and opportunities, the ability to easily find and afford healthy food, and the ability to access high-quality health care.[3]

Explanation of Data

Why These Indicators?

A working group identified the data for key demographic indicators during previous MPH CHAs. These indicators were chosen, and continue to be used and added to, because they address social determinants of health and are leading health indicators tracked in Healthy People 2030. The related Healthy People 2030 objectives for each area have been included with the health indicators. This CHA can be used as a pathway forward for what different data points can be used to track health status and intervention impact.

City and County Data

This report focuses on data for Missoula County with specific information for the City of Missoula included when available. The data are for Missoula County as a whole, including within the Missoula City Limits, unless otherwise noted. The CHA survey, detailed in Appendix 4, contains information stratified from within Missoula City Limits as compared to within Missoula County but outside Missoula City Limits (also referred to as rural areas). The use of the term "Missoula" stands for Missoula County throughout this report unless otherwise indicated.

Glossary of Acronyms

Acronyms were used in some areas of this report. For the sake of readability, this report will not always spell out these long titles that will be used often. Additional information is provided about resources that provide data at the county level in Appendix 1.

ACS = American Community Surveys

APHA = American Public Health Association

BRFSS = Behavioral Risk Factor Surveillance System: Surveys of adults 18 and over that assess behaviors related to risks for disease and disability

CHA = Community Health Assessment

CHIP = Community Health Improvement Plan

CDC = Centers for Disease Control and Prevention: The CDC is a federal agency that works to protect health and human safety by controlling and preventing disease and injury

LGBTQ+ = Lesbian, gay, bisexual, transgender, and queer. As used herein, it is umbrella term that refers to a variety of sexual orientations, romantic identities, and gender identities that are not heterosexual or cisgender

Montana DPHHS = Montana Department of Health and Human Services: The statewide government health department that serves the health, safety, and well-being of Montanans

MPH = Missoula Public Health

SDOH = Social Determinants of Health: Refer to the fuller explanation of these above

UIO = Urban Indian Organizations

YRBS = Youth Risk Behavior Surveillance: Surveys conducted in middle schools and high schools every two years that assess risk factors, including alcohol and drug use,

risky behaviors, and eating habits, that contribute to the leading causes of death and disability

Key Findings

Welcome to the 2024 Missoula CHA. This report is the work of the many participants listed in the Acknowledgement section. This introduction summarizes and highlights some of the key issues that developed from the data and the input of partner organizations and community groups.

Input from Community Partners

Input from community partners provided the following list of **PRIORITY AREAS** for Missoula to focus on for health improvement purposes:

1. Access to care
2. Community living
3. Environmental health
4. Family resources and support
5. Housing as health
6. Substance use, mental, and behavioral health
7. Physical health

A throughline in this report showed that even when things were going well overall, not all groups, neighborhoods, or communities experienced positive effects and benefits. For Missoula to support the health of *all* residents and work towards health equity, mindful steps need to be identified and taken to extend opportunities for health and well-being to *everyone* in the Missoula community.

The top three leading causes of death were:

1. Heart disease
2. Cancer
3. Unintentional injury

The main industry employers were:

1. Educational, healthcare, and social assistance
2. Retail trade
3. Arts, entertainment, recreation, accommodations, and food service

Community Strengths & Opportunities

The people in Missoula are diverse, caring, and appreciate much of what Missoula has to offer. **In the CHA survey, residents were asked to rate the strength of social determinants of health** in their local community (where they were living). A summary follows. *Complete answers for the CHA survey are found in Appendix 4.*

Community Strengths & Opportunities

Strengths:

1. The major strength identified for both in and outside Missoula City was **Green Spaces like Public Parks, Playgrounds, and/or Trails**.
2. **Healthy Food Options** were the second greatest strength in City Limits.
3. **Public Schools** were the second greatest strength in County rural areas.

Opportunities/Weaknesses for both in and outside City Limits**:**

1. **Availability of Housing Options** was the major weakness.
2. **Housing Security** was the second greatest weakness.

Health Topics

The **health topics** identified as major issues in the City Limits and in rural areas:

1. **Mental Health**
2. **Substance Abuse, Drugs, and Alcohol**

Climate Shifts

People were asked about the climate for the first time in the MPH CHA. Most people reported noticing **climate shifts** in both City Limits and rural areas.

1. **Noticed changes:** The greatest way individuals noticed climate shifts in City Limits and rural areas was *first* with **hotter summer temperatures** and *second* with the **number, intensity, and frequency of wildfires**.
2. **Impact:** The greatest reported impact within City Limits and rural areas **was increased seasonal costs.** The second greatest impact was **mental or emotional health impacts**.
3. **Coping:** The greatest way people reported coping with climate shifts within both City Limits and rural areas was to **make changes to their homes** to manage indoor temperatures (i.e. heating units, air conditioning units, blackout curtains, etc.). The second greatest way people coped was to **pay more for utility bills** to stay comfortable in their homes.
4. **Barriers:** The overwhelmingly greatest barrier to keeping homes cool in the summer and warm in the winter both within City Limits and rural areas was the **cost of energy services**. **Transportation challenges** and **not having enough time** were also noted as challenges.
5. **Home Impacts**: A majority in City Limits were most concerned about the possible impacts to their homes from **wildfire *smoke***. A majority in rural areas were most concerned about the possible impact on their homes from ***wildfires***.

Missoula compared *better* and *not as good* to Montana and the US:

Strengths		Opportunities
Missoula's **unintentional injury death** rate was lower than in Montana or the US.	***AND***	Missoula had a higher **overdose** rate than Montana or the US.
Missoula's **uninsured** rate was lower than Montana or US rates.	***AND***	Missoula had a lack of **safe, affordable childcare**, especially for infants.
Missoula had more **primary care providers** by population than Montana or the US.	***AND***	Missoula faced challenges for **primary care provider coverage** in rural areas outside City Limits.
Missoula had more **mental health care providers** by population than Montana or the US.	***AND***	Barriers exist to **accessing mental health care**, such as lack of insurance, transportation issues, and long waiting lists.
Missoula had a lower **cancer death rate** and lower incidence rate than both Montana and the US.	***AND***	**Cancer** was the second-leading cause of death in Missoula.
Missoula had a **growing aging population** of individuals older than 60 years.	***AND***	Sufficient health services, housing infrastructure, and community services do not exist for Missoula's aging population to comfortably **age in place**.
Missoula's rate of children in **foster care** and reported cases of **child abuse and neglect** decreased.	***AND***	**Foster care and child abuse** rates were not accurate because schools were closed during the COVID-19 pandemic. Teachers no longer saw children every day and did not know whether to make an abuse or neglect report so fewer reports were made. This did not mean less abuse or neglect occurred.
Intimate Partner Violence and Family Violence trended downward in Missoula from 2017 to 2019 but began to rise in 2020.	***AND***	**Firearms** were a significant factor in **Intimate Partner and Family Violence**, involved in 75% of intimate partner homicides.
Missoula had a lower adult **diabetes** case rate than Montana or the US.	***AND***	Missoula's **adult obesity** rate increased.
Missoula had an **educated population** with more people having attended college or graduate school than in Montana or the US.	***AND***	Missoula **adults** had a higher excessive **(binge) drinking rate** than Montana or the US.
More Missoulians **walked or biked** to work than in Montana or the US.	***AND***	Missoula **high school students' alcohol drinking** rate was higher than in Montana or the US.
Missoula had a lower **income gap** between male and female earnings than in Montana or the US.	***AND***	A $7,000 **difference in earnings** based on gender still existed in Missoula.

Missoula's **unemployment** rate generally trended downward	***AND***	Missoula's average yearly income and hourly **wage** were lower than Montana and the US.
Many steps were taken at a community and local government level to positively impact **houselessness** since the 2017 CHA.	***AND***	**Houselessness** remained a public health crisis. **Housing** costs in Missoula were higher than the rest of Montana on average, causing Missoulians to be cost-burdened.
The number of people in Missoula accessing **SNAP** Supplemental Nutrition Assistance Program benefits declined.	***AND***	While access to SNAP benefits declined there was increased use of local **food banks** during the same time.
Missoula had fewer infants born with **low birthweight or preterm** than Montana or the US.	***AND***	Missoula had a lack of **dental health** providers and dental health insurance.
The Missoula rate of children living in **poverty** was lower than in Montana or the US but began to rise in 2019.	***AND***	Those aged 18-24 were the largest group living in **poverty**. A majority of those living in poverty had not graduated high school.
Missoula's percentage of those living below the **poverty** line trended downward.	***AND***	Missoula's percentage of those living below the **poverty** line was slightly higher than in Montana or the US.
Missoula's percentage of **high school students** who were **cigarette** users decreased.	***AND***	The rate of Missoula high school students who used **vape** products rose and was higher than Montana or US rates. More students used vape than cigarettes.
More Missoula high school students used a **condom** for intercourse than in Montana or the U.S.	***AND***	Missoula high school students' **marijuana** use rate rose and was greater than in Montana or the US.
The rate of **gonorrhea** cases sharply declined in 2021 after rising before.	***AND***	**Syphilis** cases increased in 2021 after decreasing from 2018 to 2020.
The number of Missoula **adults** who were current **smokers** decreased from 2017 to 2020.	***AND***	The number of Missoula **adults** who were current **smokers** rose in 2021.
Less Missoula students **texted** or **emailed** while driving compared to Montana but Missoula's rate was higher than the rest of the US.	***AND***	Missoula high school students wore **seatbelts** at a lower rate than in Montana or the US.
Missoula overall had fewer days of unhealthy winter **air quality**.	***AND***	Seeley Lake had higher poor **air quality** in the summer months than the rest of Missoula.
Some progress was made to clean up **hazardous sites** in Missoula.	***AND***	Missoula continued to struggle to have adequate clean-up of **hazardous sites**.
Missoula's **death-by-suicide** rate was lower than Montana's rate.	***AND***	Missoula's **death-by-suicide** rate was higher than the US. Firearms were a risk factor being involved in 64% of deaths by suicide in Montana but only 50% in the US.

Other Highlights

This is the fourth CHA report for Missoula. The prior ones were completed in 2011, 2014, and 2017. MPH has continually learned from the CHA process and taken steps to improve the process and resulting report accordingly. This CHA expanded in important ways to reflect everyone in the Missoula community more fully. This expansion included:

1. **Expanded data from rural communities**
2. **Expansion of health indicators**
3. **Expanded community input**
4. **Inclusion of Healthy People 2030 goals**
5. **Expansion of climate change section**
6. **Inclusion of health equity section**
7. **Inclusion of LGBTQ+ Health section**
8. **Inclusion of list of existing plans**

Please Use This Report!

This report is intended to be a community asset that can be used for preparing reports, applying for grants, community planning, and however else individuals can use it. Please share it with anyone or any organization who is interested. The CHA and related CHIP processes are dynamic, evolving processes for MPH. We strive to do better and make this report as useful as possible.

If you have any questions or want to be part of the CHA work in the future, please contact:

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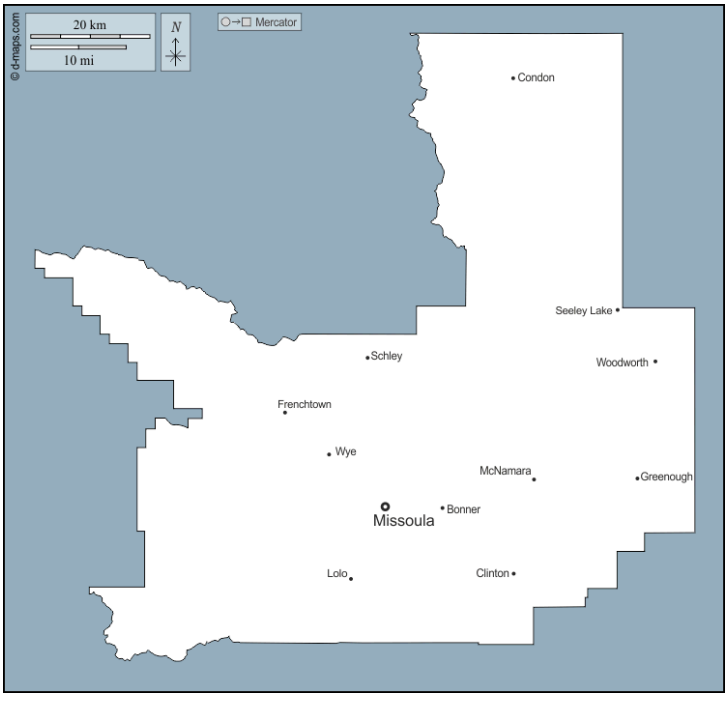
Missoula County Overview

This county overview includes not only the location and geography of Missoula but also the demographics of the people living there. Where someone lives affects many areas of their health. It affects the ability to access healthcare, ways to recreate, employment opportunities, ability to build and be a part of a community, types and quality of education available, quality of the air, and much more.

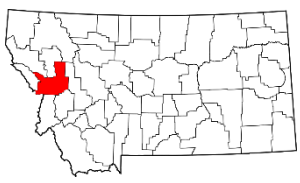
Location and Geography

Missoula and the surrounding area are the traditional and current homelands of the Séliš (Bitterroot Salish), Ktunaxa (Kootenai), and Qĺispé (Kalispell), along with the Siksikaitsitapi (Blackfoot Confederacy), Nimíipuu (Nez Perce), and other tribal nations.

Located in Western Montana, Missoula County is roughly 2,600 square miles large and 3,200 feet above sea level. It is filled with mountains, five valleys, and more than 1,975 miles of rivers and streams. On these lands, there is abundant wildlife and green spaces with wilderness close to many people's homes. Easy access to the outdoors and green spaces allows residents to recreate during all seasons. The geography of Missoula County, with its mountains and valleys, also creates an air inversion in the Missoula Valley that can contribute to air quality challenges.



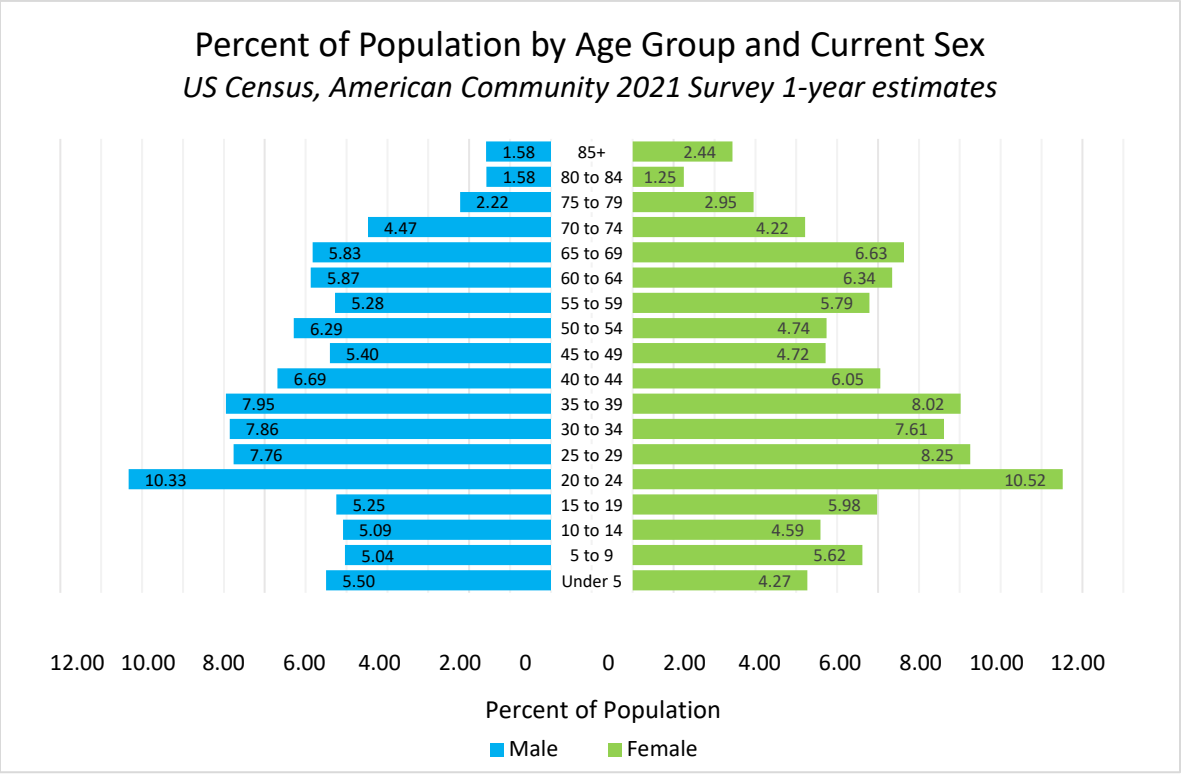
The mostly rural nature of Missoula County can create obstacles to improving health outcomes. Services available in the City of Missoula are not always available in areas outside City Limits, such as in Seeley Lake. Individuals may have to travel lengthy distances to access needed care. Lower patient density (due to smaller populations) and increased cost of providing services can make it difficult to begin and maintain healthcare in these rural communities.



Population

Missoula County's population grew since the 2017 CHA. The population increased from 109,299 in 2010 to 119,533 in 2021 with 62% of County residents living in the City of Missoula and 38% of County residents living in areas outside the City of Missoula boundaries.

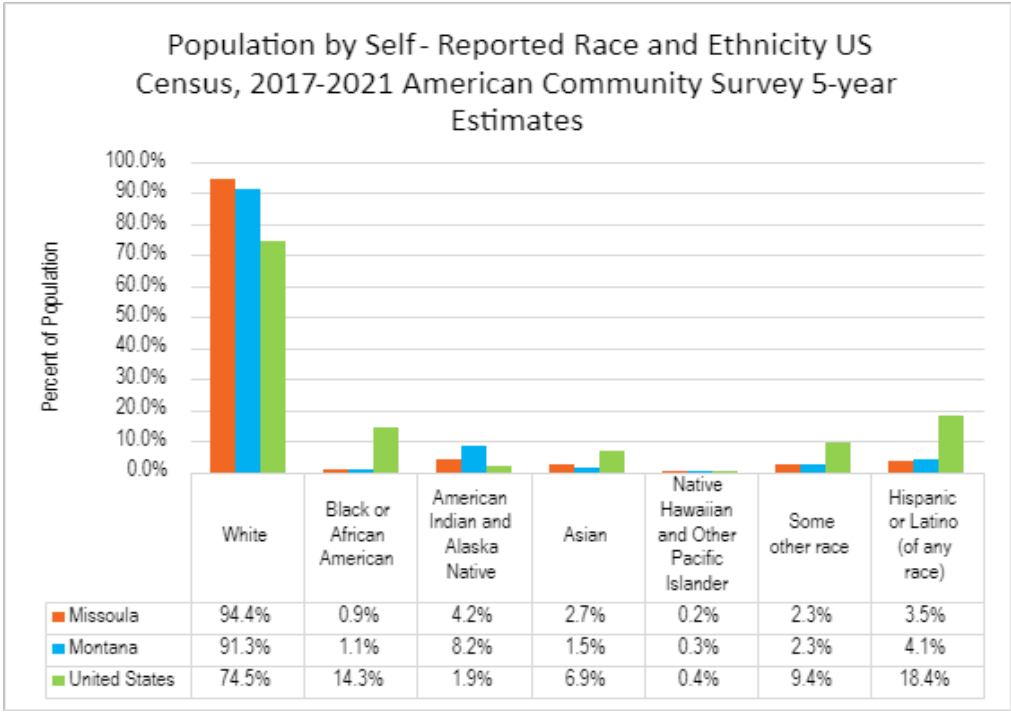
Missoula County's largest age group was those 20 to 39 years old, making up 20.85% of the population. The smallest age group was those aged 80 years and above. The impact of having the University of Montana, a public flagship research university, located in Missoula was likely a large contributor to having the largest group being those of typical college age.



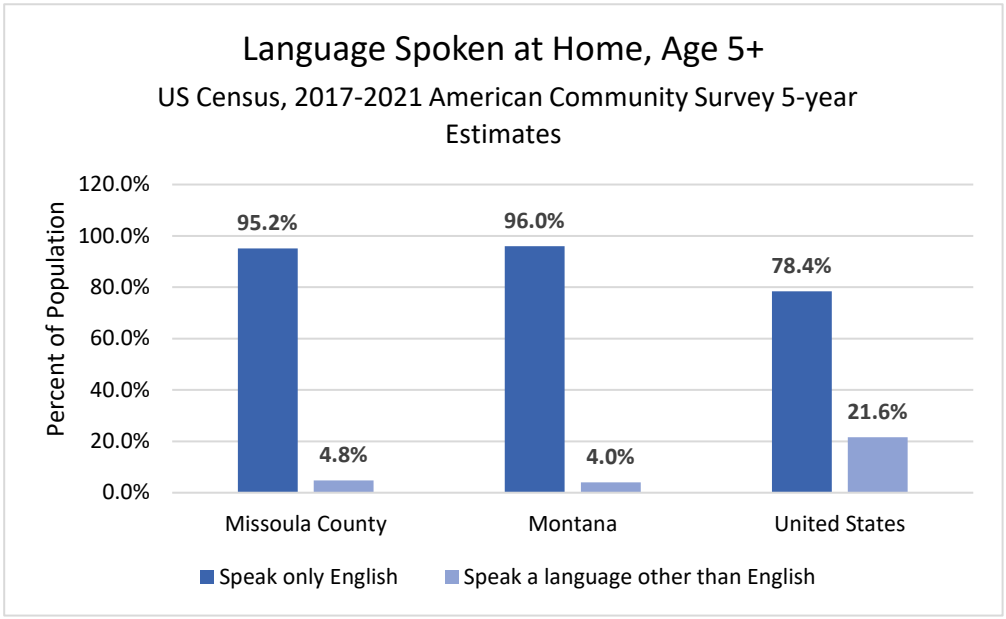
Race, Ethnicity, and Language

94.4% of Missoula residents identified as White, 4.2% as American Indian or Alaskan Native, and 3.5% as Hispanic or Latino. [4]

English was the primary language spoken at home in 95% of Missoula households. Even so, multiple other languages were spoken. This makes having effective language translation services essential so individuals can successfully access healthcare and other services.



	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Hispanic or Latino (of any race)
Missoula	94.4%	0.9%	4.2%	2.7%	0.2%	2.3%	3.5%
Montana	91.3%	1.1%	8.2%	1.5%	0.3%	2.3%	4.1%
United States	74.5%	14.3%	1.9%	6.9%	0.4%	9.4%	18.4%



Indigenous Health

Missoula County and the surrounding area are the traditional and current homelands of the Séliš (Biterroot Salish), Ktunaxa (Kootenai), and Qĺispé (Kalispell), along with the Siksikaitsitapi (Blackfoot Confederacy), Nimíipuu (Nez Perce), and other Tribal nations.

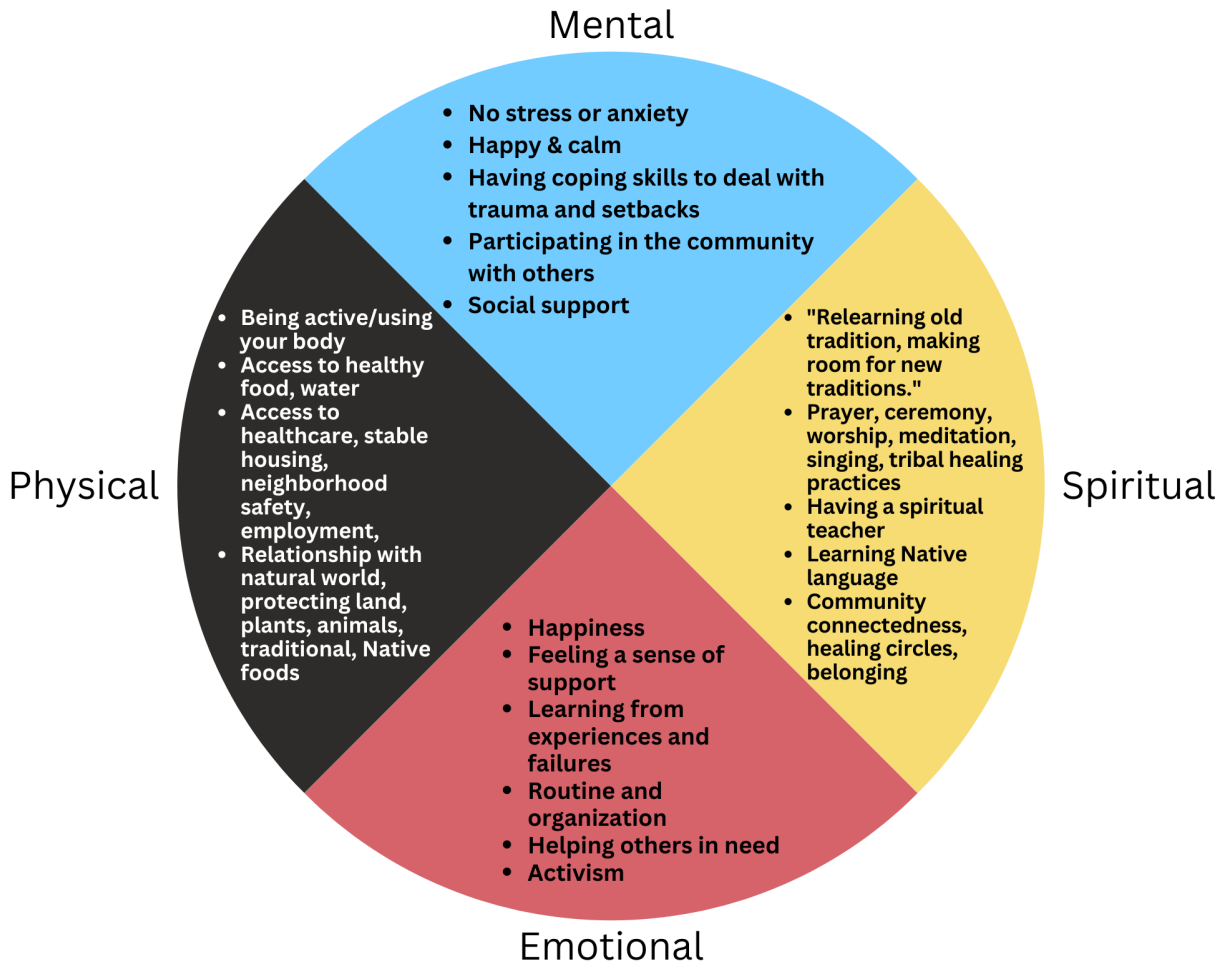
Today, many people who identify as American Indian, Alaska Native, Native American, or Indigenous live in Missoula. All Nations Health Center (All Nations) is one of 41 Urban Indian Organizations (UIOs) in the United States. UIOs are non-profit corporate bodies situated in urban centers for the provision of healthcare and referral services for Indigenous individuals residing within the urban center, as described in Title V of the Indian Healthcare Improvement Act.

All Nations has been incorporated as a non-profit 501 (c)(3) community-based organization since 1970, governed by a volunteer Board of Directors elected by the Indigenous community. All Nations now proudly offers a comprehensive suite of healthcare services from full medical services to behavioral health services. The organization serves anyone, regardless of ability to pay, and they serve individuals representing over 60 unique Tribal affiliations each year. All Nations "is committed to promoting sustainable healthy lives for our Native people and the surrounding community through culturally based, holistic care."

All Nations "draws from a diverse skill set using an interdisciplinary team-led approach to implement a comprehensive suite of healthcare services. We are working towards instituting trauma-informed practices and policies in order to achieve holistic wellness for the Missoula Native community."[112] While All Nations does provide healthcare services prioritizing the Missoula Native American community, not all Missoula-residing Indigenous individuals receive healthcare services from All Nations. They may choose to see another provider in the Missoula area, and some Missoula-residing Indigenous individuals choose to access healthcare services on their home reservations through either the Indian Health Service (IHS) or Tribal Health Services.

In urban settings, Indigenous individuals miss the community care and support they usually receive on their home reservation, so it falls to the urban Indian clinics to take on the role of a cultural community dedicated to supporting its clients. The strengths of All Nations are critical in delivering services to the Indigenous community of Missoula. All Nations is committed to cultural understanding and amplifying community voices to ensure that services are delivered in a good way that embraces cultural sensitivity and respect for Native traditions, beliefs, and values. This approach helps build trust and fosters a comfortable environment for Native individuals that increases the likelihood of better health outcomes. This integration of Western medicine and traditional values enhances patient engagement and encourages more individuals to seek care, decrease barriers, and feel they will be understood and supported in line with their cultural background. All Nations'

resiliency enables the organization to adapt to challenges and changes, whether they relate to funding, policy, or community needs.



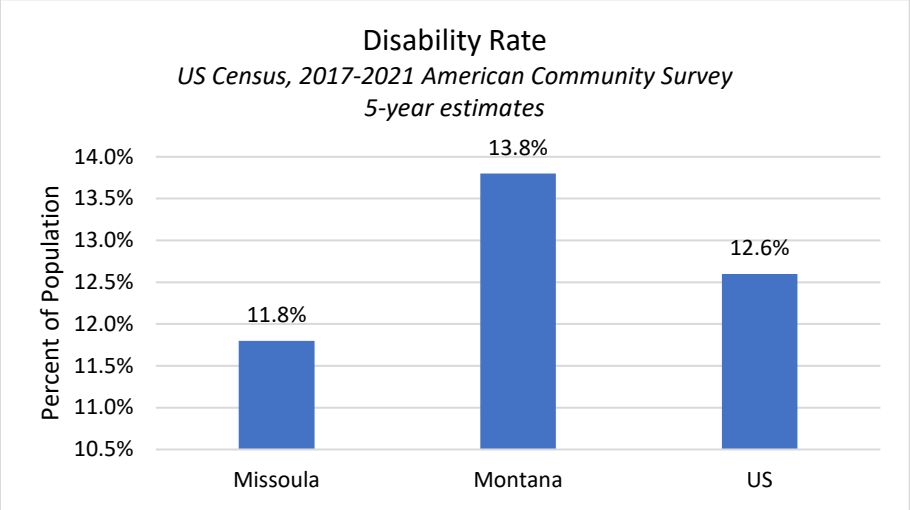
All Nations conducted a community needs assessment in 2023 focusing on the needs of Indigenous youth and young adults ages 16-26, recognizing the interconnected needs and well-being of all generations in the community. Using the medicine wheel as a model for wellness (i.e., wellness is a balance of mental, spiritual, physical, and emotional health), the All Nations needs assessment identified key priorities and strategies that All Nations can implement to support the well-being of the Missoula Indigenous Community. Please visit their website or contact All Nations for updates.

This section was written in collaboration with staff from All Nations Health Center. MPH is thankful for their partnership on this project.

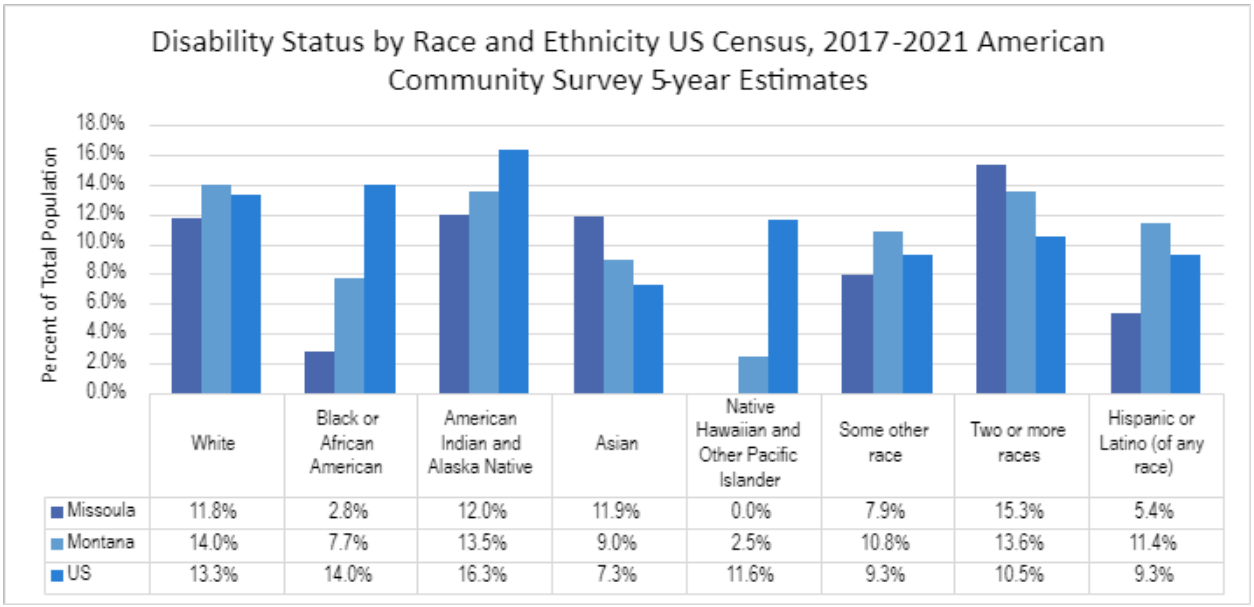
Disability

Research has shown people experiencing disabilities face challenges accessing needed preventive healthcare services and access to education and living situations that those not experiencing disabilities do not face. [5] This impacts individual health and is also a public health issue that can be positively affected by public health interventions.

From 2017 to 2021, the percentage of Missoula's population with a disability, 11.8%, was lower than in Montana or the US. Montana's rate, 13.8%, was higher than the US rate, 12.6%.



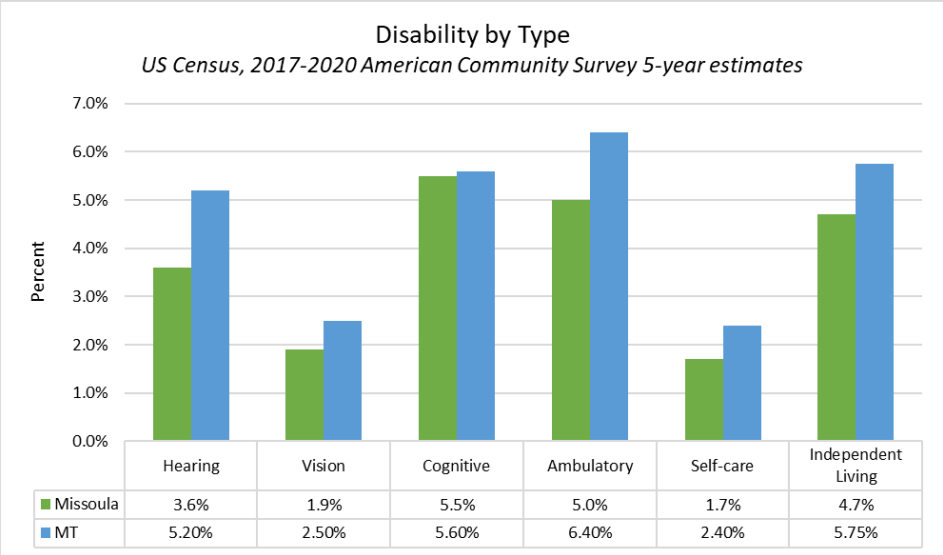
The disabilities included: (1) being deaf or having serious difficulty hearing (hearing disability); (2) being blind or having serious difficulty seeing (vision disability); (3) having serious difficulty concentrating, remembering, or making decisions (cognitive disability); (4) having serious difficulty walking or climbing stairs (ambulatory disability); (5) having difficulty dressing or bathing (self-care disability); and (6) having difficulty doing errands alone such as visiting a doctor's office or shopping because of a physical, mental or emotional condition (independent living disability).



	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Two or more races	Hispanic or Latino (of any race)
Missoula	11.8%	2.8%	12.0%	11.9%	0.0%	7.9%	15.3%	5.4%
Montana	14.0%	7.7%	13.5%	9.0%	2.5%	10.8%	13.6%	11.4%
US	13.3%	14.0%	16.3%	7.3%	11.6%	9.3%	10.5%	9.3%

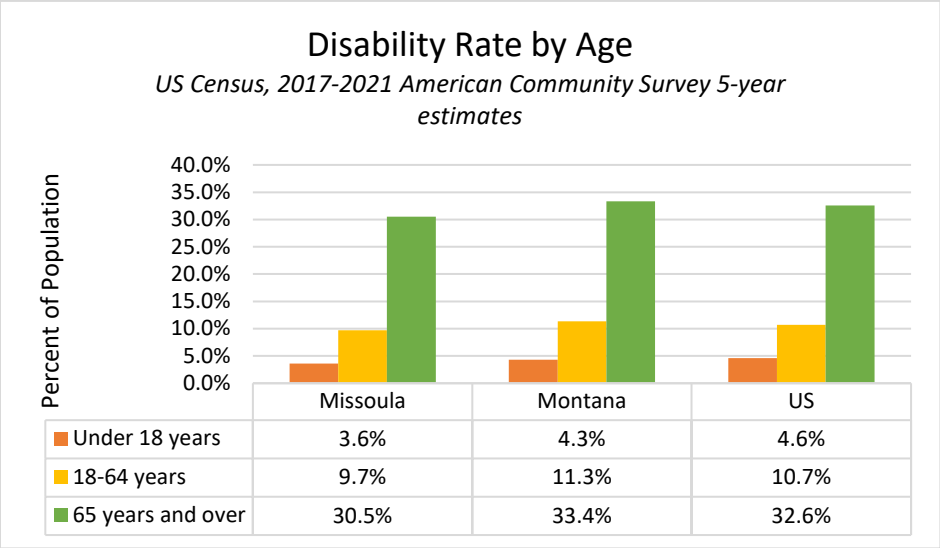
Disabilities are experienced by all races and ethnicities. Those who identified as being of two or more races had the highest rate at 15.3%. The American Indian and Alaska Native rate was 12.0%, the Asian rate was 11.9%, and the White rate was 11.8%.

The most common disabilities were cognitive disabilities at 5.5% of the population and ambulatory disabilities at 5.0% of the population. Other disabilities (listed by decreasing frequency) were Independent Living, Hearing, Vision, and Self-Care.



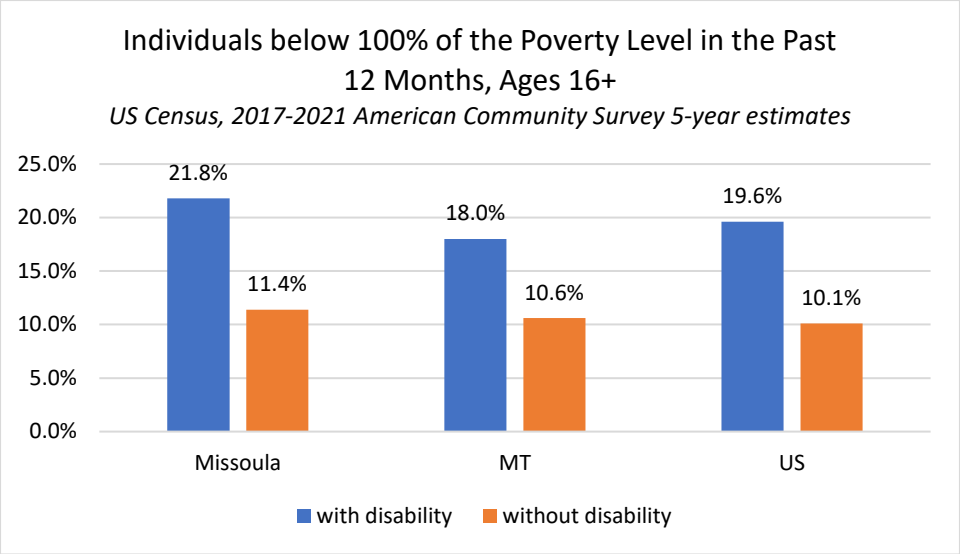
	Hearing	Vision	Cognitive	Ambulatory	Self-care	Independent Living
Missoula	3.6%	1.9%	5.5%	5.0%	1.7%	4.7%
MT	5.20%	2.50%	5.60%	6.40%	2.40%	5.75%

The rate of people experiencing disabilities by age. The highest rate by age group of those experiencing disabilities in Missoula was 30.5% for adults aged 65 and older. This was the highest rate age group in Montana and the US also.



	Missoula	Montana	US
Under 18 years	3.6%	4.3%	4.6%
18-64 years	9.7%	11.3%	10.7%
65 years and over	30.5%	33.4%	32.6%

The rate of those experiencing disabilities was higher for those living in poverty. In Missoula, 21.8% of people below 100% of the poverty level had a disability. This was higher than the percentages in Montana and the US.



Healthy People 2030 has various goals related to those living with disabilities. These goals include:

1. Increasing the proportion of students with disabilities who are usually in regular education programs to 73.3%;
2. Increase the proportion of students with disabilities who spend at least 80% of their time in regular education programs to 73.3%;
3. Reducing the proportion of adults with disabilities who experience serious psychological distress to 7.6%;
4. Reducing the proportion of adults with disabilities who delay preventive care because of cost to 48.4%; and
5. Reducing the proportion of people with intellectual and developmental disabilities who live in institutional settings with 7 or more people to 11.5%.

LGBTQ+ Health

* A note about terms used to describe LGBTQ+ sexual and gender identity. In this section, we use LGBTQ+ to refer to the broad population of people who identify with a sexual or gender identity other than cisgender or heterosexual. *

According to a 2023 Gallup poll, 7.6% of adults in the United States identify as LGBTQ+.[6] Due to historical and current discrimination, LGBTQ+ people often face challenges and barriers in achieving healthy and affirmed lives. Research has found that there are seven main health disparities that drive poorer health outcomes in the LGBTQ+ community. These include:

1. higher risk for sexually transmitted infections
2. increased risk of violence
3. increased risk of substance use
4. increased risk of mental health conditions
5. Increased risk of obesity and eating disorders
6. higher risk of heart disease
7. increased chance of breast and cervical cancer impacts[7]

Health disparities are "preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations."[8] These health disparities are avoidable, unnecessary, unfair and unjust, and they are "directly related to the historical and current unequal distribution of social, political, economic, and environmental resources."[9]

Contributors for these health disparities include things that many people in the United States face like access to affordable, quality health insurance coverage. Additionally, "[m]any people in the LGBTQ[+] community experience high levels of chronic stress related to stigma and discrimination, which increases their risk for depression, anxiety, suicide, substance use, and other mental health struggles. In addition, LGBTQ[+] people experience challenges when seeking health care services due to lack of clinician understanding, acceptance, and sensitivity."[10] Discrimination and bias in health care come up again and again as a driver of the health disparities that people in the LGBTQ+ community face. The Center for American Progress published a nationally representative survey of LGBTQ+ people in 2017 which found that "nearly one in 10 LGBTQIA+ respondents reported that a healthcare professional refused to see them in the prior year. Those individuals attributed the discrimination to their actual or perceived sexual orientation. In the same survey, almost three in 10 transgender people reported that healthcare providers would not see them because of their gender identity."[11]

It is important that we eliminate barriers to care. We need to ensure access to LGBTQ+-competent and inclusive healthcare providers and provide safe affirming quality healthcare

that every person deserves. There needs to be a systematic approach to this and "it's paramount to better educate medical, mental health, and social service providers on the unique needs and challenges of people in the LGBTQ+ community, such as how to provide affirming care. More scientific research is also needed to study specific health issues relating to this underserved population."[12]

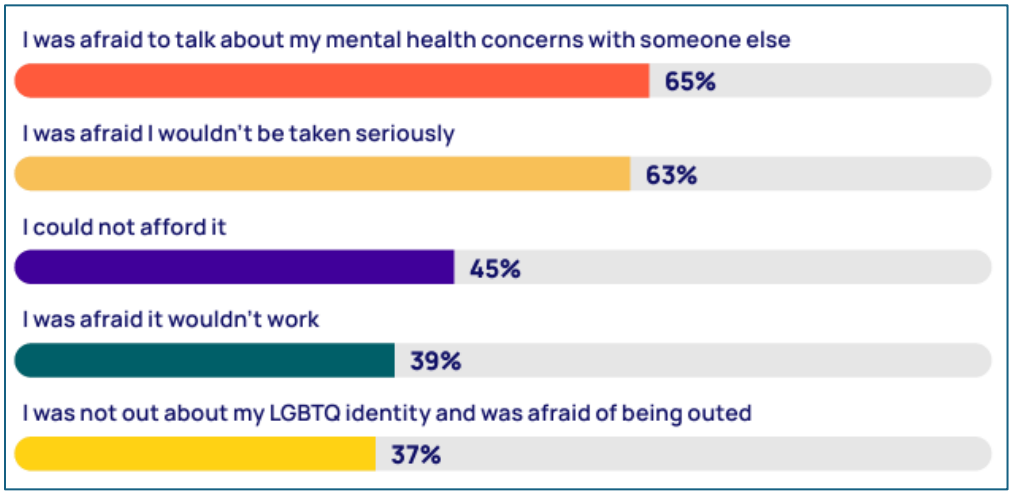
As a resource, GLMA: Health Professionals Advancing LGBTQ+ Equality maintains an LGBTQ+ inclusive provider directory. The directory is a "free, searchable database of doctors, medical professionals and healthcare providers who are knowledgeable and sensitive to the unique health needs of LGBTQ+ people in the United States and Canada."[13]

In addition to the health disparities included above for adults, LBGTQ+ young people are especially at risk and face social stigma that "comes in many forms, such as discrimination, harassment, family disapproval, social rejection, and violence" which puts LGBTQ+ young people at a higher risk for certain negative health outcomes.[14] This fear and stigma can increase their risk of anxiety, depression, substance use, post-traumatic stress disorder, and considering attempting suicide.[15] It is important to note that LGBTQ+ young people "are not inherently prone to suicide risk because of their sexual orientation or gender identity, but rather placed at higher risk because of how they are mistreated and stigmatized in society."[16]

According to the 2022 National Survey on LGBTQ Youth Mental Health Montana data report from Trevor Project:

1. **55%** of LGBTQ young people in Montana seriously considered suicide in the past year and **13%** of LGBTQ young people in Montana attempted suicide in the past year,
2. **79%** reported experiencing symptoms of anxiety and **57%** reported symptoms of depression, and
3. **51%** of LGBTQ youth in Montana who wanted mental health care in the past year were not able to get it.

In the same report, the top five reasons LGBTQ youth in Montana were not able to access mental health care were:[17]



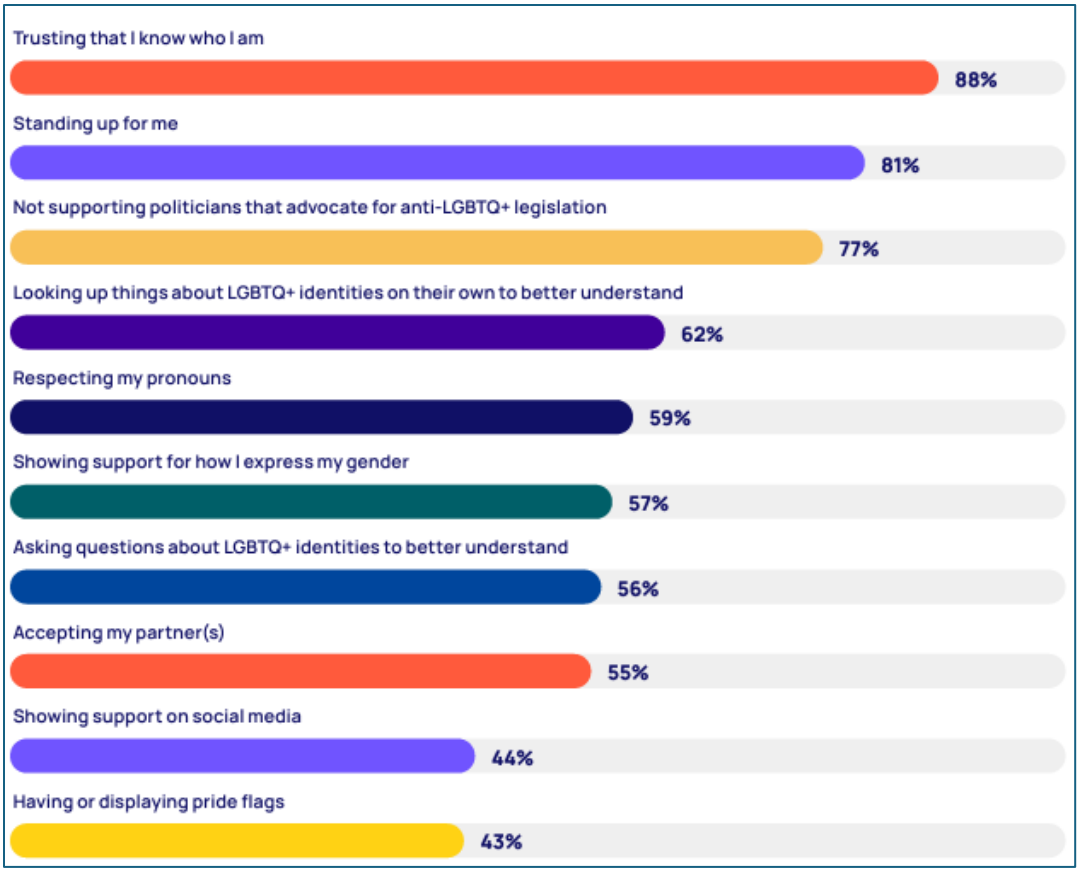
Trevor Project's 2022 National Survey on LGBTQ Youth Mental Health Montana also reports that research finds that LGBTQIA youth "who have experienced anti-LGBTQ victimization – including being physically threatened or harmed, discriminated against, or subjected to conversion therapy – report significantly higher rates of attempting suicide." Research also shows that LGBTQIA+ youth "who live in accepting communities and feel high social support from family and friends report significantly lower rates of attempting suicide."[18]

The following is what survey respondents included that makes a space affirming for LGBTQ+ young people in Montana:[19]

> **accepting people** • visible pride flags • **if they have LGBTQ resources available** • my pronouns and preferred names being respected • **when other LGBTQ individuals are in positions of power** • other openly LGBTQ people • others' openness to LGBTQ people • **the people there don't discriminate**

Similar responses on how to support LGBTQ+ young people were found nationwide in the 2024 Trevor Project Survey.[20]

Also, in the 2024 LGBTQ+ young people also were asked how people in their lives could best show support and acceptance. The top ten actions are reported below:[21]



2024 U.S. National Survey on the Mental Health of LGBTQ+ Young People

Missoula had numerous health resources and organizations for adults and young people involved with health and the LGBTQ+ community. They are leaders in understanding and advocating for affirming spaces and health care. These organizations include, but are not limited to, the Western Montana LGBTQ+ Community Center, the Gay Health Task Force, and the Montana Two Spirit Society. Andy Nelson, the Executive Director of the Western Montana LGBTQ+ Community Center provided his insight into what he has observed and experienced in Missoula:

> *"As the Executive Director of the Western Montana LGBTQ+ Community Center here in Missoula who works alongside two other LGBTQ+ orgs (the Montana Two Spirit Society and Gay Health Task Force), I interact with folks from all different walks of life and backgrounds.*
>
> *When it comes to my work at The Center, there are 2 main facets of need that I see: community support and a sense of belonging and direct services.*
>
> *As part of our mission, one of our ultimate goals is literally building community. This is how I stumbled into the organization back in 2016, myself. I was gradually coming out to friends and family and yearning to find a community of like-minded individuals that had similar lived experiences. Folks come through our doors looking for a support network,*

people to talk to…a chosen family. Others come to us for direct support. Some come to us in need of food. Others come to obtain clothing that we house in our free clothing closet. We also have a large database of referrals for folks looking for things like LGBTQ+ affirming healthcare providers, legal counsel, businesses, name change advice, etc.

In regards to healthcare, one of the most frequent requests is for mental health providers (of which we have a long list of LGBTQ+ referrals). When interacting with older folks, I notice that many of their struggles are due to isolation and loneliness. For the younger generation, I would say substance abuse is one of the highest concerns along with homelessness. Through the Gay Health Task Force, we are able to offer free HIV, hepatitis C and syphilis testing. As those working in this field know, syphilis has been on the rise in recent years, and this tends to be the sexually transmitted infection of which we see the most positive test results. Lastly, anxiety, depression and rates of suicide are disproportionally high across the board in the LGBTQ+ community, especially here in Montana. I know at least 1-2 LGBTQ+ people (per year) in our community that have died by suicide since I began working in this field in 2018."

There are known gaps in the understanding of health experiences for the LGBTQ+ community because data collection often lacks information related to sexual orientation or gender identity. Collecting this data and knowing the statistics surrounding LBGTQ+ health and hearing the experiences of lived experts in this population is important to ensure that Missoula's LGBTQ+ community members can not only access quality healthcare services that are safe and affirming but also feel supported and have all the resources they need to be healthy and thrive. We aim to increase the data and community partnership in this important area as a part of future efforts to assess health in Missoula.

Missoula City and Rural Communities

Missoula County contains one larger, more centralized "urban" area, the City of Missoula, and multiple outlying communities. These outlying, rural communities have varying demographics and health factors unique to their areas. Geographically specific information is provided in the tables below. Some of the differences in this data are examined in more detail in the Rural Challenges part of the Health Inequities section. This first page contains demographic information for all rural communities. The next pages contain health indicators.

Population	Bonner-West Riverside	Clinton	Condon	East Missoula	Evaro	Frenchtown	Huson	Lolo	Missoula	Orchard Homes	Seeley Lake	Turah	MT
2010	1,644	807	309	1,830	477	1,162	85	3,081	65,383	6,259	1,374	464	973,739
2020	1,404	661	282	2,214	401	1,741	60	4,064	74,994	5,480	1,512	309	1,061,705
% Change	-14.6	-18.1	-8.7	21.0	-15.9	49.8	-29.4	31.9	14.7	-12.4	10.0	-33.4	9.0

Median Household Income	Bonner-West Riverside	Clinton	Condon	East Missoula	Evaro	Frenchtown	Huson	Lolo	Missoula	Orchard Homes	Seeley Lake	Turah	MT
Average	$60,078	$81,443	$59,958	$57,937	$81,123	$117,023	$33,586	$68,989	$80,338	$90,742	$61,581	$155,316	$82,237
% below $50,000	48.6%	20.7%	44.0%	43.5%	42.2%	16.4%	88.9%	41.8%	46.8%	32.1%	54.1%	8.6%	41.4%

Race & Ethnicity	Bonner-West Riverside	Clinton	Condon	East Missoula	Evaro	Frenchtown	Huson	Lolo	Missoula	Orchard Homes	Seeley Lake	Turah	MT
White	1,350	635	282	2,161	235	1,672	60	3,860	70,932	5,182	1461	290	970,545
Black	11	12	0	0	4	63	0	22	1,068	0	0	0	12,031
American Indian or Alaskan Native	55	51	0	106	176	0	0	0	2,926	261	16	0	87,563
Asian	5	40	0	7	0	18	0	214	2,105	116	51	36	15,622
Hawaiian or Pacific Islander	0	0	0	0	0	0	0	0	227	0	0	0	2,759
2+ Races	104	98	0	74	14	44	0	58	3,871	108	16	17	40,705
Hispanic or Latino	34	6	7	58	0	0	0	129	2,917	54	53	0	41,501

Age Distribution	Bonner-West Riverside	Clinton	Condon	East Missoula	Evaro	Frenchtown	Huson	Lolo	Missoula	Orchard Homes	Seeley Lake	Turah	MT
Under 5	72	50	0	123	5	62	0	594	3,626	156	57	15	61,338
Under 18	266	130	7	389	128	430	0	1,220	13,051	936	120	66	228,589
18-64	959	423	156	1443	162	1009	60	2,391	52,165	3,296	782	174	634,997
65+	179	108	119	382	111	302	0	453	9,778	1,248	610	69	198,119

Health Indicator	Data Source	Bonner-West Riverside	Clinton	Condon	East Missoula	Evaro	Frenchtown
Percentage of adults reporting a physical checkup in the past year	CDC/BRFSS 2021	67.0%	67.1%	67.1%	67.2%	67.8%	67.1%
Percentage of adults ever diagnosed with diabetes	CDC/BRFSS 2021	7.2%	7.1%	7.6%	7.8%	9.7%	6.6%
Percentage of families receiving SNAP (food stamps)	US Census, 2017-2021 ACS 5-year estimates	20.0%	8.9%	6.0%	24.8%	36.1%	3.3%
Percent of all people without health insurance	US Census, 2017-2021 ACS 5-year estimates	7.0%	7.3%	3.5%	10.4%	6.2%	4.8%
Percent of all people with health insurance	US Census, 2017-2021 ACS 5-year estimates	93.0%	92.7%	96.5%	89.6%	93.8%	95.2%
Older adult men aged >=65 years who are up to date on a core set of clinical preventive services: Flu shot past year, PPV shot ever, Colorectal cancer screening	CDC/BRFSS 2020	49.2%	49.0%	48.1%	47.8%	43.9%	50.5%
Older adult women aged >=65 years who are up to date on a core set of clinical preventive services: Flu shot past year, PPV shot ever, Colorectal cancer screening, and Mammogram past 2 years	CDC/BRFSS 2021	43.2%	43.5%	42.2%	41.7%	28.7%	44.7%
Estimated percent of adults ever diagnosed with depression	CDC/BRFSS 2021	25.0%	25.4%	25.5%	25.6%	24.4%	24.5%
Estimated percent of adults reporting fair or poor mental health for more than 14 days of the past 30 days	CDC/BRFSS 2021	16.0%	16.2%	16.6%	16.6%	17.5%	15.3%
Estimated percent of adults reporting fair or poor physical health for more than 14 days of the past 30 days	CDC/BRFSS 2021	10.1%	10.1%	10.5%	10.7%	12.0%	9.4%
Estimated percent of adults reporting to be obese (BMI of 30 or greater)	CDC/BRFSS 2021	31.4%	31.2%	32.0%	32.6%	34.9%	30.4%
Estimated percent of adults reporting no leisure-time physical activity in the past 30 days	CDC/BRFSS 2021	17.6%	17.7%	18.5%	18.6%	19.6%	16.3%
Estimated percent of adults reporting to engage in binge drinking	CDC/BRFSS 2021	24.7%	24.5%	24.1%	24.0%	24.0%	25.2%

Health Indicator	Data Source	Huson	Lolo	Missoula	Orchard Homes	Seeley Lake	Turah
Percentage of adults reporting a physical checkup in the past year	CDC/BRFSS 2021	67.3%	67.1%	67.7%	67.3%	66.9%	67.0%
Percentage of adults ever diagnosed with diabetes	CDC/BRFSS 2021	6.6%	6.7%	7.7%	7.1%	7.6%	7.1%
Percentage of families receiving SNAP (food stamps)	US Census, 2017-2021 ACS 5-year estimates	44.4%	6.5%	9.2%	6.3%	5.1%	0.0%
Percent of all people without health insurance	US Census, 2017-2021 ACS 5-year estimates	0.0%	8.4%	6.0%	5.7%	9.8%	0.0%
Percent of all people with health insurance	US Census, 2017-2021 ACS 5-year estimates	100.0%	91.6%	94.0%	94.3%	90.2%	100.0%
Older adult men aged >=65 years who are up to date on a core set of clinical preventive services: Flu shot past year, PPV shot ever, Colorectal cancer screening	CDC/BRFSS 2020	50.5%	50.5%	48.7%	49.5%	48.5%	49.4%
Older adult women aged >=65 years who are up to date on a core set of clinical preventive services: Flu shot past year, PPV shot ever, Colorectal cancer screening, and Mammogram past 2 years	CDC/BRFSS 2021	34.0%	44.3%	42.8%	43.6%	42.0%	33.1%
Estimated percent of adults ever diagnosed with depression	CDC/BRFSS 2021	24.9%	24.6%	25.6%	24.8%	25.2%	25.0%
Estimated percent of adults reporting fair or poor mental health for more than 14 days of the past 30 days	CDC/BRFSS 2021	15.5%	15.4%	16.4%	15.7%	16.4%	16.0%
Estimated percent of adults reporting fair or poor physical health for more than 14 days of the past 30 days	CDC/BRFSS 2021	9.4%	9.4%	10.5%	9.9%	10.5%	9.9%
Estimated percent of adults reporting to be obese (BMI of 30 or greater)	CDC/BRFSS 2021	30.4%	30.3%	32.3%	30.9%	32.2%	31.1%
Estimated percent of adults reporting no leisure-time physical activity in the past 30 days	CDC/BRFSS 2021	16.4%	16.5%	18.0%	17.2%	18.4%	17.5%
Estimated percent of adults reporting to engage in binge drinking	CDC/BRFSS 2021	24.9%	25.0%	23.5%	24.3%	24.6%	24.7%
Estimated percent of adults reporting to smoke regularly	CDC/BRFSS 2021	14.3%	14.5%	15.6%	14.9%	16.7%	15.8%

Existing Missoula City, County, and Community Policies

Missoula is a community rich in organizations and people excited to positively impact their communities. The City and County governments have undertaken significant work in various areas to provide plans for topics that impact health. Many of these policies are included in the list below.

CONSERVATION
1992 Inventory Conservation Resources

FORT MISSOULA
1993 Fort Missoula Plan
2012 Fort Missoula Overall Plan

PARKS AND RECREATION
2004 Master Parks and Recreation Plan for the Greater Missoula Area
2012 Parks Trails Master Plan
2022 Missoula County Pathways and Trails Plan

DOWNTOWN
Downtown Missoula Master Plan

CLIMATE AND CONSERVATION
Missoula City Climate Ready Missoula
Missoula City Conservation & Climate Action Full Report (PDF)
Missoula City Conservation & Climate Action Plan Executive Summary (PDF)
Climate Ready Missoula 2020
Missoula City Electrify Missoula
Missoula City Greenhouse Gas Emissions Inventories
Missoula City 100% Clean Electricity
Missoula City Missoula's 2015 Community Climate Smart Action Plan
Missoula City Municipal Conservation & Climate Action Plan
Missoula City Zero Waste

GROWTH AND LAND USE
Airport Master Plan 1995
Butler Creek Comprehensive Plan Amendment 1996

City of Missoula Growth Policy
City of Missoula Municipal Policies
Grant Creek Area Plan 1980
Lolo Regional Plan 2002
Missoula County Growth Policy
Missoula County Regional Land Use Guide 2002
Miller Creek Area Comprehensive Plan 1997
Missoula Urban Area Comprehensive Plan 1998
Mullan Area Master Plan
Rattlesnake Valley Comprehensive Plan 1995
Reserve Street Area 1995
Reserve St Area B Amendment to the Missoula Airport Development Park Master Plan
Seeley Lake Area Comprehensive Plan Amendment, 1989
Seeley Lake Plan 2010
South Hills Comprehensive Plan 1986
Swan Valley Condon Comprehensive Plan (1996)
Sxwtpqyen Master Plan 2021
Target Range Neighborhood Plan 2010
1998 Tower Street Park Complex
Tower Street Park Complex Map A
Tower Street Park Complex Map B
Tower Street Park Complex Map C
Wye O'Keefe Creek Area Plan 1979

HOUSELESSNESS
Reaching Home: Missoula's 10-Year Plan to End Homelessness A Retrospective Evaluation February 2023
Missoula 10-year plan to end homelessness

HOUSING
Missoula County Housing Action Plan: Breaking Ground 2022

LONG RANGE TRANSPORTATION
The Missoula Connect: 2050 Missoula County Long Range Transportation Plan 2021

OPEN SPACE
Missoula Urban Area Open Space Plan (2019)
Plan Appendices (2019)

WILDFIRE
Missoula County Community Wildfire Protection Plan 2018

Climate Change

Climate change impacts public and individual health. Climate change is a public health emergency because of the direct health impacts and because it amplifies negative health outcomes of other disparities involved with social determinants of health.[22] In recognizing health disparities surrounding climate change, the CDC acknowledged, "Not everyone is equally at risk. Important considerations include age, economic resources, and location."[23]

Climate change has many impacts. Climate change affects health because it can disrupt physical, biological, and ecological systems. This can lead to increased respiratory and cardiovascular disease. It may increase injuries and premature deaths related to extreme weather events and changes in the availability of food. Climate change can increase water-borne illnesses and other infectious diseases, harmful algal blooms, and threats to mental health."[24] Climate change may impact population migration and employment and workforce needs and opportunities.

Tackling climate change is not an easy task. But it is a people-created problem that people can solve. Individuals, businesses, and organizations can learn about steps to take to help stop climate change and reverse harmful effects of climate change. Defined steps can prepare for the impacts of climate change. For example, to counter poor air quality from increased wildfire smoke, air filtration and purification in buildings can provide healthy air inside when the air outside is unhealthy.[25] This type of intervention is especially important for those with existing and chronic respiratory conditions like asthma.

Climate changes are already being felt in Missoula with more changes expected. These include hotter temperatures, drier summers, wetter weather with more rain than snow in the winter, more wildfires and wildfire smoke, and changes in river flow and flooding.

Healthy People 2030 does not have specific goals for climate change. However, numerous social determinants of health discussed in this report are impacted by climate change.

Missoula-Specific Information from CHA Survey

Climate change was identified as an urgent and emerging issue in the 2014 CHA process. It was then included as a Social Determinate of Health in the 2017 CHA. The Missoula community acted by conducting climate assessments and developing climate action plans. In this CHA, MPH focused on climate change by having the CHA survey include questions regarding climate change for the first time.

Through the CHA survey, information specific to what Missoula residents were experiencing with climate shifts was measured. Most individuals who participated in the CHA survey reported noticing climate shifts. Complete answers to the CHA survey are in Appendix 4. The following highlights what Missoula residents reported about climate change.

The greatest way individuals noticed climate shifts was hotter summer temperatures and the number, intensity, and frequency of wildfires.

In Missoula rural areas, the second greatest way identified (wildfires) was tied with **changes in the timing of seasonal events** (i.e. first frost, tree and flower blooms, etc.).

Additional written answers were provided by survey participants. For Missoula City Limits, answers included:

- *Haven't lived here long enough to know*
- *Lower water levels in lakes*
- *More erratic weather swings between hot and cold*
- *More rain and snow, not following typical past patterns*
- *Climate is always changing*

Within Missoula County rural areas, answers included:

- *Longer winters*
- *Stressed and fewer animals and insects*

People identified ways our shifting climate affected them or their loved ones.

Within City Limits and rural areas, the greatest impact was **increased seasonal costs** followed **by mental or emotional health impacts**.

Additional written answers were provided. For within City Limits, answers included:

- *Stress*
- *More water required for yards and gardens*
- *Worried about the future and the world for our children*
- *Loss of outdoor recreation opportunities*
- *Have to purchase air conditioning*
- *Fear of climate change making things worse*
- *The climate has been changing for years and we don't need to worry*

For rural areas, answers included:

- *Less winter outdoor recreation*

Residents had concerns about the impact of climate shifts on their homes.

A great majority of people agreed they were **able to stay warm and comfortable** when it was cold outside and **cool and comfortable** when it was hot outside.

- The **cost of energy services** was identified as the primary reason people could not stay warm or cool enough in both the City Limits and rural areas.
- **Houses that could not keep cool air or warm air in** was the second most identified reason. **Lack of air conditioning** was noted by some as an issue.

Climate shifts can have an impact on the physical structure of homes that residents were concerned about.

- A majority in City Limits were most concerned about the impacts of **wildfire smoke**.
- A majority in rural areas were most concerned about the impacts of **wildfires**.

People identified ways that they were coping with the impacts of our shifting climate.

Within City Limits and rural areas, the greatest way to cope was to **make changes to their home to manage indoor temperatures** (i.e. heating units, air conditioning units, blackout curtains, etc. The second greatest way they coped was **paying more for utility bills** to be comfortable in their home.

Additional written answers were provided. For City Limits, answers included:

- *Increased wildfire smoke and need to use air purifiers*
- *Poor air quality outside*
- *Use of solar panels*
- *Adapt actions to try to have less of a negative impact on the climate*
- *Avoid being outside when it is hot, smoky, or too cold*
- *Seek help of a therapist to deal with climate change stress*
- *Volunteer to help with climate change issues*
- *Go outside less when it is smoky in the summer*

For rural areas, answers included:

- *Go outside to recreate less if it is smoky in summer or the snow melts in the winter*
- *Higher utility bills because of economy or rate changes, not climate*

The greatest **barrier to taking action** to cope with the impacts of our shifting climate in City Limits and rural areas was the **cost of energy services**. **Transportation challenges** and **not having enough time** were also noted as challenges although others felt nothing got in their way of taking action to cope.

Additional written comments were provided. For City Limits, answers included:

- *Elected state leaders and legislators deny climate change is occurring and do not want to take action to mitigate it*
- *Too expensive*
- *Businesses and corporations do not do enough to mitigate climate change*
- *It is not up to individuals to stop climate change, the government and businesses need to step up*
- *Not sure what to do*
- *Need to have public policy that focuses on preventing climate change, not just mitigating it*
- *Feelings of the futility of individual action if major corporations do not take action*

For rural areas, answers included:

- *Climate change is a divisive topic that people do not want to talk about so they avoid it*
- *Don't believe climate change is occurring*

Health Inequities

This new section was included in the CHA because of the recognition of how many health inequities affect the communities MPH serves. These inequities include many factors, such as the impact of systemic and historical racism, disparities that occur in rural areas (outside City Limits), and the impact of social determinants of health.

For the highest level of health, communities must strive for health equity. "Health equity is the state in which everyone has a fair and just opportunity to attain their highest level of health."[26] To achieve this, we need to engage in "ongoing societal efforts to:

1. Address historical and contemporary injustices;
2. Overcome economic, social, and other obstacles to health and health care; and
3. Eliminate preventable health disparities."[27]

The following sections dive deeper into racism and health, rural disparities, and social determinants of health. Specific Missoula County information was included where possible.

Racism and Health

Racism "negatively affects the mental and physical health of millions of people, preventing them from attaining their highest level of health, and consequently, affecting the health of our nation," according to the CDC.[28] "To build a healthier America for all, we must confront the systems and policies that have resulted in the generational injustice that has given rise to racial and ethnic health inequities."[29]

To examine racism's effect on health, one must define race, ethnicity, individual, and systemic racism. Understanding these terms and how they impact our lives is important to address disparities in health outcomes. *We must discuss race and ethnicity to stop racism*. This is because "[t]rying to solve racial inequality by not talking about racial inequality doesn't reduce racial inequality[.] It leaves it there to continue to be perpetuated in existing forms."[30]

What is Race, Ethnicity, and Racism?

Race is "a social construct, a human-invented classification system. It was invented as a way to define physical differences between people but has more often been used as a tool for oppression and violence."[31] Ethnicity describes "a membership in a culturally defined group, usually in the context of a larger dominant society, as is the case with immigrant groups or "minorities."[32]

"Racism is a system of structuring opportunity and assigning value based on the social interpretation of how one looks (which is what we call "race"), that unfairly disadvantages

some individuals and communities, unfairly advantages other individuals and communities, and saps the strength of the whole society through the waste of human resources," - according to APHA Past-President Camara Phyllis Jones, MD, MPH, PhD."[33] It is a system, "consisting of structures, policies, practices, and norms," "that assigns value and determines opportunity based on the way people look or the color of their skin." The CDC stated, "This results in conditions that unfairly advantage some and disadvantage others throughout society."[34]

Racism can exist in various forms. Two overarching levels that impact health are:

1. Individual-level racism which involves internalized racism (private beliefs about race and racism) and interpersonal racism (racism between individuals); and
2. Systemic-level racism which includes structural (racial bias among institutions and across society) and institutional (within institutions and systems of power).[35]

How Racism Impacts Health

Racism in the US "has had a profound and negative impact on communities of color. The impact is pervasive and deeply embedded in our society—affecting where one lives, learns, works, worships and plays[.]" Racism creates inequities in access to a range of health, social, and economic resources—such as housing, education, wealth, and employment.

- These social determinants of health are "key drivers of health inequities within communities of color, placing those within these populations at greater risk for poor health outcomes."
- These outcomes include " higher rates of illness and death across a wide range of health conditions, including diabetes, hypertension, obesity, asthma, and heart disease."[36]

The impact of racism is complex and cannot be fully shown by the data in this CHA. The data included herein provides a starting point upon which to consider efforts to overcome health inequities.

In drafting the CHA, MPH strove to ensure accurate data was used to reflect the status of American Indians and Alaska Natives, one of Missoula's largest groups that have been socially, economically, and historically marginalized or minoritized. Ensuring correct racial data was used and taking proactive steps to stop the erasure of the American Indian and Alaska Native populations and data through racial misclassification was an important step to stop systemic racism.[37] Using the correct data and ethnic or racial classifications was done in consultation with All Nations Health Center and the Urban Indian Health Institute.

In Missoula County, 3.5% of the population identified as Hispanic, and 4.2% as American Indian or Alaskan Native. This report does not provide a clear view of the health impacts and disparities associated with systemic racism these groups may experience. This is because the total impact of systemic racism is wide, difficult to measure, and outside of the scope of the data provided or available for the CHA.

Rural Challenges for Health

Data provided in the CHA Missoula City and Rural Communities section details specific health statistics for the City of Missoula and the surrounding rural communities. Health differences based on location were evident. Much of Missoula geographically is rural. This rurality creates challenges for health service availability primarily because of the decreased number of health providers in rural areas (outside City Limits) and the distance residents must travel to have their health needs met.

Rural communities have different characteristics that impact health factors.

One example of a rural/urban difference was income and the percentage of families receiving food assistance through the SNAP program. The SNAP rate was 9.2% in Missoula but in rural Huson, the rate was 44%, much higher than in other areas. The ability to purchase food is a social determinant of health impacted by factors such as income level, job opportunities, and food availability in supermarkets. Income level was a factor related to SNAP program involvement. Lower income levels, as seen in Huson, were positively correlated with SNAP eligibility and use. Huson's average household income was $33,586 with 88.9% of Huson's population having a median household income below $50,000. This compared to Missoula City Limits' average income of $80,338 with 46.8% having a median household income below $50,000.

A second example of a rural difference was related to gender and location. In rural Evaro, the rate of adult women aged 65 years and higher who were up to date on a core set of clinical preventive services (flu shot in the past year, PPV [pneumococcal polysaccharide vaccine to prevent pneumonia, meningitis, and severe ear infections] shot ever, colorectal cancer screening, and mammogram in past 2 years) was drastically lower than in other areas. Evaro's rate was 28.7% compared to Missoula City Limits' rate of 42.8%. The rate for women in Evaro who received this care was lower as compared to the rate for men in Evaro aged 65 years or more who were up to date on a core set of clinical preventive services (flu shot past year, PPV shot ever, colorectal cancer screening). The Evaro men's rate was 43.9%, higher than the Evaro women's rate of 28.7%. Similar disparities existed in Huson and Turah. The rate for men in Missoula City Limits was 48.7%, higher than for men in Evaro.

Social Determinants of Health

Social determinants of health can create challenges and resulting inequities for Missoula residents. These inequities are seen in more detail throughout this report. They include the high cost of housing, low average pay, and high childcare costs. Differences existed between City Limits and rural areas (those outside City Limits). Answers to the CHA survey reflected these inequities.

For example, in the CHA survey, residents ranked the strength of social determinants of health in their local community. Weaknesses were similar. “Availability of Housing Options” was the major weakness in both City Limits and rural areas. Housing security was the second greatest weakness in both. Strengths were more divergent. The major strength identified for both City Limits and rural areas was “Green Spaces like Public Parks, Playgrounds, and/or Trails.” “Healthy Food Options” was the second greatest strength in city limits. “Public Schools” were the second greatest strength in rural areas.

Complete results from the CHA Survey are in Appendix 4 showing these differences. The CHA section showing City and rural area differences above provides additional information on social determinants and health impacts.

Health Outcomes: Mortality

A county's mortality rate, according to the CDC, is the measure of the number of deaths during a given time. Examining the different causes of death is important to understand the state of health of the people living in a community, what impacts their health, the effectiveness of the health system, what improvements could be made to improve the health status of those in the community, and where resources may best be allocated to prevent more deaths of a similar kind. This section includes:

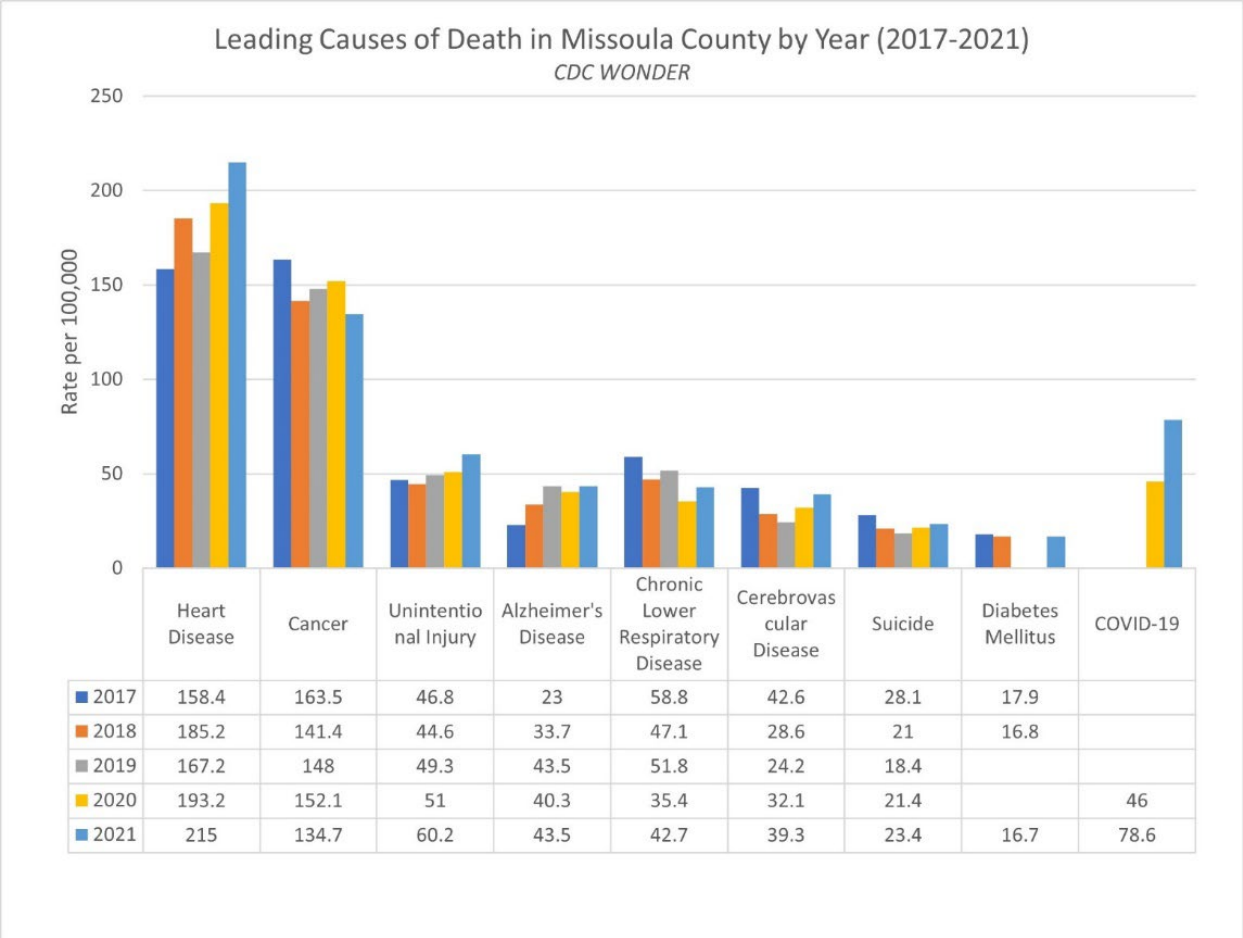
1. Leading Causes of Death
2. Death by Suicide
3. Unintended Injury/Death by Injury

Leading Causes of Death

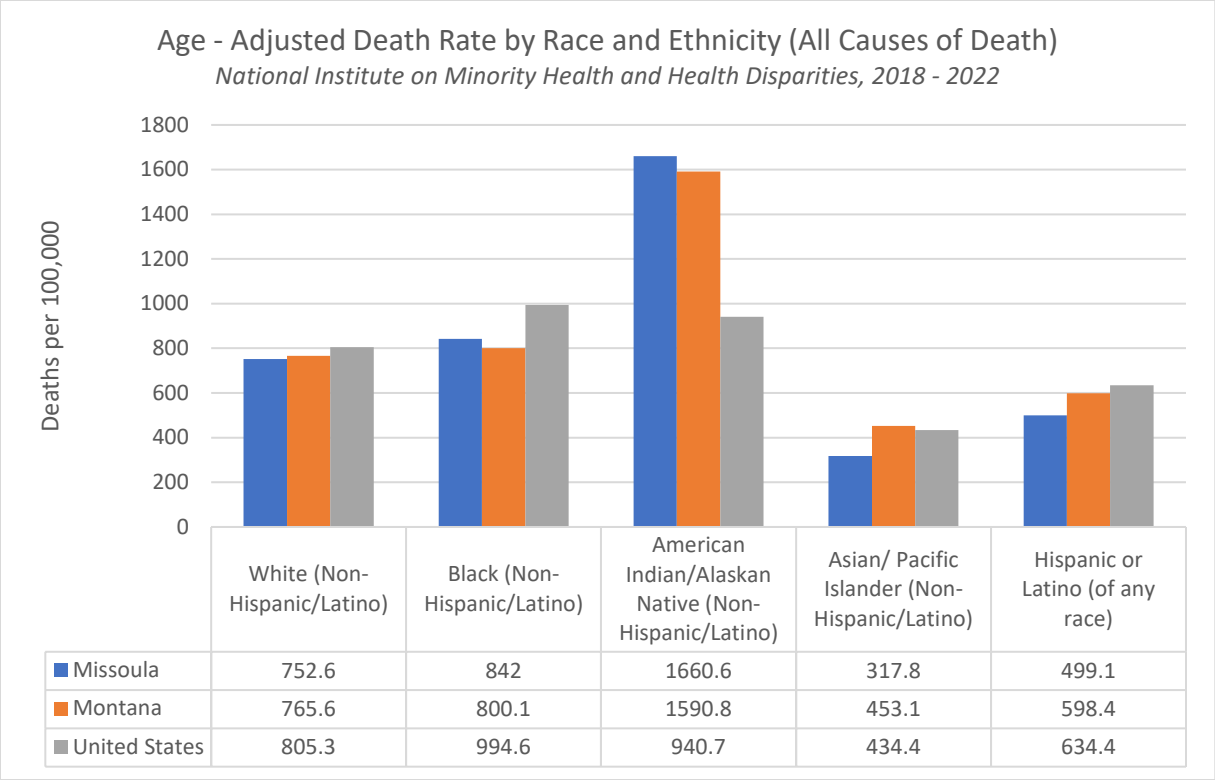
The top eight leading causes of death in Missoula for 2017 to 2021 were:

1) Heart Disease;
2) Cancer;
3) Unintentional Injury;
4) Alzheimer's Disease;
5) Chronic Lower Respiratory Disease;
6) Cerebrovascular Disease;
7) Death by Suicide; and
8) Diabetes Mellitus or COVID-19, depending on the year.

The emergence of COVID-19 in 2020 impacted the causes of death, making COVID-19 the third leading cause of death in Missoula in 2021.



	Heart Disease	Cancer	Unintentional Injury	Alzheimer's Disease	Chronic Lower Respiratory Disease	Cerebrovascular Disease	Suicide	Diabetes Mellitus	COVID-19
2017	158.4	163.5	46.8	23	58.8	42.6	28.1	17.9	
2018	185.2	141.4	44.6	33.7	47.1	28.6	21	16.8	
2019	167.2	148	49.3	43.5	51.8	24.2	18.4		
2020	193.2	152.1	51	40.3	35.4	32.1	21.4		46
2021	215	134.7	60.2	43.5	42.7	39.3	23.4	16.7	78.6



	White (Non-Hispanic/Latino)	Black (Non-Hispanic/Latino)	American Indian/Alaskan Native (Non-Hispanic/Latino)	Asian/ Pacific Islander (Non-Hispanic/Latino)	Hispanic or Latino (of any race)
Missoula	752.6	842	1660.6	317.8	499.1
Montana	765.6	800.1	1590.8	453.1	598.4
United States	805.3	994.6	940.7	434.4	634.4

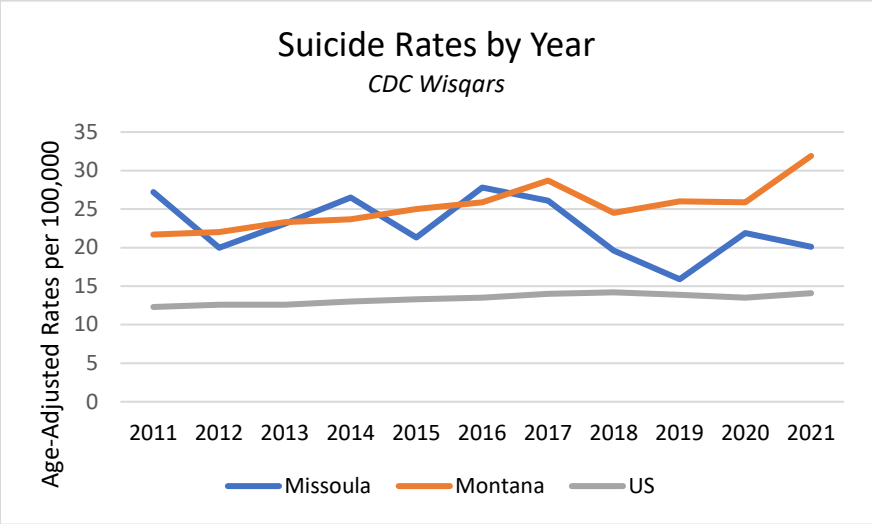
The death rate varied by race and ethnicity, showing health disparities. The highest death rate in Missoula and Montana was for those identifying as American Indian and Alaskan Natives (Non-Hispanic/Latino). The rate was higher in Missoula than in Montana for reasons that are not clear.

The disparity between White (Non-Hispanic/Latino) individuals and American Indian and Alaskan Natives ((Non-Hispanic/Latino) was greater in Missoula than in Montana. The highest death rate in the US was for those identifying as Black (Non-Hispanic/Latino).

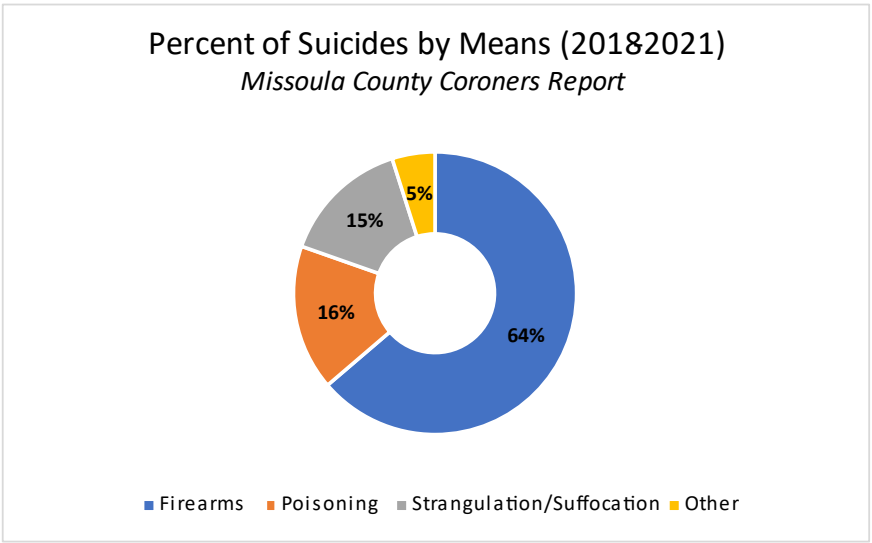
Death by Suicide

According to Montana DPHHS, Montana has ranked in the top five in the nation for the past 40 years for death by suicide. According to the National Vital Statistics Report for 2020, Montana had the third-highest rate of death by suicide in the US.[38]

Many factors are related to whether someone may attempt death by suicide. This includes being bullied, lack of access to mental health care, and easy access to firearms.[39]

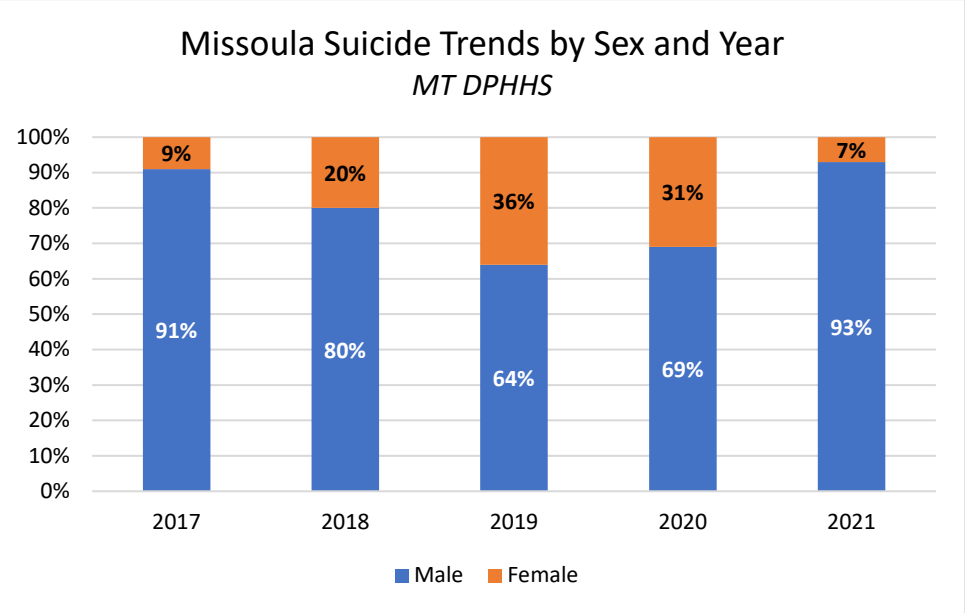


Since 2017, Missoula's rate of death by suicide trended downward to approximately 16 per 100,000 in 2019 but rose to a rate of 20 per 100,000 in 2021. Montana's rate increased from 2018 through 2021. Missoula's 2021 rate was lower than Montana's rate but higher than the US rate.

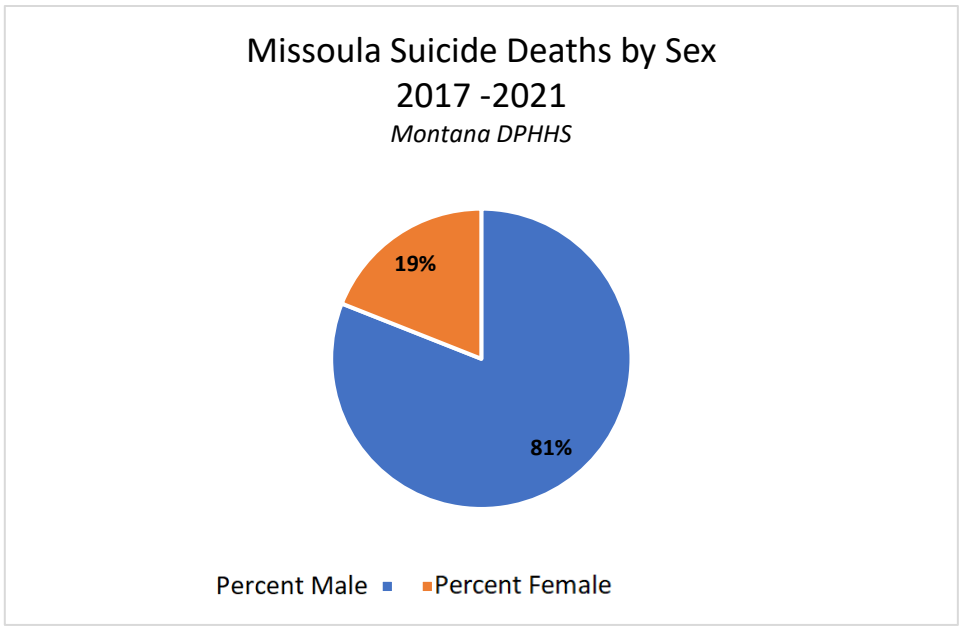


The large number of firearms in Montana was a major risk factor for death by suicide. Nationally, firearms play a part in 50% of all deaths by suicide.[40] However, firearms accounted for 64% of all deaths by suicide in Missoula between 2018 and 2021, 14% higher than the US rate.

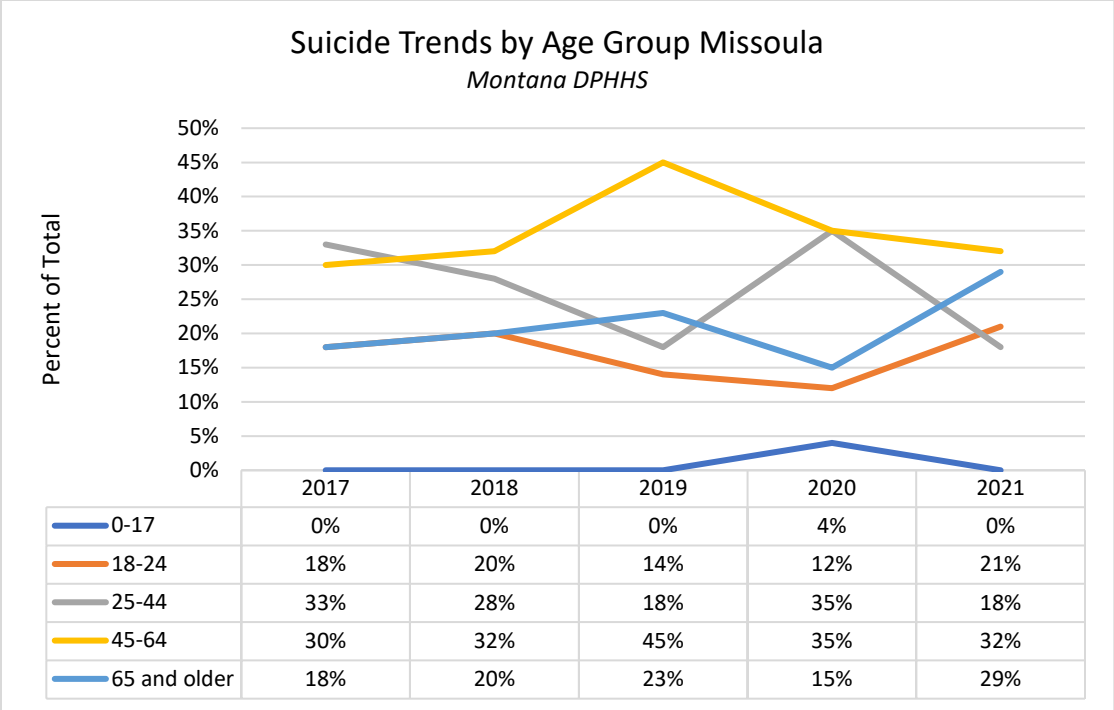
Males were four times more likely to die by suicide than females. Between 2017 and 2021, 81% of deaths by suicide were male and 19% female. In 2019, males were 64% of deaths by suicide and females 36%. The gender gap grew through 2021 with males being 93% of deaths by suicide and females 7%.



Death by suicide affected people of all ages and the rate varied based on age. This age difference allows different interventions and prevention based on age group. In Missoula, from 2017 to 2021, the deaths by suicide rate:



- Was highest for those aged 45-64 years being 45% of all deaths by suicide in 2018 and 32% in 2021;
- Was second highest for those aged 65 and older, increasing from 18% in 2017 to 29% in 2021;
- Was third highest for those aged 18-44 years at 21% in 2021, increasing from 18% in 2017;
- Was 33% in 2017 for those aged 25-44 and then dropped to 18% of the total in 2021; and
- Was lowest for those ages 0 to 17 years old, with a rate typically of 0%, only rising once to 4%, in 2020.



	2017	2018	2019	2020	2021
0-17	0%	0%	0%	4%	0%
18-24	18%	20%	14%	12%	21%
25-44	33%	28%	18%	35%	18%
45-64	30%	32%	45%	35%	32%
65 and older	18%	20%	23%	15%	29%

Working to address death by suicide in Missoula and Western Montana is a cross-collaborative effort of various programs that provide services and resources. These services and resources include providing gun locks to help create barriers to those experiencing suicidal thoughts and training community members to respond to help those experiencing suicidal thoughts or behaviors.

Another promising intervention is working with primary health providers to detect the risk of death by suicide during patient visits. According to Montana DPHHS, up to 45% of individuals who die by suicide visited their primary care provider for physical health problems within a month of their death; 20% of those visited their primary care provider within 24 hours of their death. For people over 65 years old, 73% were in contact with their primary care provider within one month before their death by suicide.[41]

Experiencing chronic pain, which can occur more as people age, increases the risk of death by suicide by three times. 20-30% of those who die by suicide have chronic illness or chronic pain issues.

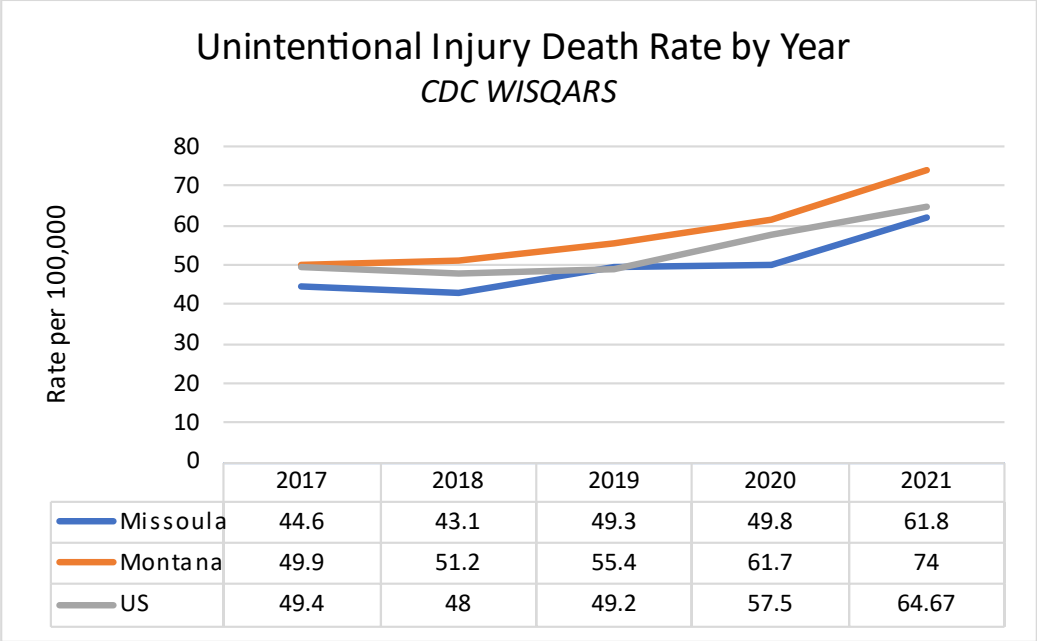
Healthy People 2030 has focused goals regarding death by suicide. These include:

1. Reduce the rate of death by suicide to 12.8 per 100,000 population;
2. Reduce suicide attempts by adolescents to 1.8 per 100 population of youths in grades 9 through 12;
3. Reduce emergency department visits for nonfatal intentional self-harm injuries to 117.9 per 100,000 population;

4. Reduce firearm-related deaths to 10.7 per 100,000 population (although these deaths are not specifically from suicide);
5. Reduce gun carrying among adolescents (excluding carrying guns only for hunting or for a sport such as target shooting) to 3.7%; and
6. Reduce suicidal ideation among sexual minority (lesbian, gay, or bisexual) high school students, including those who seriously considered suicide, made a plan, or made an attempt in the past year to 52.1%.

Unintended Injury/Death by Injury

Unintended injuries and death by injury can occur at any time, without warning, and have serious effects on people's lives. Healthy People 2030 notes injury is the leading cause of death in children and adolescents. Many health indicators are involved with unintended injury or death by injury. Traffic safety, mental health, poverty, recreational activities, child abuse and neglect, and infrastructure quality can all affect the likelihood of people experiencing unintended injury or death by injury. Some of these indicators are reported in other areas of the CHA so they are not specifically included in this section.



	2017	2018	2019	2020	2021
Missoula	44.6	43.1	49.3	49.8	61.8
Montana	49.9	51.2	55.4	61.7	74
US	49.4	48	49.2	57.5	64.67

The rate of death from unintentional injuries in Missoula consistently rose from 2018 to 2021, as did the rates for Montana and the US. The sharpest rise for Missoula, Montana, and the US occurred between 2020 and 2021. Missoula's rate rose by 12 to 61.8 annual deaths per 100,000 population. Montana's rate increase was larger at 12.3 deaths annually for a total of 74 deaths annually per 100,000. The US rate rose the least in 2020 by only 7.17 deaths per 100,000 population for a total of 64.67 deaths annually. Overall Missoula had a lower rate than Montana or the US.

Healthy People 2030 objectives for this topic include those for injuries and firearm-related harm. These include:

1. Reduce the unintentional injury death rate to 43.2 per 100,000 population;

2. Reduce fatal injuries to 63.1 per 100,000 population;
3. Reduce deaths from work-related injuries in all industries to 2.9 per 100,000 full-time workers;
4. Reduce employer-reported nonfatal work-related injuries resulting in 1 or more days away from work to 63.8 per 10,000 full-time private industry workers;
5. Reduce firearm-related deaths to 10.7 per 100,000 population;
6. Reduce nonfatal firearm-related injuries to 10.1 per 100,000 population; and
7. Reduce the rate of deaths among children and adolescents aged 1 to 19 years to 18.4 per 100,000.

Health Care and Access

The ability to access effective and affordable health care directly impacts the health of individuals, families, and communities. The following of health care topics are included in this section:

1. Health Care Availability
2. Mental Health, Mental Disorders, and Access to Care
3. Oral Health Care and Access

Health Care Availability

Health care availability impacts health status. Primary healthcare supports an individual's whole health needs. Primary healthcare providers are frequently the first point of contact in the healthcare system. They assist with disease prevention, treatment, screening, rehabilitation, palliative care, and more.[42] The availability and affordability of primary care for all groups of people are important to reduce health disparities and ensure people have access to regular prevention services. This access reduces the spread of disease, helps with early disease detection, and can keep health care costs lower.[43]

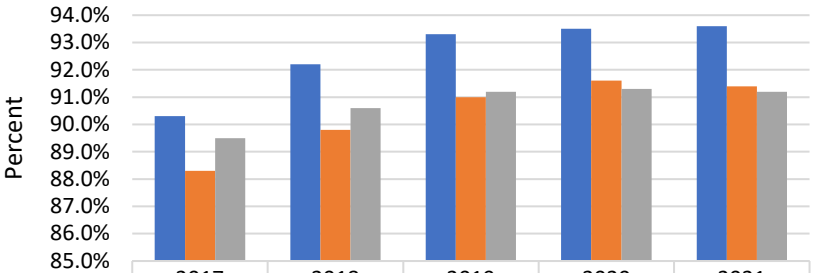
The cost of health care and associated issues create a barrier to accessing care. Even with insurance coverage, the cost of medical care can be high enough that one is less likely to access care when needed. 54% of people report health insurance premiums are too high.[44] 37% of Americans report not being able to afford a $400 medical emergency.[45] Four in ten Americans have some form of medical debt, amounting to an estimated 195 billion dollars in total. Travel time and distance can also affect access to care.[46]

Missoula is the medical hub of western Montana. Providence St. Patrick Hospital and Community Medical Center are major healthcare providers for Missoula. In addition, All Nations Health Center is in Missoula, providing an interdisciplinary approach to comprehensive healthcare services, including achieving holistic wellness for the Missoula Native community. Missoula is served by MPH, the city-county health department, that provides various public health services. Partnership Health Center and many other medical providers, including naturopathic and nontraditional health providers, are also located in Missoula.

People who have healthcare coverage

US Census, 2017-2021

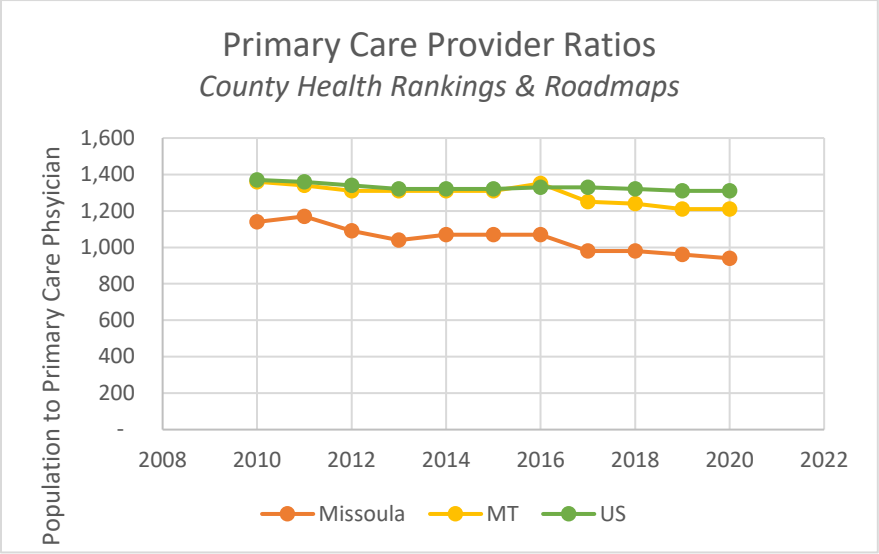
American Community Survey 5-year estimates



	2017	2018	2019	2020	2021
Missoula	90.3%	92.2%	93.3%	93.5%	93.6%
Montana	88.3%	89.8%	91.0%	91.6%	91.4%
US	89.5%	90.6%	91.2%	91.3%	91.2%

Affordable health insurance coverage is essential for people to access care. Missoula's rate of health insurance coverage increased after the passage of the Affordable Care Act in 2010 and Montana's Medicaid expansion in 2015 because insurance was more accessible to Missoula residents. The rate of uninsured individuals in Missoula steadily decreased from 2017 to 2021. In 2021, 93.6% of Missoula residents were covered by health insurance. This was a higher rate than either Montana's rate or the US rate.

The availability of medical services is influenced by the Provider Ratio, the number of healthcare providers compared to the number of people living in an area. Low provider ratios can be a barrier to accessing care. From 2010 to 2020, Missoula had more primary care providers than the US or Montana with 1 provider for every 940 residents in 2020.



Missoula was considered a medically underserved area for primary care, dental care, and mental health care. Although the provider ratio showed greater availability of medical services in Missoula, this did not reflect some health disparities existing for those living in more rural areas. Rural areas such as Frenchtown, Turah, Condon, and Seeley Lake, do not have access to the number and breadth of health services available within Missoula City Limits. Travel time and distance are a barrier when access to emergency care is more than a one-hour drive away. The more condensed services within the City of Missoula are not readily available to those living in outlying communities.[47]

Healthy People 2030 has various objectives regarding primary care. These include:

1. Increase the proportion of people with a usual primary care provider to 84%;
2. Increase the proportion of people with health insurance to 92.4%;
3. Increase the proportion of people with prescription drug insurance to 89%;
4. Reduce the proportion of people who can't obtain medical care when they need it to 5.9%; and
5. Reduce the proportion of people who can't obtain prescription medicines when they need them to 6.3%.

Mental Health, Mental Disorders, and Access to Care

Mental Health includes mental, emotional, psychological, and social well-being.[48] A close connection between mental health and physical health exists because when someone is experiencing a mental disorder or having mental health challenges, it can affect that person's ability to engage in healthy behaviors. Moreover, if one is experiencing physical health problems, it can be more difficult for that person to obtain treatment for a mental disorder. These reasons make the availability of screening for mental disorders essential so people can receive the treatment they need. Prevention and treatment availability, as well as support for those in recovery (and their families), are important for accessing mental health care.[49]

Experiencing mental health problems can impact one's living situation, access to opportunities, financial status, and physical health. The CDC noted that those with depression are at increased risk of developing conditions such as diabetes, heart disease, and stroke, increasing their financial healthcare burden.[50]

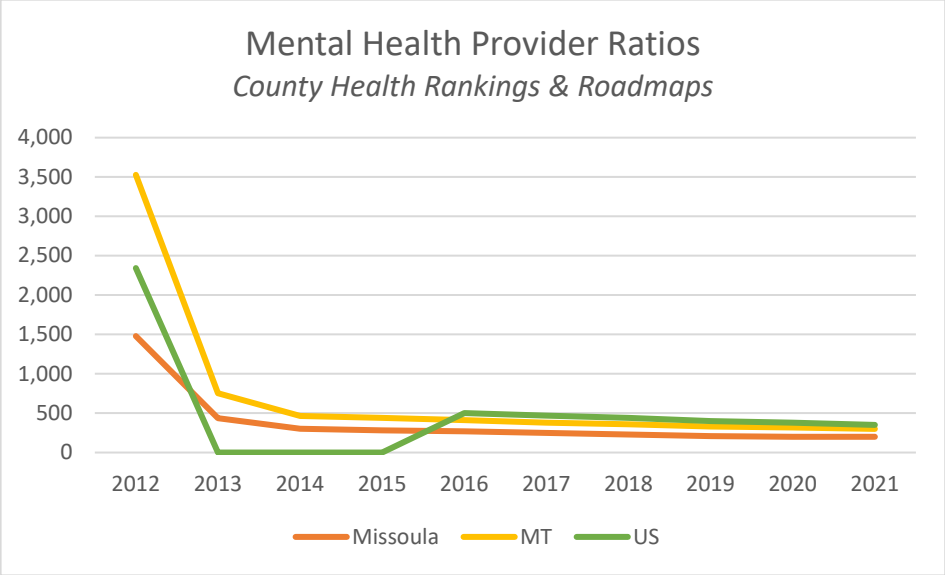
The availability of mental health providers increased greatly in Missoula since the passage of the Affordable Care and the Mental Health Parity and Addiction Equity Act of 2008. These made changes to group insurance plans, insurance providers, and Medicare's rates of payment for mental health treatment.

The 2024 CHA survey identified mental health as residents' major issue of concern in both Missoula City Limits and Missoula County rural areas.

In 2021, Missoula had 1 mental health service provider for every 200 residents. This rate was an improvement from the rate in 2012 when Missoula had one mental health provider for every 1,479 people. This was also a better rate than the US rate of one provider for every 2,343 people or the Montana rate of one provider for every 3,527 people.

Even with many behavioral health professionals and programs, lack of access to services was a major barrier identified by the community. Barriers identified in the 2018 Missoula County CHIP included services had waiting lists, people lacked transportation, and individuals did not have insurance or financial means to obtain treatment.

Missoula was noted by Montana DPHHS to be an area with a mental health professional shortage. To help with the availability of services, in 2020 the City of Missoula established a Crisis Intervention Team. The purpose of this was to address 911 calls with help for those experiencing mental health crises instead of sending them to jail.[51]



Healthy People 2030's goals regarding mental health include increasing screening, treatment, and use of mental health services for all age groups:

1. Increase the rate of children aged four to 17 years with mental health problems who get treatment to 79.3%;
2. Increase the proportion of adolescents with depression who get treatment to 46.4%;
3. Increase the proportion of adults with depression who get treatment to 69.5%;
4. Increase the proportion of adults with serious mental illness who get treatment to 68.8%;
5. Reduce bullying of lesbian, gay, or bisexual high school students to 20.7%; and
6. Increase the proportion of adolescents who have an adult in their lives with whom they can talk about serious problems to 82.9%.

Healthy People 2030 is expanding its goals to include harm specific to transgender students. This includes reducing bullying of transgender students and reducing suicidal thoughts in transgender students, although these goals were still in the developmental stage.

Healthy People 2030 has a new goal of increasing the proportion of adults with mental health problems experiencing houselessness who receive mental health services although this goal was in research status.

Oral Health Care and Access

Oral health care, also referred to as dental health, includes the health of the teeth, gums, and entire oral-facial system.[52] Preventative oral health is important for preventing chronic dental pain, oral diseases, tooth decay, and oral cancers. Lack of adequate oral health can impact the ability to speak and eat as well as negatively affect mental health and employment opportunities.

Missoula was listed as a Dental Health Professional Shortage Area. Residents attempting to access dental care faced similar barriers as those seeking primary health care. Level of access differences exist between the City of Missoula and rural communities outside Missoula City Limits. Lack of reliable transportation was a common issue individuals faced, especially in rural areas.[53] Access to dental insurance was a barrier to dental care in Montana and nationally. Montana did provide dental coverage as a part of Medicaid and Medicare enrollment but not all insurance plans offered dental health insurance.[54]

Teeth are healthier when there is fluoride in drinking water because teeth develop stronger and are less likely to have tooth decay. However, fluoride in drinking water was not uniformly accessible, especially for those who use wells for water.[55] Although the City of Missoula's water supply is fluoridated, those living in areas outside the city with individual wells do not have fluoridated water.[56]

Healthy People 2030 has many dental objectives. These include:

1. Reduce the proportion of people who can't get the dental care they need when they need it to 19.4%;
2. Reduce the proportion of adults with active or untreated tooth decay to 17.3%
3. Reduce the proportion of older adults with untreated root surface decay to 29.1%
4. Increase the proportion of people with dental insurance to 75%;
5. Increase the proportion of those who use the oral health care system to 45%;
6. Increase the proportion of children and adolescents who have dental sealants on 1 or more molars to 42.5%;
7. Reduce the proportion of children and adolescents with active and untreated tooth decay to 10.2%;
8. Increase the proportion of low-income youth who have a preventive dental visit to 79.9%;
9. Increase the proportion of persons served by community systems with optimally fluoridated water systems to 77.1%; and
10. Reduce the proportion of adults aged 45 years or over who have lost all their teeth to 5.4%.

Health Factors

Health is impacted by many variables. The following section explores some of these health factors in detail. This is not an exhaustive list as many factors influence individual and community health. Wherever possible the data includes trends and comparisons. Many targets and goals from Healthy People 2030 are included. However, all relevant objectives related to these topics may not have been included due to the complex, interrelated relationship between many of the factors.

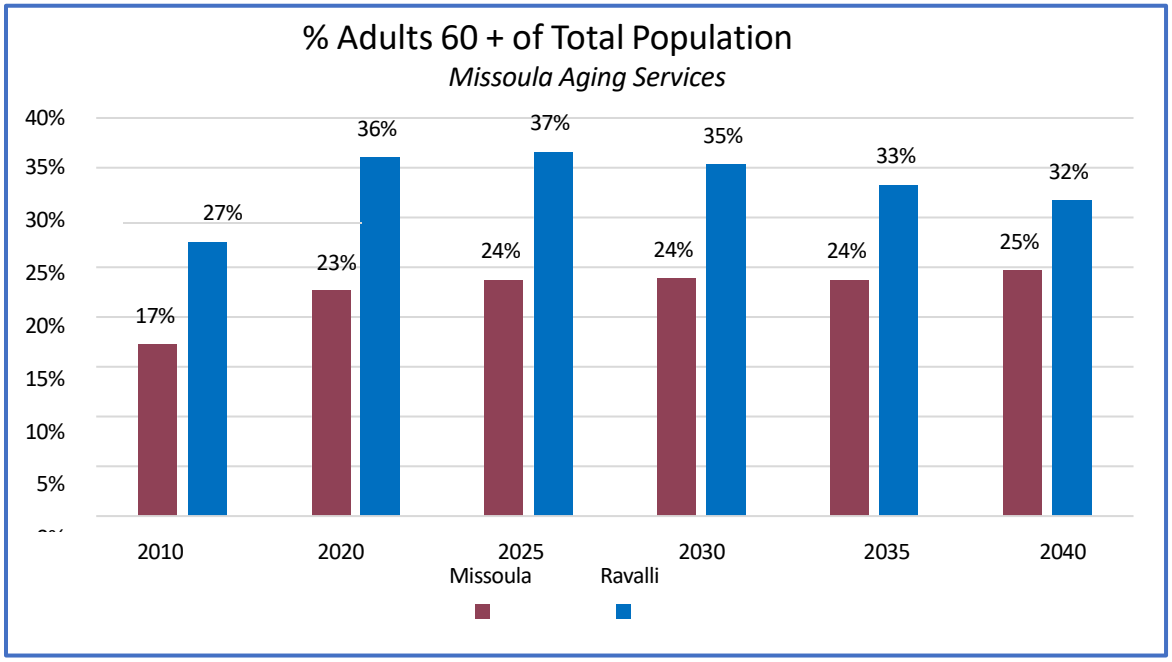
1. Aging and Health
2. Cancer
3. Childcare
4. Child Abuse and Neglect
5. Civic Engagement
6. Diabetes
7. Drug and Alcohol Use
8. Educational Attainment
9. Food Security
10. Houselessness
11. Income and Employment
12. Intimate Partner Violence
13. Low Birthweight
14. Maternal and Infant Health
15. Nutrition Security
16. Obesity
17. Physical Activity
18. Poverty and Living Wage
19. Reproductive and Sexual Health
20. Tobacco and Nicotine Use
21. Traffic Safety

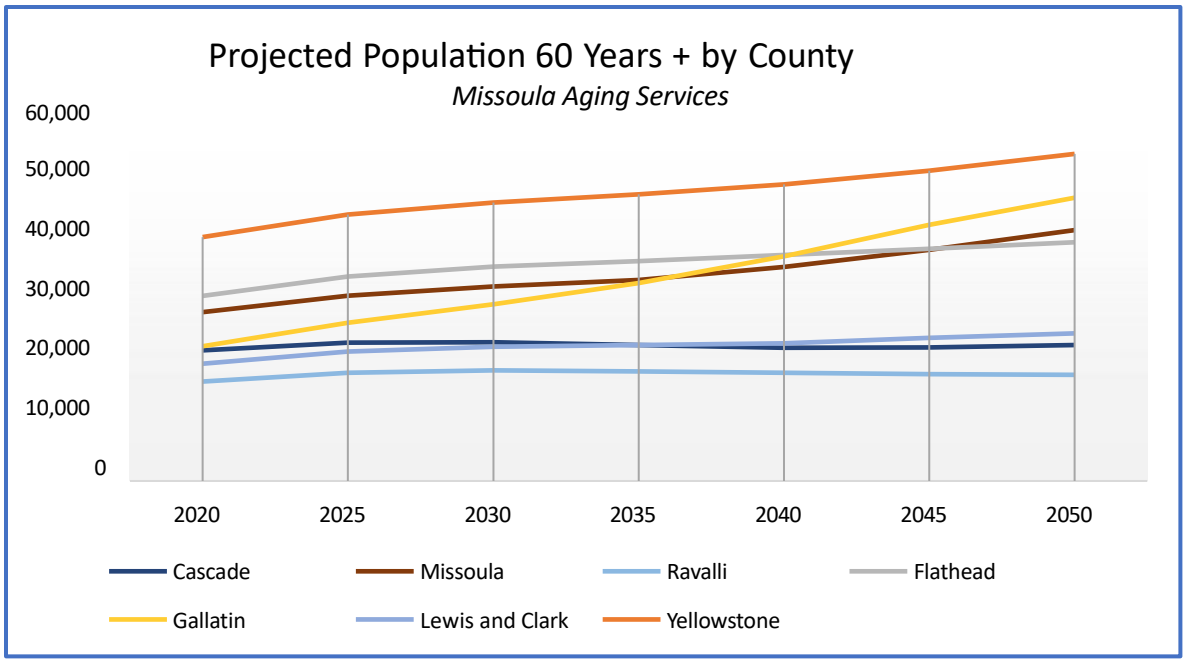
Aging and Health

As a population ages, key health issues and service needs change. Older adults have many of the same needs and wishes as younger age groups; clean air, walkable communities, and accessible services and amenities. However, an older population will have increased needs for certain types of health and home care services, housing, and infrastructure that accommodate increased rates of functional difficulties and lessen fall risk. Missoula Aging Services previously identified that issues of dental care, mental health, elder abuse, and poverty were important to this population.

Since MPH's first CHA in 2014, the needs of the aging population have been an urgent issue for public health in Missoula. The projected population in Missoula 60 years or older was expected to continue to increase. In 2020 the population was approximately 27,000, 23% of the population. By 2025 it was projected to grow to more than 40,000, 24% of the population. By 2040, the older population was expected to grow to 25% of the population.

Alzheimer's and other dementias become more common as people age. Alzheimer's in older adults is a growing public health issue in Montana that needs a public health approach according to the National Alzheimer's Association.[57] The Alzheimer's Association estimated the number of people aged 65 and older with Alzheimer's in Montana in 2020 was 22,000 and in 2025 will be 27,000. This affects not only the person with Alzheimer's but also those who care for them. 17,000 unpaid caregivers were estimated to be helping care for these individuals in 2022. That same year, the Montana Medicaid costs of caring for people with Alzheimer's were estimated to total $150 million.[58]





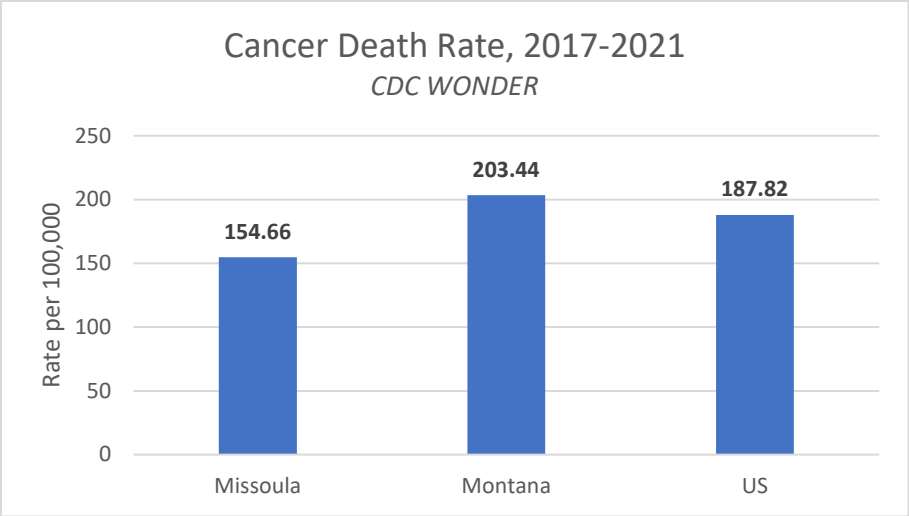
Healthy People 2030 has objectives that focus on improving the safety and quality of life for aging and older adults and reducing their hospitalizations. These include:

1. Increase the proportion of older adults with reduced physical or cognitive function who engage in light, moderate, or vigorous leisure-time physical activities to 51%;
2. Reduce the rate of pressure ulcer-related hospital admissions among older adults to 753.2 per 100,000;
3. Reduce the rate of hospital admissions for diabetes among older adults to 264 per 100,000;
4. Reduce the rate of hospital admissions for pneumonia among older adults to 642.5 per 100,000;
5. Reduce the rate of hospital admissions for urinary tract infections among older adults to 496.2 per 100,000;
6. Reduce the rate of emergency department visits due to falls among older adults to 5,447 per 100,000;
7. Reduce the proportion of preventable hospitalizations in older adults with diagnosed Alzheimer's disease and other dementias to 19.2% of those diagnosed;
8. Increase the proportion of older adults with diagnosed Alzheimer's disease and other dementias, or their caregiver, who are aware of the diagnosis to 65.1%;
9. Increase the proportion of older adults with diagnosed Alzheimer's disease and other dementias, or their caregiver, who are aware of the diagnosis to 63.4 per 100,000;
10. Increase the proportion of adults with Subjective Cognitive Decline (SCD) who have discussed their confusion or memory loss with a health care professional to 50.4%;
11. Reduce hip fractures among older adults to 4.6 per 1,000; and
12. Reduce visual impairment due to age-related macular degeneration (AMD) to 12.5 per 1,000.

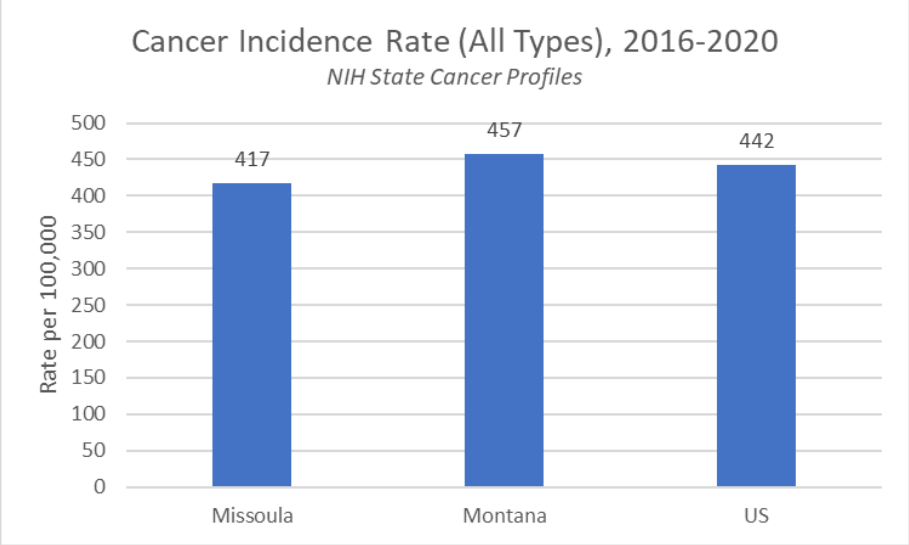
Cancer

Cancer is a public health issue because of the wide impact it has on individuals and communities. The cancer rates discussed in this section concern cancer "incidence" which is the *occurrence* of cancer and cancer "deaths" which is when a person passes away because of cancer. Female breast cancer and prostate cancer were the leading *new cancer cases* in Montana. Lung and bronchus cancer were the leading cause of cancer *deaths*, followed by prostate cancer.

From 2017 to 2021, cancer was the second-leading cause of death in Missoula and has been since 2017 (previously it was the leading cause).



Missoula had a lower cancer death rate than both Montana and the US. In 2021, the cancer death rate for 100,000 people was 154.86 in Missoula, 203.44 in Montana, and 187.82 in the US.



The incidence rate of cancer was also lower in Missoula, with a rate of 417 per 100,000, 457 per 100,000 in Montana, and 442 per 100,000 in the US.

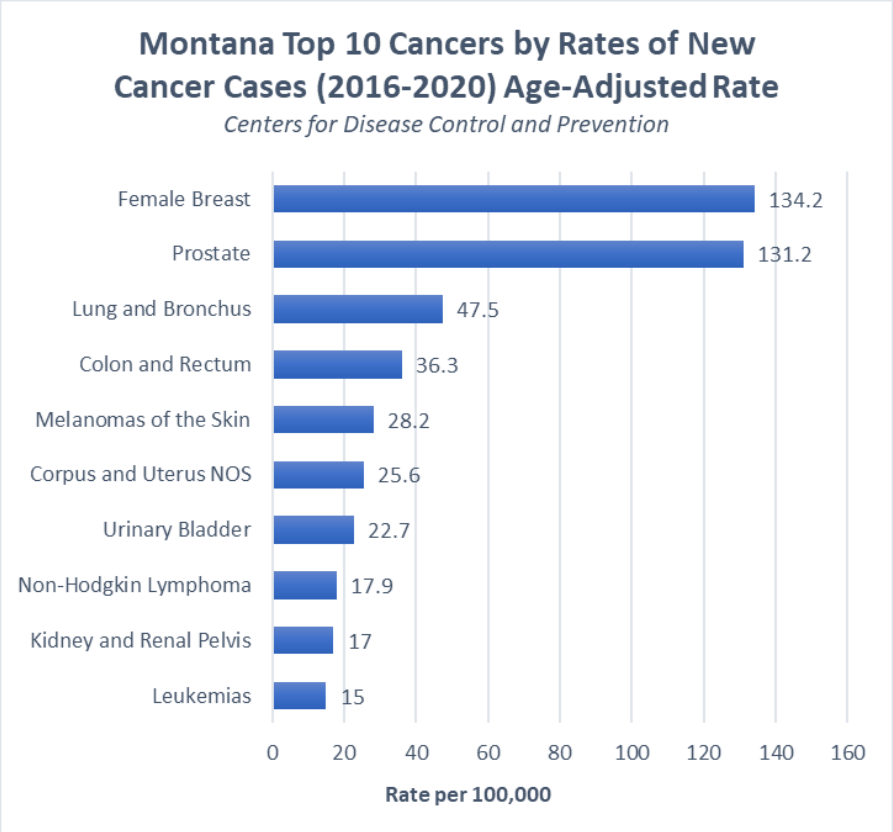
Gender influenced rates. Males were more likely to die from cancer as compared to females in Missoula, at a rate of 157.8 per 100,000 for men and 121 per 100,000 for females. This followed the same trend as that seen in Montana and the US.

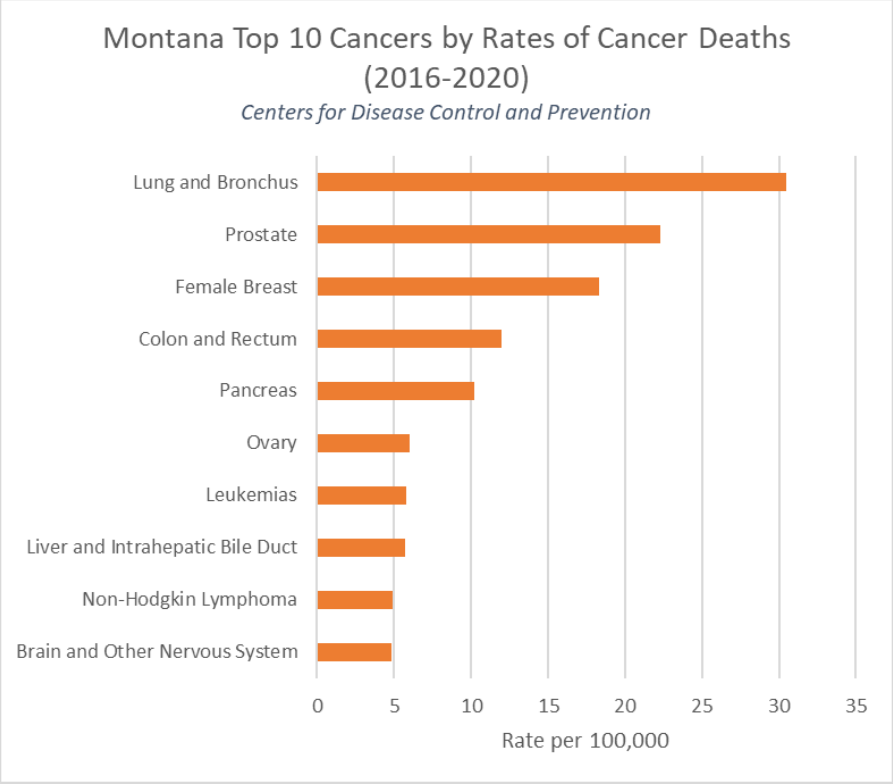
In Montana (not specifically Missoula), female breast cancer was the most common cancer with an incidence rate of 134.2 per 100,000.

The second most common cancer in Montana was prostate cancer with a rate of 131.2 per 100,000.

From 2017 to 2021 in Montana, the rate of death because of cancer was highest with lung and bronchus cancer, followed by prostate cancer, and then female breast cancer.

Prevention and early detection through screening for cancer, before there are signs of sickness and the cancer is at an early stage so it can be more easily treated, can help decrease deaths attributable to cancer. By the time signs appear, a tumor may have already grown or spread, making the cancer more severe.





Healthy People 2030 sets target goals for specific cancers and interventions. These include:

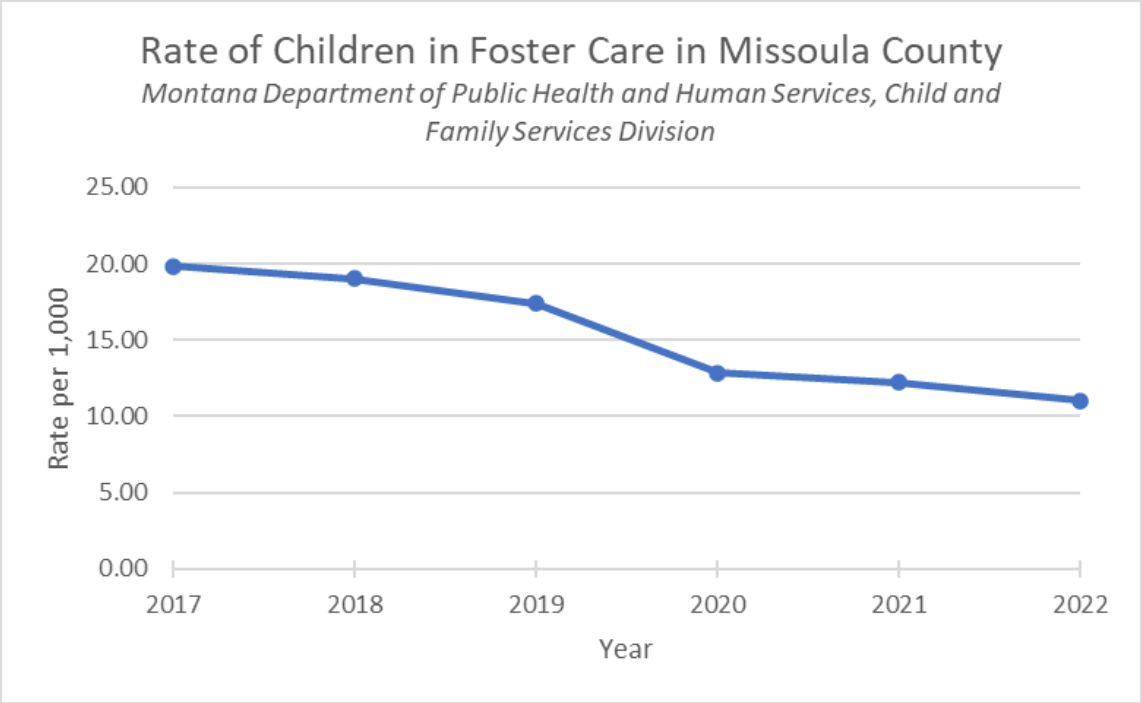
1. Reduce the overall cancer death rate to below 122.7 deaths per 100,000 population (which was a change from the Healthy People 2020 goal of reducing deaths from cancer to 161.4 per 100,000 population). Neither Missoula nor Montana met this new goal. For the top three cancers in Missoula, specific targets are discussed below;
2. For breast cancer, the objective is to reduce the female breast cancer death rate to 15.3 per 100,000 females. To help reach this goal, another objective is to increase the proportion of females who get screened for breast cancer to 80.3%;
3. For prostate cancer, the aim is to reduce the prostate cancer death rate to 16.9 per 100,000 males. Whether to receive screening for prostate cancer is something men should discuss with their healthcare provider regarding the benefits and possible harms;
4. For lung cancer, the goal is to reduce deaths from lung cancer to 25.1 per 100,000 population. Increasing the proportion of adults who are screened for lung cancer to 7.5% is part of achieving this goal; and
5. For oral and pharyngeal cancers, increase the proportion detected at the earliest stage to 29.5%.

Child Abuse and Neglect

Being subjected to child abuse or neglect can have many negative impacts on a child. These impacts are seen in many areas, including physical health, education, and mental health. Some youths may also not be adequately prepared when they age out of the foster care system to successfully transition to adult life. This can lead to lifelong negative impacts.

Child and Family Services Division (CFS) in Missoula is part of the Montana Department of Public Health and Human Services. CFS provides state and federally-mandated services to investigate abuse and neglect reports, help families stay together, and place children in foster or adoptive homes.

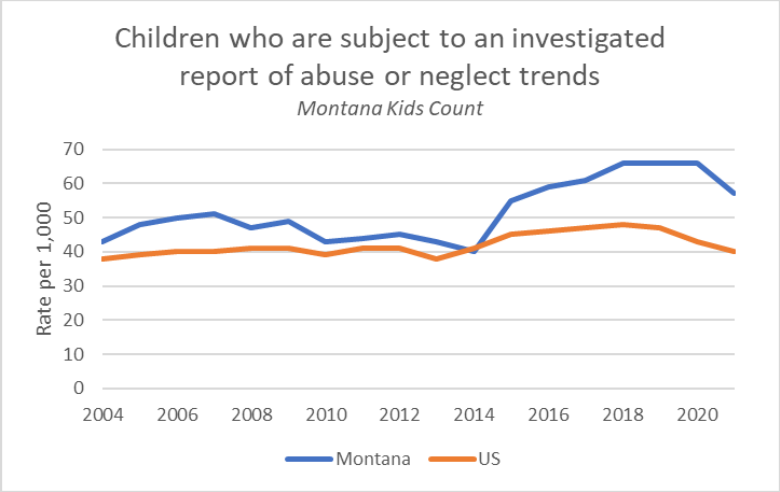
When children are placed in foster care, they may have multiple placements throughout one year. Lack of stability can contribute to health and dental problems for children. An evaluation of the Missoula Foster Child Health Program found the number of foster placements directly affected health; 18% of children in foster care had three or more placements. These multiple placements were found to directly contribute to poor health outcomes.



In Missoula, the number of children in foster care trended down since 2017, almost halving the rate to approximately ten children per 1,000 being in foster care by 2022.

In Montana, the rate of children who were the subject of an investigated child abuse or neglect report started decreasing in 2020 after rising since 2014.

Although this decrease may appear to indicate that since the number of reports decreased, less abuse and neglect was occurring, this was also during the time that schools were physically closed during the COVID pandemic.



This closure resulted in teachers who normally see children every day no longer being able to see them and determine if they should make a report because they were concerned abuse or neglect of the child may be taking place. This could be the reason the report rate decreased – not because less child abuse or neglect was happening.

A disproportionate number of Indigenous children have historically been in foster care in Missoula. American Indian/Alaska Native children are disproportionately represented in foster care nationwide, including in Montana.[59] Studies show American Indian/Alaska Native were two times more likely to be investigated, two times more likely to have allegations of abuse or neglect substantiated, and four times more likely to be placed in foster care than children identified as Caucasian/White.[60]

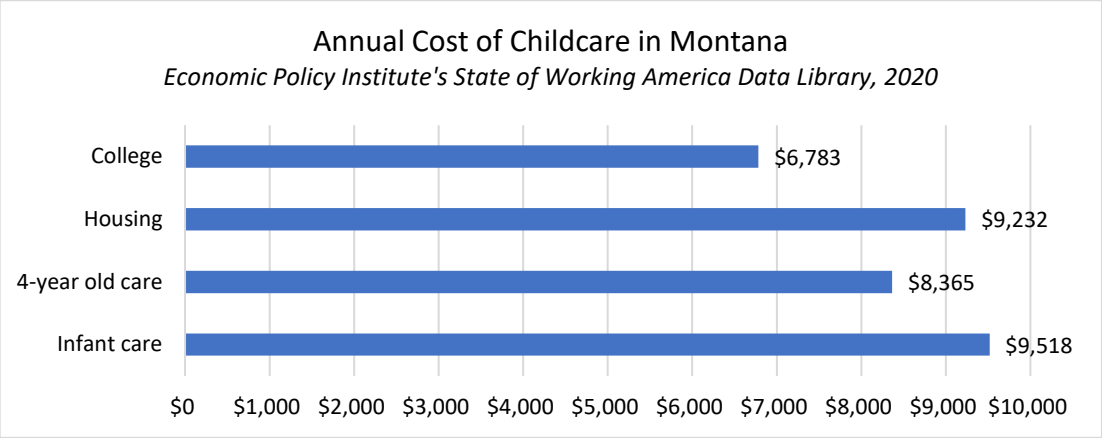
Healthy People 2030 has established goals regarding child abuse and neglect. These include:

1. Increase the proportion of adolescents in foster care who show signs of being ready for adulthood, although this goal is currently in the research stage without specific benchmarks;
2. Decrease the number of young adults who report 3 or more adverse childhood experiences. This goal is still in the developmental stage;
3. Reduce child abuse and neglect deaths to 1.9 per 100,000 population;
4. Reduce nonfatal child abuse and neglect to 8.7 per 1,000 children under 18 years of age; and
5. Reduce the percentage of adolescents in grades 9 through 12 who report they have experienced sexual violence (by anyone) to 8.7% (this would show a reduction in occurrence, not a reduction in reporting).

Childcare

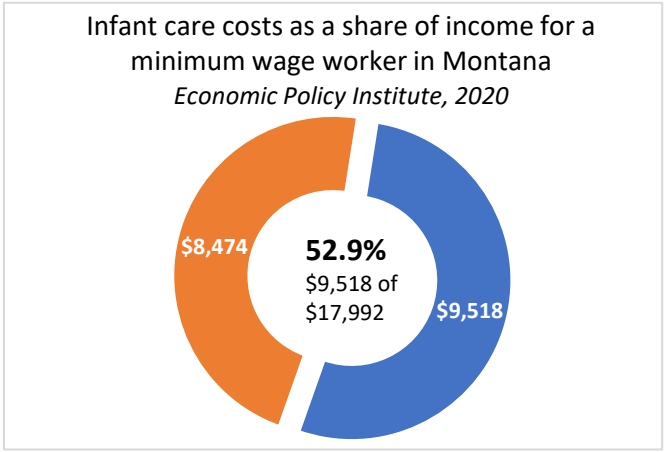
Childcare was added to the Missoula CHA in 2017 as a health indicator because it was identified as a critical piece of the health and well-being of our community. Research indicated consistent and excellent care for our youngest residents was crucial to their later health and well-being – from mental health and disease status to education and employment. Additionally, the availability of childcare was necessary for working families to live their lives.

Affordable childcare for many families in Montana does not exist. Childcare was considered affordable if it was less than 7% of total income.[61] Only 12% of Montana families could afford infant care by this standard.



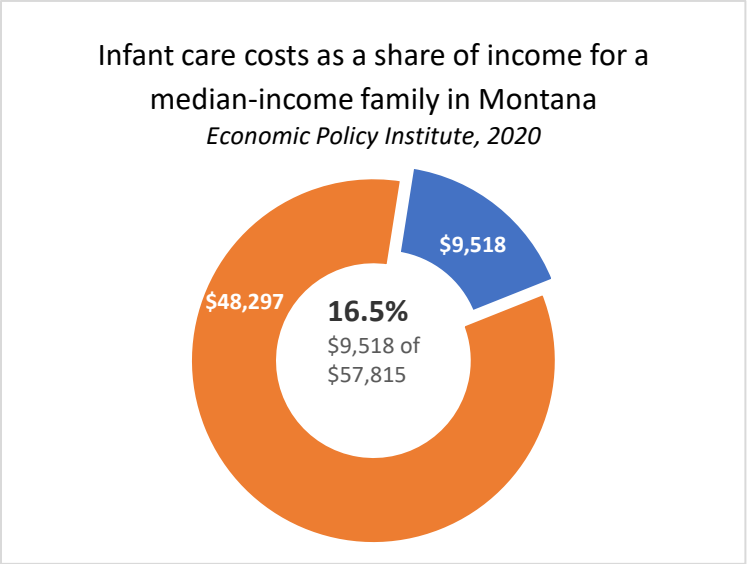
The cost of childcare was higher than housing costs in Montana. Infant care cost 3% more than the annual average rent in Montana. Childcare for two children (an infant and a four-year-old) cost $17,883 annually and was 48.4% more than Montana's annual average rent. Infant care costs and child care costs for those four years and older were both individually more expensive annually than in-state tuition for an individual to attend a four-year public college.

Infant care costs were the highest childcare costs in Montana. For an individual who earned minimum wage, average infant care costs consumed 52.9% of the individual's income. This was far higher than what was considered affordable.



A family that earned the median income in Montana spent 16.5% of the family income on infant care for one child.

If the family spent money on care for one infant and one four-year-old, this was 30.9% of the family income. This was far higher than "affordable" childcare where a family spent less than 7% of its income on childcare.



Healthy People 2030 does not specifically identify childcare as an objective. Nonetheless, the need for childcare was seen throughout the Healthy People 2030 objectives. Finding ways to increase the availability of affordable and safe childcare has been identified as a priority for the Missoula community.

Civic Engagement

Civic engagement (also called civic participation) influences community health, individual health, and individual and community well-being. Civic engagement is explained by Healthy People 2030 to encompass many activities, both formal and informal. These activities include voting in elections, volunteering for organizations or issues one cares about, participating in group activities, and even engaging in community gardening.

Civic engagement may benefit individuals by providing ways to become physically active (such as hiking groups or recreational soccer teams), or benefit society on a larger scale (such as voting and volunteering at organizations). It can help individuals develop a sense of purpose in their life. It can build social cohesion and decrease feelings of loneliness.[62]

Missoula does not track civic engagement in all the ways Healthy People 2030 describes civic engagement. Missoula's local government does track voter turnout as a form of civic engagement through the Missoula County Elections Office.

Missoula County Voter Turnout: 44.82% in 2023

Healthy People 2030 explains other ways exist to participate in civic engagement.

1. **Voting** is important for individuals to impact their communities and ensure those with power wield it fairly. Studies have found voting has a health impact in that those who reported voting participation self-reported better health than those who reported they did not vote.
2. **Volunteering** is another form of civic engagement that provides positive health benefits. Those who volunteer have better psychological well-being and more positive emotional health than those who do not. Volunteering increases a social network and can reduce levels of anxiety, stress, and depression.
3. **Joining and being part of a group** provides health benefits as well. Membership in a formal group, such as 4-H, PTA, and Rotary, or part of an informal group, such as a book club, decreases social isolation and improves the physical and mental health of members.
4. **Participating in a community garden** can increase access to healthy food. Fruit and vegetable intake can increase. Community gardens can give a sense of community or neighborhood pride and appreciation and motivate involvement in one's community.

Different strategies can promote civic participation. One strategy is to encourage young people to be active in their community, leading to lifelong civic participation. Another strategy is public health media advocacy campaigns. Policy changes that improve public health can be promoted through media engagement and community action.

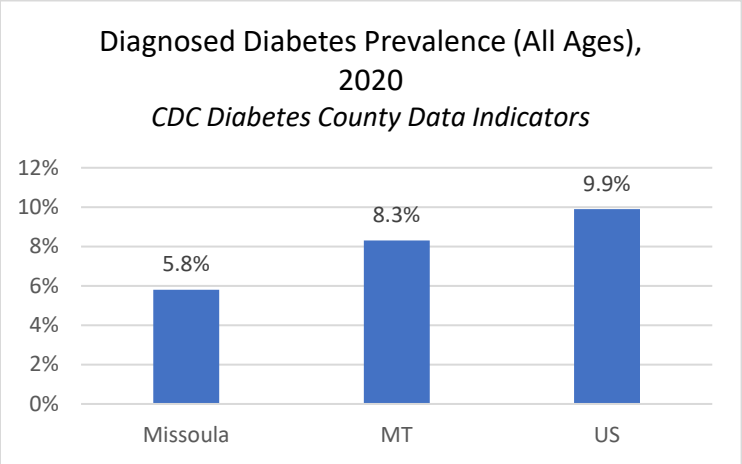
Healthy People 2030 has one goal specific to civic engagement. This goal is to increase the proportion of the voting-age citizens who vote to 58.4%. Missoula has not met this goal.

Diabetes

Diabetes results from having one of three issues processing insulin within your body. Insulin is important for health because it processes sugars from foods. With Type 1 diabetes, the body cannot produce insulin naturally. For Type 2 diabetics the body does not utilize insulin as well as a body without diabetes. The third type of diabetes is gestational diabetes which only occurs in pregnancy from the body not utilizing insulin well.[63] The data below combines all types of diabetes for data purposes.

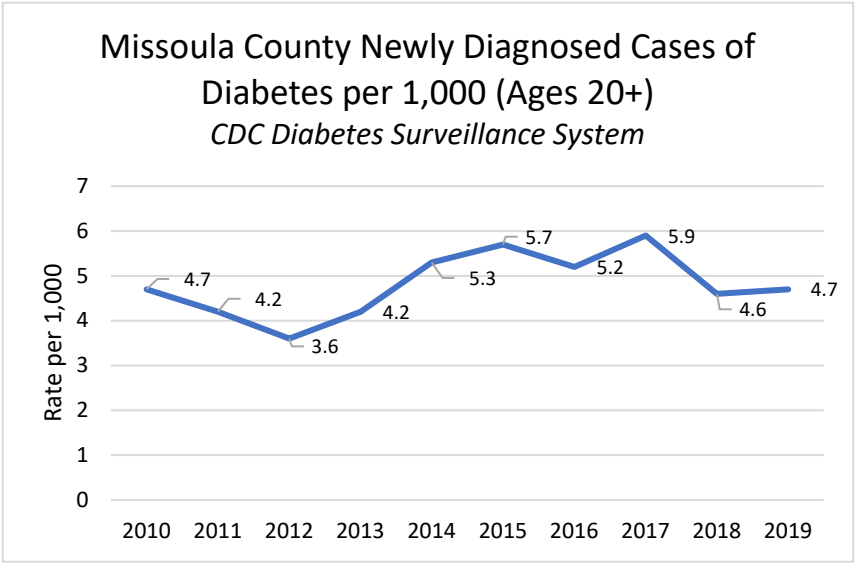
Diabetes can lead to serious health outcomes. Those with undiagnosed or inadequately managed diabetes can experience nerve damage, foot health potentially requiring amputation, vision impairment and blindness, and hearing loss.[64] Diabetes can cause lower life expectancy related to heart disease and kidney failure.[65]

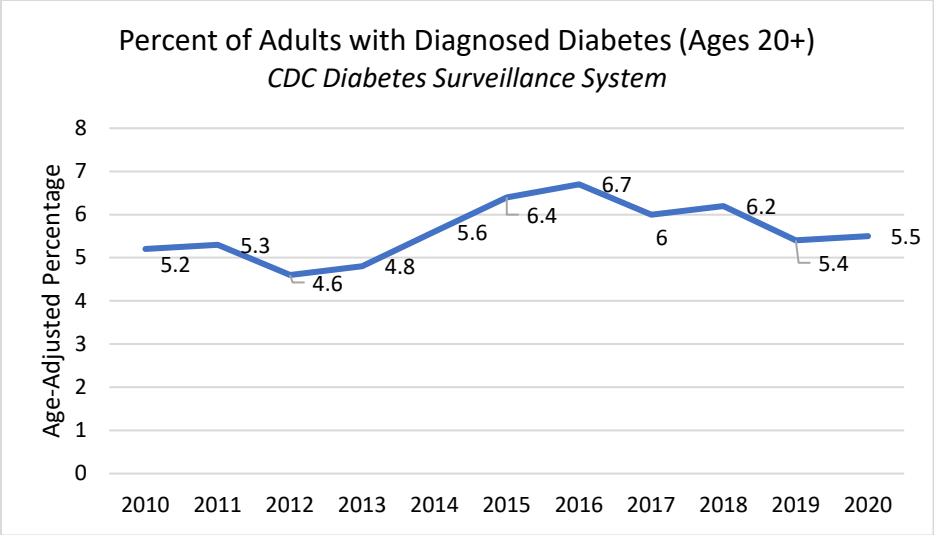
Diabetes was the most expensive chronic condition in the US. One of every four dollars spent in the US healthcare system was on diabetes treatment.[66] Since 2017, the cost of diabetes treatment increased by 7% and insulin cost by 24% (with inflation accounted for).[67] In Montana, people experiencing diabetes had medical bills 2.3 times higher than those not experiencing diabetes.[68]



Missoula had a lower diabetes prevalence rate than either Montana or the US. In 2020, Missoula's rate of 5.8% was almost half the US rate of 9.9%.

Missoula had approximately five newly diagnosed cases of diabetes per 1,000 adults aged 20 or more every year from 2010 to 2019.





The 2010 to 2020 US adult rate of diabetes diagnosis varied between 4.5% and nearly 7%.

Healthy People 2030 objectives for diabetes focus on reducing diabetes cases, complications, and deaths. This includes:

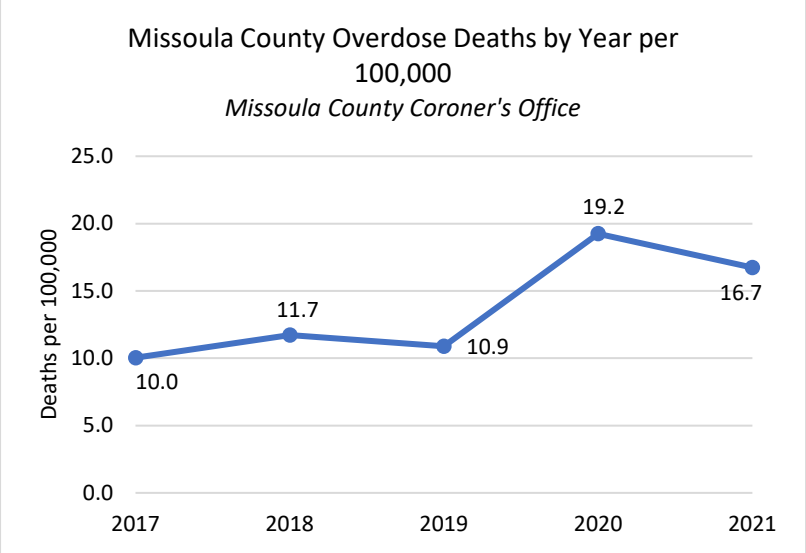
1. Reducing the number of new diabetes cases diagnosed yearly to 4.8 per 1,000 adults;
2. Reducing the rate of death from any cause in adults with diabetes to 13.7%;
3. Reduce the rate of hospital admissions for diabetes among older adults to 264 per 100,000 adults aged 65 years and older;
4. Reduce the annual number of new cases of diagnosed diabetes in the population to 4.8 per 1,000 adults aged 18 to 84 years old;
5. Reduce the rate of lower extremity amputations to 4.3 per 1,000 adults aged 18 years and over with diagnosed diabetes; and
6. Increasing the proportion of people who receive formal diabetes education to 55.2% of adults aged 18 and older with a diabetes diagnosis.

Drug and Alcohol Use

Misuse of drugs and alcohol can have devastating consequences. Some of these include overdoses and substance use disorder. Information included in prior CHA sections on substance use disorder is now included in this section.

Drug Use

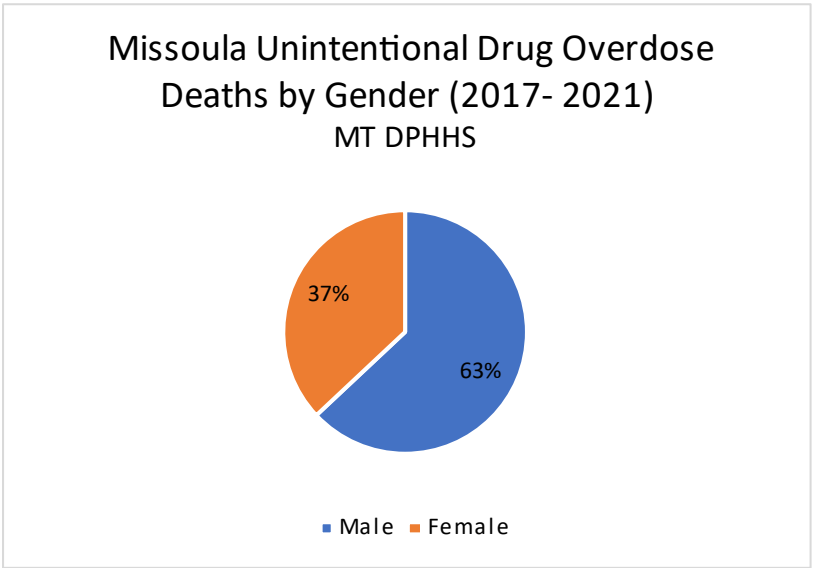
The rate of overdose deaths in Missoula increased since the 2017 CHA. The overdose rate peaked in 2020 with 19.2 deaths per 100,000 individuals, nearly double that seen in 2017. In 2021, a decline occurred with the rate dropping to 16.7 deaths per 100,000. These numbers excluded those where the death by suicide was a drug poisoning.



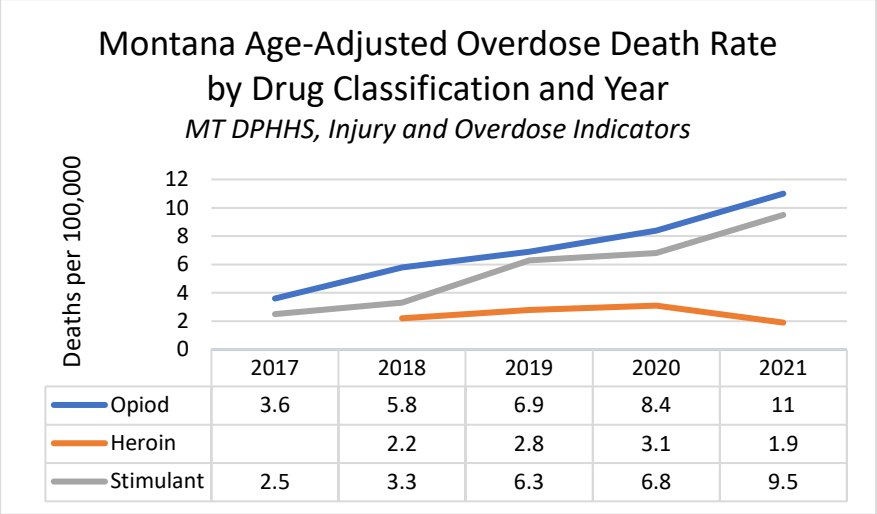
Gender was a factor in overdose rates. Males were nearly twice as likely to die from unintentional drug overdoses than females; 63% of unintentional overdose deaths were for males and 37% for females.

Missoula and Montana had similar overdose death rates. Opioids were the leading cause of overdose deaths statewide, and that number has steadily increased. The use of Narcan may impact these rates in the future.

Since 2017, the Montana number of fatalities from opioid overdose increased from 3.6 deaths per 100,000 population to 11 per 100,000 population in 2021.



Stimulants were the second leading cause of overdose deaths in Montana and that number rose. In 2021, stimulant deaths were 9.5 per 100,000 population, a nearly fourfold increase since 2.5 deaths per 100,000 in 2017.

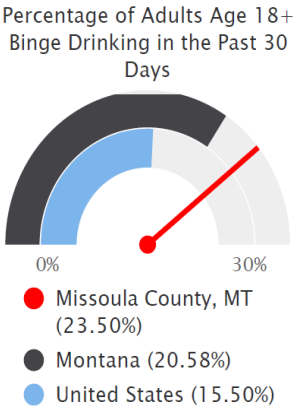


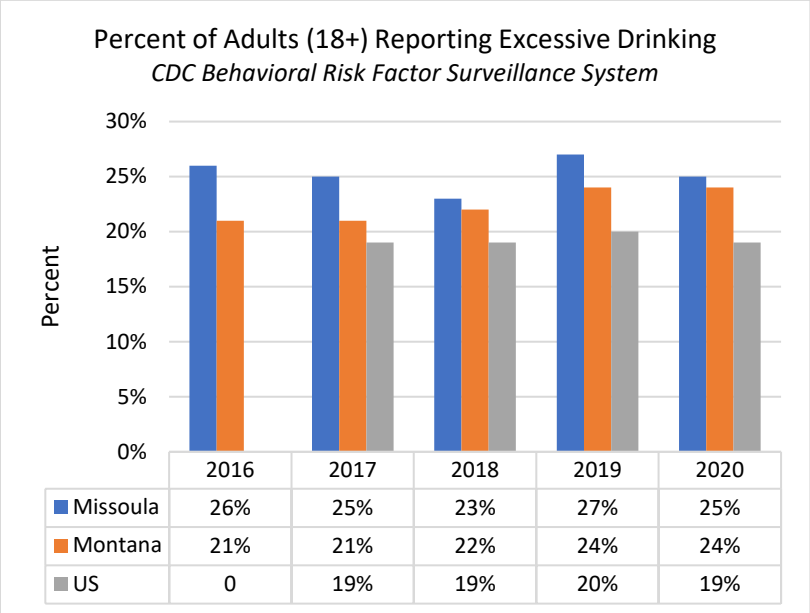
	2017	2018	2019	2020	2021
Opiod	3.6	5.8	6.9	8.4	11
Heroin		2.2	2.8	3.1	1.9
Stimulant	2.5	3.3	6.3	6.8	9.5

Heroin deaths in Montana were the third leading cause of overdose deaths. This decreased from 2.2 deaths per 100,000 in 2018 to 1.9 deaths per 100,000 in 2021.

Alcohol Use

Alcohol use and misuse occur in Missoula. 23.50% of adults aged 18 years and over in Missoula reported binge drinking. The binge drinking rate was higher than the statewide Montana rate of 20.58% or the US rate of 15.50%.[69]

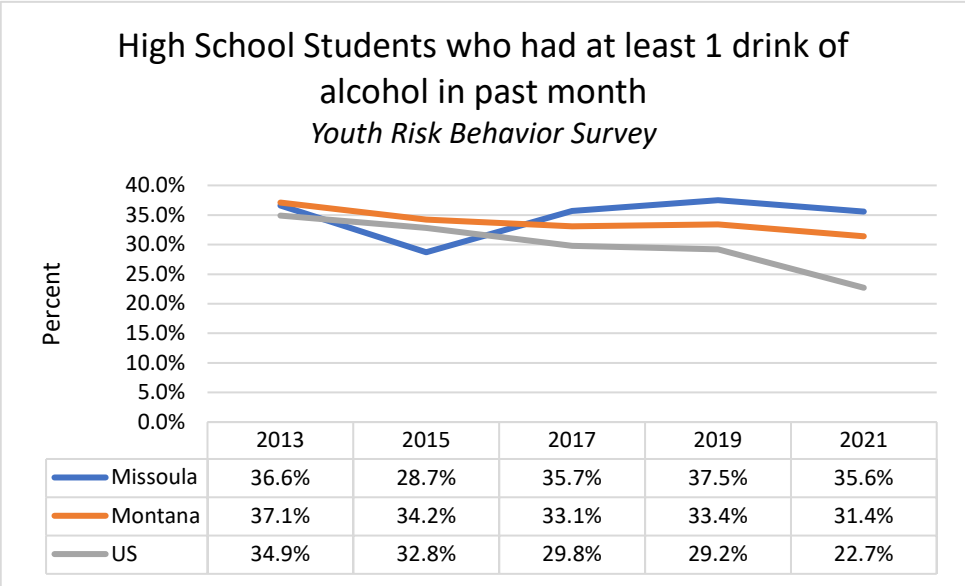




	2016	2017	2018	2019	2020
Missoula	26%	25%	23%	27%	25%
Montana	21%	21%	22%	24%	24%
US	0	19%	19%	20%	19%

Missoula was also higher in the percentage of adults reporting excessive drinking than either Montana or the US from 2016 to 2020. In 2020, Missoula's rate was 25% of adults reported excessive drinking compared to Montana's rate of 24% and 19% in the US.

Missoula high school students reported a higher rate of drinking alcohol than either those in Montana or the US.



	2013	2015	2017	2019	2021
Missoula	36.6%	28.7%	35.7%	37.5%	35.6%
Montana	37.1%	34.2%	33.1%	33.4%	31.4%
US	34.9%	32.8%	29.8%	29.2%	22.7%

2021's rate was 35.6% of Missoula high school students reported having a drink in the past month as compared to Montana's rate of 31.4% and the US rate of 22.7%.

Healthy People 2030 objectives for drug and alcohol use include specific objectives for various populations and issues, including addiction, adolescents, chronic pain, hospital and emergency services, infectious diseases, injury prevention, mental health, and pregnancy. Missoula made progress toward meeting Healthy People 2030 objectives because Missoula's overdose drug death rate was less than what Healthy People 2030 aimed for, even though ideally the number would be zero overdose deaths.

Healthy People 2030 goals include the following:

Overdose Deaths:

1. Reduce the number of overdose drug deaths per year to 20.7 per 100,000 population;
2. Reduce overdose deaths involving heroin is to reduce it to 4.2 per 100,000 population;
3. Reduce deaths involving opioids to 13.1 per 100,000 population;
4. Reduce overdose deaths involving methadone to 0.84 per 100,000 population;
5. Reduce overdose deaths involving synthetic opioids other than methadone (e.g., fentanyl) to 8.9 deaths per 100,000 population.

Substance Use Disorders:

1. Reduce the proportion of persons with illicit drug use disorder in the past year to 2.7%;
2. Reduce the proportion of persons with marijuana use disorder in the past year to 1.3%;
3. Reduce the proportion of persons with opioid use disorder in the past year to 0.5%.

Misuse:

1. Reduce the misuse of prescription drugs in the past year to 3.6%;
2. Reduce the proportion of prescription pain reliever misuse in the past year to 3.3%;
3. Reduce the proportion of prescription pain reliever misuse initiation in the past year to 0.58%.

Use:

1. Reduce the proportion of adolescents reporting use of any illicit drugs during the past 30 days to 5.5%;
2. Reduce the proportion of adolescents reporting use of marijuana during the past 30 days to 5.8%;
3. Reduce the proportion of persons using heroin in the past year to 0.33%;
4. Reduce the proportion of persons who initiate heroin use in the past year to 0.03%;
5. Reduce the proportion of adults reporting use of marijuana daily or almost daily to 3.4%;
6. Increase abstinence from illicit drugs among pregnant women to 95.3%.

Alcohol:

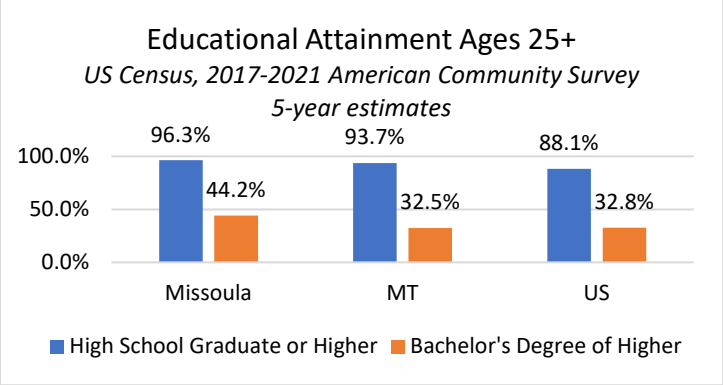
1. Reduce the proportion of adolescents aged 12 to 17 years reporting use of alcohol during the past 30 days to 6.3%;
2. Reduce the proportion of adolescents reporting use of alcohol during the past 30 days to 6.3%;
3. Reduce the proportion of persons under 21 years of age engaging in binge drinking of alcoholic beverages during the past 30 days to 8.4%;
4. Reduce the proportion of persons with alcohol use disorder in the past year to 3.9%;
5. Reduce the proportion of persons aged 21 years and over engaging in binge drinking of alcoholic beverages during the past 30 days to 25.4%;
6. Reduce cirrhosis deaths to 10.9 cirrhosis deaths per 100,000 population;
7. Increase the proportion of persons who need alcohol and/or illicit drug treatment who received specialty treatment for a substance use problem in the past year to 14.0%
8. Reduce the proportion of motor vehicle crash deaths involving an alcohol-impaired driver with a blood alcohol concentration (BAC) of 0.08 grams/deciliter (g/dL) or higher to 28.3%; and
9. Reduce the rate of acute hepatitis C to 0.1 per 100,000 population.

Educational Attainment

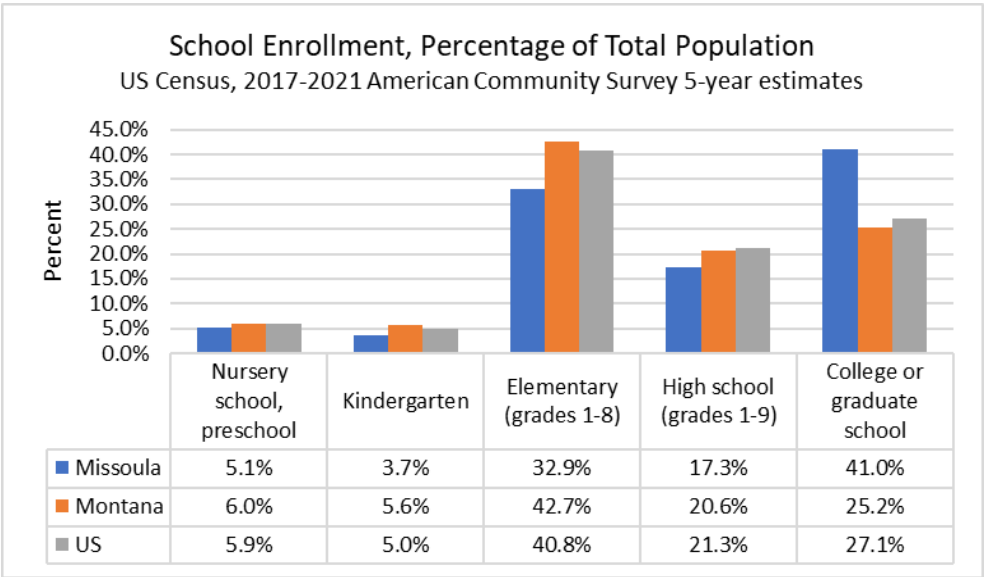
Educational attainment is the level of formal education individuals seek and attain. Income, life goals, location, family history of education, race, and social stigma all may impact who seeks higher levels of education.[70] The ability to obtain more education is impacted by complex factors. These include the rising cost of education, the complexity of financial aid, and possible racial biases.[71] The correlation between a lower educational level and being more likely to experience poverty is discussed in the section on Poverty and Living Wage.

Education attainment may impact health. Increased educational level was related to increased life expectancy, increased healthy behaviors, improved income, less social isolation, and working jobs with fewer safety hazards.[72] In Missoula, those with a bachelor's degree earned, "only 67 percent of the US Median."[73] Missoula's educational attainment rates were high compared to the US or Montana rates. Missoula had a lower rate of people who had not graduated from high school than the US or Montana.

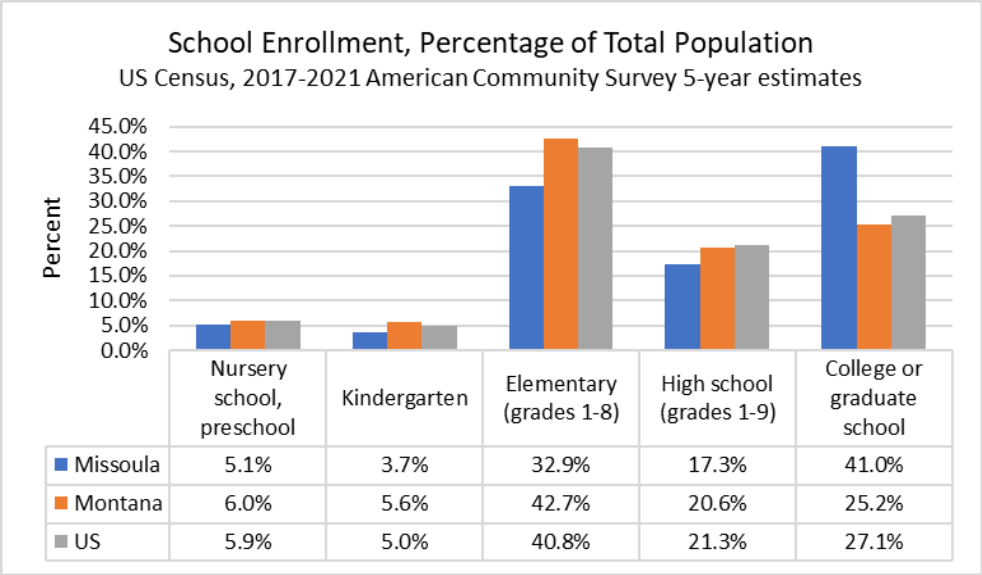
Missoula had a higher rate of people who earned a bachelor's, graduate, or professional degree than either Montana or the US. The presence of the University of Montana, a higher educational institution system, likely influenced this rate.



The enrollment rates for High School, Elementary School, Kindergarten, and Preschool were lower than the national and Montana rates. This was because Missoula had a smaller portion of its population in those age ranges so the proportion of the population enrolled would be a lower percent of the total population of Missoula.[74]



	Nursery school, preschool	Kindergarten	Elementary (grades 1-8)	High school (grades 1-9)	College or graduate school
Missoula	5.1%	3.7%	32.9%	17.3%	41.0%
Montana	6.0%	5.6%	42.7%	20.6%	25.2%
US	5.9%	5.0%	40.8%	21.3%	27.1%



	Nursery school, preschool	Kindergarten	Elementary (grades 1-8)	High school (grades 1-9)	College or graduate school
Missoula	5.1%	3.7%	32.9%	17.3%	41.0%
Montana	6.0%	5.6%	42.7%	20.6%	25.2%
US	5.9%	5.0%	40.8%	21.3%	27.1%

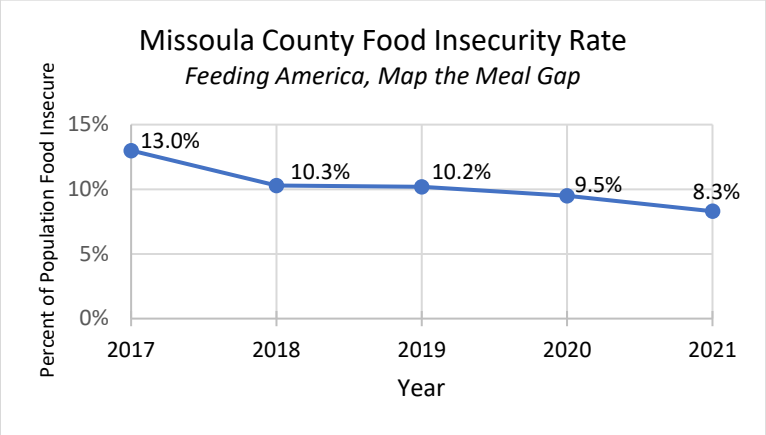
Healthy People 2030 Objectives for this include the following:

1. Increase the proportion of students with disabilities who spend at least 80 percent of their time in regular education programs to 73.3%;
2. Increase the proportion of adolescents who participate in daily school physical education 39.0%;
3. Increase the proportion of adolescents who receive formal instruction on delaying sex, birth control methods, HIV/AIDS prevention, and sexually transmitted diseases before they were 18 years old 59.1%;
4. Increase the proportion of students who graduate with a regular diploma 4 years after starting 9th grade 90.7%;
5. Increase the proportion of high school completers who were enrolled in college the October immediately after completing high school to 73.7%;
6. Reduce chronic school absence among early adolescents to 16.4%; and
7. Increase the proportion of students participating in the School Breakfast Program 34.9%.

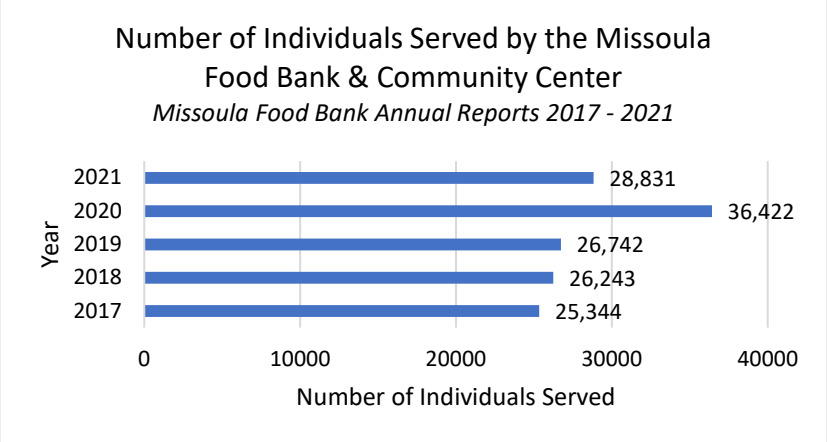
Food Security

Food security is to have access to, "nutritionally adequate and safe foods," and the "ability to acquire acceptable foods in socially acceptable ways." Food insecurity typically results from the lack of ability of a household to afford food. This is influenced by factors such as income, housing cost, poverty, the ability to access a grocery store, and the ability to grow food. For this CHA, food security and nutrition security are examined as separate topics.

Lack of food security has a variety of potential health outcomes. These include increased risk for chronic diseases and conditions such as diabetes, obesity, heart disease, mental health conditions, and cancer.[75] Mental health may affect food security. An individual's ability to work and earn income to purchase food may be decreased if they are dealing with a mental health issue. Adults with a mental health condition were up to 5 times more likely to be food insecure. Being food insecure increases rates of anxiety and depression. Educationally, it may cause children to have trouble in school. Children and adolescents enduring food insecurity were more likely to have and develop emotional problems and more likely to be diagnosed with a mental health condition than their food-secure peers.[76]

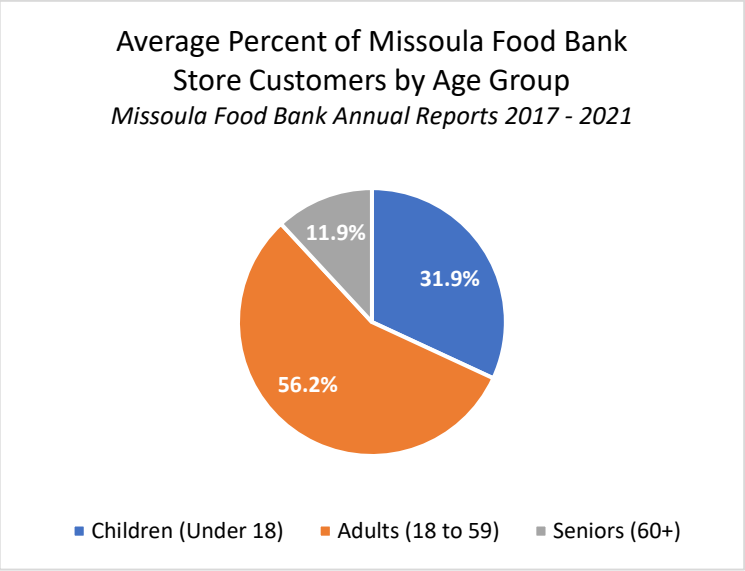


Between 13.0% and 8.3% of Missoula's population were food insecure from 2017 to 2021. This rate decreased over time. Missoula had some services to help with food insecurity but need still exists.



The Missoula Food Bank and Community Center had food available for people who could not afford to purchase

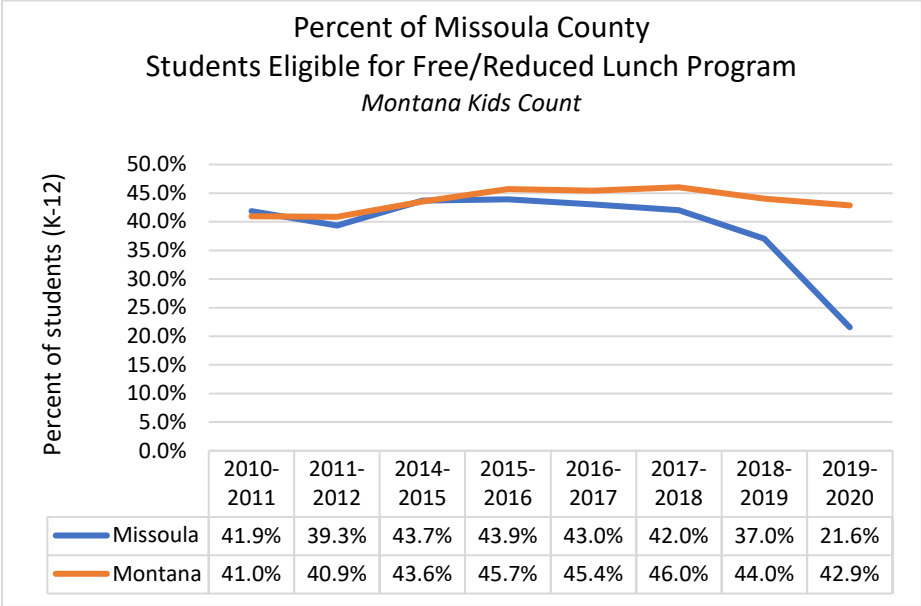
food. In 2017, 25,344 people were served by the Food Bank with that number spiking in 2020 to 36,422 and decreasing in 2021 to 28,831.



Most individuals accessing the Food Bank were adults aged 18 to 59. The second highest group was children under 18 years of age at 31.9%. The third highest group was seniors aged 60 years and above, at 11.9%.

Montana Supplemental Nutrition Assistance Program (SNAP) provides quality food assistance for those in need. In 2017, approximately 13,000 Missoula residents received SNAP food assistance. This number declined through 2021 when only approximately 9,000 people received SNAP assistance. The rates of people needing food assistance likely did not decrease during this time, shown by the increased use of the Food Bank. It was possible that state policy changes regarding who and how one received SNAP benefits impacted the decrease in utilization of SNAP benefits while at the same time the need for food assistance rose. For example, in 2021, the year with the lowest SNAP participants, the number of individuals accessing the Food Bank continued to be high.[77]

The number of Missoula students eligible for the free or reduced lunch program declined from 2017 to 2020. In the 2019-2020 school year 21% of students qualified. This was nearly half the number that qualified in 2017. The rates in Missoula were lower than the rates in Montana for the same time between 42 and 46%. A decrease in these rates did not mean fewer children were going hungry and had food security; the decrease only indicated that fewer children were receiving food through these programs. State



	2010-2011	2011-2012	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Missoula	41.9%	39.3%	43.7%	43.9%	43.0%	42.0%	37.0%	21.6%
Montana	41.0%	40.9%	43.6%	45.7%	45.4%	46.0%	44.0%	42.9%

policies or other factors may have impacted the availability of food through these programs, leading to decreased usage and available funding.

Giving more people benefits through nutrition assistance programs, increasing benefit amounts, and addressing unemployment may help reduce food insecurity and hunger.

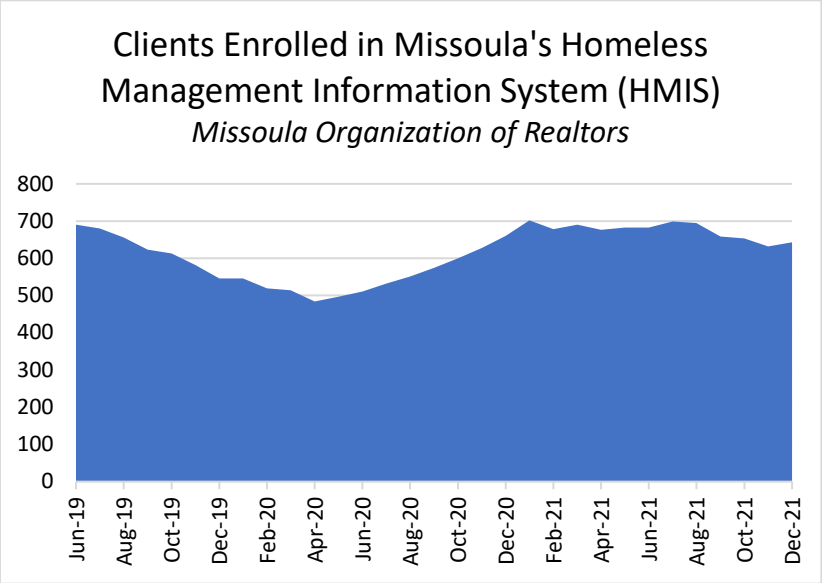
Healthy People 2030 recognizes the importance of food security. It has goals to:

1. Eliminate very low food security in children to 0%; and
2. Reduce household food insecurity and in doing so reduce hunger to 6%.

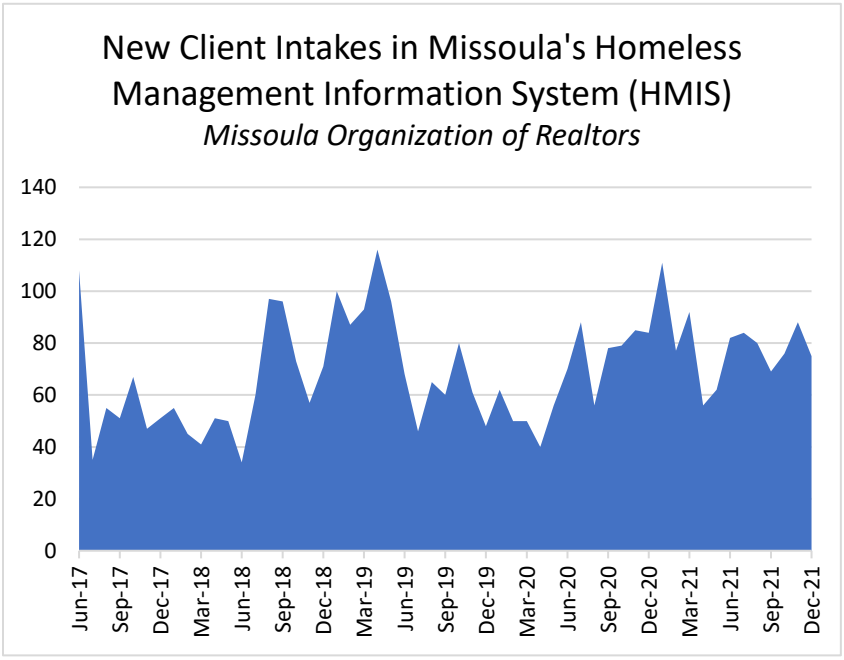
Houselessness

The CDC and American Public Health Association (APHA) have recognized houselessness as a public health issue. Those experiencing houselessness have a higher risk of chronic mental and physical health conditions and co-occurring disorders. They experience barriers to health care and affordable housing which can lead to emergency health services being one of the only ways people experiencing houselessness can access health care. This can lead to higher treatment costs.

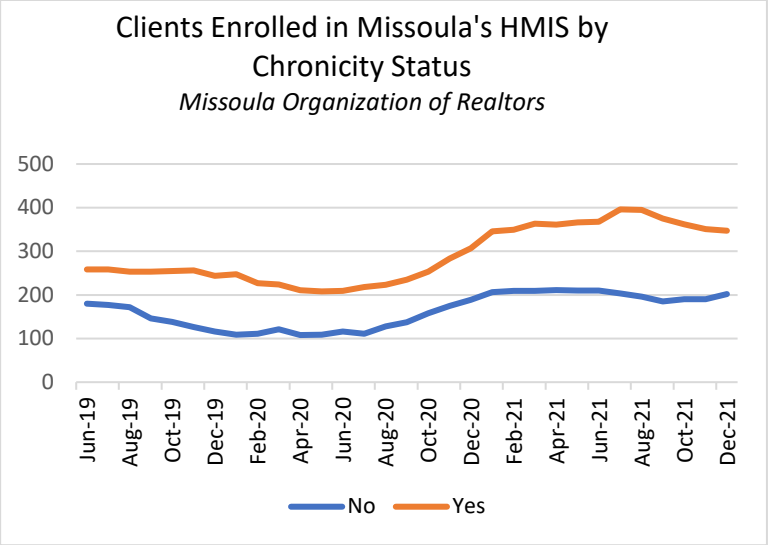
The City of Missoula created the Missoula Coordinated Entry System (MCES) and Homeless Management Information System (HMIS) in which clients were enrolled with the goal "to have a comprehensive response in place that ensures homelessness is prevented whenever possible, or if it can't be prevented, it is a rare, brief, and one-time experience."



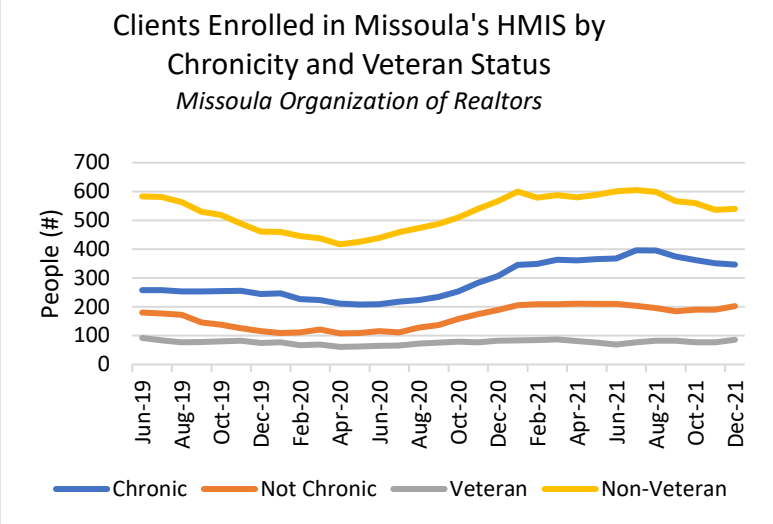
From June 2019 to December 2021, the number of clients enrolled in Missoula's HMIS was between 600 and 700 people. New client intakes in Missoula's HMIS varied between approximately 40 to 115 individuals. In December 2021, the rate for new client intakes was nearly 80 individuals.



Most people enrolled in HMIS were "chronically houseless." This meant they experienced houselessness for at least a year – or repeatedly – while struggling with a disabling condition such as a serious mental illness, substance use disorder, or physical disability.[78] In December of 2021, approximately 350 people were experiencing chronic houselessness.



A majority of those experiencing houselessness were not veterans. In December 2021, only 90 individuals were veterans with approximately 540 not being veterans.

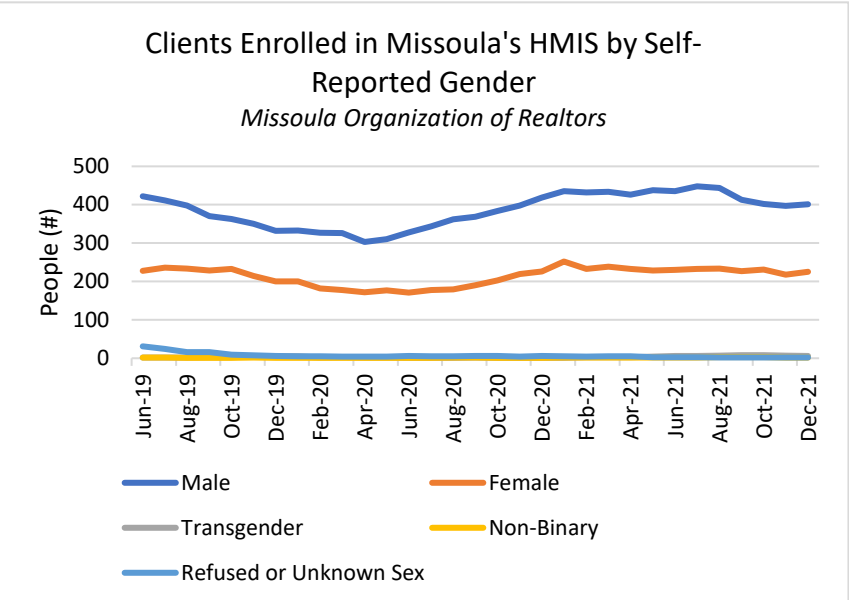


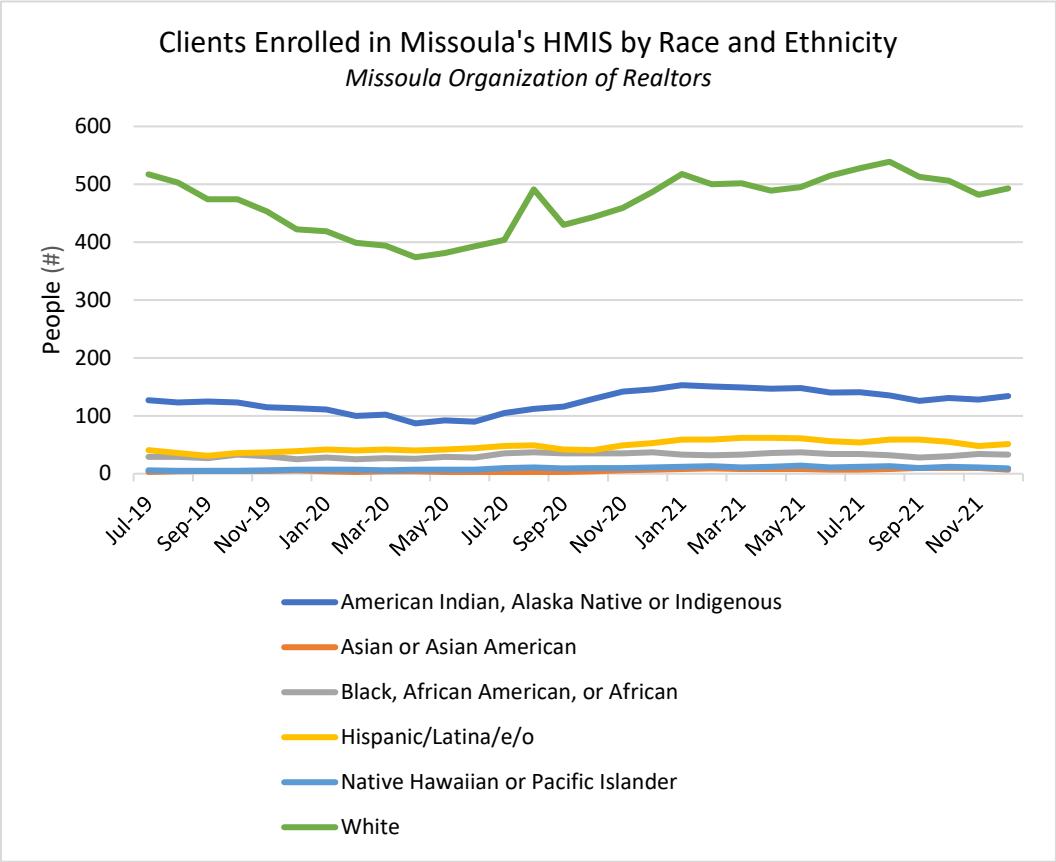
Individuals enrolled in HMIS were more likely to identify as males than females. In December 2021, through self-identification, there were approximately 400 males, 225 females, and 10 transgender and non-binary individuals enrolled in HMIS.

In December 2021, most individuals in Missoula's HMIS identified their race and ethnicity as White.

The second most self-reported race and ethnicity group was American Indian, Alaska Native, or Indigenous with about 140 individuals.

Hispanic/Latina/e/o individuals were the third most populous group with





approximately 60 individuals. Black, African American, or African were the next highest group identified with approximately 40 individuals.

Healthy People 2030 has goals that involve houselessness in other areas, such as reducing poverty and improving mental health services.

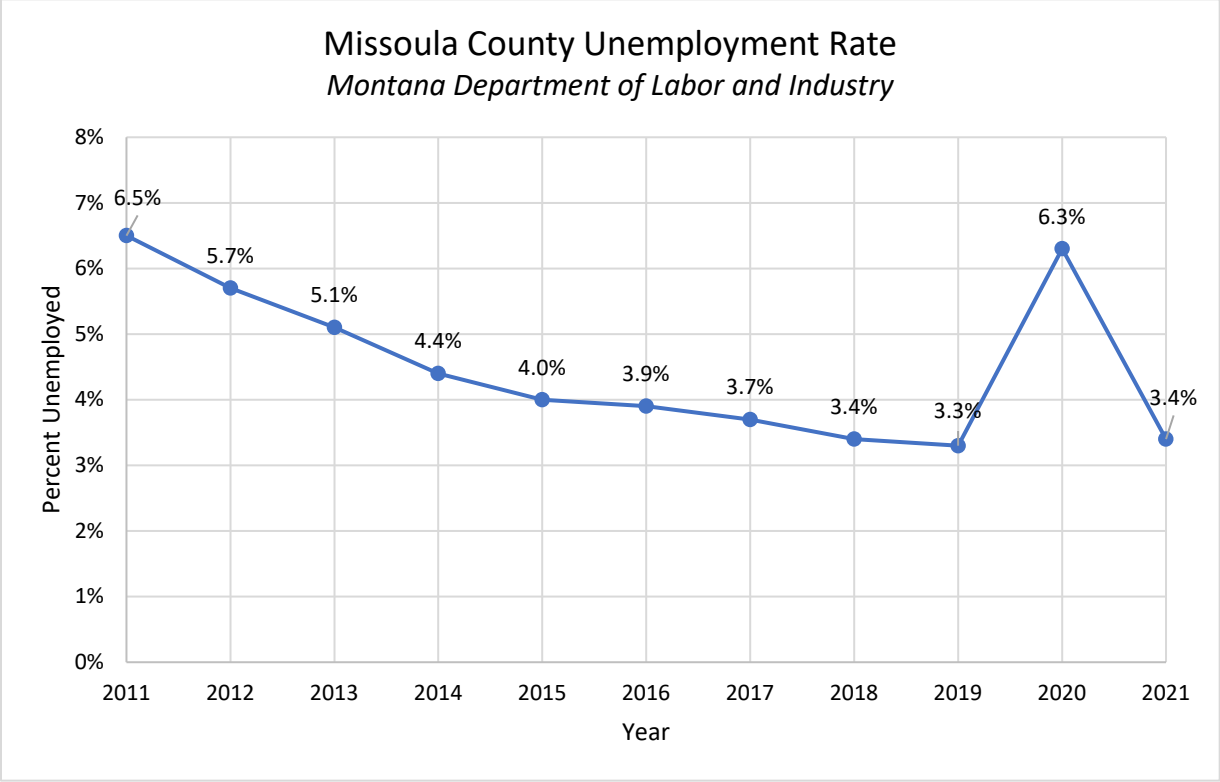
For example, one objective that was in the research stage was to increase the proportion of houseless adults with mental health problems who receive mental health services. No specific goal was provided because this objective was still in the research stage.

Income and Employment

Steady employment with sufficient income is a crucial foundation for health and well-being. They enable one to earn sufficient money to live life comfortably and contribute to society.

Because income and employment touch on so many parts of people's lives, it is hard to separate their health impacts from other social determinants of health. For example, lower incomes increase the chance of housing instability and the health impacts that happen from this lack of security. This may impact other life events such as having more difficulty leaving unsafe conditions, less opportunity to access education, and greater trouble in receiving medical care, all of which impact health.

Employment provides additional benefits that impact health. These include access to paid time off and health insurance, although not all employment offers these benefits. Lack of different employment opportunities can impact health by not permitting a person to leave an unsafe or toxic work environment because no other opportunities exist.[79]

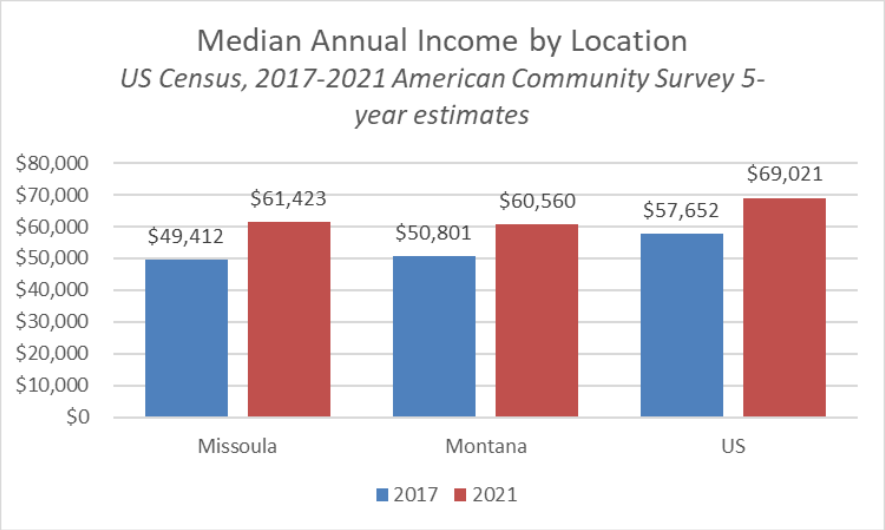


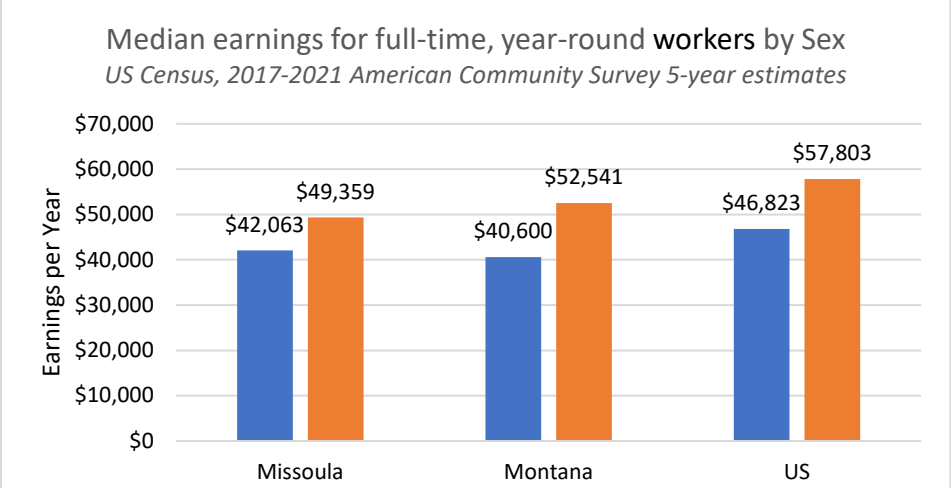
In 2021, Missoula had an unemployment rate of 3.4%. This rate generally trended downward except for a spike to 6.3% at the same time the COVID-19 pandemic began.

In a 2021 report on Missoula's workforce, the Missoula Economic Partnership determined low wages and housing costs made it difficult for people to move to Missoula for work. One of the most significant barriers for residents was the cost and availability of childcare. Because

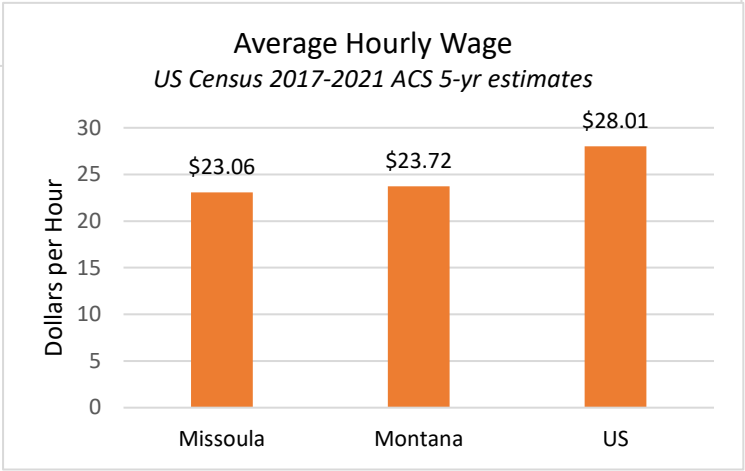
of the lack of childcare enrollment options, and the cost, some families had one parent remain at home to care for their child. This situation further reduced the number of adults in the workforce and decreased a family's income.[80]

Missoula's average yearly income was generally lower than both Montana and the US. In 2021, Missoula residents earned on average $61,423, which was slightly higher than the Montana average of $60,560 but approximately $8,000 less than the US national average. This gap would be larger when accounting for racism, sexism, and other forms of discrimination.



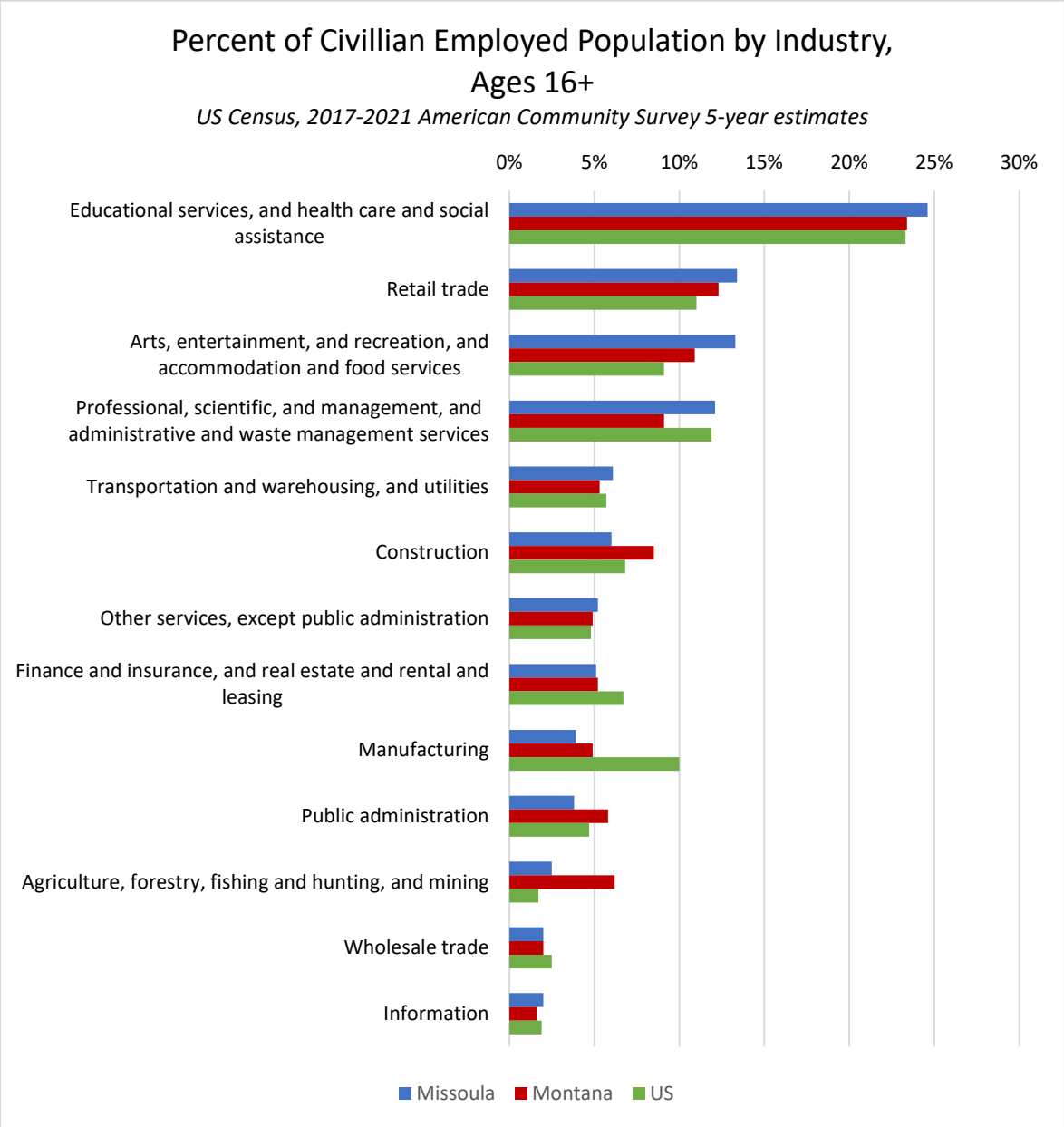


A gender gap existed between wages. A lower income gap existed between males' and females' earnings in Missoula than in either Montana or the United States. However, a $7,000 difference in earnings still existed. Missoula's gap was lower than in the US or in Montana (the highest gap).



Missoula residents earned on average $23.06 per hour which was nearly $5 less than the US average wage of $28.01 and $0.66 less than the average Montana wage of $23.72.

An earnings gap was seen in various professions. Most job fields in Missoula paid below the US median income for people in similar positions. The average Missoula pay for the same job was 88% of the national average.[81]



The largest fields of employment in Missoula were educational services, health care, and social assistance with 24.6% of Missoula workers in those fields. These same job areas had the highest rates of employment in Montana and the US.[82]

Healthy People 2030 has multiple goals regarding income and employment. Some goals for work-related injuries are included in the Injury section of this CHA. Other goals include:

1. Increase employment in working-age people to 75%;

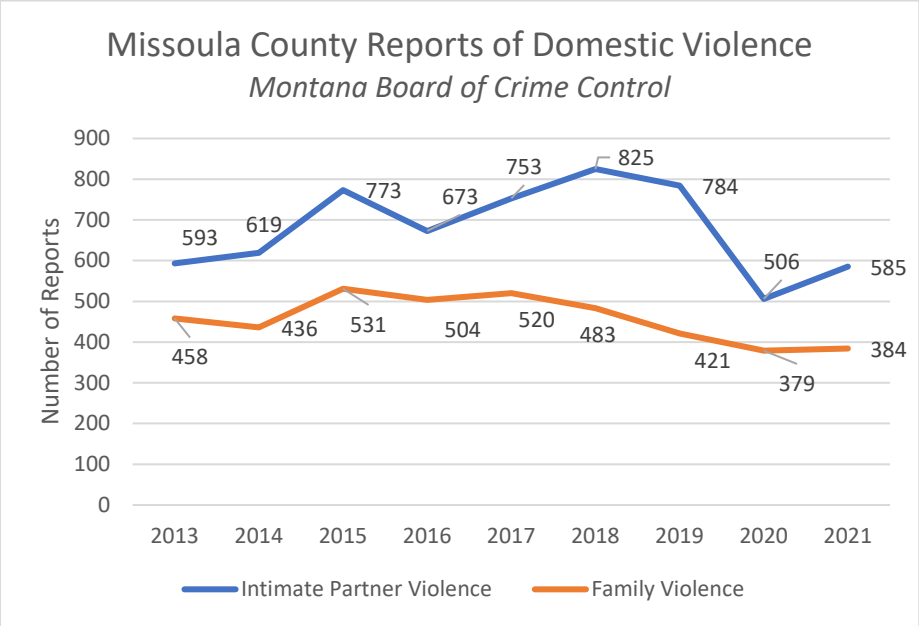
2. Increase the proportion of children living with at least 1 parent who works full-time to 85.1%;
3. Reduce the proportion of adolescents and young adults who are not working or in school to 10.1%; and
4. Reduce new cases of occupational hearing loss to 1.4 per 10,000 full-time workers.

New workplace wellness and safety goals are in the developmental stage by Healthy People 2030. These include having worksites offer employee health promotion programs, nutrition programs, and physical activity programs.

Intimate Partner Violence

Intimate partner violence damages health with numerous negative health effects on survivors and families.[83] Violence within a family or against a romantic partner is commonly called intimate partner violence or domestic violence. It can include sexual violence, physical violence, stalking, teen dating violence, and family violence. Family violence is violence that occurs within a family but is not between romantic partners.

Impacts of intimate partner violence can include a wide range of physical chronic conditions affecting, "the heart, muscles and bones, and digestive, reproductive, and nervous systems.[84] Survivors can experience behavioral and mental health conditions like PTSD, depression, increased risk for smoking, binge drinking, and sexually risky activities.[85] An economic cost exists for survivors, including lost time at work, injuries, and criminal justice costs averaging $103, 767 for women and $23,414 for men over their lifetimes.[86]



In 2018, 20% of all violent crimes across Montana were domestic violence. The rate of domestic violence in Montana trended downward since 2018. However, the rates increased for intimate partner violence and family violence in 2021. The Montana Board of Crime Control reported 585 reports of intimate partner violence in Missoula and 384 of family violence in 2021. While this rate was lower than in the 2017 CHA which had 753 reports of intimate partner violence and 520 of family violence, rates appeared to be rising. 37.2% of Montana females and 34.6% of Montana males experienced intimate partner violence – a smaller gender divide than nationally at 41% of females and 26% of males.[87]

Firearms played a large part in intimate partner violence in Montana, being involved in 75% of all intimate partner homicides between 2000 and 2016. When an abuser had access to a firearm the risk of death increased five-fold.[88]

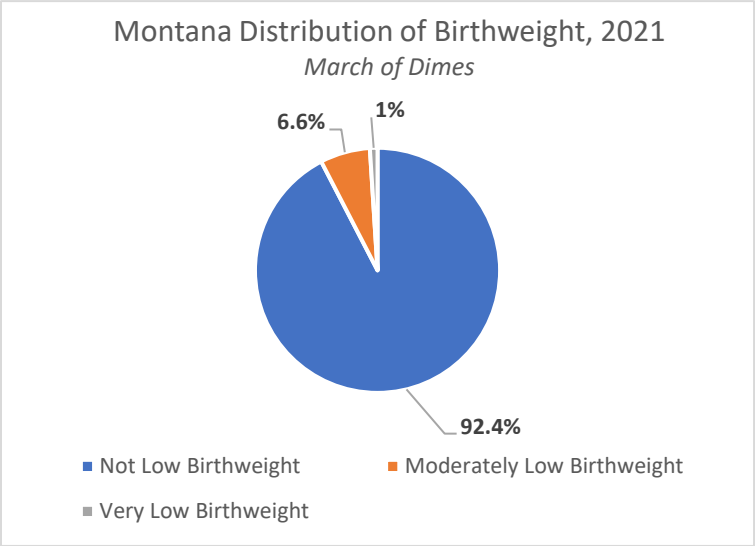
Healthy People 2030 has objectives related to intimate partner violence that include:

1. Reducing firearm-related deaths, which is involved with intimate partner violence, to 10.7 per 100,000 population (this includes death by homicide, suicide, and unintentional injuries);
2. Reducing adolescent dating violence (sexual or physical) to 11.4%;
3. Reducing adolescent sexual violence by anyone to 8.7%; and
4. One emerging objective is to reduce intimate partner violence although, because this objective is still in a developmental stage, exact targets are not yet available to reach.

Low Birthweight

Low birthweight (LBW) is included in the CHA because the weight an infant has at birth impacts their health. Numerous factors can increase the likelihood of an infant having LBW. When infants are born too early, sick, or just too small, they often have LBW. The average birthweight of a child is between five pounds, eight ounces, and eight pounds, thirteen ounces.[89] When a child weighs less than five pounds, eight ounces, at birth they are considered to have a low birth weight.[90] Children were classified as having very LBW (VLBW) when they were less than three pounds, five ounces. For this report, the term LBW includes VLBW and LBW infants.

Different factors increase the likelihood of having an infant with LBW. A pregnant person's health can impact the occurrence of an infant being LBW. Sometimes an infant will be born LBW and no reason why can be identified. Maternal factors include maternal use of nicotine and alcohol, the mother's age, experiencing domestic abuse, and experiencing health disparities. Environmental factors such as maternal exposure to lead or air pollution can contribute to having a LBW infant.[91]



Babies born LBW are more likely to experience various medical conditions throughout their lifetime. As infants, they are more likely to develop breathing problems, bleeding in the brain, heart and intestinal development troubles, jaundice, and delays in immune system development. As they grow and develop, they are more likely to have diabetes, heart disease, high blood pressure, mental and physical impairments, and obesity.[92]

Missoula's rate of LBW infants was consistently lower than Montana's or the US rates. The percentage of LBW infants in Montana remained between 7.1% and 8% between 2011 and 2021. Montana's rate rose in 2017 to 8% of births, decreased to 7.3% in 2019, and was 7.6% in 2021. In 2014 Missoula's rate was 4.8% of births, decreasing to 3.2% in 2021. In 2021, Montana's rate of 7% was more than twice Missoula's rate. The US rate of 8.5% in 2021 was nearly three times that of Missoula's rate.

Healthy People 2030's goal is to decrease LBW births to less than 7.8% of all births. Missoula exceeded this goal.

Maternal and Infant Health

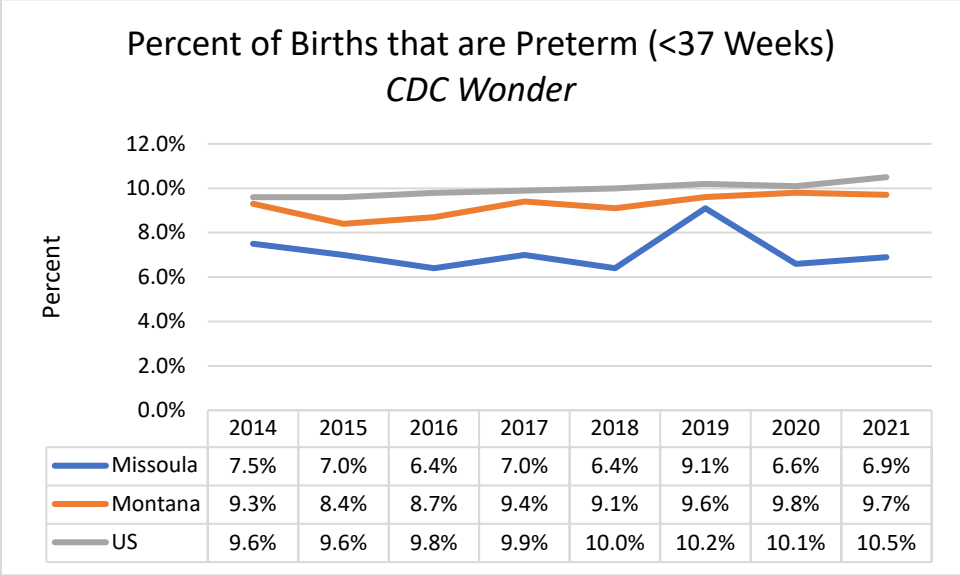
Maternal and infant health is included in the CHA because, as Healthy People 2030 emphasized, improving the well-being of mothers, infants, and children is an important public health goal. Their well-being determines the health of the next generation. It can impact future health and public health challenges for families, communities, and the healthcare system.

The time of pregnancy and postpartum can be an opportunity to prevent future health problems for women and children. An infant having a low birth weight is an important infant health factor and is included in a separate CHA section.

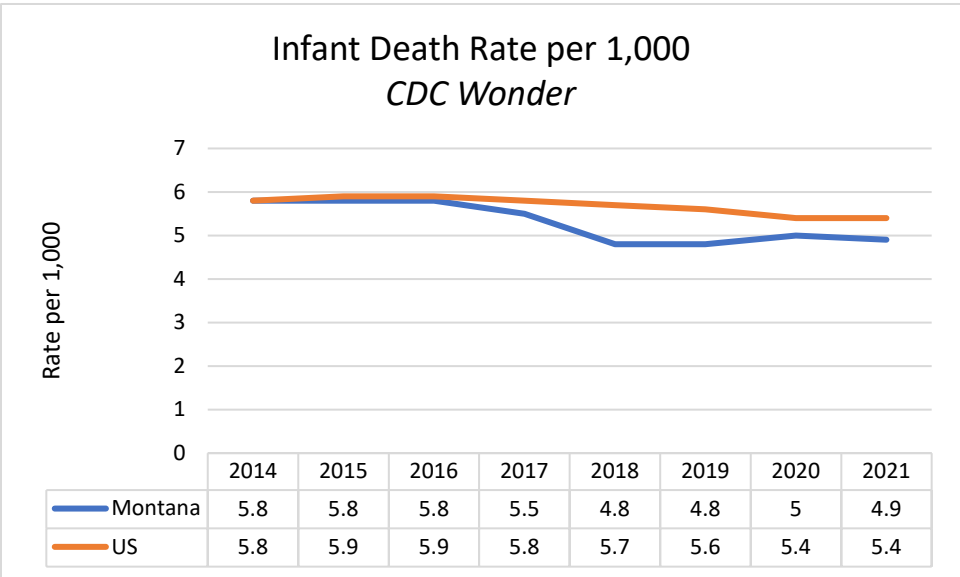
Missoula's rate of babies born early, called pre-term, was 6.9% in 2021, lower than the 9.7% Montana rate or US rate of 10.5%.

Missoula's rate slightly decreased over time while the US and Montana rates increased.

Montana, not Missoula specifically, had an infant death rate lower than the US average. Montana's rate in 2021 was 4.9% compared to the national average of 5.4%. Both these rates decreased from 2014 to 2021 with Montana having a greater decrease than the US (0.9% and 0.4% respectively).

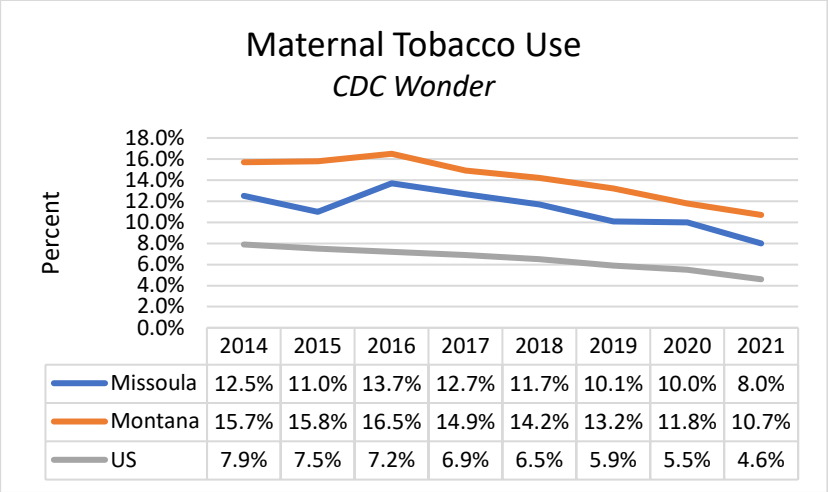


	2014	2015	2016	2017	2018	2019	2020	2021
Missoula	7.5%	7.0%	6.4%	7.0%	6.4%	9.1%	6.6%	6.9%
Montana	9.3%	8.4%	8.7%	9.4%	9.1%	9.6%	9.8%	9.7%
US	9.6%	9.6%	9.8%	9.9%	10.0%	10.2%	10.1%	10.5%



	2014	2015	2016	2017	2018	2019	2020	2021
Montana	5.8	5.8	5.8	5.5	4.8	4.8	5	4.9
US	5.8	5.9	5.9	5.8	5.7	5.6	5.4	5.4

Maternal tobacco use can impact maternal and infant health. In 2021, Missoula's maternal tobacco use rate of 8.0% was lower than Montana's rate of 10.7% but higher than the US rate of 4.6%. Missoula, Montana, and US rates decreased from 2014 to 2021.



	2014	2015	2016	2017	2018	2019	2020	2021
Missoula	12.5%	11.0%	13.7%	12.7%	11.7%	10.1%	10.0%	8.0%
Montana	15.7%	15.8%	16.5%	14.9%	14.2%	13.2%	11.8%	10.7%
US	7.9%	7.5%	7.2%	6.9%	6.5%	5.9%	5.5%	4.6%

Healthy People 2030 objectives for maternal and infant health include:

Mortality:

1. Reduce the infant death rate within the first year of life to 5.0 per 1,000 live births;
2. Reduce maternal deaths to 15.7 per 100,000 live births;

Preterm Birth:

1. Reduce preterm births to 9.4%;

Birth Spacing:

1. Reduce the proportion of pregnancies conceived within 18 months of a previous birth to 26.9%;

Breastfeeding:

1. Increase the proportion of infants who are breastfed at 1 year to 54.1%;
2. Increase the proportion of infants who are breastfed exclusively through 6 months of age to 42.4%;

Hearing:

1. Increase the proportion of infants with confirmed hearing loss who are enrolled for intervention services no later than 6 months of age to 62.9%;
2. Increase the proportion of infants who did not pass the hearing screening test that receive diagnostic audiologic evaluation for hearing loss no later than 3 months of age to 79.2%;

Safe Sleeping:

1. Increase the proportion of infants who are put to sleep on their backs to 88.9%;

Vaccination:

1. Increase the vaccination coverage level of 4 doses of the diphtheria-tetanus-acellular pertussis (DTaP) vaccine among children by age 2 years to 90%;

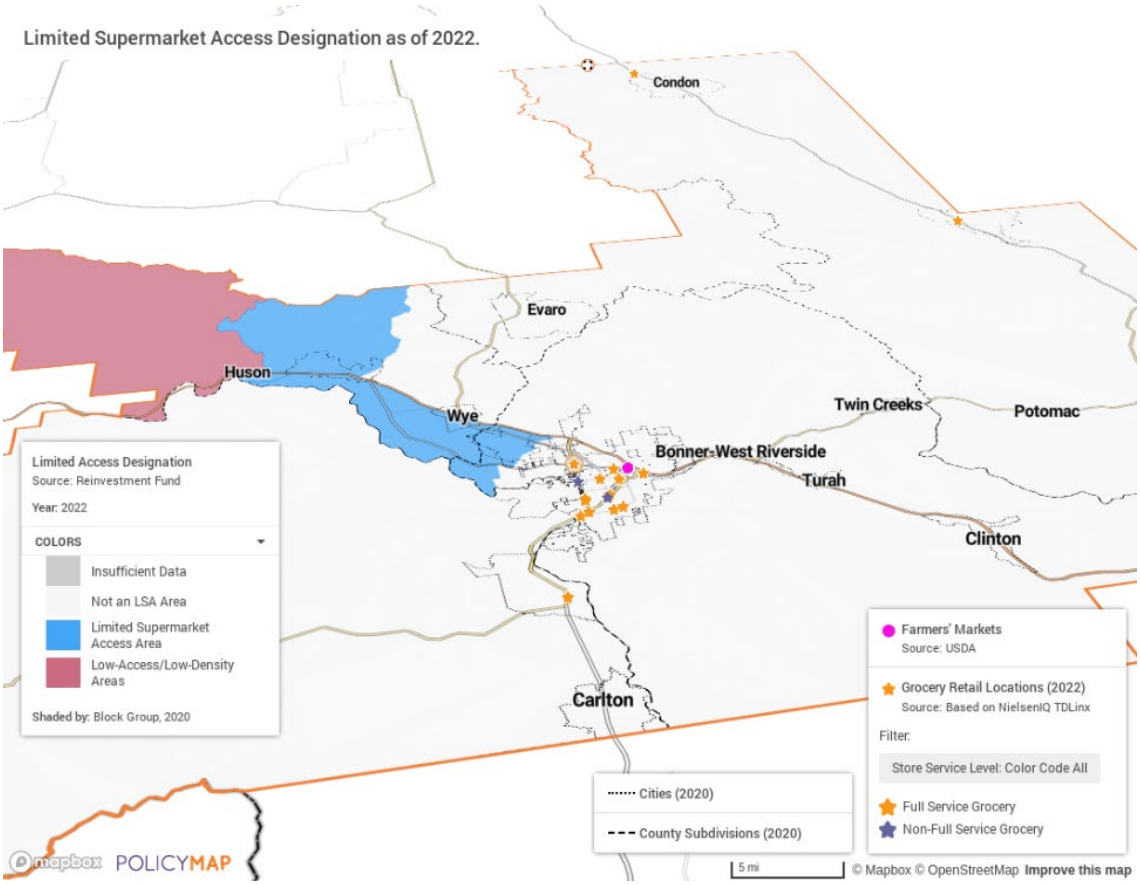
Substance Use:

1. Increase abstinence from alcohol among pregnant women to 92.2%;
2. Increase abstinence from cigarette smoking among pregnant women to 95.7%;
3. Increase smoking cessation success during pregnancy among females to 24.4%; and
4. Increase abstinence from illicit drugs among pregnant women to 95.3%.

Nutrition Security

Nutrition security is when one has "consistent access, availability, and affordability of foods and beverages that promote well-being and prevent (and if needed, treat) disease, particularly among racial/ethnic minority populations, lower incomes populations, and rural and remote populations."[93] Nutrition security assesses one's ability to access nutritional food needed for a healthy diet. Nutrition security is examined separately from food security in the CHA because even though one may have enough food to eat, the food may not be nutritious.

Individuals with a lack of nutrition security are more likely to experience "poor health outcomes including obesity, diabetes, cardiovascular disease, depression, developmental challenges, and increased mortality."[94] A child may be more likely to have negative developmental, behavioral, and academic backgrounds. Eating a high-calorie diet or non-nutritious foods can make a child more likely to experience obesity as an adult.[95] When older adults face food insecurity, there was an associated 11% increase in healthcare costs because of healthcare issues they experience.[96] An additional barrier to nutrition security for those experiencing poverty may be a decreased ability to purchase nutritional foods, even if assistance was available through different programs.[97]



Missoula had barriers to nutrition security for some residents. Missoula had some Limited or Low Access Areas, as designated by the US Department of Agriculture, where people must travel far distances to reach a supermarket.[98] This travel distance and time were barriers to accessing nutritionally adequate foods and having nutrition stability. These locations were in the northwestern area of the county in the Wye area, Huson, Frenchtown, and Ninemile. East Missoula also had these barriers.

Missoula had organizations and initiatives that help promote healthy food choices. There were also community, school, and neighborhood farms and gardens that educate children and residents about food sources and systems. Individuals may grow their food and use community plots to supplement a household's healthy and nutritious food access.[99]

Healthy People 2030 does not have specific nutrition security goals but acknowledges the importance of healthy food and food security.

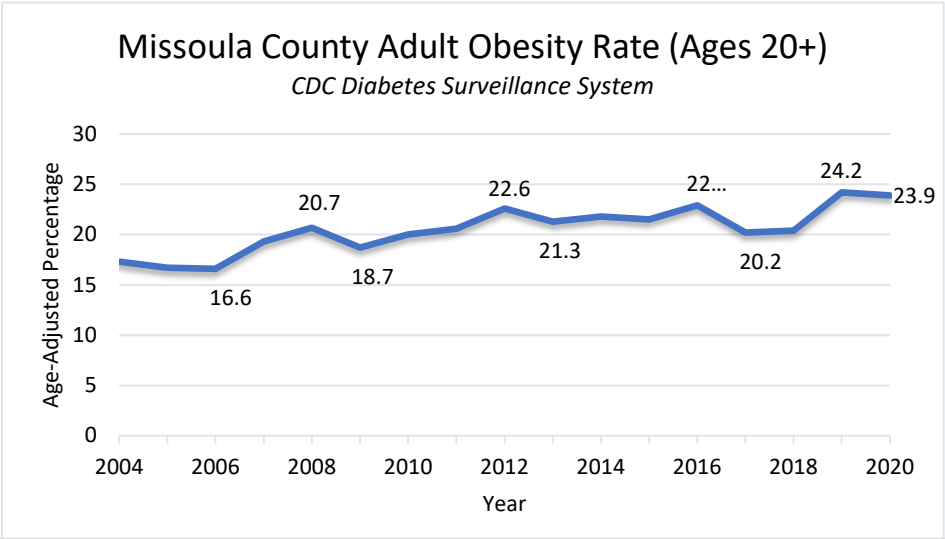
Obesity

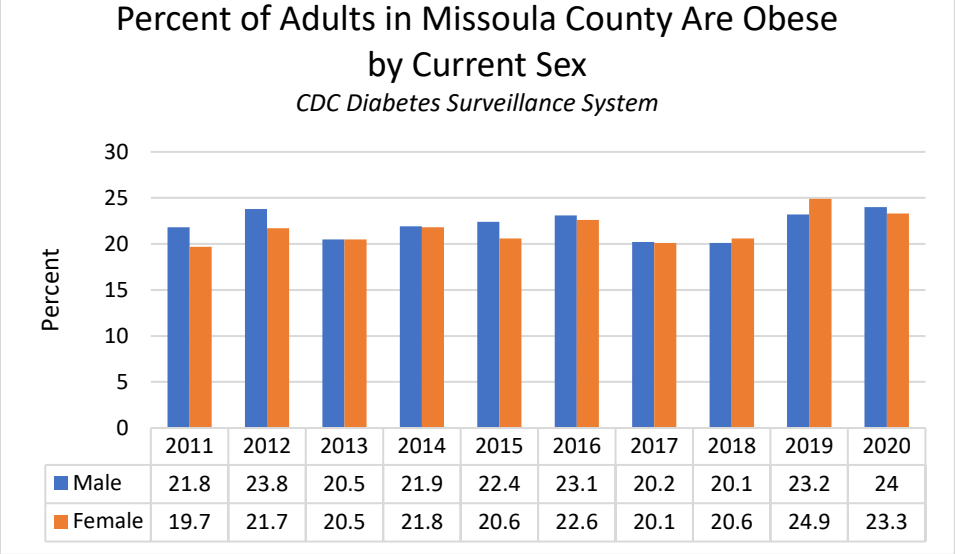
According to the CDC, obesity occurs when a person's weight is higher than what is considered healthy for a given height. How to measure this continues to be an evolving discussion, whether by percent of body fat, by body mass index (BMI), or through a comprehensive look at an individual and their lifestyle. The appropriate measure of obesity for children is uncertain. Although MPH previously tracked BMI, it is no longer tracking BMI and is developing better ways to measure the health status of Missoula's youth.

Being obese can affect health in various ways, such as by increasing the likelihood of developing type II diabetes, affecting the ability to participate in physical activities, causing joint discomfort, causing breathing or cardiovascular problems, and increasing the likelihood of developing certain types of cancer.

Adult obesity rates in Missoula increased, from 17.3% of adults meeting obesity criteria in 2004 to over 20% in 2018, and 23.9% in 2020.

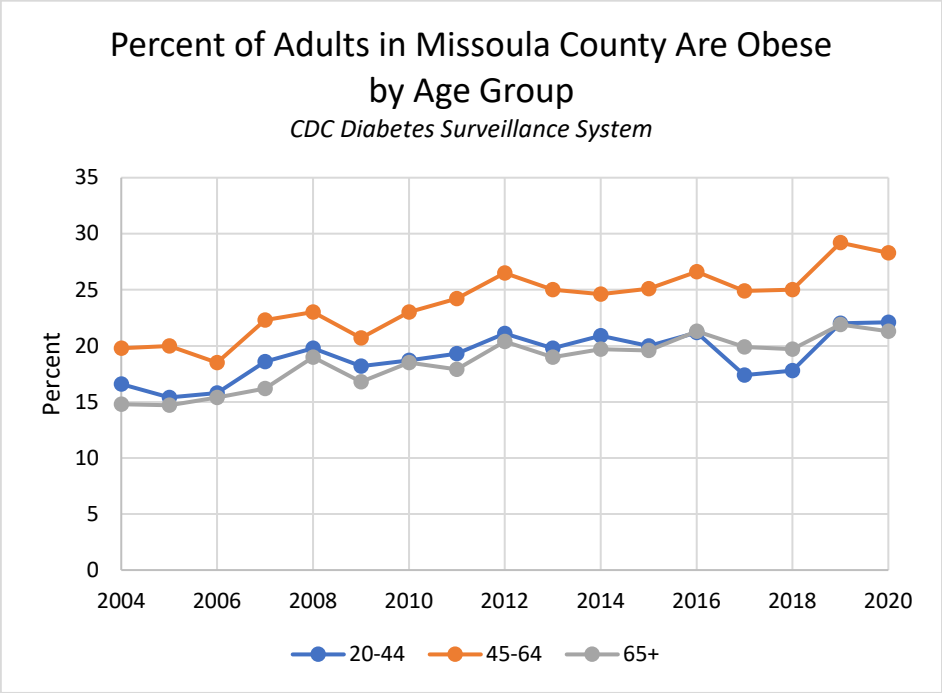
Obesity affects both males and females at similar rates. In Missoula from 2011 through 2020, the rates are within a few percentage points, between 19% and 24% of adults in Missoula.





	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Male	21.8	23.8	20.5	21.9	22.4	23.1	20.2	20.1	23.2	24
Female	19.7	21.7	20.5	21.8	20.6	22.6	20.1	20.6	24.9	23.3

Obesity increased for all adult age groups in Missoula. In 2004, only 20% of those aged 20-44 were obese, rising to approximately 28% in 2020. Similarly, in 2004 approximately 17% of those aged 45-64 were obese, rising to approximately 22% in 2020. 15% of those over 65 years of age were obese in 2004 increasing to 21% in 2020.



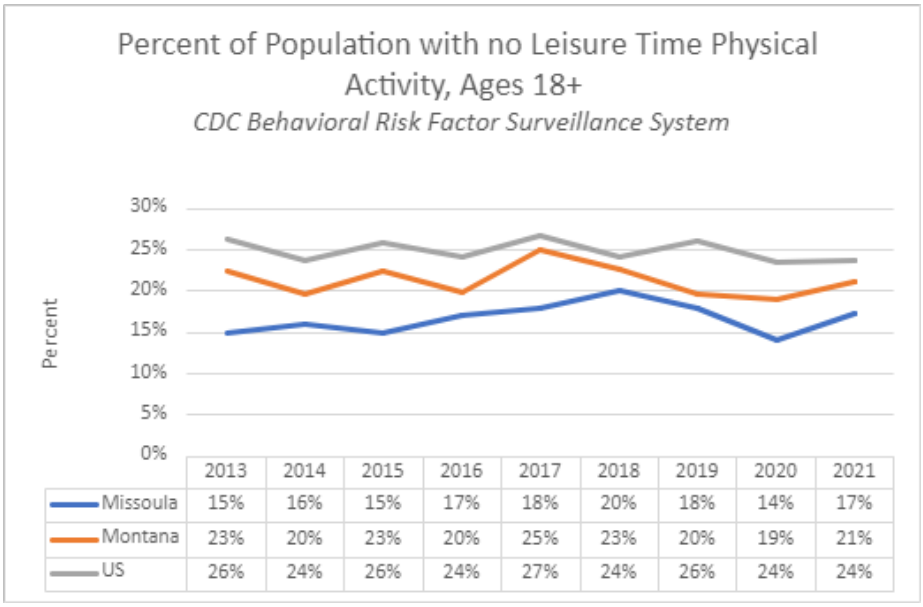
Healthy People 2030's objectives for obesity are to:

1. Reduce the proportion of adults with obesity to 36.0%;
2. Reduce the proportion of children and adolescents with obesity to 15.5%;
3. Reduce the proportion of adults with undiagnosed prediabetes to 33.2%;
4. Increase the proportion of adults with diagnosed diabetes using insulin who perform self-monitoring of blood glucose at least once daily to 94.4%;
5. Increase the proportion of adults with diagnosed diabetes who have an annual eye exam to 70.3%;
6. Increase the proportion of adults with diagnosed diabetes who receive an annual urinary albumin test to 66.4%;
7. Reduce the proportion of adults with diagnosed diabetes with an A1c value greater than 9.0 percent to 11.6%; and
8. Increase the proportion of physician office visits made by adult patients with obesity that include counseling or education related to weight reduction, nutrition, or physical activity to 32.6%.

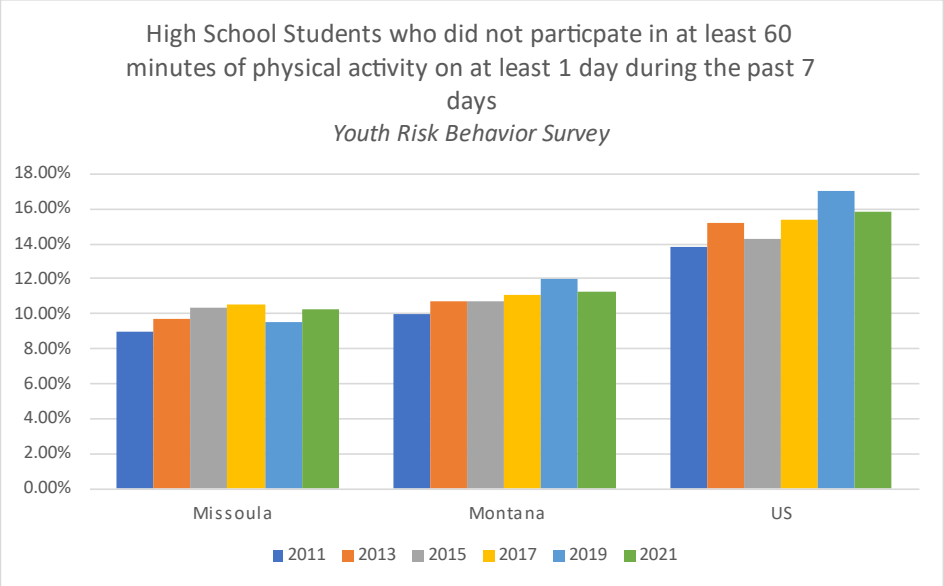
Physical Activity

Physical activity is key to living a healthy life. Exercise can lead to a longer life and help control weight. It has many other health benefits, including lowering the risk of diseases such as diabetes, heart disease, and stroke. It can also improve mental and emotional health. Healthy People 2030 notes that only one in four adults and one in five adolescents in the US meet physical activity guidelines for aerobic and muscle-strengthening activities.

Missoula is more active than Montana or the US for adults and high school students. In 2021, only 17% of Missoula adults 18 and over had no leisure-time physical activity compared to 21% in Montana and 24% in the US. In 2021, only 10% of Missoula high school students did not participate in at least 60 minutes of physical activity on at least one day in the previous seven days compared to approximately 11% in Montana and slightly less than 16% in the US.



	2013	2014	2015	2016	2017	2018	2019	2020	2021
Missoula	15%	16%	15%	17%	18%	20%	18%	14%	17%
Montana	23%	20%	23%	20%	25%	23%	20%	19%	21%
US	26%	24%	26%	24%	27%	24%	26%	24%	24%



Healthy People 2030 has numerous guidelines around physical activity, especially how it impacts different diseases. To summarize, the Healthy People 2030 goals focus on improving health and well-being by helping people of all ages get enough aerobic and muscle-strengthening activity.

Poverty and Living Wage

Experiencing poverty and earning a living wage impact health. A person is considered to be experiencing poverty when someone's income is lower than three times the cost of a minimum food diet, $27,479 in 2001.[100] Living in poverty impacts many indicators of health and well-being and whether one can obtain life's essentials. Correlations exist with employment, housing, transportation, health insurance, and access to healthy foods.

People experiencing poverty may be at risk of experiencing poorer health outcomes than those not experiencing poverty because they may not have access to proper nutrition, safe neighborhoods, adequate shelter, and adequate health care. Educational opportunities and ways to be physically active may also not be readily available.[101] Studies show those living in poverty were five times more likely to report being in poor or fair health compared to people with incomes 400% over the poverty line, or, in 2021, households earning $109,916.[102]

Many factors impact the poverty rate. An individual's level of formal educational attainment affects the likelihood they may experience living in poverty. As the level of formal education increases, the probability someone will experience poverty in general decreases.

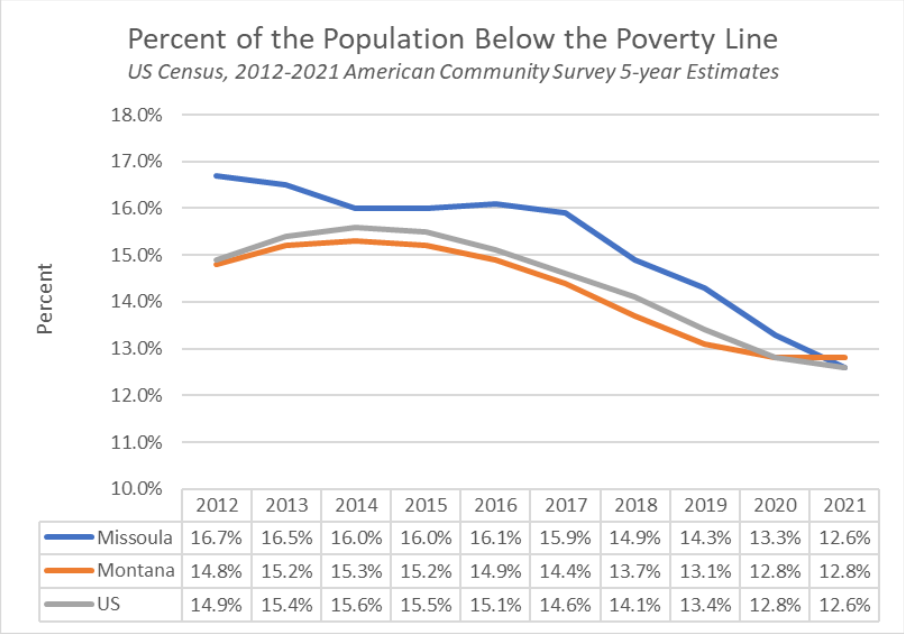
Financial difficulties can impact all individuals, including those not meeting the legal federal poverty definition. The lack of wage growth and the high cost of items like childcare and housing create many of these difficulties. The living wage is the hourly rate one needs to earn to support themselves and their family. In 2017 in Missoula, the living wage for a family of two working adults with two children was $65,150. In 2021 this amount increased to $104,298 with childcare costs being one of the major cost increases.[103]

Missoula Wages

	2017			2021		
Median Annual Income	$46,164			$61,423		
Median Hourly Wage	$22.19			$29.53		
Poverty or Living Wage Threshold	*Poverty Wage*	*Living Wage*		*Poverty Wage*	*Living Wage*	
Household Type	2 Adults (1 Working) 2 Children	2 Adults (1 Working) 2 Children	2 Adults (2 Working) 2 Children	2 Adults (1 Working) 2 Children	2 Adults (1 Working) 2 Children	2 Adults (2 Working) 2 Children
Required Income	$24,858	$48,766	$65,150	$27,479	$80,855	$104,298
Hourly Wage	$11.95	$23.45	$15.66	$13.21	$38.87	$25.07

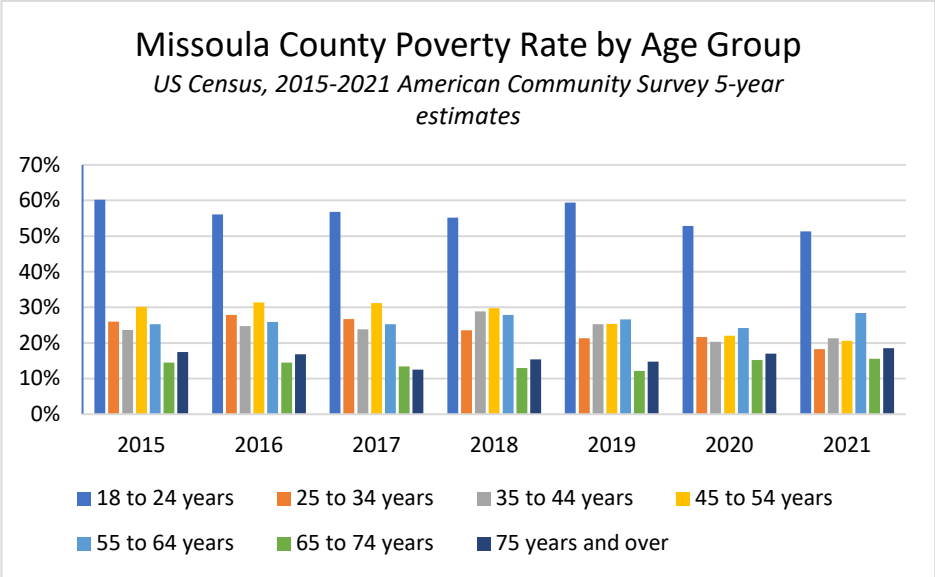
The median hourly wage in Missoula increased to $29.53 in 2021 from $22.19 in 2017. This hourly wage was lower than what was required for a living wage. For example, for one adult working in a household with two children and two adults, the required hourly wage was $28.87. If both adults in the home worked, the required living wage was $25.07. While this was in line with the median hourly wage in Missoula, the family may also accrue additional childcare costs since both parents would be working full-time and unable to care for the children at home, increasing expenses and decreasing their disposable income.[104]

Missoula had a similar rate of people living in poverty as Montana and the US, closing the gap that previously existed when Missoula had a higher average from 2012 to 2020. In 2021, Missoula and the US had a rate of 12.6% and Montana's rate was 12.5%. [105] [106]

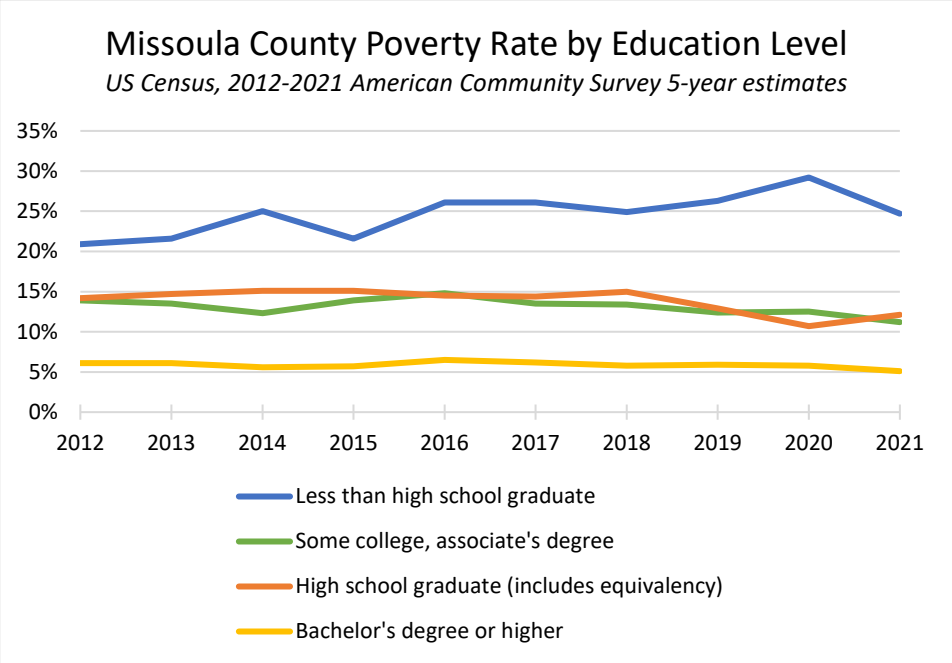


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Missoula	16.7%	16.5%	16.0%	16.0%	16.1%	15.9%	14.9%	14.3%	13.3%	12.6%
Montana	14.8%	15.2%	15.3%	15.2%	14.9%	14.4%	13.7%	13.1%	12.8%	12.8%
US	14.9%	15.4%	15.6%	15.5%	15.1%	14.6%	14.1%	13.4%	12.8%	12.6%

Poverty rates varied by age. In Missoula, people between the ages of 18 and 24 had the highest rate of experiencing poverty, between 50% and 60% from 2015 and 2021. *This rate is markedly higher than in other age groups. This is also the age when children age out of the foster care system.* Those least likely to be experiencing poverty were those between the ages of 65 and 74 years old and those 75 years old or older with a rate under 20%.

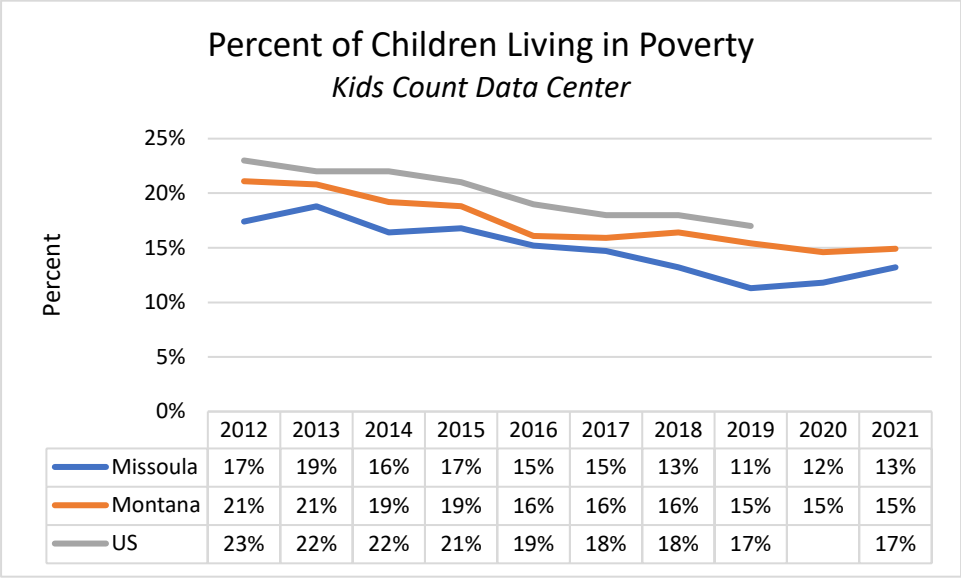


Education level is related to the poverty level. In Missoula, residents with lower educational levels were more likely to experience poverty. In 2021, 25% of those experiencing poverty had less than a high school graduate level of education.



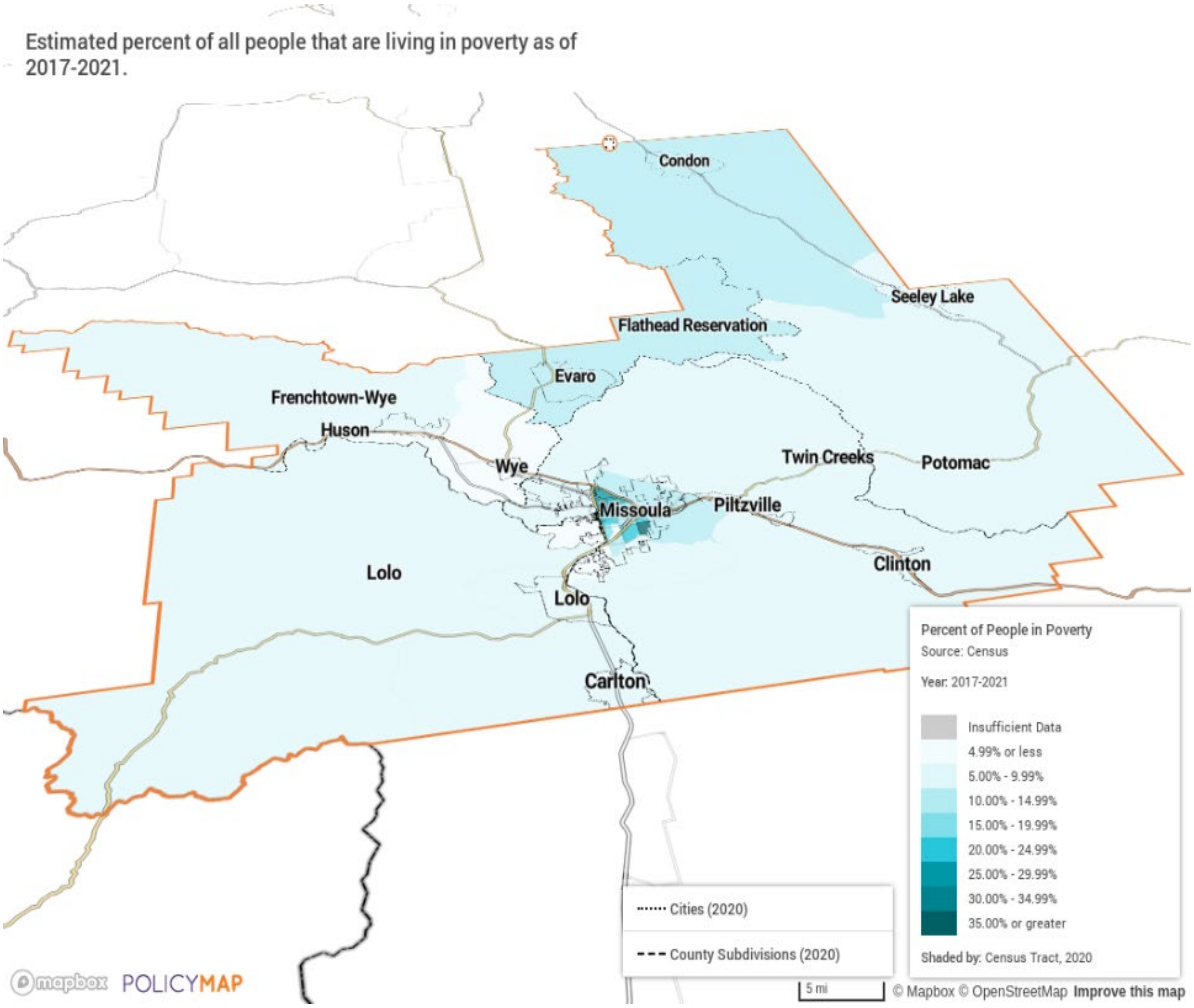
Approximately 13% of those experiencing poverty in Missoula graduated high school, attended some college, or earned an associate's degree. Approximately 5% of those experiencing poverty earned a bachelor's degree or higher.

The rate of children living in poverty in Missoula trended downward from 17% since 2012 ending at 13% in 2021, a slight increase from the prior year. Missoula's rate of children living in poverty was slightly lower in 2021 than the Montana rate of 15% and US rate of 17%.



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Missoula	17%	19%	16%	17%	15%	15%	13%	11%	12%	13%
Montana	21%	21%	19%	19%	16%	16%	16%	15%	15%	15%
US	23%	22%	22%	21%	19%	18%	18%	17%		17%

Missoula had varying levels of poverty depending on where individuals lived. Notable areas with high poverty rates existed within the central part of the City of Missoula as well as outside Missoula City's Limits in the northern part of the county.



Healthy People 2030 has various objectives related to poverty. These include:

1. Increase employment among the working-age population to 75%;
2. Reduce the proportion of people living in poverty to 8%. While Missoula exceeded this goal, more work can be done in this area;
3. Eliminate very low food security in children to 0%;
4. Reduce household food insecurity and in doing so reduce hunger to 6%;
5. Reduce the proportion of adolescents and young adults who are neither enrolled in school nor working to 10.1%;
6. Increase the proportion of children living with at least 1 parent who works full time to 85.1%;
7. Reduce the proportion of adults with provider-diagnosed arthritis who are limited in their ability to work for pay due to arthritis to 34.7%; and

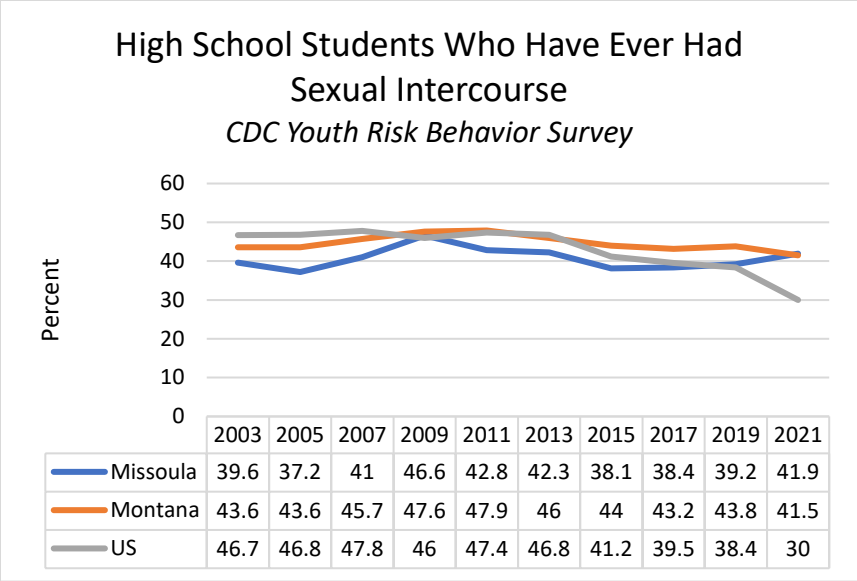
8. Reduce the proportion of families that spend more than 30 percent of income on housing to 25.5%.

One objective in the research phase is to increase the proportion of eligible students participating in the United States Department of Agriculture (USDA) Summer Food Service program. This is something Missoula and Montana should pay attention to as opportunities to participate in this program may be limited by state government decisions, thus decreasing the ability of children to eat and residents to provide food for their children during the summer months.

Reproductive and Sexual Health

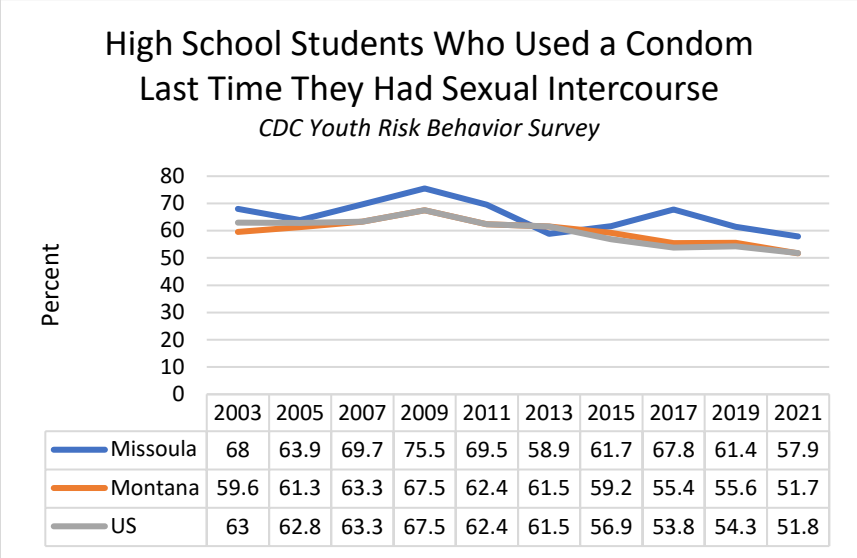
Access to the full spectrum of reproductive and sexual health care options is fundamental to the health of individuals, families, and communities. Equitable, person-centered contraceptive access is important to ensure reproductive autonomy and the use of safe sex practices, and prevent the spread of sexually transmitted infections and diseases. The CDC stated ensuring access to contraceptive services is important for preventing unintended pregnancies, which account for nearly one-half of all US pregnancies and have adverse maternal and infant health outcomes.

Access to reproductive services is important for adolescents and young adults. The rate of high school students in Missoula who had sexual intercourse increased between 2017 and 2021 to 41.9%, higher than the US rate of 30% and Montana's rate of 41.5.%



	2003	2005	2007	2009	2011	2013	2015	2017	2019	2021
Missoula	39.6	37.2	41	46.6	42.8	42.3	38.1	38.4	39.2	41.9
Montana	43.6	43.6	45.7	47.6	47.9	46	44	43.2	43.8	41.5
US	46.7	46.8	47.8	46	47.4	46.8	41.2	39.5	38.4	30

During the same time, the rate of high school students who reported use of a condom the last time they had sexual intercourse declined from 67.8% in 2017 to 57.9% in 2021. Although the rate declined, it was still higher than the rate in Montana of 51.7% and the US rate of 51.8%.

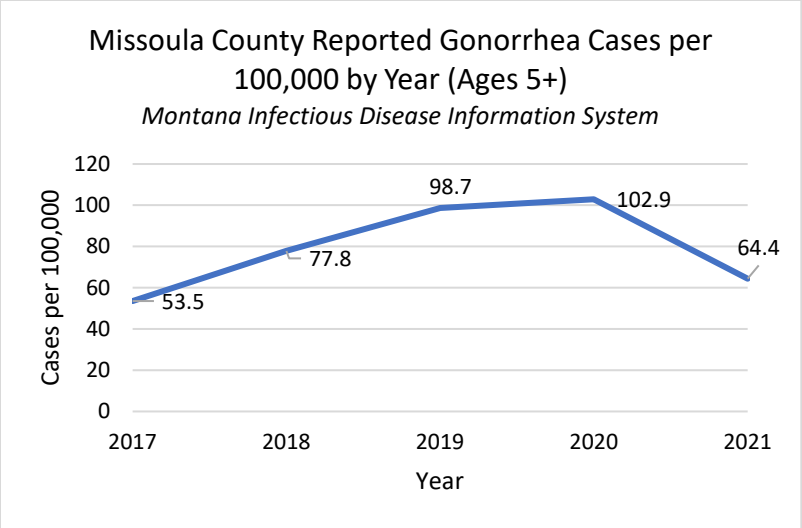


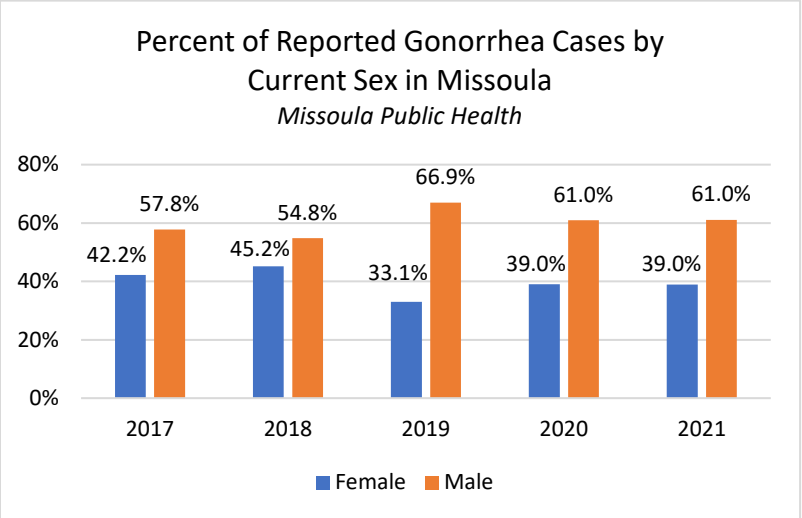
	2003	2005	2007	2009	2011	2013	2015	2017	2019	2021
Missoula	68	63.9	69.7	75.5	69.5	58.9	61.7	67.8	61.4	57.9
Montana	59.6	61.3	63.3	67.5	62.4	61.5	59.2	55.4	55.6	51.7
US	63	62.8	63.3	67.5	62.4	61.5	56.9	53.8	54.3	51.8

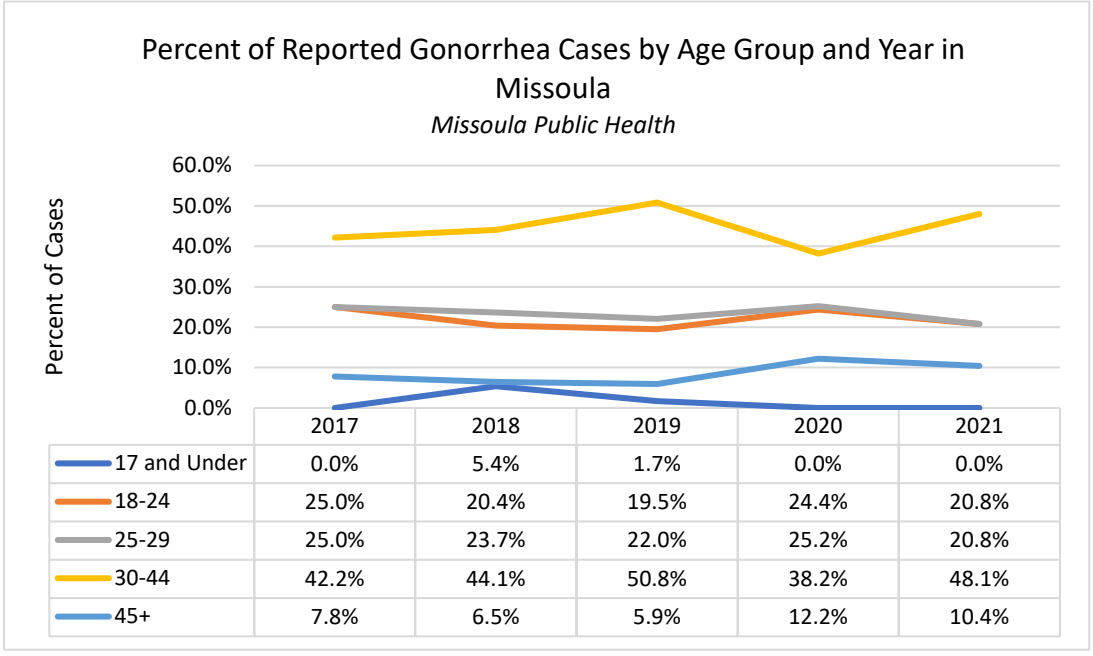
The annual rate of gonorrhea cases per 100,000 rose in Missoula from 53.5 cases in 2017 to a high of 102.9 cases in 2020. The rate then decreased to 64.4 cases per 100,000.

The case rate varied by sex. Gonorrhea cases were higher in males than females in Missoula. In 2021, the rate was 39% of current cases were females and 61% were males.

Missoula's gonorrhea case rate varied by age group. The highest rate was for those aged 30-44 at 42.2% of cases in 2017 rising to 48.1% in 2021. The next highest age group was those 25 to 29 years old at 20.8% of cases in 2021. The third highest age group was those aged 18 to 24 with a rate of 20.8% of cases in 2021. The lowest rates in 2021 were for those 45 years and more at 10.4% of cases in 2021 and those 17 years and under at 0% of cases.

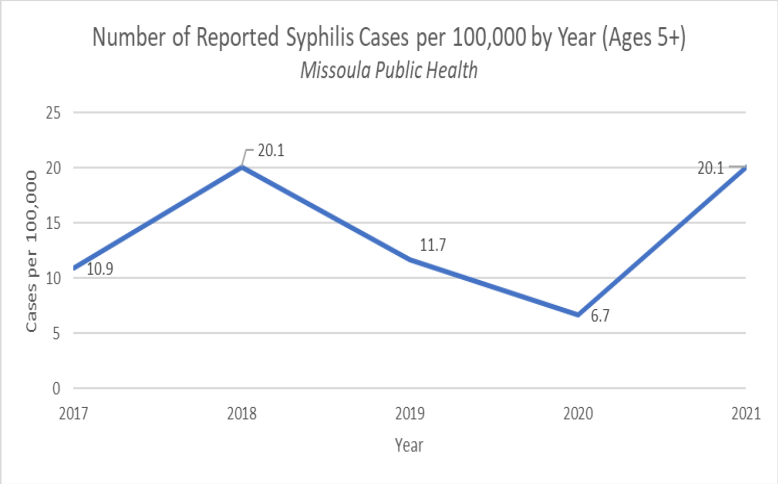




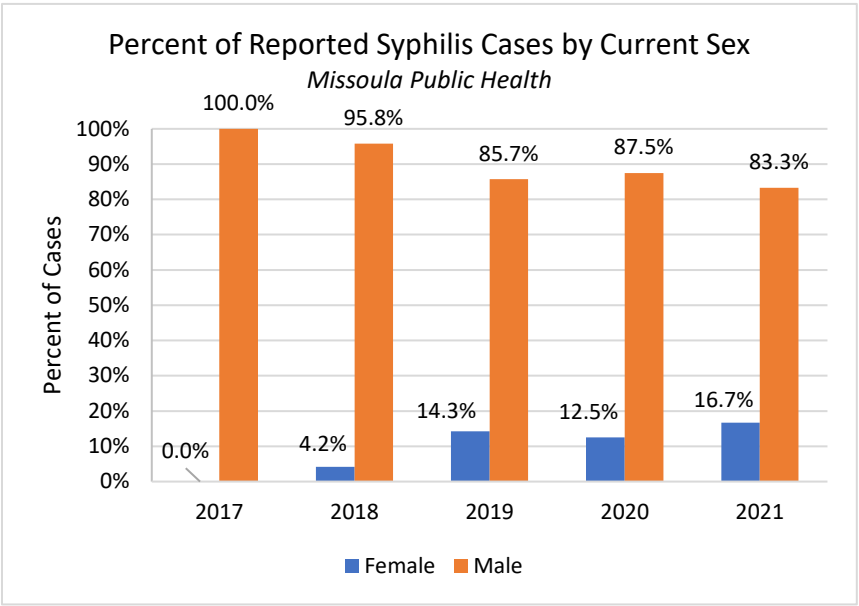


	2017	2018	2019	2020	2021
17 and Under	0.0%	5.4%	1.7%	0.0%	0.0%
18-24	25.0%	20.4%	19.5%	24.4%	20.8%
25-29	25.0%	23.7%	22.0%	25.2%	20.8%
30-44	42.2%	44.1%	50.8%	38.2%	48.1%
45+	7.8%	6.5%	5.9%	12.2%	10.4%

The rate of syphilis cases rose, fell, and rose again in Missoula from 2017 to 2021. The rate rose to 20.1 cases per 100,000, then decreased to a five-year low of 6.7 in 2020 and rose again in 2021 to 20.1 cases per 100,000.



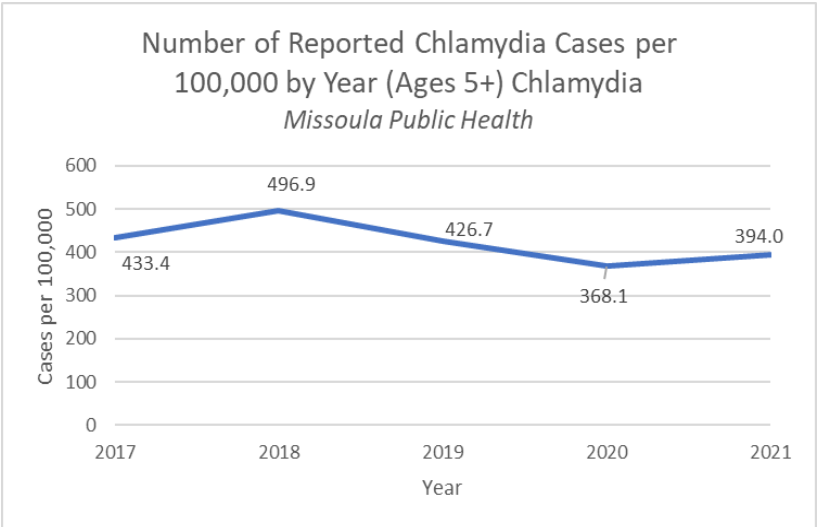
The percentage of syphilis cases varied greatly by current sex. In 2017, 100% of syphilis cases were males with that decreasing slightly until 2021 when the case rate was 83.3% male. At this same time, in 2021 the rate for females rose to 16.7% of cases after previously being 0% in 2017.



The number of chlamydia cases decreased in Missoula from 2017 to 2021. It was 433.4 cases per 100,000 in 2017 and decreased to 368.1 per 100,000 in 2021.

Chlamydia cases were more common in females than males. In 2018 the rate was 59.3% for females, rising to 65.4% of all cases in 2021.

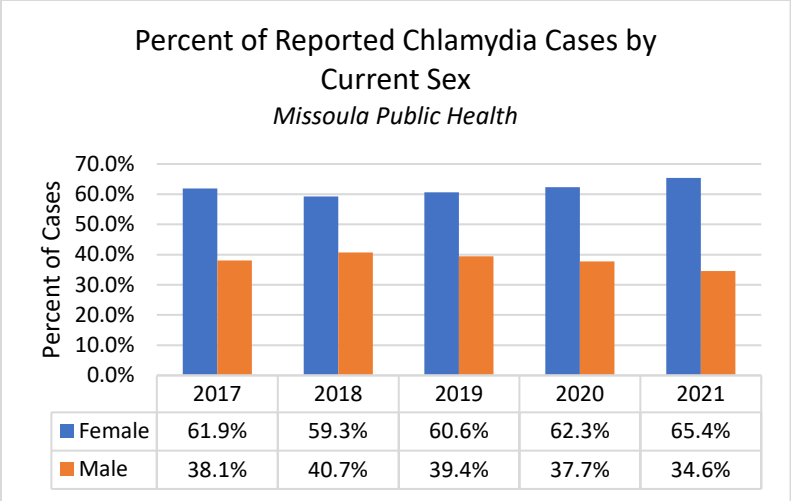
Chlamydia case rates varied by age group, highest for the 18- to 24-year-old age group at 60.7% of all cases in Missoula in 2021. Those aged 25 to 29 had the second highest rate of 17.0% in 2021.



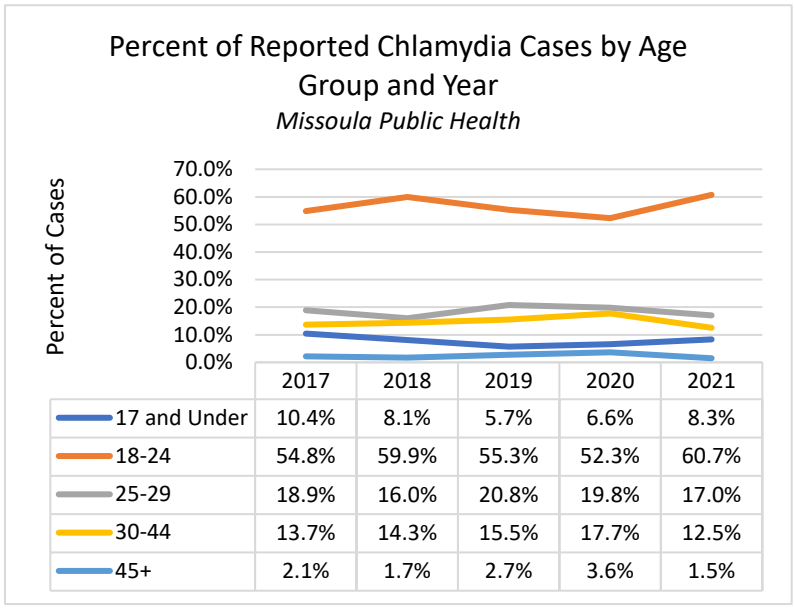
The third highest rate was for those aged 30 to 44 years old with 12.5% of all cases.

Those 17 and under had the second lowest rate at 8.3% of cases. The lowest rate was for those 45 years and older at 1.5% of all cases.

Reproductive and Sexual Health goals from Healthy People 2030 cover many topics and include the following:



	2017	2018	2019	2020	2021
Female	61.9%	59.3%	60.6%	62.3%	65.4%
Male	38.1%	40.7%	39.4%	37.7%	34.6%



	2017	2018	2019	2020	2021
17 and Under	10.4%	8.1%	5.7%	6.6%	8.3%
18-24	54.8%	59.9%	55.3%	52.3%	60.7%
25-29	18.9%	16.0%	20.8%	19.8%	17.0%
30-44	13.7%	14.3%	15.5%	17.7%	12.5%
45+	2.1%	1.7%	2.7%	3.6%	1.5%

Sexually Transmitted Infections or Diseases:

1. Increase the proportion of sexually active adolescents and young females enrolled in Medicaid and commercial health plans who are screened for chlamydial infections to 76.5%;
2. Reduce congenital syphilis to 33.9 per 100,000 population;
3. Reduce the rate of primary and secondary syphilis in females to 4.6 per 100,000 population;
4. Reduce the rate of primary and secondary syphilis in men who have sex with men to 392.0 per 100,000 population;
5. Reduce gonorrhea rates among adolescent and young males to 471.2 per 100,000 population;
6. Reduce the proportion of adolescents and young adults with herpes simplex virus-2 (HSV-2) to 2.9%;
7. Reduce pelvic inflammatory disease (PID) in adolescent and young females (aged 15 to 24 years) to 137.3 per 100,000 population;
8. Reduce infections due to human papillomavirus (HPV) types prevented by the 9-valent vaccine in young adults to 8.7%;

Adolescent Behavior:

1. Increase the proportion of adolescents who receive formal instruction on delaying sex, birth control methods, HIV/AIDS prevention, and sexually transmitted diseases before they were 18 years old to 59.1%;
2. Reduce pregnancies among adolescent females to 31.4 per 1,000;
3. Increase the proportion of adolescents who have never had sexual intercourse to 80.8%;
4. Increase the proportion of sexually active adolescent males who use a condom at last intercourse to 81.3%;
5. Increase the proportion of sexually active adolescent females who use a most or moderately effective method of contraception at last intercourse to 36.8%;

HIV:

1. Increase the proportion of persons who know their HIV status to 95%;
2. Reduce the rate of newly diagnosed perinatally acquired (mother-to-infant transmission) HIV infections to 0.9 per 100,000 live births;
3. Increase the proportion of persons aged 13 years and over with newly diagnosed HIV infection linked to HIV medical care within 1 month to 95%;
4. Contraception and Unintended Pregnancy:
5. Increase the proportion of women in need of publicly supported contraceptive services and supplies who receive those services and supplies to 47.9%;
6. Increase the proportion of women at risk of unintended pregnancy who use most effective or moderately effective methods of contraception to 65.1%;
7. Increase the proportion of adolescent females at risk of unintended pregnancy who use most effective or moderately effective methods of contraception to 70.1%;
8. Increase the proportion of sexually experienced adolescents who use any method of contraception at first intercourse to 91.6%; and
9. Reduce the proportion of pregnancies that are unintended to 36.5%.

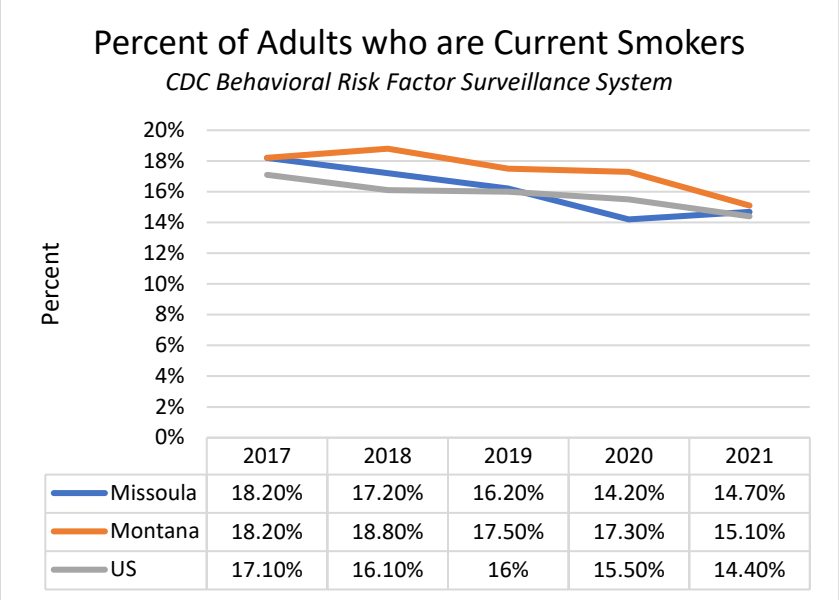
Tobacco and Nicotine Use

Tobacco and nicotine are highly addictive and lead to many health complications. The rise of e-cigarettes (vapes or vaping) as an avenue to use nicotine has created a new public health issue since 2017. Tobacco use was the leading cause of preventable disease and death in the US according to Healthy People 2030.

Smoking in all forms is harmful and can cause cancer and early death. Nicotine harms the part of the brain that controls attention, learning, mood, and impulse control. Youth cigarette and vape product use has been associated with harm to adolescent brain development and mental health symptoms such as depression.

Vape products can contain other harmful substances besides nicotine, such as the highly toxic chemicals formaldehyde and acrolein, an herbicide used to kill weeds. These chemicals can cause lung disease, cardiovascular diseases, COPD, asthma, and lung cancer. In addition, the Food and Drug Administration has not found any vape products to be safe and effective in helping smokers quit smoking.

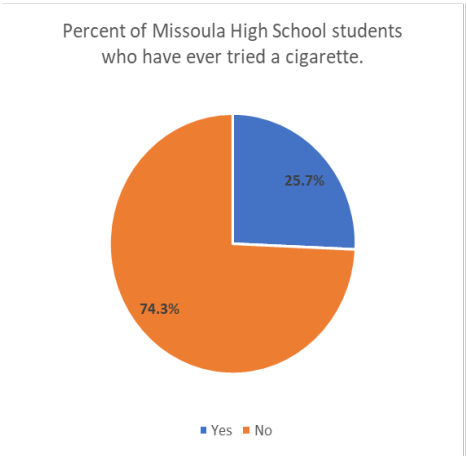
Stopping nicotine and tobacco use is difficult. Counseling and medication make quitting more likely. Strategies to raise awareness and provide insurance coverage for these treatments increase the likelihood that people may use them. Population-level interventions to reduce tobacco use include price increases, mass media campaigns, and smoke-free policies.

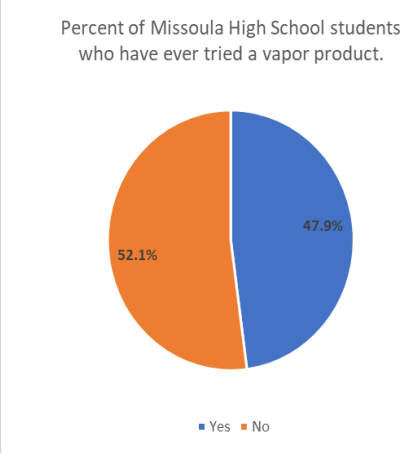


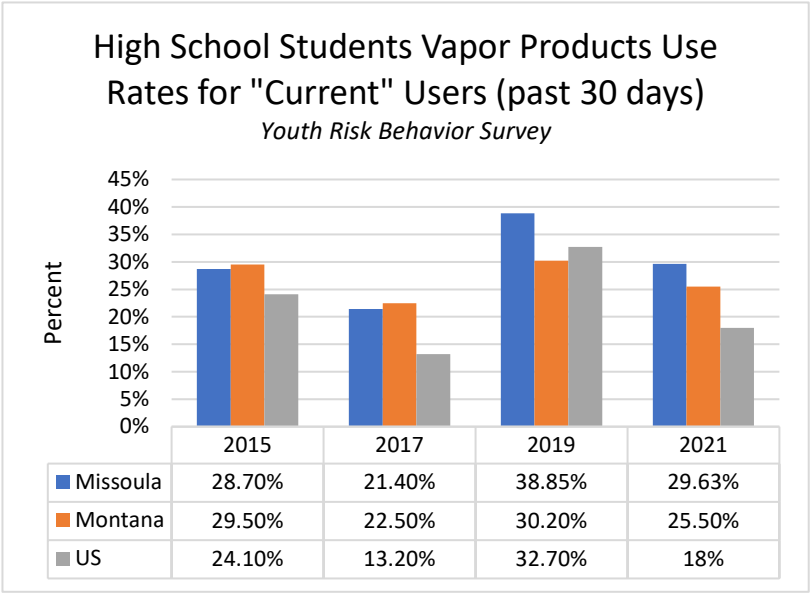
	2017	2018	2019	2020	2021
Missoula	18.20%	17.20%	16.20%	14.20%	14.70%
Montana	18.20%	18.80%	17.50%	17.30%	15.10%
US	17.10%	16.10%	16%	15.50%	14.40%

In Missoula, the percentage of adult smokers decreased from 2017 at 18.2% to 14.7% in 2021. The rates in Montana and the US decreased over this time too. Missoula's 2021 rate was lower than Montana's rate of 15.1% for adults but higher than the US rate of 14.4%.

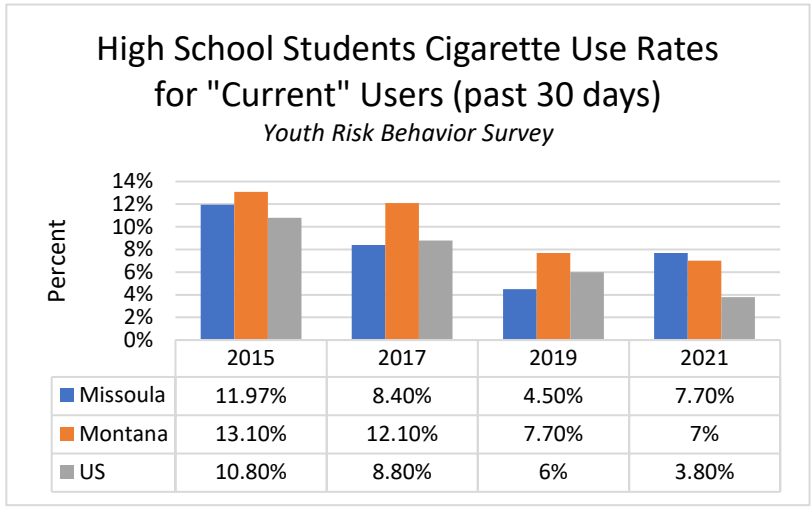
Vaping was more common among Missoula high school students than smoking cigarettes. The Youth Behavior Risk Survey reported that 47.9% of Missoula high school students reported in 2021 that they had tried vape products (e-cigarettes). More high school students tried vaping than cigarettes. In 2021, 25.7% of Missoula High School students had tried a cigarette. 22.2% more students had tried a vape product for a total of 47.9% who had ever tried vape products.







	2015	2017	2019	2021
Missoula	28.70%	21.40%	38.85%	29.63%
Montana	29.50%	22.50%	30.20%	25.50%
US	24.10%	13.20%	32.70%	18%



	2015	2017	2019	2021
Missoula	11.97%	8.40%	4.50%	7.70%
Montana	13.10%	12.10%	7.70%	7%
US	10.80%	8.80%	6%	3.80%

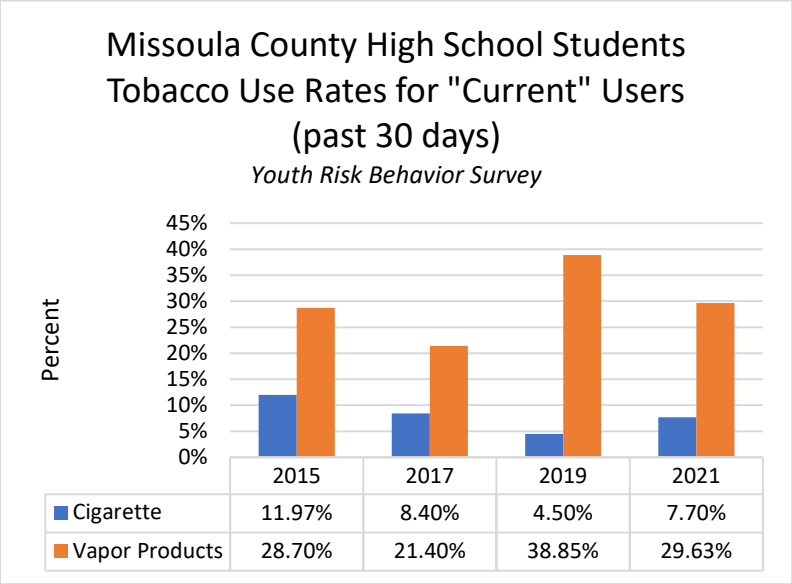
Current cigarette use by Missoula high school students trended down from 2015 to 2021, decreasing from 11.97% in 2015 to 7.7% in 2021. Missoula's rate of 7.7% was higher than Montana's rate of 7% or the US rate of 3.8%. Rates decreased from 2015 to 2021.

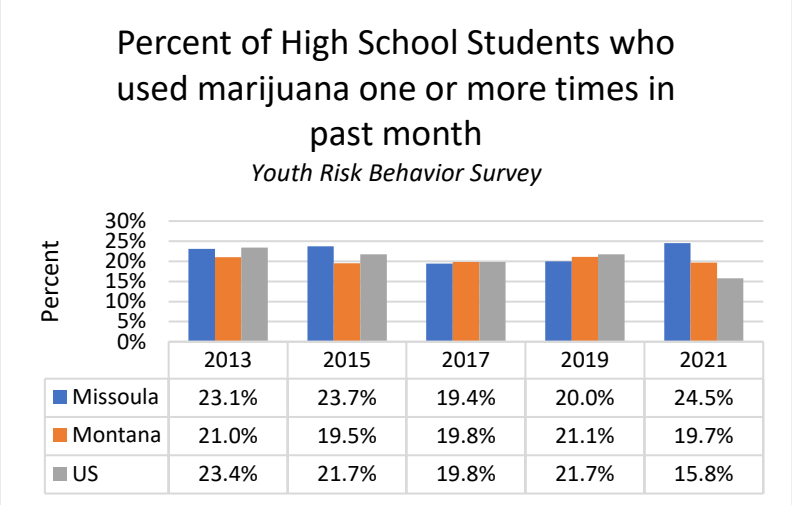
Missoula high school students use tobacco through vaping approximately four times more than through cigarette use. While cigarette use decreased, the use of vape products by Missoula high school students rose from 28.7% in 2015, peaking at 38.85% in 2019, and decreasing to 29.63% in 2021. More high school students in Missoula reported they were current vape users than the rate in either Montana or the US. In Missoula, 29.63% of

students reported being a "current" user which was higher than the rate of 25.50% of students in Montana and 18% of students in the US.

In 2021, Missoula high school students reported using marijuana one or more times in the past month at a rate of 24.5% of all students, higher than the Montana rate of 19.7% and the US rate of 15.8%. While the rates in Montana and the US decreased, the rate in Missoula increased.

Healthy People 2030 has numerous goals regarding tobacco and nicotine use. These include:





Adolescents:

1. Eliminate the initiation of cigarette use among adolescents and young adults;
2. Eliminate the initiation of the use of cigarettes among adolescents and young adults to 3.4%;
3. Reduce current use of flavored tobacco products among adolescent tobacco users to 73.2% of the current users;
4. Reduce current use of any tobacco products among adolescents to 11.3%;
5. Reduce current use of e-cigarettes among adolescents to 10.5%;
6. Reduce current use of any tobacco products among adolescents to 11.3%;
7. Reduce current use of smokeless tobacco products among adolescents to 2.3%;
8. Reduce current use of cigars, cigarillos, and little cigars among adolescents to 3%;
9. Reduce the proportion of children, adolescents and adults exposed to secondhand smoke to 17.3%;
10. Reduce the proportion of adolescents in grades 6 through 12 who are exposed to tobacco product marketing to 59.7%;

Adults:

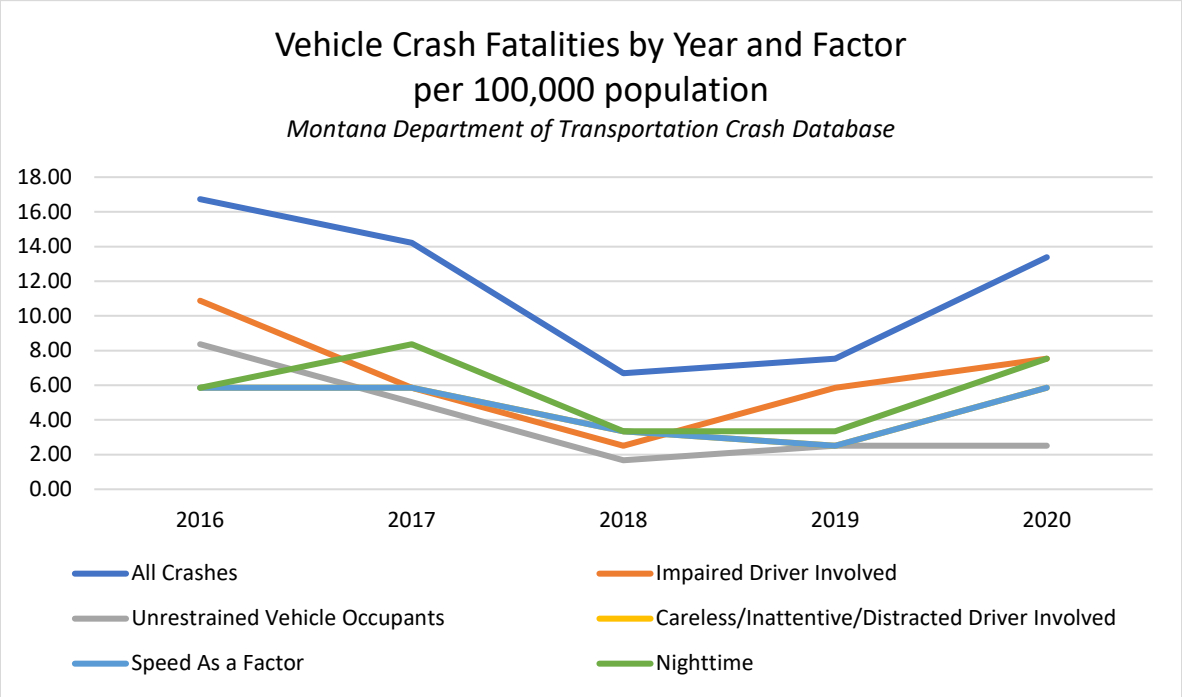
1. Reduce current use of cigarettes among adults to 6.1%;
2. Reduce current use of any tobacco products by adults to 17.4%;
3. Reduce current use of combustible tobacco products among adults to 5%;
4. Increase recent smoking cessation success among adult smokers to 10.6%;
5. Increase smoking quit attempts in the past year among adult smokers to 65.7%;
6. Increase the proportion of adult smokers who receive advice to quit from a health professional to 58.1%;
7. Increase use of smoking cessation counseling and/or medication among adult smokers to 43.8%;
8. Increase the proportion of smoke-free homes to 92.9%;

Policies:

1. Increase comprehensive Medicaid insurance coverage of evidence-based treatment for nicotine dependency in states and the District of Columbia;
2. Eliminate policies in states, territories, and the District of Columbia that preempt local tobacco control policies; and
3. Increase the number of states, territories, and the District of Columbia that establish 21 years as the minimum age for tobacco product sales.

Traffic Safety

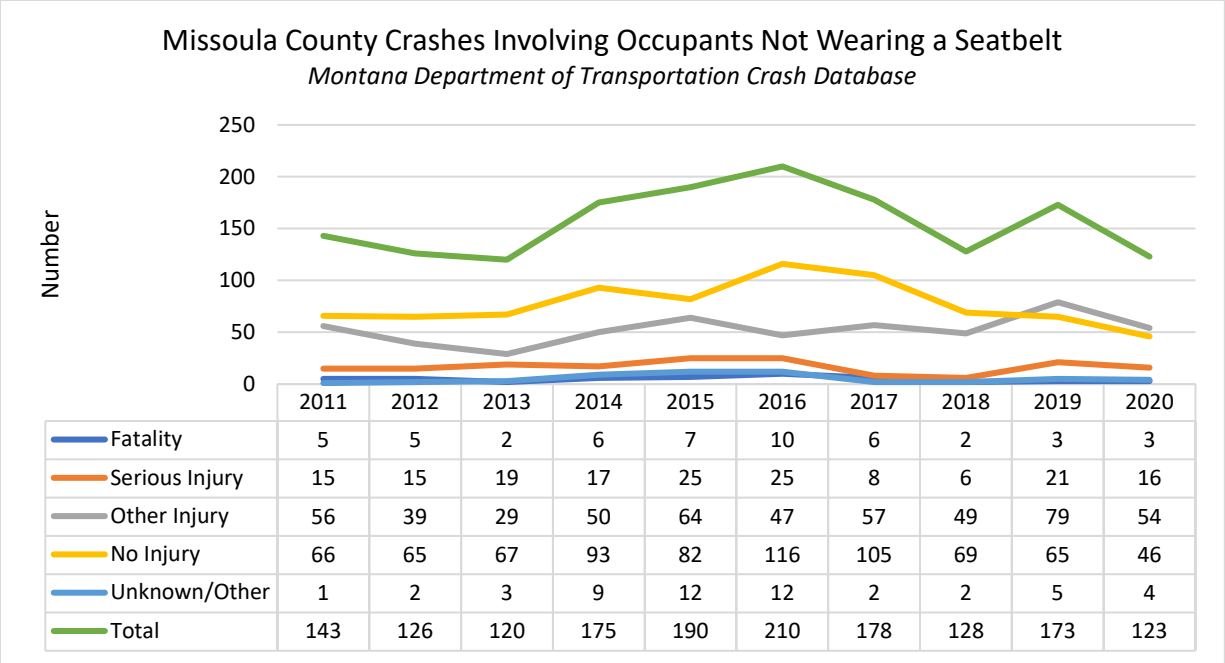
Motor vehicle deaths are one of the leading causes of death in the US. These fatalities are mostly preventable, with proven strategies to prevent death and minimize injuries. Even minor crashes can result in life-impacting injuries. Wearing a seatbelt can decrease the injuries one sustains in a crash, as does not speeding, driving while impaired, or exercising careless/inattentive/distracted driving.



In Montana, a majority of fatal vehicle crashes involved an impaired driver although the rate for crash fatalities at nighttime was nearly equal to the impaired driver rate in 2020.

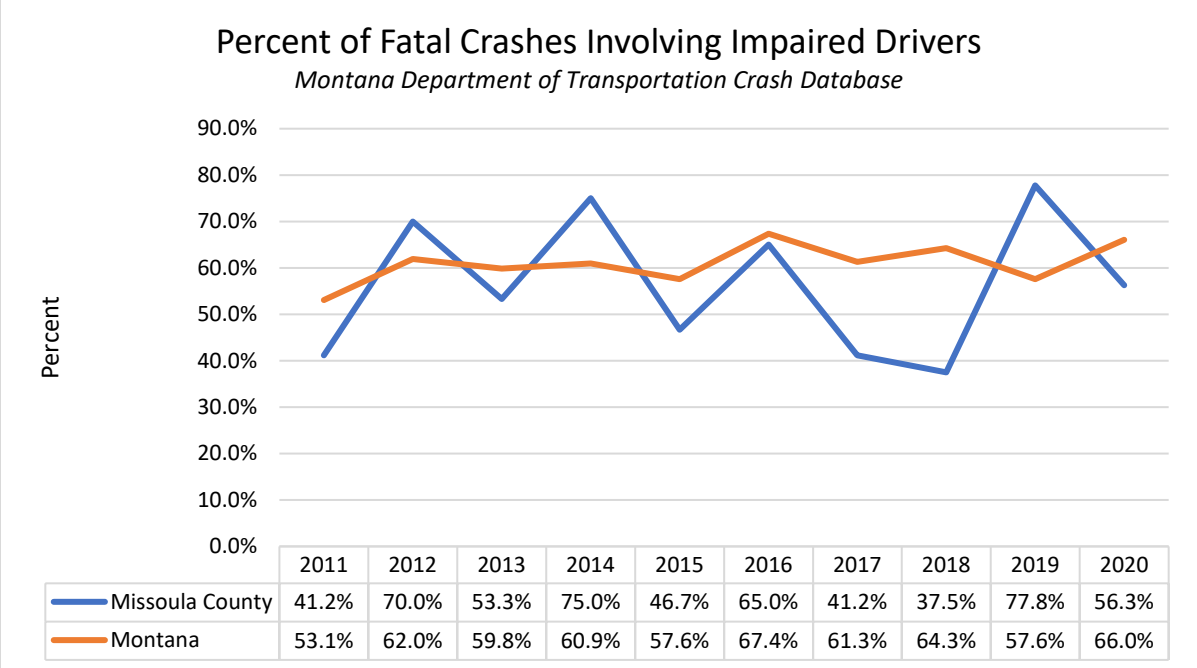
The rate of unrestrained vehicle occupants decreased from 2016 to 2017 but slightly rose in 2020.

From 2016 to 2020 a total of 32,522 reported crashes occurred in Missoula. Of the total crashes for this time, only 0.22% resulted in death and 1.49% resulted in serious injury compared to 0.41% resulting in fatalities in Montana and 1.63% resulting in serious injury in Montana. There were 70 fatal crashes between 2016 and 2020.



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fatality	5	5	2	6	7	10	6	2	3	3
Serious Injury	15	15	19	17	25	25	8	6	21	16
Other Injury	56	39	29	50	64	47	57	49	79	54
No Injury	66	65	67	93	82	116	105	69	65	46
Unknown/Other	1	2	3	9	12	12	2	2	5	4
Total	143	126	120	175	190	210	178	128	173	123

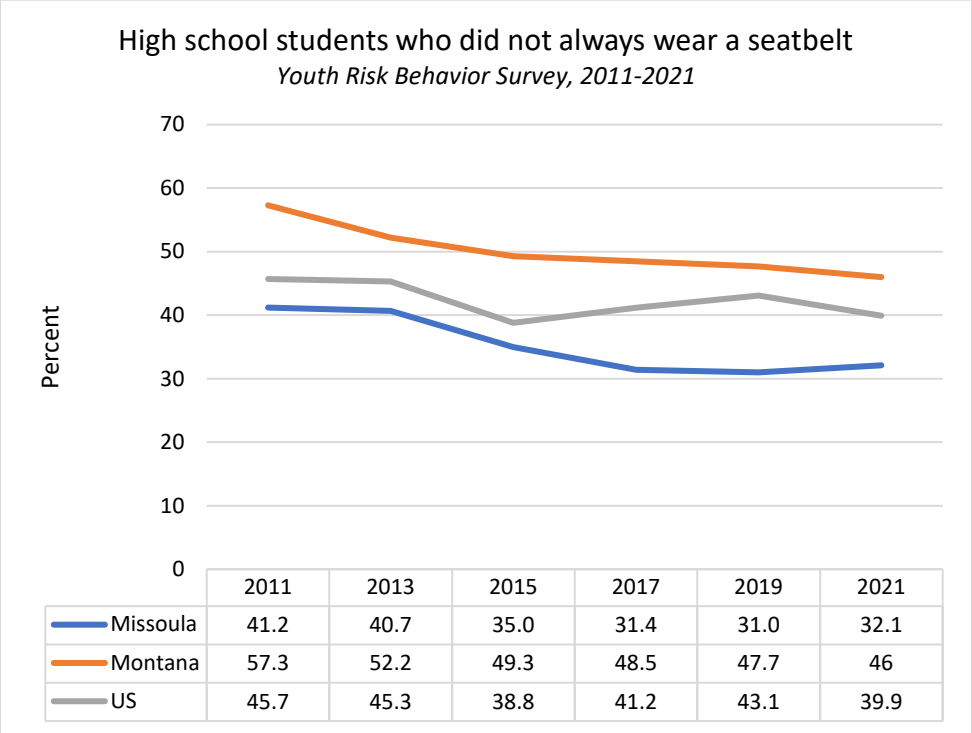
In Missoula, the rate of vehicle crashes involving occupants not wearing a seatbelt declined to 123 crashes in 2020 compared with 178 crashes in 2017. Missoula had a lower fatal crash rate involving impaired drivers compared to Montana in 2020.



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Missoula County	41.2%	70.0%	53.3%	75.0%	46.7%	65.0%	41.2%	37.5%	77.8%	56.3%
Montana	53.1%	62.0%	59.8%	60.9%	57.6%	67.4%	61.3%	64.3%	57.6%	66.0%

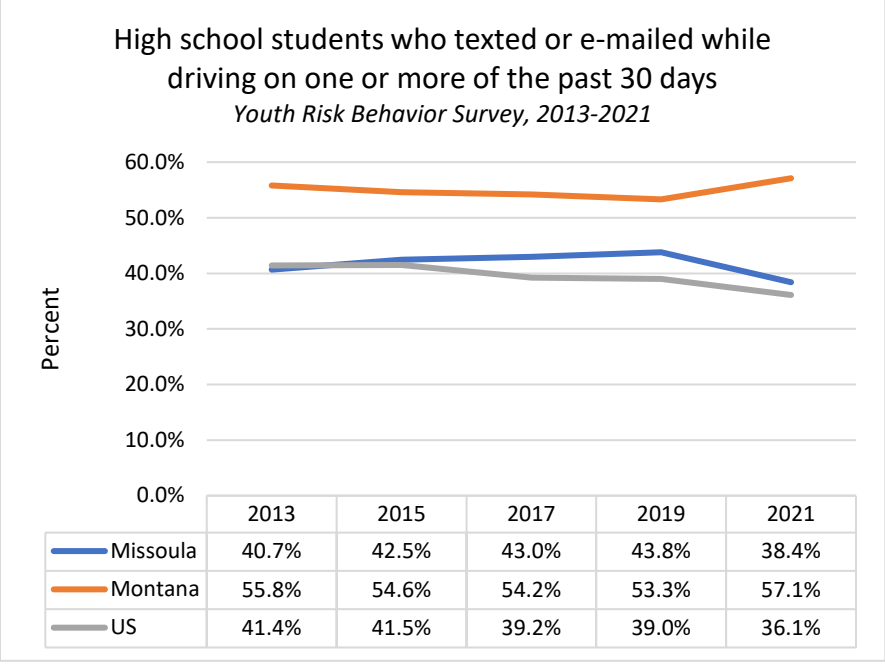
Vehicle crash fatalities varied by location (urban or rural) and driver sex.

- More fatal crashes happened in rural (59 crashes) than in urban areas (11 crashes).
- Male drivers were more likely to be involved in a fatal vehicle crash (57 crashes) than female drivers (24 crashes).
- Two fatal crashes involved a wild animal. [107]



	2011	2013	2015	2017	2019	2021
Missoula	41.2	40.7	35.0	31.4	31.0	32.1
Montana	57.3	52.2	49.3	48.5	47.7	46
US	45.7	45.3	38.8	41.2	43.1	39.9

Missoula's youth engage in risky behavior while driving. In 2021, 32.1% of Missoula's youth did not always wear a seatbelt compared with 46% of youth throughout Montana and 39.9% of youth throughout the US.



	2013	2015	2017	2019	2021
Missoula	40.7%	42.5%	43.0%	43.8%	38.4%
Montana	55.8%	54.6%	54.2%	53.3%	57.1%
US	41.4%	41.5%	39.2%	39.0%	36.1%

Missoula's youth reported texting or emailing while operating a vehicle which is considered "distracted driving".

In 2021, 38.4% of Missoula high school students engaged in this behavior which was higher than the US rate of 36.1% but lower than Montana's rate of 57.1%.

Healthy People 2030 objectives for traffic safety are to:

1. Reduce deaths from motor vehicle crashes to at least 10.1 per 100,000 population;
2. Reduce the proportion of deaths of car passengers who were not using a seat belt or child safety restraint system to 41.9%;
3. Reduce the rate of vehicular crashes that are due to drowsy driving to 2.2 per 100,000,000; and
4. Reduce the proportion of motor vehicle crash deaths involving an alcohol-impaired driver with a blood alcohol concentration (BAC) of 0.08 grams/deciliter (g/dL) or higher to 28.3% of all motor vehicle crash deaths.

Built Environment

The physical environment we live in and that we have built can impact our health in numerous ways. It can contribute to exposure to harmful substances or contribute to sedentary lifestyles that increase the risk of disease, such as diabetes or cardiovascular disease. The following section examines some of these built environment conditions and their impact on health in Missoula.

1. Housing
2. Lead
3. Parks and Green Space
4. Radon
5. Transportation

Housing

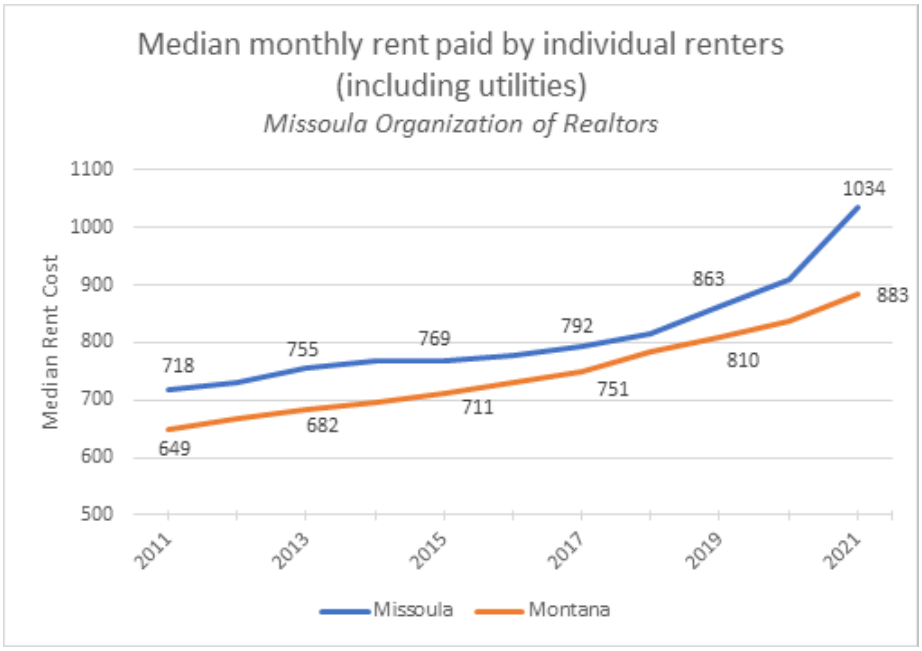
Housing is a key building block for health and well-being. A clean, well-maintained living environment can directly reduce health problems such as asthma and injuries from falls. Housing in a safe and well-built environment can influence physical activity, community engagement, and even good nutrition because of access to a full kitchen for food preparation or nearby stores (or farmers' markets) containing healthy foods. Housing that people in a community can afford is a cornerstone of economic stability.

Healthy People 2030 explains that when families must "spend a large part of their income on housing, they may not have enough money to pay for things like healthy food or health care. This is linked to increased stress, mental health problems, and an increased risk of disease." It can make it difficult to afford other essentials like clothing, healthy food, and health insurance.

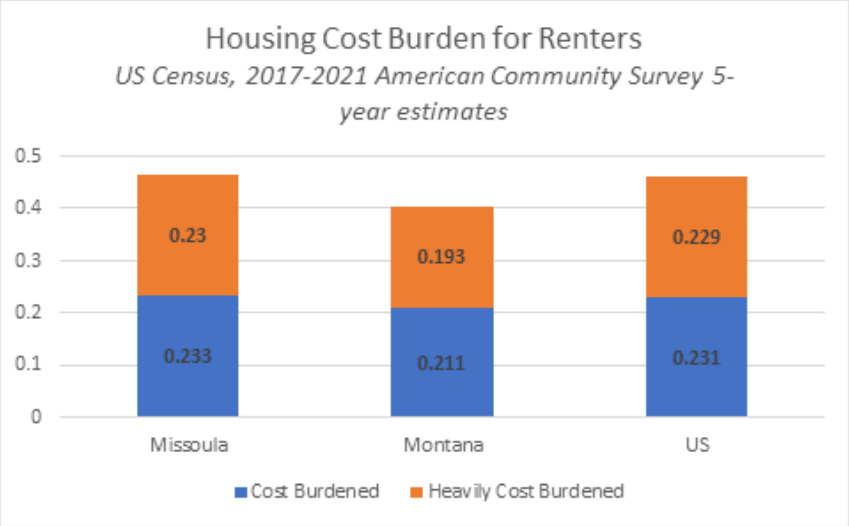
The need for affordable housing was identified in Missoula's 2017 Community Health Assessment and continues to be a need in Missoula. The availability of affordable housing can be affected by property taxes, income level, housing availability, and short-term rentals among other factors.

Homeownership varied by location in Missoula. As of 2021, approximately 58% of those living in Missoula County (outside City Limits) owned their homes, and approximately 42% rented housing. Within the City of Missoula, approximately 47% of people owned their homes and 53% rented.[108]

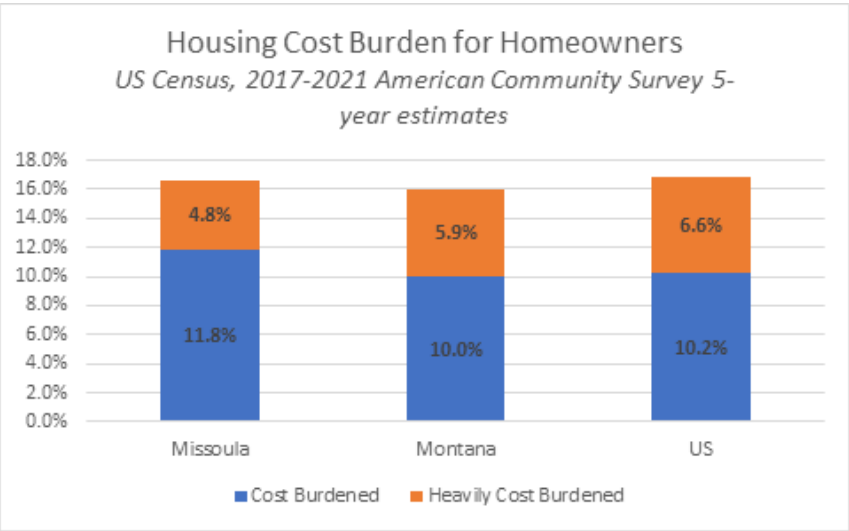
The cost of rent can be a barrier to obtaining housing. Monthly rent in Missoula had consistently been higher and rose at a rate faster than in the rest of Montana. In 2021, monthly rent in Missoula was $1,034 compared with monthly rent throughout Montana of $883. Wages did not keep up with this increase in housing cost.[109]



23% of Missoula renters were cost-burdened, meaning they had to pay more than 30% of their monthly income on housing. 23% of renters were heavily cost-burdened, meaning they paid over 50% of their monthly income on housing.



Missoula homeowners were also cost-burdened. 11.8% of Missoula homeowners paid more than 30% of their income on housing with an additional 4.8% being heavily cost-burdened, paying more than 50% of their income on housing. This can be especially difficult for those on a fixed income or who do not have life circumstances that allow them to find additional work opportunities to earn more income.



Resolving the housing crisis will take coordination and work in multiple areas at the same time. Possible ways to impact housing cost is to advocate for fair taxes at the state level to impact property taxes, plan development with various housing options, or regulate short-term rentals if they are impacting housing availability.[110] [111]

Healthy People 2030 supports expanding policies that make housing more affordable and safer, as discussed in other sections of the CHA.

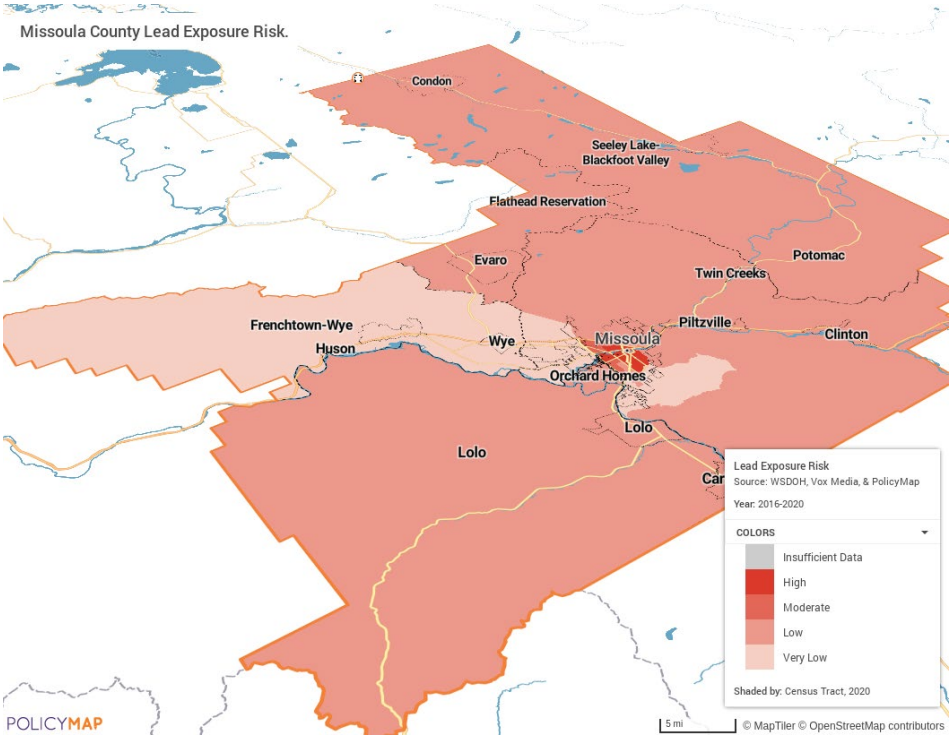
A Healthy People 2030 housing objective is to reduce the proportion of families that spend more than 30% of income on housing to 25.5%.

Lead

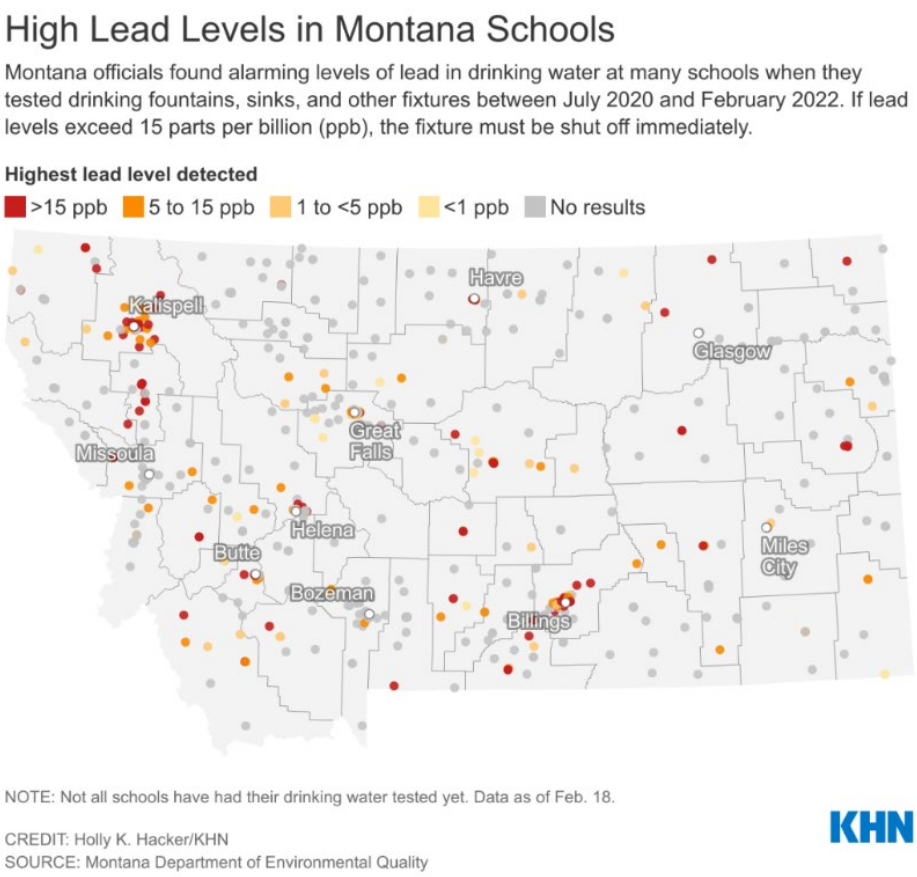
Lead has been a public health problem since the early 1900s. It was used in paints, cosmetics, dishware, and glassware, seasonings, gasoline, and pipes. At the time, the dangers of lead exposure were largely unknown.[112] Lead was regulated and removed from most products in the 1970s, leading to a more than 90% decrease in the average person's blood lead levels.[113]

Lead is a chemical that can lead to harmful effects on the human body. Healthy People 2030 stated high levels of lead in the body can damage the blood, kidneys, and brain — and cause seizures and paralysis. Monitoring levels of lead in the blood is key to identifying and reducing exposure. "There is no safe level of lead exposure."[114] Small exposures to lead can build quickly and enter the bloodstream, spreading harm across the body and building damage over time.[115] Lead exposure is associated with high blood pressure, IQ loss, cognitive and behavioral challenges, miscarriage, low birth weight, and childhood development problems.[116] [117] [118] [119]

Lead exposure remains a public health concern, especially for young children and those experiencing poverty as "most [exposures] are a legacy of the past use of lead."[120] Adults are most likely to be exposed to lead at work, like at manufacturing plants. Children most often encounter lead through lead-based paint at home although exposure can occur in school. Most people are exposed to lead through eating food and drinking water in a lead-contaminated environment. People may be exposed to lead in older buildings with lead paint and pipes, by breathing in soil from areas where lead was used before, through breastmilk, and heirloom pots and pans.[121]



Mapping from 2016 to 2021 showed most of Missoula homes had a moderate risk for lead exposure. Areas with higher lead exposure were concentrated mainly within the City of Missoula.



Beginning in 2020, all schools in Montana had to be tested for lead levels in water used for drinking and food preparation every three years. Reports from the testing found more than 50% of all schools in Montana tested positive for levels of lead above the "safe" level. Missoula performed better than much of the state with only three schools having lead high levels in the entire county.[122]

Healthy People 2030 objectives related to lead include the following:

1. Reduce exposure to lead in the population, as measured by blood or urine concentrations of the substance or its metabolites to 1.74 micrograms per deciliter (µg/dL); and
2. Reduce blood lead levels in children aged 1 to 5 years to 1.18 micrograms per deciliter (µg/dL).

Parks and Green Space

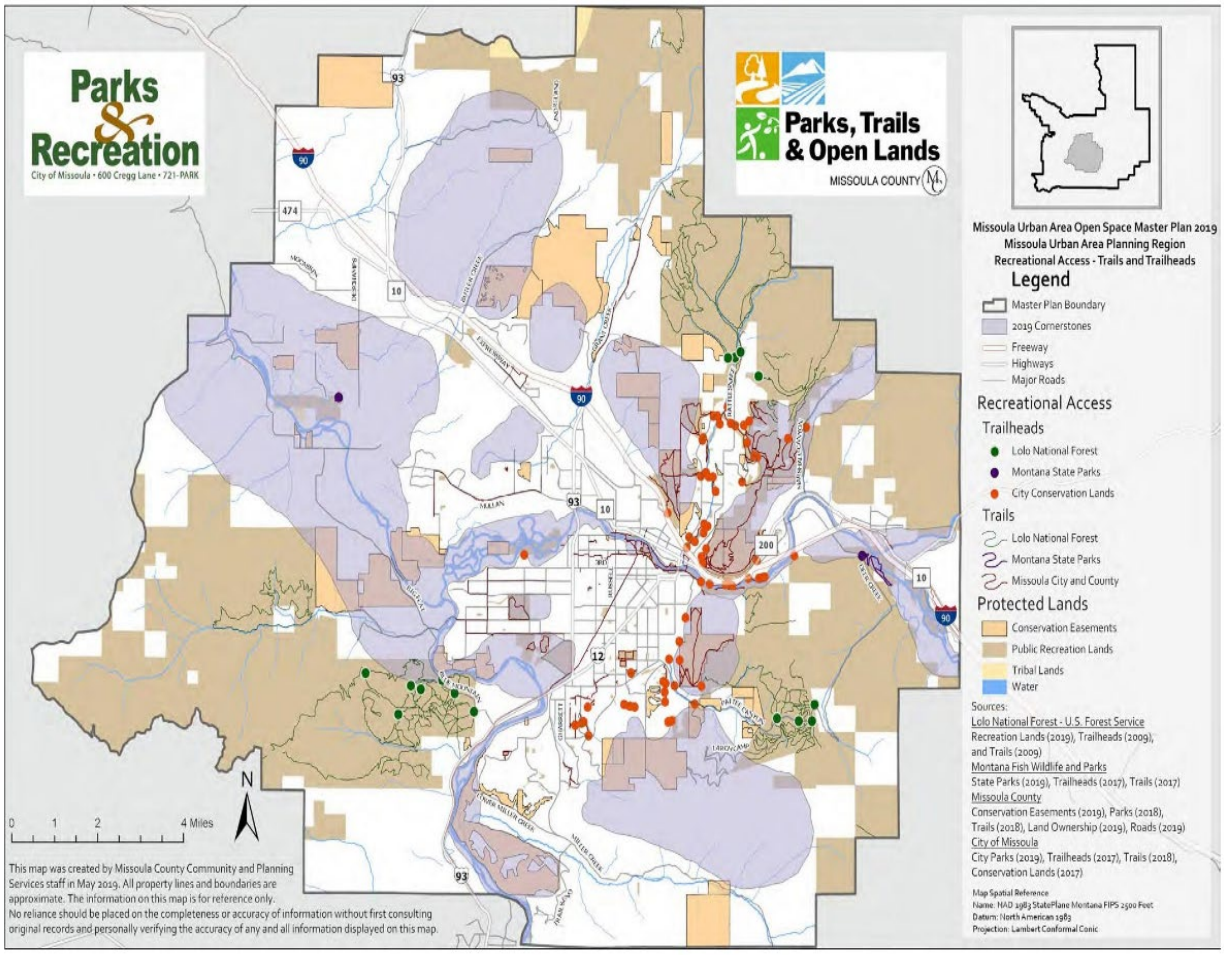
Parks and green space are important to health because people close to parks and green space are more physically active. This activity can reduce stress, boost mood, and improve mental health. The arks and green spaced provide a place for neighbors to meet and improve community connections. Environmentally they also reduce air and water pollution and can mitigate urban heat islands. Green spaces and parks can further be a tool to help address public health disparities.

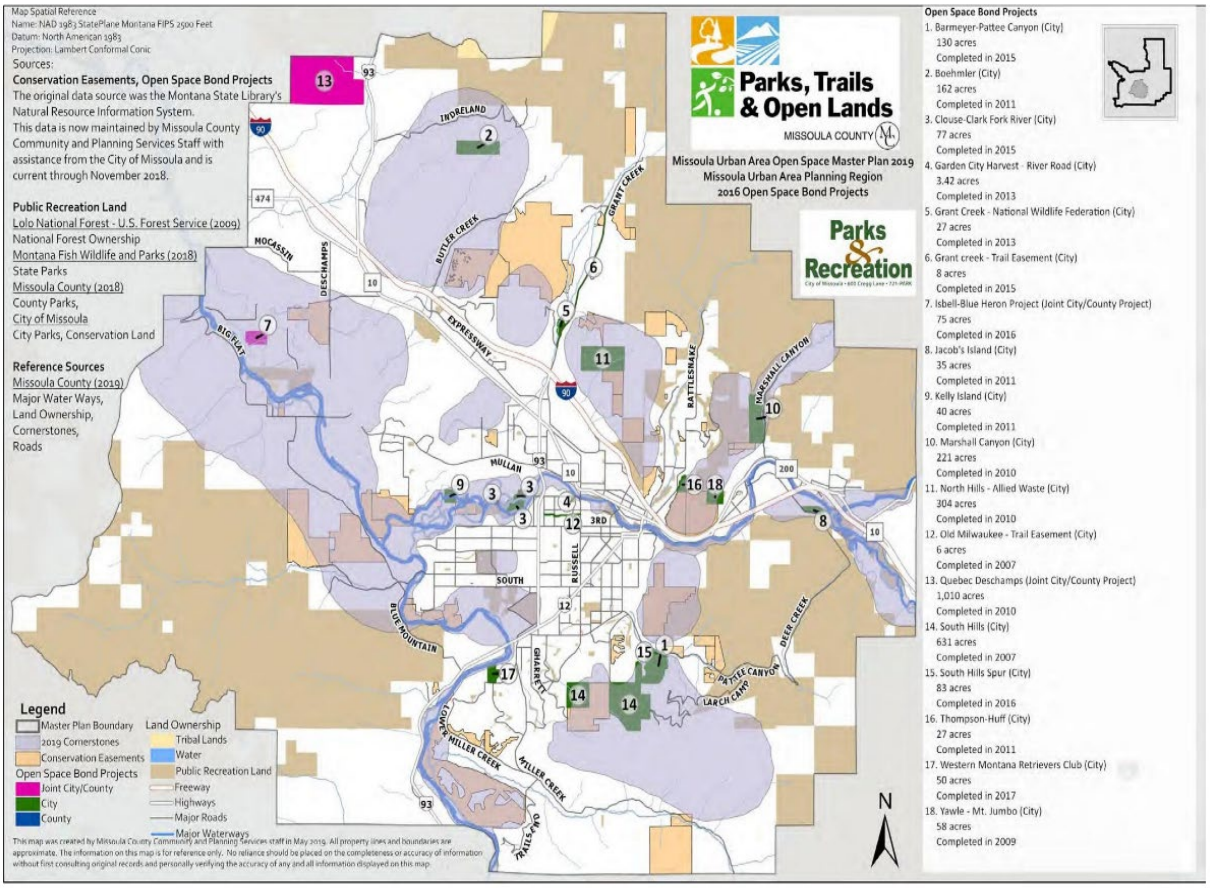
Missoula had extensive green spaces, being surrounded by state and federal public lands as well as Tribal lands. The City of Missoula and Missoula County hold land used for parks, green spaces, and trails.

Missoulians like to use green spaces and parks. In 2018, a survey showed that two-thirds of those surveyed visit a park or green space once per week. Residents expressed a desire for wildlife habitats, trails, and river access sites. Increased access for those with disabilities was desired because one in five households would benefit from trails and green spaces.

Access varied based on whether individuals lived in rural or urban areas. Those living outside of the Missoula urban core were more likely to experience barriers to accessing green spaces than those in more urbanized areas.[123]

Missoula had numerous recreational access trailheads, protected lands, open space areas, and parks as shown in these Parks & Recreation maps.





Healthy People 2030 does not have specific goals regarding green spaces. Nonetheless, the many health benefits make preserving and possibly creating more of these accessible areas available to residents of all abilities would benefit the community.

Radon

Radon is a gas that can harm health and is a public health risk. It is without color, smell, or taste and results from the natural breakdown of radioactive materials found naturally in water, soil, and rocks. Any exposure to radon carries risk, the risk increasing with the amount of exposure. Everyone of all ages is vulnerable to radon exposure with children being more vulnerable to exposure.

Radon is found in houses and other buildings. Radon can enter through a building's foundation and groundwater used in a building. It builds up more quickly than it can leave the building.

Radon exposure can lead to health problems. The major health concern associated with radon is the development of lung cancer. Radon exposure is the leading cause of lung cancer for those who do *not* smoke. Radon exposure is the second leading cause for individuals who *do* smoke.[124] Radon exposure for those who smoke greatly increases the risk of developing lung cancer beyond the levels of someone who smoked but was not exposed to radon.[125] The Environmental Protection Agency (EPA) recommends all homes be tested for radon.[126]

Montana has high levels of radon. Not all houses have increased levels of radon in Montana, but the rate of homes with radon in Montana was higher than in other areas.[127] Radon can be found in homes in Missoula. Missoula had one of the highest rates of radon testing in Montana. When a house tested high, the average high radon level was estimated to be between 5.9 pCi/L and 7.2 pCi/L (picocuries per liter).[128] This was much higher than the national average found in homes of 1.3 pCi/L. The EPA recommends mitigation when a home has more than 4.0 pCi/L which Missoula homes exceeded when they tested high.[129]

Healthy People 2030 does not have specific goals around radon. Nonetheless, the EPA recommends all homes be tested. New home constructions should include radon-resistant materials.[130] Montana law provides an additional level of protection to individuals. Montana law requires a seller to disclose if a radon test and mitigation has been conducted on a property that they are selling.[131]

Transportation

Transportation affects health in a variety of ways. How individuals can move from place to place affects their ability to participate in physical activity, access care, achieve employment, access healthy foods, and many other factors.

Transportation encompasses roads, paths, bikeways, access for all abilities, and transit opportunities among other ways we move among our environments. Communities can use built environment strategies, like creating safe walking and biking routes, to increase opportunities for physical activity. Drivers can also use mass transit, such as buses, or transportation.

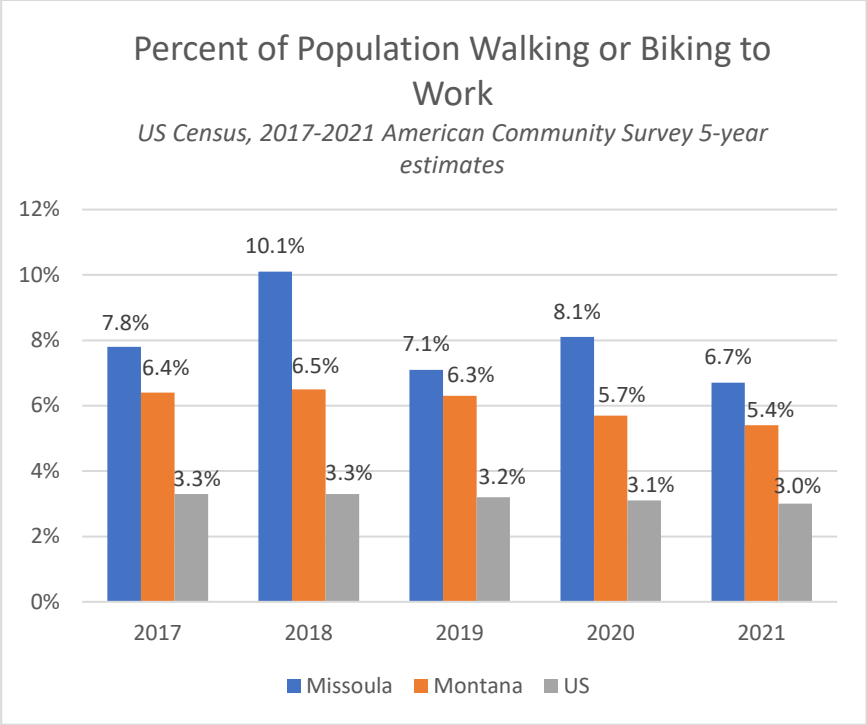
Missoula had various modes of transportation. These included:

1. The public roadways;
2. The Mountain Lion bus system with zero-fare;
3. A network of bike lanes and bike and walking paths (see the Missoula city bike map); and
4. Air travel through the Missoula International Airport.[132]

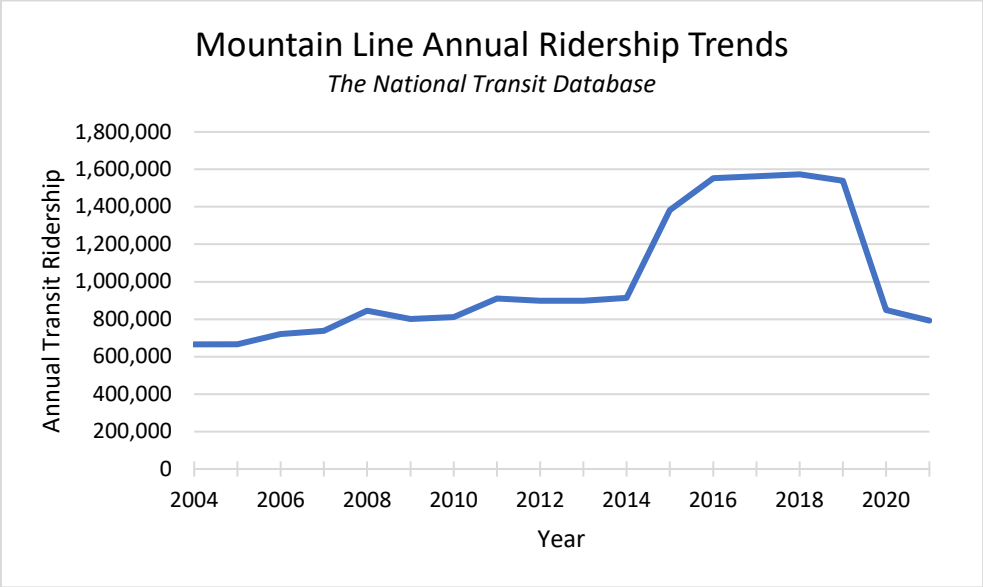
Missoulians are active. Missoula had a higher percentage of people walking or biking to work than either Montana or the US.

Missoula's rate reached a high in 2018 of 10.1%, almost twice that of Montana in general and nearly three times that of the US.

Missoula's rate of people walking or biking to work decreased in 2021 when the rate in Missoula was only 6.7%, but Missoula's rate was still higher than in Montana or the US.



Missoulians use alternative transportation besides individual vehicles. The annual bus ridership on Mountain Line peaked between 2014 and 2019 to nearly 1,600,000 annually. This ridership decreased in 2020, correlating with COVID-19 restrictions.



Healthy People 2030 has goals to promote healthy and safe transportation. Some specific goals include:

1. Increase the proportion of adolescents who walk or use a bicycle to get to and from places to 44.9%;
2. Increase the proportion of adults who walk or use a bicycle to get to and from places to 26.8%; and
3. Increase trips to work made by mass transit to 5.3%.

Environmental Health

The environment people live in affects their health. Environmental factors can cause health problems, such as respiratory diseases, heart disease, and some types of cancer. Additionally, disparities exist. People earning lower incomes are more likely to live in polluted areas and have unsafe drinking water. Certain populations, such as children and pregnant women, are at higher risk of health complications related to environmental pollution.

Healthy People 2030 focuses on reducing people's exposure to harmful pollutants in air, water, soil, food, and materials in homes and workplaces.

1. Air Quality
2. Hazardous Sites
3. Water Quality

Air Quality

Air quality is the health of the air we breathe both outside and inside houses and other structures. Air pollution is linked to many health problems. These include respiratory diseases, cancer, heart disease, and early death. Regulations and laws that prevent air pollution, such as laws like the Clean Air Act, can reduce pollution and help prevent health problems related to air quality.[133]

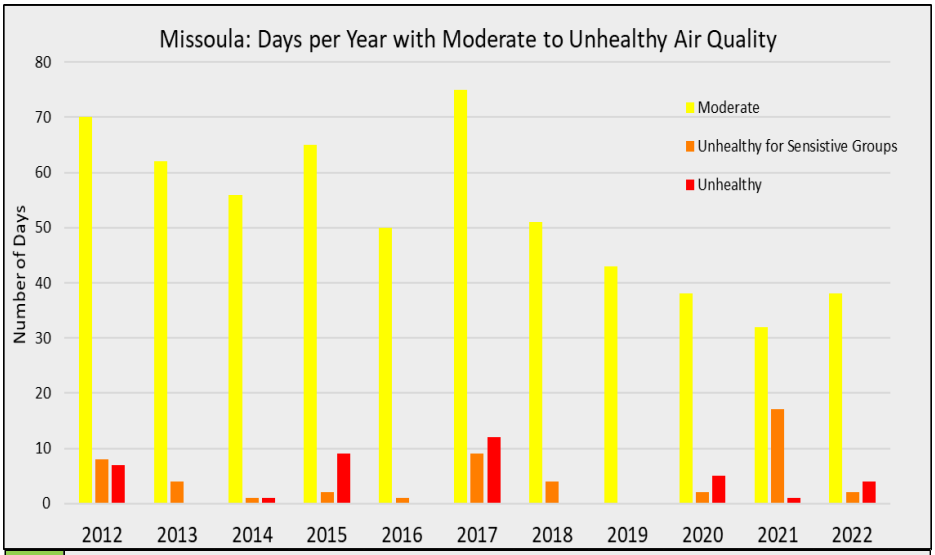
Missoula had programs that impact air quality. Missoula's Air Quality Program monitors air quality, manages outdoor burning, advocates for cleaner burning wood stoves, and provides the public with air quality updates. Air quality is monitored by measuring the amount of particulate matter in the air at three sites in Missoula, Seeley Lake, and Frenchtown. These monitoring stations allow the Air Quality Program to track the daily and yearly averages for PM2.5 (particulate matter 2.5 microns in size). Tracking this also ensures Missoula meets the National Ambient Air Quality Standards set by the EPA.

From 2012 to 2022, the cause of air pollution varied in Missoula based on season. In the winter, Missoula's major air pollution concern was smoke from wood stoves. In the summer and fall, the air pollution concern was smoke from outdoor burning and wildfires. The number of Good air quality days increased. The number of Moderate to Unhealthy air quality days decreased. These changes were likely due to reduced wood stove use across Missoula, improved street cleaning practices, and climate change.

Geography impacts air quality. Missoula's mountain valleys are prone to inversions that can trap polluted air at ground level. This often occurs in Seeley Lake, a valley town northeast of Missoula where wintertime wood stove use produces a lot of smoke (PM2.5). To improve the air quality in Seeley Lake, the Air Quality Program started a wood stove exchange program in 2012 which funded the installation of cleaner burning stoves. Despite unavoidable air quality challenges from wildfire smoke, significant improvements in air quality occurred during the winter months in Seeley Lake because of the program.

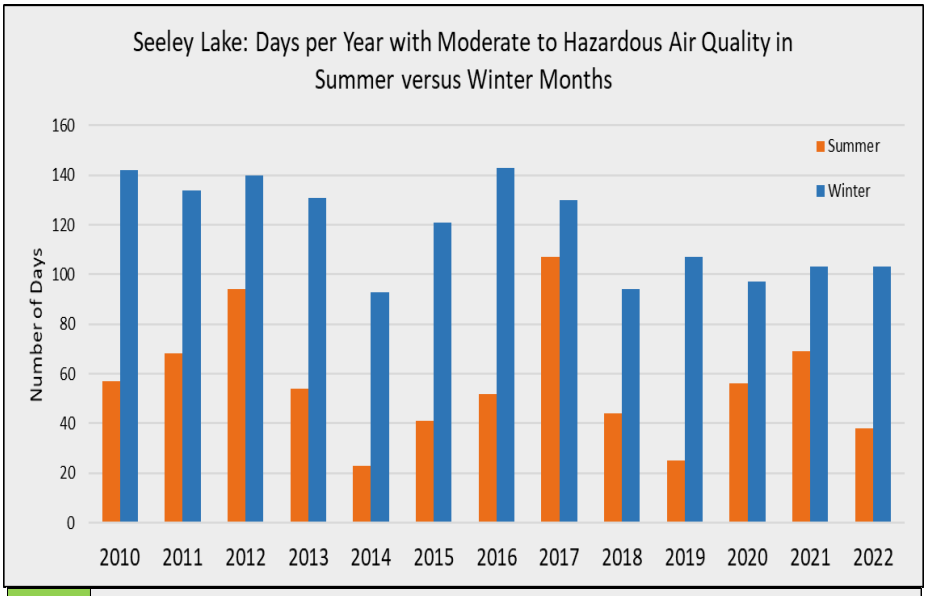
In the City of Missoula, no very unhealthy or hazardous air quality days were recorded. From 2017 to 2022, the rate of unhealthy air quality days was less than the prior five years. The number of days with Good air quality increased from 252 in 2017 to 316 in 2022. Days with moderate, unhealthy for sensitive groups, and unhealthy air quality have occurred nearly every year.

Wildfires impacted air quality. 2012 and 2017, years with higher rates of unhealthy air quality, were years impacted by wildfires.



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Good	265	291	301	275	311	252	303	317	320	312	316

Seeley Lake had higher rates of hazardous air quality than other areas in the County. This is shown even though, before 2010, data was not collected every day of the year on hazardous air quality in Seeley Lake.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Summer	153	136	117	148	142	161	162	104	170	189	158	145	176
Winter	5	10	11	18	34	27	8	16	52	44	55	47	47

In Seeley Lake, winter months had more days with hazardous air quality than summer months. More days in the winter were impacted by moderate to unhealthy air quality than in the summer indicating wood stove smoke was likely causing poor air quality. Over the past decade, the wintertime air quality has improved.

The number of days in the summer with Good air quality in Seeley Lake increased from 104 (shown in green in the graph) in 2017 to 176 in 2022 (out of a total 213 possible days in April through October). The number of days in the winter with good air quality increased from 16 in 2017 to 47 in 2022 (out of a possible 151 days in November through March). Days in the summer with less than good air quality were likely due to smoke from wildfires or prescribed burning whereas in the winter they were most likely due to wood stove smoke.

Healthy People 2030 aims to reduce the number of days people are exposed to unhealthy air. Missoula's Air Quality Program works toward this goal.

Hazardous Sites

Substances harmful to health are found at hazardous sites, including Brownfield and Superfund sites. Proper clean-up of sites determined to be hazardous sites is important because these sites have contaminants that can pollute the air, water, and land in a way that harms human health. Chemicals such as arsenic, polychlorinated biphenyls (PCBs), dioxins, furans, and diesel, all of which can be poisonous and possibly deadly to individuals, can be at these sites. The chemicals may spread through water and soil, spreading the health risks. Certain sites have been located and designated as being hazardous but not all sites containing hazardous substances are designated as such.

In Missoula, harmful chemicals are found at sites, in soil, and in water including well water, streams, lakes, and ponds. Missoula County Water District has four sites listed for clean-up. These are:

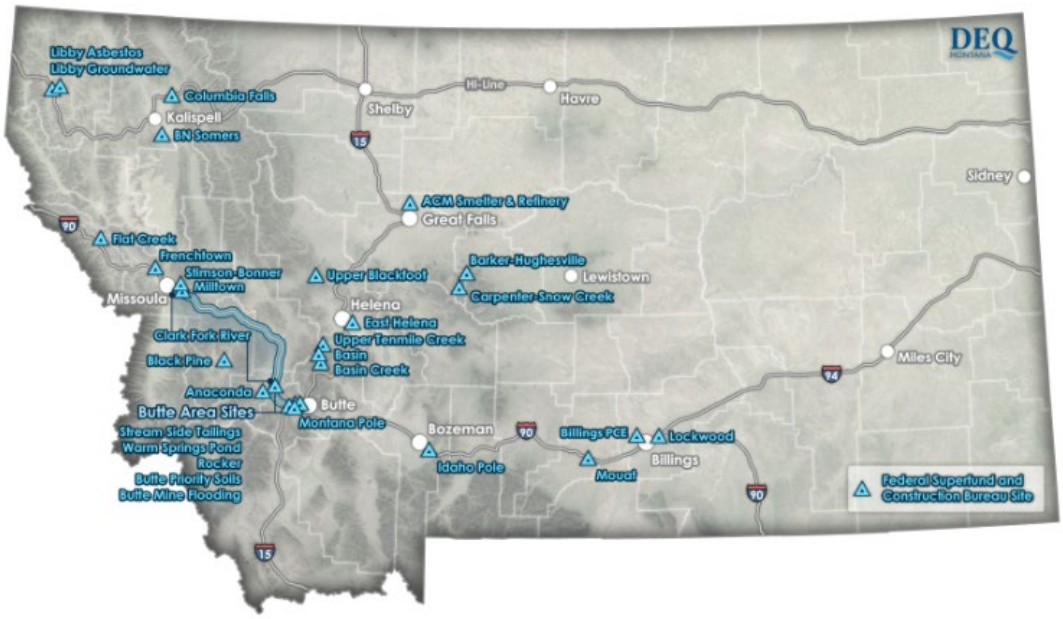
1. Smurfit-Stone Container near Frenchtown in the west part of Missoula County;
2. White Pine Sash in the City of Missoula in the northside neighborhood;
3. Milltown Dam in the eastern part of the Missoula County; and
4. Stimson Lumber Mill in the eastern part of the Missoula County.

This map from PolicyMap has orange shapes representing the Brownfield sites in Missoula County.

The Montana State Federal Superfund and Construction Bureau (Construction Bureau) consult with EPA Region 8 on National Priorities List (NPL) sites within Montana. Sites in Missoula or touching Missoula that the EPA and Construction Bureau oversee the implementation of the remedial process to clean up the sites include the following:[134]

1. Frenchtown Mill (Smurfit Stone Mill in Missoula);
2. Milltown Reservoir Sediments (Milltown);
3. Clark Fork River (Opportunity to Milltown) and
4. Stimson-Bonner Mill PCB Site (Non-National Priority List site in Bonner).

Federal National Priority List (NPL) Site Map



Hazardous sites impact the ability to recreate safely and be near contaminated areas. It impacts the ability to safely swim, fish, and consume fish caught in contaminated areas.[135]

Healthy People 2030 has specific goals related to hazardous sites. These are to:

1. Reduce the risks to human health and the environment posed by hazardous sites to 85.2% of sites where human exposure is known to be under control; and
2. Reduce exposure to arsenic in the population, as measured by blood or urine concentrations of the substance or its metabolites to 34.9 micrograms per gram (µg/g).

Water Quality

Water quality is the quality of the water people drink. It includes the health of the streams, rivers, lakes, and ponds. Clean drinking water is essential for the health of any community. The Safe Drinking Water Act (SDWA) is the primary federal law that ensures clean and safe drinking water in public water supplies. Under the SDWA, public water supplies are required to meet federal drinking water standards that include regular and rigorous testing for chemical and microbial contaminants.

Many people within Missoula City Limits obtain their water from a public water system. The City of Missoula public water system filters this water and limits the ability for the spread of vector-born illnesses from the consumption of contaminated local water.

Those in areas outside City Limits may use private wells for water instead of the public water system. Public water systems have safety standards that private wells do not. Approximately 30% of the population uses private wells in Missoula compared to 10% nationally.[136] Although private wells are not required to be tested for contamination, the Missoula Water Quality District recommends residents testing them and offers well-testing services for county residents.

For those with septic tanks (which are common when one has a private well), a leaking septic tank can spread germs and bacteria into the local well water supply. Without a filtration system that is cleaned regularly to filter these, those drinking from wells could experience illness.

Unsafe water increases the risk of exposure to various metals and nutrients which can harm people. The following materials were found following well testing of Missoula wells. All of these can be harmful to human health:

1. "Nitrate and Bacteria (E. coli and total coliform) should be tested regularly, ideally every year";
2. "Lead can be a concern if household plumbing was installed prior to the mid-1990s, especially if well water is corrosive";
3. "Copper can be an issue if household plumbing includes copper and well water is corrosive"; and
4. "Arsenic, Copper, Lead, Nitrate, Uranium have been found above the human health threshold in this and/or a neighboring county."[137] [138]

Many in Missoula recreate on public waterways. They may also fish and use the water as a source of food from their fishing. The consumption of fish from bodies of water with unsafe levels of various chemicals can increase the risk of cancer. Elevated levels of lead in these waters can cause an increased risk of lead exposure. Chemical contamination is at times related to hazardous sites.

Healthy People 2030 has a goal of Increasing the proportion of persons served by community water systems who receive a supply of drinking water that meets the regulations of the Safe Drinking Water Act to 92.1%.

Appendix 1: Data Resources

Local agencies working on specific issues can provide us with much data. There is also a wealth of data resources available online. Here are several we have found useful.

AARP Livability Index

The AARP Public Policy Institute scores US neighborhoods and communities on services and amenities.

American Community Survey

The American Community Survey (ACS) helps local officials, community leaders, and businesses understand the changes taking place in their communities.

American Factfinder

This US Census website allows you to search for demographic data for states, counties, and communities.

Behavioral Risk Factor Surveillance Survey

The BRFSS is a phone survey of Americans that takes place every two years. It asks questions about people's health conditions, health behaviors, and use of preventive services. You can search for data for counties and cities. You can also get Montana BRFSS data through the Montana Department of Health and Human Services.

Centers for Disease Control and Prevention WONDER

You can search many CDC databases and reports for many subjects — from cancer to pregnancy to the environment.

CDC United States Diabetes Surveillance System

The United States Diabetes Surveillance System is an interactive web application of the most comprehensive compilation of diabetes data and trends at national, state, and county levels.

CDC WISQARS (Web-Based Injury Statistics Query and Reporting System)

CDC's WISQARS™ is an interactive, online database that provides fatal and nonfatal injury, violent death, years of potential life lost, and cost of injury data in the United States.

CDC National Center for Health Statistics

The NCHS compiles statistical information from birth and death records, medical records, interview surveys, and through direct physical exams and laboratory testing.

CDC National Vital Statistics System

The NVSS compiles mortality data that are a fundamental source of demographic, geographic, and cause-of-death information. This is one of the few sources of comparable health-related data for

small geographic areas over an extended period. The data were used to present characteristics of those dying in the United States, to determine life expectancy, and to compare mortality trends.

Community Commons

This subscription service also provides data through maps, tables, reports, and data files. It includes a special focus on equity issues and vulnerable populations. Data categories were equity, economy, education, environment, food, and health.

County Health Rankings & Roadmaps

This collaborative project of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute uses data on health factors to provide a snapshot of health status for each county. The site also provides examples of programs and policies that work to promote health.

Missoula Public Health Community Health Maps

MPH shares the community health data it uses in planning and decision making in mapping tools.

Montana Youth Risk Behavior Survey

The Montana YRBS provides data on health and risk behaviors through a standardized national survey.

PolicyMap

This subscription service provides data through maps, tables, reports, and data files. The 37,000 data indicators were often available down to the census tract or even block group level. Data categories include demographics, health, quality of life, economy, housing, lending activity, and education, among others.

Montana Department of Transportation

The Montana Department of Transportation site provides an overview of the department's responsibilities as well as specifics related to Montana's highway system, rail system, and air services.

Missoula Organization of Realtors

Missoula Organization of Realtors provides resources regarding the local real estate industry and the community. This includes local housing market statistics, homeownership education, member training programs, charity events, monitoring local government issues pertaining to real estate and real estate law.

500 Cities Project

The 500 Cities Project provides city– and census tract–level small area estimates for chronic disease risk factors, health outcomes, and clinical preventive services. Missoula is one of only two communities from Montana that is included.

Appendix 2: Community Resources

Community resources beyond healthcare can be mobilized to address health challenges. Missoula has many agencies and organizations that work to improve community health and well-being in some way. **This list is not intended to be exhaustive.** We tried to include all organizations that affect or serve a significant number of Missoula residents, or that provide crucial or specialized services.

Food and Nutrition Services

Missoula Food Bank

(406) 549-0543

The Food Bank's mission is to lead the movement to end hunger in our community through activism, volunteerism and healthy food for all.

Supplemental Nutrition Assistance Program (SNAP)

(406) 329-1200

SNAP offers nutrition assistance to millions of eligible, low-income individuals and families and provides economic benefits to communities.

Missoula Aging Services Nutrition Programs

(406) 728-7682

Missoula Aging Services provides several programs to address nutritional and social needs of seniors and people with disabilities. Programs include Meals on Wheels, Congregate Meals, Farmers' Market Coupons, and the Rural Nutrition Program.

All Nations Health Center

(406) 829-9515

All Nations Health Center Community Health team offers several programming services throughout the year that focus on healthy cooking, preparing traditional indigenous foods, and diabetes prevention and education. Some of our seasonal services include bison hunts, grocery store tours, meat canning classes, Indigenous farm tours, dry meat cutting and berry drying classes, and food system series.

Garden City Harvest

(406) 523-3663

Building community through agriculture by growing food with and for people with low incomes, offering education and training in ecologically conscious agriculture, and using our sites for the personal restoration of youth and adults.

Community Food & Agriculture Coalition (CFAC)

(406) 880-0543

CFAC's aim is to develop a local food system that ensures all people have access to nutritious, affordable food grown by family farmers within our region.

Women, Infants and Children (WIC)

(406) 258-4740

WIC is a nutrition education program that provides healthy foods, nutrition information and referrals to health and social services in the community.

Child and Adult Care Food Program

(406) 728-6446

The program plays a vital role in assuring the nutritional quality of meals and snacks served to eligible children and adults attending non-residential child or adult care programs and making care more affordable for many low- income families.

Expanded Food and Nutrition Education Program (EFNEP)

(406) 258-4200

EFNEP is a nutrition education program for limited-resource families with children and youth to acquire the knowledge, skills, and attitudes necessary to change behavior for nutritional well-being.

Poverello Center Food Services

(406) 728-1809

The Poverello homeless shelter provides food services including three meals a day to anyone in need, a sack lunch program, and a food pantry.

School Meals

(406) 728-2400 x3051

Healthy breakfasts and lunches are available at fee or reduced rates. Contact your local school for applications.

City Food Bank

(406) 532-7711

The Ministry of Clark Fork City helps to feed hungry Missoula County residents.

Union Gospel Mission

(406) 926-6477

This day center for people experiencing homelessness provides food boxes and meals Monday through Saturday.

Housing and Shelter Services

Missoula Housing Authority

(406) 549-4113

Through creative partnerships and innovative development, the MHA provides quality housing solutions for low and middle-income households in Missoula and the surrounding area.

Missoula Human Resource Council

(406) 728-3710

The Human Resource Council programs include Section 8 rental assistance, emergency housing assistance to the homeless, assistance to first-time home buyers, help with energy bills, and homeowner rehabilitation and repair loans.

Poverello Center

(406) 728-1809

The Poverello provides short-term emergency housing and services, housing and services for veterans, and homeless outreach programs.

Homeword

(406) 532-4663

Homeword provides safe, healthy homes people can afford and strengthens community through housing counseling and education for those in need.

North Missoula Community Development Corporation

(406) 829-0873

The North-Missoula Community Development Corporation, or NMCDC, is a community-based nonprofit organization that develops permanently affordable homeownership opportunities, advocates to meet community needs, and supports neighbors in building the community they want to live in.

Women's Opportunity and Resource Development, Inc. (WORD)

(406) 543-3550

WORD's housing assistance program is designed to help families who are homeless or at risk of homelessness secure or maintain stable housing.

YWCA

(406) 543-6691

The YWCA is the leading organization in Missoula for moving women and families out of crisis and empowering them to achieve lasting independence.

Valor House

(406) 829– 3928

Valor House is a transitional housing facility for homeless veterans operated through a partnership between the Poverello Center Inc., Missoula Housing Authority, and the U.S. Veterans Affairs Department.

Mountain Home Montana

(406) 541-4663

Mountain Home Montana provides shelter for young mothers who need a place to live and a network of support as they create homes of their own.

Salvation Army

(800) 728-7825

The Salvation Army provides assistance and emergency shelter for families with children under the age of 18.

Family Promise

(406) 207-8228

Family Promise Missoula is run by the Missoula Interfaith Collaborative. A network of 28 faith communities and businesses provide housing for homeless families.

Union Gospel Mission of Missoula (UGM)

(406) 542-5240

UGM operates the Women & Children's Center which provides emergency housing for women with children and for single women.

Health Care Services

The lists that follow provide information about a range of health care organizations in Missoula. It is not a comprehensive list because of the number of different types of health care services provided in Missoula. If we listed all clinics and practices, the list would take several pages. In addition to the following, Missoula has a wide range of alternative health care practitioners. There are multiple chiropractic offices, acupuncture clinics, alternative care centers for groups of practitioners using different modalities, naturopaths, homeopaths, massage therapists, and different kinds of bodywork specialists.

Physical Health Services

Partnership Health Center (PHC)

(406) 258-4789

PHC is Missoula's Federally Qualified Health Center. The clinic provides affordable healthcare on a sliding fee scale to the medically underserved residents of Missoula and surrounding rural areas through a partnership of community resources. PHC provides outpatient medical and pharmacy services at their main location, Lowell School Health Center, the Seeley Swan Health Center, and the Poverello homeless shelter.

Community Medical Center (CMC)

(406) 728-4100

CMC provides inpatient and outpatient services including walk-in clinics at multiple locations, nurses on call, and a physician group.

Providence St. Patrick Hospital

(406) 543-7271

Providence provides inpatient and outpatient services including walk-in clinics at multiple locations and a physician group.

All Nation Health Center

(406) 829-9515

All Nations Health Center provides culturally relevant diabetes programs, immunizations, testing, and behavioral health services to the Native American community in Missoula County and the surrounding area.

Curry Health Center

(406) 243-2122

Curry Health Center at the University of Montana provides care for students. They offer walk-in care or appointments, an on-site lab, x-rays, wellness programs, and pharmacy services on the UM campus.

Western Montana Clinic

(406) 721-5600

Western Montana Clinic is the largest clinic in Missoula County with 62 providers across multiple specialties. It also offers.

Planned Parenthood

(406) 728-5490

Planned Parenthood offers reproductive health care, LGBT services, and health care for men and women.

Blue Mountain Clinic

(406) 721-1646

Family practice clinic providing traditional, preventative, and complimentary care. The clinic integrates family medicine, reproductive care, mental health counseling, and trans care.

Seeley Swan Health Center

(406) 677-2277

Seeley Swan Health Center is a branch of Partnership Health Center serving the Seeley Swan area. It provides medical, dental, and behavioral health services.

Ag Worker Health & Services

(406) 273-4633

The Ag Worker Health & Services staff of nurses, dental hygienists, and counselors offers primary health care and referrals for agricultural workers and their families. Spanish interpreters are on staff.

Substance Abuse Disorder and Mental Health Services

Western Montana Mental Health Center Adult Mental Health Services

(406) 532-9700

WMMHC offers services including adult day treatment, adult group homes, transitional housing, crisis stabilization, drop-in centers, emergency services, jail diversion programs, outpatient therapy, support for independent living, medication management, and vocational services.

Western Montana Mental Health Center Child & Youth Mental Health Services

(406) 532-9700

WMMHC offers services including comprehensive school and community treatment in public school districts, home support services, individual and family counseling, and medication management.

Western Montana Mental Health Center Substance Use Disorder Services (WMMHC)

(406) 532-9700

WMMHC addiction services include the inpatient Recovery Center, residential services at Share House and the Carole Graham Home, transitional housing through the Serenity Cove Apartments and the Carol Sem apartments, prevention services including the Flagship after-school program, and outpatient programs including assessment, outpatient therapy, relapse prevention, and day treatment.

Providence Psychiatry

(406) 327-3362

Providence St. Patrick Hospital offers inpatient mental health services for adolescents and adults, including the Adolescent Partial Hospitalization Program.

Partnership Health Center (PHC)

(406) 258-4789

PHC offers counseling on a sliding fee scale and mental health referral services in Missoula and at the Seeley Swan Health Center.

All Nations Health Center

(406) 829-9515

All Nations Health Center offers culturally relevant chemical dependency and mental health services to the Native American community in Missoula County and the surrounding area.

Curry Health Center

(406) 243-2122

Curry Health Center at the University of Montana offers individual counseling, group programs, and medication for mental health and addiction issues.

AWARE Inc.

(406) 543-2202

AWARE Inc. works with children and families in challenging mental health and emotional situations. Services include case management, home support, psychiatric services, and school-based treatment.

Blue Mountain Clinic

(406) 721-1646

Blue Mountain Clinic's family practice clinic integrates family medicine, reproductive care, mental health counseling, and trans care.

Ag Worker Health & Services

(406) 273-4633

The Ag Worker Health & Services staff includes counselors who provide behavioral health and substance abuse counseling.

Private Providers

Missoula County (especially the City of Missoula) has a wealth of private providers dealing with behavioral health issues.

Services for Children & Families

Child Care Resources (CCR)

(406) 728-6446

CCR helps families find and pay for childcare, provides training and coaching for childcare professionals, improves nutrition and opportunities for physical activity in childcare, and works with the health department to promote a healthy and safe environment in childcare centers.

The Parenting Place

(406) 728-5437

The mission of the Parenting Place is to prevent child abuse and neglect by strengthening families through respite care, parenting classes, and in-home visits. Staff also educates the community through training on adverse childhood experiences and child sexual abuse prevention.

Child Development Center

(406) 549-6413

The Child Development Center supports children who have developmental delays and disabilities, from birth through high school graduation. Staff primarily work in families' homes.

Families First

(406) 721–7690

Families First provides multiple family services in Missoula. It operates the Missoula Children's Museum and a parent resource center and regularly offers parenting classes and classes for parents who are separating.

Missoula Youth Homes

(406) 721-2704

Missoula Youth Homes' Family Support Services Program offers coaching and guidance to help families build strong relationships, with the goal of keeping children in their family homes. Youth Homes also offers wilderness treatment, group home care, and foster care and adoption services.

Child and Family Services Division (CFSD)

(406) 543-5531

CFSD offices across the state protect children who have been or are at substantial risk of abuse, neglect or abandonment. They conduct assessments and make decisions about placement to improve safety, permanency, and well-being for children.

Dental Services

Partnership Health Center Dental Clinic (PHC)

(406) 258-4185

PHC is Missoula County's Federally Qualified Health Center. The dental clinic offers full dental care on a sliding fee scale to the medically underserved residents of Missoula and surrounding rural areas. Dental services are also available in PHC's Seeley Swan Health Center.

Curry Health Center

(406) 243-2122

Curry Health Center at the University of Montana provides full dental care for students and greatly reduced rates.

Ag Worker Health & Services

(406) 273-4633

The Ag Worker Health & Services staff includes dental hygienists who provide dental cleanings and basic oral health care and make referrals.

All Nations Health Center

(406) 829-9515

All Nations Health Center is currently developing a program to offer dental cleaning and other preventive services at their center. Call for more information.

Employment & Education Services

Missoula Job Services

(406) 728-7060

No-cost services for job seekers include employment counseling, proficiency and aptitude testing, and job referral training and placement. The Computer Resource Center includes internet access, resume assistance, Montana Career Information System, and Microsoft Word access. Also provides services to employers.

Human Resource Council

(406) 728-3710

The Human Resource Council offers the Workforce Innovation and Opportunity Act Youth Program, which helps to out-of-school youth ages 16 to 24 to reach their educational and employment goals.

Lifelong Learning Center

(406) 549-8765

The Lifelong Learning Center offers adult basic skills and literacy education. Classes include basic skills, English as second language classes, GED classes and testing, college preparation, and pre-employment programs in medical, trade, and technical fields.

Office of Public Assistance Pathways Program

(888) 705-1535

Temporary Assistance for Needy Families (TANF) includes programs to help participants transition into employment and become self-sufficient. The Pathways program provides coaching and mentoring, financial literacy training, work readiness training, work experience, and help with employment-related expenses such as childcare.

Montana Vocational Rehabilitation

(406) 329-5400

Programs help people with permanent disabilities return to competitive employment. Services include counseling, on-the-job training, job location services, and aptitude assessment.

Missoula Works

(406) 926-3400

This project of the Missoula Interfaith Collaborative provides supportive employment for anyone looking for a job, with a focus on people who have low incomes, have been incarcerated, or are homeless.

Opportunity Resources Inc.

(406) 721-2930

Opportunity Resources Inc. (ORI) provides job-related services to adults with intellectual, developmental, and physical disabilities. ORI provides supportive services for clients and works with more than 75 businesses to provide work opportunities.

Missoula Veterans Center

(406) 721-4918

Community-based and VA affiliated. Assisting combat veterans and their families with readjustment counseling, employment and referrals.

The University of Montana

(406) 243-0211

The University of Montana offers undergraduate and graduate degrees in liberal arts, sciences, and professional programs.

Missoula College

(406) 243-0211

Missoula College is the two-year unit of the University of Montana. It offers more than 40 occupational and technical programs and an associate of arts general education program.

Services for Older Adults

Missoula Aging Services

(406) 728-7682

Missoula Aging Services provides multiple services to older and disabled adults, including Medicare and Medicaid assistance, caregiver support, referrals, a resource center, nutrition programs, and Foster Grandparents and other volunteer opportunities.

Missoula Senior Center

(406) 543-7154

The Missoula Senior Center serves as a community center with the goal of supporting the physical, emotional well-being of Missoula's older population. Events focus on health, education, recreation and socialization of members and their families.

Social Security Administration (SSA)

(866) 931-9029

SSA administers Social Security and Supplemental Security Income Benefit Programs.

Disability Services

Missoula Aging Services Aging & Disability Resource Center

(406) 728-7682

Missoula Aging Services links seniors, people with disabilities, their families, and caregivers with community-based services, resources, and volunteer opportunities.

Montana Advocacy Program

(406) 771-6000

Services include advocacy and legal representation for issues directly related to disability.

MonTECH

(406) 243-5751

MonTECH is an assistive technology (AT) resource center that offers Montanans free, confidential information about assistive, adaptive, and rehabilitative devices and services for people with disabilities and older adults.

Opportunity Resources Inc.

(406) 721-2930

ORI programs support individuals with disabilities through health care coordination, vocational assessment and job development, independent living support, and adult day care services.

JOBS Inc.

(406) 541-6966

JOBS provides employment and socialization supports for people with disabilities.

Appendix 3: Survey Methods

MPH surveyed residents in Missoula County (outside Missoula City Limits) and within the Missoula City Limits. The CHA survey received a total of 842 completed responses. All survey responses were automatically entered into the Qualtrics computer system MPH used to conduct the survey.

Survey design:

This CHA survey was divided into two parts, those living within City of Missoula boundaries and those living outside of those boundaries. This was done to examine these data separately so that any differences that exist between the city data and the outlying area data could be examined. Missoula County spread knowledge about the survey through social media at sites such as Missoula County Voice.

City Survey

Those within the city were selected through a random stratified cluster sample approach. Randomly selected households within the Missoula City Limits were selected based on block groups that crossed into city boundaries. Block groups with no residential households were removed from the list of potential block groups to be sampled. Following this, the remaining block groups were separated into three separate groups of the same size based on median household income as reported in 2021 American Community Survey estimates.

A mailing provider was used to have mail sent to all addresses within the selected block groups. This allowed inclusion of addresses with multiple dwellings, such as an apartment building, to be included in the survey sample. However, these tracks and block groups did not always align with the City of Missoula boundaries. Although sampling was able to select for only households within the city, the data on median income may not be a precise reflection of the income of those in split census tracts living within the city. Weighting of this data was not conducted due to lack of relevant, necessary data. A postcard was sent to the addresses identified, inviting one participant per household to take the online survey by using a survey code specific to each address. Citizens were given from July 10, 2023, to August 24, 2023, to complete the survey.

County Survey

In the areas outside City of Missoula boundaries, the rural surveys were based on convenience sampling. Rural data was collected using an online survey that residents were made aware of through public outreach to community organizations. The outreach was done through personal outreach by the PHAC Accreditation coordinator to community councils. The coordinator would reach out to these councils, attend meetings, and discuss the CHA survey. Information for individuals to participate in the survey was provided. Online resources were also used to spread awareness of the survey.

Following completion of the CHA survey, County respondents were given the opportunity to take another survey for the chance to participate further with the CHA and receive a $100 gift card incentive if they participated. The answers given in the CHA survey were completely detached from the future participation survey. The survey was open from July 10, 2023, to August 24, 2023.

Appendix 4: Complete CHA Survey Results

CHA Survey – Total of All Responses

A total of 852 people completed the survey. Quantitative results will be provided for those results within Missoula City Limits and those in Missoula County but outside Missoula City Limits. "Missoula County" in the results refers to those living outside City Limits. Note: Percentage totals may not add up to 100% because of rounding, and many questions allowed multiple responses so may have more answers than respondents.

Where do you currently live in Missoula County?

Where do you currently live in Missoula County?	Choice Count
Bonner	9
Clinton	4
Condon	8
East Missoula	12
Evaro	1
Frenchtown	16
Huson	9
Lolo	43
Missoula (within City limits)	734
Seeley Lake	13
Turah	3
Total	852

How often do you live there?

Missoula City Limits: How often do you live there?	Choice Count
Full-time/year round	700
Part-time/seasonally	13
Total	713

Missoula County: How often do you live there?	Choice Count
Full-time/year round	113
Part-time/seasonally	9
Total	122

How long have you lived there?

Missoula City Limits: How long have you lived there?	Choice Count
Less than one year	55
1-2 years	55
2-5 years	147
5-10 years	124
More than 10 years	332
Total	713

Missoula County: How long have you lived there?	Choice Count
Less than one year	2
1-2 years	14
2-5 years	25
5-10 years	22
More than 10 years	62
Total	125

What is the total number of people living in your household, including yourself?

Missoula City Limits: What is the total number of people living in your household, including yourself	Choice Count
1	216
2	327
3	70
4	73
5 or more people	29
Total	715

Missoula County: What is the total number of people living in your household including yourself?	Choice Count
1	12
2	61
3	29
4	13
5 or more people	10
Total	125

Do you rent or own your current residence?

Missoula City Limits: Do you rent of own your current residence?	Choice Count
Rent	211
Own	494
Other	9
Total	714

Missoula County: Do you rent or own your current residence?	Choice Count
Rent	13
Own	110
Other	1
Total	124

"Other" answers receiving more than one response, in order of occurrence:

- Owned by family or relatives

What racial categories do you identify with? Check all that apply to you.

Missoula City Limits: What racial categories do you identify with?	Choice Count
Alaskan Native, American Indian, Native American	19
Black, African American	7
White, Non-Hispanic	788
Hispanic, Latino, Latina, Latin-x	22
Asian, Asian American	17
Native Hawaiian, Pacific Islander	4
Write-in	18
Total	875

Missoula County: What racial categories do you identify with?	Choice Count
Alaskan Native, American Indian, Native American	6
Black, African American	5
White, Non-Hispanic	111
Hispanic, Latino, Latina, Latin-x	3
Asian, Asian American	4
Native Hawaiian, Pacific Islander	1
Write-in	3
Total	133

"Other" answers receiving more than one response, in order of occurrence:

Missoula City Limits:

- American

What is your current employment status?

Missoula City Limits: What is your current employment status?	Choice Count
Full-time	357
Part-time	62
Unemployed	17
Retired	249
Other, please specify:	30
Total	715

Missoula County: What is your current employment status?	Choice Count
Full-time	69
Part-time	11
Unemployed	2
Retired	39
Other, please specify:	3
Total	124

"Other" answers receiving more than one response, in order of occurrence:

Missoula City Limits:

- Stay-at-home mom
- Self-employed
- Retired and still working part-time
- Disabled

Missoula County:

- Self-employed

What best describes the type of organization that you currently work for? Please check all that apply.

Missoula City Limits: What best describes the type of organization that you currently work for? Please check all that apply.	Choice Count
Education	85
Government	63
Healthcare	105
Nonprofit	62
Private / For-profit	117
Not applicable	12
Other, please specify:	41
Total	485

Missoula County: What best describes the type of organization that you currently work for? Please check all that apply.	Choice Count
Education	18
Government	5
Healthcare	24
Nonprofit	11
Private / For-profit	25
Not applicable	2
Other, please specify:	4
Total	89

"Other" answers receiving more than one response, in order of occurrence:

Missoula City Limits:

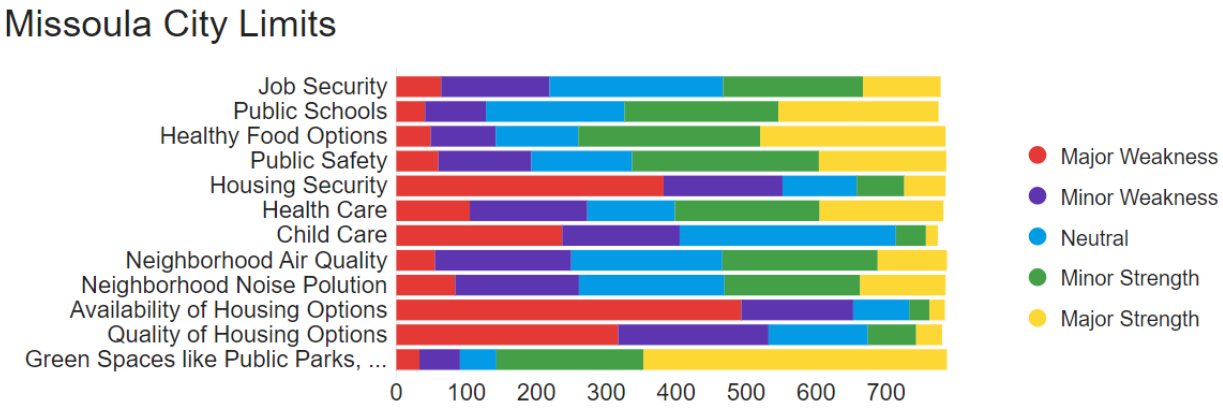
- Self-employed
- Construction
- Service Industry

Missoula County:

- Self-employed

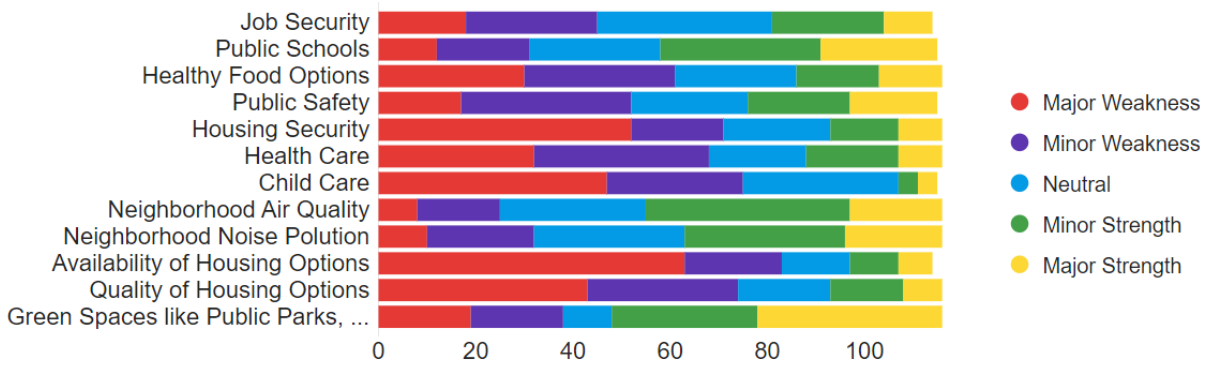
Please review the list of social determinants below and rate each item's relative strength in your local community. Consider "community" to be where you currently live.

Missoula City Limits: Please review the list of social determinants and rate each iten's relative strength in your local community. Consider 'community" to be where you currently live.	Min	Max	Mean	Responses
Job Security	1.00	5.00	3.18	778
Public Schools	1.00	5.00	3.66	775
Healthy Food Options	1.00	5.00	3.76	785
Public Safety	1.00	5.00	3.48	786
Housing Security	1.00	5.00	2.05	785
Health Care	1.00	5.00	3.23	782
Child Care	1.00	5.00	2.27	774
Neighborhood Air Quality	1.00	5.00	3.15	787
Neighborhood Noise Polution	1.00	5.00	3.12	785
Availability of Housing Options	1.00	5.00	1.63	784
Quality of Housing Options	1.00	5.00	2.09	780
Green Spaces like Public Parks, Playgrounds, and/or Trails	1.00	5.00	4.21	787



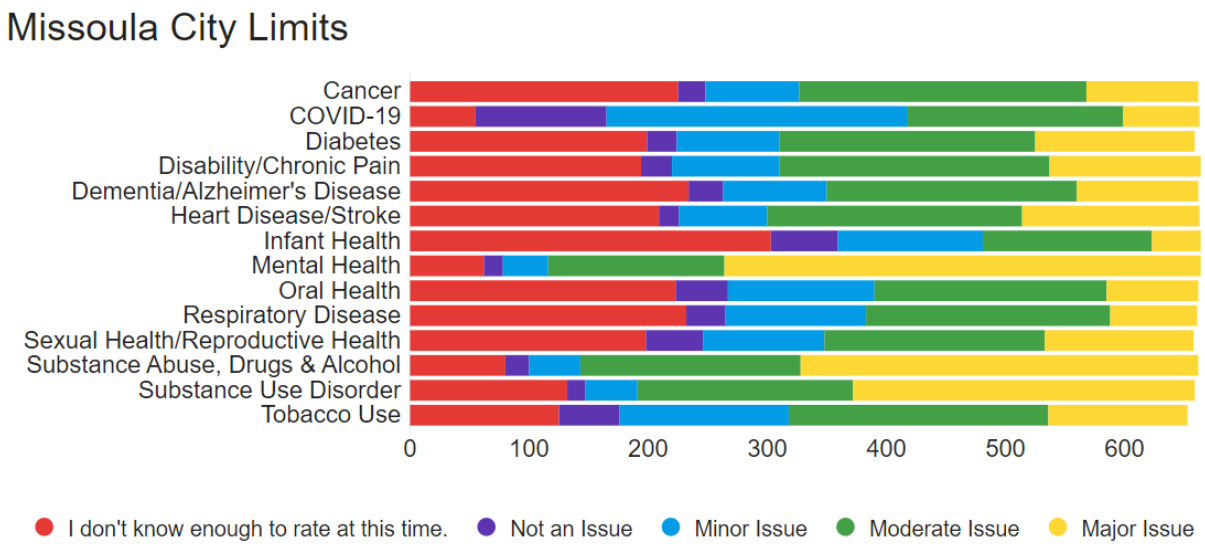
Missoula County: Preview the list of social determinants and rate each iten's relative strength in your local community. Consider 'community" to be where you currently live.	Min	Max	Mean	Responses
Job Security	1.00	5.00	2.82	114
Public Schools	1.00	5.00	3.33	115
Healthy Food Options	1.00	5.00	2.59	116
Public Safety	1.00	5.00	2.90	115
Housing Security	1.00	5.00	2.22	116
Health Care	1.00	5.00	2.46	116
Child Care	1.00	5.00	2.04	115
Neighborhood Air Quality	1.00	5.00	3.41	116
Neighborhood Noise Polution	1.00	5.00	3.27	116
Availability of Housing Options	1.00	5.00	1.93	114
Quality of Housing Options	1.00	5.00	2.26	116
Green Spaces like Public Parks, Playgrounds, and/or Trails	1.00	5.00	3.42	116

Missoula County



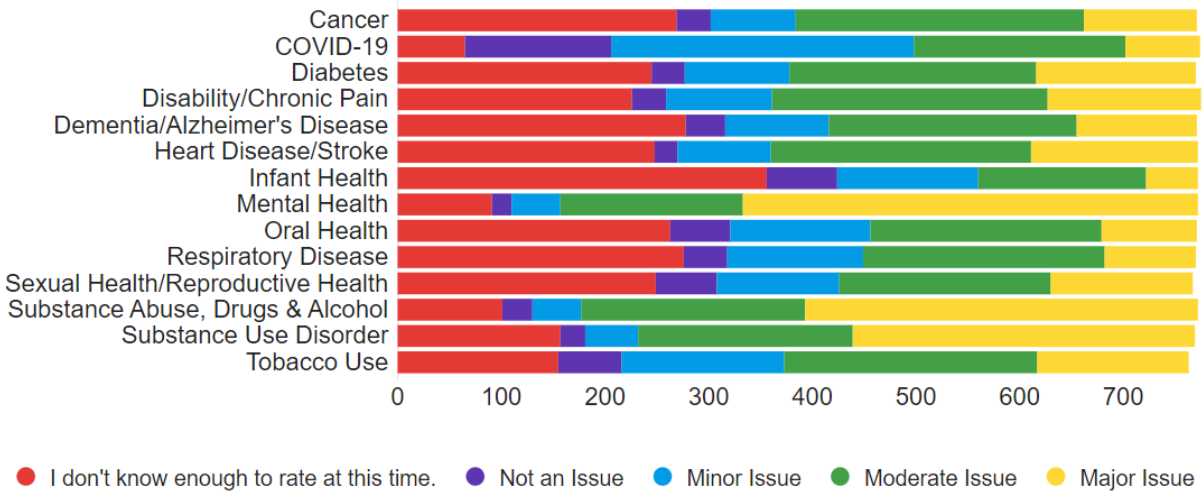
Please review the list of health topics below and consider how much of an issue each health topic is in your local community.

Missoula City Limits: Please review the list of heatlh topics below and consider how much of an issue each health topic is in your local community.	I don't know enough to rate at this time.	Not an Issue	Minor Issue	Moderate Issue	Major Issue
Cancer	225	23	79	241	94
COVID-19	55	110	253	181	64
Diabetes	199	25	86	215	134
Disability/Chronic Pain	194	26	90	227	127
Dementia/Alzheimer's Disease	234	29	87	210	102
Heart Disease/Stroke	209	17	74	214	149
Infant Health	303	56	122	142	41
Mental Health	62	16	38	148	400
Oral Health	223	44	123	195	77
Respiratory Disease	232	33	118	205	73
Sexual Health/Reproductive Health	198	48	102	185	125
Substance Abuse, Drugs & Alcohol	80	20	43	185	334
Substance Use Disorder	132	15	44	181	287
Tobacco Use	125	51	142	218	117



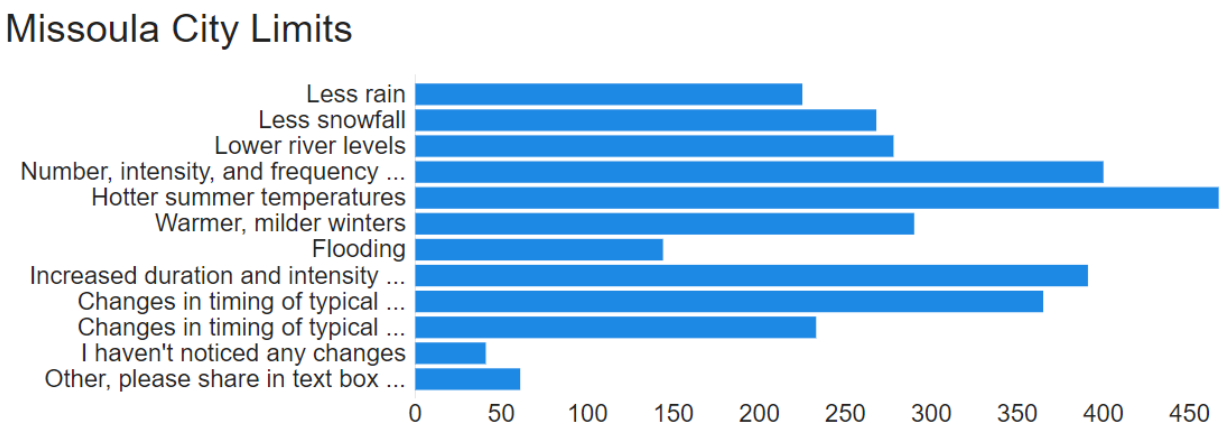
Missoula County: Please review the list of health topics below and consider how much of an issue each health topic is in your local community.	I don't know enough to rate at this time.	Not an Issue	Minor Issue	Moderate Issue	Major Issue	Total
Cancer	269	33	82	278	109	771
COVID-19	65	141	292	204	72	774
Diabetes	245	32	101	238	154	770
Disability/Chronic Pain	226	33	102	266	148	775
Dementia/Alzheimer's Disease	278	38	100	239	116	771
Heart Disease/Stroke	248	22	90	251	161	772
Infant Health	356	68	136	162	50	772
Mental Health	91	19	47	176	439	772
Oral Health	263	58	135	223	92	771
Respiratory Disease	276	42	131	233	88	770
Sexual Health/Reproductive Health	249	59	118	204	137	767
Substance Abuse, Drugs & Alcohol	101	29	47	216	379	772
Substance Use Disorder	157	24	51	207	330	769
Tobacco Use	155	61	157	244	146	763

Missoula County

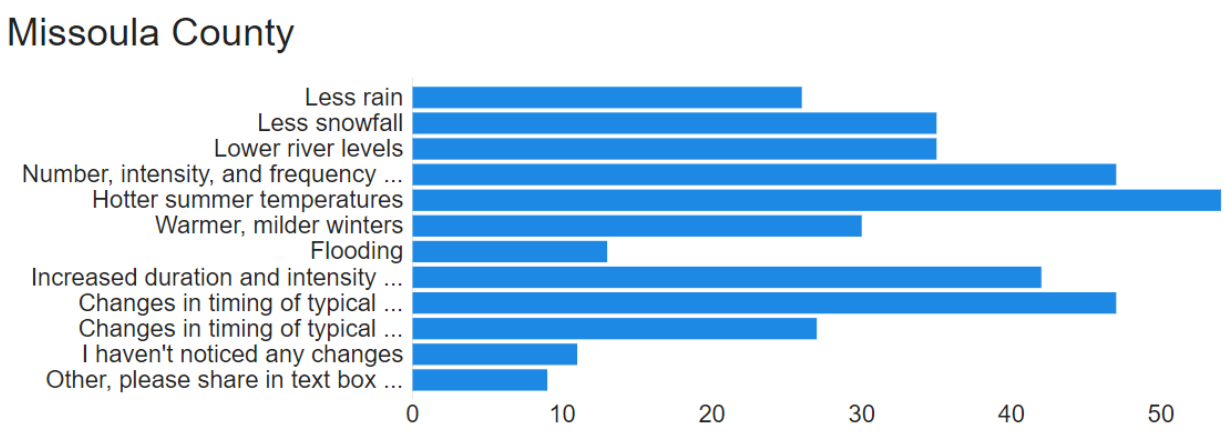


In what ways, if any, have you noticed climate shifts in Montana? Check all that apply.

Missoula City Limits: In what ways, if any, have you noticed climate shifts in Montana? Check all that apply	Choice Count
Less rain	225
Less snowfall	268
Lower river levels	278
Number, intensity, and frequency of wildfires	400
Hotter summer temperatures	467
Warmer, milder winters	290
Flooding	144
Increased duration and intensity of wildfire smoke	391
Changes in timing of typical seasonal events (i.e. first frost, spring runoff, tree and flower blooms, etc.)	365
Changes in timing of typical seasonal activities (i.e. fishing, hiking, skiing, boating, planting/growing season, etc.)	233
I haven't noticed any changes	41
Other, please share in text box below	61
Total	3163



Missoula County: In what ways, if any, have you noticed climate shifts in Montana. Check all that apply.	Choice Count
Less rain	26
Less snowfall	35
Lower river levels	35
Number, intensity, and frequency of wildfires	47
Hotter summer temperatures	54
Warmer, milder winters	30
Flooding	13
Increased duration and intensity of wildfire smoke	42
Changes in timing of typical seasonal events (i.e. first frost, spring runoff, tree and flower blooms, etc.)	47
Changes in timing of typical seasonal activities (i.e. fishing, hiking, skiing, boating, planting/growing season, etc.)	27
I haven't noticed any changes	11
Other, please share in text box below	9
Total	376



"Other" answers receiving more than one response, in order of occurrence:

Missoula City Limits:

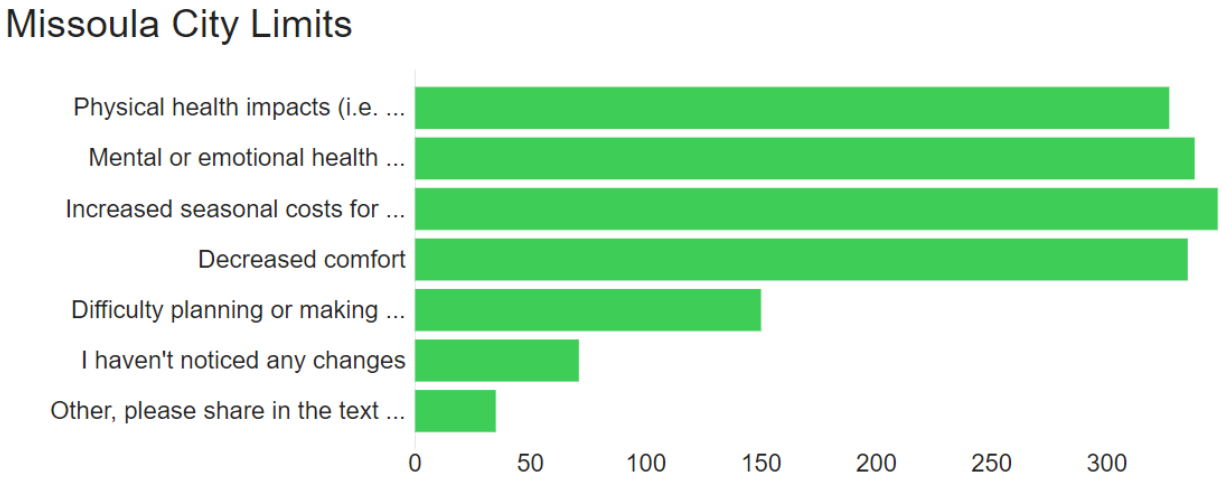
- Haven't lived here long enough to know
- Lower water levels in lakes
- More erratic weather swings between hot and cold
- More rain and snow, not following typical past patterns
- Climate is always changing

Missoula County:

- Longer winters
- Stressed and fewer animals and insects

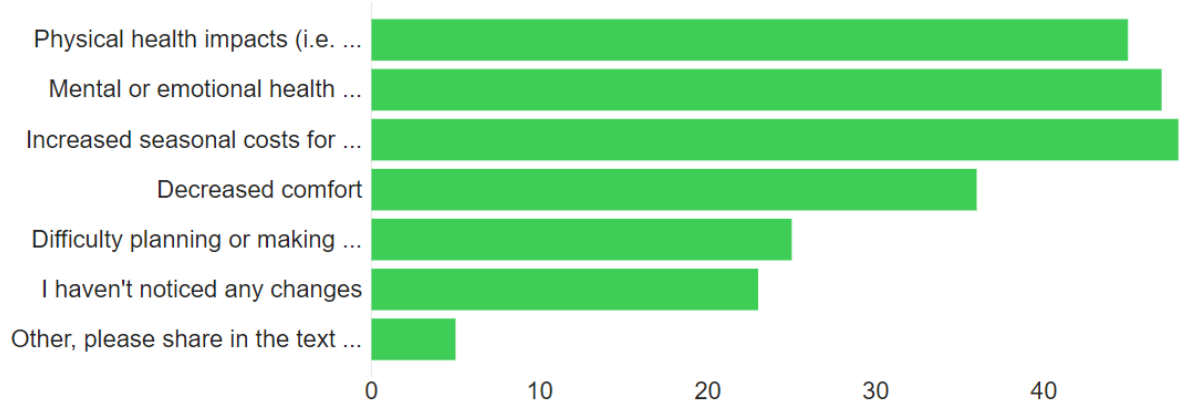
In what ways, if any, does our shifting climate affect you or your loved ones? Check all that apply.

Missoula City Limits: In what ways, if any, does our shifting climate affect you or your loved ones? Check all that apply.	Choice Count
Physical health impacts (i.e. asthma, difficulty breathing, heat exhaustion, etc.)	327
Mental or emotional health impacts (i.e. anxiety, grief, depression, etc.)	338
Increased seasonal costs for heating or cooling your household	348
Decreased comfort	335
Difficulty planning or making decisions	150
I haven't noticed any changes	71
Other, please share in the text box below	35
Total	1604



Missoula County: In what way, if any, does our shifting climate affect you or your loved ones? Check all that apply	Choice Count
Physical health impacts (i.e. asthma, difficulty breathing, heat exhaustion, etc.)	45
Mental or emotional health impacts (i.e. anxiety, grief, depression, etc.)	47
Increased seasonal costs for heating or cooling your household	48
Decreased comfort	36
Difficulty planning or making decisions	25
I haven't noticed any changes	23
Other, please share in the text box below	5
Total	229

Missoula County



"Other" answers receiving more than one response, in order of occurrence:

Missoula City Limits:

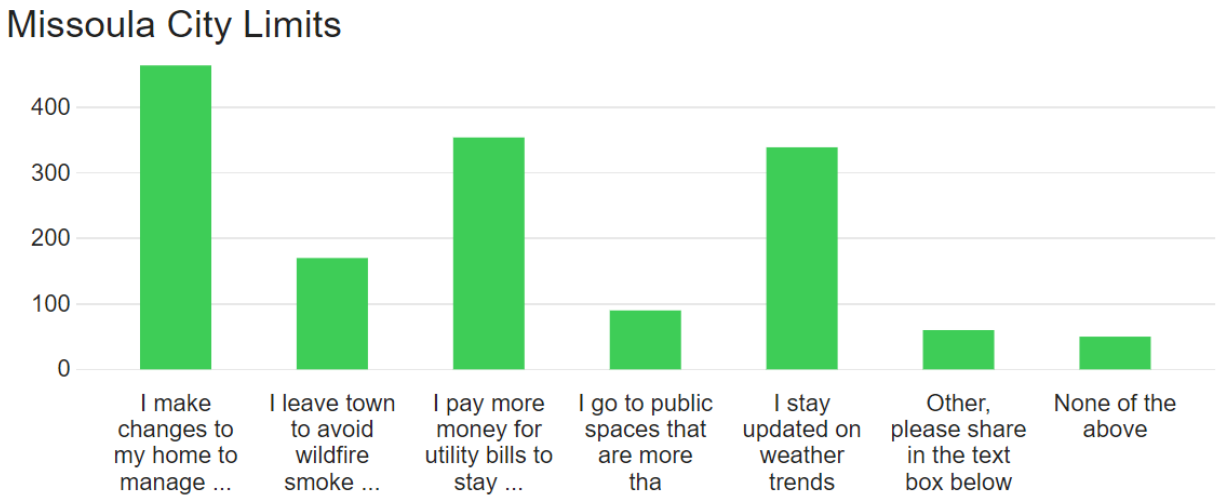
- Stress
- More water required for yards and gardens
- Worried about the future and the world for our children
- Loss of outdoor recreation opportunities
- Have to purchase air conditioning
- Fear of climate change making things worse
- The climate has been changing for years and we don't need to worry

Missoula County:

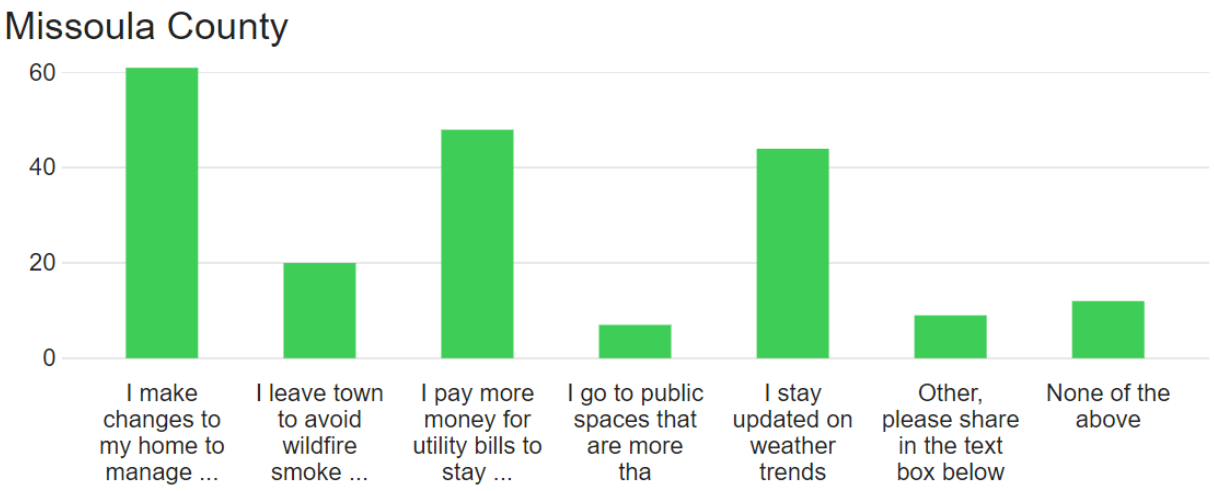
- Less winter outdoor recreation

What are some of the ways that you currently cope with the impacts of our shifting climate? Check all that apply.

Missoula City Limits: What are some of the ways that you currently cope with the impacts of our shifting climate? Check all that apply.	Choice Count
I make changes to my home to manage indoor temperatures (i.e. heating units, air conditioning units, blackout curtains, etc.)	464
I leave town to avoid wildfire smoke and/or extreme heat	170
I pay more money for utility bills to stay comfortable in my home	354
I go to public spaces that are more comfortable than my own home	90
I stay updated on weather trends	339
Other, please share in the text box below	60
None of the above	50
Total	1527



Missoula County: What are some of the ways that you currently cope wtih the impacts of our shifting climate? Check all that apply.	Choice Count
I make changes to my home to manage indoor temperatures (i.e. heating units, air conditioning units, blackout curtains, etc.)	61
I leave town to avoid wildfire smoke and/or extreme heat	20
I pay more money for utility bills to stay comfortable in my home	48
I go to public spaces that are more comfortable than my own home	7
I stay updated on weather trends	44
Other, please share in the text box below	9
None of the above	12
Total	201



"Other" answers receiving more than one response, in order of occurrence:

Missoula City Limits:

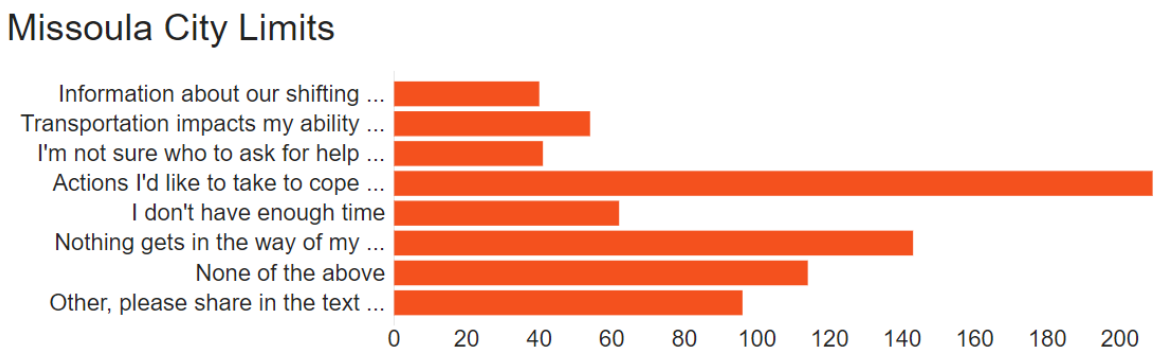
- Increased wildfire smoke and need to use air purifiers
- Poor air quality outside
- Use of solar panels
- Adapt actions to try to have less of a negative impact on the climate
- Avoid being outside when it is hot, smoky, or too cold
- Seek help of a therapist to deal with climate change stress
- Volunteer to help with climate change issues
- Go outside less when it is smoky in the summer

Missoula County:

- Go outside to recreate less if it is smoky in summer or the snow melts in the winter
- Higher utility bills because of economy or rate changes, not climate

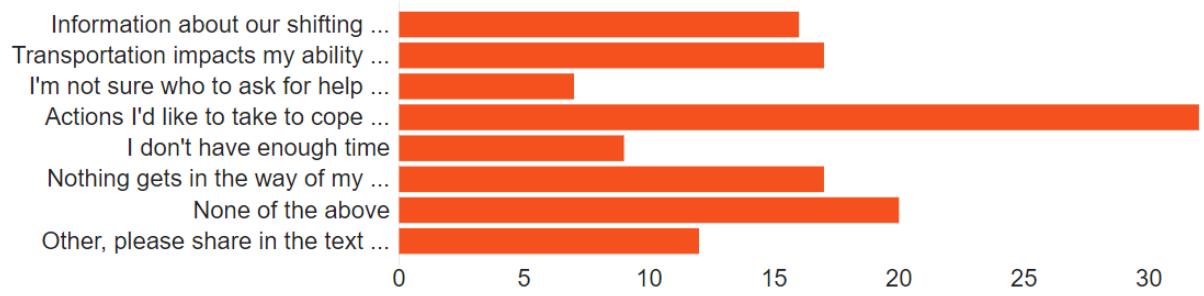
What are some of the things that get in the way of you taking actions to cope with the impacts of our shifting climate? Check all that apply.

Missoula City Limits: What are some of the things that get in the way of you taking actions to cope with the impacts of our shifting climate? Check all that apply.	Choice Count
Information about our shifting climate is confusing and/or hard to understand	40
Transportation impacts my ability to cope with our shifting climate	54
I'm not sure who to ask for help or information about our shifting climate and coping strategies	41
Actions I'd like to take to cope cost too much	209
I don't have enough time	62
Nothing gets in the way of my ability to cope with the impacts of our shifting climate	143
None of the above	114
Other, please share in the text box below	96
Total	759



Missoula County: What are some of the things that get in the way of you taking actions to cope with the impacts of our shifting climate? Check all that apply.	Choice Count
Information about our shifting climate is confusing and/or hard to understand	16
Transportation impacts my ability to cope with our shifting climate	17
I'm not sure who to ask for help or information about our shifting climate and coping strategies	7
Actions I'd like to take to cope cost too much	32
I don't have enough time	9
Nothing gets in the way of my ability to cope with the impacts of our shifting climate	17
None of the above	20
Other, please share in the text box below	12
Total	130

Missoula County



"Other" answers receiving more than one response, in order of occurrence:

Missoula City Limits:

- Elected state leaders and legislators deny climate change is occurring and do not want to take action to mitigate it
- Too expensive
- Businesses and corporations do not do enough to mitigate climate change
- It is not up to individuals to stop climate change, the government and businesses need to step up
- Not sure what to do
- Need to have public policy that focuses on preventing climate change, not just mitigating it
- Feelings of the futility of individual action if major corporations do not take action

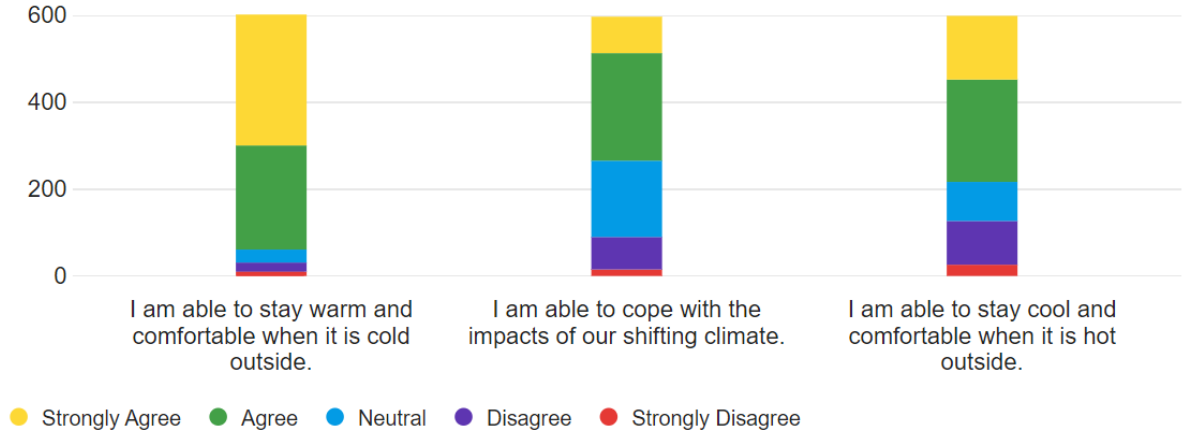
Missoula County

- Climate change is a divisive topic that people do not want to talk about so they avoid it
- Don't believe climate change is occurring

Please review the following statements and rate your level of agreement with each.

Missoula City Limits: Please review the following statements and rate your level of agreement with each.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
I am able to stay warm and comfortable when it is cold outside.	10	21	30	240	302	603
I am able to cope with the impacts of our shifting climate.	15	75	176	248	84	598
I am able to stay cool and comfortable when it is hot outside.	26	101	90	236	147	600

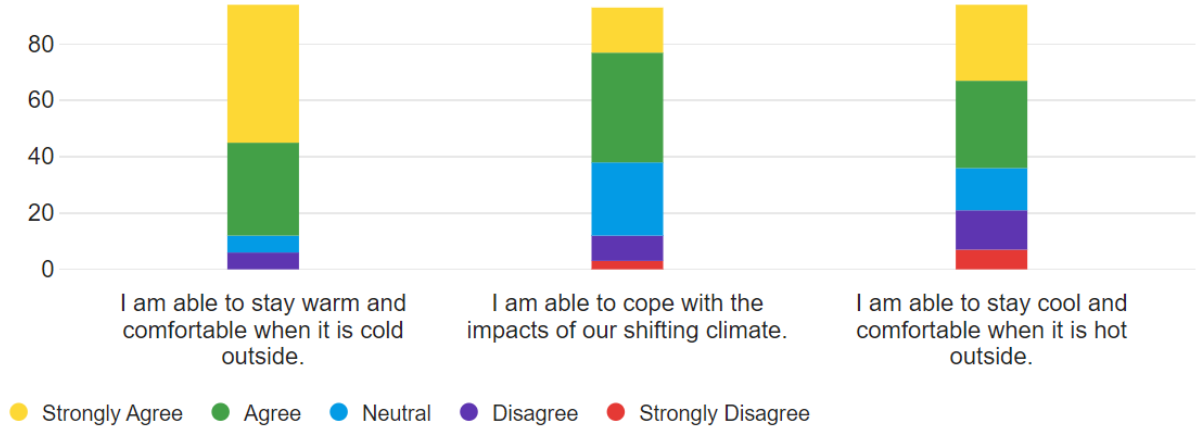
Missoula City Limits



Statistical Analysis of Missoula City Limits: Please review the following statements and rate your level of agreement with each.	Min	Max	Mean	Responses
I am able to stay warm and comfortable when it is cold outside.	1.00	5.00	4.33	603
I am able to cope with the impacts of our shifting climate.	1.00	5.00	3.52	598
I am able to stay cool and comfortable when it is hot outside.	1.00	5.00	3.63	600

Missoula County: Please review the following statements and rate your level of agreement with each.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
I am able to stay warm and comfortable when it is cold outside.	0	6	6	33	49	94
I am able to cope with the impacts of our shifting climate.	3	9	26	39	16	93
I am able to stay cool and comfortable when it is hot outside.	7	14	15	31	27	94

Missoula County

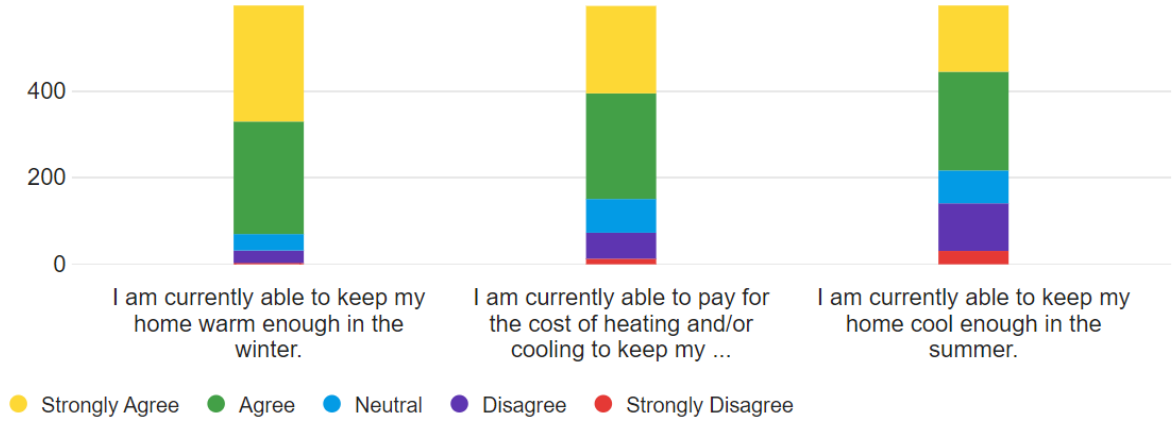


Statistical Analysis of Missoula County: Please review the following statements and rate your level of agreement with each.	Min	Max	Mean	Responses
I am able to stay warm and comfortable when it is cold outside.	2.00	5.00	4.33	94
I am able to cope with the impacts of our shifting climate.	1.00	5.00	3.60	93
I am able to stay cool and comfortable when it is hot outside.	1.00	5.00	3.61	94

Please review the following statements and rate your level of agreement with each.

Missoula City Limits: Please review the following statements and rate your level of agreement with each.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am currently able to keep my home warm enough in the winter.	3	29	38	260	268
I am currently able to pay for the cost of heating and/or cooling to keep my household comfortable year-round.	13	60	78	244	202
I am currently able to keep my home cool enough in the summer.	31	110	76	228	153
Total	47	199	192	732	623

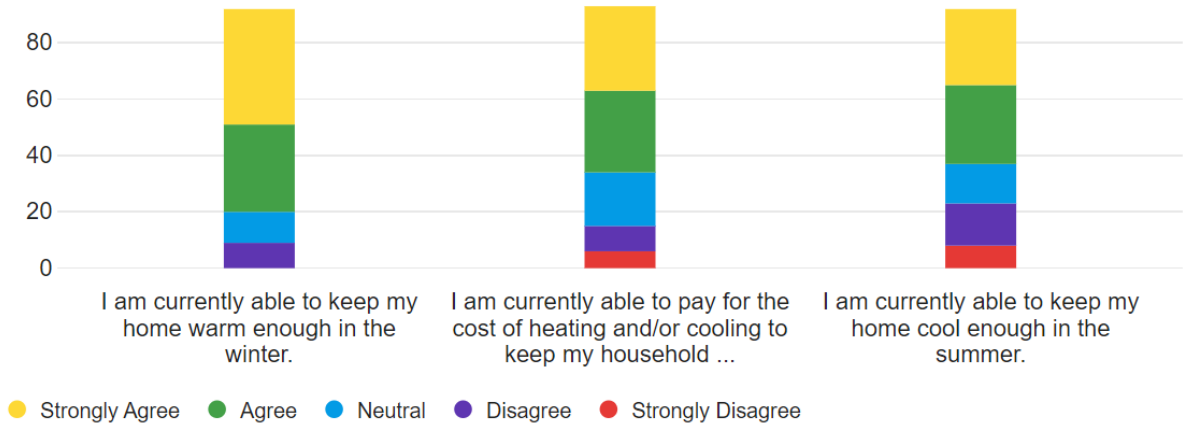
Missoula City Limits



Statistical Analysis Missoula City Limits: Please review the following statements and rate your level of agreement with each.	Min	Max	Mean	Responses
I am currently able to keep my home warm enough in the winter.	1.00	5.00	4.27	598
I am currently able to pay for the cost of heating and/or cooling to keep my household comfortable year-round.	1.00	5.00	3.94	597
I am currently able to keep my home cool enough in the summer.	1.00	5.00	3.61	598

Missoula County: Please review the following statements and rate your level of agreement with each.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
I am currently able to keep my home warm enough in the winter.	0	9	11	31	41	92
I am currently able to pay for the cost of heating and/or cooling to keep my household comfortable year-round.	6	9	19	29	30	93
I am currently able to keep my home cool enough in the summer.	8	15	14	28	27	92

Missoula County

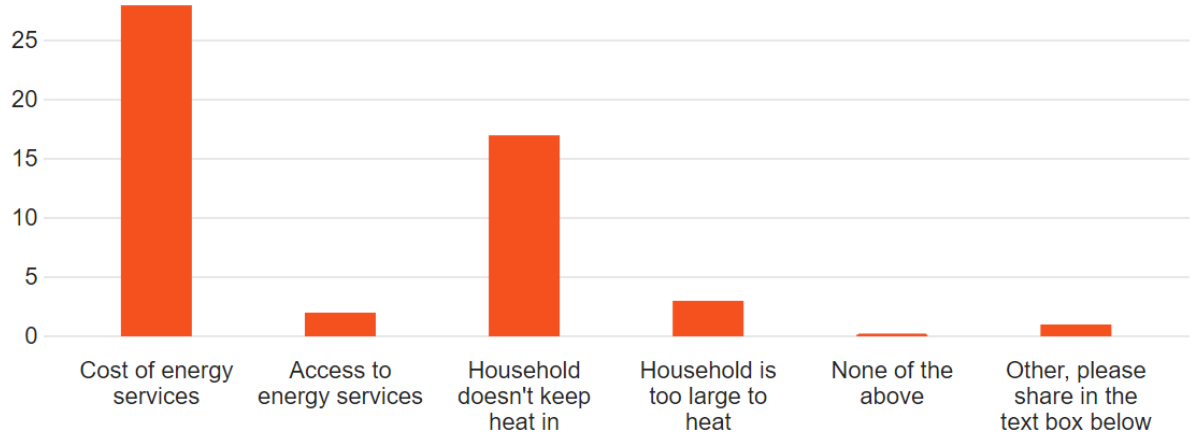


Statistical Analysis Missoula County: Please review the following statements and rate your level of agreement with each.	Min	Max	Mean	Responses
I am currently able to keep my home warm enough in the winter.	2.00	5.00	4.13	92
I am currently able to pay for the cost of heating and/or cooling to keep my household comfortable year-round.	1.00	5.00	3.73	93
I am currently able to keep my home cool enough in the summer.	1.00	5.00	3.55	92

What are some things that prevent you from keeping your home warm enough in the winter? Check all that apply.

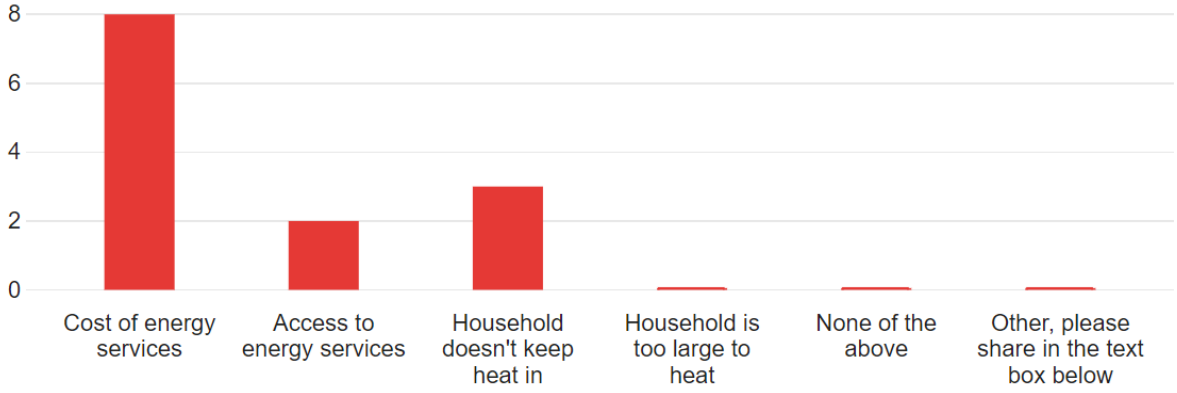
Missoula City Limits: What are some things that prevent you from keeping your home warm enough in the winter?	Choice Count
Cost of energy services	28
Access to energy services	2
Household doesn't keep heat in	17
Household is too large to heat	3
None of the above	0
Other, please share in the text box below	1
Total	51

Missoula City Limits



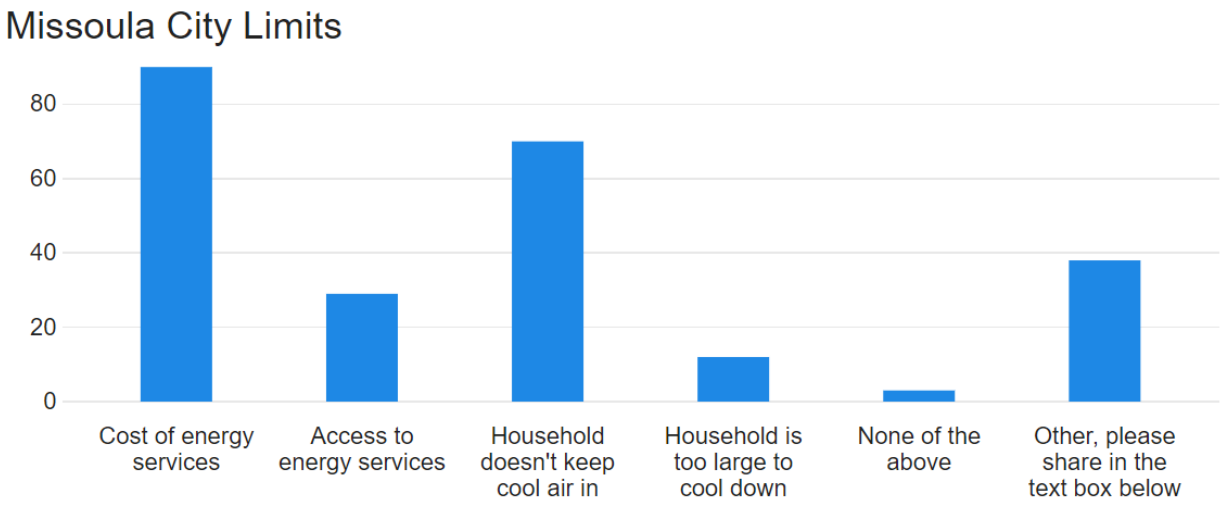
Missoula County: What are some things that prevent you from keeping your home warm enough in the winter? Check all that apply.	Choice Count
Cost of energy services	8
Access to energy services	2
Household doesn't keep heat in	3
Household is too large to heat	0
None of the above	0
Other, please share in the text box below	0
Total	13

Missoula County

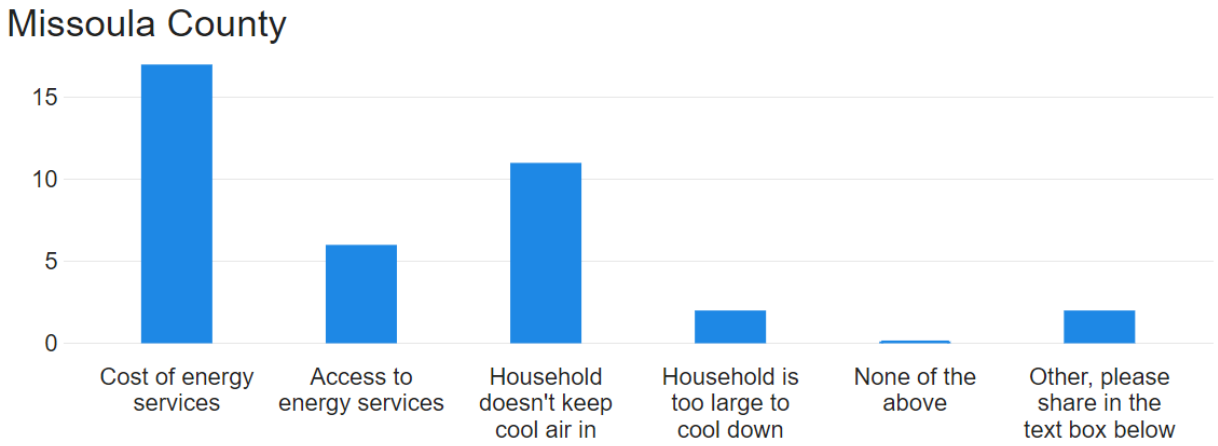


What are some things that prevent you from keeping your home cool enough in the summer? Check all that apply.

Missoula City Limits: What are some things that prevent you from keeping your home cool enough in the summer?	Choice Count
Cost of energy services	90
Access to energy services	29
Household doesn't keep cool air in	70
Household is too large to cool down	12
None of the above	3
Other, please share in the text box below	38
Total	242



Missoula County: What are some things that prevent you from keeping your home cool enough in the summer?	Choice Count
Cost of energy services	17
Access to energy services	6
Household doesn't keep cool air in	11
Household is too large to cool down	2
None of the above	0
Other, please share in the text box below	2
Total	38



"Other" answers receiving more than one response, in order of occurrence:

Missoula City Limits:

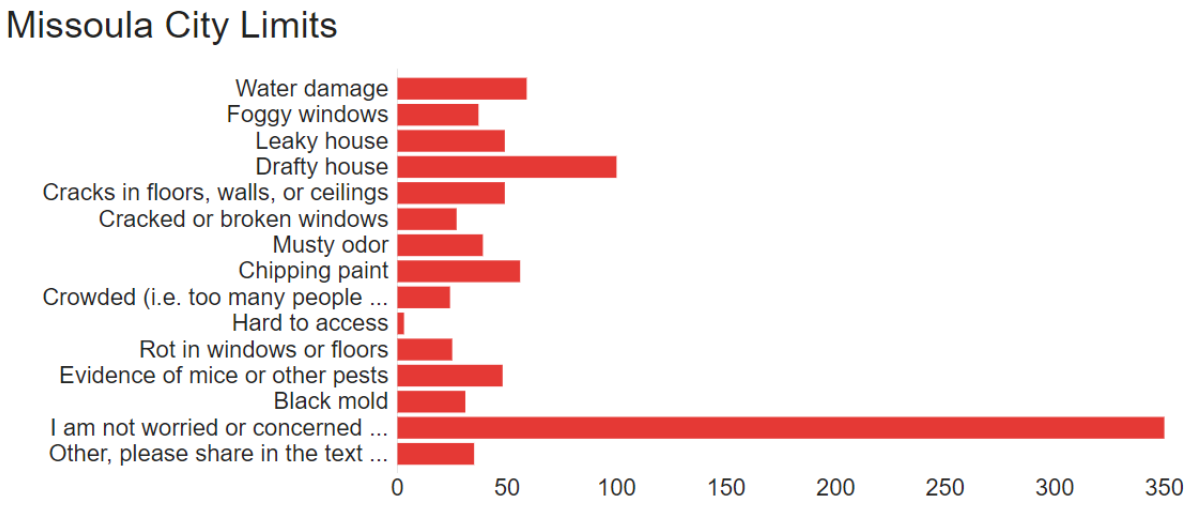
- Don't have air conditioning
- Can't afford air conditioning
- Live in an old house without air conditioning that lets smoke in
- Air conditioning is not environmentally responsible

Missoula County

- Do not have air conditioning

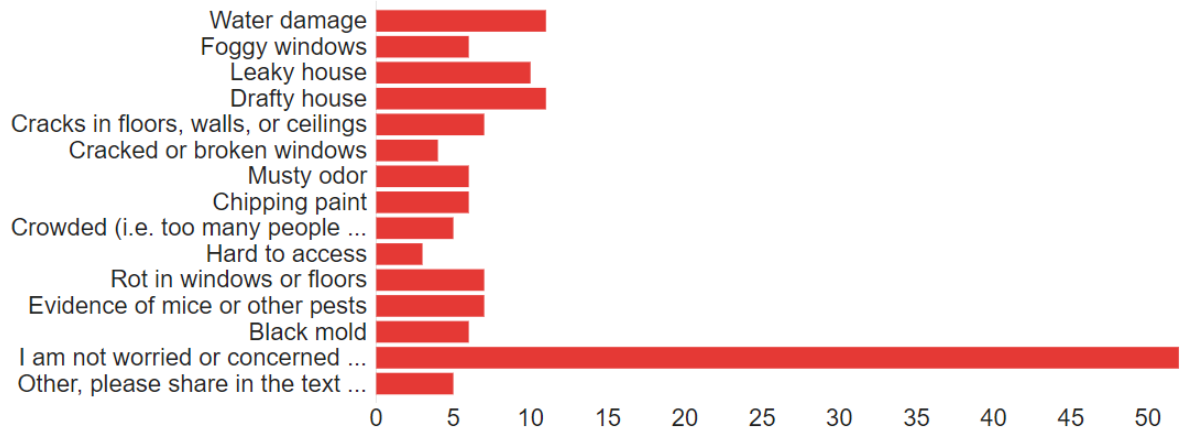
Are you currently worried or concerned about any of the following inside your household? Check all that apply.

Missoula City Limits: Are you currently worried or concerned about any of the following inside your household?	Choice Count
Water damage	59
Foggy windows	37
Leaky house	49
Drafty house	100
Cracks in floors, walls, or ceilings	49
Cracked or broken windows	27
Musty odor	39
Chipping paint	56
Crowded (i.e. too many people for the amount of livable space)	24
Hard to access	3
Rot in windows or floors	25
Evidence of mice or other pests	48
Black mold	31
I am not worried or concerned about the current condition of my home	350
Other, please share in the text box below	35
Total	932



Missoula County: Are you currently worried or concerned about any of the following inside your household? Check all that apply.	Choice Count
Water damage	11
Foggy windows	6
Leaky house	10
Drafty house	11
Cracks in floors, walls, or ceilings	7
Cracked or broken windows	4
Musty odor	6
Chipping paint	6
Crowded (i.e. too many people for the amount of livable space)	5
Hard to access	3
Rot in windows or floors	7
Evidence of mice or other pests	7
Black mold	6
I am not worried or concerned about the current condition of my home	52
Other, please share in the text box below	5
Total	146

Missoula County



"Other" answers receiving more than one response, in order of occurrence:

Missoula City Limits:

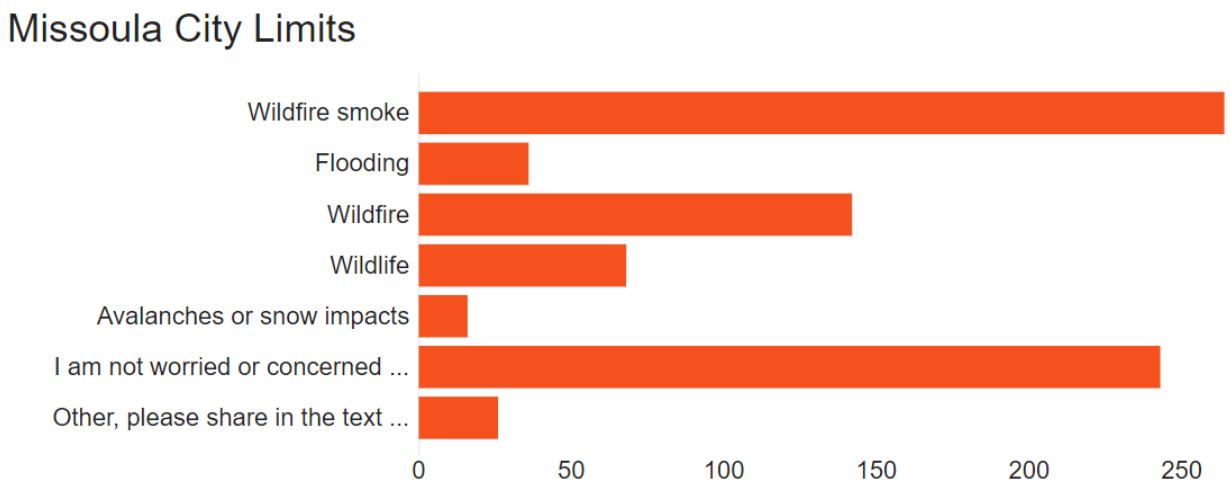
- Old house and windows
- House hard to maintain
- Asbestos
- Plumbing
- May not be able to afford staying in our house
- Drafty, inefficient house for heating

Missoula County:

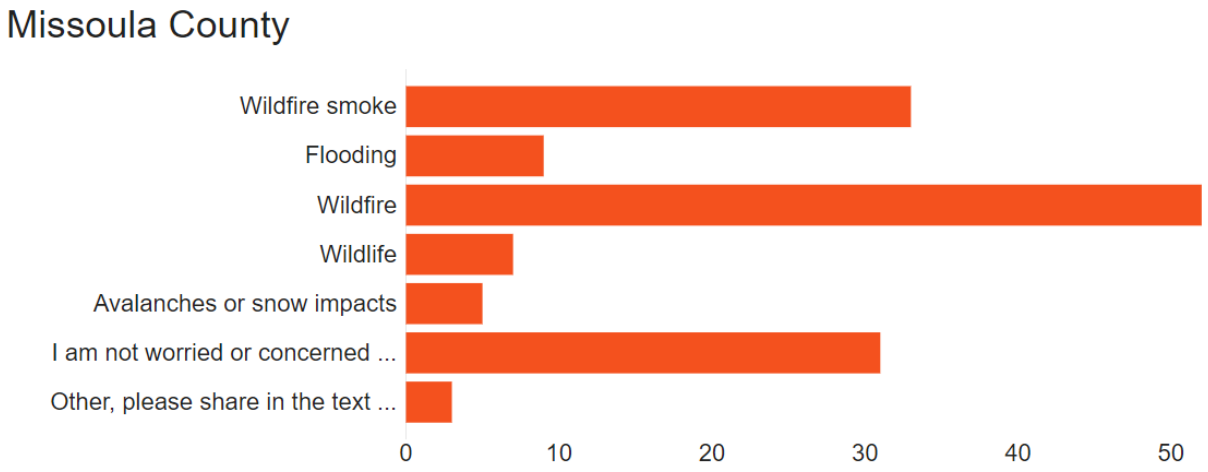
- Radon

Are you currently worried or concerned about possible impacts to your home due to any of the following weather or climate events? Check all that apply.

Missoula City Limits: Are you currently worried or concerned about possible impacts to your home due to any of the following or climate events? Check all that apply.	Choice Count
Wildfire smoke	264
Flooding	36
Wildfire	142
Wildlife	68
Avalanches or snow impacts	16
I am not worried or concerned about any of these climate shifts impacting my home	243
Other, please share in the text box below	26
Total	795



Missoula County: Are you currently worried or concerned about possible impacts to your home due to any of the following weather or climate events: Check all that apply.	Choice Count
Wildfire smoke	33
Flooding	9
Wildfire	52
Wildlife	7
Avalanches or snow impacts	5
I am not worried or concerned about any of these climate shifts impacting my home	31
Other, please share in the text box below	3
Total	140



"Other" answers receiving more than one response, in order of occurrence:

Missoula City Limits:

- Wildfires
- Flooding
- Climate change impacts on society and the environment

Missoula County:

- Dry land and fires

Appendix 5: Sources

[1] Centers for Disease Control and Prevention. (2022). *Social Determinants of Health at CDC*. Retrieved 01/29/2024 from https://www.cdc.gov/about/sdoh/index.html; Missoula Urban Indian Health Program: Community Health Profile & Individual Site Report

[2] https://www.cdc.gov/about/sdoh/index.html

[3] Kaiser Family Foundation

[4] Data Source: HDPulse: An Ecosystem of Minority Health and Health Disparities Resources. National Institute on Minority Health and Health Disparities. Created 7/23/2024. Available from https://hdpulse.nimhd.nih.gov

[5] https://health.gov/healthypeople/objectives-and-data/browse-objectives/people-disabilities

[6] https://news.gallup.com/poll/611864/lgbtq-identification.aspx

[7] https://www.health.com/mind-body/lgbtq-health-disparities

[8] https://www.cdc.gov/healthyyouth/disparities/index.htm

[9] https://www.cdc.gov/healthyyouth/disparities/index.htm

[10] https://www.cdc.gov/prc/research-in-action/success-stories/UMD-PRC-improving-the-lgbtq-mental-health-experience.html

[11] https://www.americanprogress.org/article/widespread-discrimination-continues-shape-lgbt-peoples-lives-subtle-significant-ways/ ; https://www.health.com/mind-body/lgbtq-health-disparities

[12] Lampe NM, Barbee H, Tran NM, Bastow S, McKay T. Health Disparities Among Lesbian, Gay, Bisexual, Transgender, and Queer Older Adults: A Structural Competency Approach. *Int J Aging Hum Dev*. 2024;98(1):39-55. doi:10.1177/00914150231171838; https://www.health.com/mind-body/lgbtq-health-disparities

[13] https://www.glma.org/find_a_provider.php

[14] https://www.cdc.gov/healthyyouth/disparities/health-considerations-lgbtq-youth.htm

[15] Hafeez H, Zeshan M, Tahir MA, Jahan N, Naveed S. Health Care Disparities Among Lesbian, Gay, Bisexual, and Transgender Youth: A Literature Review. Cureus. 2017 Apr 20;9(4):e1184. doi: 10.7759/cureus.1184. PMID: 28638747; PMCID: PMC5478215

[16] https://www.thetrevorproject.org/wp-content/uploads/2022/12/The-Trevor-Project-2022-National-Survey-on-LGBTQ-Youth-Mental-Health-by-State-Montana.pdf

[17] 2022 National Survey on LGBTQ Youth Mental Health Montana

[18] https://www.thetrevorproject.org/wp-content/uploads/2022/12/The-Trevor-Project-2022-National-Survey-on-LGBTQ-Youth-Mental-Health-by-State-Montana.pdf

[19] 2022 National Survey on LGBTQ Youth Mental Health Montana

[20] 2024 U.S. National Survey on the Mental Health of LGBTQ+ Young People; https://www.thetrevorproject.org/survey-2024/assets/static/TTP_2024_National_Survey.pdf

[21] 2024 U.S. National Survey on the Mental Health of LGBTQ+ Young People, https://www.thetrevorproject.org/survey-2024/#support-youth

[22] https://climatehealthconnect.org/wp-content/uploads/2018/10/APHA_ClimateGuide18_pp10web_FINAL.pdf

[23] https://www.cdc.gov/climateandhealth/effects/default.htm

[24] https://www.cdc.gov/climateandhealth/effects/default.htm

[25] https://www.climatereadymissoula.org/uploads/1/2/6/6/126687164/vulnerabilityassessment.pdf; https://www.missoulaclimate.org/improving-indoor-air-quality.html.

[26] https://www.cdc.gov/healthequity/whatis/index.html.

[27] https://www.cdc.gov/healthequity/whatis/index.html

[28] https://www.cdc.gov/minorityhealth/racism-disparities/inde x.html

[29] https://www.cdc.gov/minorityhealth/racism-disparities/index.html

[30] https://publicintegrity.org/inequality-poverty-opportunity/can-you-tackle-systemic-racism-without-confronting-race/

[31] Center for Health Progress. Race is a Social Construct. https://centerforhealthprogress.org/blog/race-socialconstruct/#:~:text=That's%20why%20we%20say%20race,tool%20for%20oppression%20and%20violence.

[32] Harkness S., Keefer C.H., Super C.M., Chapter-19, Culture and Ethnicity. Developmental-Behavioral Pediatrics 77 (Fourth Edition), 2009, 182-191. https://www.sciencedirect.com/science/article/pii/B9781416033707000195

[33] Racism and Health. American Public Health Association. (n.d.). https://www.apha.org/topics-and-issues/health-equity/racism-and-health.

[34] https://www.cdc.gov/minorityhealth/racism-disparities/index.html

[35] https://www.cdc.gov/minorityhealth/racism-disparities/index.html; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1446334/

[36] https://www.cdc.gov/minorityhealth/racism-disparities/index.html

[37]https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8561074/#:~:text=SYSTEMIC%20RACISM%20AND%20EXCLUSION%20IN%20HEALTH%20DATA&text=One%20rampant%20form%20of%20systemic,an%20aggregate%20%E2%80%9Cother%E2%80%9D%20category

[38] https://leg.mt.gov/content/publications/fiscal/2023-Interim/March-2022/DPHHS-Suicide-Prevention.pdf.

[39] https://www.cdc.gov/suicide/facts/index.html;

https://www.cdc.gov/suicide/factors/index.html

[40] DPHHS suicide fact sheet

[41] https://leg.mt.gov/content/publications/fiscal/2023-Interim/March-2022/DPHHS-Suicide-Prevention.pdf; https://www.cdc.gov/suicide/factors/index.html

[42] https://www.who.int/health-topics/primary-health-care#tab=tab_1; https://www.betterhealth.vic.gov.au/health/servicesandsupport/primary-healthcare-explained#primary-healthcare-providers

[43] https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/access-primary-care

[44] https://www.aha.org/system/files/media/file/2023/07/New-Consumer-Poll-Finds-Patients-Are-Concerned-about-Commercial-Insurer-Barriers-to-Care.pdf

[45] https://www.aha.org/fact-sheets/2023-06-12-fact-sheet-medical-debt

[46] https://www.sciencedirect.com/science/article/pii/S2211335523001882#b0045; https://apha.confex.com/apha/2021/meetingapp.cgi/Paper/491505

[47] https://dphhs.mt.gov/ecfsd/primarycare/ShortageAreaDesignations; https://dphhs.mt.gov/ecfsd/primarycare/ShortageAreaDesignations

[48](https://health.gov/healthypeople/objectives-and-data/browse-objectives/mental-health-and-mental-disorders#:~:text=Healthy%20People%202030%20focuses%20on,people%20affected%20by%20these%20conditions

[49] https://www.cdc.gov/mentalhealth/learn/index.htm; CHIP BH Survey

[50] https://www.cdc.gov/mentalhealth/learn/index.htm;https://www.samhsa.gov/sites/default/files/samhsa-behavioral-health-integration.pdf

[51] https://www.ci.missoula.mt.us/2763/Missoula-Crisis-Intervention-Team-CIT#:~:text=CIT%20is%20a%20community%20partnership,homeless%20service%20providers%2C%20and%20others

[52] https://www.cdc.gov/oralhealth/conditions/index.html

[53] https://www.chcs.org/media/Adult-Oral-Health-Fact-Sheet_091519.pdf

[54] https://www.chcs.org/media/Adult-Oral-Health-Fact-Sheet_091519.pdf

[55]https://www.cdc.gov/fluoridation/basics/index.htm#:~:text=Fluoride%20helps%20to%20rebuild%20and,even%20rebuild%20the%20tooth's%20surface

[56] https://www.cdc.gov/oralhealth/oral_health_disparities/fluoridated

[57] https://www.alz.org/media/Documents/montana-alzheimers-facts-figures-2023.pdf

[58] https://www.alz.org/media/Documents/montana-alzheimers-facts-figures-2023.pdf

[59] https://www.nicwa.org/wp-content/uploads/2021/12/NICWA_11_2021-Disproportionality-Fact-Sheet.pdf

[60] https://www.nicwa.org/wp-content/uploads/2021/12/NICWA_11_2021-Disproportionality-Fact-Sheet.pdf

[61] US DPHHS

[62] https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/civic-participation

[63] https://www.cdc.gov/diabetes/basics/diabetes.html

[64] https://www.cdc.gov/diabetes/managing/problems.html

[65] https://www.cdc.gov/diabetes/library/socialmedia/infographics.html

[66] https://www.cdc.gov/chronicdisease/programs-impact/pop/diabetes.htm

[67] https://diabetes.org/newsroom/press-releases/new-american-diabetes-association-report-finds-annual-costs-diabetes-be#:~:text=After%20adjusting%20for%20inflation%2C%20the,to%20%24307%20billion%20in%202022

[68] https://pubmed.ncbi.nlm.nih.gov/29567642/

[69] https://sparkmap.org/dashboard/ Citation: U.S. Census Bureau, American Community Survey (2016-20) [Percentage of Adults 18+ Binge Drinking in the Past 30 Days]. Courtesy of SparkMap, retrieved November 15, 2022, https://cares.page.link/Kkb5

[70] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7326385/; https://publichealth.tulane.edu/blog/social-determinant-of-health-education-is-crucial/

[71] https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/enrollment-higher-education

[72] https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/enrollment-higher-education; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7326385/

[73] https://www.missoulapartnership.com/wp-content/uploads/2021/09/Missoula-State-of-the-Workforce-2021.pdf

[74] https://www.missoulapartnership.com/wp-content/uploads/2021/09/Missoula-State-of-the-Workforce-2021.pdf

[75] https://jamanetwork.com/journals/jama/article-abstract/2778232; https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/food-insecurity; https://www.nimhd.nih.gov/resources/understanding-health-disparities/food-accessibility-insecurity-and-health-outcomes.html

[76] https://www.nami.org/Advocacy/Policy-Priorities/Supporting-Community-Inclusion-and-Non-Discrimination/Social-Determinants-of-Health-Food-Security#:~:text=Access%20to%20nutritious%20food%20is,is%20affected%20by%20%E2%80%94%20mental%20health

[77] https://map.feedingamerica.org/county/2017/overall/montana/county/missoula

[78] https://endhomelessness.org/homelessness-in-america/who-experiences-homelessness/chronically-homeless/#:~:text=People%20who%20are%20chronically%20homeless,use%20disorder%2C%20or%20physical%20disability

[79] https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/employment

[80] https://www.missoulapartnership.com/wp-content/uploads/2021/09/Missoula-State-of-the-Workforce-2021.pdf

[81] https://www.missoulapartnership.com/wp-content/uploads/2021/09/Missoula-State-of-the-Workforce-2021.pdf

[82] https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/employment

[83] https://academic.oup.com/ije/article/50/2/652/5974838

[84] https://www.cdc.gov/violenceprevention/intimatepartnerviolence/fastfact.html

[85] https://www.cdc.gov/violenceprevention/intimatepartnerviolence/fastfact.html

[86] https://www.cdc.gov/intimate-partner-violence/about/?CDC_AAref_Val=https://www.cdc.gov/violenceprevention/intimatepartnerviolence/fastfact.html;

https://assets.speakcdn.com/assets/2497/ncadv_montana_fact_sheet_2020.pdf

[87] https://ncadv.org/state-by-state

[88] https://assets.speakcdn.com/assets/2497/ncadv_montana_fact_sheet_2020.pdf

[89]https://kidshealth.org/en/parents/grownewborn.html#:~:text=How%20Big%20Are%20Newborns%3F,average%20baby%20are%20usually%20fine

[90] https://www.marchofdimes.org/find-support/topics/birth/low-birthweight#:~:text=What%20is%20low%20birthweight%3F,health%20problems%20for%20some%20babies

[91] https://www.marchofdimes.org/find-support/topics/birth/low-birthweight#:~:text=What%20is%20low%20birthweight%3F,health%20problems%20for%20some%20babies

[92] https://www.marchofdimes.org/find-support/topics/birth/low-birthweight#:~:text=What%20is%20low%20birthweight%3F,health%20problems%20for%20some%20babies

[93] https://www.nifa.usda.gov/topics/food-nutrition-security

[94] https://www.ncdhhs.gov/ncdhhs-state-action-plan-nutrition-security-2023-2024/open

[95] https://www.ncdhhs.gov/ncdhhs-state-action-plan-nutrition-security-2023-2024/open

[96] https://www.ncdhhs.gov/ncdhhs-state-action-plan-nutrition-security-2023-2024/open

[97] https://www.frontiersin.org/articles/10.3389/fpubh.2020.00453/full; https://www.ncdhhs.gov/ncdhhs-state-action-plan-nutrition-security-2023-2024/open

[98] https://www.reinvestment.com/wp-content/uploads/2018/08/LSA_2018_Report_web.pdf.

[99] https://www.irp.wisc.edu/resources/how-is-poverty-measured/;

[100] https://poverty.ucdavis.edu/faq/what-are-poverty-thresholds-today#:~:text=Some%202021%20poverty%20thresholds%20were,two%20children%20under%20age%2018.

[101] https://www.aafp.org/about/policies/all/poverty-health.html

[102] https://www.healthaffairs.org/do/10.1377/hpb20180817.901935/; https://www.rwjf.org/en/insights/our-research/2022/07/minimum-wage-increases-could-improve-health-and-advance-equity.html#:~:text=Key%20Findings&text=Minimum%20wage%20increases%20have%20a,among%20other%20key%20health%20indicators;

https://www.aafp.org/about/policies/all/poverty-health.html; https://www.aafp.org/about/policies/all/poverty-health.html; https://www.aafp.org/about/policies/all/poverty-health.html; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1405857/

[103] https://livingwage.mit.edu/counties/30063

[104] 2017 CHA, MIT Living Wage Calculator, ACS 2017-2021; https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html

[105] https://www.missoulapartnership.com/wp-content/uploads/2021/09/Missoula-State-of-the-Workforce-2021.pdf

[106] https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/frequently-asked-questions-related-poverty-guidelines-poverty

[107] Montana Department of Transportation Crash Database

[108] Missoula Organization of Realtors housing information

[109] ACS; CHA 2017

[107]https://www.freddiemac.com/research/insight/20210507-housing-supply; https://crsreports.congress.gov/product/pdf/R/R47617; https://www.missoularealestate.com/supply-data/

[111] Grandius; UM; https://ehq-production-us-california.s3.us-west-1.amazonaws.com/0f4a4f9004240d78991ad85a77158797305e4192/original/1666638575/5614b7f05f0712a29bffeb7e16fcdc22_MissoulaSTRData_Report_Final_June_2022.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIA4KKNQAKICO37GBEP%2F20231214%2Fus-west-1%2Fs3%2Faws4_request&X-Amz-Date=20231214T223017Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=2427473481fd564315dc40a28679a0671a3806610620918 57c12bcc20093afb7

[112] https://www.epa.gov/archive/epa/aboutepa/lead-poisoning-historical-perspective.html; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6522252/;https://www.epa.gov/archive/epa/aboutepa/lead-poisoning-historical-perspective.html; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6522252/; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4961898/

[113] https://www.epa.gov/lead/public-health-approach-addressing-lead; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6522252/

[114] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6522252/

[115] https://www.epa.gov/archive/epa/aboutepa/lead-poisoning-historical-perspective.html; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4961898/

[116] https://www.niehs.nih.gov/health/topics/agents/lead

[117] https://www.niehs.nih.gov/health/topics/agents/lead https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4961898/

[118]https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2902938/#:~:text=Lead%20is%20a%20developmental%20neurotoxin,of%20attention%20deficit%20hyperactivity%20disorder; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4961898/

[119] https://www.nyc.gov/site/doh/health/health-topics/lead-poisoning-adults-and-lead-poisoning.page#:~:text=Lead%20exposure%20can%20cause%20high,t%20look%20or%20feel%20sick

[120] https://www.epa.gov/sites/default/files/2017-01/documents/lead_a_public_health_approach_document_final_1-24-17.pdf

[121] https://www.epa.gov/sites/default/files/2017-01/documents/lead_a_public_health_approach_document_final_1-24-17.pdf; https://www.epa.gov/lead/public-health-approach-addressing-lead; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4961898/

[122] https://montanafreepress.org/2022/03/02/dangerous-levels-of-lead-found-in-water-of-montana-schools/

[123]https://missoulacounty.sharepoint.com/CommDev/CAPS/PksTrlsOL/PW/Forms/AllItems.aspx?id=%2FCommDev%2FCAPS%2FPksTrlsOL%2FPW%2FPlanning%2FPlans%2FPROST%2F2018%20PROST%20Survey%20Results%2Epdf&parent=%2FCommDev%2FCAPS%2FPksTrlsOL%2FPW%2FPlanning%2FPlans%2FPROST&p=true&ga=1

[124] https://www.lung.org/getmedia/d467149f-0e4a-4930-bf6d-255268db32fb/Radon-Testing-Disparity-report-for-Montana-2022-08-14.pdf

[125] https://www.epa.gov/radon/health-risk-radon

[126] https://www.lung.org/getmedia/d467149f-0e4a-4930-bf6d-255268db32fb/Radon-Testing-Disparity-report-for-Montana-2022-08-14.pdf

[127] https://ravalli.us/DocumentCenter/View/216/Radon

[128] https://www.lung.org/getmedia/d467149f-0e4a-4930-bf6d-255268db32fb/Radon-Testing-Disparity-report-for-Montana-2022-08-14.pdf, 2017 CHA

[129] https://sosradon.org/Radon%20Basics, 2017 CHA; https://ravalli.us/DocumentCenter/View/216/Radon; https://apps.msuextension.org/magazine/assets/docs/Radon.pdf

[130] https://www.ci.missoula.mt.us/DocumentCenter/View/54385/5-MCCHD

[131] https://apps.msuextension.org/magazine/assets/docs/Radon.pdf; https://deq.mt.gov/energy/Programs/radon#collapse11

[132] https://destinationmissoula.org/partner/missoula-montana-airport

[133] https://health.gov/healthypeople/objectives-and-data/browse-objectives/environmental-health/reduce-number-days-people-are-exposed-unhealthy-air-eh-01

[134] https://deq.mt.gov/cleanupandrec/Programs/superfundfed

[135] https://missoula-mt.prod.govaccess.org/government/health/health-department/missoula-valley-water-quality-district/cleanup-sites

[136] CHA 2017; https://www.epa.gov/dwreginfo/information-about-public-water-systems#:~:text=The%20public%20drinking%20water%20systems,to%2090%20percent%20of%20Americans

[137] https://well.educated.siglerh2o.org/media/countydata_summary/Missoula.stacked.bar.png

[138] https://www.dhs.wisconsin.gov/publications/p02559.pdf; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6068531/

Revision History:

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