



# 2020 Community Health Needs Assessment Report

**Yellowstone County, Montana**

---

*Sponsored by:*  
**Billings Clinic, RiverStone Health,  
and St. Vincent Healthcare**

*By:*  
PRC, Inc.  
11326 P Street Omaha, NE 68137-2316  
[www.PRCCustomResearch.com](http://www.PRCCustomResearch.com)

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# Introduction



## Project Overview

### Project Goals

This Community Health Needs Assessment (CHNA), a follow-up to similar assessments conducted in 2005, 2010, 2014, and 2017, is a systematic, data-driven approach to determining the health status, behaviors, and needs of residents in Yellowstone County, Montana. Subsequently, this information may be used to inform decisions and guide efforts to improve community health and wellness, including serving as the basis for the county's Community Health Improvement Plan (CHIP).

A Community Health Needs Assessment provides information so that communities may identify issues of greatest concern and decide to commit resources to those areas, thereby making the greatest possible impact on community health status. This Community Health Needs Assessment serves as a tool toward reaching three basic goals:

- **To improve residents' health status, increase their life spans, and elevate their overall quality of life.** A healthy community is not only one where its residents suffer little from physical and mental illness, but also one where its residents enjoy a high quality of life.
- **To reduce the health disparities among residents.** By gathering demographic information along with health status and behavior data, it will be possible to identify population segments that are most at-risk for various diseases and injuries. Intervention plans aimed at targeting these individuals may then be developed to combat some of the socio-economic factors that historically have had a negative impact on residents' health.
- **To increase accessibility to preventive services for all community residents.** More accessible preventive services will prove beneficial in accomplishing the first goal (improving health status, increasing life spans, and elevating the quality of life), as well as lowering the costs associated with caring for late-stage diseases resulting from a lack of preventive care.

This assessment was conducted on behalf of Billings Clinic, RiverStone Health, and St. Vincent Healthcare by PRC, Inc. PRC is a nationally recognized healthcare consulting firm with extensive experience conducting Community Health Needs Assessments in hundreds of communities across the United States since 1994.

## Methodology

This assessment incorporates data from both quantitative and qualitative sources. Quantitative data input includes primary research (the PRC Community Health Survey) and secondary research (vital statistics and other existing health-related data); these quantitative components allow for trending and comparison to benchmark data at the state and national levels. Qualitative data input includes primary research gathered through an Online Key Informant Survey.

### PRC Community Health Survey

#### *Survey Instrument*

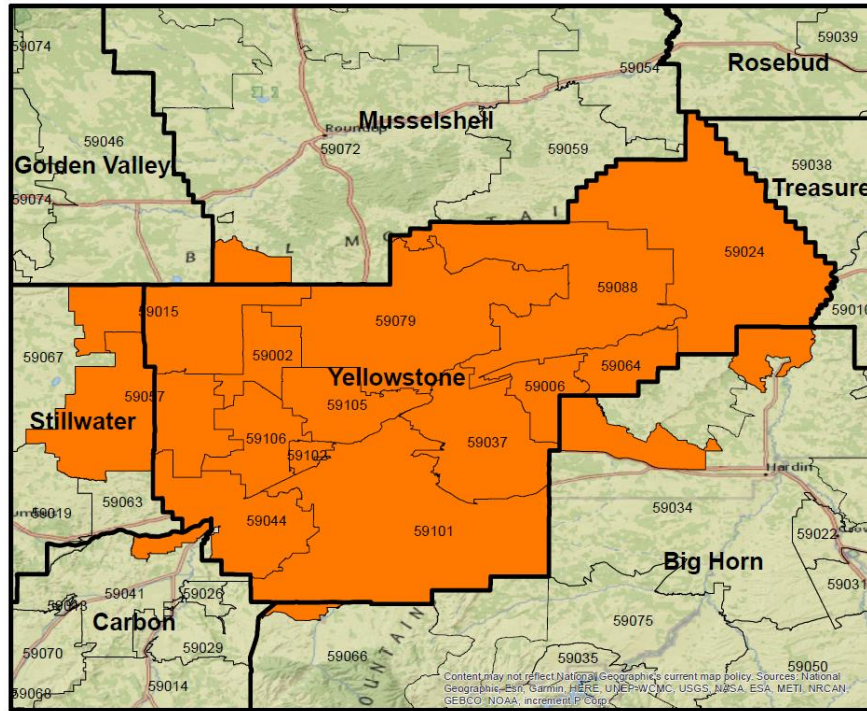
The survey instrument used for this study is based largely on the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS), as well as various other public health surveys and customized questions addressing gaps in indicator data relative to health promotion and disease prevention objectives and other recognized health issues.

The final survey instrument was developed by Billings Clinic, RiverStone Health, and St. Vincent Healthcare in collaboration with PRC. The survey is similar to the previous surveys used in the region, allowing for data trending.

#### *Community Defined for This Assessment*

The study area for the survey effort (referred to as “Yellowstone County” in this report) includes each of the ZIP Codes significantly represented in the county. Yellowstone County is a common patient base among the three collaborating entities sponsoring this study. RiverStone Health’s jurisdictional authority is only within the county. This is also a primary service area for both Billings Clinic and St. Vincent Healthcare, representing approximately 60% and 64% of hospital and emergency admissions, respectively. This community definition is illustrated in the following map.





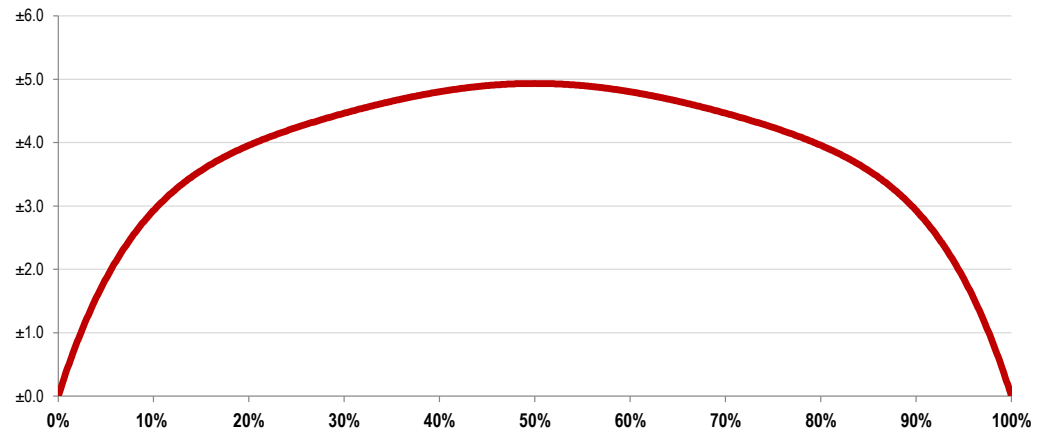
### *Sample Approach & Design*

A precise and carefully executed methodology is critical in asserting the validity of the results gathered in the PRC Community Health Survey. Thus, to ensure the best representation of the population surveyed, a telephone interview methodology — one that incorporates both landline and cell phone interviews — was employed. The primary advantages of telephone interviewing are timeliness, efficiency, and random-selection capabilities.

The sample design used for this effort consisted of a random sample of 400 individuals age 18 and older in Yellowstone County, Montana (the sample included 112 parents who also provided information about a randomly selected child in the household). All administration of the surveys, data collection, and data analysis was conducted by PRC.

For statistical purposes, the maximum rate of error associated with a sample size of 400 respondents is  $\pm 4.9\%$  at the 95 percent confidence level.

## Expected Error Ranges for a Sample of 400 Respondents at the 95 Percent Level of Confidence



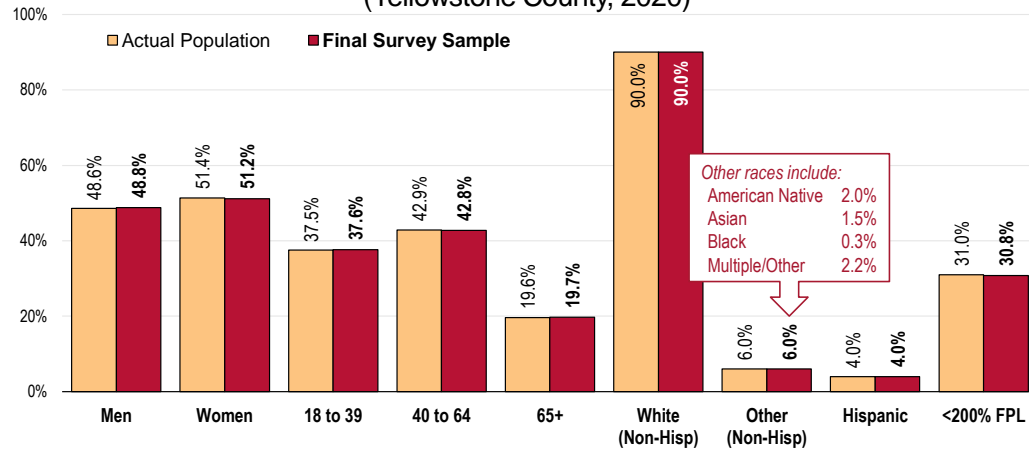
- Note:
- The "response rate" (the percentage of a population giving a particular response) determines the error rate associated with that response. A "95 percent level of confidence" indicates that responses would fall within the expected error range on 95 out of 100 trials.
- Examples:
- If 10% of the sample of 400 respondents answered a certain question with a "yes," it can be asserted that between 7.1% and 12.9% (10% ± 2.9%) of the total population would offer this response.
  - If 50% of respondents said "yes," one could be certain with a 95 percent level of confidence that between 45.1% and 54.9% (50% ± 4.9%) of the total population would respond "yes" if asked this question.

### Sample Characteristics

To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. While this random sampling of the population produces a highly representative sample, it is a common and preferred practice to "weight" the raw data to improve this representativeness even further. This is accomplished by adjusting the results of a random sample to match the geographic distribution and demographic characteristics of the population surveyed (poststratification), so as to eliminate any naturally occurring bias. Specifically, once the raw data are gathered, respondents are examined by key demographic characteristics (namely sex, age, race, ethnicity, and poverty status), and a statistical application package applies weighting variables that produce a sample which more closely matches the population for these characteristics. Thus, while the integrity of each individual's responses is maintained, one respondent's responses may contribute to the whole the same weight as, for example, 1.1 respondents. Another respondent, whose demographic characteristics may have been slightly oversampled, may contribute the same weight as 0.9 respondents.

The following chart outlines the characteristics of Yellowstone County sample for key demographic variables, compared to actual population characteristics revealed in census data. [Note that the sample consisted solely of area residents age 18 and older; data on children were given by proxy by the person most responsible for that child's healthcare needs, and these children are not represented demographically in this chart.]

### Population & Survey Sample Characteristics (Yellowstone County, 2020)



Sources: • US Census Bureau, 2011-2015 American Community Survey.  
 • 2020 PRC Community Health Survey, PRC, Inc.  
 Notes: • FPL is federal poverty level, based on guidelines established by the US Department of Health & Human Services.

Further note that the poverty descriptions and segmentation used in this report are based on administrative poverty thresholds determined by the US Department of Health & Human Services. These guidelines define poverty status by household income level and number of persons in the household (e.g., the 2019 guidelines place the poverty threshold for a family of four at \$25,750 annual household income or lower). In sample segmentation: “**low income**” refers to community members living in a household with defined poverty status or living just above the poverty level, earning up to twice (<200% of) the poverty threshold; “**mid/high income**” refers to those households living on incomes which are twice or more (≥200% of) the federal poverty level.

The sample design and the quality control procedures used in the data collection ensure that the sample is representative. Thus, the findings may be generalized to the total population of community members in the defined area with a high degree of confidence.

#### Online Key Informant Survey

To solicit input from key informants, those individuals who have a broad interest or expertise in the health of the community, an Online Key Informant Survey also was implemented as part of this process. A list of recommended participants was provided by the sponsors; this list included names and contact information for healthcare providers, public health representatives, government representatives, educators, business leaders, and a variety of other community leaders. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, as well as of the community overall.

Key informants were contacted by email, introducing the purpose of the survey and providing a link to take the survey online; reminder emails were sent as needed to increase

participation. In all, 154 community stakeholders took part in the Online Key Informant Survey, as outlined in the following chart:

Online Key Informant Survey Participation	
Key Informant Type	Number Participating
Community Leader	55
Healthcare Provider	35
Educator	19
Government Representative	18
Business Leader	16
Public Health Representative	11

Final participation included representatives of the organizations outlined below.

- 406 Pride
- Adult Resource Alliance of Yellowstone County
- AWARE Inc.
- Better Billings Foundation
- Big Sky Economic Development
- Big Sky Senior Services
- Big Sky State Games
- Billings Action For Healthy Kids
- Billings Association of Relators
- Billings BackPack Meals and Teen Pantry Program
- Billings Catholic Schools
- Billings Central Terry Neighborhood Task Force
- Billings Clinic
- Billings Cultural Partners
- Billings Family YMCA
- Billings First Congregational Church
- Billings Gazette
- Billings Leadership Foundation
- Billings Police Department
- Billings Public Library
- Billings Public School District #2
- Billings Public Schools Office of Indian Education
- Billings Urban Indian Health and Wellness Center
- Billings-Yellowstone County Planning Division
- Boy Scouts of America
- Canyon Creek School District #4
- City of Billings
- City of Billings Community Services Division
- City of Billings Parks and Recreation
- City of Billings Planning and Community Services Dept
- City of Billings Public Works
- Community Crisis Center
- Community Innovations Board
- Community Leadership and Development, Inc.
- Crow/Northern Cheyenne Indian Health Center
- Crow/Northern Cheyenne Indian Health Center and Lodge Grass and Pryor Clinics
- Disabled American Veterans
- Dress For Success Billings

- Early Childhood Intervention
- Explorers Academy/Head Start, Inc.
- Faith Chapel
- Foster Grandparent Program
- Girl Scouts of Montana and Wyoming
- Global Peace Foundation Montana
- Habitat for Humanity Mid-Yellowstone Valley
- Housing Authority of Billings
- Independent School
- Invisage Consulting
- Laurel School District
- Living Independently for Today and Tomorrow
- Lockwood School District #26
- McCall Homes and Development
- Montana BioScience Alliance
- Montana House of Representatives
- Morin Elementary
- MSU Extension
- NAMI
- Outpatient Veterans Health Clinic
- Pharmacy
- Planned Parenthood of Montana
- Q360 Health
- Rimrock Neighborhoods Task Force
- RiverStone Health
- Rocky Mountain Accountable Health Network
- Rocky Mountain College
- Rocky Mountain Tribal Leaders Council
- Simply Family Magazine
- South Central Montana Regional Mental Health Center
- South Side Neighborhood Task Force
- Special Olympics Montana
- St. Vincent Healthcare
- The Children's Clinic of Billings, PC
- The Phoenix
- United Way of Yellowstone County
- US Attorney's Office
- VA Montana Healthcare
- Volunteers of America
- Yellowstone Boys and Girls Ranch
- Yellowstone County Sheriff's Office
- Yellowstone County Substance Abuse Connect Coalition
- Youth Dynamics Inc.
- YWCA–Billings

Through this process, input was gathered from a CHNA advisory committee, which included area residents and organizational representatives either identifying as or serving low-income, minority, or other medically underserved populations.

In the online survey, key informants were asked to rate the degree to which various health issues are a problem in their own community. Follow-up questions asked them to describe why they identify problem areas as such and how these might better be addressed. Results of their ratings, as well as their verbatim comments, are included throughout this report as they relate to the various other data presented.

*NOTE: These findings represent qualitative rather than quantitative data. The Online Key Informant Survey was designed to gather input regarding participants' opinions and perceptions of the health needs of the residents in the area.*

## Public Health, Vital Statistics & Other Data

A variety of existing (secondary) data sources was consulted to complement the research quality of this Community Health Needs Assessment. Data for Yellowstone County were obtained from the following sources (specific citations are included with report charts):

- Center for Applied Research and Engagement Systems (CARES) Engagement Network, University of Missouri Extension
- Centers for Disease Control & Prevention, Office of Infectious Disease, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
- Centers for Disease Control & Prevention, Office of Public Health Science Services, Center for Surveillance, Epidemiology and Laboratory Services, Division of Health Informatics and Surveillance (DHIS)
- Centers for Disease Control & Prevention, Office of Public Health Science Services, National Center for Health Statistics
- ESRI ArcGIS Map Gallery
- Montana Department of Public Health & Human Services
- National Cancer Institute, State Cancer Profiles
- OpenStreetMap (OSM)
- US Census Bureau, American Community Survey
- US Census Bureau, County Business Patterns
- US Census Bureau, Decennial Census
- US Department of Agriculture, Economic Research Service
- US Department of Health & Human Services
- US Department of Health & Human Services, Health Resources and Services Administration (HRSA)
- US Department of Justice, Federal Bureau of Investigation
- US Department of Labor, Bureau of Labor Statistics

## Benchmark Data

### *Trending*

Similar surveys were administered in Yellowstone County in 2005, 2010, 2014, and 2017 by PRC on behalf of the sponsors. Trending data, as revealed by comparison to prior survey results, are provided throughout this report whenever available. Historical data for secondary data indicators are also included for the purposes of trending.

### *Montana Risk Factor Data*

Statewide risk factor data are provided where available as an additional benchmark against which to compare local survey findings; these data represent the *2017–2018 BRFSS (Behavioral Risk Factor Surveillance System) Prevalence and Trends Data* published online by the Centers for Disease Control and Prevention. State-level vital statistics are also provided for comparison of secondary data indicators.

***Nationwide Risk Factor Data***

Nationwide risk factor data, which are also provided in comparison charts, are taken from the *2017 PRC National Health Survey*; the methodological approach for the national study is similar to that employed in this assessment, and these data may be generalized to the US population with a high degree of confidence. National-level vital statistics are also provided for comparison of secondary data indicators.

***Healthy People 2020***

Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. For three decades, Healthy People has established benchmarks and monitored progress over time in order to:



- Encourage collaborations across communities and sectors.
- Empower individuals toward making informed health decisions.
- Measure the impact of prevention activities.

Healthy People strives to:

- Identify nationwide health improvement priorities.
- Increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress.
- Provide measurable objectives and goals that are applicable at the national, State, and local levels.
- Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge.
- Identify critical research, evaluation, and data collection needs.

**Determining Significance**

Differences noted in this report represent those determined to be significant. For survey-derived indicators (which are subject to sampling error), statistical significance is determined based on confidence intervals (at the 95 percent confidence level), using question-specific samples and response rates. For the purpose of this report, “significance” of secondary data indicators (which do not carry sampling error but might be subject to reporting error) is determined by a 15% variation from the comparative measure.

**Information Gaps**

While this assessment is quite comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. It must be recognized that these information gaps might in some ways limit the ability to assess all of the community’s health needs.

For example, certain population groups — such as the homeless, institutionalized persons, or those who only speak a language other than English or Spanish — are not represented in the survey data. Other population groups — for example, pregnant women, lesbian/gay/bisexual/transgender residents, undocumented residents, and members of certain racial/ethnic or immigrant groups — might not be identifiable or might not be represented in numbers sufficient for independent analyses.

In terms of content, this assessment was designed to provide a comprehensive and broad picture of the health of the overall community. However, there are certainly medical conditions that are not specifically addressed.

### **Public Comment**

The sponsors of this study made the prior Community Health Needs Assessment (CHNA) report publicly available on their respective websites. At the time of this writing, they had not received any written comments. However, through population surveys and key informant feedback for this assessment, input from the broader community was considered and taken into account when identifying and prioritizing the significant health needs of the community.



## IRS Form 990, Schedule H Compliance

For non-profit hospitals, a Community Health Needs Assessment (CHNA) also serves to satisfy certain requirements of tax reporting, pursuant to provisions of the Patient Protection & Affordable Care Act of 2010. To understand which elements of this report relate to those requested as part of hospitals' reporting on IRS Schedule H (Form 990), the following table cross-references related sections.

IRS Form 990, Schedule H (2018)	See Report Page
<b>Part V Section B Line 3a</b> <i>A definition of the community served by the hospital facility</i>	8
<b>Part V Section B Line 3b</b> <i>Demographics of the community</i>	43
<b>Part V Section B Line 3c</b> <i>Existing health care facilities and resources within the community that are available to respond to the health needs of the community</i>	64
<b>Part V Section B Line 3d</b> <i>How data was obtained</i>	8
<b>Part V Section B Line 3e</b> <i>The significant health needs of the community</i>	18
<b>Part V Section B Line 3f</b> <i>Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups</i>	Addressed Throughout
<b>Part V Section B Line 3g</b> <i>The process for identifying and prioritizing community health needs and services to meet the community health needs</i>	19
<b>Part V Section B Line 3h</b> <i>The process for consulting with persons representing the community's interests</i>	11
<b>Part V Section B Line 3i</b> <i>The impact of any actions taken to address the significant health needs identified in the hospital facility's prior CHNA(s)</i>	244

## Summary of Findings

### Significant Health Needs of the Community

The following “Areas of Opportunity” represent the significant health needs of the community, based on the information gathered through this Community Health Needs Assessment. From these data, opportunities for health improvement exist in the area with regard to the health issues listed below (see also the summary tables presented in the following section).

The Areas of Opportunity were determined after consideration of various criteria, including: standing in comparison with benchmark data (particularly national data); identified trends; the preponderance of significant findings within topic areas; the magnitude of the issue in terms of the number of persons affected; and the potential health impact of a given issue. These also take into account those issues of greatest concern to the community stakeholders (key informants) giving input to this process.

Areas of Opportunity Identified Through This Assessment	
<b>Access to Healthcare Services</b>	<ul style="list-style-type: none"> <li>• Finding a Physician</li> <li>• Specific Source of Ongoing Medical Care</li> </ul>
<b>Cancer</b>	<ul style="list-style-type: none"> <li>• Leading Cause of Death</li> <li>• Cancer Deaths                             <ul style="list-style-type: none"> <li>◦ Prostate Cancer, Female Breast Cancer</li> </ul> </li> <li>• Cancer Incidence                             <ul style="list-style-type: none"> <li>◦ Prostate Cancer, Female Breast Cancer</li> </ul> </li> </ul>
<b>Diabetes</b>	<ul style="list-style-type: none"> <li>• Diabetes Deaths</li> </ul>
<b>Heart Disease &amp; Stroke</b>	<ul style="list-style-type: none"> <li>• Leading Cause of Death</li> <li>• High Blood Pressure Prevalence</li> <li>• High Blood Pressure Management</li> </ul>
<b>Infant Health</b>	<ul style="list-style-type: none"> <li>• Low-Weight Births</li> <li>• Infant Deaths</li> </ul>
<b>Injury &amp; Violence</b>	<ul style="list-style-type: none"> <li>• Unintentional Injury Deaths                             <ul style="list-style-type: none"> <li>◦ Including Motor Vehicle Crash, Falls [Age 65+] Deaths</li> </ul> </li> <li>• Firearm-Related Deaths</li> <li>• Domestic Violence Experience</li> </ul>
<b>Mental Health</b>	<ul style="list-style-type: none"> <li>• “Fair/Poor” Mental Health</li> <li>• Diagnosed Depression</li> <li>• Symptoms of Chronic Depression</li> <li>• Suicide Deaths</li> <li>• Suicide Ideation</li> <li>• <i>Key Informants: Mental health ranked as a top concern.</i></li> </ul>
<b>Nutrition, Physical Activity &amp; Weight</b>	<ul style="list-style-type: none"> <li>• Fruit/Vegetable Consumption</li> <li>• Overweight &amp; Obesity [Adults]</li> </ul>

—continued on the following page—

Areas of Opportunity (continued)	
<b>Potentially Disabling Conditions</b>	<ul style="list-style-type: none"> <li>• Activity Limitations</li> <li>• Osteoporosis Prevalence [Age 50+]</li> <li>• Sciatica/Chronic Back Pain Prevalence</li> <li>• Caregiving</li> </ul>
<b>Respiratory Diseases</b>	<ul style="list-style-type: none"> <li>• Chronic Lower Respiratory Disease (CLRD) Deaths</li> <li>• Chronic Obstructive Pulmonary Disease (COPD) Prevalence</li> <li>• Flu Vaccination [Age 65+]</li> </ul>
<b>Sexual Health</b>	<ul style="list-style-type: none"> <li>• Gonorrhea Incidence</li> <li>• Chlamydia Incidence</li> <li>• HIV Prevalence</li> </ul>
<b>Substance Abuse</b>	<ul style="list-style-type: none"> <li>• Cirrhosis/Liver Disease Deaths</li> <li>• Personally Impacted by Substance Abuse (Self or Other's)</li> <li>• <i>Key Informants: Substance abuse ranked as a top concern.</i></li> </ul>
<b>Tobacco Use</b>	<ul style="list-style-type: none"> <li>• Use of E-Cigarettes/Vaping Products</li> </ul>

### Community Feedback on Prioritization of Health Needs

On November 22, 2019, the sponsors of this study hosted the 2019-2020 Community Health Public Forum. This event was attended by more than 100 community stakeholders representing a cross-section of community-based agencies, organizations, and neighborhoods, 85 of whom evaluated and prioritized the significant health issues for the community (see Areas of Opportunity above), based on findings of this CHNA.

During the Forum, Professional Research Consultants, Inc. (PRC) presented key findings from the CHNA, after which attendees were asked to give input to prioritizing these health needs for Yellowstone County by registering their evaluations for each health issue using the Mentimeter platform on their personal devices (mobile phone, tablet, etc.). The participants were asked to evaluate each health issue along two criteria:

- **Scope & Severity** — The first rating was to gauge the magnitude of the problem in consideration of the following:
  - How many people are affected?
  - How does the local community data compare to state or national levels, or Healthy People 2020 targets?
  - To what degree does each health issue lead to death or disability, impair quality of life, or impact other health issues?
- Ratings were entered on a scale of 1 (not very prevalent at all, with only minimal health consequences) to 10 (extremely prevalent, with very serious health consequences).

- **Ability to Impact** — A second rating was designed to measure the perceived likelihood of the community having a positive impact on each health issue, given available resources, competencies, spheres of influence, etc. Ratings were entered on a scale of 1 (no ability to impact) to 10 (great ability to impact).

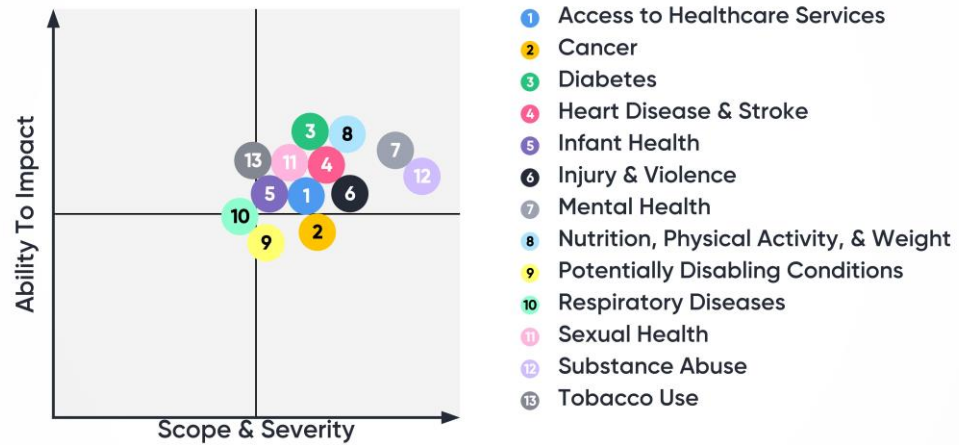
Individuals' ratings for each criteria were averaged for each tested health issue, and then these composite criteria scores were averaged to produce an overall score. This process yielded the following prioritized list of community health needs:

1. **Mental Health**
2. **Substance Abuse**
3. **Nutrition, Physical Activity, & Weight**
4. **Diabetes**
5. **Heart Disease & Stroke**
6. **Injury & Violence**
7. **Access to Healthcare Services**
8. **Tobacco Use**
9. **Infant Health**
10. **Cancer**
11. **Sexual Health**
12. **Respiratory Diseases**
13. **Potentially Disabling Conditions**

Plotting these overall scores in a matrix illustrates the intersection of the Scope & Severity and the Ability to Impact scores. Those issues placing closest to the upper right corner of the matrix represent health needs rated as most severe, with the greatest ability to impact.

## Areas of Opportunity

Mentimeter



### Hospital and Health Department Implementation Strategy

The CHNA sponsors will use the information from this Community Health Needs Assessment to develop implementation strategies to address the significant health needs in the community. While the sponsors will likely not implement strategies for all of the health issues listed above, the results of this prioritization exercise will be used to inform the development of the sponsors' respective action plans (both shared and individual) to guide community health improvement efforts in the coming years.

*Note: Evaluations of the hospitals' and health department's past activities to address the needs identified in prior CHNAs can be found as appendices to this report.*

## Summary Tables: Comparisons With Benchmark Data

The following tables provide an overview of indicators in Yellowstone County, including trend data. These data are grouped by health topic.

### *Reading the Summary Tables*

■ In the following tables, Yellowstone County results are shown in the larger, blue column.

*Tip: Indicator labels beginning with a “%” symbol are taken from the PRC Community Health Survey; the remaining indicators are taken from secondary data sources.*

■ ■ The columns to the right of Yellowstone County column provide trending, as well as comparisons between local data and any available state and national findings, and Healthy People 2020 objectives. Symbols indicate whether Yellowstone County compares favorably (☀️), unfavorably (☹️), or comparably (☁️) to these external data.

*Note that blank table cells signify that data are not available or are not reliable for that area and/or for that indicator.*

#### **TREND SUMMARY**

(Current vs. Baseline Data)












#### **Survey Data Indicators:**




Baseline trends for survey-derived indicators represent significant changes since 2005 (or the first year a question was asked). Note that survey data reflect the ZIP Code-defined Yellowstone County.

#### **Other (Secondary) Data**

**Indicators:** Trends for other indicators (e.g., public health data) represent point-to-point changes between the most current reporting period and the earliest presented in this report (typically representing the span of roughly a decade).

Note that secondary data reflect county-level data.

Social Determinants	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Linguistically Isolated Population (Percent)	0.4	 0.3	 4.4	
Population in Poverty (Percent)	10.1	 14.4	 14.6	
Children in Poverty (Percent)	11.9	 17.6	 20.3	
No High School Diploma (Age 25+, Percent)	7.1	 7.0	 12.7	
Unemployment Rate (Age 16+, Percent)	2.9	 2.9	 3.8	
% Worry/Stress Over Rent/Mortgage in Past Year	27.8		 30.8	
% Unsafe/Unhealthy Housing Conditions in the Past Year	7.0			
% Can Rely on Public Transportation	53.4			
% Have "No Impact" on Improving Community Life	8.8			
% Aware of Montana 2-1-1	19.6			

 better    
  similar    
  worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				 (2.7 vs. 2.9)
			 (27.7 vs. 27.8)	 (27.7 vs. 27.8)

§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a "\*\*"), data years can vary but typically represent a span of 7 to 10 years.





















































Overall Health	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
% "Fair/Poor" Physical Health	16.7	15.1	18.1	
		better	similar	worse





Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
(10.5 vs. 17.1)	(17.1 vs. 16.3)	(16.3 vs. 15.4)	(15.4 vs. 16.7)	(10.5 vs. 16.7)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a ****), data years can vary but typically represent a span of 7 to 10 years.				






Access to Health Services	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
% [Age 18-64] Lack Health Insurance	6.4	13.2	13.7	0.0
% Difficulty Accessing Healthcare in Past Year (Composite)	32.1		43.2	
% Inconvenient Hrs Prevented Dr Visit in Past Year	10.5		12.5	
% Cost Prevented Getting Prescription in Past Year	9.0		14.9	
% Cost Prevented Physician Visit in Past Year	9.2	10.1	15.4	
% Difficulty Getting Appointment in Past Year	14.3		17.5	




















Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
(13.1 vs. 18.6)	(18.6 vs. 16.7)	(16.7 vs. 7.4)	(7.4 vs. 6.4)	(13.1 vs. 6.4)
(33.9 vs. n/a)		(35.3 vs. 42.0)	(42.0 vs. 32.1)	(33.9 vs. 32.1)
(10.7 vs. 8.3)	(8.3 vs. 11.6)	(11.6 vs. 10.3)	(10.3 vs. 10.5)	(10.7 vs. 10.5)
(13.5 vs. 12.6)	(12.6 vs. 12.0)	(12.0 vs. 14.5)	(14.5 vs. 9.0)	(13.5 vs. 9.0)
(13.4 vs. 13.7)	(13.7 vs. 16.0)	(16.0 vs. 12.1)	(12.1 vs. 9.2)	(13.4 vs. 9.2)
(14.2 vs. 12.7)	(12.7 vs. 18.7)	(18.7 vs. 25.4)	(25.4 vs. 14.3)	(14.2 vs. 14.3)




Access to Health Services (continued)	Yellowstone County	Yellowstone vs. Benchmarks			Yellowstone County Trends				
		vs. MT	vs. US	vs. HP2020	2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
% Difficulty Finding Physician in Past Year	8.6		 13.4		 (4.3 vs. 6.2)	 (6.2 vs. 8.0)	 (8.0 vs. 9.7)	 (9.7 vs. 8.6)	 (4.3 vs. 8.6)
% Transportation Hindered Dr Visit in Past Year	3.0		 8.3		 (3.8 vs. 5.6)	 (5.6 vs. 5.9)	 (5.9 vs. 5.6)	 (5.6 vs. 3.0)	 (3.8 vs. 3.0)
% Language/Culture Prevented Care in Past Year	0.2		 1.2					 (0.7 vs. 0.2)	 (0.7 vs. 0.2)
% Skipped Prescription Doses to Save Costs	9.5		 15.3		 (14.3 vs. 17.3)	 (17.3 vs. 14.1)	 (14.1 vs. 13.9)	 (13.9 vs. 9.5)	 (14.3 vs. 9.5)
% Difficulty Getting Child's Healthcare in Past Year	1.7		 5.6		 (3.2 vs. 2.0)	 (2.0 vs. 2.8)	 (2.8 vs. 4.8)	 (4.8 vs. 1.7)	 (3.2 vs. 1.7)
% Low Health Literacy	20.4		 23.3					 (17.3 vs. 20.4)	 (17.3 vs. 20.4)
Primary Care Doctors per 100,000	85.8	 74.1	 75.6						
% [Age 18+] Have a Specific Source of Ongoing Care	77.6		 74.1	 95.0	 (84.0 vs. 82.0)	 (82.0 vs. 81.7)	 (81.7 vs. 81.3)	 (81.3 vs. 77.6)	 (84.0 vs. 77.6)
% Have Had Routine Checkup in Past Year	67.2	 73.0	 68.3		 (57.2 vs. 62.9)	 (62.9 vs. 64.7)	 (64.7 vs. 67.8)	 (67.8 vs. 67.2)	 (57.2 vs. 67.2)
% Child Has Had Checkup in Past Year	85.9		 87.1		 (72.6 vs. 84.3)	 (84.3 vs. 78.3)	 (78.3 vs. 84.1)	 (84.1 vs. 85.9)	 (72.6 vs. 85.9)

Access to Health Services (continued)	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
% Two or More ER Visits in Past Year	9.4			
			9.3	
				
		better	similar	worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
 (7.3 vs. 8.6)	 (8.6 vs. 5.8)	 (5.8 vs. 6.1)	 (6.1 vs. 9.4)	 (7.3 vs. 9.4)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a "***"), data years can vary but typically represent a span of 7 to 10 years.				

Cancer	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Cancer (Age-Adjusted Death Rate)	158.7	 151.8	 155.6	 161.4
Lung Cancer (Age-Adjusted Death Rate)	37.5	 35.0	 38.5	 45.5
Prostate Cancer (Age-Adjusted Death Rate)	25.0	 23.3	 18.9	 21.8
Female Breast Cancer (Age-Adjusted Death Rate)	24.0	 19.6	 20.1	 20.7
Colorectal Cancer (Age-Adjusted Death Rate)	11.8	 13.5	 13.9	 14.5
Cancer Incidence Rate (All Sites)	496.4	 438.0	 483.8	
Prostate Cancer Incidence per 100,000	123.1	 111.1	 109.0	

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				 (167.6 vs. 158.7)

Cancer (continued)	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Female Breast Cancer Incidence per 100,000	134.0	123.2	124.7	
Lung Cancer Incidence per 100,000	59.3	55.7	60.2	
Colorectal Cancer Incidence per 100,000	37.3	38.2	39.2	
% Skin Cancer	5.8	7.6	8.5	
% Cancer (Other Than Skin)	6.7	7.9	7.1	
% [Women 50-74] Mammogram in Past 2 Years	77.3	74.1	77.0	81.1
% [Women 21-65] Pap Smear in Past 3 Years	75.3	77.0	73.5	93.0
% [Age 50-75] Colorectal Cancer Screening	77.7	64.5	76.4	70.5
		better	similar	worse









Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
(5.5 vs. 8.4)	(8.4 vs. 6.8)	(6.8 vs. 7.2)	(7.2 vs. 5.8)	(5.5 vs. 5.8)
(6.4 vs. 5.7)	(5.7 vs. 7.5)	(7.5 vs. 8.3)	(8.3 vs. 6.7)	(6.4 vs. 6.7)
(86.9 vs. 76.4)	(76.4 vs. 76.1)	(76.1 vs. 76.4)	(76.4 vs. 77.3)	(86.9 vs. 77.3)
(78.8 vs. 80.8)	(80.8 vs. 74.0)	(74.0 vs. 69.5)	(69.5 vs. 75.3)	(78.8 vs. 75.3)
		(71.0 vs. 75.0)	(75.0 vs. 77.7)	(71.0 vs. 77.7)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a "**"), data years can vary but typically represent a span of 7 to 10 years.				





















Diabetes	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Diabetes Mellitus (Age-Adjusted Death Rate)	19.9	23.2	21.3	20.5
% Diabetes/High Blood Sugar	12.5	9.4	13.3	
% Borderline/Pre-Diabetes	6.4		9.5	
		better	similar	worse







Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				(17.5 vs. 19.9)
(8.7 vs. 12.1)	(12.1 vs. 8.6)	(8.6 vs. 9.2)	(9.2 vs. 12.5)	(8.7 vs. 12.5)
		(7.1 vs. 10.1)	(10.1 vs. 6.4)	(7.1 vs. 6.4)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a "***"), data years can vary but typically represent a span of 7 to 10 years.				



Heart Disease & Stroke	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Diseases of the Heart (Age-Adjusted Death Rate)	155.3	155.1	166.3	156.9
Stroke (Age-Adjusted Death Rate)	37.3	34.0	37.5	34.8
% Heart Disease (Heart Attack, Angina, Coronary Disease)	7.0		8.0	
% Stroke	3.0	3.6	4.7	
% Told Have High Blood Pressure (Ever)	40.2	29.0	37.0	26.9

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				(153.7 vs. 155.3)
				(39.6 vs. 37.3)
(5.1 vs. 8.1)	(8.1 vs. 5.9)	(5.9 vs. 6.7)	(6.7 vs. 7.0)	(5.1 vs. 7.0)
(3.3 vs. 2.3)	(2.3 vs. 3.3)	(3.3 vs. 2.1)	(2.1 vs. 3.0)	(3.3 vs. 3.0)
(26.1 vs. 32.4)	(32.4 vs. 33.7)	(33.7 vs. 37.3)	(37.3 vs. 40.2)	(26.1 vs. 40.2)

Heart Disease & Stroke (continued)	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
% [HBP] Taking Action to Control High Blood Pressure	82.1		 93.8	
% Told Have High Cholesterol (Ever)	25.4	 36.2	 13.5	
% [HBC] Taking Action to Control High Blood Cholesterol	83.0		 87.3	
% 1+ Cardiovascular Risk Factor	84.1		 87.2	
		 better	 similar	 worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
 (88.9 vs. 94.4)	 (94.4 vs. 83.7)	 (83.7 vs. 90.5)	 (90.5 vs. 82.1)	 (88.9 vs. 82.1)
 (28.5 vs. 28.6)	 (28.6 vs. 25.7)	 (25.7 vs. 30.0)	 (30.0 vs. 25.4)	 (28.5 vs. 25.4)
 (83.6 vs. 91.3)	 (91.3 vs. 79.8)	 (79.8 vs. 82.7)	 (82.7 vs. 83.0)	 (83.6 vs. 83.0)
 (89.1 vs. 87.4)	 (87.4 vs. 81.7)	 (81.7 vs. 84.2)	 (84.2 vs. 84.1)	 (89.1 vs. 84.1)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a ****), data years can vary but typically represent a span of 7 to 10 years.				

Infant Health & Family Planning	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Low Birthweight Births (Percent)	7.7	 7.8	 8.2	 7.8
Infant Death Rate	7.1	 5.6	 5.8	 6.0
% Would Give a Newborn All Vaccinations	92.5			














Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				 (7.3 vs. 7.7)
				 (8.2 vs. 7.1)





Infant Health & Family Planning (cont.)	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Births to Teenagers Under Age 20 (Percent)	5.2	5.4	5.1	
		better	similar	worse








Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				(9.3 vs. 5.2)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a ""), data years can vary but typically represent a span of 7 to 10 years.				





Injury & Violence Prevention	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Unintentional Injury (Age-Adjusted Death Rate)	46.5	53.5	46.7	36.4
Motor Vehicle Crashes (Age-Adjusted Death Rate)	12.7	17.7	11.4	12.4
% "Always" Wear Seat Belt	75.2			92.0
% Child [Age 5-17] "Always" Wears Bicycle Helmet	41.0		48.8	
[65+] Falls (Age-Adjusted Death Rate)	89.7	84.7	62.1	47.0
% [Age 45+] Fell in the Past Year	38.5		31.6	
% Have a Family Emergency Plan	38.5			





Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				(43.0 vs. 46.5)
(76.8 vs. 78.3)	(78.3 vs. 78.6)	(78.6 vs. 80.7)	(80.7 vs. 75.2)	(76.8 vs. 75.2)
(36.2 vs. 45.1)	(45.1 vs. 38.5)	(38.5 vs. 49.5)	(49.5 vs. 41.0)	(36.2 vs. 41.0)



















Injury & Violence Prevention (continued)	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Firearm-Related Deaths (Age-Adjusted Death Rate)	18.3	 20.2	 11.6	 9.3
% Have an Unlocked Firearm in the Home or Vehicle	23.6			
Homicide (Age-Adjusted Death Rate)	3.3	 3.6	 5.6	 5.5
Violent Crime per 100,000	362.0	 306.1	 384.8	
% Perceive Neighborhood as "Slightly/Not At All Safe"	13.7		 15.6	
% Feel "Slightly/Not At All Safe" Walking in the Neighborhood	11.7			
% Victim of Domestic Violence (Ever)	21.9		 14.2	
		 better	 similar	 worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
	 (14.7 vs. 15.8)	 (15.8 vs. 15.3)	 (15.3 vs. 21.9)	 (14.7 vs. 21.9)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a "§"), data years can vary but typically represent a span of 7 to 10 years.				

Kidney Disease	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Kidney Disease (Age-Adjusted Death Rate)	6.6	 9.9	 13.2	
% Kidney Disease	2.0	 2.0	 3.8	
		 better	 similar	 worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				 (14.4 vs. 6.6)
		 (2.0 vs. 1.4)	 (1.4 vs. 2.0)	 (2.0 vs. 2.0)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a "**"), data years can vary but typically represent a span of 7 to 10 years.				



























































Mental Health & Mental Disorders	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
% "Fair/Poor" Mental Health	20.2		 13.0	
% Diagnosed Depression	32.2	 21.9	 21.6	
% Symptoms of Chronic Depression (2+ Years)	38.5		 31.4	
% Have Considered Suicide	21.3			
% "Always/Usually" Have Social and Emotional Support	76.8			
% "Often" Experience Feelings of Isolation	11.9			













Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
 (6.9 vs. 10.1)	 (10.1 vs. 10.6)	 (10.6 vs. 13.4)	 (13.4 vs. 20.2)	 (6.9 vs. 20.2)
		 (21.2 vs. 25.3)	 (25.3 vs. 32.2)	 (21.2 vs. 32.2)
 (25.7 vs. 25.0)	 (25.0 vs. 26.9)	 (26.9 vs. 31.0)	 (31.0 vs. 38.5)	 (25.7 vs. 38.5)
 (8.1 vs. 10.2)	 (10.2 vs. 9.7)	 (9.7 vs. 14.2)	 (14.2 vs. 21.3)	 (8.1 vs. 21.3)






















Mental Health & Mental Disorders (cont.)	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Suicide (Age-Adjusted Death Rate)	25.3	26.7	13.6	10.2
% Have Ever Sought Help for Mental Health	41.7		30.8	
% [Those With Diagnosed Depression] Seeking Help	90.3		87.1	
Mental Health Providers per 100,000	317.7	285.5	202.8	
% Taking Rx/Receiving Mental Health Trtmt	19.4		13.9	
% Unable to Get Mental Health Svcs in Past Yr	5.1		6.8	
% Typical Day Is "Extremely/Very" Stressful	13.6		13.4	
		better	similar	worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				(17.5 vs. 25.3)
(24.1 vs. 24.5)	(24.5 vs. 27.0)	(27.0 vs. 35.5)	(35.5 vs. 41.7)	(24.1 vs. 41.7)
		(85.0 vs. 92.4)	(92.4 vs. 90.3)	(85.0 vs. 90.3)
			(20.3 vs. 19.4)	(20.3 vs. 19.4)
			(3.5 vs. 5.1)	(3.5 vs. 5.1)
(9.5 vs. 11.6)	(11.6 vs. 12.6)	(12.6 vs. 11.7)	(11.7 vs. 13.6)	(9.5 vs. 13.6)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a ""), data years can vary but typically represent a span of 7 to 10 years.				

Nutrition, Physical Activity & Weight	Yellowstone County	Yellowstone vs. Benchmarks			Yellowstone County Trends					
		vs. MT	vs. US	vs. HP2020	2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §	
% Eat 5+ Servings of Fruit or Vegetables per Day	27.7									(34.9 vs. 27.7)
			33.5		(34.9 vs. 40.6)	(40.6 vs. 40.1)	(40.1 vs. 30.8)	(30.8 vs. 27.7)	(34.9 vs. 27.7)	
% "Very/Somewhat" Difficult to Buy Fresh Produce	17.1									(23.5 vs. 17.1)
			22.1				(23.5 vs. 23.3)	(23.3 vs. 17.1)	(23.5 vs. 17.1)	
Population With Low Food Access (Percent)	22.7									
		24.3	22.4							
% Food Insecure	18.1									(16.9 vs. 18.1)
			27.9					(16.9 vs. 18.1)	(16.9 vs. 18.1)	
% 7+ Sugar-Sweetened Drinks in Past Week	32.7									(29.8 vs. 32.7)
			29.0					(29.8 vs. 32.7)	(29.8 vs. 32.7)	
% Healthy Weight (BMI 18.5-24.9)	26.9									(35.8 vs. 26.9)
		34.7	30.3	33.9	(35.8 vs. 25.4)	(25.4 vs. 31.9)	(31.9 vs. 32.1)	(32.1 vs. 26.9)	(35.8 vs. 26.9)	
% Overweight (BMI 25+)	72.7									(62.7 vs. 72.7)
		63.3	67.8		(62.7 vs. 72.9)	(72.9 vs. 65.7)	(65.7 vs. 65.6)	(65.6 vs. 72.7)	(62.7 vs. 72.7)	
% Obese (BMI 30+)	36.9									(23.9 vs. 36.9)
		26.9	32.8	30.5	(23.9 vs. 26.0)	(26.0 vs. 32.6)	(32.6 vs. 34.4)	(34.4 vs. 36.9)	(23.9 vs. 36.9)	
% Child [Age 5-17] Healthy Weight	49.9									(55.4 vs. 49.9)
			58.4				(55.4 vs. 56.0)	(56.0 vs. 49.9)	(55.4 vs. 49.9)	
% Children [Age 5-17] Overweight (85th Percentile)	34.3									(33.8 vs. 34.3)
			33.0		(33.8 vs. 24.3)	(24.3 vs. 28.7)	(28.7 vs. 28.8)	(28.8 vs. 34.3)	(33.8 vs. 34.3)	
% Children [Age 5-17] Obese (95th Percentile)	21.7									(17.5 vs. 21.7)
			20.4	14.5	(17.5 vs. 15.4)	(15.4 vs. 15.1)	(15.1 vs. 14.4)	(14.4 vs. 21.7)	(17.5 vs. 21.7)	

Nutrition, Physical Activity & Weight (continued)	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
% No Leisure-Time Physical Activity	<b>16.6</b>	 22.7	 26.2	 32.6
% Meeting Physical Activity Guidelines	<b>23.3</b>	 21.1	 22.8	 20.1
Recreation/Fitness Facilities per 100,000	<b>24.3</b>	 15.8	 11.0	
% [Adults] 3+ Hours per Day of Total Screen Time	<b>44.7</b>			
% Increased Physical Activity Through Everyday Behaviors	<b>68.2</b>			
% "Never" Walked/Biked/Used Public Transportation for Commute	<b>63.8</b>			
% Child [Age 2-17] Physically Active 1+ Hours per Day	<b>66.2</b>		 50.5	
% Child [Age 5-17] 3+ Hours per Day of Total Screen Time	<b>25.4</b>			
		 better	 similar	 worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
 (26.3 vs. 22.4)	 (22.4 vs. 23.7)	 (23.7 vs. 18.0)	 (18.0 vs. 16.6)	 (26.3 vs. 16.6)
			 (24.3 vs. 23.3)	 (24.3 vs. 23.3)
			 (53.8 vs. 44.7)	 (53.8 vs. 44.7)
		 (72.0 vs. 68.6)	 (68.6 vs. 68.2)	 (72.0 vs. 68.2)
			 (68.5 vs. 63.8)	 (68.5 vs. 63.8)
		 (42.8 vs. 70.8)	 (70.8 vs. 66.2)	 (42.8 vs. 66.2)
			 (21.7 vs. 25.4)	 (21.7 vs. 25.4)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a "§"), data years can vary but typically represent a span of 7 to 10 years.				

Oral Health	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
% [Age 18+] Dental Visit in Past Year	62.4	66.4	59.7	49.0
% Child [Age 2-17] Dental Visit in Past Year	90.1		87.0	49.0
% Have Dental Insurance	68.7		59.9	
		better	similar	worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
(63.9 vs. 70.0)	(70.0 vs. 62.9)	(62.9 vs. 68.0)	(68.0 vs. 62.4)	(63.9 vs. 62.4)
(78.1 vs. 83.4)	(83.4 vs. 75.1)	(75.1 vs. 88.1)	(88.1 vs. 90.1)	(78.1 vs. 90.1)
(56.2 vs. 58.9)	(58.9 vs. 58.9)	(58.9 vs. 69.7)	(69.7 vs. 68.7)	(56.2 vs. 68.7)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a "**"), data years can vary but typically represent a span of 7 to 10 years.				

Potentially Disabling Conditions	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
% [50+] Arthritis/Rheumatism	38.9		38.3	
% [50+] Osteoporosis	17.2		9.4	5.3
% Sciatica/Chronic Back Pain	33.8		22.9	
% Activity Limitations	30.7		25.0	
% Multiple Chronic Conditions	43.5		41.4	

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
(36.3 vs. 35.6)	(35.6 vs. 39.3)	(39.3 vs. 38.1)	(38.1 vs. 38.9)	(36.3 vs. 38.9)
(11.9 vs. 9.2)	(9.2 vs. 10.9)	(10.9 vs. 12.4)	(12.4 vs. 17.2)	(11.9 vs. 17.2)
(22.3 vs. 20.0)	(20.0 vs. 19.8)	(19.8 vs. 27.7)	(27.7 vs. 33.8)	(22.3 vs. 33.8)
(24.3 vs. 25.7)	(25.7 vs. 22.4)	(22.4 vs. 29.6)	(29.6 vs. 30.7)	(24.3 vs. 30.7)

Potentially Disabling Conditions (cont.)	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Alzheimer's Disease (Age-Adjusted Death Rate)	22.5	21.4	30.2	
% Caregiver to a Friend/Family Member	30.1		20.8	
		better	similar	worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				(27.2 vs. 22.5)
			(24.4 vs. 30.1)	(24.4 vs. 30.1)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a "**"), data years can vary but typically represent a span of 7 to 10 years.				

Respiratory Diseases	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
CLRD (Age-Adjusted Death Rate)	63.2	51.9	41.0	
Pneumonia/Influenza (Age-Adjusted Death Rate)	13.0	12.7	14.3	
% COPD (Lung Disease)	11.2	6.0	8.6	
% [Adult] Currently Has Asthma	10.0	10.0	11.8	
% [Child 0-17] Currently Has Asthma	6.5		9.3	

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				(61.2 vs. 63.2)
				(15.2 vs. 13.0)
(6.8 vs. 7.3)	(7.3 vs. 6.9)	(6.9 vs. 8.4)	(8.4 vs. 11.2)	(6.8 vs. 11.2)
(8.0 vs. 9.0)	(9.0 vs. 11.1)	(11.1 vs. 9.5)	(9.5 vs. 10.0)	(8.0 vs. 10.0)
	(8.5 vs. 4.4)	(4.4 vs. 12.5)	(12.5 vs. 6.5)	(8.5 vs. 6.5)

Respiratory Diseases (continued)	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
% [Age 65+] Flu Vaccine in Past Year	64.5	57.5	76.8	70.0
		better	similar	worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a ""), data years can vary but typically represent a span of 7 to 10 years.				

Sexually Transmitted Diseases	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Gonorrhea Incidence per 100,000	154.1	83.9	145.8	
Chlamydia Incidence per 100,000	441.3	427.5	497.3	
HIV Prevalence per 100,000	103.1	66.1	362.3	
		better	similar	worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				(28.5 vs. 154.1)
				(275.8 vs. 441.3)
				(95.9 vs. 103.1)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a ""), data years can vary but typically represent a span of 7 to 10 years.				

Substance Abuse	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	13.9	15.1	10.8	8.2
% Current Drinker	60.1	58.6	55.0	
% Excessive Drinker	20.0		22.5	25.4
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)				24.4
Unintentional Drug-Related Deaths (Age-Adjusted Death Rate)	4.1	8.6	12.3	11.3
% Ever Sought Help for Alcohol or Drug Problem	8.3		3.4	
% Life Negatively Affected by Substance Abuse	53.8		37.3	
		better	similar	worse

Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
				(9.6 vs. 13.9)
(57.4 vs. 58.5)	(58.5 vs. 59.7)	(59.7 vs. 60.5)	(60.5 vs. 60.1)	(57.4 vs. 60.1)
(17.2 vs. 14.7)	(14.7 vs. 19.9)	(19.9 vs. 20.3)	(20.3 vs. 20.0)	(17.2 vs. 20.0)
(3.8 vs. 4.8)	(4.8 vs. 5.2)	(5.2 vs. 3.7)	(3.7 vs. 8.3)	(3.8 vs. 8.3)
			(45.5 vs. 53.8)	(45.5 vs. 53.8)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a "***"), data years can vary but typically represent a span of 7 to 10 years.				

Tobacco Use	Yellowstone County	Yellowstone vs. Benchmarks		
		vs. MT	vs. US	vs. HP2020
% Current Smoker	11.9	18.0	16.3	12.0
% Someone Smokes at Home	9.7		10.7	
% [Nonsmokers] Someone Smokes in the Home	6.2		4.0	
% [Household With Children] Someone Smokes in the Home	6.8		7.2	
% Currently Use Electronic Cigarettes	7.9	3.9	3.8	
% Use Smokeless Tobacco	4.3	6.6	4.4	0.3
% [Tobacco Users] Received Advice to Quit Using Tobacco	53.7			
		better	similar	worse

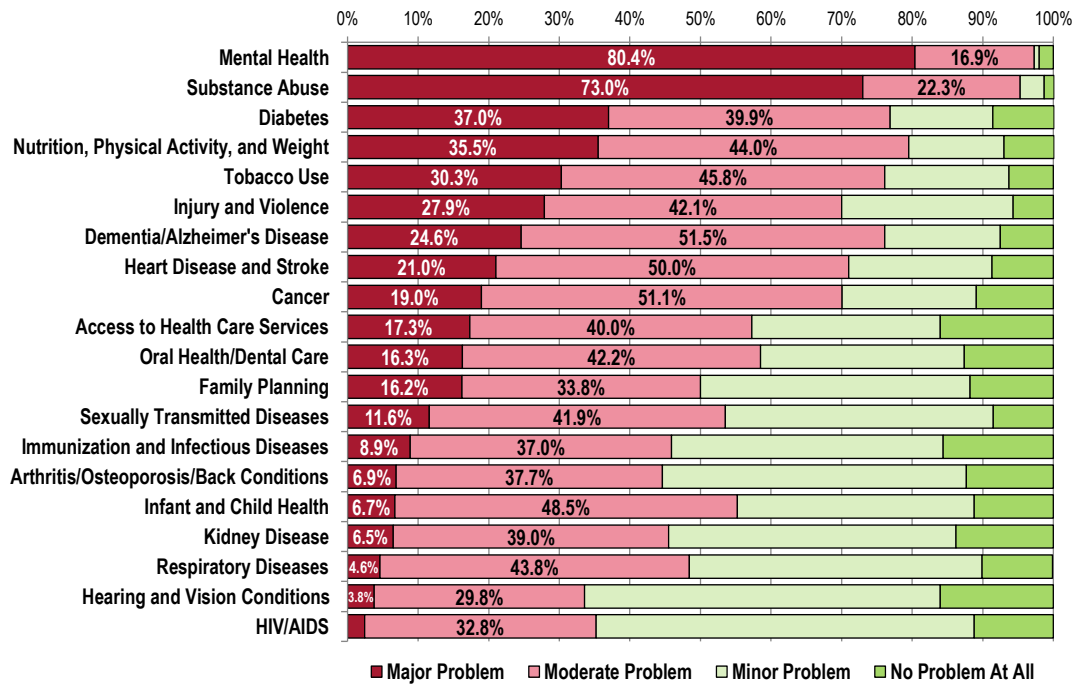
Yellowstone County Trends				
2005 vs. 2010	2010 vs. 2014	2014 vs. 2017	2017 vs. 2020	Baseline vs. Current Data §
(18.3 vs. 13.8)	(13.8 vs. 11.7)	(11.7 vs. 19.6)	(19.6 vs. 11.9)	(18.3 vs. 11.9)
(15.6 vs. 9.1)	(9.1 vs. 9.9)	(9.9 vs. 10.5)	(10.5 vs. 9.7)	(15.6 vs. 9.7)
		(6.7 vs. 3.7)	(3.7 vs. 6.2)	(6.7 vs. 6.2)
(12.6 vs. 6.9)	(6.9 vs. 8.5)	(8.5 vs. 8.9)	(8.9 vs. 6.8)	(12.6 vs. 6.8)
			(4.8 vs. 7.9)	(4.8 vs. 7.9)
(5.1 vs. 6.6)	(6.6 vs. 7.6)	(7.6 vs. 3.5)	(3.5 vs. 4.3)	(5.1 vs. 4.3)
		(69.0 vs. 68.4)	(68.4 vs. 53.7)	(69.0 vs. 53.7)
§ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with a "**"), data years can vary but typically represent a span of 7 to 10 years.				



## Summary of Key Informant Perceptions

In the Online Key Informant Survey, community stakeholders were asked to rate the degree to which each of 20 health issues is a problem in their own community, using a scale of “major problem,” “moderate problem,” “minor problem,” or “no problem at all.” The following chart summarizes their responses; these findings also are outlined throughout this report, along with the qualitative input describing reasons for their concerns. (Note that these ratings alone do not establish priorities for this assessment; rather, they are one of several data inputs considered for the prioritization process described earlier.)

### Key Informants: Relative Position of Health Topics as Problems in the Community



# Community Description



## Population Characteristics

### Total Population

Yellowstone County, the focus of this Community Health Needs Assessment, encompasses 2,633.50 square miles and houses a total population of 156,332 residents, according to latest census estimates.

**Total Population**  
(Estimated Population, 2013-2017)

	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
<b>Yellowstone County</b>	156,332	2,633.50	59.36
<b>Montana</b>	1,029,862	145,545.42	7.08
<b>United States</b>	321,004,407	3,532,315.66	90.88

Sources: 

- US Census Bureau American Community Survey 5-year estimates.
- Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.

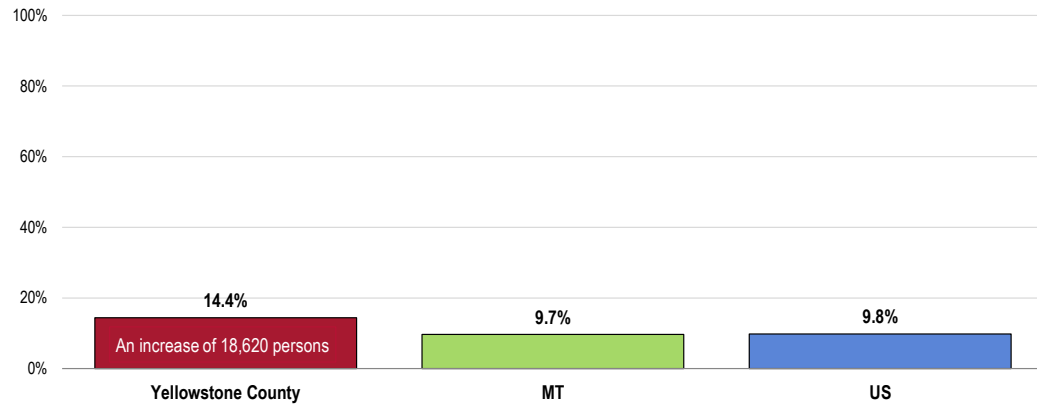
### Population Change 2000-2010

A significant positive or negative shift in total population over time impacts healthcare providers and the utilization of community resources.

**Between the 2000 and 2010 US Censuses, the population of Yellowstone County increased by 18,620 persons, or 14.4%.**

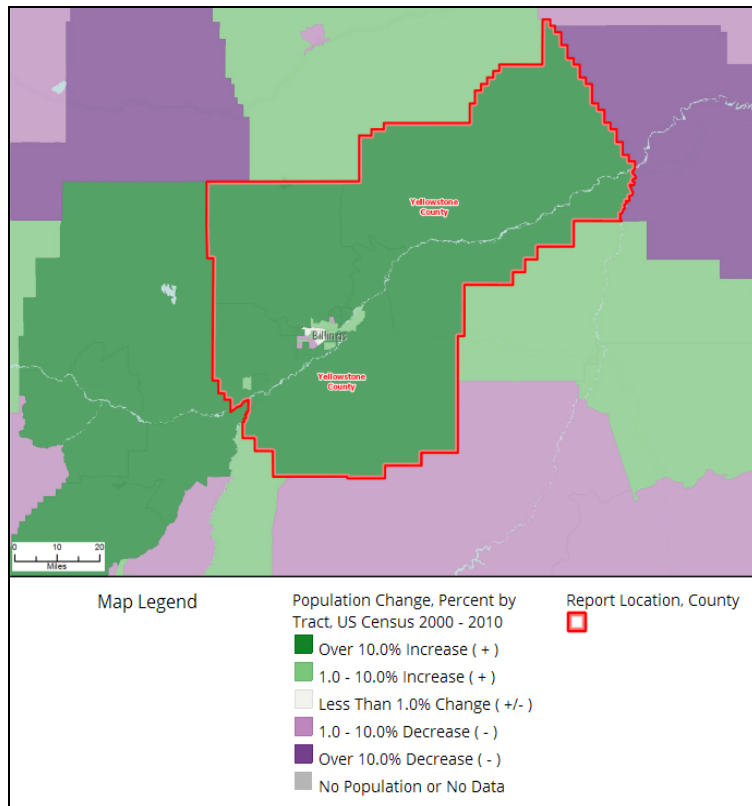
- **BENCHMARK:** A greater proportional increase than reported statewide and nationally.

### Change in Total Population (Percentage Change Between 2000 and 2010)



Sources: • US Census Bureau Decennial Census (2000-2010).  
 • Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.  
 Notes: • A significant positive or negative shift in total population over time impacts healthcare providers and the utilization of community resources.

This map shows the areas of greatest increase or decrease in population between 2000 and 2010.



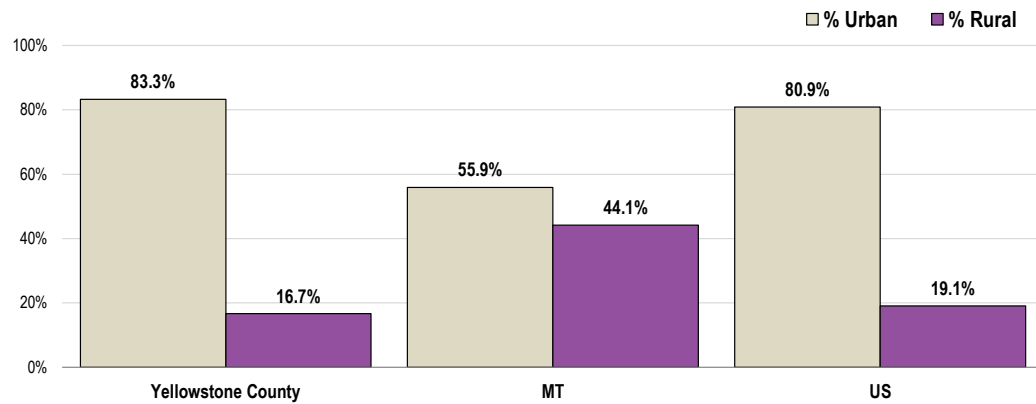
## Urban/Rural Population

Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban.

**Yellowstone County is predominantly urban, with 83.3% of the population living in areas designated as urban.**

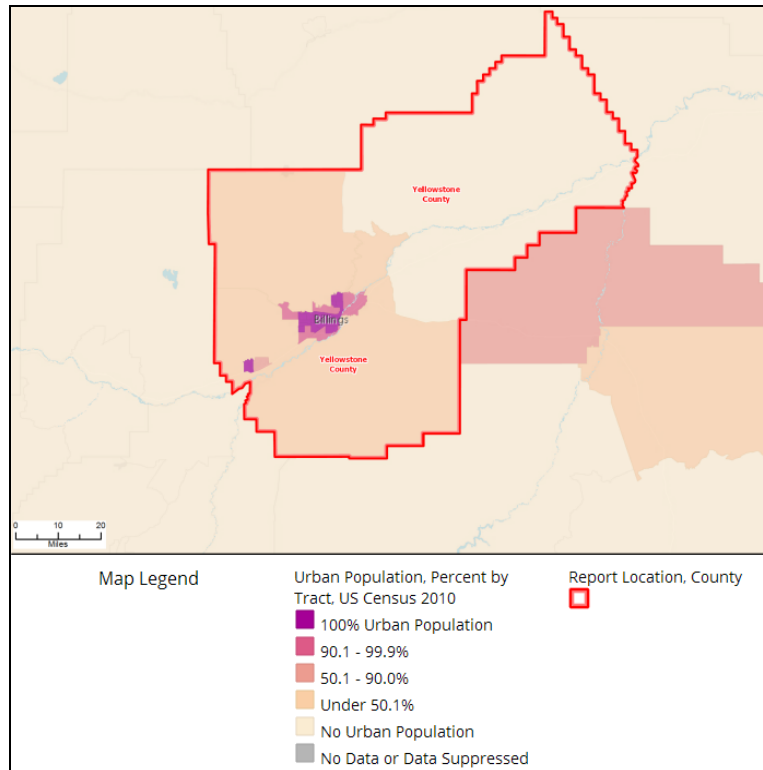
- **BENCHMARK:** A much higher proportion of urban residents than reported in Montana.

### Urban and Rural Population (2010)



- Sources:
- US Census Bureau Decennial Census.
  - Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.
- Notes:
- This indicator reports the percentage of population living in urban and rural areas. Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban.

Note the following map, outlining the urban population in Yellowstone County census tracts as of 2010.

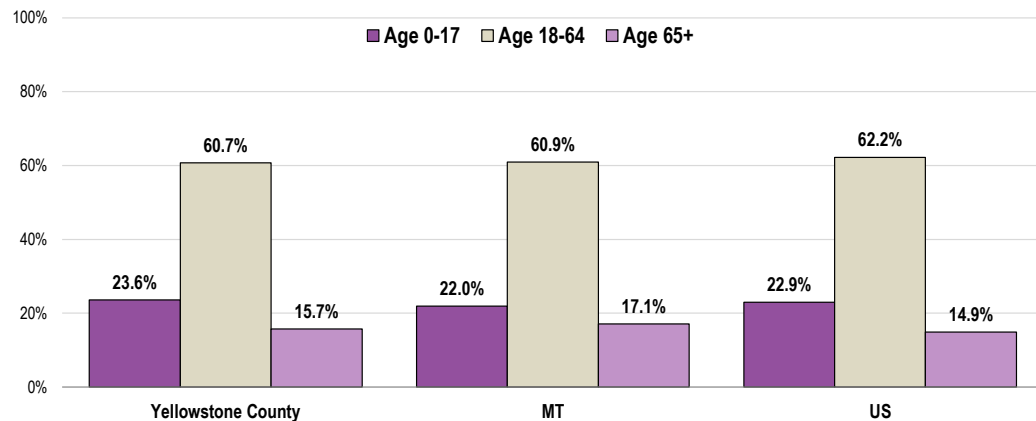


## Age

It is important to understand the age distribution of the population, as different age groups have unique health needs that should be considered separately from others along the age spectrum.

**In Yellowstone County, 23.6% of the population are children age 0-17; another 60.7% are age 18 to 64, while 15.7% are age 65 and older.**

**Total Population by Age Groups, Percent**  
(2013-2017)

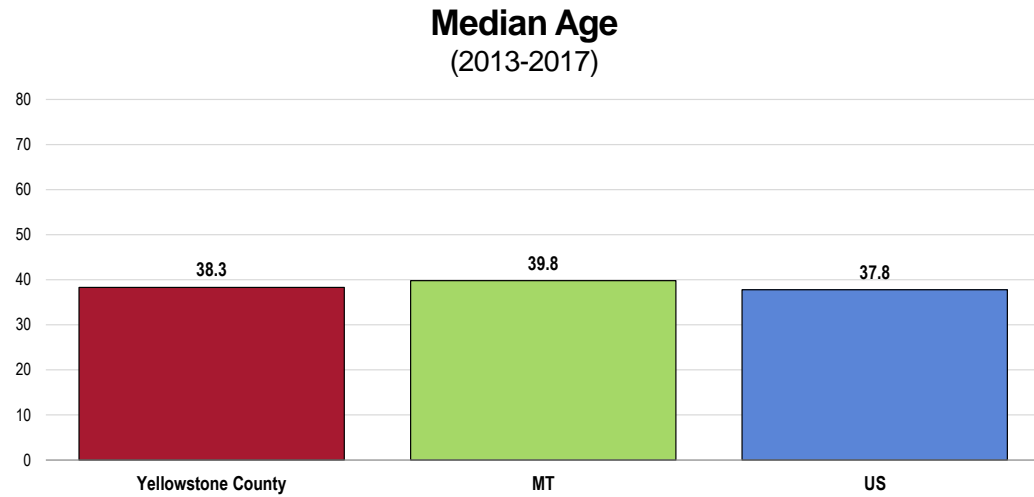


Sources: 

- US Census Bureau American Community Survey 5-year estimates.
- Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.

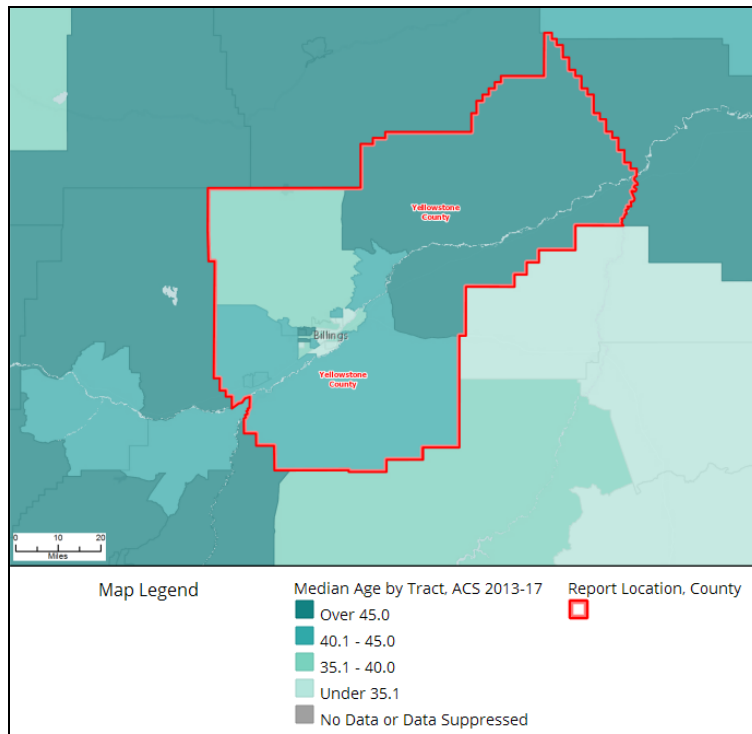
### Median Age

The median age of county residents falls between the state and national figures.



Sources:   
 • US Census Bureau American Community Survey 5-year estimates.   
 • Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.

The following map provides an illustration of the median age in Yellowstone County, segmented by census tract.



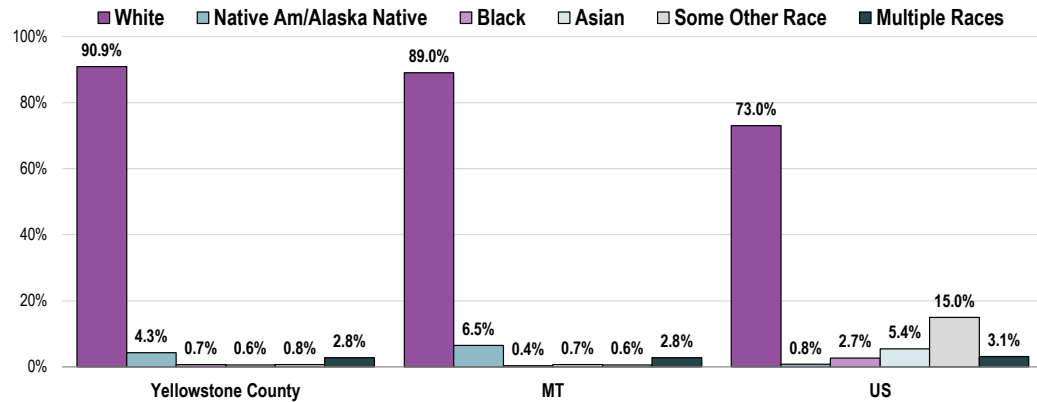
## Race & Ethnicity

### Race

In looking at race independent of ethnicity (Hispanic or Latino origin), most residents of Yellowstone County (90.9%) are White.

- **BENCHMARK:** A less diverse population than reported nationwide.

**Total Population by Race Alone, Percent**  
(2013-2017)



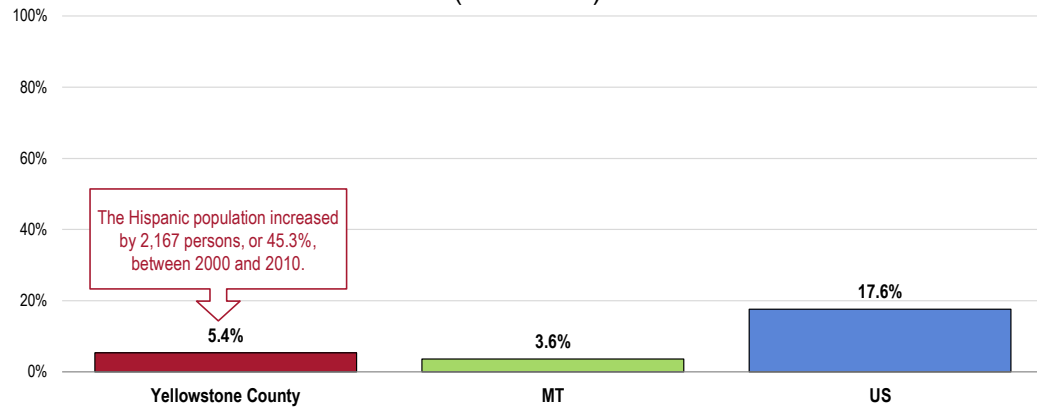
Sources: • US Census Bureau American Community Survey 5-year estimates.  
• Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.

### Ethnicity

A total of 5.4% of Yellowstone County residents are Hispanic or Latino.

- **BENCHMARK:** Above the Montana state prevalence but well below the US figure.

**Hispanic Population**  
(2013-2017)



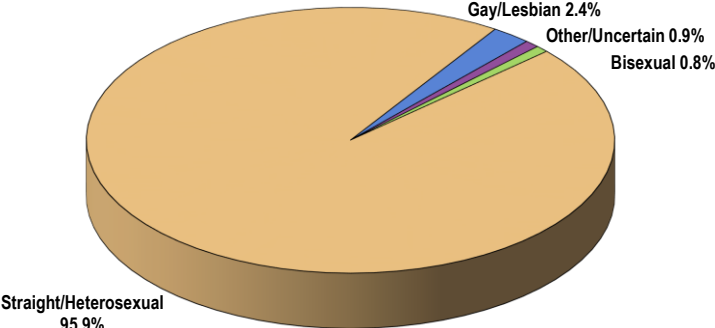
Sources: • US Census Bureau American Community Survey 5-year estimates.  
• Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.  
Notes: • Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.



### Sexual Orientation

Most survey respondents (95.9%) self-identify as straight or heterosexual, while 2.4% are gay or lesbian, and 0.8% identify as bisexual.

**Respondent's Sexual Orientation**  
(Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 311]

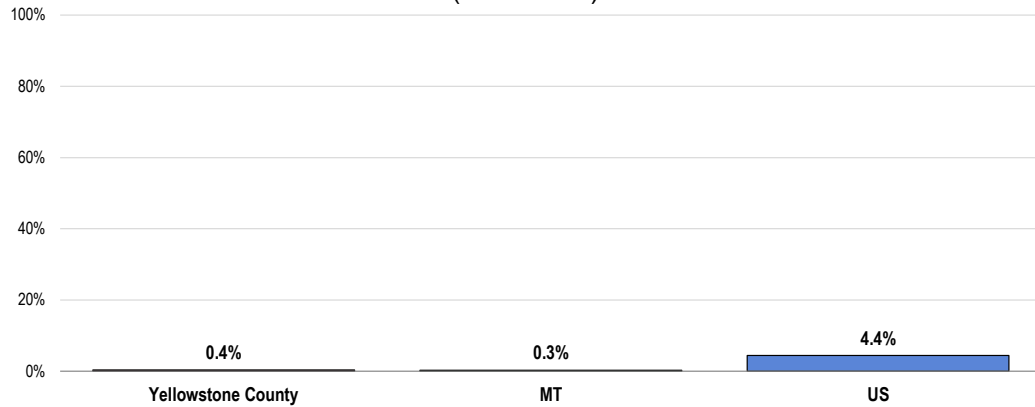
Notes: • Asked of all respondents.

## Linguistic Isolation

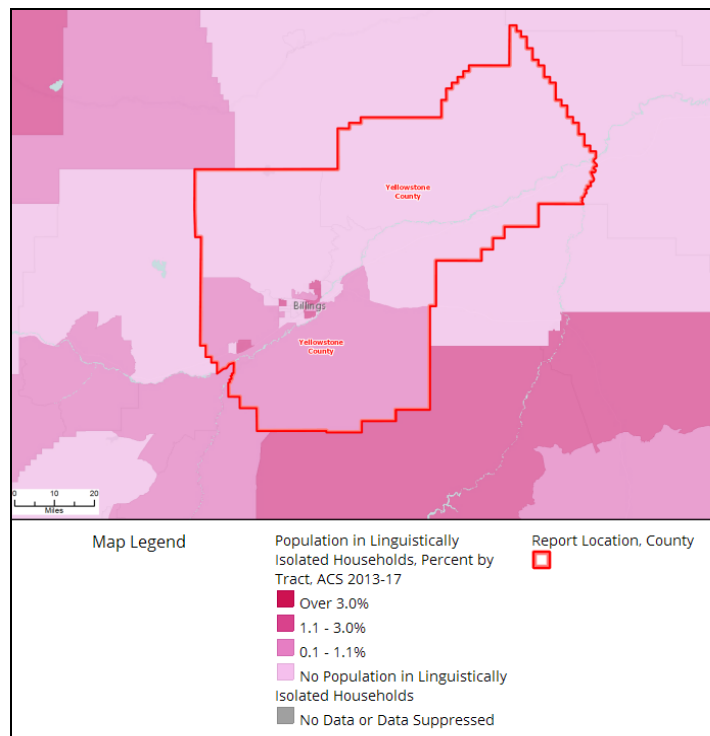
Just 0.4% of the county population age 5 and older live in a home in which **no** person age 14 or older is proficient in English (speaking only English or speaking English “very well”).

- **BENCHMARK:** Above the Montana prevalence but well below the US.

### Linguistically Isolated Population (2013-2017)



- Sources:
- US Census Bureau American Community Survey 5-year estimates.
  - Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.
- Notes:
- This indicator reports the percentage of the population age 5+ who live in a home in which no person age 14+ speaks only English, or in which no person age 14+ speak a non-English language and speak English "very well."



## Social Determinants of Health

### About Social Determinants

Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know that taking care of ourselves by eating well and staying active, not smoking, getting the recommended immunizations and screening tests, and seeing a doctor when we are sick all influence our health. Our health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. The conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

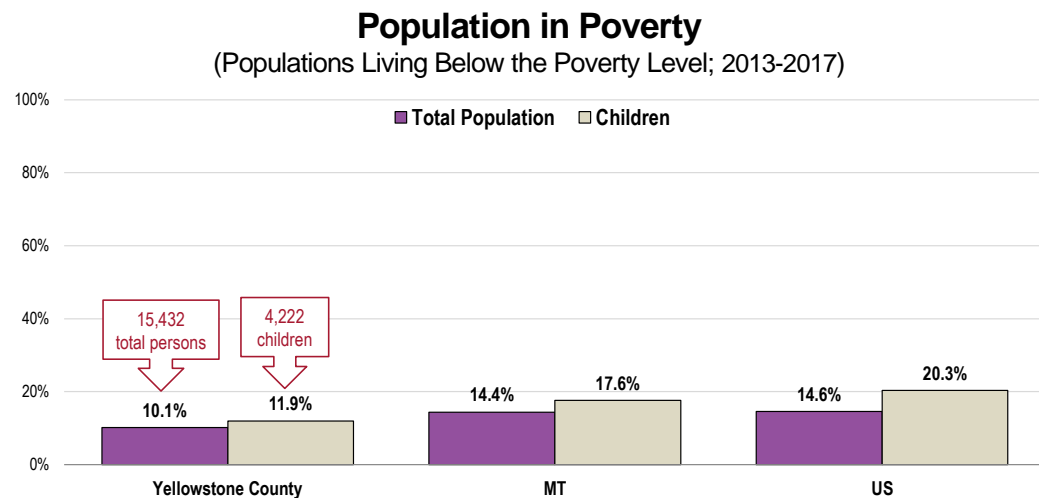
### Poverty

The latest census estimate shows **10.1%** of Yellowstone County total population living below the federal poverty level.

- **BENCHMARK:** Below the state and national figures.

Among children (ages 0 to 17), this percentage in Yellowstone County is **11.9%** (representing an estimated 4,222 children).

- **BENCHMARK:** Below the state and national figures.



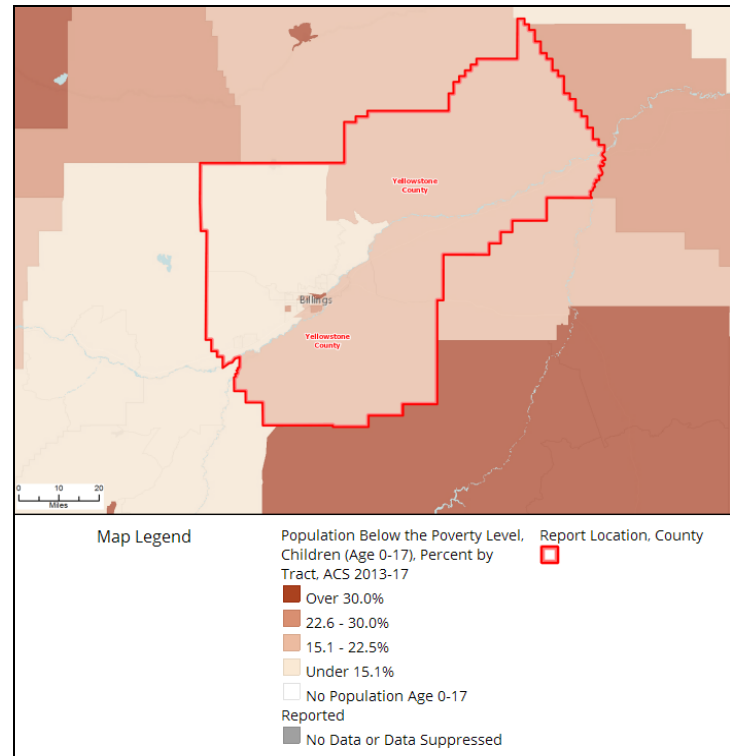
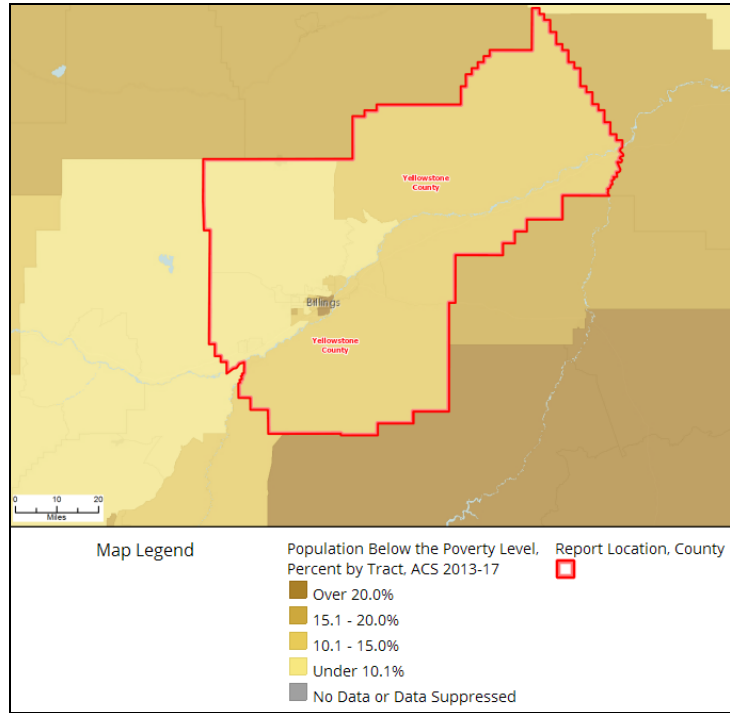
Sources: 

- US Census Bureau American Community Survey 5-year estimates.
- Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.

  
 Notes: 

- Poverty is considered a key driver of health status. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

The following maps highlight concentrations of persons living below the federal poverty level.



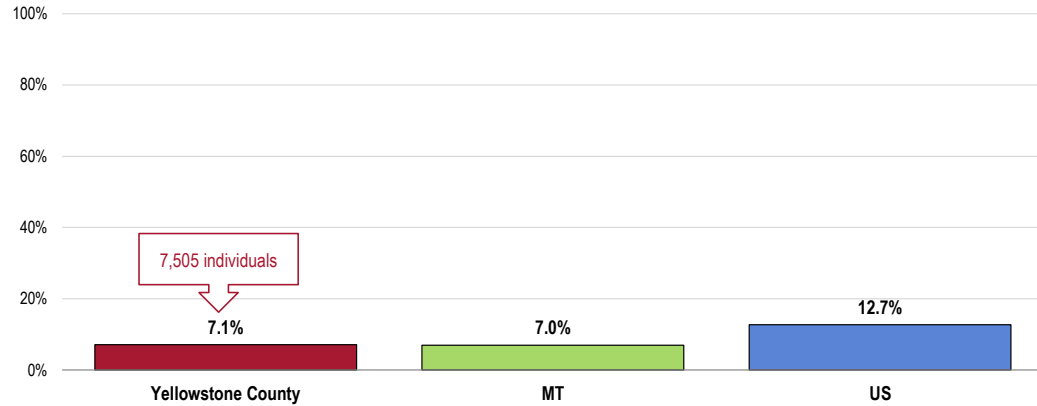
## Education

Among Yellowstone County population age 25 and older, an estimated 7.1% (about 7,500 people) do not have a high school education.

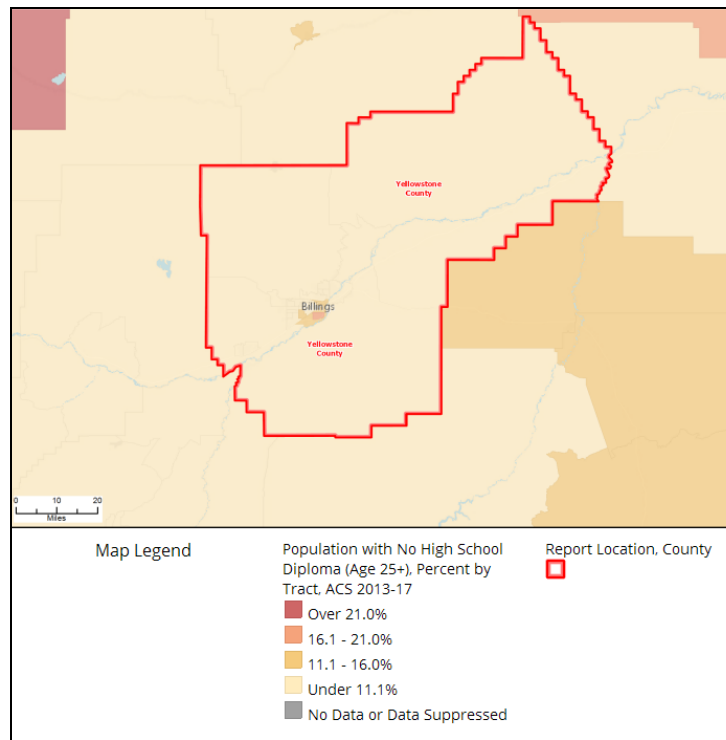
- **BENCHMARK:** Well below the US percentage.

### Population With No High School Diploma

(Population Age 25+ Without a High School Diploma or Equivalent, 2013-2017)



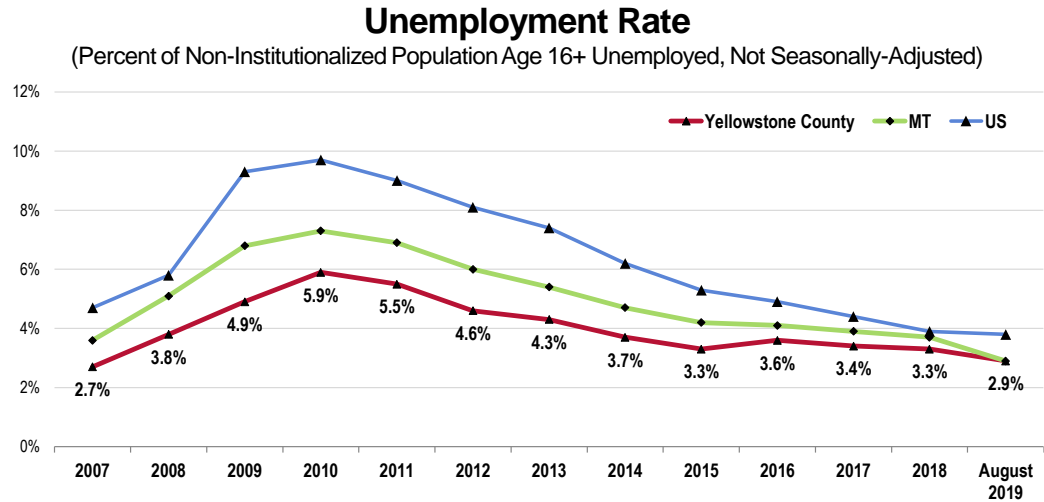
- Sources:
- US Census Bureau American Community Survey 5-year estimates.
  - Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.
- Notes:
- This indicator is relevant because educational attainment is linked to positive health outcomes.



## Employment

According to data derived from the US Department of Labor, the unemployment rate in Yellowstone County as of August 2019 was 2.9%.

- **BENCHMARK:** Below the US figure.
- **TREND:** The percentage has decreased since 2010, echoing state and US trends.



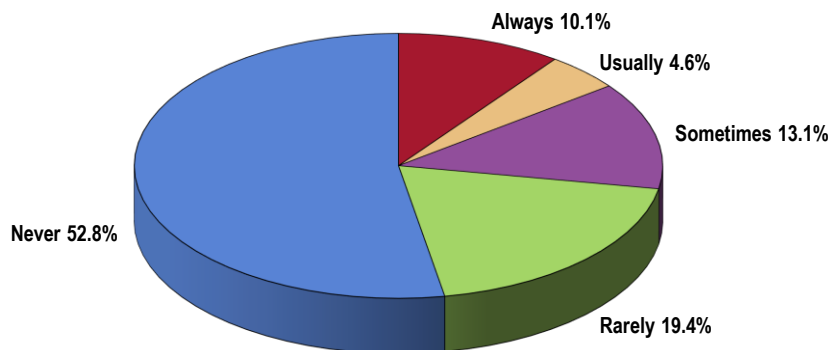
Sources: • US Department of Labor, Bureau of Labor Statistics.  
 • Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.  
 Notes: • This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

## Housing

### Housing Insecurity

Most surveyed adults rarely, if ever, worry about the cost of housing.

### Frequency of Worry or Stress Over Paying Rent/Mortgage in the Past Year (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 71]  
 Notes: • Asked of all respondents.

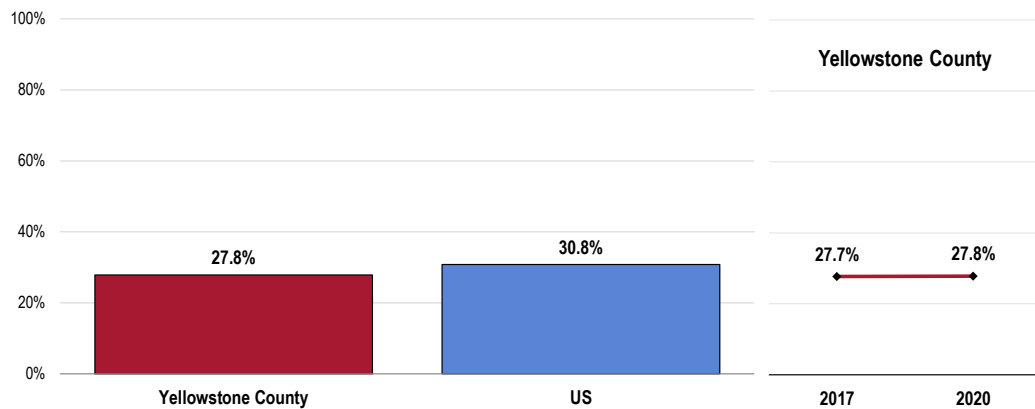
However, a considerable share (27.8%) reports that they were “sometimes,” “usually,” or “always” worried or stressed about having enough money to pay their rent or mortgage in the past year.

NOTE:

For indicators derived from the population-based survey administered as part of this project, text describes significant differences determined through statistical testing. The reader can assume that differences (against or among local findings) that are not mentioned are ones that are not statistically significant.

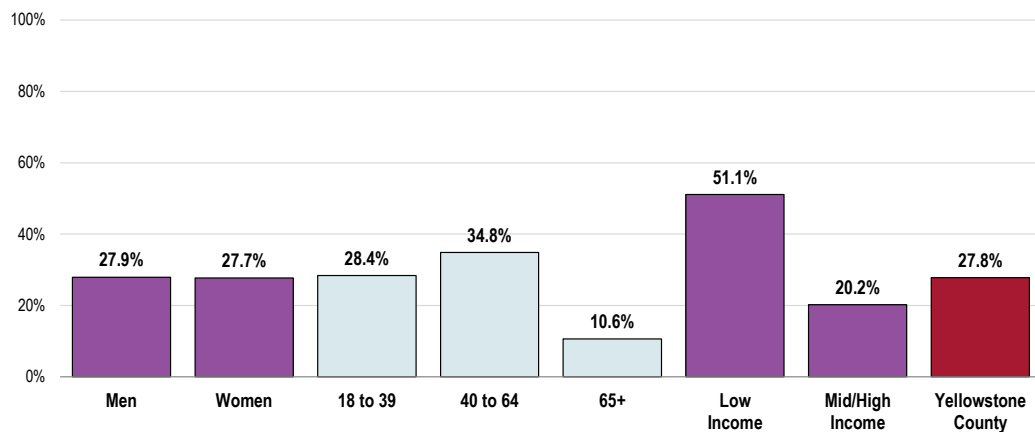
- **DISPARITY:** The percentage is reported more often among adults age 40 to 64 and those in low-income households.

### “Always/Usually/Sometimes” Worried About Paying Rent/Mortgage in the Past Year



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 196]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

### “Always/Usually/Sometimes” Worried About Paying Rent/Mortgage in the Past Year (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 196]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

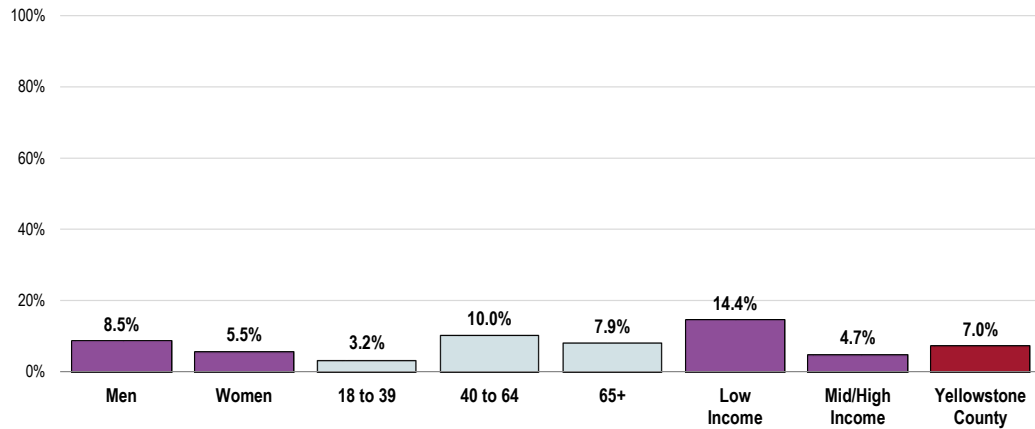
Charts throughout this report (such as that here) detail survey findings among key demographic groups – namely by sex, age groupings, and income (based on poverty status).

### Housing Conditions

A total of 7.0% of survey respondents have experienced ongoing problems with water leaks, rodents, insects, mold, or other unsafe/unhealthy housing conditions in the past year.

- **DISPARITY:** The percentage is reported more often among adults age 40 to 64 and those in low-income households.

### Have Experienced Water Leaks, Rodents, Insects, Mold, or Other Unsafe/Unhealthy Housing Conditions in the Past Year (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 312]

Notes: • Asked of all respondents.

• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Key Informant Input: Housing

Key informants taking part in an online survey made these comments related to housing in the community:

*The social determinants of health are an important measure of a healthy community: access to healthcare, housing, nutritional food, transportation, and employment. – Government Representative*

*Unhealthy housing. There is no housing code, so renters, in particular, struggle with poor conditions, such as lack of heat, mold, poor ventilation, and pests. – Public Health Representative*

*Homelessness and access to healthcare on a nonemergency basis. – Community Leader*

*Housing for homeless when convalescing. – Community Leader*

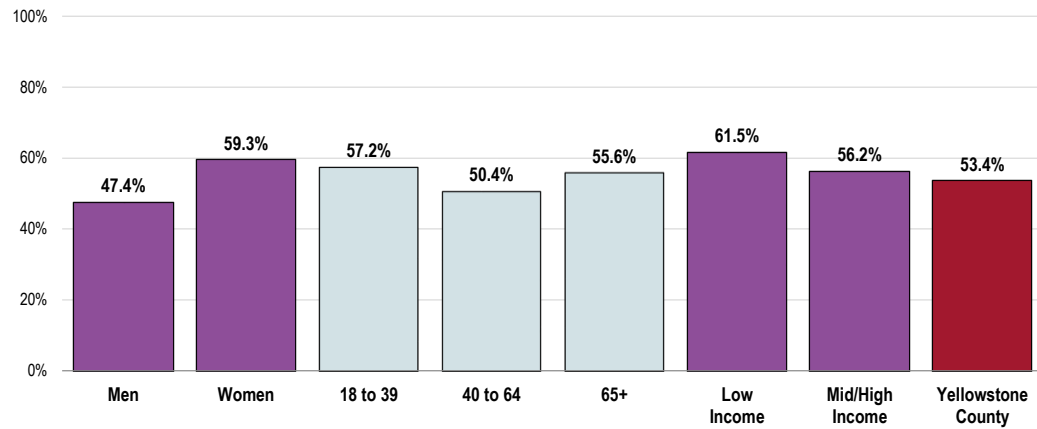


## Public Transportation

Over half of survey respondents (53.4%) report that they could rely on public transportation if needed for work, errands, or appointments.

- **DISPARITY:** The prevalence is lowest among male respondents.

### Could Rely on Public Transportation if Needed for Work, Errands, Appointments (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 313]

Notes: • Asked of all respondents.  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Food Access

### Low Food Access

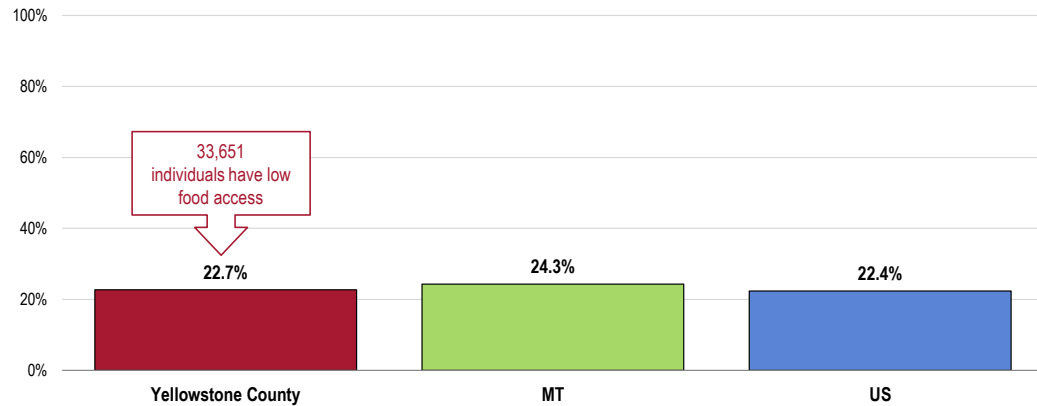
Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store.

US Department of Agriculture data show that **22.7%** of the Yellowstone County population (representing 33,651 residents) have low food access, meaning that they do not live near a supermarket or large grocery store.

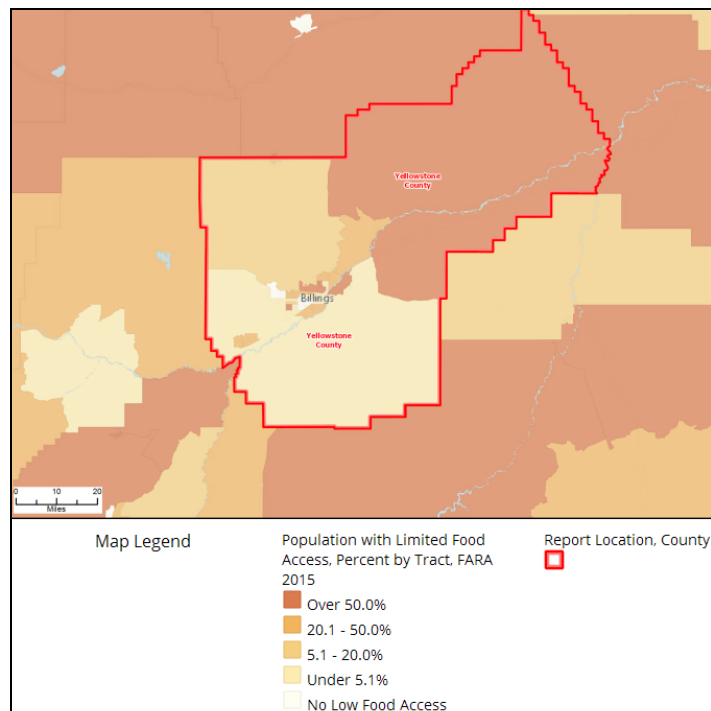
- **BENCHMARK:** Below the state percentage.

### Population With Low Food Access

(Percent of Population That Is Far From a Supermarket or Large Grocery Store, 2015)



- Sources:
- US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas (FARA).
  - Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.
- Notes:
- This indicator reports the percentage of the population with low food access. Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store. This indicator is relevant because it highlights populations and geographies facing food insecurity.



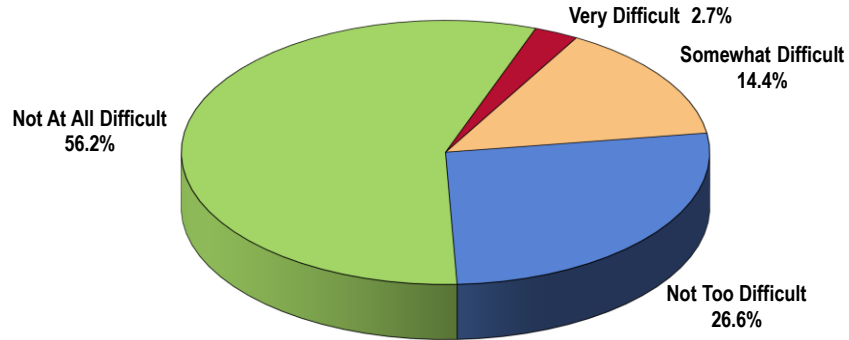
### Difficulty Accessing Fresh Produce

Most Yellowstone County adults report little or no difficulty buying fresh produce at a price they can afford.

Respondents were asked:

"How difficult is it for you to buy fresh produce like fruits and vegetables at a price you can afford? Would you say: Very Difficult, Somewhat Difficult, Not Too Difficult, or Not At All Difficult?"

### Level of Difficulty Finding Fresh Produce at an Affordable Price (Yellowstone County, 2020)

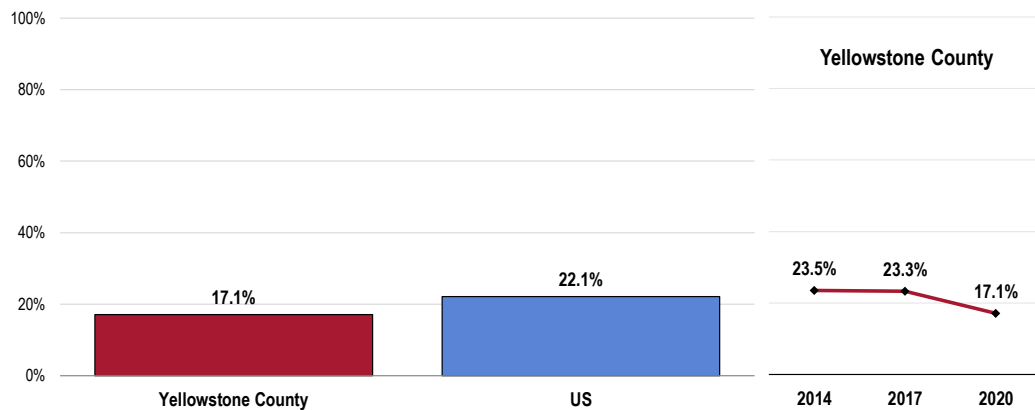


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 86]  
 Notes: • Asked of all respondents.

However, 17.1% of Yellowstone County adults find it “very” or “somewhat” difficult to access affordable fresh fruits and vegetables.

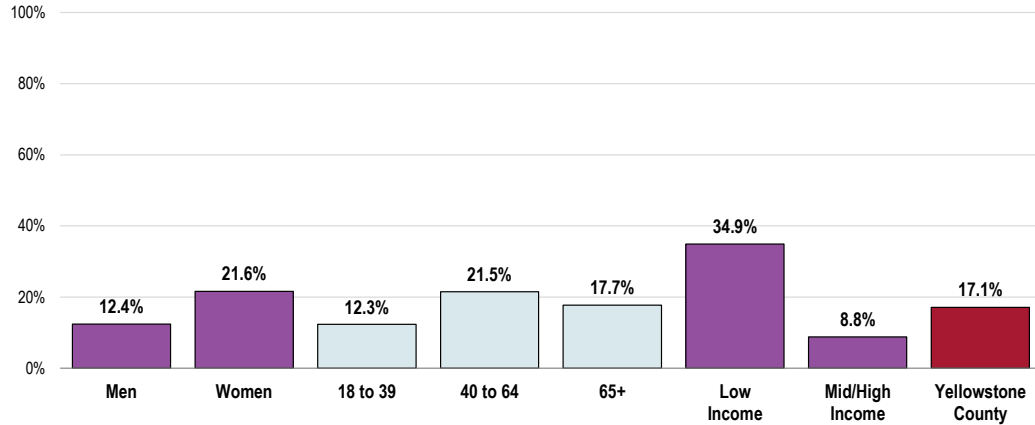
- **BENCHMARK:** Lower than the US prevalence.
- **TREND:** Denotes a statistically significant decrease (improvement) since 2014.
- **DISPARITY:** Reported more among women and especially low-income respondents.

### Find It “Very” or “Somewhat” Difficult to Buy Affordable Fresh Produce



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 189]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

### Find It “Very” or “Somewhat” Difficult to Buy Affordable Fresh Produce (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 189]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

### Food Insecurity

Overall, 18.1% of community residents are determined to be “food insecure,” having run out of food in the past year and/or been worried about running out of food.

- **BENCHMARK:** Well below the US figure.
- **DISPARITY:** Higher among adults under 65 and especially those in low-income households.

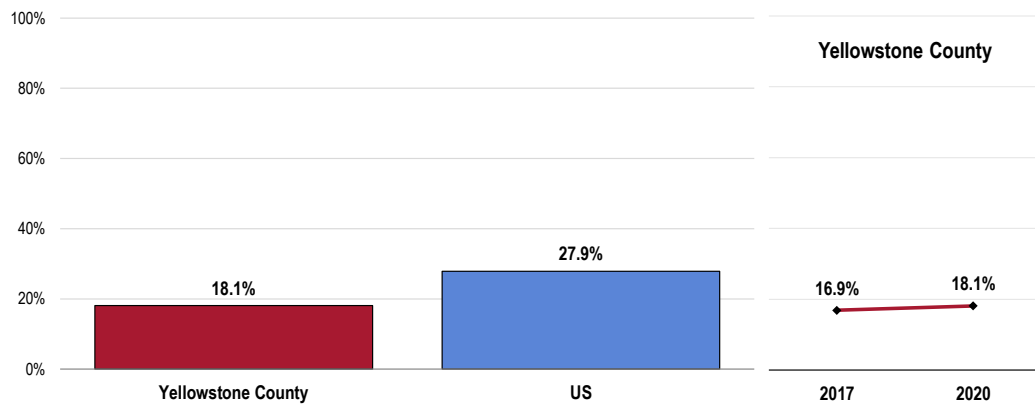
Surveyed adults were asked:

“Now I am going to read two statements that people have made about their food situation. Please tell me whether each statement was “Often True,” “Sometimes True,” or “Never True” for you in the past 12 months:

- *I worried about whether our food would run out before we got money to buy more.*
- *The food that we bought just did not last, and we did not have money to get more.”*

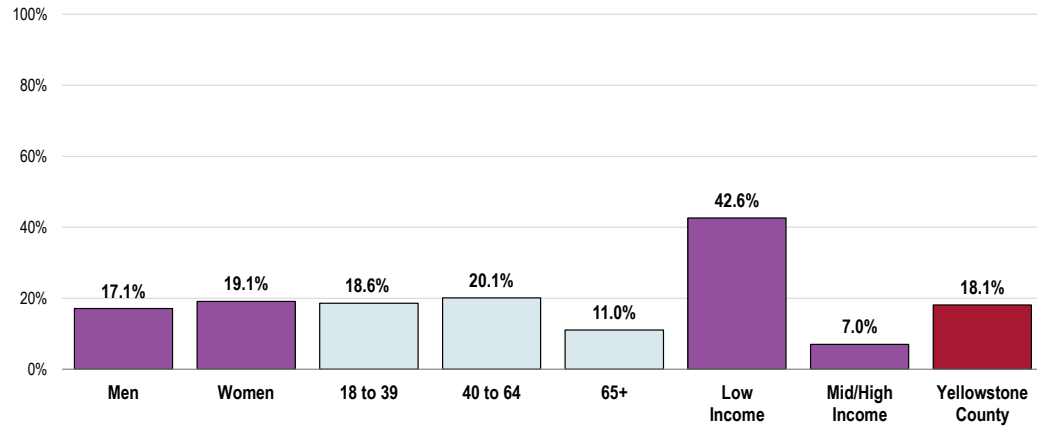
Those answering “Often” or “Sometimes True” for either statement are considered to be food insecure.

### Food Insecurity



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 149]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.  
 • Includes adults who A) ran out of food at least once in the past year and/or B) worried about running out of food in the past year.

### Food Insecurity (Yellowstone County, 2020)



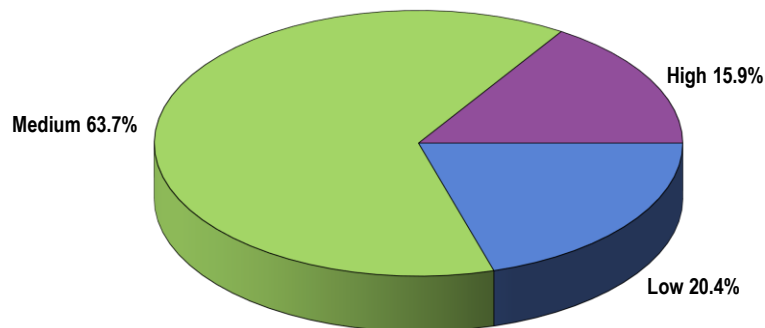
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 149]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Includes adults who A) ran out of food at least once in the past year and/or B) worried about running out of food in the past year.

### Health Literacy

Most surveyed adults in Yellowstone County are found to have a moderate level of health literacy.

Low health literacy is defined as those respondents who "Seldom/Never" find written or spoken health information easy to understand, and/or who "Always/Nearly Always" need help reading health information, and/or who are "Not At All Confident" in filling out health forms.

### Level of Health Literacy (Yellowstone County, 2020)

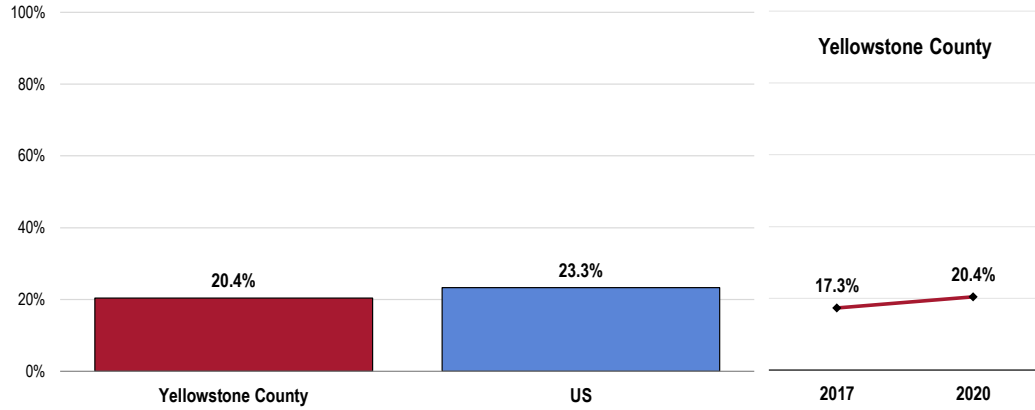


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 172]  
 Notes: • Asked of all respondents.  
 • Respondents with low health literacy are those who "seldom/never" find written or spoken health information easy to understand, and/or who "always/nearly always" need help reading health information, and/or who are "not at all confident" in filling out health forms.

A total of 20.4% are determined to have low health literacy.

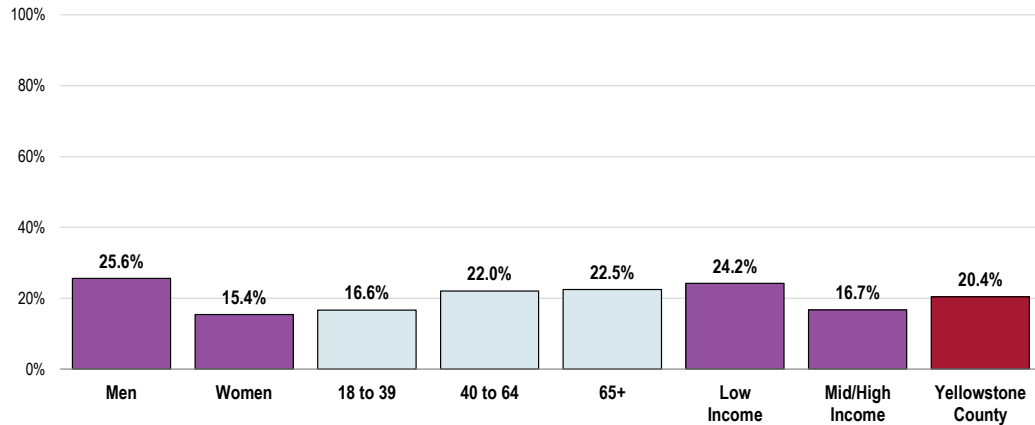
- **DISPARITY:** More often reported among male respondents.

### Low Health Literacy



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 172]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.  
 • Respondents with low health literacy are those who "seldom/never" find written or spoken health information easy to understand, and/or who "always/nearly always" need help reading health information, and/or who are "not at all confident" in filling out health forms.

### Low Health Literacy (Yellowstone County, 2020)



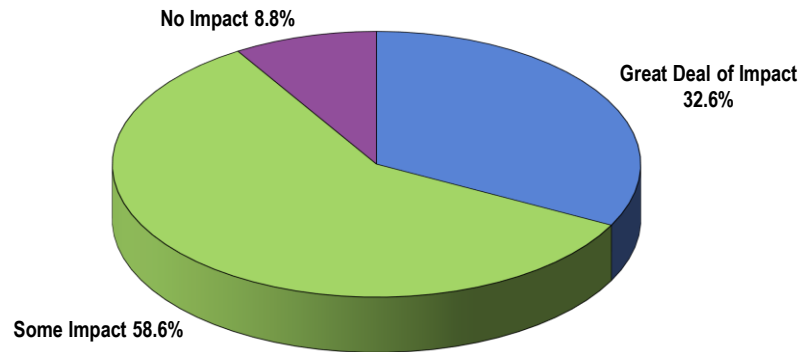
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 172]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Respondents with low health literacy are those who "seldom/never" find written or spoken health information easy to understand, and/or who "always/nearly always" need help reading health information, and/or who are "not at all confident" in filling out health forms.

## Perceived Ability to Impact Community Life

When asked about their perceived ability to help make their community a better place to live, 32.6% of survey respondents feel they have a “great deal of impact” responses, and 58.6% consider themselves to have “some impact” on affecting community health.

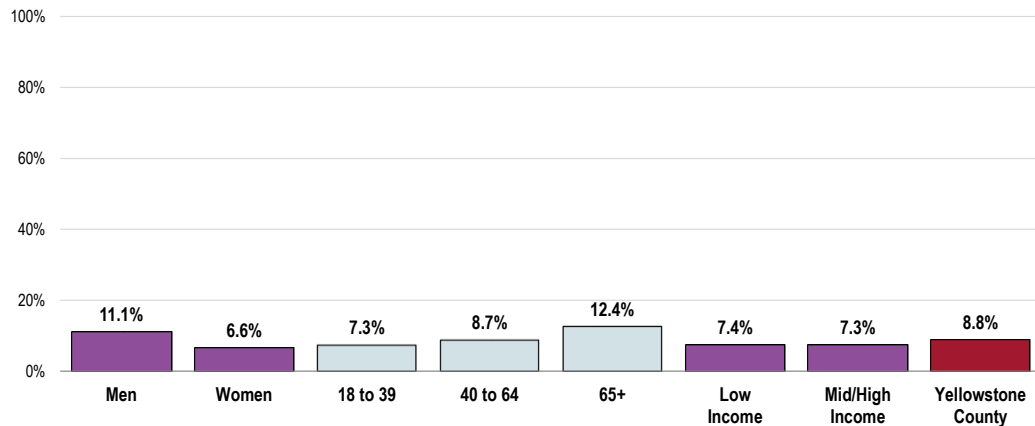
Note, however, that 8.8% of survey respondents do not perceive themselves as having any local impact.

**Personal Degree of Impact on Making the Community a Better Place to Live**  
(Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 322]  
Notes: • Asked of all respondents.

**Personally Have “No Impact” On Improving Community Health**  
(Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 322]  
Notes: • Asked of all respondents.  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

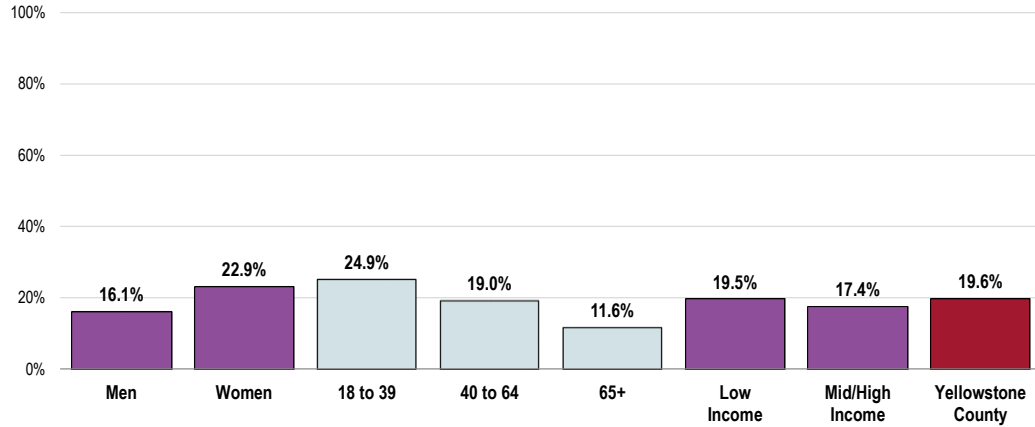
## Awareness of Montana 2-1-1

Among survey respondents, one in five (19.6%) is aware of Montana 2-1-1.

- **DISPARITY:** The prevalence decreases with age.

Montana 2-1-1 is a website and phone number designed to connect people who live in Montana with information and help from state and local resources. Food or housing assistance, childcare, crisis counseling, and substance abuse treatment are just a few of the services that could be accessed using this free, anonymous service.

### Awareness of Montana 2-1-1 (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 306]

Notes: • Asked of all respondents.

• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.



## General Health Status



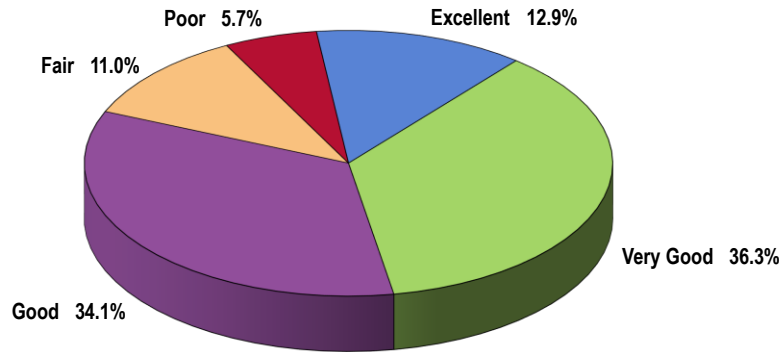
## Overall Health Status

The initial inquiry of the PRC Community Health Survey asked respondents the following:

"Would you say that in general your health is: Excellent, Very Good, Good, Fair, or Poor?"

**Most Yellowstone County residents rate their overall health favorably (responding "excellent," "very good," or "good").**

**Self-Reported Health Status**  
(Yellowstone County, 2020)

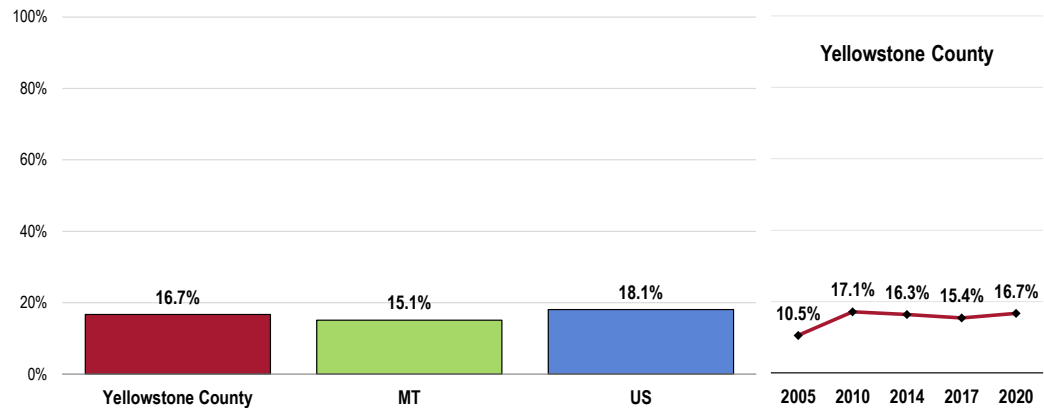


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 5]  
Notes: • Asked of all respondents.

**However, 16.7% of Yellowstone County adults believe that their overall health is "fair" or "poor."**

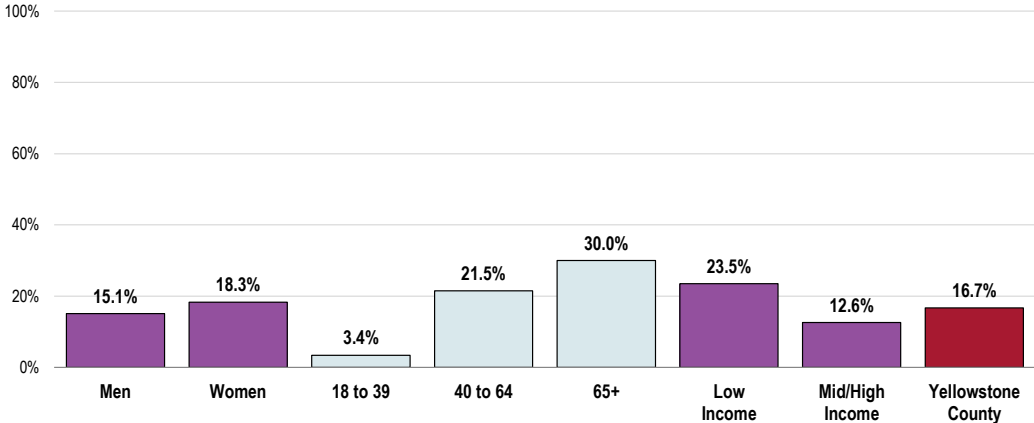
- **TREND:** Denotes a statistically significant increase from 2005 survey findings (but similar to subsequent survey results).
- **DISPARITY:** Correlates with age among survey respondents.

### Experience "Fair" or "Poor" Overall Health



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 5]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
• 2017 PRC National Health Survey, PRC, Inc.  
Notes: • Asked of all respondents.

### Experience “Fair” or “Poor” Overall Health (Yellowstone County, 2020)



Sources: ● 2020 PRC Community Health Survey, PRC, Inc. [Item 5]  
Notes: ● Asked of all respondents.  
● Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Mental Health

### About Mental Health & Mental Disorders

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society. Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning. Mental disorders contribute to a host of problems that may include disability, pain, or death. Mental illness is the term that refers collectively to all diagnosable mental disorders. Mental disorders are among the most common causes of disability. The resulting disease burden of mental illness is among the highest of all diseases nationwide.

Mental health and physical health are closely connected. Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery.

The existing model for understanding mental health and mental disorders emphasizes the interaction of social, environmental, and genetic factors throughout the lifespan. In behavioral health, researchers identify: **risk factors**, which predispose individuals to mental illness; and **protective factors**, which protect them from developing mental disorders. Researchers now know that the prevention of mental, emotional, and behavioral (MEB) disorders is inherently interdisciplinary and draws on a variety of different strategies. Over the past 20 years, research on the prevention of mental disorders has progressed. The major areas of progress include evidence that:

- MEB disorders are common and begin early in life.
- The greatest opportunity for prevention is among young people.
- There are multiyear effects of multiple preventive interventions on reducing substance abuse, conduct disorder, antisocial behavior, aggression, and child maltreatment.
- The incidence of depression among pregnant women and adolescents can be reduced.
- School-based violence prevention can reduce the base rate of aggressive problems in an average school by 25% to 33%.
- There are potential indicated preventive interventions for schizophrenia.
- Improving family functioning and positive parenting can have positive outcomes on mental health and can reduce poverty-related risk.
- School-based preventive interventions aimed at improving social and emotional outcomes can also improve academic outcomes.
- Interventions targeting families dealing with adversities, such as parental depression or divorce, can be effective in reducing risk for depression in children and increasing effective parenting.
- Some preventive interventions have benefits that exceed costs, with the available evidence strongest for early childhood interventions.
- Implementation is complex, and it is important that interventions be relevant to the target audiences.
- In addition to advancements in the prevention of mental disorders, there continues to be steady progress in treating mental disorders as new drugs and stronger evidence-based outcomes become available.

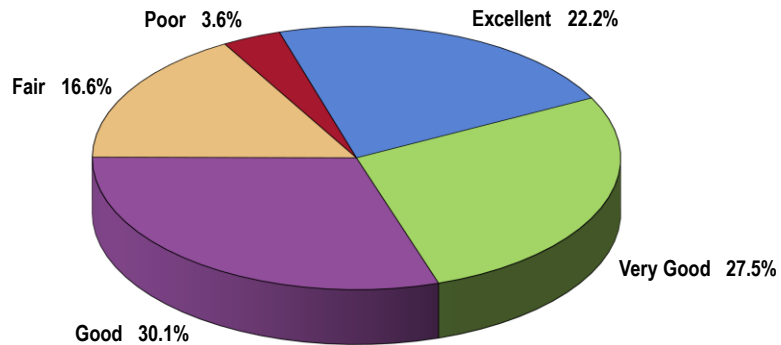
— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Mental Health Status

Most Yellowstone County adults rate their overall mental health favorably (“excellent,” “very good,” or “good”).

“Now thinking about your mental health, which includes stress, depression, and problems with emotions, would you say that, in general, your mental health is: Excellent, Very Good, Good, Fair, or Poor?”

**Self-Reported Mental Health Status**  
(Yellowstone County, 2020)

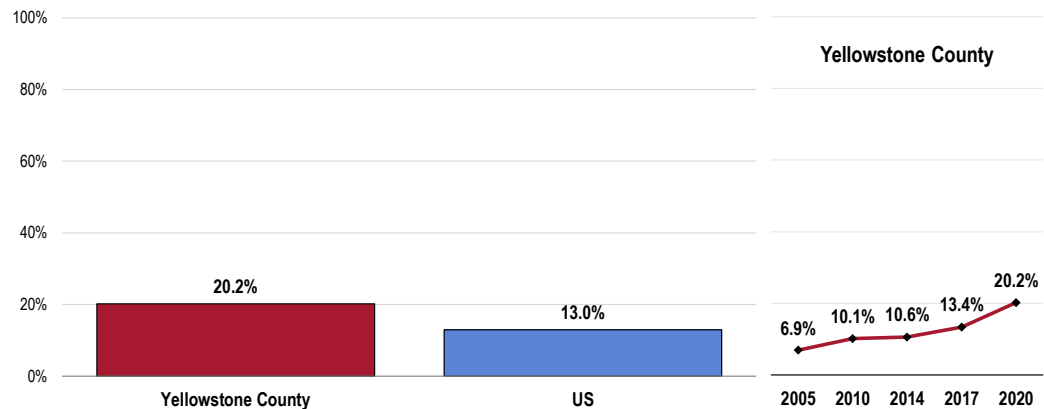


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 99]  
Notes: • Asked of all respondents.

However, 20.2% believe that their overall mental health is “fair” or “poor.”

- **BENCHMARK:** Above the US prevalence.
- **TREND:** Denotes a statistically significant increase since 2005.

## Experience “Fair” or “Poor” Mental Health



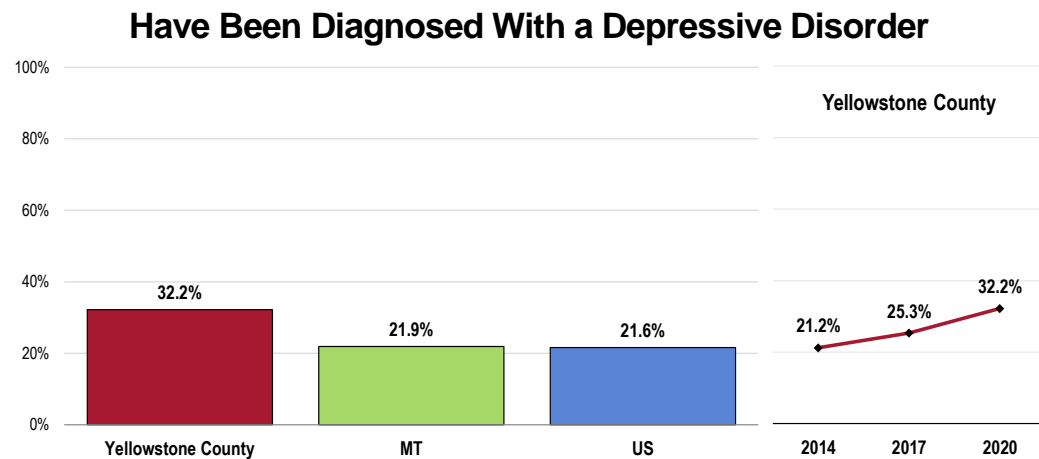
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 99]  
• 2017 PRC National Health Survey, PRC, Inc.  
Notes: • Asked of all respondents.

## Depression

### Diagnosed Depression

A total of 32.2% of Yellowstone County adults have been diagnosed by a physician as having a depressive disorder (such as depression, major depression, dysthymia, or chronic depression).

- **BENCHMARK:** Well above state and US figures.
- **TREND:** Marks a statistically significant increase since 2014.



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 102]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 • 2017 PRC National Health Survey, PRC, Inc.

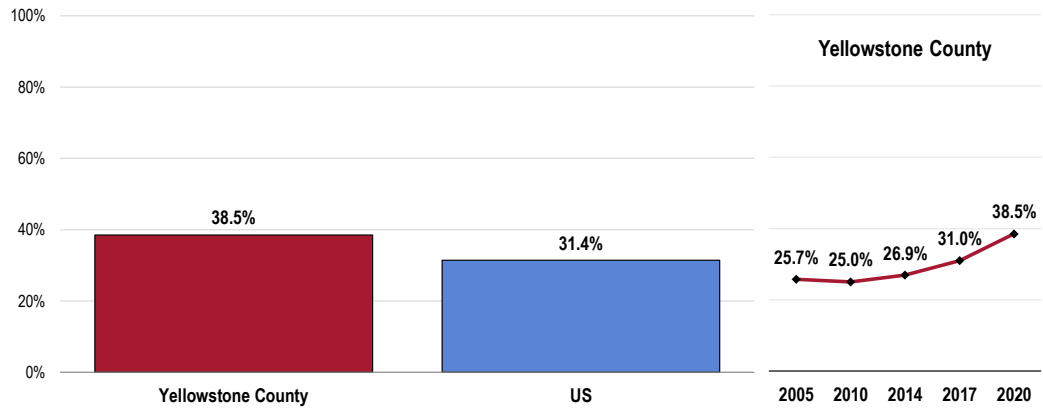
Notes: • Asked of all respondents.  
 • Depressive disorders include depression, major depression, dysthymia, or minor depression.

### Symptoms of Chronic Depression

A total of 38.5% of Yellowstone County adults have had two or more years in their lives when they felt depressed or sad on most days, although they may have felt okay sometimes (symptoms of chronic depression).

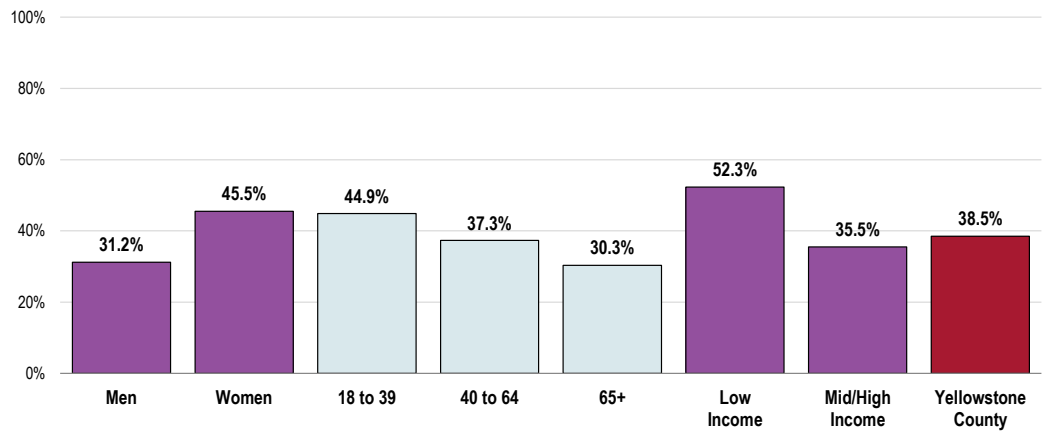
- **BENCHMARK:** Worse than the US prevalence.
- **TREND:** Denotes a statistically significant increase over time.
- **DISPARITY:** Significantly higher among women and low-income respondents.

### Have Experienced Symptoms of Chronic Depression



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 100]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.  
 • Chronic depression includes periods of two or more years during which the respondent felt depressed or sad on most days, even if (s)he felt okay sometimes.

### Have Experienced Symptoms of Chronic Depression (Yellowstone County, 2020)

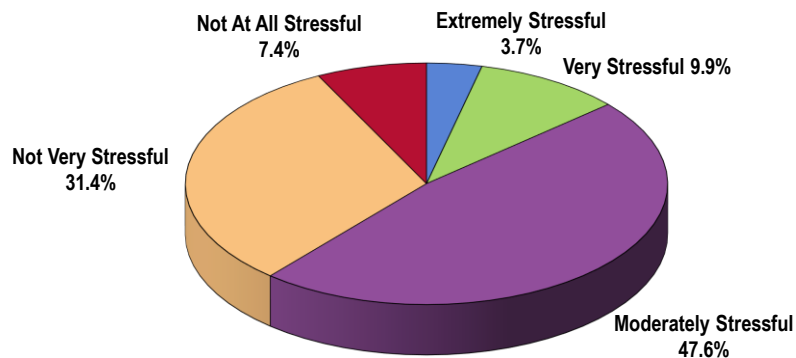


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 100]  
 Notes: • Asked of all respondents.  
 • Chronic depression includes periods of two or more years during which the respondent felt depressed or sad on most days, even if (s)he felt okay sometimes.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Stress

A majority of surveyed adults characterize most days as no more than “moderately” stressful.

**Perceived Level of Stress On a Typical Day**  
(Yellowstone County, 2020)

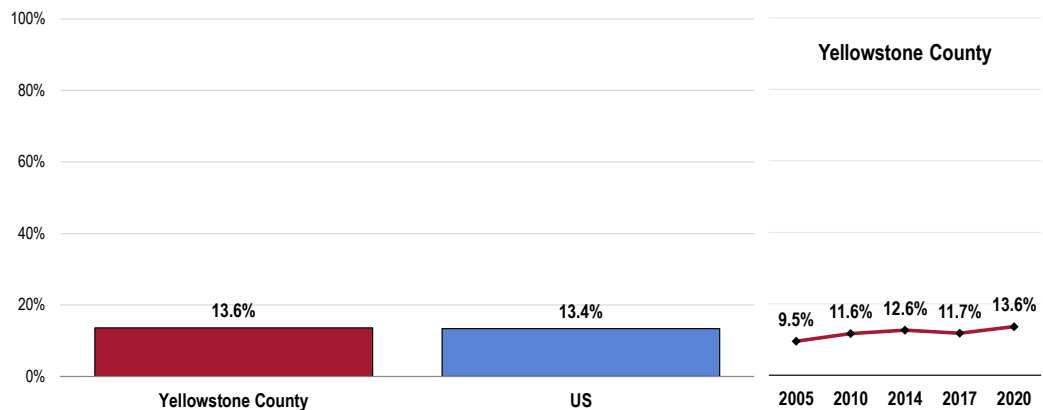


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 101]  
Notes: • Asked of all respondents.

In contrast, 13.6% of Yellowstone County adults feel that most days for them are “very” or “extremely” stressful.

- **DISPARITY:** Reported more often among adults under age 65.

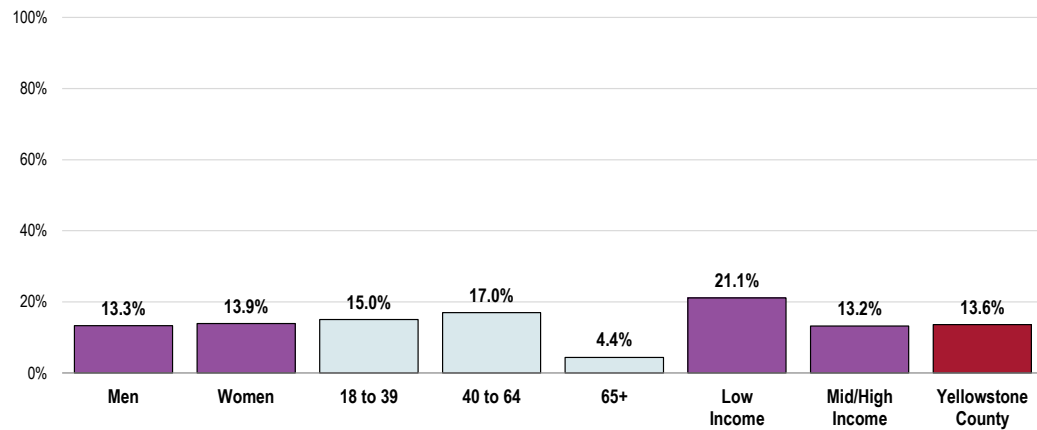
**Perceive Most Days As “Extremely” or “Very” Stressful**



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 190]  
• 2017 PRC National Health Survey, PRC, Inc.  
Notes: • Asked of all respondents.



## Perceive Most Days as “Extremely” or “Very” Stressful (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 190]

Notes: • Asked of all respondents.

• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

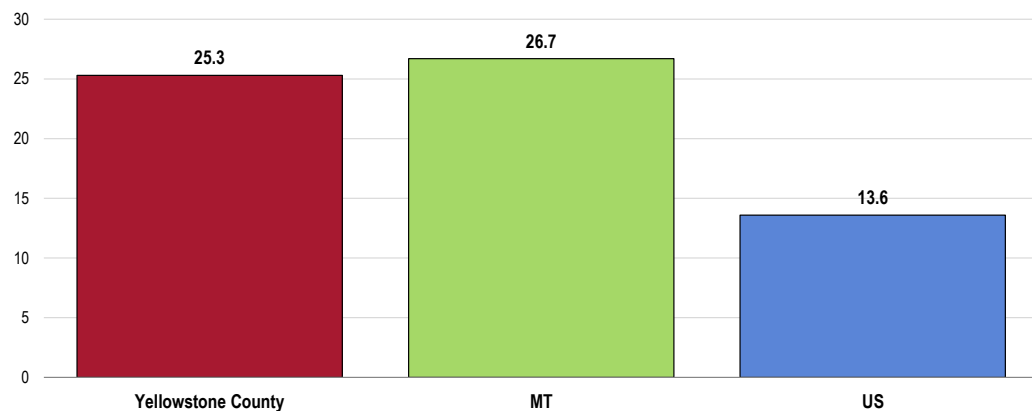
## Suicide

### Age-Adjusted Suicide Deaths

Between 2015 and 2017, there was an annual average age-adjusted suicide rate of 25.3 deaths per 100,000 population in Yellowstone County.

- **BENCHMARK:** Below the Montana rate but much higher than the US rate.
- **TREND:** Denotes an increasing trend over time (echoing the state mortality trend).

### Suicide: Age-Adjusted Mortality (2015-2017 Annual Average Deaths per 100,000 Population) Healthy People 2020 = 10.2 or Lower



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.

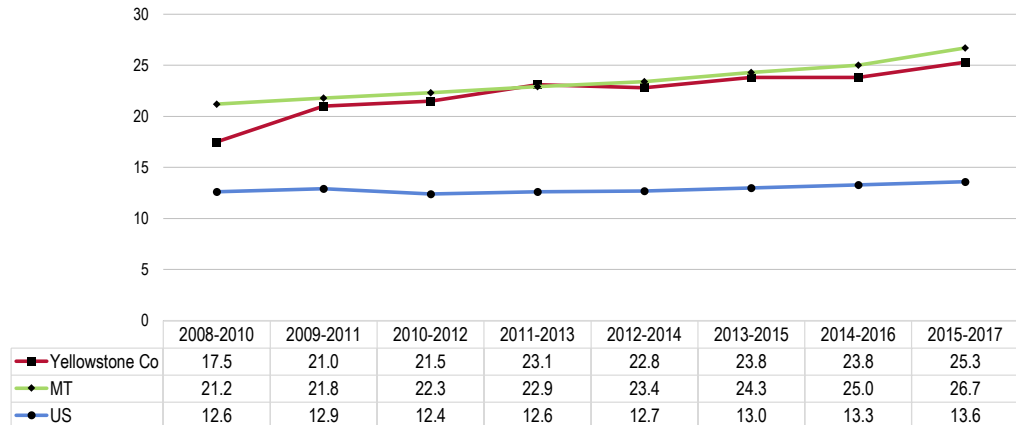
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MHMD-1]

Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
• Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Suicide: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 10.2 or Lower



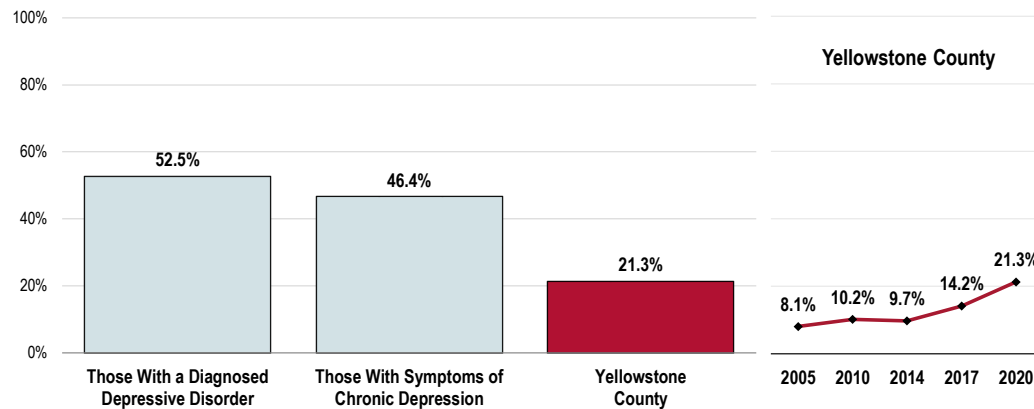
Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MHMD-1]  
 Notes: ● Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
 ● Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Suicide Ideation

Just over one in five county residents (21.3%) has considered suicide.

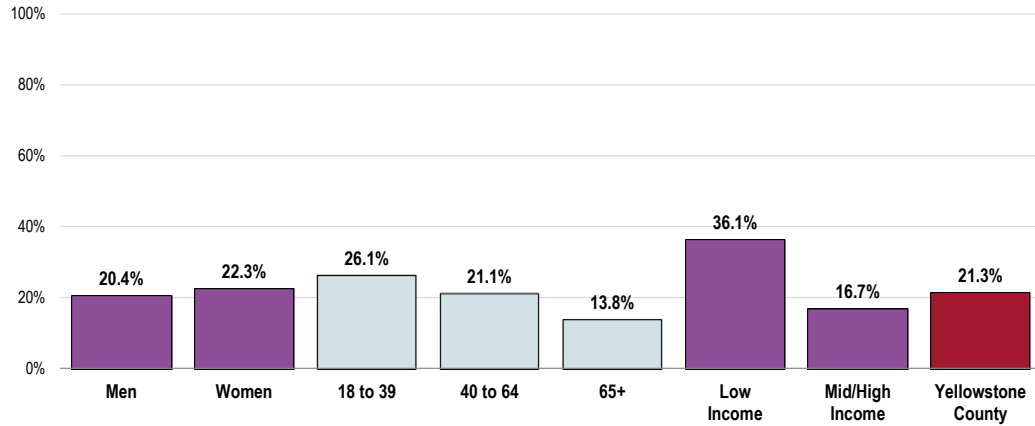
- **TREND:** Denotes a statistically significant increase from 2005 survey results.
- **DISPARITY:** Includes roughly one-half of those adults with a diagnosed depressive disorder or symptoms of chronic depression. Note the 36.1% prevalence among low-income adults.

### Have Considered Suicide



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 321]  
 Notes: ● Asked of all respondents.

## Have Considered Suicide (Yellowstone County, 2020)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 321]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Mental Health Treatment

### Mental Health Providers

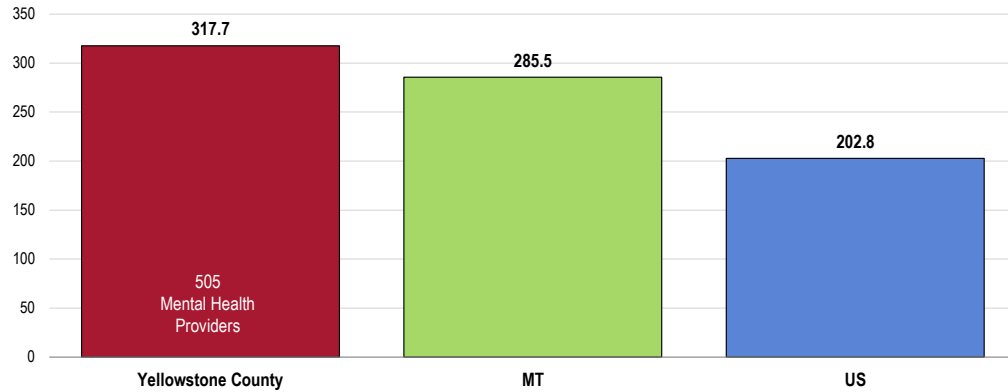
Yellowstone County serves as a medical hub for the region, routinely providing a variety of health care services, including mental health care, to patients from across Montana, Wyoming, North and South Dakota, and Idaho. This county has been designated a Mental Health Provider Shortage Area by the Health Resources & Services Administration (HRSA). It is important to note that the indicator below is a comparison of the number of providers in the county relative to the county population, which does not reflect the wider geographic population served.

**In 2017, there were 317.7 mental health providers per 100,000 population in the county.**

- **BENCHMARK:** Well above the state and US ratios.

Here, "mental health providers" includes psychiatrists, psychologists, clinical social workers, and counsellors who specialize in mental health care.

### Access to Mental Health Providers (Number of Mental Health Providers per 100,000 Population, 2017)



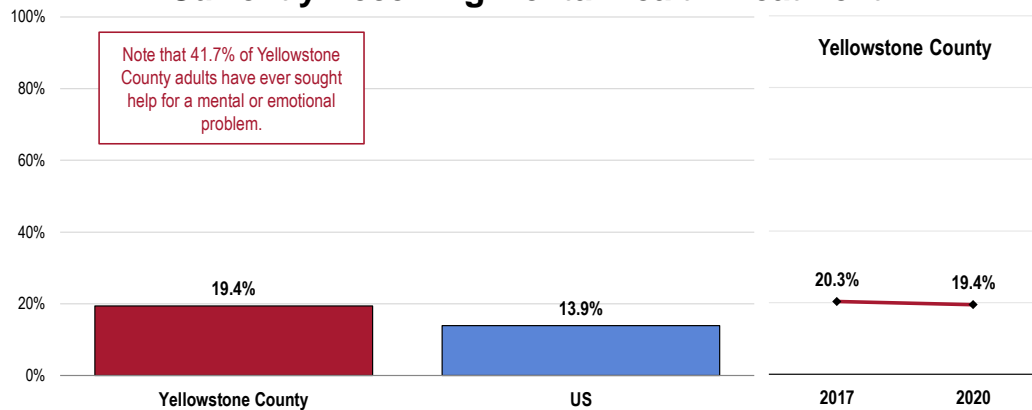
Sources: • University of Wisconsin Population Health Institute, County Health Rankings.  
 • Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.  
 Notes: • This indicator reports the rate of the county population to the number of mental health providers including psychiatrists, psychologists, clinical social workers, and counsellors that specialize in mental health care.

### Currently Receiving Treatment

A total of 19.4% are currently taking medication or otherwise receiving treatment from a doctor or other health professional for some type of mental health condition or emotional problem.

- **BENCHMARK:** Above the US prevalence.

### Currently Receiving Mental Health Treatment



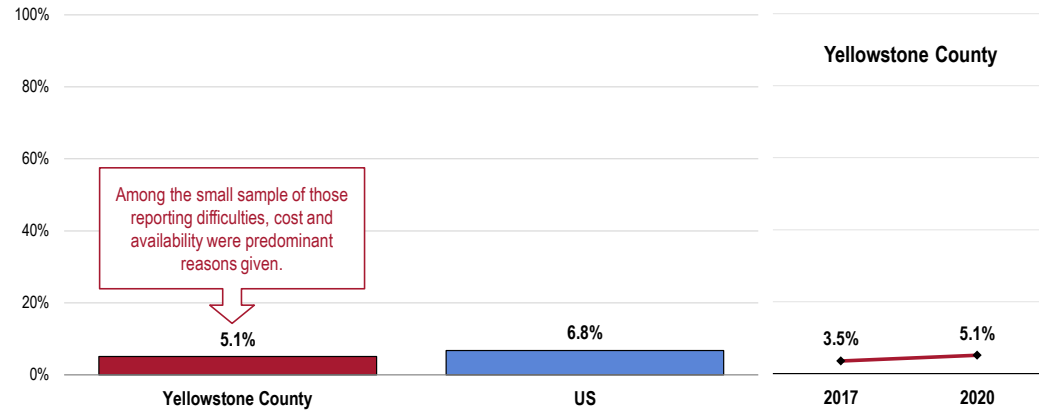
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 103-104]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.  
 • "Treatment" can include taking medications for mental health.

### Difficulty Accessing Mental Health Services

A total of 5.1% of Yellowstone County adults report a time in the past year when they needed mental health services but were not able to get them.

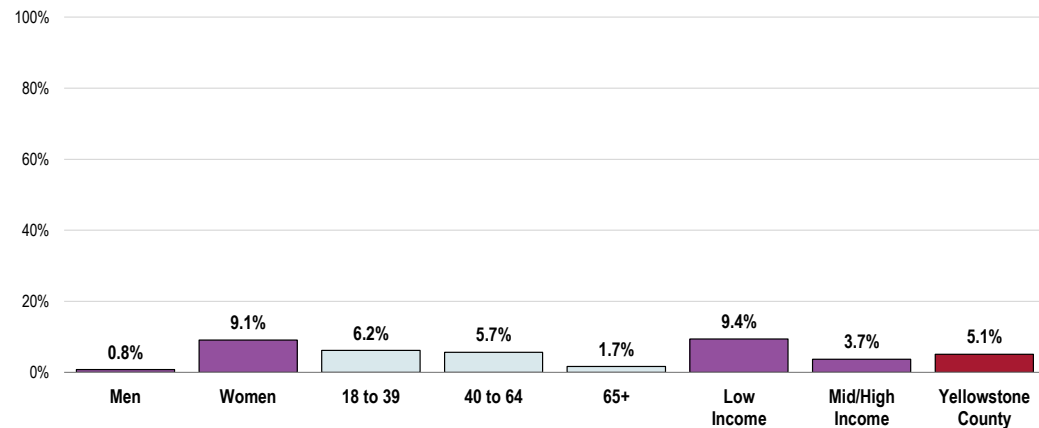
- **DISPARITY:** Significantly higher among county women and adults under age 65.

### Unable to Get Mental Health Services When Needed in the Past Year



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 105, 106]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

### Unable to Get Mental Health Services When Needed in the Past Year (Yellowstone County, 2020)



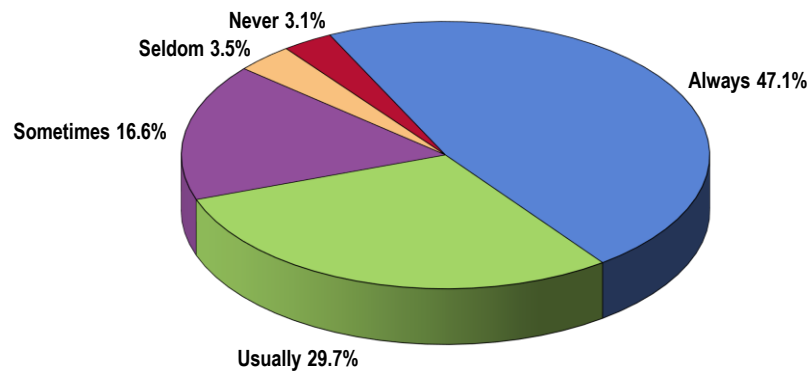
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 105]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Social Support

### Social & Emotional Support

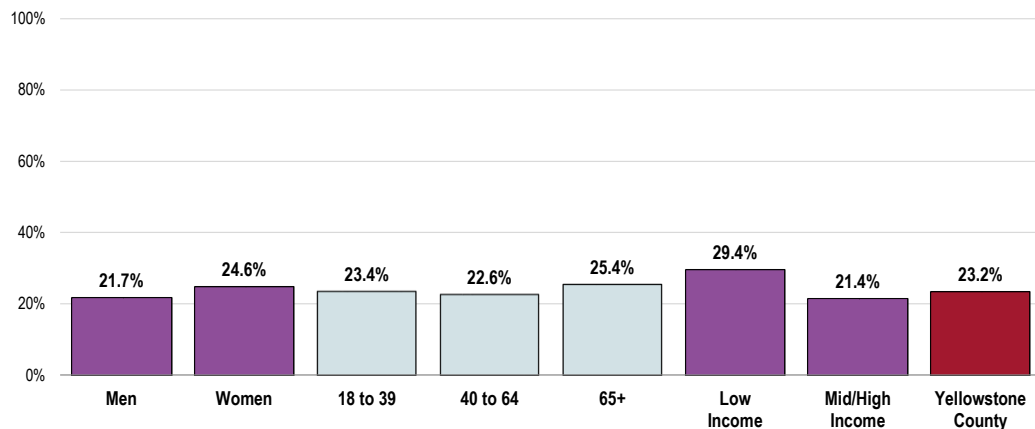
While most survey respondents report “always” or “usually” having enough social and emotional support, a total of 23.2% feel less support in their lives.

**Frequency of Having Social and Emotional Support**  
(Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 319]  
Notes: • Asked of all respondents.

**“Always/Usually” Have Social and Emotional Support**  
(Yellowstone County, 2020)

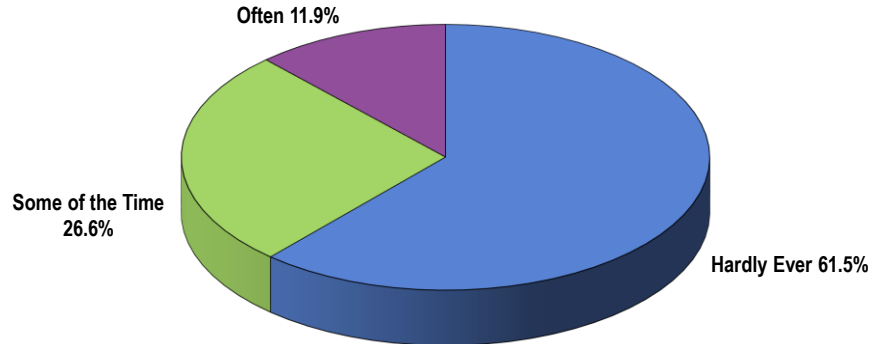


Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 319]  
Notes: • Asked of all respondents.  
• Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

### Isolation

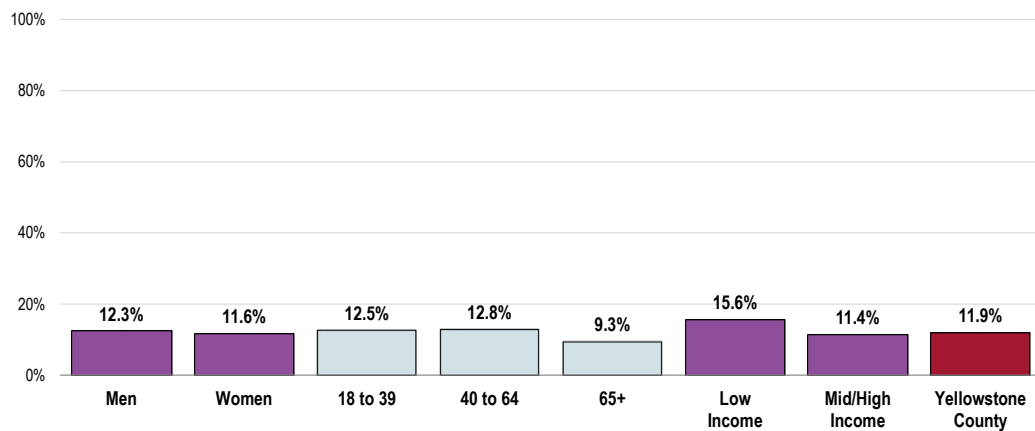
When asked about feelings of isolation, note that 26.6% of survey respondents experience these feelings “some of the time”, and 11.9% report “often” feeling isolated.

**Frequency of Feeling Isolated**  
(Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 320]  
Notes: • Asked of all respondents.

**“Often” Experience Feelings of Isolation**  
(Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 320]  
Notes: • Asked of all respondents.  
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Key Informant Input: Mental Health

Most key informants taking part in an online survey characterized *Mental Health* as a “major problem” in the community.

### Perceptions of Mental Health as a Problem in the Community (Key Informants, 2020)

■ Major Problem   ■ Moderate Problem   ■ Minor Problem   ■ No Problem At All



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
Notes: • Asked of all respondents.

## Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

### Access to Care/Services

*Adult mental health lacks resources. – Community Leader*

*Access to mental health services, particularly psychiatry, and especially for those on Medicaid versus private insurance. Stigma around mental health issues. – Healthcare Provider*

*Access remains a huge problem. The farther you get out from Billings it gets worse, but even in town those with pressing mental health concerns often have to wait until they are in crisis to be seen, often in the emergency rooms. Mental health patients make up a significant number of emergency rooms patients at any given time. It is hard to get mental health treatment even if you have time and money, if you have neither it seems even harder. – Healthcare Provider*

*There is very poor access to mental health services. Even those in crisis have to wait for services and then only receive a small amount if they are poor or indigent. Primary care doctors fail to ask or notice clear indicators of mental health problems in their patients. – Government Representative*

*Access to quality, proper and appropriate care. – Government Representative*

*Not enough resources for families with children experiencing mental health issues. Unless on Medicaid it can be very expensive for families even those with insurance. Services are often limited time wise and when Medicaid or insurance runs out, the patient is discharged, regardless of condition. – Educator*

*No access to acute care for individuals or families dealing with mental health issues. Waiting lists are up to three months to get children evaluated. Local hospitals do not acknowledge recommendations for a pre-anesthesia checkup evaluation when given by professionals outside of the hospital staff. Parents complain of hours of waiting to see a professional only to be sent home when concerns do not meet hospital requirements for intervention. – Educator*

*Access to services and/or lack of integrated behavioral health. – Educator*

*I believe the challenges I have encountered with young kids or young adults is that mental health facilities are not keeping kids in residential treatment long enough to actually help them. Instead, young kids are exited from mental health facilities when the insurance runs out. This breaks my heart because the patient is never better. As a school administrator, I find it disturbing that we are placing insurance payments in front of what is best for kids. We need more resources for children and adults that are suffering from mental health issues. The current facilities have waiting lists for residential treatment and so many others are waiting for help or never get it. I have had many students not suited to be in the regular education setting sent back to our school because the mental health facilities discharge them. We are forced to place them back in a school setting that is not suited for them. In my opinion, this is an epidemic and needs to be addressed quickly. – Educator*



*Access to a prescriber, providers apply for services like PACT Team and nobody returns calls or follows up until the provider gets tired of waiting, so the clients feel really frustrated. Lack of group home placements for persons in need and clients do not have the where with all to follow through. Waiting lists for services are daunting. – Healthcare Provider*

*There are long wait times for outpatient psychiatric care. Additionally, there are not enough low-barrier resources to address the housing needs of people living with mental illness. – Community Leader*

*There is a lack of access to mental health services in Montana, along with bias and lack of support. – Educator*

*Access to care and treatment. Many factors in addition to mental illness, drug and alcohol abuse, lack of income, and the cycle continues. These folks are marginalized by society. – Community Leader*

*The biggest issue facing people with mental health issues in the community is the lack of access to high quality affordable mental healthcare. This is due not only to problems of lack of medical insurance but also to the lack of qualified professionals in our area. – Community Leader*

*Not being able to be in a safe environment that offers treatment, shelter, consistent counseling, regularly taking medications and support. – Community Leader*

*Not enough assistance for those with mental illness. Medicaid cuts. – Community Leader*

*Having an agency tasked with this work that is dysfunctional and is not a team player. – Community Leader*

*Lack of resources for the population served. Lack of articulated, coordinated efforts to service this population. – Community Leader*

*The options for treatment are very limited and the healthcare industry is challenged to find treatment facilities. – Community Leader*

*Mental health services are limited and there is virtually no outreach that will go to where the client is located. – Community Leader*

*Access to mental healthcare is lacking due to pressure on too few providers. The pressure on the existing providers also creates an issue with the quality of care. – Business Leader*

*The lack of resources, counselors, treatment, housing and insurance. – Business Leader*

*Lack of access and stigma. Especially lack of access for people of limited means and homeless people who may be homeless because of a mental illness. Suicide prevention programs and education are needed to help with our high suicide rates in Montana. – Business Leader*

*If a person has insurance, Medicare or Medicaid, they are able to access care. But there are many people who may be homeless and transient. They might be able to access services for a period of time, but do not have resources to sustain it. – Community Leader*

*Continuity of care is an issue and insurance coverage to really allow people to get the extent of help that is needed in extreme cases like suicidal patients and other severe psychological disorders. – Healthcare Provider*

*Access to care and someone to guide the patient through finding care. Once they find the care, it seems to be a concern that people don't follow through with doctor's orders. – Educator*

*Very limited access to psychiatric care. Not enough providers and out of reach financially for many people. – Healthcare Provider*

*Hard to navigate the mental healthcare systems. Stigma around the topic. Difficult to develop social connections with the community to feel comfortable and able to reach out when in need. – Public Health Representative*

*The inability to know of or have access to mental health providers. – Healthcare Provider*

*Lack of resources for the demand. – Healthcare Provider*

*Access to a variety of services; inadequate attention and knowledge of primary care providers and ER providers in helping those with mental health issues. More resources needed integration in these areas of healthcare. Not enough pediatric mental health resources in community. – Healthcare Provider*

*Access to mental health treatment, more than just giving a prescription. Having open conversations about mental health and the stigma it has. – Public Health Representative*

*Access to quality care in a timely manner. – Public Health Representative*

*Access to care. – Healthcare Provider*

*Access to mental health resources including counseling is extremely difficult. Lack of providers (of all licenses), limited space in psych unit. Primary care and other specialty providers (for example, family planning) don't have a fully integrated model. – Healthcare Provider*

*Lack of services for those needing psychiatric providers. – Public Health Representative*

Access to care due to many vacancies in the behavioral health department. – Healthcare Provider  
 Access to mental health professionals, workforce shortages in mental health field, state regulations that create obstacles for efficient treatment of mental health patients on Medicaid. – Healthcare Provider

Lack of psychiatric care and access to medication. There is also a great deal of stigma for those who seek mental health services. – Public Health Representative

Referrals to mental health services along with knowledge of where mental health services are in the community. – Healthcare Provider

One of the biggest challenges for mental health is lack of access to services. Sometimes it can take months to get in to see the right kind of provider. – Public Health Representative

### Contributing Factors

The continuing stigma of being mentally ill, long wait times to see a psychiatrist, poverty, being unable to work full-time or during periods of illness. – Business Leader

Them staying on their medications. Not receiving enough of the right type of individual counseling. Cannot afford services. – Community Leader

Undiagnosed mental health issues. Depression, suicide, inconsistent treatment philosophies. Shame associated with mental health issues. Therapeutic limitations with time and money. – Community Leader

Mental health issues are a huge problem nationwide. Lack of services or availability of such as psychiatrists and counselors. Negative attitudes towards mental health as a weakness. Mentality to “suck it up.” Cost of counseling. – Educator

Not enough access to treatment. Much of the problem includes inmates in our jail that have mental health issues as well as co-occurring substance abuse. – Government Representative

Mental health illnesses are a significant problem in Yellowstone County. Access to services are very limited because of a lack of psychiatrists and mental health professionals. Individuals sometimes have to wait for months before they get an appointment. Many individuals with mental health illnesses also have co-occurring addiction problems that are not being addressed. The cost of mental health treatment can be so high that patients and their families cannot afford to seek help. – Government Representative

No stable support system. To see a psychiatrist to get medications can take three to four months. Limited interventions in jail and in the community. No long-term solutions, especially with co-occurring disorders. – Public Health Representative

Supportive housing. Supported employment. Social isolation. Lack of easy access to professional care. – Community Leader

If we look at the top 50 high utilizers of healthcare in our facility, they ALL have a mental health diagnosis along with their medical problems. It contributes to their disease progression, their ability to get or keep jobs and housing; they lose their children, they can't afford the meds, there is limited follow-up due to a scarcity of mental health resources. Most are non-compliant with the treatment of medical conditions because of or as a side effect of their MH issues. One of the largest behavioral health clinics in Billings has a decrease in volume of patients by 70%, not because the patients aren't there but because they don't have providers. – Healthcare Provider

Accessing services and then following through. Additionally, medications are outrageously expensive. Often lack of transportation is an issue. – Healthcare Provider

No support, no insurance and limited access in the community. – Educator

Mental health and substance use almost go in hand in hand. – Healthcare Provider

Abuse of people, of drugs and alcohol, of family life. – Healthcare Provider

We have a mental health crisis in the area. There aren't enough psychiatrists, so lack of access is huge. Drugs and alcohol compound this issue. – Healthcare Provider

Gambling addiction based on the number of casinos within Yellowstone County. – Community Leader

Gambling and the amount of casinos in the area. – Educator

Shortage of mental healthcare services and providers. – Public Health Representative

Lack of counselors in the schools. I think there should be free counselors in all the senior centers. – Community Leader

Preventative care is hard to access, and we have a large stigma associated with mental health. Once Someone is in crisis treatment, it is often temporary. – Educator

*Mental health is an issue in our community that continues to be a problem. – Government Representative*

*Mental healthcare and treatment, not enough service to help those who need services. Waiting list for almost all programs. – Community Leader*

### **Access to Providers**

*Lack of mental health professionals. – Public Health Representative*

*Lack of mental health providers and a broad sense of shame and lack of awareness around mental health issues. Also, a wealth disparity leaves many people lacking funds unable to seek out mental healthcare. – Community Leader*

*There is an extreme lack of mental healthcare providers. Even if you are in crisis, you need to literally have a nervous breakdown on the spot or become delusional, or else you have a six month wait for care. – Community Leader*

*Access to mental health professionals. Primary care providers provide much of the mental healthcare but are overworked and don't have time. – Healthcare Provider*

*Very few mental health providers. Programs to support mental health issues are available but inadequate to meet the growing demand. – Healthcare Provider*

*Lack of mental health providers. There is no access and many of the supports we did have were cut with recent state budget cuts. We have the highest suicide rate in the country. This is a huge problem. – Healthcare Provider*

*Access to providers. – Educator*

*Continued care. – Government Representative*

*Getting in to a professional, appointments are weeks if not months out. A shortage for the size of the population. – Community Leader*

*Access to mental health professionals and resources. – Educator*

*Not enough mental health providers. – Business Leader*

*Lack of access to licensed professionals in a variety of levels of psychiatrists, psychologists, social workers and therapists. – Healthcare Provider*

*There are long wait lists for access to psychiatric care and often the only way patients can get access is after they have a crisis and need institutionalization. The care given to the LGBTQ+ community especially the transgender community is often more damaging causing more trauma rather than helping. Pediatric patients wait months to get access and for those 8-18 that wait time can have catastrophic results even death in some cases. Access to mental healthcare for the homeless is difficult leaving vulnerable populations even more vulnerable and at risk for harm and violence. – Community Leader*

*Access to quality mental health professional. – Business Leader*

*Not having access to mental health counselors. – Government Representative*

*Lack of providers, low reimbursements to providers, confusing procedures to remain on Medicaid and other government funded programs and lack of caseworkers to assist them or changes in the system that causes people to lose caseworkers, discharged from hospital without follow-up appointments, long lines to obtain services and long waits. – Healthcare Provider*

*Finding providers that take new clients. Getting people who need the help to the help they need. – Community Leader*

*Very difficult for children from families not eligible for Medicaid and all adults to receive mental health services. – Government Representative*

### **Denial/Stigma**

*If mental health patients make the decision that they don't want or need help, there is no way to get them the help they need. Many times, they are not competent to make the decision to seek help, but they truly need it. You cannot tell a sick mind that it is sick. There should be options for family and loved ones to get help for their mentally ill family members. – Community Leader*

*I feel stigma is a major challenge within our community for people seeking help. Maybe education on the topic might open the minds of our community. Teaching people what self-care looks like. – Community Leader*

*Stigmas associated with mental health diagnoses and treatment. – Community Leader*

*Mental health issues continue to be stigmatized and difficult to treat. With continued cuts to mental healthcare budgets, it will only get worse. – Business Leader*

*We have a significant mental health crisis nationally. There continues to be significant stigma surrounding mental illness that detours people from seeking appropriate diagnostic and maintenance care. In Montana particularly, there is a vast population that continues to see mental health and mental illness as “weakness” and not as a genuine medical/health concern, resulting in lack of funding, access, compassion and trained service professionals in this arena. – Business Leader*

*It appears there are those who choose not to seek out help. There are those impacted by substance abuse and have severe mental health issues. It appears our efforts to address this are not as comprehensive or collaborative. – Community Leader*

### Homelessness

*The effects of homelessness, drugs and affordable housing seem to be causing more people to detach from what most would consider the real world. More and more we seem to see society shunning mentally impaired rather than reaching out to help. – Community Leader*

*Homeless as a health issues covers many of the issues in the survey. – Government Representative*

*Homelessness/transients. These people are suffering. This alone makes it a health issue. They often come from backgrounds and communities with much sorrow. The collateral is all are impacted. It appears we enable more than solve the problems (if such problems can be solved). There may be more success in collaboration, cooperation, communication and networking. Funds are diminishing as needs are increasing. How can we share time, money and people? We seem to be competing rather than complementing each agency in service to the people in need. We may then see more discrimination and misunderstanding. We may create divisions in sections of towns and use of businesses in sections of towns. Invisible walls may appear when not needed nor helpful. – Community Leader*

### Funding

*Simply to get help. Budget cuts have forced a reduction in the force of counselors, plus there has been press about either cutting resources available to the Crisis Center and the HUB or closing them. That’s absurd. – Community Leader*

*Lack of funding for upstream services. There are able and willing providers, but without funding for these services, the providers cannot sustain business. – Community Leader*

*We simply don’t have enough resources due to lack of funding, mostly. Within the school district, we also see a large increase in students with significant health needs. Many of these needs go unaddressed because families lack transportation, cannot afford care or medication. We need more options for mentally ill children. As it is now, if they are sent to the clinic for a pre-anesthesia checkup eval, most are sent out with just a referral. We have kids coming back to the school setting directly from suicide attempts, overdoses, self-harm behaviors, oppositional behaviors, etc. and we know nothing about their history. I understand HIPAA is at play here, but what about the safety of the student? For many of our significantly ill kids, there is nowhere to go. The residential treatment programs are full, and many cannot get services anyway due to being turned down by their Medicaid. We also need more childhood psychiatric providers! At this time, appointments are booked months out. – Educator*

*As a state and a nation, treatment is underfunded. – Healthcare Provider*

### Suicide

*It is my understanding that Montana has the highest suicide rate in the country. There are very few psychiatrists in Billings and the high cost of counseling/therapy is prohibitive. It is my understanding that many people are getting mental health assistance from their PCPs, which is not always ideal. I think an affordable counseling clinic would be a big help in Billings. – Educator*

*Particularly, I have heard and witnessed what seems like an increase in suicide. – Business Leader*

*Mental health and suicides. – Community Leader*

*Until there are no shootings and suicides, we have a problem. – Community Leader*

### Awareness/Education

*Overall stress in today’s lifestyles is high and we are just now realizing the immense impact stress plays on one’s health. – Public Health Representative*

*Lack of awareness of symptoms and resources to treat the members of the community. – Government Representative*

*Mental health is not discussed on the same level as physical health, making it more difficult to identify and treat. – Community Leader*

### **Affordable Care/Services**

*Limited access to affordable mental healthcare as well as limited access to get care. I see homeless people on the streets who clearly have mental health issues, which breaks my heart and I wonder if they would even know where to go to get help. – Business Leader*

*Not enough resources for free available to treat mental health issues for low-income people. – Government Representative*

*Access to affordable services and support and understanding of the condition. – Business Leader*

### **Vulnerable Populations**

*Among the American Indian populations this becomes a complicated issue due to historical trauma which has resulted in loss of identity and traditional support systems. I would also say there is still stigma around mental health issues and lack of understanding about co-occurring mental health/substance use issues. We don't have a lot of dialogue in our community about how we maintain our mental health and resources available within our community. – Community Leader*

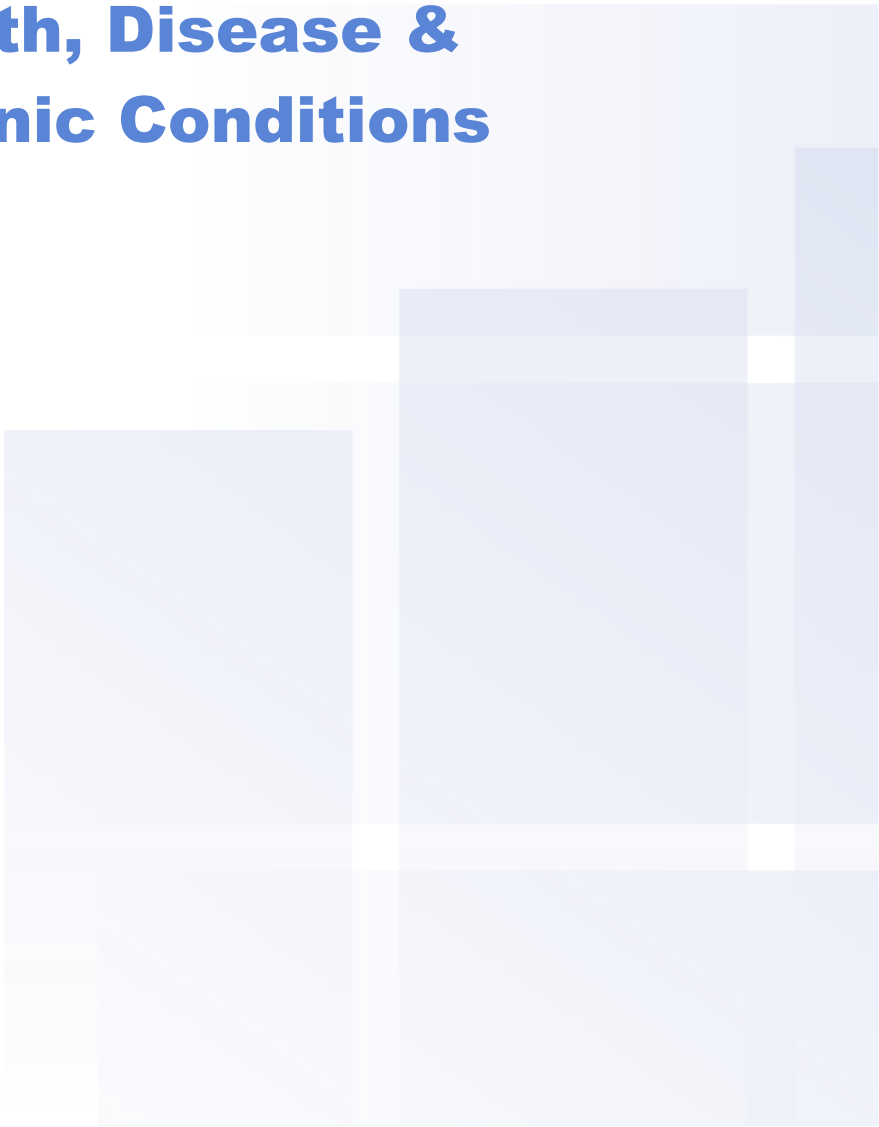
### **Co-Occurrences**

*Co-occurring mental health and chemical dependency. No supported housing or group homes for serious mental illness. Most case management for individuals with a mental health diagnosis. – Public Health Representative*

### **Diagnosis/Treatment**

*Untreated mental illness. – Healthcare Provider*

# Death, Disease & Chronic Conditions

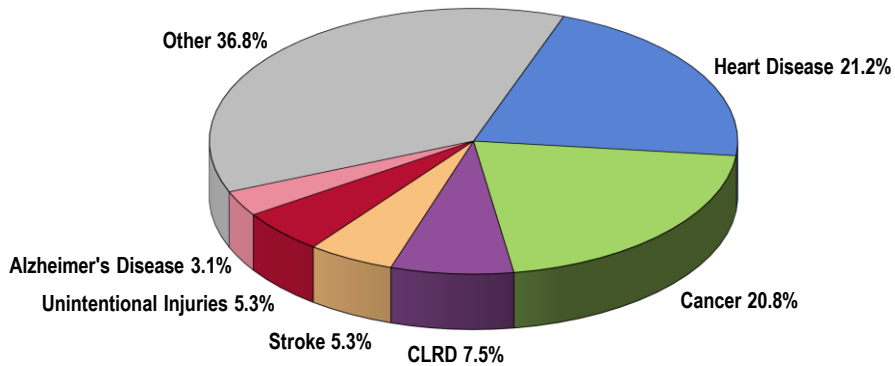


## Leading Causes of Death

### Distribution of Deaths by Cause

Together, heart disease and cancers accounted for over four in ten deaths in Yellowstone County in 2017.

**Leading Causes of Death**  
(Yellowstone County, 2017)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Lung disease is CLRD, or chronic lower respiratory disease.

## Age-Adjusted Death Rates for Selected Causes

### About Age-Adjusted Death Rates

In order to compare mortality in the region with other localities (in this case, Montana and the United States), it is necessary to look at rates of death — these are figures which represent the number of deaths in relation to the population size (such as deaths per 100,000 population, as is used here).

Furthermore, in order to compare localities without undue bias toward younger or older populations, the common convention is to adjust the data to some common baseline age distribution. Use of these “age-adjusted” rates provides the most valuable means of gauging mortality against benchmark data, as well as Healthy People 2020 objectives.

The following chart outlines 2015-2017 annual average age-adjusted death rates per 100,000 population for selected causes of death in Yellowstone County.

Each of these is discussed in greater detail in subsequent sections of this report.

For infant mortality data, see *Birth Outcomes & Risks* in the **Births** section of this report.

## Age-Adjusted Death Rates for Selected Causes (2015-2017 Deaths per 100,000 Population)

	Yellowstone County	Montana	US	HP2020
Malignant Neoplasms (Cancers)	158.7	151.8	155.6	161.4
Diseases of the Heart	155.3	155.1	166.3	156.9*
Chronic Lower Respiratory Disease (CLRD)	63.2	51.9	41.0	n/a
Unintentional Injuries	46.5	53.5	46.7	36.4
Cerebrovascular Disease (Stroke)	37.3	34.0	37.5	34.8
Intentional Self-Harm (Suicide)	25.3	26.7	13.6	10.2
Alzheimer's Disease	22.5	21.4	30.2	n/a
Diabetes	19.9	23.2	21.3	20.5*
Firearm-Related	18.3	20.2	11.6	9.3
Cirrhosis/Liver Disease	13.9	15.1	10.8	8.2
Pneumonia/Influenza	13.0	12.7	14.3	n/a
Motor Vehicle Deaths	12.7	17.7	11.4	12.4
Kidney Disease	6.6	9.9	13.2	n/a
Unintentional Drug-Related Deaths	4.1	8.6	12.3	11.3
Homicide/Legal Intervention	3.3	3.6	5.6	5.5

Sources: 

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.

- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>.

Note: 

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population and coded using ICD-10 codes.

- \*The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart; the Diabetes target is adjusted to reflect only diabetes mellitus-coded deaths.



## Cardiovascular Disease

### About Heart Disease & Stroke

Heart disease is the leading cause of death in the United States, with stroke following as the third leading cause. Together, heart disease and stroke are among the most widespread and costly health problems facing the nation today, accounting for more than \$500 billion in healthcare expenditures and related expenses in 2010 alone. Fortunately, they are also among the most preventable.

The leading modifiable (controllable) risk factors for heart disease and stroke are:

- High blood pressure
- High cholesterol
- Cigarette smoking
- Diabetes
- Poor diet and physical inactivity
- Overweight and obesity

The risk of Americans developing and dying from cardiovascular disease would be substantially reduced if major improvements were made across the US population in diet and physical activity, control of high blood pressure and cholesterol, smoking cessation, and appropriate aspirin use.

The burden of cardiovascular disease is disproportionately distributed across the population. There are significant disparities in the following based on gender, age, race/ethnicity, geographic area, and socioeconomic status:

- Prevalence of risk factors
- Access to treatment
- Appropriate and timely treatment
- Treatment outcomes
- Mortality

Disease does not occur in isolation, and cardiovascular disease is no exception. Cardiovascular health is significantly influenced by the physical, social, and political environment, including: maternal and child health; access to educational opportunities; availability of healthy foods, physical education, and extracurricular activities in schools; opportunities for physical activity, including access to safe and walkable communities; access to healthy foods; quality of working conditions and worksite health; availability of community support and resources; and access to affordable, quality healthcare.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Age-Adjusted Heart Disease & Stroke Deaths

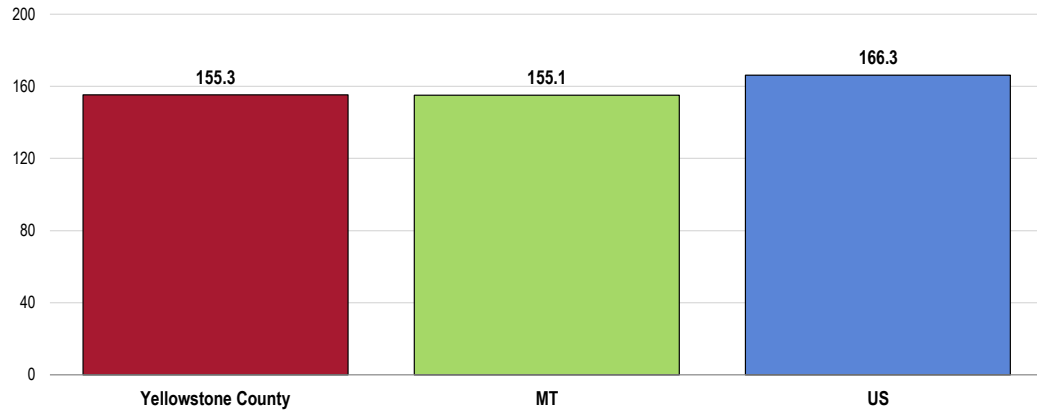
### Heart Disease Deaths

**Between 2015 and 2017, there was an annual average age-adjusted heart disease mortality rate of 155.3 deaths per 100,000 population in Yellowstone County.**

- **BENCHMARK:** Below the US mortality rate.

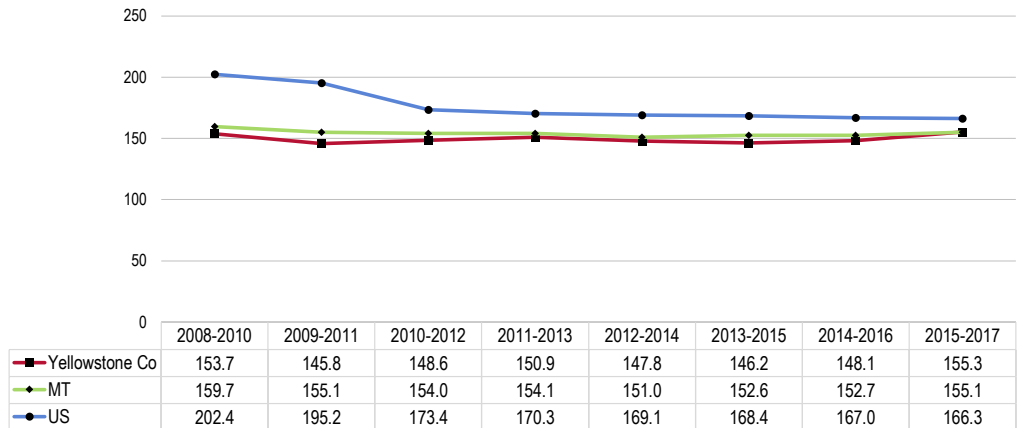
The greatest share of cardiovascular deaths is attributed to heart disease.

### Heart Disease: Age-Adjusted Mortality (2015-2017 Annual Average Deaths per 100,000 Population) Healthy People 2020 = 156.9 or Lower (Adjusted)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-2]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
  - The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

### Heart Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 = 156.9 or Lower (Adjusted)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-2]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
  - The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

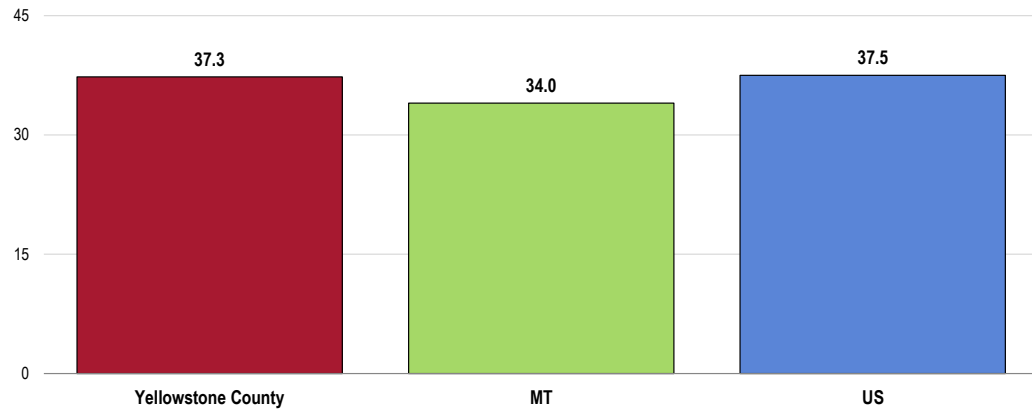
### Stroke Deaths

Between 2015 and 2017, there was an annual average age-adjusted stroke mortality rate of 37.3 deaths per 100,000 population in Yellowstone County.

- **BENCHMARK:** Worse than the Montana mortality rate and failing to satisfy the Healthy People 2020 objective.
- **TREND:** The rate has decreased over time, echoing state and national trends.

### Stroke: Age-Adjusted Mortality (2015-2017 Annual Average Deaths per 100,000 Population)

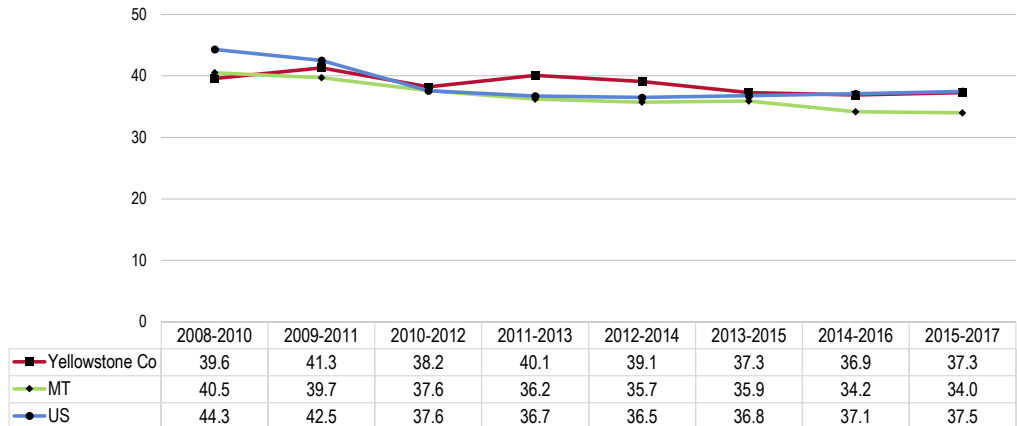
Healthy People 2020 = 34.8 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Stroke: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 34.8 or Lower



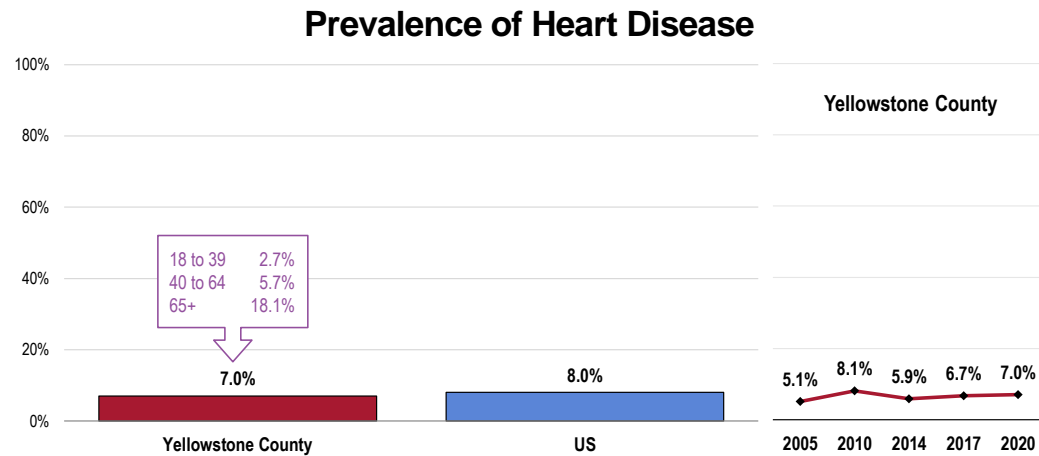
- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

## Prevalence of Heart Disease & Stroke

### Prevalence of Heart Disease

A total of 7.0% of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina, or heart attack.

- **DISPARITY:** The prevalence correlates with age, as shown.



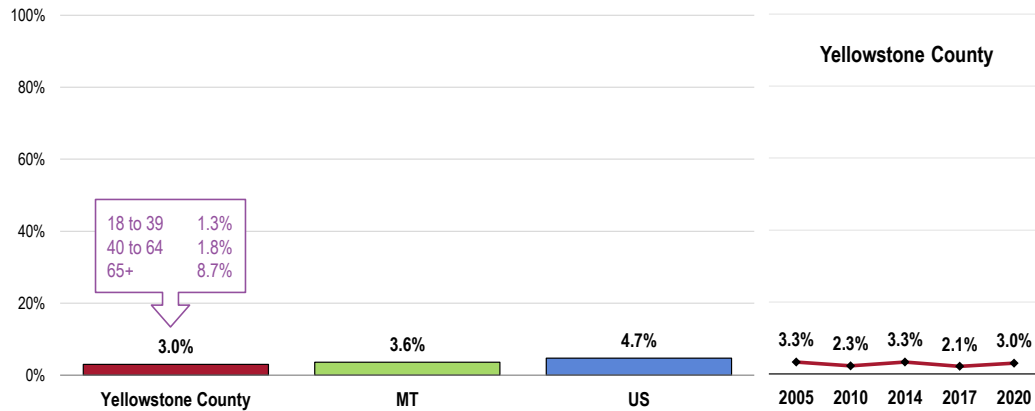
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 128]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.  
 • Includes diagnoses of heart attack, angina, or coronary heart disease.

### Prevalence of Stroke

A total of 3.0% of surveyed adults report that they suffer from or have been diagnosed with cerebrovascular disease (a stroke).

- **DISPARITY:** The prevalence of stroke increases with survey respondent's age.

## Prevalence of Stroke



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 33]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 • 2017 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.

## Cardiovascular Risk Factors

### About Cardiovascular Risk

Controlling risk factors for heart disease and stroke remains a challenge. High blood pressure and cholesterol are still major contributors to the national epidemic of cardiovascular disease. High blood pressure affects approximately 1 in 3 adults in the United States, and more than half of Americans with high blood pressure do not have it under control. High sodium intake is a known risk factor for high blood pressure and heart disease, yet about 90% of American adults exceed their recommendation for sodium intake.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Blood Pressure & Cholesterol

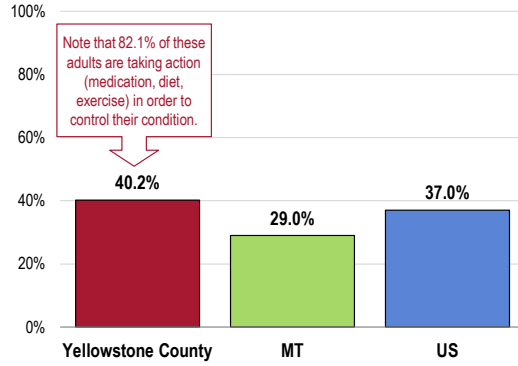
**A total of 40.2% of Yellowstone County adults have been told at some point that their blood pressure was high.**

- **BENCHMARK:** Well above the state prevalence and failing to satisfy the Healthy People 2020 objective.
- **TREND:** Denotes a statistically significant increase since 2005.

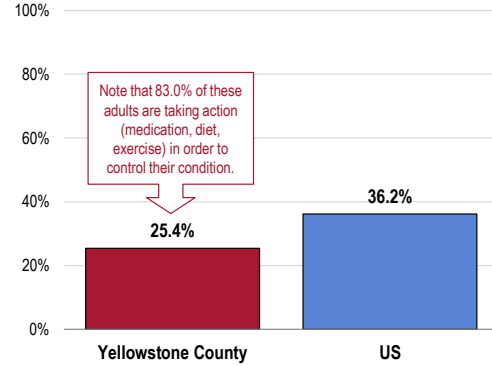
**A total of 25.4% of adults have been told by a health professional that their cholesterol level was high.**

- **BENCHMARK:** Well below the US figure but failing to satisfy the Healthy People 2020 objective.

### Prevalence of High Blood Pressure Healthy People 2020 = 26.9% or Lower

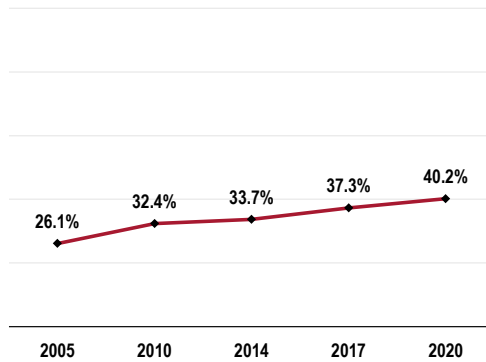


### Prevalence of High Blood Cholesterol Healthy People 2020 = 13.5% or Lower

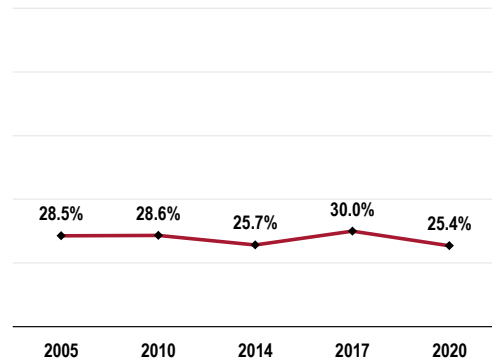


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 41, 44, 129, 130]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2017 Montana data.  
 • 2017 PRC National Health Survey, PRC, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objectives HDS-5.1, HDS-7]  
 Notes: • Asked of all respondents.

### Prevalence of High Blood Pressure (Yellowstone County) Healthy People 2020 = 26.9% or Lower



### Prevalence of High Blood Cholesterol (Yellowstone County) Healthy People 2020 = 13.5% or Lower



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 129, 130]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objectives HDS-5.1, HDS-7]  
 Notes: • Asked of all respondents.

## Total Cardiovascular Risk

### About Cardiovascular Risk

Individual level risk factors which put people at increased risk for cardiovascular diseases include:

- High Blood Pressure
- High Blood Cholesterol
- Tobacco Use
- Physical Inactivity
- Poor Nutrition
- Overweight/Obesity
- Diabetes

— National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

Three health-related behaviors contribute markedly to cardiovascular disease:

**Poor nutrition.** People who are overweight have a higher risk for cardiovascular disease. Almost 60% of adults are overweight or obese. To maintain a proper body weight, experts recommend a well-balanced diet which is low in fat and high in fiber, accompanied by regular exercise.

**Lack of physical activity.** People who are not physically active have twice the risk for heart disease of those who are active. More than half of adults do not achieve recommended levels of physical activity.

**Tobacco use.** Smokers have twice the risk for heart attack of nonsmokers. Nearly one-fifth of all deaths from cardiovascular disease, or about 190,000 deaths a year nationally, are smoking-related. Every day, more than 3,000 young people become daily smokers in the US.

Modifying these behaviors is critical both for preventing and for controlling cardiovascular disease. Other steps that adults who have cardiovascular disease should take to reduce their risk of death and disability include adhering to treatment for high blood pressure and cholesterol, using aspirin as appropriate, and learning the symptoms of heart attack and stroke.

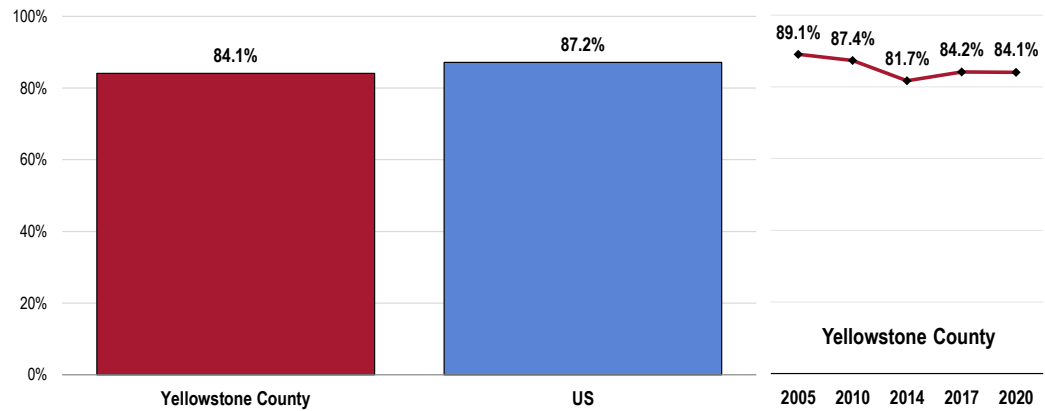
— National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

**A total of 84.1% of Yellowstone County adults report one or more cardiovascular risk factors, such as being overweight, smoking cigarettes, being physically inactive, or having high blood pressure or cholesterol.**

- **TREND:** Denotes a statistically significant decrease from 2005 survey findings.
- **DISPARITY:** The prevalence correlates with age and is higher among men.

RELATED ISSUE:  
See also *Nutrition, Physical Activity, Weight Status, and Tobacco Use* in the **Modifiable Health Risks** section of this report.

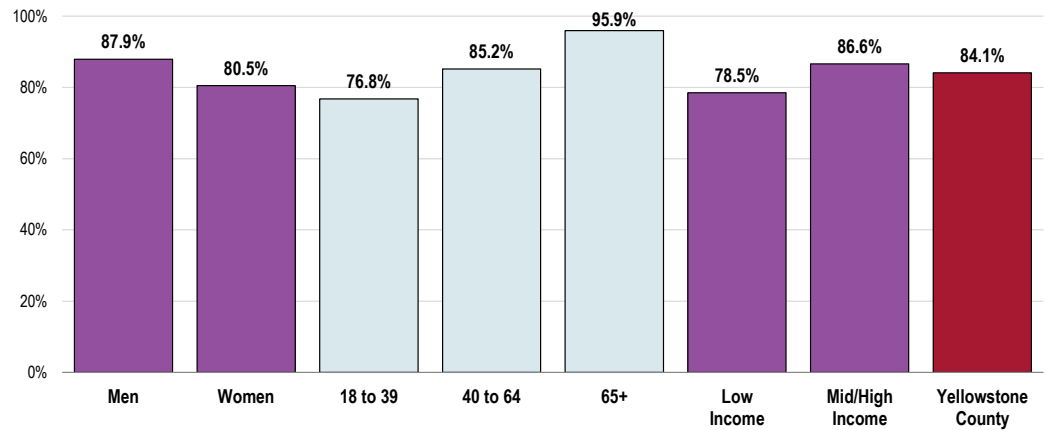
### Present One or More Cardiovascular Risks or Behaviors



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 131]  
 • 2017 PRC National Health Survey, PRC, Inc.

Notes: • Reflects all respondents.  
 • Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) high blood pressure; 4) high blood cholesterol; and/or 5) being overweight/obese.

### Present One or More Cardiovascular Risks or Behaviors (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 131]  
 • Reflects all respondents.

Notes: • Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) high blood pressure; 4) high blood cholesterol; and/or 5) being overweight/obese.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

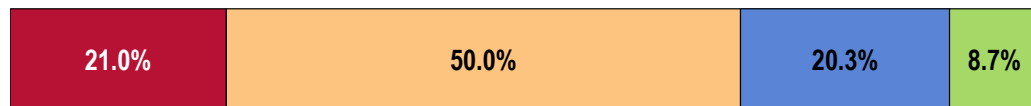


## Key Informant Input: Heart Disease & Stroke

Half of key informants taking part in an online survey characterized *Heart Disease & Stroke* as a “moderate problem” in the community.

### Perceptions of Heart Disease and Stroke as a Problem in the Community (Key Informants, 2020)

■ Major Problem   ■ Moderate Problem   ■ Minor Problem   ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Asked of all respondents.

### Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

#### Prevalence/Incidence

*Heart disease takes many forms: arrhythmia, stroke, hypertension, heart attack, and coronary artery. All of these conditions are common in Yellowstone County. Often symptoms are mild and not noticed until a serious event takes place. Age, genetics, diet and obesity all can be factors in causing these problems. – Government Representative*

*High number of patients with this diagnosis. Care and treatment, however, is available and high quality. – Public Health Representative*

*I know many people who have had problems. I read the obituaries. – Business Leader*

*We see a lot of cardiac disease and strokes. There are still a lot of smokers here. – Healthcare Provider*

*Many people are suffering from this disease. – Community Leader*

*Beginning to see it more often in our field. – Healthcare Provider*

*Again, as Billings has an aging population and also a population with some obesity/high blood pressure issues, I am assuming this is also a significant issue. Additionally, given the national statistics regarding heart disease prevalence, it would be logical to believe Billings also has this issue. – Business Leader*

*Heart disease and stroke are among the major disease of older people all across the US. Montana is no exception. The fact so many of our elderly citizens are overweight and fairly inactive contributes greatly to this problem. Many middle-aged people are also well on the way to heart disease due to their excess body weight, elevated blood pressure, and lack of activity. – Community Leader*

#### Lifestyle

*Rampant Type 2 diabetes management and poor lifestyles with high fat, high sugar, processed foods and little physical activity. – Healthcare Provider*

*It is culturally acceptable to live an unhealthy lifestyle, leading to long-term health issues like heart disease and stroke. – Educator*

*Stressful lifestyles, obesity, drugs, alcohol and smoking all contribute and we have high rates of all. – Healthcare Provider*

*Most people don't eat healthy meals regularly, putting them at risk. – Business Leader*

*Generally, the major cause of heart disease and stroke are a result of poor diets and obesity among American Indians. – Community Leader*

*Prevention and recognition of symptoms. – Healthcare Provider*

### **Access to Care/Services**

*The doctors are all so busy one has to schedule several months out to see their doctor. I'm not aware of any quality issues. – Community Leader*

*We have two hospitals that treat many people. – Government Representative*

*Geography creates a huge issue for stroke in our area. Time is a crucial component for treatment and getting to appropriate care in that amount of time remains a huge barrier. – Healthcare Provider*

### **Leading Cause of Death**

*Heart disease and stroke are two of the leading causes of death in the U.S. Yellowstone County is no different. Access to healthcare, both pre-hospital care and hospital care remains a challenge.*

*Healthcare illiteracy remains significant among our population. – Government Representative*

### **Weight Status**

*The population is generally overweight, smokes and does not maintain as healthy of a lifestyle as they should. – Healthcare Provider*

### **Contributing Factors**

*Elderly population, poor diet decisions, genetics, not following-up with a primary care doctor, lack of exercise. – Community Leader*

## Cancer

### About Cancer

Continued advances in cancer research, detection, and treatment have resulted in a decline in both incidence and death rates for all cancers. Among people who develop cancer, more than half will be alive in five years. Yet, cancer remains a leading cause of death in the United States, second only to heart disease.

Many cancers are preventable by reducing risk factors such as: use of tobacco products; physical inactivity and poor nutrition; obesity; and ultraviolet light exposure. Other cancers can be prevented by getting vaccinated against human papillomavirus and hepatitis B virus. In the past decade, overweight and obesity have emerged as new risk factors for developing certain cancers, including colorectal, breast, uterine corpus (endometrial), and kidney cancers. The impact of the current weight trends on cancer incidence will not be fully known for several decades. Continued focus on preventing weight gain will lead to lower rates of cancer and many chronic diseases.

Screening is effective in identifying some types of cancers (see US Preventive Services Task Force [USPSTF] recommendations), including:

- Breast cancer (using mammography)
- Cervical cancer (using Pap tests)
- Colorectal cancer (using fecal occult blood testing, sigmoidoscopy, or colonoscopy)

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

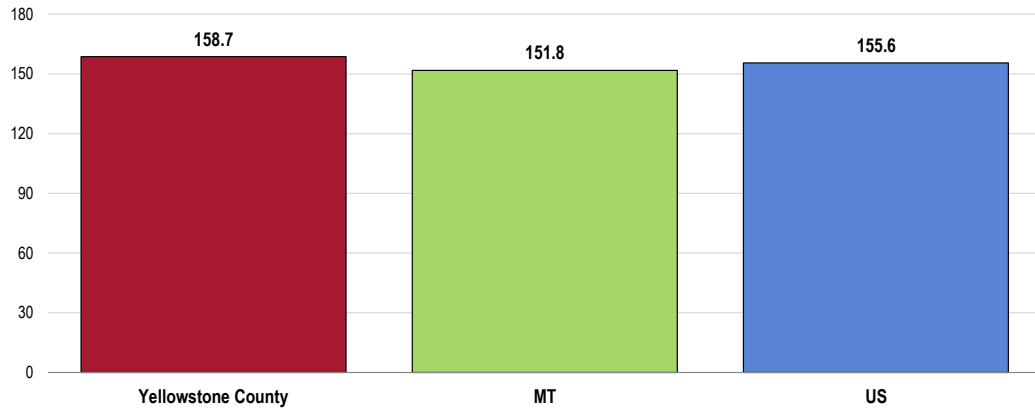
## Age-Adjusted Cancer Deaths

### All Cancer Deaths

**Between 2015 and 2017, there was an annual average age-adjusted cancer mortality rate of 158.7 deaths per 100,000 population in Yellowstone County.**

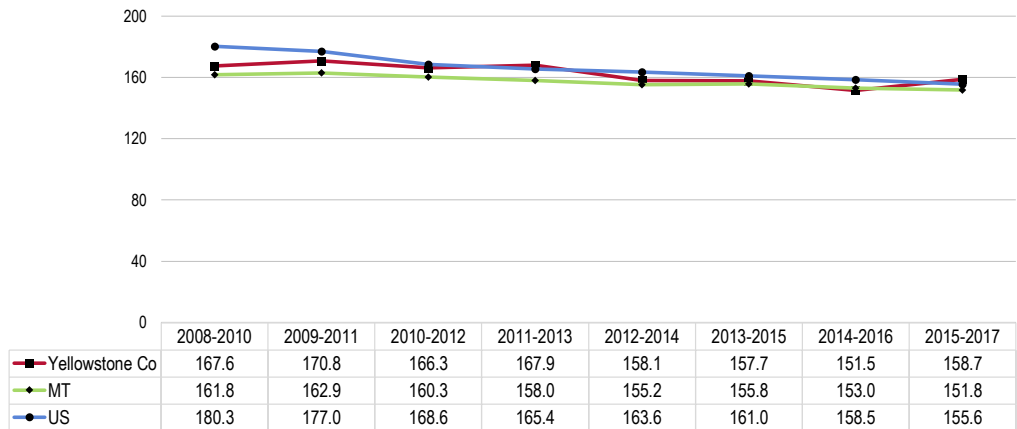
- **TREND:** The cancer mortality rate has decreased over time, echoing the state and US trends.

### Cancer: Age-Adjusted Mortality (2015-2017 Annual Average Deaths per 100,000 Population) Healthy People 2020 = 161.4 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-1]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Cancer: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 = 161.4 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-1]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

## Cancer Deaths by Site

**Lung cancer is by far the leading cause of cancer deaths in Yellowstone County.**

Other leading sites include prostate cancer among men, breast cancer among women, and colorectal cancer (both sexes).

**BENCHMARKS:** Based on 2015-2017 annual average age-adjusted cancer death rates by site, note the following unfavorable comparisons for Yellowstone County:

- **Lung Cancer:** Higher than the Montana mortality rate.
- **Prostate Cancer:** Higher than state and national rates. Fails to satisfy the Healthy People 2020 objective.
- **Female Breast Cancer:** Higher than Montana and US rates. Fails to satisfy the Healthy People 2020 objective.

### Age-Adjusted Cancer Death Rates by Site (2015-2017 Annual Average Deaths per 100,000 Population)

	Yellowstone County	Montana	US	HP2020
<b>ALL CANCERS</b>	<b>158.7</b>	<b>151.8</b>	<b>155.6</b>	<b>161.4</b>
<b>Lung Cancer</b>	<b>37.5</b>	<b>35.0</b>	<b>38.5</b>	<b>45.5</b>
<b>Prostate Cancer</b>	<b>25.0</b>	<b>23.3</b>	<b>18.9</b>	<b>21.8</b>
<b>Female Breast Cancer</b>	<b>24.0</b>	<b>19.6</b>	<b>20.1</b>	<b>20.7</b>
<b>Colorectal Cancer</b>	<b>11.8</b>	<b>13.5</b>	<b>13.9</b>	<b>14.5</b>

Sources: • CDC WONDER Online Query System, Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>

## Cancer Incidence

Incidence rates reflect the number of newly diagnosed cases in a given population in a given year, regardless of outcome. These rates are also age-adjusted.

**The highest cancer incidence rates are for female breast cancer and prostate cancer.**

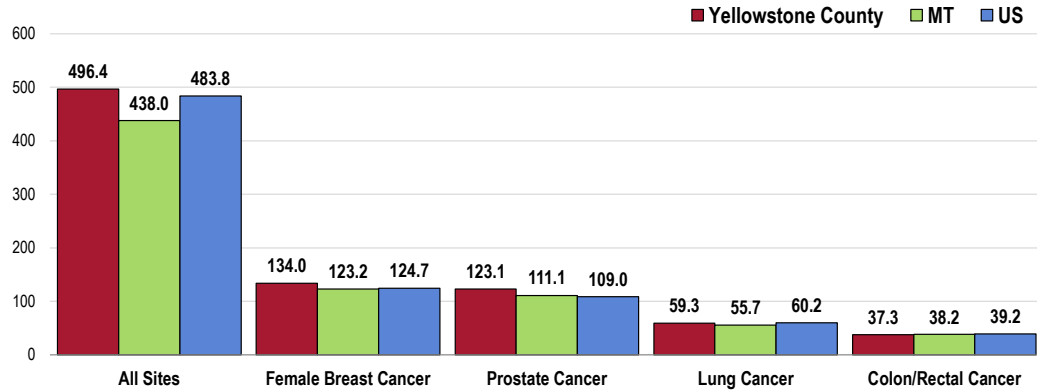
**BENCHMARKS:** Based on 2011-2015 annual average incidence rates by site, note the following unfavorable comparisons for Yellowstone County:

- **All Cancer Sites:** Higher than the state incidence rate.
- **Female Breast Cancer:** Higher than the state and national rates.
- **Prostate Cancer:** Higher than Montana and US rates.
- **Lung Cancer:** Higher than the Montana incidence rate.

"Incidence rate" or "case rate" is the number of new cases of a disease occurring during a given period of time.

It is usually expressed as cases per 100,000 population per year.

### Cancer Incidence Rates by Site (Annual Average Age-Adjusted Incidence per 100,000 Population, 2011-2015)



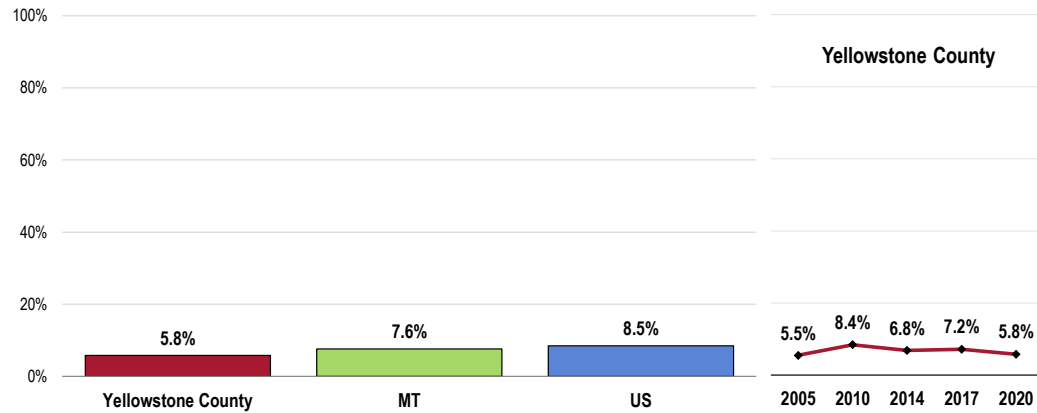
Sources: • State Cancer Profiles.  
 • Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.  
 Notes: • This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of cancers, adjusted to 2000 US standard population age groups (under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

## Prevalence of Cancer

### Skin Cancer

A total of 5.8% of surveyed Yellowstone County adults report having been diagnosed with skin cancer.

### Prevalence of Skin Cancer

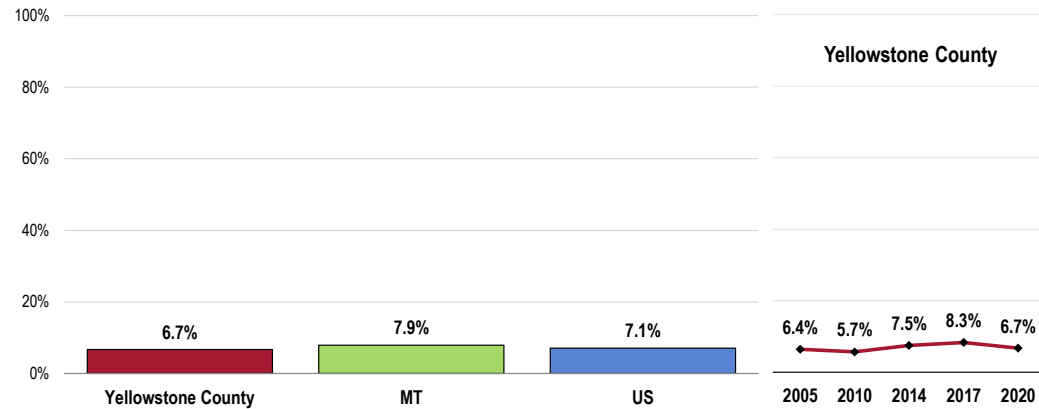


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 28]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

### Other Cancers

A total of 6.7% of survey respondents have been diagnosed with some type of (non-skin) cancer.

### Prevalence of Cancer (Other Than Skin Cancer)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 27]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 • 2017 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.

**RELATED ISSUE:**

See also *Nutrition, Physical Activity, Weight Status, and Tobacco Use* in the **Modifiable Health Risks** section of this report.

### Cancer Risk

#### About Cancer Risk

Reducing the nation’s cancer burden requires reducing the prevalence of behavioral and environmental factors that increase cancer risk.

- All cancers caused by cigarette smoking could be prevented. At least one-third of cancer deaths that occur in the United States are due to cigarette smoking.
- According to the American Cancer Society, about one-third of cancer deaths that occur in the United States each year are due to nutrition and physical activity factors, including obesity.

— National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

### Cancer Screenings

The American Cancer Society recommends that both men and women get a cancer-related checkup during a regular doctor’s checkup. It should include examination for cancers of the thyroid, testicles, ovaries, lymph nodes, oral cavity, and skin, as well as health counseling about tobacco, sun exposure, diet and nutrition, risk factors, sexual practices, and environmental and occupational exposures.

Screening levels in the community were measured in the PRC Community Health Survey relative to three cancer sites: female breast cancer (mammography); cervical cancer (Pap smear testing); and colorectal cancer (sigmoidoscopy and fecal occult blood testing).

**Female Breast Cancer**

The US Preventive Services Task Force (USPSTF) recommends biennial screening mammography for women aged 50 to 74 years.

**Cervical Cancer**

The US Preventive Services Task Force (USPSTF) strongly recommends screening for cervical cancer every 3 years with cervical cytology alone in women aged 21 to 29 years.

**Colorectal Cancer**

The US Preventive Services Task Force (USPSTF) recommends screening for colorectal cancer starting at age 50 years and continuing until age 75 years.

— US Preventive Services Task Force, Agency for Healthcare Research and Quality, US Department of Health & Human Services

Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

**Among women age 50-74, 77.3% have had a mammogram within the past 2 years.**

**Among Yellowstone County women age 21 to 65, 75.3% have had a Pap smear within the past 3 years.**

- **BENCHMARK:** Fails to satisfy the Healthy People 2020 objective.

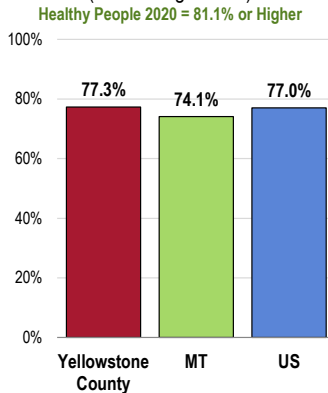
**Among all adults age 50-75, 77.7% have had appropriate colorectal cancer screening.**

- **BENCHMARK:** Better than the Montana percentage and satisfies the Healthy People 2020 objective.

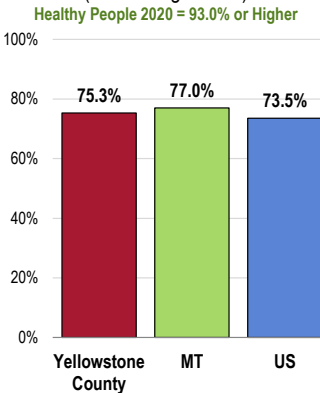
"Appropriate colorectal cancer screening" includes a fecal occult blood test within the past year and/or a lower endoscopy (sigmoidoscopy or colonoscopy) within the past 10 years.

**Cancer Screenings**

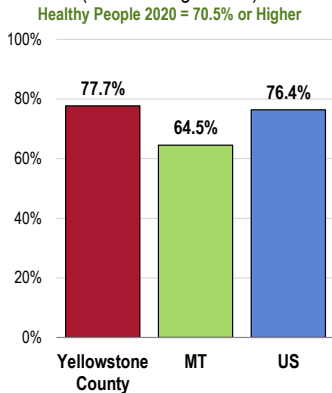
**Mammogram in Past Two Years**  
(Women Age 50-74)



**Pap Smear in Past Three Years**  
(Women Age 21-65)



**Colorectal Cancer Screening**  
(All Adults Age 50-75)

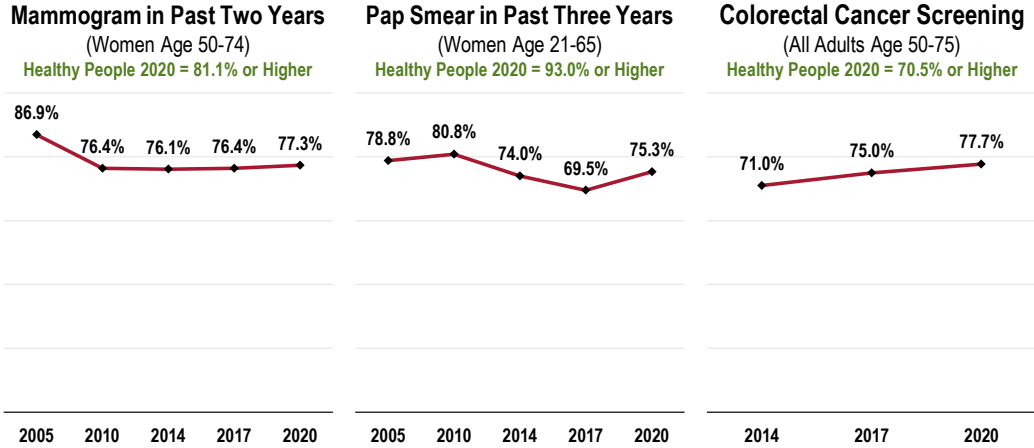


Sources: ● 2020 PRC Community Health Survey, PRC, Inc. [Items 133, 134, 137]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 ● 2017 PRC National Health Survey, PRC, Inc.  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objectives C-15, C-16, C-17]

Notes: ● Each indicator is shown among the gender and/or age group specified.



### Cancer Screenings: Yellowstone County Trends

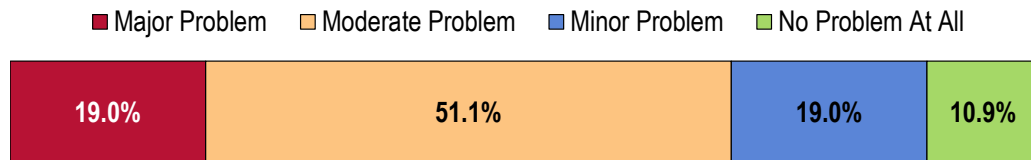


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 133, 134, 137]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objectives C-15, C-16, C-17]  
 Notes: • Each indicator is shown among the gender and/or age group specified.

### Key Informant Input: Cancer

The greatest share of key informants taking part in an online survey characterized **Cancer** as a “moderate problem” in the community.

### Perceptions of Cancer as a Problem in the Community (Key Informants, 2020)



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

### Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

#### Prevalence/Incidence

- The number of people I know being treated for cancer. – Government Representative
- It touches every family and many of the uninsured or underinsured have additional challenges. – Business Leader

*A lot of people are being diagnosed with cancer and many people do not have insurance. – Community Leader*

*I know so many people with cancer. It's a fear that I have, and I know others that fear it too. – Community Leader*

*Cancer care in Yellowstone County is overwhelmed. More physicians are needed and better treatment. Many going out of state for treatment. – Community Leader*

*I cannot speak to anyone that does not have or had cancer affect their family. – Community Leader*

*Too many cases of cancer being diagnosed in general. – Community Leader*

*I'm not in a position to understand if cancer rates are higher or atypical in Yellowstone County, and given the overall high quality of our health services, I believe that cancer treatment here would be above average for those who have access and resources. I rated it a major problem because of the severity of the disease and the exaggerated impact it often has on the individual, friends and family, and society in general. – Business Leader*

*Due to a high degree of contact with a varied sample of community members, it is dispiriting how many residents I speak to that are dealing with cancer themselves or have a family member who is deceased or receiving treatment for a cancer-related illness. – Educator*

*The age-adjusted incidence, Yellowstone County is in the top quarter in Montana, the largest urban area identified, and the top-tiered counties surround Yellowstone for all cancer types. – Public Health Representative*

*A variety of cancers are being diagnosed in Yellowstone County. Skin cancer is particularly prevalent because so many Montanans work outdoors and are exposed to long periods in the sun. Also, breast cancer and other types of cancer are prevalent, especially in the large elderly population. – Government Representative*

*It is a major issue throughout our country, thus impacting our county. – Healthcare Provider*

*The incidence rate seems high. About every other day, someone I know is diagnosed with cancer. – Healthcare Provider*

*It feels like everyone is affected by cancer in some way. We all know someone or have someone close to us with cancer. – Educator*

### **Vulnerable Populations**

*My response is in regard to primarily the American Indian community in the Yellowstone County area. Due to phosphates or other fertilizers consumption or exposure, asbestos (old houses), poor drinking water in the rural areas in the county, tobacco use, poor nutrition or eating habits to name a few. American Indian are very mobile and are exposed to those things mentioned above outside of the Yellowstone area but move into the city thus affecting the demand on healthcare due to cancer. Many individuals who have grown up in the 1960's have been exposed to large amount of DDT resulting in cancer today in a variety of forms such as prostate, rectal, kidney and other cancers. – Community Leader*

*Higher incidence among Native Americans than population averages with poorer outcomes due to delay in diagnosis, seeking care and poor compliance with breast, cervical and colon screenings ordered by providers. – Healthcare Provider*

### **Leading Cause of Death**

*People are dying every day from cancer. – Healthcare Provider*

*Cancer is the second leading cause of death in the US and disparities exist for the American Indian people in terms of cancer. While it is a major problem, we are fortunate to have good cancer healthcare available. – Healthcare Provider*

### **Aging Population**

*The general population is getting older and is experiencing more cancer incidence. – Government Representative*

### **Affordable Care/Services**

*Very expensive treatment, very debilitating. – Healthcare Provider*

## Respiratory Disease

### About Asthma & COPD

Asthma and chronic obstructive pulmonary disease (COPD) are significant public health burdens. Specific methods of detection, intervention, and treatment exist that may reduce this burden and promote health.

Asthma is a chronic inflammatory disorder of the airways characterized by episodes of reversible breathing problems due to airway narrowing and obstruction. These episodes can range in severity from mild to life threatening. Symptoms of asthma include wheezing, coughing, chest tightness, and shortness of breath. Daily preventive treatment can prevent symptoms and attacks and enable individuals who have asthma to lead active lives.

COPD is a preventable and treatable disease characterized by airflow limitation that is not fully reversible. The airflow limitation is usually progressive and associated with an abnormal inflammatory response of the lung to noxious particles or gases (typically from exposure to cigarette smoke). Treatment can lessen symptoms and improve quality of life for those with COPD.

The burden of respiratory diseases affects individuals and their families, schools, workplaces, neighborhoods, cities, and states. Because of the cost to the healthcare system, the burden of respiratory diseases also falls on society; it is paid for with higher health insurance rates, lost productivity, and tax dollars. Annual healthcare expenditures for asthma alone are estimated at \$20.7 billion.

**Asthma.** The prevalence of asthma has increased since 1980. However, deaths from asthma have decreased since the mid-1990s. The causes of asthma are an active area of research and involve both genetic and environmental factors.

Risk factors for asthma currently being investigated include:

- Having a parent with asthma
- Sensitization to irritants and allergens
- Respiratory infections in childhood
- Overweight

Asthma affects people of every race, sex, and age. However, significant disparities in asthma morbidity and mortality exist, in particular for low-income and minority populations. Populations with higher rates of asthma include: children; women (among adults) and boys (among children); African Americans; Puerto Ricans; people living in the Northeast United States; people living below the Federal poverty level; and employees with certain exposures in the workplace.

While there is not a cure for asthma yet, there are diagnoses and treatment guidelines that are aimed at ensuring that all people with asthma live full and active lives.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Age-Adjusted Respiratory Disease Deaths

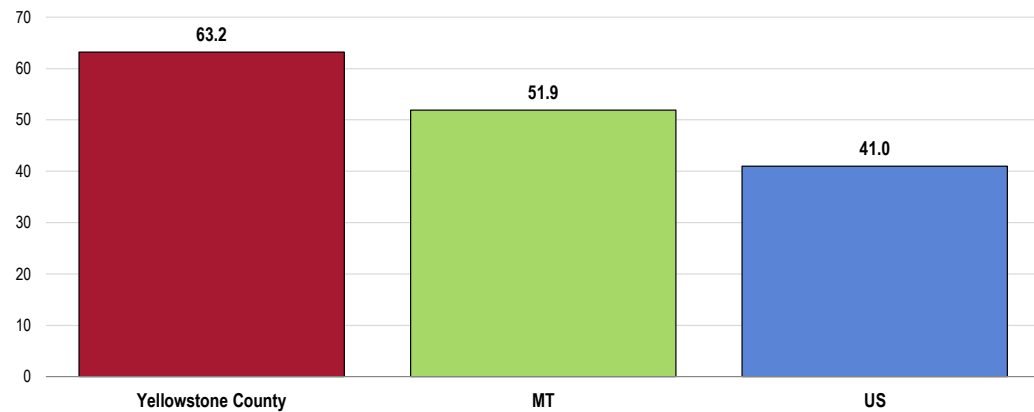
### Chronic Lower Respiratory Disease Deaths (CLRD)

Note: Chronic lower respiratory disease (CLRD) includes lung diseases such as emphysema, chronic bronchitis, and asthma.

Between 2015 and 2017, the county reported an annual average age-adjusted CLRD mortality rate of 63.2 deaths per 100,000 population.

- **BENCHMARK:** Worse than the state and national mortality rates.

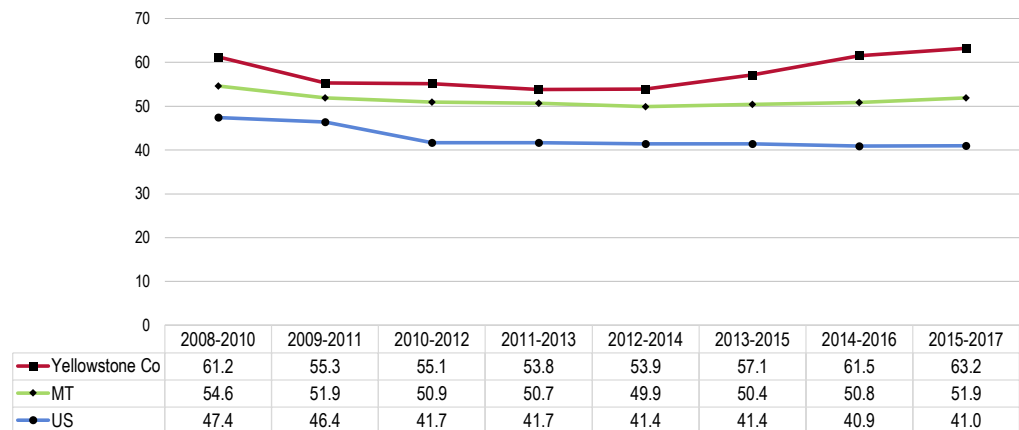
**CLRD: Age-Adjusted Mortality**  
(2015-2017 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.

- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
  - CLRD is chronic lower respiratory disease.

**CLRD: Age-Adjusted Mortality Trends**  
(Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.

- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
  - CLRD is chronic lower respiratory disease.

## Pneumonia/Influenza Deaths

### About Influenza & Pneumonia

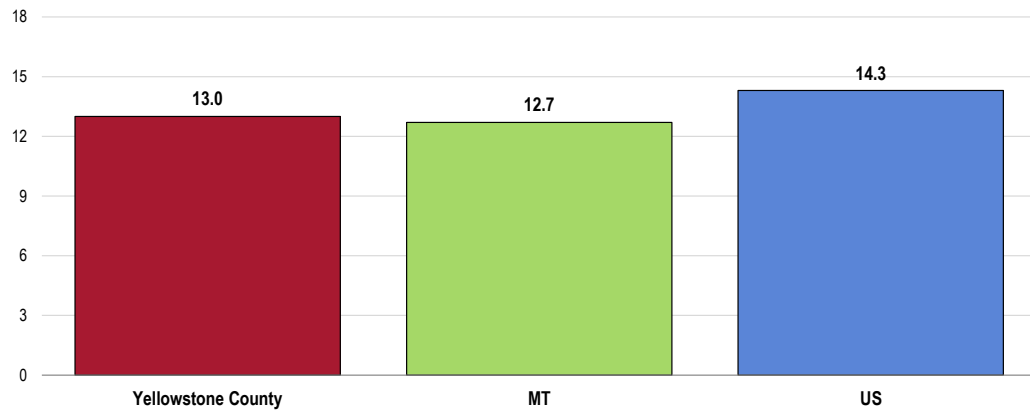
Acute respiratory infections, including pneumonia and influenza, are the 8th leading cause of death in the nation, accounting for 56,000 deaths annually. Pneumonia mortality in children fell by 97% in the last century, but respiratory infectious diseases continue to be leading causes of pediatric hospitalization and outpatient visits in the US. On average, influenza leads to more than 200,000 hospitalizations and 36,000 deaths each year. The 2009 H1N1 influenza pandemic caused an estimated 270,000 hospitalizations and 12,270 deaths (1,270 of which were of people younger than age 18) between April 2009 and March 2010.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**Between 2015 and 2017, Yellowstone County reported an annual average age-adjusted pneumonia influenza mortality rate of 13.0 deaths per 100,000 population.**

- **BENCHMARK:** Below the US mortality rate.
- **TREND:** Though fluctuating, the rate has decreased over time.

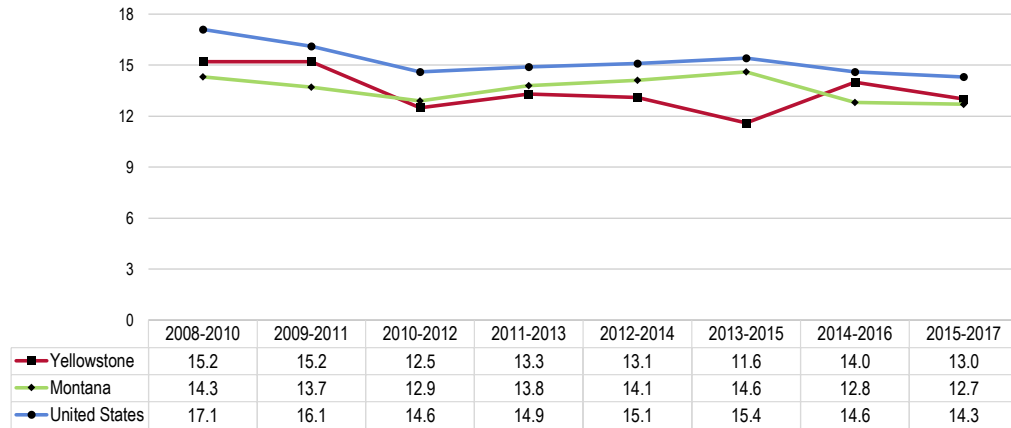
### Pneumonia/Influenza: Age-Adjusted Mortality (2015-2017 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System, Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.

Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
• Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Pneumonia/Influenza: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.  
 Notes: ● Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
 ● Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

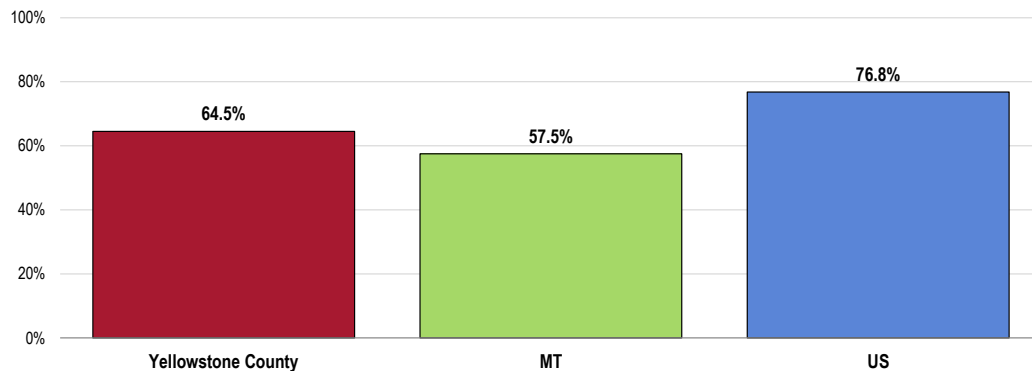
### Influenza & Pneumonia Vaccination

Among Yellowstone County adults age 65 and older, **64.5% received a flu vaccination** within the past year.

- **BENCHMARK:** Lower than the US figure.

### Older Adults: Flu Vaccination in the Past Year (Adults Age 65+)

Healthy People 2020 = 70.0% or Higher



Sources: ● 2020 PRC Community Health Survey, PRC, Inc. [Items 144, 146]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 ● 2017 PRC National Health Survey, PRC, Inc.  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-12.12]  
 Notes: ● Reflects respondents 65 and older.

## Prevalence of Respiratory Disease

### Asthma

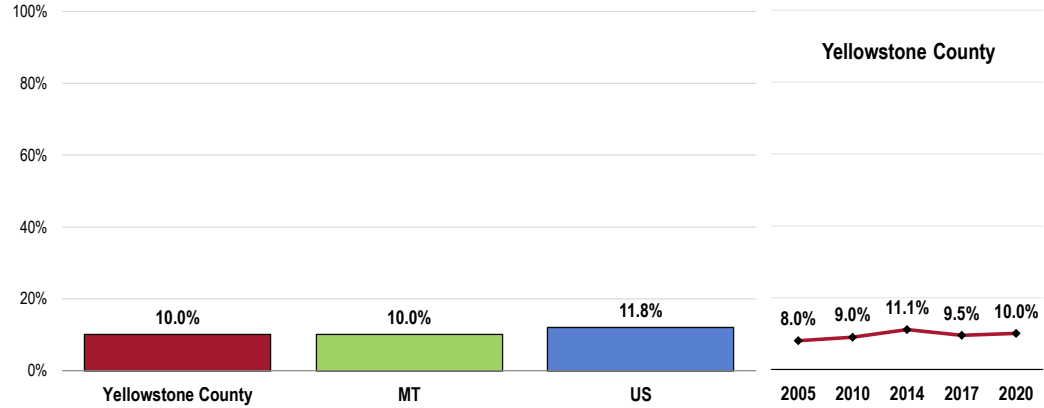
#### Adults

A total of 10.0% of Yellowstone County adults currently suffer from asthma.

- **DISPARITY:** Notably higher among female survey respondents.

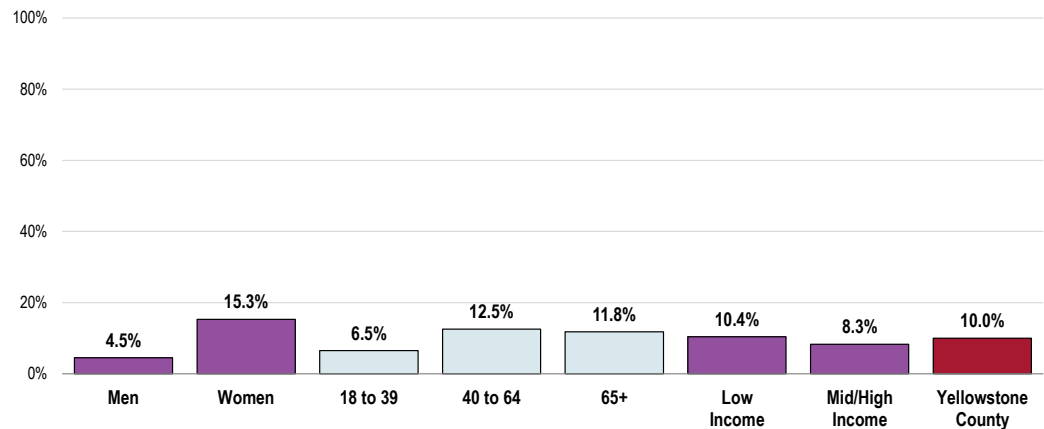
Survey respondents were asked to indicate whether they suffer from or have been diagnosed with various respiratory conditions, including asthma and COPD.

### Prevalence of Asthma



- Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 138]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Montana data.
  - 2017 PRC National Health Survey, PRC, Inc.
- Notes:
- Asked of all respondents.
  - Includes those who have ever been diagnosed with asthma and report that they still have asthma.

### Prevalence of Asthma (Yellowstone County, 2020)

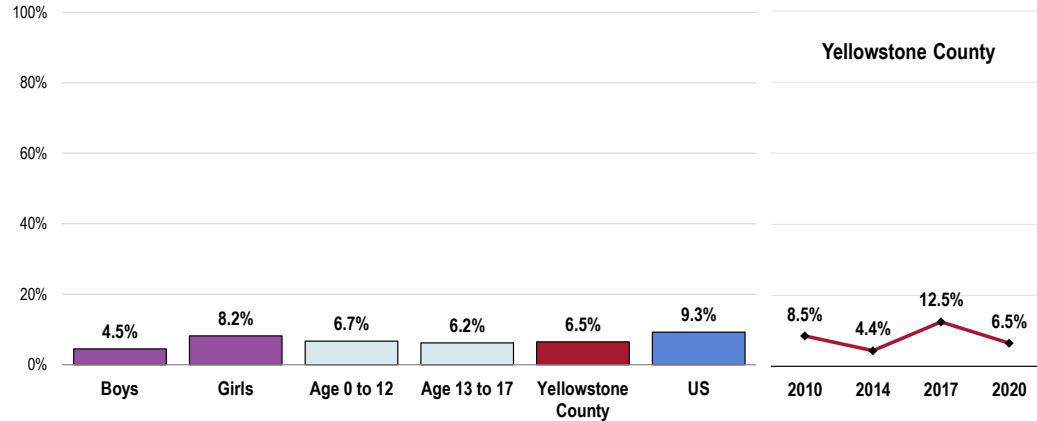


- Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 138]
- Notes:
- Asked of all respondents.
  - Includes those who have ever been diagnosed with asthma and report that they still have asthma.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

**Children**

Among Yellowstone County children under age 18, 6.5% currently have asthma.

**Prevalence of Asthma in Children**  
(Parents of Children Age 0-17)



Sources: ● 2020 PRC Community Health Survey, PRC, Inc. [Item 139]  
 ● 2017 PRC National Health Survey, PRC, Inc.  
 Notes: ● Asked of all respondents with children 0 to 17 in the household.  
 ● Includes children who have ever been diagnosed with asthma and are reported to still have asthma.

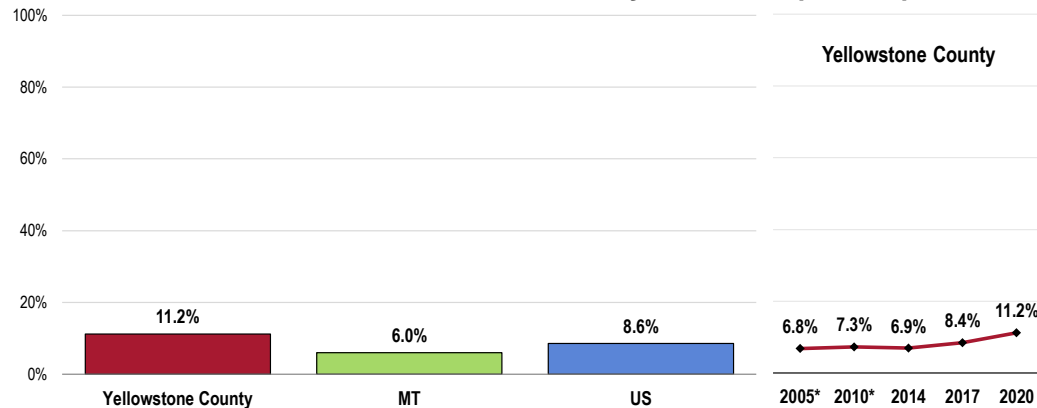
**Chronic Obstructive Pulmonary Disease (COPD)**

Note: COPD includes lung diseases such as emphysema and chronic bronchitis.

A total of 11.2% of Yellowstone County adults suffer from chronic obstructive pulmonary disease (COPD, including emphysema and bronchitis).

- **BENCHMARK:** Well above the Montana prevalence.
- **TREND:** Marks a statistically significant increase since 2005.

**Prevalence of Chronic Obstructive Pulmonary Disease (COPD)**



Sources: ● 2020 PRC Community Health Survey, PRC, Inc. [Item 24]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 ● 2017 PRC National Health Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.  
 ● Includes those having ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema.  
 ● \*In prior data, the term "chronic lung disease" was used, which also included bronchitis or emphysema.



## Key Informant Input: Respiratory Disease

Key informants taking part in an online survey were similarly likely to characterize *Respiratory Disease* as either a “moderate problem” or a “minor problem” in the community.

### Perceptions of Respiratory Diseases as a Problem in the Community

(Key Informants, 2020)

■ Major Problem ■ Moderate Problem ■ Minor Problem ■ No Problem At All



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
Notes: • Asked of all respondents.

## Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

### Prevalence/Incidence

*In my experience, many individuals in Yellowstone County have COPD and have to be on oxygen part- or full-time. – Government Representative*

*Asthma is mentioned often among health problems. – Government Representative*

*Asthma. – Community Leader*

## Injury & Violence

### About Injury & Violence

Injuries and violence are widespread in society. Both unintentional injuries and those caused by acts of violence are among the top 15 killers for Americans of all ages. Many people accept them as “accidents,” “acts of fate,” or as “part of life.” However, most events resulting in injury, disability, or death are predictable and preventable.

Injuries are the leading cause of death for Americans ages 1 to 44, and a leading cause of disability for all ages, regardless of sex, race/ethnicity, or socioeconomic status. More than 180,000 people die from injuries each year, and approximately 1 in 10 sustains a nonfatal injury serious enough to be treated in a hospital emergency department.

Beyond their immediate health consequences, injuries and violence have a significant impact on the well-being of Americans by contributing to:

- Premature death
- Disability
- Poor mental health
- High medical costs
- Lost productivity

The effects of injuries and violence extend beyond the injured person or victim of violence to family members, friends, coworkers, employers, and communities.

Numerous factors can affect the risk of unintentional injury and violence, including individual behaviors, physical environment, access to health services (ranging from pre-hospital and acute care to rehabilitation), and social environment (from parental monitoring and supervision of youth to peer group associations, neighborhoods, and communities).

Interventions addressing these social and physical factors have the potential to prevent unintentional injuries and violence. Efforts to prevent unintentional injury may focus on:

- Modifications of the environment
- Improvements in product safety
- Legislation and enforcement
- Education and behavior change
- Technology and engineering

Efforts to prevent violence may focus on:

- Changing social norms about the acceptability of violence
- Improving problem-solving skills (for example, parenting, conflict resolution, coping)
- Changing policies to address the social and economic conditions that often give rise to violence

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

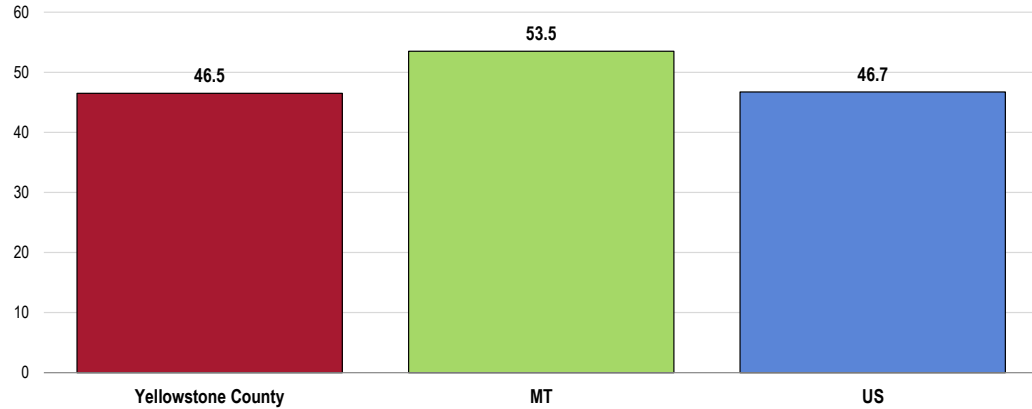
## Unintentional Injury

### Age-Adjusted Unintentional Injury Deaths

**Between 2015 and 2017, there was an annual average age-adjusted unintentional injury mortality rate of 46.5 deaths per 100,000 population in Yellowstone County.**

- **BENCHMARK:** Below the Montana death rate but failing to satisfy the Healthy People 2020 objective.
- **TREND:** Denotes an increase over time, especially since the 2011-2013 reporting period.

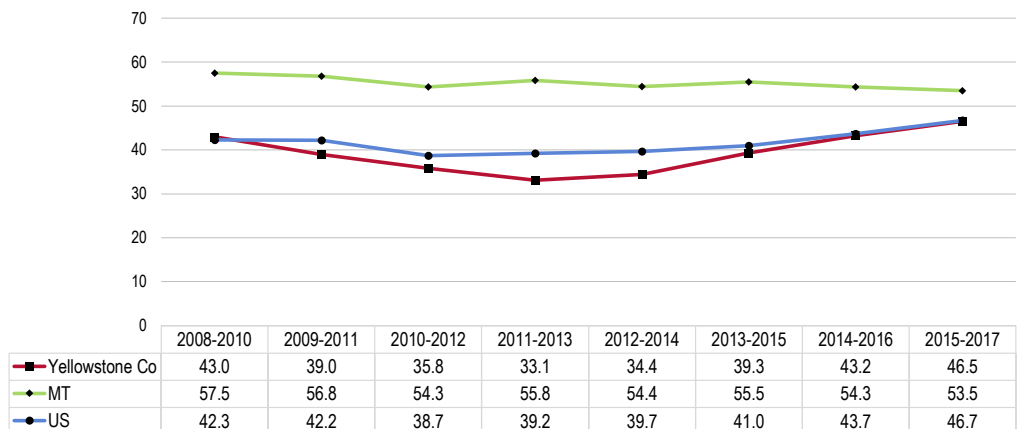
### Unintentional Injuries: Age-Adjusted Mortality (2015-2017 Annual Average Deaths per 100,000 Population) Healthy People 2020 = 36.4 or Lower



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-11]

Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Unintentional Injuries: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 = 36.4 or Lower



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-11]

Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

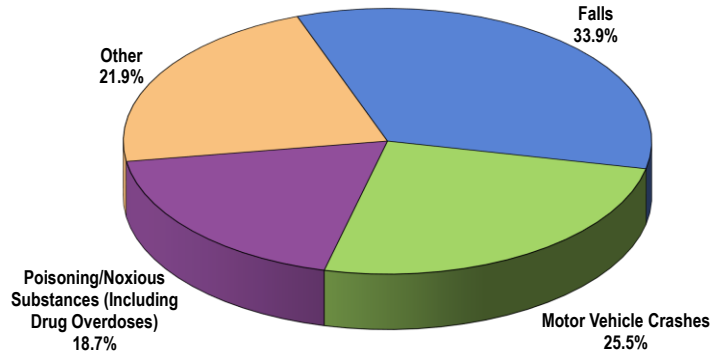
### Leading Causes of Unintentional Injury Deaths

Falls, motor vehicle crashes, and poisoning (including unintentional drug overdose) accounted for most unintentional injury deaths in Yellowstone County between 2015 and 2017.

RELATED ISSUE:

For more information about unintentional drug-related deaths, see also *Substance Abuse* in the **Modifiable Health Risks** section of this report.

**Leading Causes of Unintentional Injury Deaths**  
(Yellowstone County, 2015-2017)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.  
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

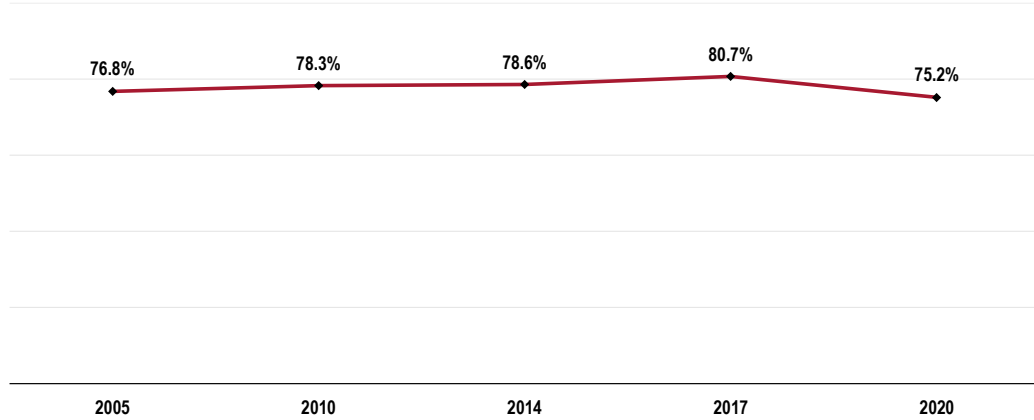
### Seat Belt Usage

Three in four Yellowstone County adults (75.2%) report “always” wearing a seat belt when driving or riding in a vehicle.

- **BENCHMARK:** Far from satisfying the Healthy People 2020 objective.
- **DISPARITY:** Less often reported among male survey respondents.

## “Always” Wear a Seat Belt When Driving or Riding in a Vehicle (Yellowstone County)

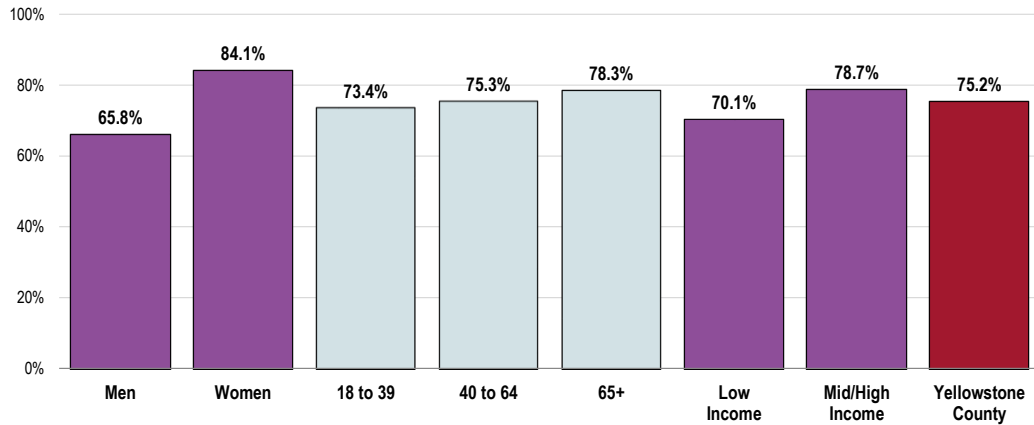
Healthy People 2020 Target = 92.0% or Higher



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 302]  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IPV-15]  
 Notes: ● Asked of all respondents.

## “Always” Wear a Seat Belt When Driving or Riding in a Vehicle (Yellowstone County, 2020)

Healthy People 2020 Target = 92.0% or Higher

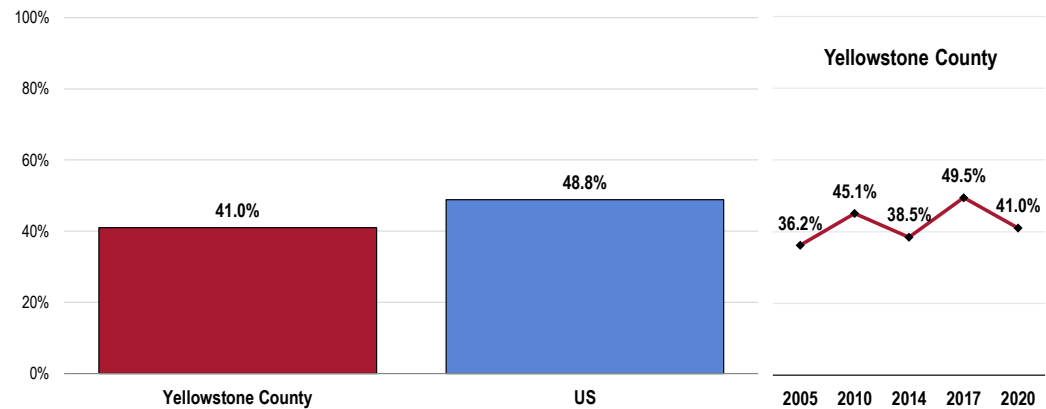


Sources: ● 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 302]  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IPV-15]  
 Notes: ● Asked of all respondents.  
 ● Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Bicycle Safety

Just over four in ten (41.0%) Yellowstone County children age 5 to 17 are reported to “always” wear a helmet when riding a bicycle.

### Child “Always” Wears a Helmet When Riding a Bicycle (Yellowstone County Parents on Behalf of Children Age 5-17)



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 324]

● 2017 PRC National Health Survey, PRC, Inc.

Notes: ● Asked of all respondents with children age 5 to 17 at home.

## Falls

### Falls

Each year, an estimated one-third of older adults fall, and the likelihood of falling increases substantially with advancing age.

Falls are the leading cause of fatal and nonfatal injuries for persons aged ≥65 years ... Even when those injuries are minor, they can seriously affect older adults' quality of life by inducing a fear of falling, which can lead to self-imposed activity restrictions, social isolation, and depression.

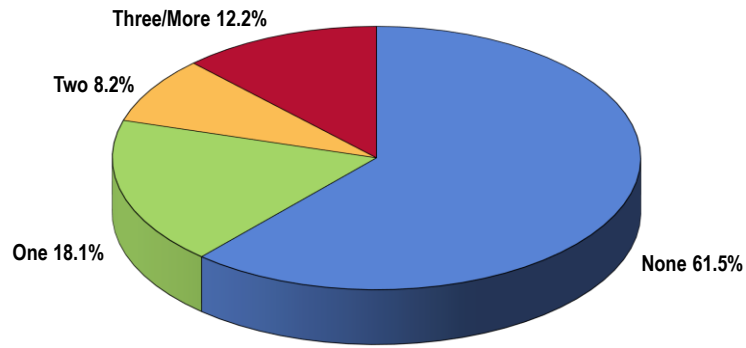
In addition, fall-related medical treatment places a burden on US healthcare services. In 2000, direct medical costs for fall-related injuries totaled approximately \$19 billion. A recent study determined that 31.8% of older adults who sustained a fall-related injury required help with activities of daily living as a result, and among them, 58.5% were expected to require help for at least 6 months.

Modifiable fall risk factors include muscle weakness, gait and balance problems, poor vision, use of psychoactive medications, and home hazards. Falls among older adults can be reduced through evidence-based fall-prevention programs that address these modifiable risk factors. Most effective interventions focus on exercise, alone or as part of a multifaceted approach that includes medication management, vision correction, and home modifications.

— Division of Unintentional Injury Prevention, National Center for Injury Prevention and Control, CDC

Among surveyed Yellowstone County adults age 45 and older, most have not fallen in the past year.

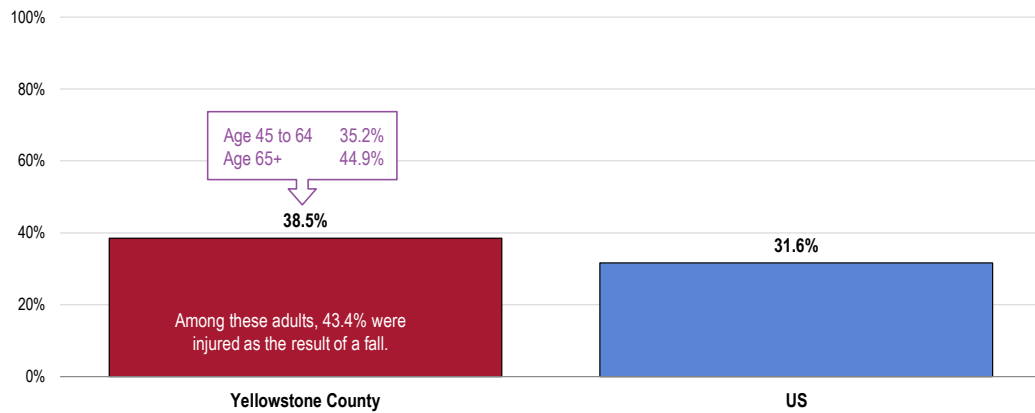
**Number of Falls in Past 12 Months**  
(Adults Age 45 and Older; Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 107]  
Notes: • Asked of all respondents age 45+.

However, 38.5% have experienced a fall at least once in the past year.

**Fell One or More Times in the Past Year**  
(Adults Age 45 and Older)

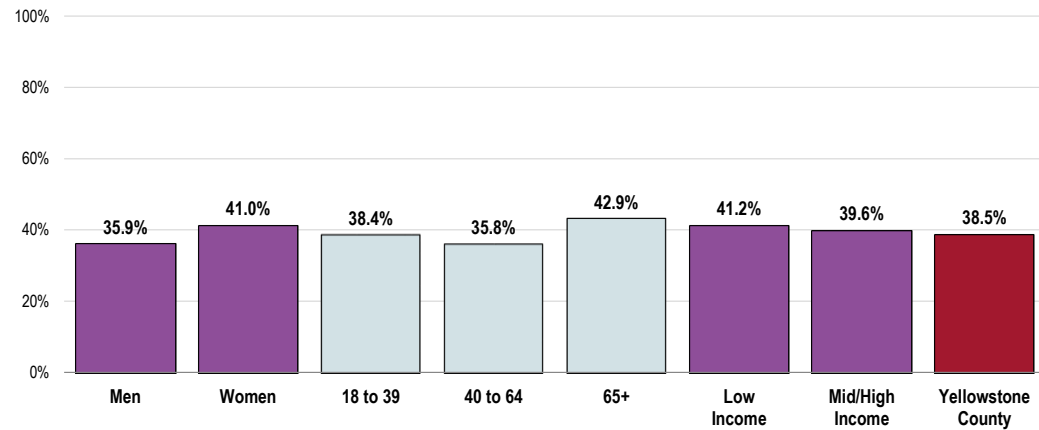


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 107-108]  
• 2017 PRC National Health Survey, PRC, Inc.  
Notes: • Asked of those respondents age 45 and older.

### Family Emergency Planning

A total of 38.5% of survey respondents have a family emergency plan that describes what they will do before, during, and after a natural disaster or other emergency.

#### Family Has an Emergency Plan (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 305]

Notes: • Asked of all respondents.

• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Intentional Injury (Violence)

#### Age-Adjusted Homicide Deaths

Between 2008 and 2017, the county reported an annual average age-adjusted homicide rate of 3.3 per 100,000 population.

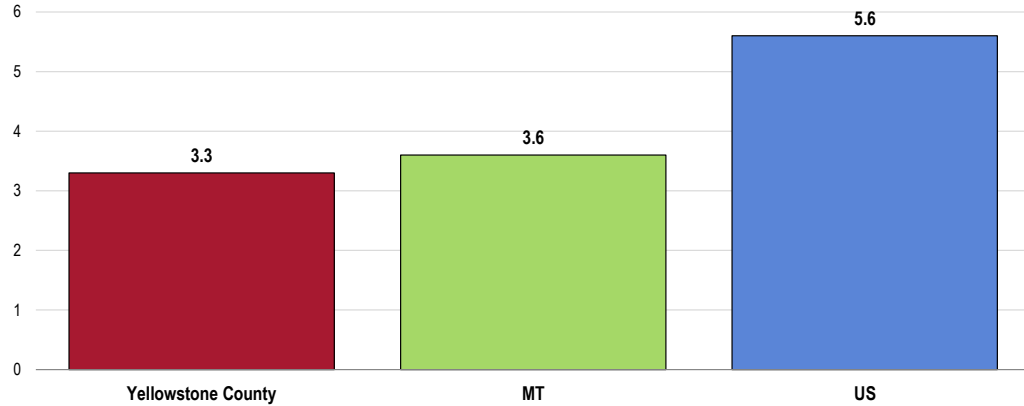
- **BENCHMARK:** Below the state and national homicide rates and satisfying the Healthy People 2020 objective.

RELATED ISSUE:

See also *Mental Health: Suicide* in the **General Health Status** section of this report.



### Homicide: Age-Adjusted Mortality (2008-2017 Annual Average Deaths per 100,000 Population) Healthy People 2020 = 5.5 or Lower



Sources: 

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-29]

Notes: 

- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Violent Crime

#### Violent Crime Rates

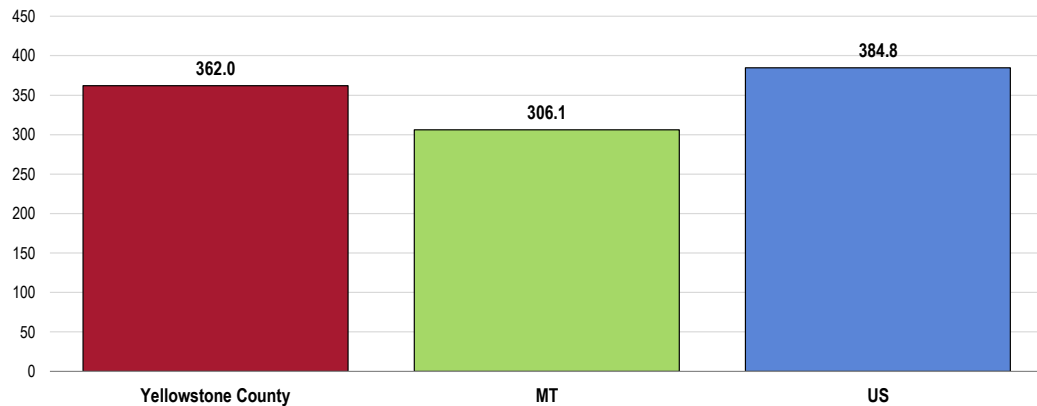
Between 2014 and 2016, there were a reported 362.0 violent crimes per 100,000 population in Yellowstone County.

- **BENCHMARK:** Well above the state crime rate but below the national rate.

Violent crime is composed of four offenses (FBI Index offenses): murder and non-negligent manslaughter; forcible rape; robbery; and aggravated assault.

Note that the quality of crime data can vary widely from location to location, depending on the consistency and completeness of reporting among various jurisdictions.

### Violent Crime (Rate per 100,000 Population, 2014-2016)



Sources: 

- Federal Bureau of Investigation, FBI Uniform Crime Reports.
- Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.

Notes: 

- This indicator reports the rate of violent crime offenses reported by the sheriff's office or county police department per 100,000 residents. Violent crime includes homicide, rape, robbery, and aggravated assault. This indicator is relevant because it assesses community safety.
- Participation by law enforcement agencies in the UCR program is voluntary. Sub-state data do not necessarily represent an exhaustive list of crimes due to gaps in reporting. Also, some institutions of higher education have their own police departments, which handle offenses occurring within campus grounds; these offenses are not included in the violent crime statistics but can be obtained from the Uniform Crime Reports Universities and Colleges data tables.

**Family Violence**

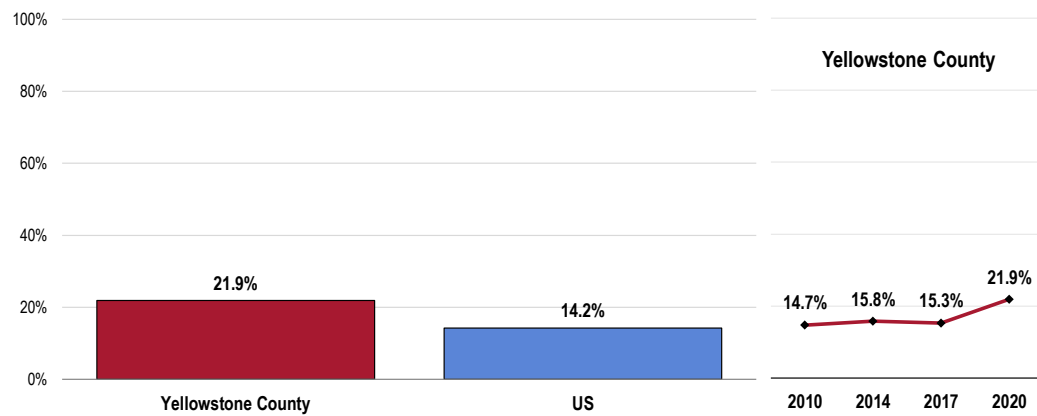
**A total of 21.9% of Yellowstone County adults acknowledge that they have ever been hit, slapped, pushed, kicked, or otherwise hurt by an intimate partner.**

Respondents were read:

"By an intimate partner, I mean any current or former spouse, boyfriend, or girlfriend. Someone you were dating, or romantically or sexually intimate with would also be considered an intimate partner."

- **BENCHMARK:** Worse than the national figure.
- **TREND:** The prevalence denotes a statistically significant increase from previous survey findings.

**Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner**



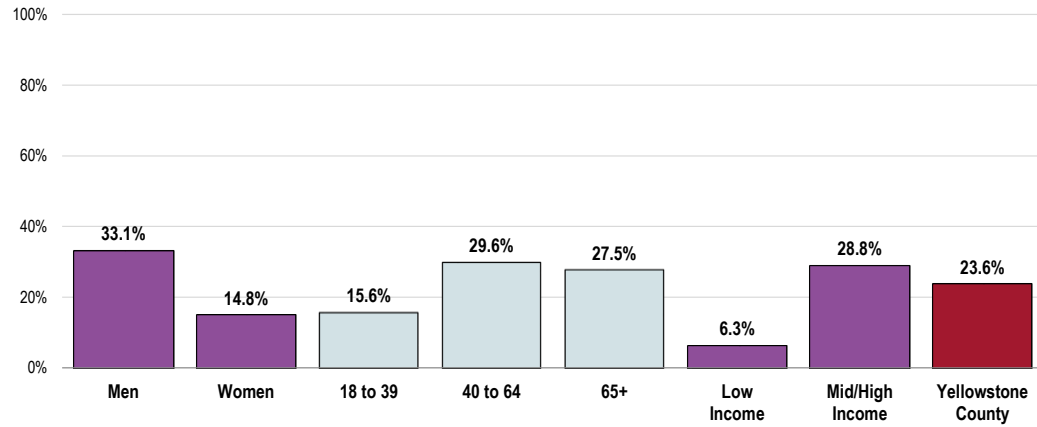
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 47]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

**Gun Safety**

**A total of 23.6% of survey respondents currently have an unlocked firearm in or around their home, property, or vehicle.**

- **DISPARITY:** The prevalence is higher among men, adults age 40+, and those at the higher income level.

### Currently Have an Unlocked Firearm in or Around the Home or Vehicle (Yellowstone County, 2020)



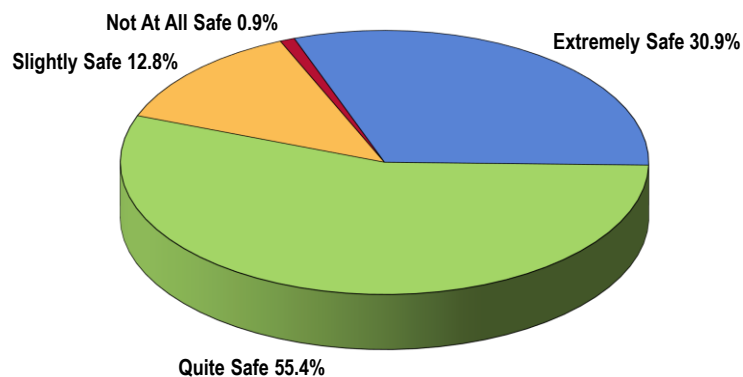
Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 307]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • In this case, the safety is not considered to be a lock.

### Perceived Neighborhood Safety

While most Yellowstone County adults consider their own neighborhoods to be "extremely safe" or "quite safe," 13.7% consider it only "slightly safe" or "not at all safe."

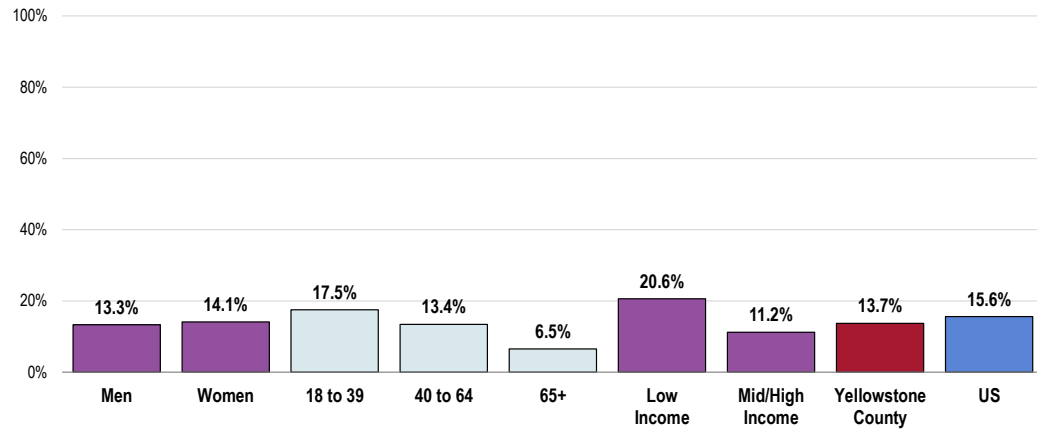
- **DISPARITY:** The prevalence decreases with age among survey respondents.

### Perceived Safety of Own Neighborhood (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 303]  
 Notes: • Asked of all respondents.

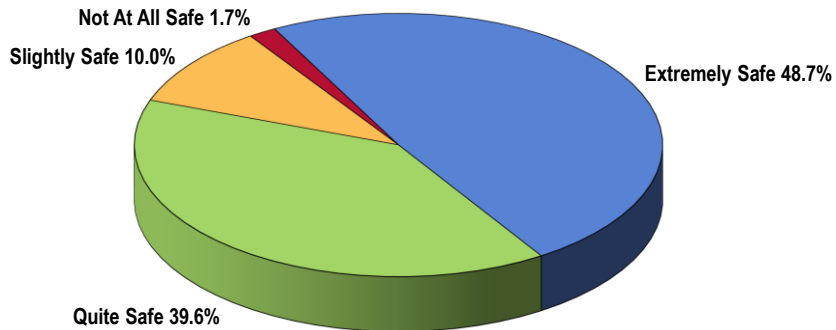
### Perceive Own Neighborhood as “Slightly” or “Not At All” Safe (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 303]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

**In a related inquiry, 11.7% of survey respondents indicate that they feel “slightly safe” or “not at all safe” walking alone in their neighborhood.**

### Perceived Safety of Walking Alone in the Neighborhood (Yellowstone County, 2020)



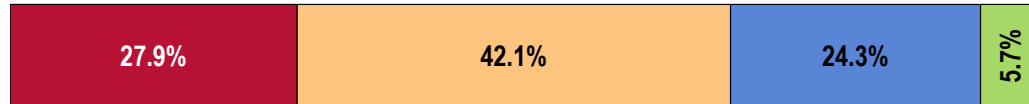
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 304]  
 Notes: • Asked of all respondents.

## Key Informant Input: Injury & Violence

Most key informants taking part in an online survey characterized *Injury & Violence* as either a “major problem” or a “moderate problem” in the community.

### Perceptions of Injury and Violence as a Problem in the Community (Key Informants, 2020)

■ Major Problem ■ Moderate Problem ■ Minor Problem ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Asked of all respondents.

### Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

#### Drugs/Alcohol

*The increase in the number of crimes of domestic violence due to the problems associated with the meth abuse in our community. – Government Representative*

*Substance abuse issues in our community have led to an increase in violent crimes like injury and violence. – Educator*

*With the meth epidemic, there has been a rise in injury from violence. – Healthcare Provider*

*Injury and violence have increased substantially in the community, mostly due to illicit substances. Just this week, my neighbor had seven bullets shot into her house, and we live in a nice neighborhood. – Healthcare Provider*

*Violence and injury of drug and alcohol use, methamphetamine in particular. – Government Representative*

*I think injury and violence are a major problem in our community because we have so many issues with substance abuse. We have a high incidence of traffic fatalities. – Educator*

*There is a lot of unhealthy use of drugs, legal and not legal. Alcoholism and drug addiction are a major contributor to injury and violence. Isolation of families in rural areas and in non-social neighborhoods adds to this problem. – Government Representative*

*My response is based on drug and alcohol abuse in our community and the number of children in the foster care system. – Community Leader*

*Drinking is a huge problem in the county, which results in domestic violence. – Community Leader*

*The mental health and drug issues have increased the number of reports. – Community Leader*

#### Domestic/Family Violence

*Domestic abuse and addiction are co-occurring. Lack of treatment on demand to meet the client when they are ready. Lack of immediate mental health and transitional housing. I believe that we release too many people back into the community that have not had their addiction or mental health issues resolved because we do not have the space to keep them and the staff to coordinate a long-term solution. Three days in psyche hold does not help when they are released and have not been given any tools or have to wait 3 or 4 months to see a psychiatrist to get on medications. – Public Health Representative*

*Constant articles in the paper about violence and domestic violence. – Business Leader*

*Increased rates and severity of domestic violence, high rate of traffic accidents, gun violence is common and high suicide rates. – Public Health Representative*

*I worked for a number of years in the field of human services and have seen firsthand the level of domestic violence and also violence related to substance addiction and mental illness. In addition, in regard to injury, given the high level of refinery and manufacturing work in Billings, job related injury is high. Lastly, Montana is a “gun state” in which almost everyone owns/has access to firearms, increasing the risk for high-level violence and injury. – Business Leader*

*Domestic violence is an epidemic not only in Billings/Yellowstone County but across the state and country. The resources that are available to survivors are not enough to meet the need and our community does not have enough police officers to adequately address community safety. – Community Leader*

### Prevalence/Incidence

*It seems that the number of injuries and violence in our community are increasing. Billings has become a center for human trafficking and illegal drugs. We have a continuing increase in abused and neglected children going into the state foster care system. A vast number have parents that have major addiction. Suicide continues to stay high for youth and adults, and there are so many vehicle and motorcycle accidents due to alcohol use that they have become a norm. – Community Leader*

*It appears so frequently in the news. Also, there is much abuse that happens that is never seen. – Healthcare Provider*

*Assault and penetrating trauma have increased for the trauma registries at both hospitals. Billings Clinic trauma registry has grown 4-5% every year for the past 9 years. Motor Vehicle crash death rates for Montana are 5-10 times greater than other states in the country. Some of this is due to seatbelt use and higher rates of driving while intoxicated. As numerous as motor vehicle crash is, injuries from falls are greater in number in the trauma registries with it actually being the number-one cause of injury.*

*Emergency rooms deal with a great deal of partner and family violence as well as violence from mental health issues that spill over. The system seems overwhelmed. – Healthcare Provider*

*Montana has the highest suicide rate in the nation. – Healthcare Provider*

*High incidences of assault, family and domestic violence, elder abuse and child neglect, largely contributed to by drug and alcohol use and poverty. – Healthcare Provider*

### Contributing Factors

*Culture. – Healthcare Provider*

*Racism—it creates violence that actively destroys the lives of all people in the Billings community. The community refuses to provide visible leadership which actively confronts this health issue. As a result, racism will continue to underlie many of the other issues in Billings. – Community Leader*

*I've read that two out of three Native women under 21 will be sexually abused. We have a lot of assaults and murders. – Business Leader*

*Lack of resources for victims in crisis. – Public Health Representative*

### Vulnerable Populations

*There is a significant risk of violence in Yellowstone County especially amongst the homeless and the transgender community. 40% of homeless youth in Billings are LGBTQ+ and at an increased risk for trafficking and violence from pimps and johns. The rate of domestic violence in Billings is above the national average. Montana has the highest suicide rate in America. – Community Leader*

*Working downtown, I see homeless people in fights and women who are in very tough situations. I also read in the newspaper about issues on the reservations that lead to deaths or disappearances. I personally feel that there are many silent people suffering. – Community Leader*

*Vagrant issues all over downtown. – Community Leader*

*Transient population in Billings, human trafficking in Yellowstone County, domestic violence due to poverty and/or drug abuse. – Healthcare Provider*

### Violence

*Until last year, we have had a significant increase in violent crime for most of this decade. – Government Representative*

*We have seen an increase in the Emergency Department in the number of injuries and severity of violent injuries. – Healthcare Provider*

*Mass shootings, professionals are being targeted by the public. – Healthcare Provider*

*Our community has become very unsafe due to violent attacks, domestic violence, and child abuse. – Healthcare Provider*

## Diabetes

### About Diabetes

Diabetes mellitus occurs when the body cannot produce or respond appropriately to insulin. Insulin is a hormone that the body needs to absorb and use glucose (sugar) as fuel for the body's cells. Without a properly functioning insulin signaling system, blood glucose levels become elevated and other metabolic abnormalities occur, leading to the development of serious, disabling complications. Many forms of diabetes exist; the three common types are Type 1, Type 2, and gestational diabetes. Effective therapy can prevent or delay diabetic complications.

Diabetes mellitus:

- Lowers life expectancy by up to 15 years.
- Increases the risk of heart disease by 2 to 4 times.
- Is the leading cause of kidney failure, lower limb amputations, and adult-onset blindness.

The rate of diabetes mellitus continues to increase both in the United States and throughout the world. Due to the steady rise in the number of persons with diabetes mellitus, and possibly earlier onset of type 2 diabetes mellitus, there is growing concern about the possibility that the increase in the number of persons with diabetes mellitus and the complexity of their care might overwhelm existing healthcare systems.

People from minority populations are more frequently affected by type 2 diabetes. Minority groups constitute 25% of all adult patients with diabetes in the US and represent the majority of children and adolescents with type 2 diabetes.

Lifestyle change has been proven effective in preventing or delaying the onset of type 2 diabetes in high-risk individuals.

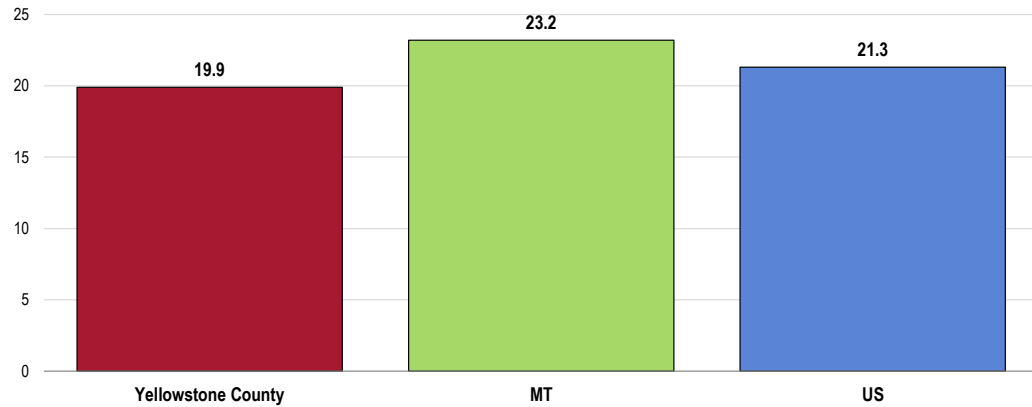
— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Age-Adjusted Diabetes Deaths

**Between 2015 and 2017, there was an annual average age-adjusted diabetes mortality rate of 19.9 deaths per 100,000 population in Yellowstone County.**

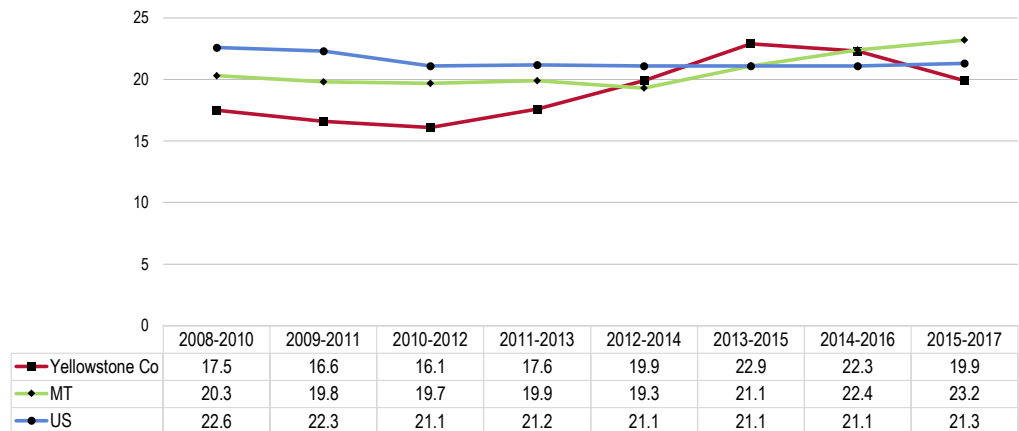
- **BENCHMARK:** Lower than the Montana and US mortality rates.
- **TREND:** Decreasing in recent years but higher than the baseline mortality rate.

### Diabetes: Age-Adjusted Mortality (2015-2017 Annual Average Deaths per 100,000 Population) Healthy People 2020 = 20.5 or Lower (Adjusted)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective D-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
  - The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

### Diabetes: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 = 20.5 or Lower (Adjusted)



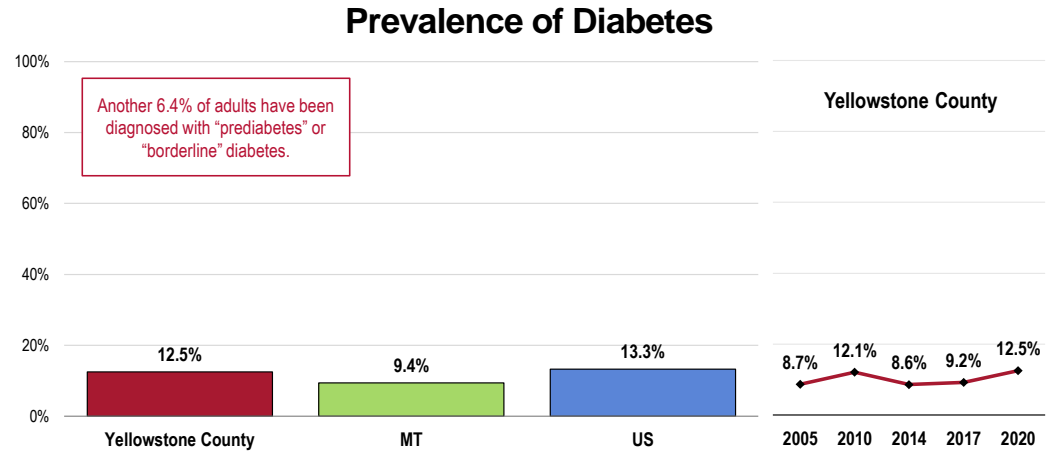
- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective D-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
  - The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.



## Prevalence of Diabetes

A total of 12.5% of Yellowstone County adults report having been diagnosed with diabetes.

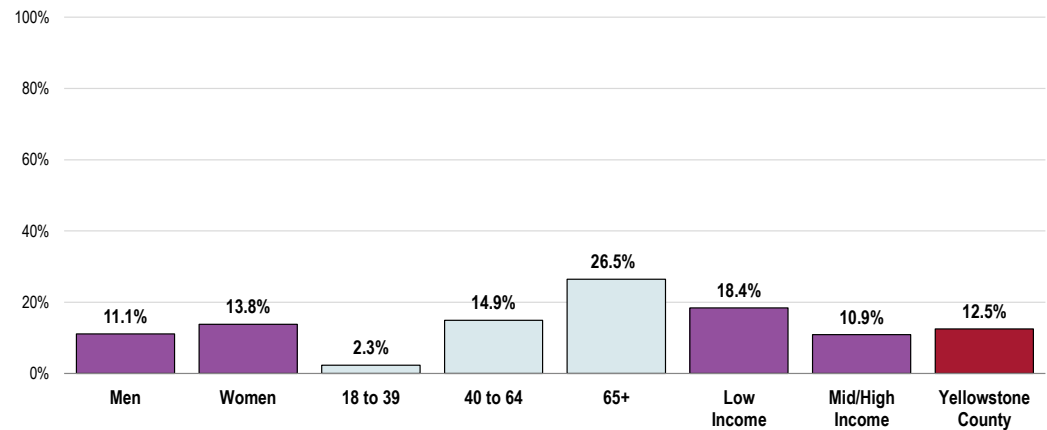
- **DISPARITY:** Correlates strongly with age among survey respondents.



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 140]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 • 2017 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.

## Prevalence of Diabetes (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 140]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Excludes gestational diabetes (occurring only during pregnancy).

## Key Informant Input: Diabetes

Many key informants taking part in an online survey characterized *Diabetes* as a “moderate problem” in the community (followed closely by “major problem” ratings).

### Perceptions of Diabetes as a Problem in the Community (Key Informants, 2020)

■ Major Problem ■ Moderate Problem ■ Minor Problem ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Asked of all respondents.

## Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

### *Disease Management*

*Medication compliance and unhealthy lifestyles and diet. – Healthcare Provider*  
*I think controlling it is an issue. Not getting to the point of having Type 2 diabetes should be a strong focus of any community. Again, this is a major cost issue for many. – Business Leader*  
*Proper care and follow-up. Prediabetes intervention needs to be strengthened. – Business Leader*  
*Diet, individuals are not committed to changing their diet. – Healthcare Provider*  
*Willingness to comply with instructions. – Healthcare Provider*  
*Compliance and prevention. – Healthcare Provider*  
*Lack of taking some personal responsibility in their care. They cannot expect everyone else to take care of their needs if they assume no interest in it. – Community Leader*  
*Compliance with a healthier lifestyle. – Healthcare Provider*

### *Access to Medications/Supplies*

*The cost of medications, getting the proper medical care and follow-up. Diet decisions. – Community Leader*  
*Insulin copays. There is a need for peer mentoring program with our Native American populations. Re-education that diabetes is long-term and must be managed daily. I don't think some folks understand the implications of missing doses or erroneous dosing. – Public Health Representative*  
*Cost of medication. – Community Leader*  
*Access to medicine and good nutrition. – Healthcare Provider*  
*Insulin is expensive. Noncompliance is huge—patients don't take meds, don't follow diet, don't exercise, etc. Usually have multiple other conditions. Either lack of insurance or underinsured. Truck drivers cannot drive if they take insulin, thus they just don't do it. Fresh produce and appropriate diet are not readily available and is unaffordable for many that need this diet. – Healthcare Provider*  
*Paying for insulin and other expenses of staying well. – Business Leader*

### *Contributing Factors*

*Unfortunately, diabetes is becoming more prevalent due to many factors: age, diet and lack of exercise. The cost of purchasing insulin and other necessary items to manage diabetes has become prohibitive for many patients. – Government Representative*

*Access to healthy foods is a problem. There are no grocery stores on the Southside of Billings where there is a concentration of people living in poverty. Also, the cost of medical care for diabetics is out of control and out of reach for many people. – Community Leader*

*Diet and exercise. – Public Health Representative*

*Due to economic and poverty conditions with the American Indian community, there is very little ability to acquire health foods. Foods purchased are usually those items that are inexpensive and last a long time such as cereals, potatoes, bread, soda, and other items that contain sugars. Also, the abuse of alcohol is a contributing factor. – Community Leader*

### **Prevalence/Incidence**

*Diabetes is a highly prevalent disease in our community due to obesity and our Native population. – Healthcare Provider*

*Several people suffer from some type of diabetes. – Community Leader*

*We are seeing a higher prevalence of reported pre-diabetes in adults. Higher prevalence in American Indian population. Less healthy lifestyles are leading to increased prevalence. Difficult to manage the disease. – Public Health Representative*

*Many people I know are either diabetic or pre-diabetic. Those that are pre-diabetic do not know much about the disease and aren't doing anything to manage their risk of becoming diabetic. – Community Leader*

### **Awareness/Education**

*Education about diabetes, access to and/or interest in good nutrition, understanding about what things can exacerbate diabetes issues. – Healthcare Provider*

*Education, it is culturally acceptable to make poor choices in food and drink and live an unhealthy lifestyle. – Educator*

*Lack of information on lifestyle change and preventative care. I think many people are on the line of diabetes and instead of having a conversation about how this disease impacts the entire body, they are told to eat less carbs and lose weight. There are many ways to find balance with this chronic condition and instead there is such a fear factor associated with it, there isn't even a conversation about all the parts of their body impacted by it. – Educator*

### **Access to Healthy Food**

*Not enough places to buy healthy food. Unhealthy school lunches. Non-walkable places to live or work. – Government Representative*

*Access to affordable and convenient healthy food options, time and support for exercise and activity, community support for healthy and active lifestyles. – Government Representative*

*Affordable, good food. Healthy food. Good lifestyle. – Community Leader*

### **Obesity**

*Obesity is a major problem in our community, despite having good access to healthy foods. – Public Health Representative*

*This is a silent epidemic with many not knowing and obesity is becoming more prevalent. Lifestyles do not allow enough time for healthy eating, exercise and stress reduction. – Public Health Representative*

*We have a significant obesity issue in this county and often times this impacts diabetes. – Healthcare Provider*

### **Prevention**

*Getting it when for the most part, it is preventable. – Community Leader*

*Preventative care and good evidence-based, adolescent diabetes management prevention and treatment. – Healthcare Provider*

*Treatment is focused on disease treatment rather than prevention early on. – Public Health Representative*

### **Access to Care/Services**

*Not enough resources. – Community Leader*

*I lack understanding of the accessibility and affordability of treatment in Yellowstone County. I imagine that for those with limited means, access to treatment, education, dialysis, or other service may be difficult, if not for the lack of coverage, then for the difficulty in scheduling and the inability to miss work to attend. Another big challenge that is not necessarily limited to Yellowstone County is eating and living a healthy lifestyle to control diabetes while the “American Diet” is prevalent. – Business Leader*

#### **Affordable Care/Services**

*Affordable care and diabetes management supplies. – Healthcare Provider*

*Even if people have health insurance, the deductibles are often high and there is no cover for related costs. For example, diabetic patients may have trouble affording diabetes supplies, including insulin and glucose testing. Many people with Type 2 diabetes have lower incomes that makes it hard for them to afford healthier foods. Or they live in neighborhoods without sidewalks that discourage walking, etc. – Community Leader*

#### **Access to Providers**

*Finding a physician and maintaining a relationship. They come to Billings, but often don't stay more than a few years. – Business Leader*

#### **Diagnosis/Treatment**

*People that are undiagnosed and people who choose not to treat the disease. – Community Leader*

#### **Poverty**

*Billings is a resource rich community with few healthcare access challenges. I suspect the greatest challenge for this issue is access for those in poverty, who are also at greater risk for diabetes. – Business Leader*

#### **Lifestyle**

*Lifestyle and lack of understanding of risk factors. – Government Representative*

## Kidney Disease

### About Kidney Disease

Chronic kidney disease and end-stage renal disease are significant public health problems in the United States and a major source of suffering and poor quality of life for those afflicted. They are responsible for premature death and exact a high economic price from both the private and public sectors. Nearly 25% of the Medicare budget is used to treat people with chronic kidney disease and end-stage renal disease.

Genetic determinants have a large influence on the development and progression of chronic kidney disease. It is not possible to alter a person's biology and genetic determinants; however, environmental influences and individual behaviors also have a significant influence on the development and progression of chronic kidney disease. As a result, some populations are disproportionately affected. Successful behavior modification is expected to have a positive influence on the disease.

Diabetes is the most common cause of kidney failure. The results of the Diabetes Prevention Program (DPP) funded by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) show that moderate exercise, a healthier diet, and weight reduction can prevent development of type 2 diabetes in persons at risk.

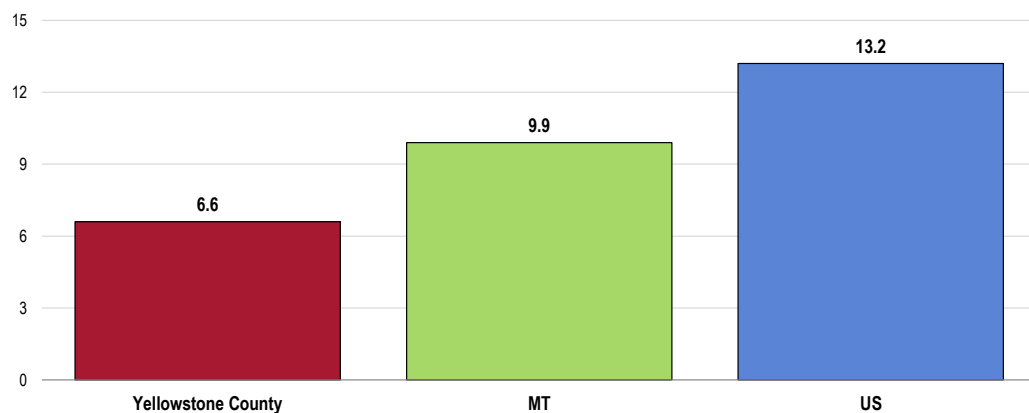
— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Age-Adjusted Kidney Disease Deaths

**Between 2015 and 2017, there was an annual average age-adjusted kidney disease mortality rate of 6.6 deaths per 100,000 population in Yellowstone County.**

- **BENCHMARK:** Below the state and national mortality rates.
- **TREND:** The mortality rate has decreased over time, in keeping with state and national trends.

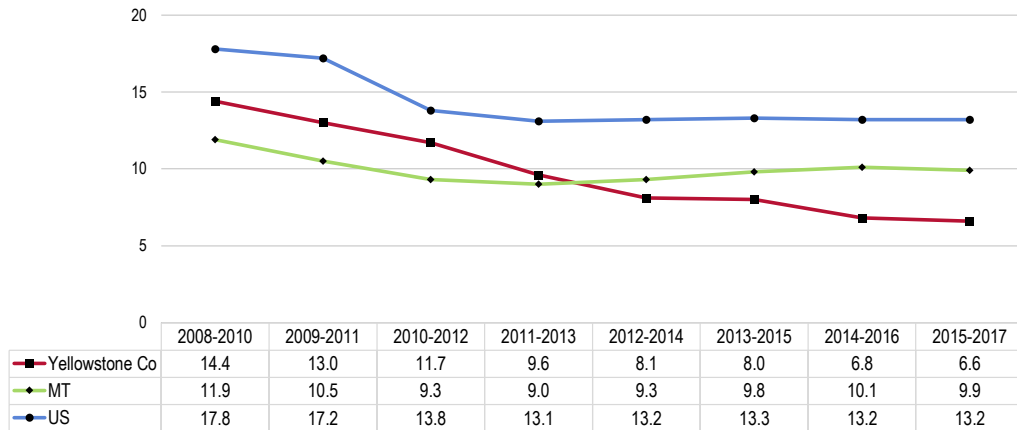
**Kidney Disease: Age-Adjusted Mortality**  
(2015-2017 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.

Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
• Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Kidney Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



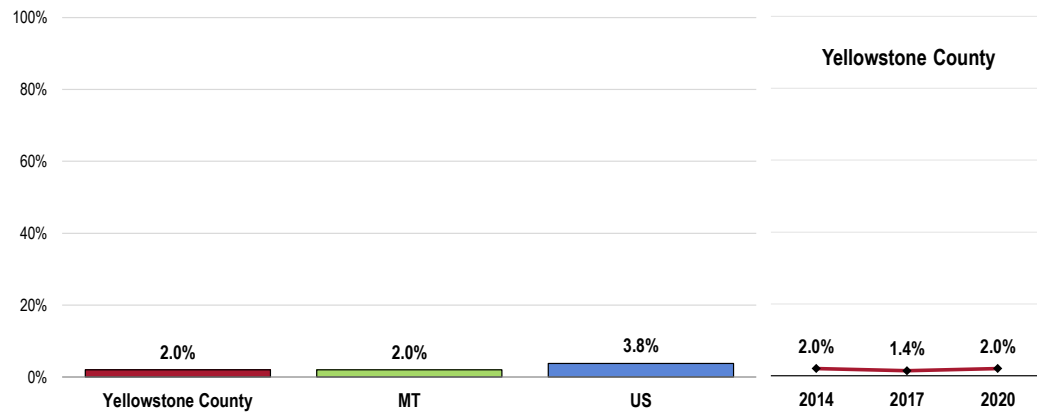
Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.  
 Notes: ● Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
 ● Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Prevalence of Kidney Disease

A total of 2.0% of Yellowstone County adults report having been diagnosed with kidney disease.

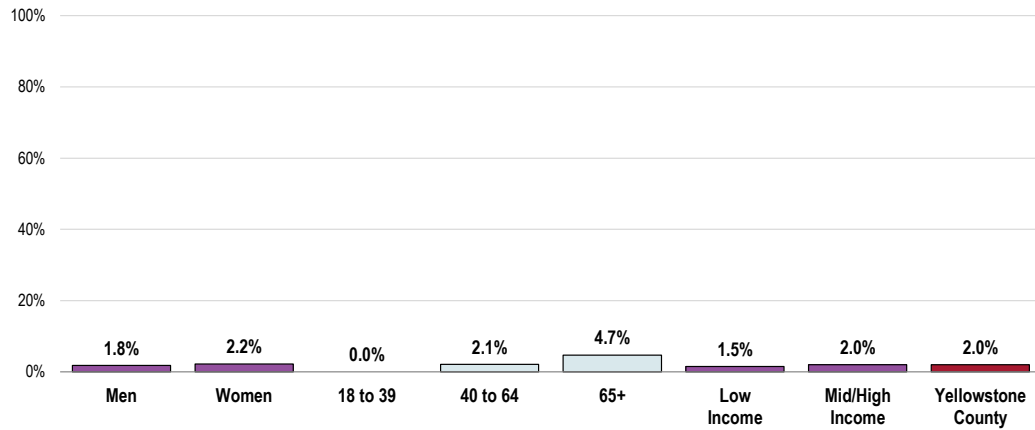
- **DISPARITY:** Increases with age among survey respondents.

### Prevalence of Kidney Disease



Sources: ● 2020 PRC Community Health Survey, PRC, Inc. [Item 30]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 ● 2017 PRC National Health Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

## Prevalence of Kidney Disease (Yellowstone County, 2020)

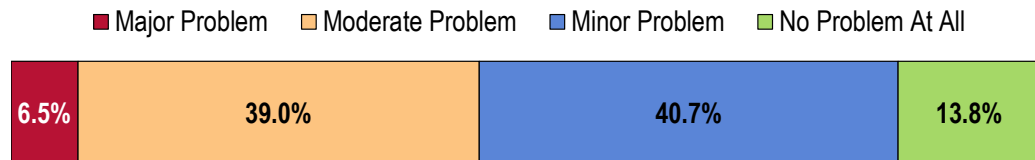


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 30]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Key Informant Input: Kidney Disease

Key informants taking part in an online survey were similarly likely to characterize *Kidney Disease* as a “moderate problem” and a “minor problem” in the community.

## Perceptions of Kidney Disease as a Problem in the Community (Key Informants, 2020)



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

## Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

### Prevalence/Incidence

*We see many patients with end stage kidney disease—many of them are back in the hospital numerous times a year as the disease progresses. Dialysis centers are few, with many having to travel a long distance to get to dialysis and home again. These folks usually have multiple conditions, requiring many healthcare resources, many have no insurance, or are underinsured for the amount of care/treatment they are requiring. – Healthcare Provider*

*Poorly controlled Type 2 diabetic management is rampant with high incidences of chronic kidney disease, neuropathy, and cardiovascular disease as well. – Healthcare Provider*

*There are a significant number of patients with kidney problems in our community. – Business Leader*

#### **Access to Care/Services**

*Billings Clinic has expanded its capacity to treat those using dialysis. – Government Representative*

*There is not enough access and literature in regard to how to treat the disease personally. –  
Community Leader*

#### **Comorbidities**

*This is a common disease among our Native population, primarily due to diabetes. – Healthcare  
Provider*

*Morbid obesity, Native American population, poor compliance with diabetes. – Healthcare Provider*



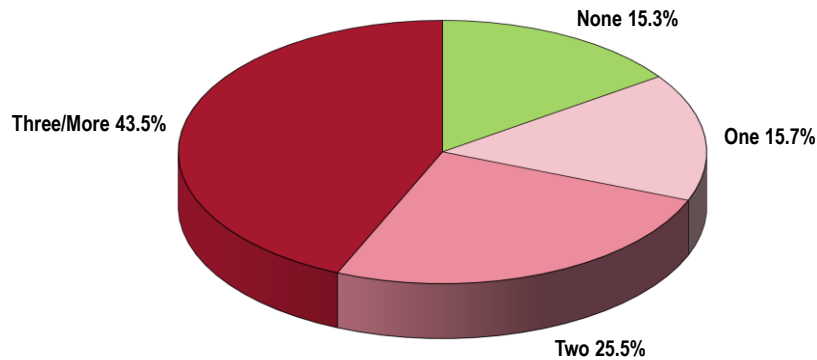
## Potentially Disabling Conditions

### Multiple Chronic Conditions

Among Yellowstone County survey respondents, most report currently having at least one chronic health condition.

For the purposes of this assessment, chronic conditions include lung disease, arthritis, sciatica, cancer, osteoporosis, kidney disease, heart attack, angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression. Multiple chronic conditions are concurrent conditions.

**Number of Current Chronic Conditions**  
(Yellowstone County, 2020)

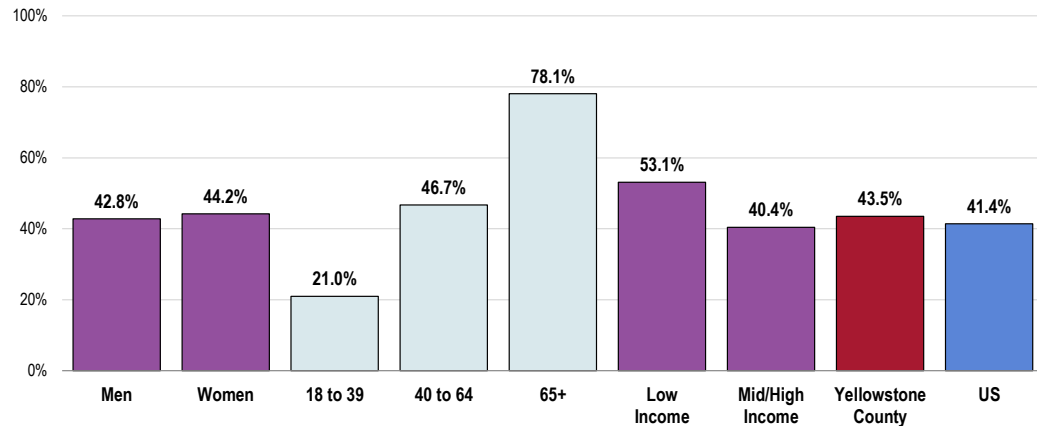


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 143]  
 Notes: • Asked of all respondents.  
 • In this case, chronic conditions include lung disease, arthritis, sciatica, cancer, osteoporosis, kidney disease, heart attack, angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression.

In fact, 43.5% of Yellowstone County adults report having three or more chronic conditions.

- **DISPARITY:** Correlates significantly with age, as shown.

**Currently Have Three or More Chronic Conditions**  
(Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 143]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • In this case, chronic conditions include lung disease, arthritis, sciatica, cancer, osteoporosis, kidney disease, heart attack, angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression.

## Activity Limitations

### About Disability & Health

An individual can get a disabling impairment or chronic condition at any point in life. Compared with people without disabilities, people with disabilities are more likely to:

- Experience difficulties or delays in getting the health care they need.
- Not have had an annual dental visit.
- Not have had a mammogram in past 2 years.
- Not have had a Pap test within the past 3 years.
- Not engage in fitness activities.
- Use tobacco.
- Be overweight or obese.
- Have high blood pressure.
- Experience symptoms of psychological distress.
- Receive less social-emotional support.
- Have lower employment rates.

There are many social and physical factors that influence the health of people with disabilities. The following three areas for public health action have been identified, using the International Classification of Functioning, Disability, and Health (ICF) and the three World Health Organization (WHO) principles of action for addressing health determinants.

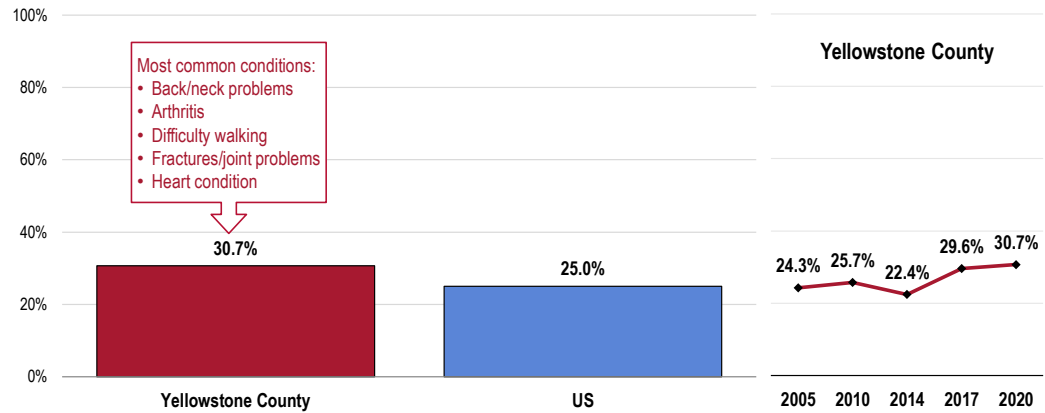
- **Improve the conditions of daily life** by: encouraging communities to be accessible so all can live in, move through, and interact with their environment; encouraging community living; and removing barriers in the environment using both physical universal design concepts and operational policy shifts.
- **Address the inequitable distribution of resources among people with disabilities and those without disabilities** by increasing: appropriate health care for people with disabilities; education and work opportunities; social participation; and access to needed technologies and assistive supports.
- **Expand the knowledge base and raise awareness about determinants of health for people with disabilities** by increasing: the inclusion of people with disabilities in public health data collection efforts across the lifespan; the inclusion of people with disabilities in health promotion activities; and the expansion of disability and health training opportunities for public health and health care professionals.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**A total of 30.7% of Yellowstone County adults are limited in some way in some activities due to a physical, mental, or emotional problem.**

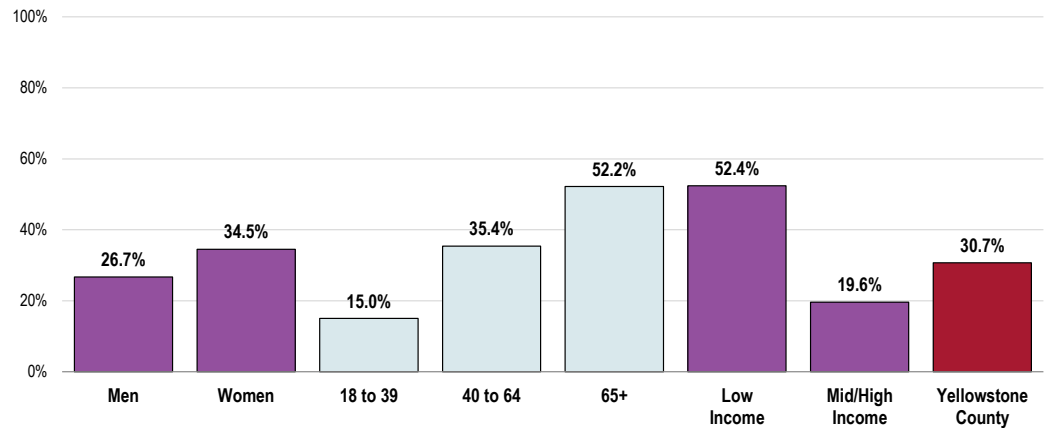
- **BENCHMARK:** Worse than the US prevalence.
- **TREND:** Denotes a statistically significant increase since 2005.
- **DISPARITY:** More often reported among seniors and respondents in low-income households.

### Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 109-110]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

### Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 109]  
 Notes: • Asked of all respondents.  
 • Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Arthritis, Osteoporosis & Chronic Back Conditions

### About Arthritis, Osteoporosis & Chronic Back Conditions

There are more than 100 types of arthritis. Arthritis commonly occurs with other chronic conditions, such as diabetes, heart disease, and obesity. Interventions to treat the pain and reduce the functional limitations from arthritis are important and may also enable people with these other chronic conditions to be more physically active. Arthritis affects 1 in 5 adults and continues to be the most common cause of disability. It costs more than \$128 billion per year. All of the human and economic costs are projected to increase over time as the population ages. There are interventions that can reduce arthritis pain and functional limitations, but they remain underused. These include: increased physical activity; self-management education; and weight loss among overweight/obese adults.

Osteoporosis is a disease marked by reduced bone strength leading to an increased risk of fractures (broken bones). In the United States, an estimated 5.3 million people age 50 years and older have osteoporosis. Most of these people are women, but about 0.8 million are men. Just over 34 million more people, including 12 million men, have low bone mass, which puts them at increased risk for developing osteoporosis. Half of all women and as many as 1 in 4 men age 50 years and older will have an osteoporosis-related fracture in their lifetime.

Chronic back pain is common, costly, and potentially disabling. About 80% of Americans experience low back pain in their lifetime. It is estimated that each year:

- 15%-20% of the population develop protracted back pain.
- 2-8% have chronic back pain (pain that lasts more than 3 months).
- 3-4% of the population is temporarily disabled due to back pain.
- 1% of the working-age population is disabled completely and permanently as a result of low back pain.

Americans spend at least \$50 billion each year on low back pain. Low back pain is the:

- 2<sup>nd</sup> leading cause of lost work time (after the common cold).
- 3<sup>rd</sup> most common reason to undergo a surgical procedure.
- 5<sup>th</sup> most frequent cause of hospitalization.

Arthritis, osteoporosis, and chronic back conditions all have major effects on quality of life, the ability to work, and basic activities of daily living.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**Over one-third of Yellowstone County adults age 50 and older (38.9%) reports suffering from arthritis or rheumatism.**

- **BENCHMARK:** Similar to national findings.

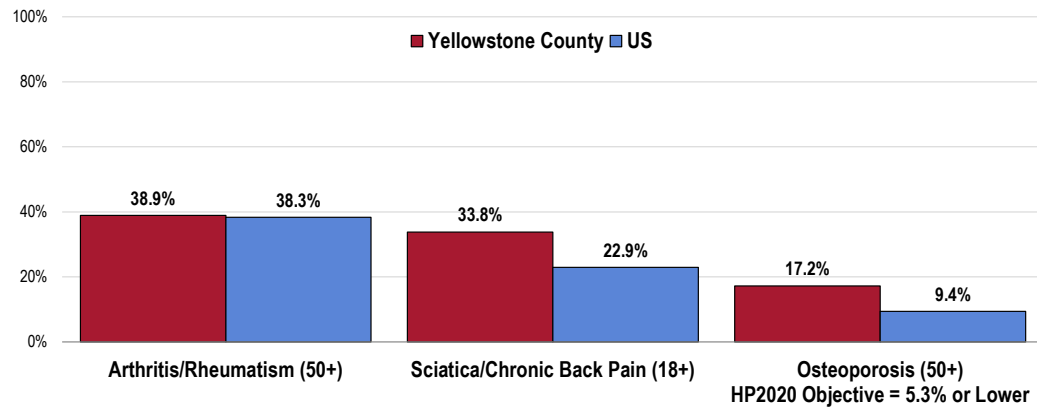
**A total of 17.2% of Yellowstone County adults age 50 and older have osteoporosis.**

- **BENCHMARK:** Well above the national figure and three times the Healthy People 2020 objective.

A total of 33.8% of Yellowstone County adults (18 and older) suffer from chronic back pain or sciatica.

- **BENCHMARK:** Worse than the US prevalence.
- **TREND:** Denotes a statistically significant increase since 2005 (not shown).

### Prevalence of Potentially Disabling Conditions

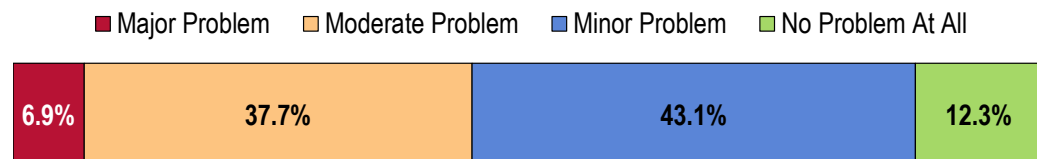


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 26, 141-142]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AOCBC-10]  
 Notes: • The sciatica indicator reflects the total sample of respondents; the arthritis and osteoporosis columns reflect adults age 50+.

### Key Informant Input: Arthritis, Osteoporosis & Chronic Back Conditions

Many key informants taking part in an online survey characterized *Arthritis, Osteoporosis & Chronic Back Conditions* as a “minor problem” in the community.

### Perceptions of Arthritis/Osteoporosis/Back Conditions as a Problem in the Community (Key Informants, 2020)



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

### Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

#### Prevalence/Incidence

Seeing more and more of it just within the addiction counseling field. – Healthcare Provider

*Family experience having experienced challenges to receive quality care for all three—arthritis, osteoporosis, and back conditions. Some doctors prescribe medications for these that cause other issues unrelated to the original diagnosis. Some doctors are not willing to provide patients with medical care outside of traditional western medicine. – Government Representative*

*I interact with many people on a daily basis suffering from back pain, who feel their only remedy is surgery and pain medications. – Community Leader*

**Contributing Factors**

*Aging population, a lot of manual labor jobs. – Community Leader*

*Poor physical conditioning plus high substance abuse in an area with no seatbelt laws makes the incidence of severe motor vehicle accidents a common occurrence. – Healthcare Provider*

*I would anticipate this is a major problem as we have several refineries and industrial/mechanical industries in the area; jobs that often result in significant back issues. Additionally, we have an aging population which often is accompanied by issues with arthritis/osteoporosis. – Business Leader*

**Aging Population**

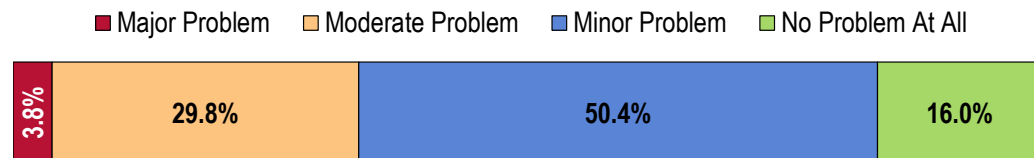
*We have a significant elder population and these affect that population. – Healthcare Provider*

*Arthritis, osteoporosis and back conditions are a major problem because of the large number of aging people over age 65 in Yellowstone County. – Government Representative*

**Key Informant Input: Vision & Hearing**

Half of key informants taking part in an online survey characterized *Vision & Hearing* as a “minor problem” in the community.

**Perceptions of Vision and Hearing as a Problem in the Community**  
(Key Informants, 2020)



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Asked of all respondents.

**Top Concerns**

Among those rating this issue as a “major problem,” reasons related to the following:

**Affordable Care/Services**

*These items are costly and not often covered by insurance. Consequently, they are left untreated. – Healthcare Provider*

*Vision, especially for children of limited income. – Educator*

*Hearing aids not covered by Medicaid or Medicare. This is important to the seniors I work with and it affects their quality of life and their ability to volunteer. – Community Leader*

**Vulnerable Populations**

*We have a large homeless population and many who are underserved and uninsured. – Business Leader*

## Alzheimer’s Disease

### About Dementia

Dementia is the loss of cognitive functioning—thinking, remembering, and reasoning—to such an extent that it interferes with a person’s daily life. Dementia is not a disease itself but rather a set of symptoms. Memory loss is a common symptom of dementia, although memory loss by itself does not mean a person has dementia. Alzheimer’s disease is the most common cause of dementia, accounting for the majority of all diagnosed cases.

Alzheimer’s disease is the 6th leading cause of death among adults age 18 years and older. Estimates vary, but experts suggest that up to 5.1 million Americans age 65 years and older have Alzheimer’s disease. These numbers are predicted to more than double by 2050 unless more effective ways to treat and prevent Alzheimer’s disease are found.

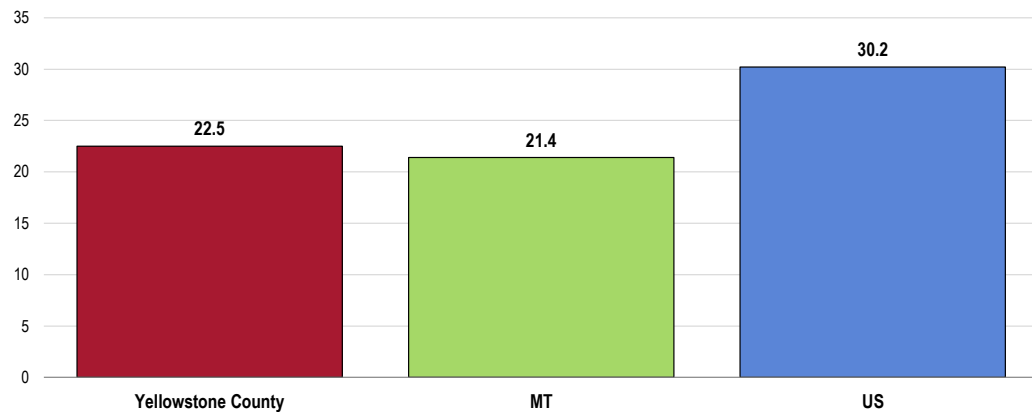
— Healthy People 2020 (www.healthypeople.gov)

### Age-Adjusted Alzheimer’s Disease Deaths

Between 2015 and 2017, there was an annual average age-adjusted Alzheimer’s disease mortality rate of 22.5 deaths per 100,000 population in Yellowstone County.

- **BENCHMARK:** Below the US prevalence.
- **TREND:** The mortality rate has decreased in recent years.

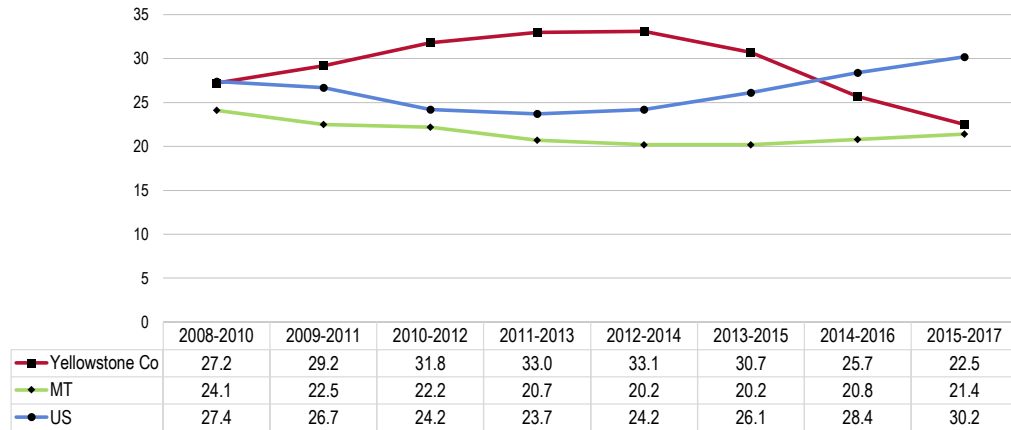
**Alzheimer's Disease: Age-Adjusted Mortality**  
(2015-2017 Annual Average Deaths per 100,000 Population)



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.

Notes: ● Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
● Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Alzheimer's Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

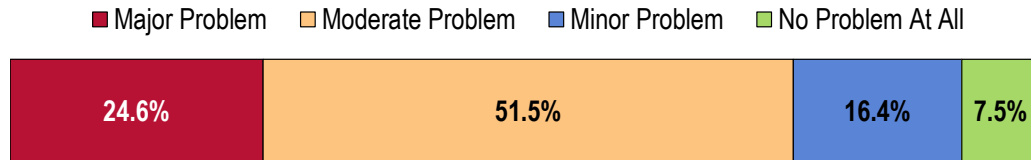


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.  
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Key Informant Input: Dementias, Including Alzheimer’s Disease

Key informants taking part in an online survey are most likely to consider *Dementias, Including Alzheimer’s Disease* as a “moderate problem” in the community.

### Perceptions of Dementia/Alzheimer's Disease as a Problem in the Community (Key Informants, 2020)



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

### Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

#### Aging Population

*Growing aging community, we are one of the oldest states. – Community Leader*

*We are an aging community and we have an increasing number of community members with problems. – Business Leader*

*Billings has a large over 60 population. It would statistically put us at a higher occurrence rate. It is becoming more prevalent. – Community Leader*



*Many elderly people are diagnosed with this disease. – Community Leader*

*We are an aging community and I'm worried about elderly citizens, living alone and not receiving care for their dementia/Alzheimer's. I'm not sure neighbors or shop keepers know how to react or what to do to provide support. Should we call the police with concerns or an urgent care center? – Community Leader*

*Aging community, dementia-friendly designations has brought attention to the disease. Growing number of memory care units in Yellowstone County. – Public Health Representative*

*We are an aging population; the fastest growing age cohort is 65 and over. The incidence of dementia and Alzheimer's is going to continue to rise. – Healthcare Provider*

*We have an aging population, dementia and Alzheimer's are on the rise, and yet there is a significant lack of awareness about the disease and treatment. – Healthcare Provider*

### Access to Care/Services

*Lack of resources for the demand. – Healthcare Provider*

*It is difficult to access residential care. – Educator*

*I don't feel there are enough care facilities in the area. There is a definite lack of programs beyond care for these folks to keep them be active. – Community Leader*

*There is a lack of appropriate facilities and beds in Yellowstone County for these patients--often the most vulnerable elders in our community are being cared for in "assisted living" facilities that have a significant lack of state oversight and regulations and lack appropriate staff training for the level of care required by patients with dementia. – Community Leader*

*My in-laws both had dementia and it was a very big struggle to get appropriate care for my father in law as his condition worsened. He was kicked out of his nursing home and ended up in a psychiatric ward because nursing homes don't want to deal with the hard cases (his was not bad). Without proper care facilities it's a struggle for families. The cost of care is astronomical as well. As our population ages I believe we will see more and more dementia and the cost of care will bankrupt many. – Business Leader*

*I think it is a problem because there are not enough services or housing specifically for this care, and the care I have heard about is not quality care. – Community Leader*

*I know many people with family members with dementia/Alzheimer's, and they struggle to find good care for their family members. – Community Leader*

### Prevalence/Incidence

*I believe that we are experiencing higher volumes of dementia than what has been considered more normal in the past. – Business Leader*

*It is a growing problem with very complicated situations and can be very costly to care for. Not enough cash assistance for caregivers and families. – Community Leader*

*The numbers of people affected are increasing and I don't believe the healthcare industry is able to identify dementia and oftentimes it's mistaken for other medical issues. – Community Leader*

*I've observed it. I work with seniors in my job. It's not caught until later in the stages for many. We see it just when it's beginning. I've seen families in denial. – Community Leader*

*Dementia/Alzheimer's disease is being diagnosed more frequently because there are more people in Yellowstone County reaching the ages when these diseases are common. – Government Representative*

*Our volumes in the hospital are increasing dramatically—families bring patients in at a point that the patient has no decisional capacity, and the families cannot care for them. Worse yet are the patients that neighbors or police bring in, full blown dementia, and no family. These patients need memory care units. We have only one SNF in town that has a memory care unit, and their waiting list is huge. They are the only facility that will take Medicaid. Any other memory care units are private pay, and no one can afford those out of pocket. Families can't take home as they work, patient is too behaviorally challenging, etc. If there is not family, we must pay for a court appointed guardian, but then there is still the issue of where can they go and have the money to pay for it. – Healthcare Provider*

### Contributing Factors

*Population is aging, more people are living longer and developing dementia. Workforce shortage leaves nursing homes understaffed. Some dementia sufferers have behavior that makes them unsafe in standard skilled nursing facility and the state does not provide Medicaid funding for a higher level of care in the community. – Business Leader*

Community is aging and there is a lack of resources. – Business Leader  
 As a result of heavy drug use, there are cases of early onset of dementia. – Healthcare Provider  
 Care and stress on families. – Healthcare Provider  
 Self-neglect represents 50% of the reports at Adult Protective Services. People are not aware or choose not to get the help they need. – Community Leader  
 Care of frail, elderly, and dementia. – Healthcare Provider

**Access to Providers**

There is a lack of trained geriatricians with no access to geriatric-specific hospital units such as ACE units, seen in other areas of the country. Although there are various assisted living and nursing home facilities available, out of pocket costs or availability of Medicaid beds can be a big issue when patients and families are looking for appropriate facility care. On top of that, we do not have a standardized method to regularly assess cognitive deficits to recognize dementia early in the disease process. There is a dearth of referrals to community-based senior services such as the Yellowstone County Adult Resource Alliance. Providers may not be aware that these services exist. – Healthcare Provider  
 Decreased provider availability. – Healthcare Provider

**Diagnosis/Treatment**

The training of family practice physicians, nurse practitioners and physician assistants to recognize cognition issues and talk to the patient and families and caregiver in an honest manner. The lack of geriatricians in our community is distressing. – Community Leader

**Affordable Care/Services**

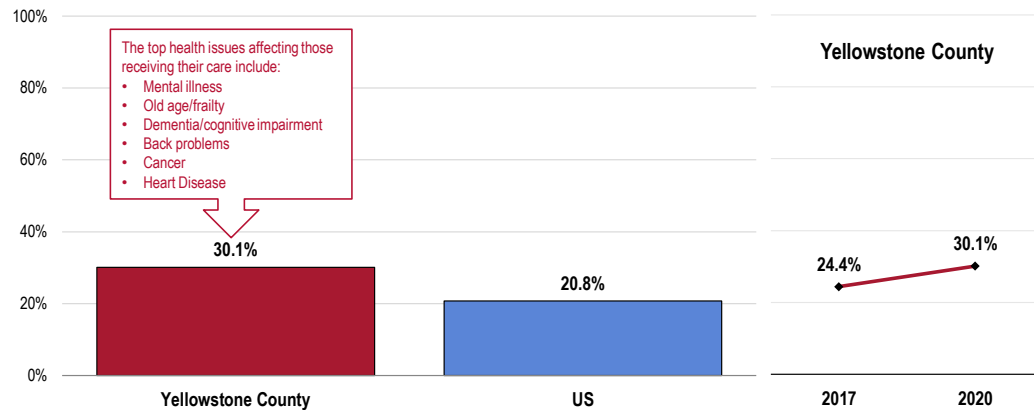
Facilities are out of reach financially for most families. – Healthcare Provider

**Caregiving**

A total of 30.1% of Yellowstone County adults currently provide care or assistance to a friend or family member who has a health problem, long-term illness, or disability.

- **BENCHMARK:** Higher than the US figure.

**Act as Caregiver to a Friend or Relative with a Health Problem, Long-Term Illness, or Disability**



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 111-112]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

## Immunization & Infectious Diseases

### Key Informant Input: Immunization & Infectious Diseases

Key informants taking part in an online survey were similarly likely to characterize *Immunization & Infectious Diseases* as a “moderate problem” or a “minor problem” in the community.

### Perceptions of Immunization and Infectious Diseases as a Problem in the Community

(Key Informants, 2020)

■ Major Problem ■ Moderate Problem ■ Minor Problem ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Asked of all respondents.

### Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

#### Immunization Rates

- Unfortunately, there are many in our community who do not believe in immunizations. – Business Leader
- We have low immunization rates. – Business Leader
- The culture of not immunizing, anti-vaccine. – Healthcare Provider
- Mandatory immunizations. – Community Leader

#### Contributing Factors

- High rates of hepatitis C due to drug using. We can provide some preventative measures to high risk populations. Sometimes miss opportunities for media campaigns to promote preventative vaccines, i.e. HPV, and immunes geared to older population, like the pneumonia or flu shot. – Public Health Representative

#### Cultural/Personal Beliefs

- School admission based on religious exemption, no current vaccinations. Home schools, no vaccination tracking. Influenza numbers are high each year in the community. – Public Health Representative

#### Awareness/Education

- I believe immunization and infectious diseases are a crisis for our entire country. The false information spread by people afraid of vaccines has led to a resurgence of preventable diseases. I am concerned about the impacts on our community from people who choose not to vaccinate their children. – Community Leader

#### Prevalence/Incidence

- Infectious disease processes like measles have made a comeback and we have a lot of confusion in the public about the safety of vaccinations. – Healthcare Provider



# Births



## Birth Outcomes & Risks

### Low-Weight Births

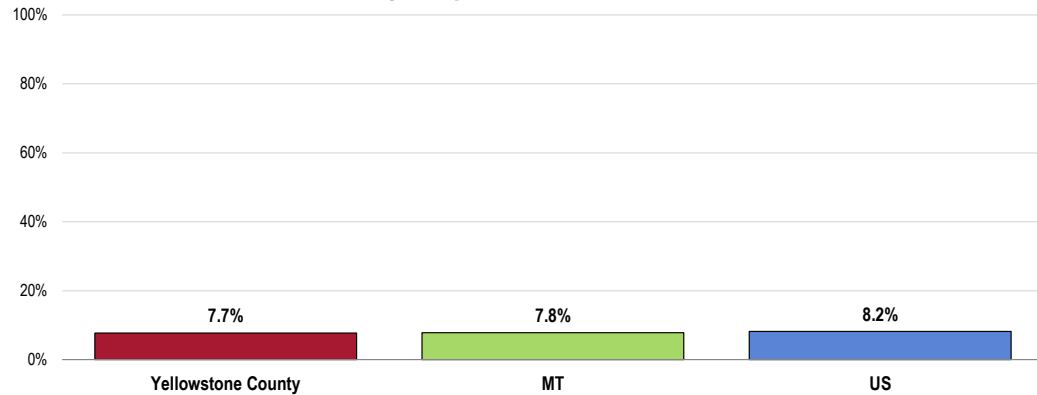
Low birthweight babies, those who weigh less than 2,500 grams (5 pounds, 8 ounces) at birth, are much more prone to illness and neonatal death than are babies of normal birthweight.

Largely a result of receiving poor or inadequate prenatal care, many low-weight births and the consequent health problems are preventable.

**A total of 7.7% of 2016-2018 Yellowstone County births were low weight.**

- **BENCHMARK:** Lower than the national percentage.
- **TREND:** Stable for much of the past decade.

#### Low-Weight Births (Percent of Live Births, 2016-2018) Healthy People 2020 = 7.8% or Lower

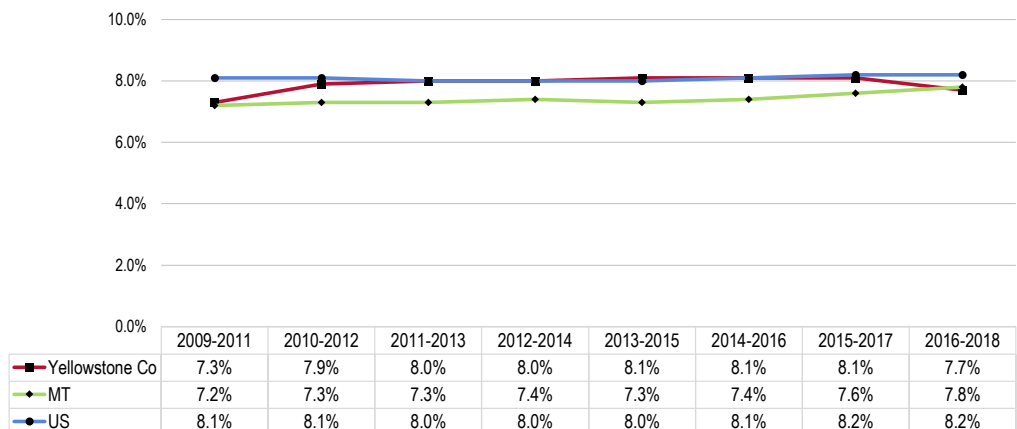


Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted October 2019.

● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-8.1]

Note: ● This indicator reports the percentage of total births that are low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

#### Low-Weight Births (Percent of Live Births) Healthy People 2020 = 7.8% or Lower



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted October 2019.

● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-8.1]

Note: ● This indicator reports the percentage of total births that are low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

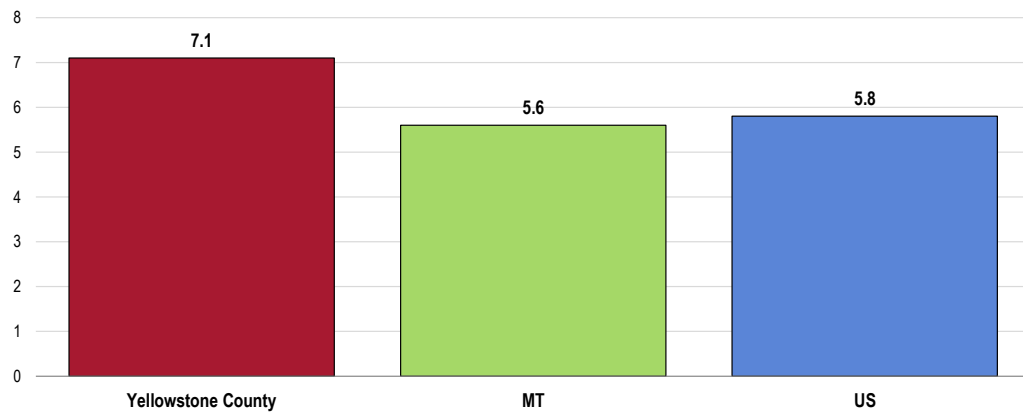
## Infant Mortality

Infant mortality rates reflect deaths of children less than one year old per 1,000 live births.

Between 2015 and 2017, there was an annual average of 7.1 infant deaths per 1,000 live births.

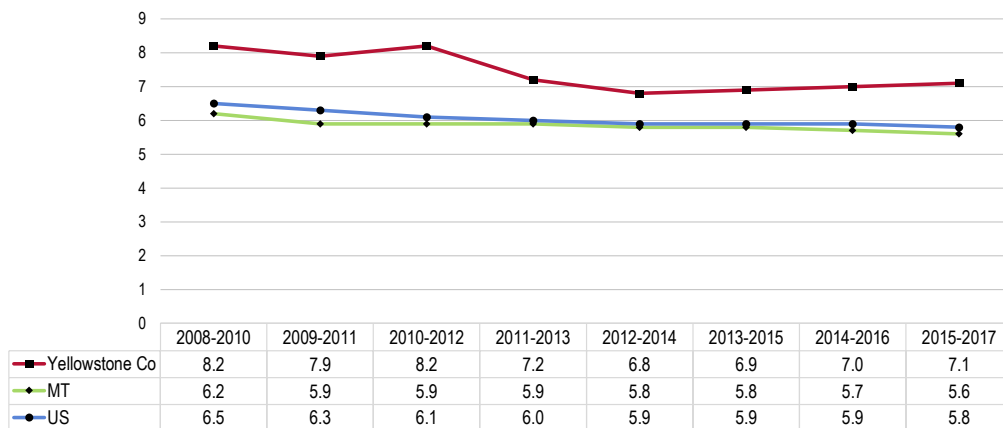
- **BENCHMARK:** Worse than state and national death rates and failing to satisfy the Healthy People 2020 objective.
- **TREND:** Decreasing over time in Yellowstone County.

**Infant Mortality Rate**  
(Annual Average Infant Deaths per 1,000 Live Births, 2015-2017)  
Healthy People 2020 = 6.0 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-1.3]
- Notes:
- Infant deaths include deaths of children under 1 year old.
  - This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

**Infant Mortality Trends**  
(Annual Average Infant Deaths per 1,000 Live Births)  
Healthy People 2020 = 6.0 or Lower



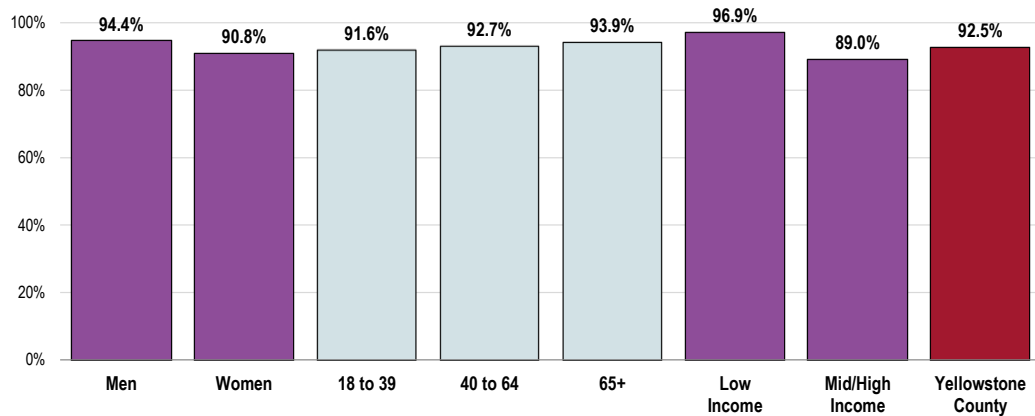
- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted October 2019.
  - Centers for Disease Control and Prevention, National Center for Health Statistics.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-1.3]
- Notes:
- Rates are three-year averages of deaths of children under 1 year old per 1,000 live births.

## Perceptions of Childhood Vaccinations

Most survey respondents (92.5%), if they had a newborn in the family, would want that newborn to receive all recommended vaccinations.

- **DISPARITY:** The prevalence is lowest among respondents in the higher income breakout.

### Would Want All Immunizations for a Newborn in the Family (Yellowstone County, 2020)

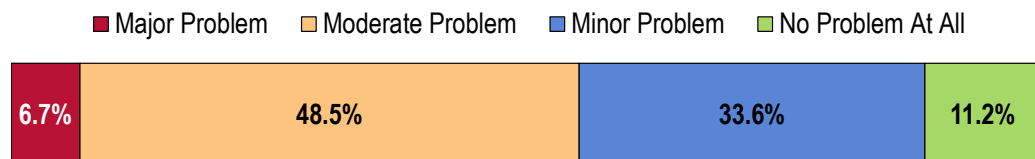


Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 325]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Key Informant Input: Infant & Child Health

Key informants taking part in an online survey generally characterized *Infant & Child Health* as a "moderate problem" in the community.

### Perceptions of Infant and Child Health as a Problem in the Community (Key Informants, 2020)



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

## Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

### Contributing Factors

*Abuse and neglect are common, especially in home with substance abuse and methamphetamine. NOWS is a common problem in neonates. Many infants are exposed to substances in utero. – Healthcare Provider*

*There is not enough emphasis on infant and childcare funding. Often families that need this help are often poor, homeless, jobless, lack education and training, and are involved in substance abuse. I hope there will be a day when we will invest in single parents with kids and families to help stabilize them. – Community Leader*

*Adverse childhood experiences. Research is crystal clear that 4 or more ACEs are predictive of multiple health problems down the road. We know when ACEs occur but have no public health approach to addressing ACEs in the moment. Our system waits for ACEs to accrue and addresses the symptoms which eventually present in acute care and/or corrections. – Community Leader*

*Adverse childhood experiences resulting in 800 to 900 children in and out of home care for child abuse and neglect. The number has doubled in the past five years and we have lost funding and services in the community to support families. – Public Health Representative*

*Child abuse and neglect. – Business Leader*

### Prevalence/Incidence

*We see a lot of neglect and abuse cases in the hospital. We do the most referrals to CPS of any facility in the state. The drug use in this county, especially meth, is crippling and destructive; the children affected by this are numerous and the effect is critical for their ability to have a normal life. Daycare is very expensive, amount of time that parents get off for maternity/paternity leave is ridiculously low; children are cared for in poor, unlicensed situations that do not always give them the mental and physical nourishment they need. – Healthcare Provider*

### Access to Care/Services

*There are no clinics located in a population of over 7000 residents. 52% of the population I deal with is in the lowest socio-economic category putting those infants at risk due to lack of access to neonatal care. There is no public transportation to this community so single mothers with newborns who may have no transportation are cut off from seeing doctors on a regular basis. – Educator*

### Teen Pregnancy

*I am assuming we have a problem as we have many teen pregnancies, much poverty and may be a lack of education regarding the needs of infants. – Healthcare Provider*

### Vulnerable Populations

*We have many homeless and people who are underserved and uninsured. – Business Leader*

### Access to Providers

*Pediatricians are overwhelmed. Competency of pediatricians is questionable. – Community Leader*



## Family Planning

### Births to Adolescent Mothers

#### About Adolescent Births

The negative outcomes associated with unintended pregnancies are compounded for adolescents. Teen mothers:

- Are less likely to graduate from high school or attain a GED by the time they reach age 30.
- Earn an average of approximately \$3,500 less per year, when compared with those who delay childbearing.
- Receive nearly twice as much Federal aid for nearly twice as long.

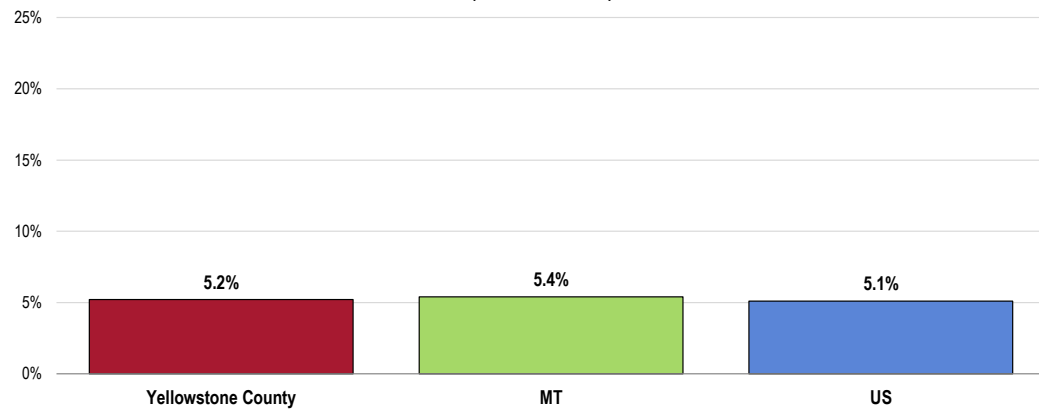
Similarly, early fatherhood is associated with lower educational attainment and lower income. Children of teen parents are more likely to have lower cognitive attainment and exhibit more behavior problems. Sons of teen mothers are more likely to be incarcerated, and daughters are more likely to become adolescent mothers.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**Between 2016 and 2018, 5.2% of all births in Yellowstone County were to adolescents age 15 to 19.**

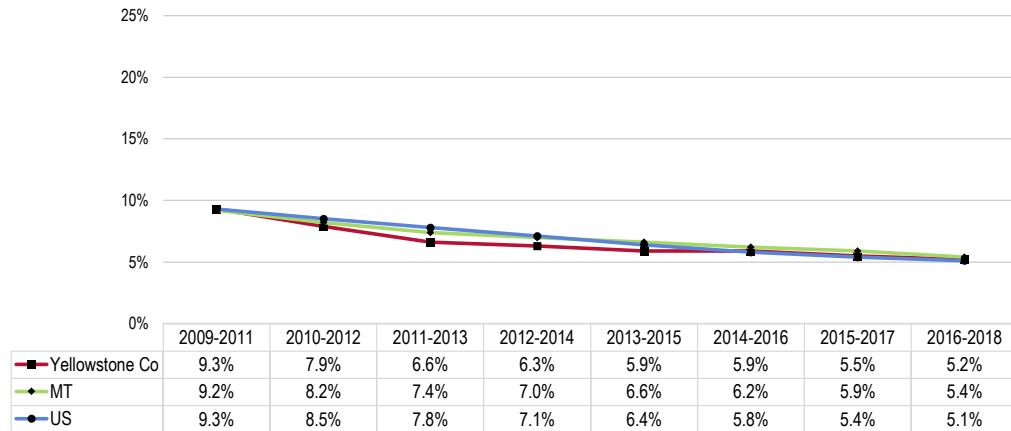
- **TREND:** The percentage has decreased over time, in keeping with Montana and US trends.

**Percentage of Births to Adolescents Age 15 to 19 (2016-2018)**



Sources: • Centers for Disease Control and Prevention, National Vital Statistics System. Accessed using CDC WONDER.  
 • Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.  
 Note: • Percentages are the proportion of live births within each population born to mothers ages 15 to 19 years.

### Adolescent Birth Trends (Percentage of Births to Adolescents Age 15-19)



Sources: 

- Centers for Disease Control and Prevention, National Vital Statistics System. Accessed using CDC WONDER.
- Retrieved from CARES Engagement Network at <https://engagementnetwork.org>.

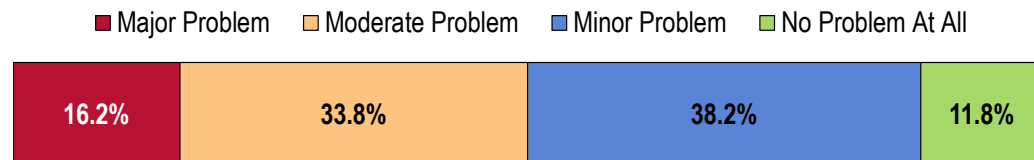
  
 Notes: 

- This indicator reports the rate of total births to women under the age of 15–19 per 1,000 female population age 15–19. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.

### Key Informant Input: Family Planning

Key informants taking part in an online survey most often characterized *Family Planning* as a “minor problem” in the community.

### Perceptions of Family Planning as a Problem in the Community (Key Informants, 2020)



Sources: 

- PRC Online Key Informant Survey, PRC, Inc.

  
 Notes: 

- Asked of all respondents.

### Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

#### Contributing Factors

*Planned Parenthood is being attacked. – Business Leader*

*For decades, Planned Parenthood has been able to provide affordable family planning on a sliding fee scale. With changes to the federal Title X program, it seems likely that in the coming months that will have to change. While PP’s doors will remain open, the sliding fee scale will most likely go away for PP patients over the age of 17. While another provider could eventually receive the Title X grant in Yellowstone County, changes to the program are also undermining its integrity and effectiveness. (For example, the new recipient could limit the birth control provided to natural family planning.). – Healthcare Provider*

*Trump is making it harder for Planned Parenthood and other family planning clinics to treat patients. There is a lack of insurance in many cases. – Business Leader*

*The political rhetoric around Planned Parenthood facilities. – Community Leader*

*Pending cuts to funding at Planned Parenthood will make family planning and reproductive healthcare out of reach for many people. Oftentimes contraceptives, especially long-term highly effective methods, are out of reach for those without healthcare coverage. Preventing unplanned/unwanted pregnancy would be so much cheaper for society than trying to deal with the costs of a child that the parent(s) can't afford. – Community Leader*

*Planned Parenthood is under constant threat of losing its funding. There are no providers in Billings with specific training in Trans Fertility and there are minimal healthcare resources for reproductive care for lesbians. – Community Leader*

*Cut in funding to Planned Parenthood. – Educator*

*The number of perceived drug users who continue to have children is high. – Educator*

*Billings is a conservative community which often sees family planning through singular options. A great organization like Planned Parenthood has to work too hard to provide its array of education and services. – Community Leader*

*Teenage pregnancy, unplanned pregnancy and little to no sex education for the youth. – Healthcare Provider*

*Large incidence of teen pregnancy and precipitous deliveries without prenatal care. Illicit drug use and low use of barrier protection. – Healthcare Provider*

*Lack of it has led to a greater burden on society. Also, an increasing birth rate for babies born addicted. It also is one of the reasons (the giant responsibility) that leads to broken homes, etc. that puts the burden on many grandparents to raise the children. – Community Leader*

*The number of children in foster care has exploded in the past several years. Many babies are born to drug-addicted parents and are removed to foster care shortly after birth. Women on probation and parole have a high birth rate, even though they are not ready to adequately provide for their children. – Business Leader*

*Roe vs. Wade ... say no more. Leave it alone. We also need more programming and support for Planned Parenthood. – Community Leader*

*Women are not recognized in our society as having the final say in their own health outcomes. We need to consider ways to keep family planning, like access, available in our community. – Healthcare Provider*

### **Access to Care/Services**

*When people have limited access to healthcare facilities and those that they can afford, there will be problems. Continued efforts to get rid of Planned Parenthood will only make this issue worse. When young women have nowhere to turn for contraceptives and other family planning needs there will be issues and we will see more unwanted pregnancy. Not all people have a family they can turn to for assistance in the type of healthcare, so removing these resources only hurts us as a whole. – Business Leader*

*As a former employee of Planned Parenthood, I visited with many people who struggled to access family planning services. I saw the poor state of sex education in our schools and the effect it was having on teenagers. – Community Leader*

### **Awareness/Education**

*Lack of knowledge about the importance and affordability. – Healthcare Provider*

*There is not an effective way of distributing the important information about family planning. There are also mixed messages about family planning means. – Community Leader*

### **Prevalence/Incidence**

*Number of females and families I know needing help through pregnancy or after the birth of a child. – Government Representative*

## Modifiable Health Risks



## Nutrition

### About Healthful Diet & Healthy Weight

Strong science exists supporting the health benefits of eating a healthful diet and maintaining a healthy body weight. Efforts to change diet and weight should address individual behaviors, as well as the policies and environments that support these behaviors in settings such as schools, worksites, healthcare organizations, and communities.

The goal of promoting healthful diets and healthy weight encompasses increasing household food security and eliminating hunger.

Americans with a healthful diet:

- Consume a variety of nutrient-dense foods within and across the food groups, especially whole grains, fruits, vegetables, low-fat or fat-free milk or milk products, and lean meats and other protein sources.
- Limit the intake of saturated and trans fats, cholesterol, added sugars, sodium (salt), and alcohol.
- Limit caloric intake to meet caloric needs.

Diet and body weight are related to health status. Good nutrition is important to the growth and development of children. A healthful diet also helps Americans reduce their risks for many health conditions, including: overweight and obesity; malnutrition; iron-deficiency anemia; heart disease; high blood pressure; dyslipidemia (poor lipid profiles); type 2 diabetes; osteoporosis; oral disease; constipation; diverticular disease; and some cancers.

Diet reflects the variety of foods and beverages consumed over time and in settings such as worksites, schools, restaurants, and the home. Interventions to support a healthier diet can help ensure that:

- Individuals have the knowledge and skills to make healthier choices.
- Healthier options are available and affordable.

**Social Determinants of Diet.** Demographic characteristics of those with a more healthful diet vary with the nutrient or food studied. However, most Americans need to improve some aspect of their diet.

Social factors thought to influence diet include:

- Knowledge and attitudes
- Skills
- Social support
- Societal and cultural norms
- Food and agricultural policies
- Food assistance programs
- Economic price systems

**Physical Determinants of Diet.** Access to and availability of healthier foods can help people follow healthful diets. For example, better access to retail venues that sell healthier options may have a positive impact on a person's diet; these venues may be less available in low-income or rural neighborhoods.

The places where people eat appear to influence their diet. For example, foods eaten away from home often have more calories and are of lower nutritional quality than foods prepared at home.

Marketing also influences people's—particularly children's—food choices.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Daily Recommendation of Fruits/Vegetables

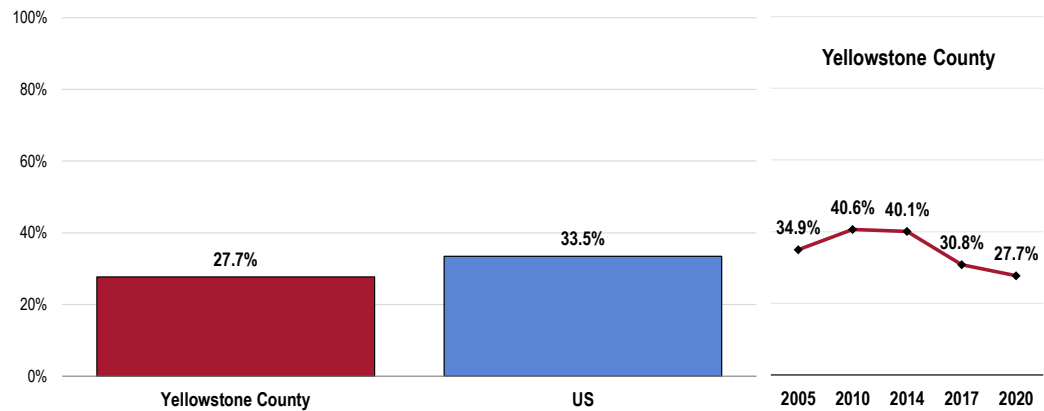
A total of 27.7% of Yellowstone County adults report eating five or more servings of fruits and/or vegetables per day.

To measure fruit and vegetable consumption, survey respondents were asked multiple questions, specifically about the foods and drinks they consumed on the day prior to the interview.

**RELATED ISSUE:**  
See also *Food Access* in the **Social Determinants of Health** section of this report.

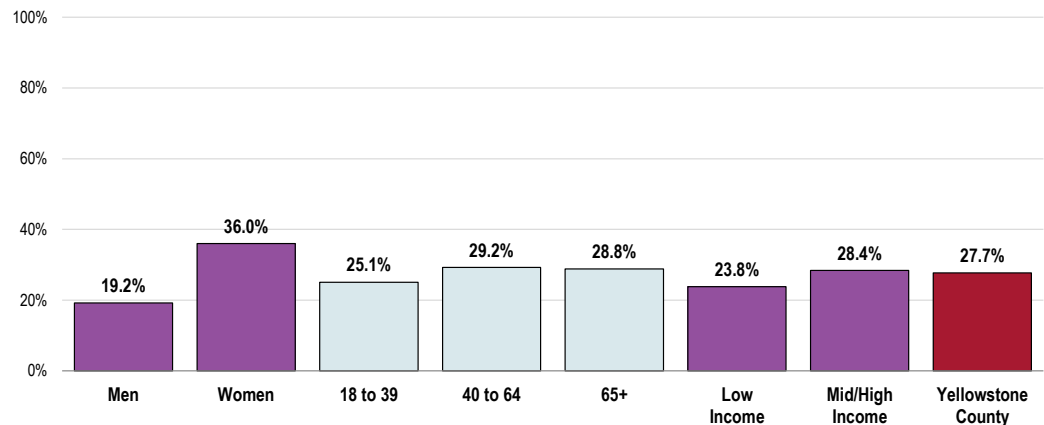
- **BENCHMARK:** Below the US prevalence.
- **TREND:** Marks a statistically significant decrease since 2005 (and especially 2010 and 2014).
- **DISPARITY:** Reported less often among male respondents.

### Consume Five or More Servings of Fruits/Vegetables Per Day



- Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 148]
  - 2017 PRC National Health Survey, PRC, Inc.
- Notes:
- Asked of all respondents.
  - For this issue, respondents were asked to recall their food intake on the previous day.

### Consume Five or More Servings of Fruits/Vegetables Per Day (Yellowstone County, 2020)



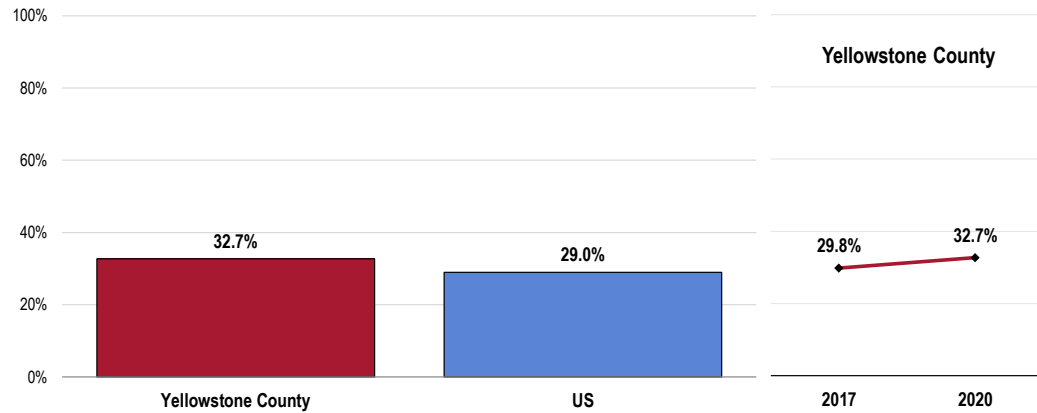
- Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 148]
- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
  - For this issue, respondents were asked to recall their food intake on the previous day.

## Sugar-Sweetened Beverages

A total of 32.7% of Yellowstone County adults report drinking an average of at least one sugar-sweetened beverage per day in the past week.

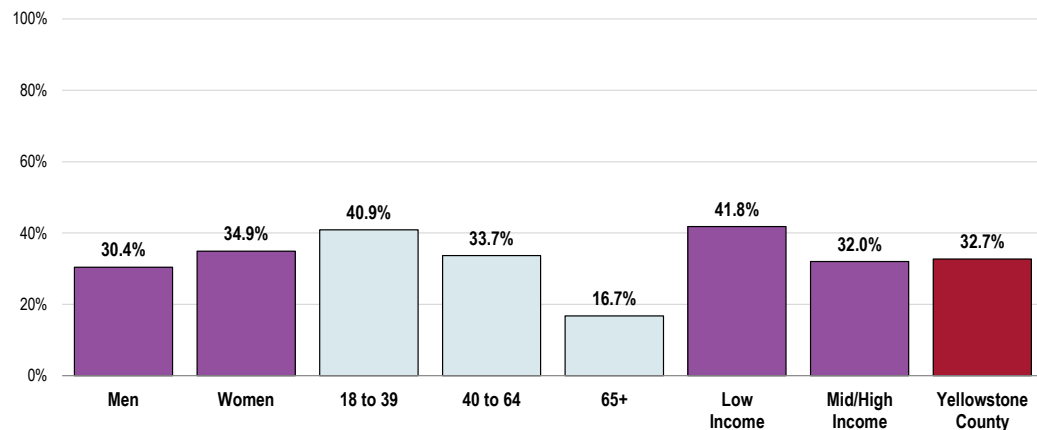
- **DISPARITY:** The prevalence decreases with age.

### Had Seven or More Sugar-Sweetened Beverages in the Past Week



- Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 327]
  - 2017 PRC National Health Survey, PRC, Inc.
- Notes:
- Asked of all respondents.

### Had Seven or More Sugar-Sweetened Beverages in the Past Week (Yellowstone County, 2020)



- Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 327]
- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Physical Activity

### About Physical Activity

Regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. Among adults, physical activity can lower the risk of: early death; coronary heart disease; stroke; high blood pressure; type 2 diabetes; breast and colon cancer; falls; and depression. Among children and adolescents, physical activity can: improve bone health; improve cardiorespiratory and muscular fitness; decrease levels of body fat; and reduce symptoms of depression. For people who are inactive, even small increases in physical activity are associated with health benefits.

Personal, social, economic, and environmental factors all play a role in physical activity levels among youth, adults, and older adults. Understanding the barriers to and facilitators of physical activity is important to ensure the effectiveness of interventions and other actions to improve levels of physical activity.

Factors **positively** associated with adult physical activity include: postsecondary education; higher income; enjoyment of exercise; expectation of benefits; belief in ability to exercise (self-efficacy); history of activity in adulthood; social support from peers, family, or spouse; access to and satisfaction with facilities; enjoyable scenery; and safe neighborhoods.

Factors **negatively** associated with adult physical activity include: advancing age; low income; lack of time; low motivation; rural residency; perception of great effort needed for exercise; overweight or obesity; perception of poor health; and being disabled. Older adults may have additional factors that keep them from being physically active, including lack of social support, lack of transportation to facilities, fear of injury, and cost of programs.

Among children ages 4 to 12, the following factors have a positive association with physical activity: gender (boys); belief in ability to be active (self-efficacy); and parental support.

Among adolescents ages 13 to 18, the following factors have a positive association with physical activity: parental education; gender (boys); personal goals; physical education/school sports; belief in ability to be active (self-efficacy); and support of friends and family.

Environmental influences positively associated with physical activity among children and adolescents include:

- Presence of sidewalks
- Having a destination/walking to a particular place
- Access to public transportation
- Low traffic density
- Access to neighborhood or school play area and/or recreational equipment

People with disabilities may be less likely to participate in physical activity due to physical, emotional, and psychological barriers. Barriers may include the inaccessibility of facilities and the lack of staff trained in working with people with disabilities.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))



Leisure-time physical activity includes any physical activities or exercises (such as running, calisthenics, golf, gardening, walking, etc.) which take place outside of one's line of work.

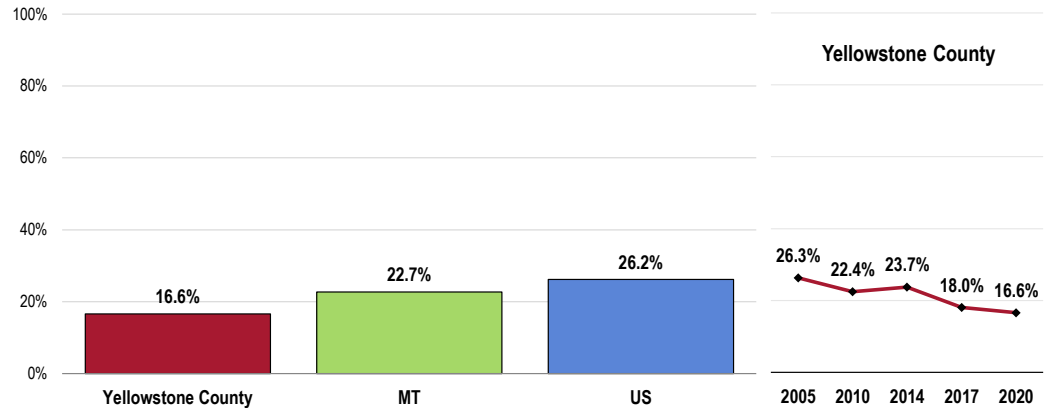
## Leisure-Time Physical Activity

A total of 16.6% of Yellowstone County adults report no leisure-time physical activity in the past month.

- **BENCHMARK:** Well below the state and national figures. Satisfies the Healthy People 2020 objective.
- **TREND:** Denotes a statistically significant decrease (improvement) since 2005.

### No Leisure-Time Physical Activity in the Past Month

Healthy People 2020 = 32.6% or Lower



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 89]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 • 2017 PRC National Health Survey, PRC, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-1]

Notes: • Asked of all respondents.

## Activity Levels

### Adults

#### Recommended Levels of Physical Activity

Adults should do 2 hours and 30 minutes a week of moderate-intensity (such as walking), or 1 hour and 15 minutes (75 minutes) a week of vigorous-intensity **aerobic** physical activity (such as jogging), or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity. The guidelines also recommend that adults do **muscle-strengthening** activities, such as push-ups, sit-ups, or activities using resistance bands or weights. These activities should involve all major muscle groups and be done on two or more days per week.

The report finds that nationwide nearly 50 percent of adults are getting the recommended amounts of aerobic activity and about 30 percent are engaging in the recommended muscle-strengthening activity.

- 2013 Physical Activity Guidelines for Americans, US Department of Health and Human Services. [www.cdc.gov/physicalactivity](http://www.cdc.gov/physicalactivity)
- Learn more about CDC's efforts to promote walking by visiting <http://www.cdc.gov/vitalsigns/walking>.

"Meeting physical activity recommendations" includes adequate levels of both aerobic and strengthening activities:

**Aerobic** activity is one of the following: at least 150 minutes per week of light to moderate activity, 75 minutes per week of vigorous activity, or an equivalent combination of both.

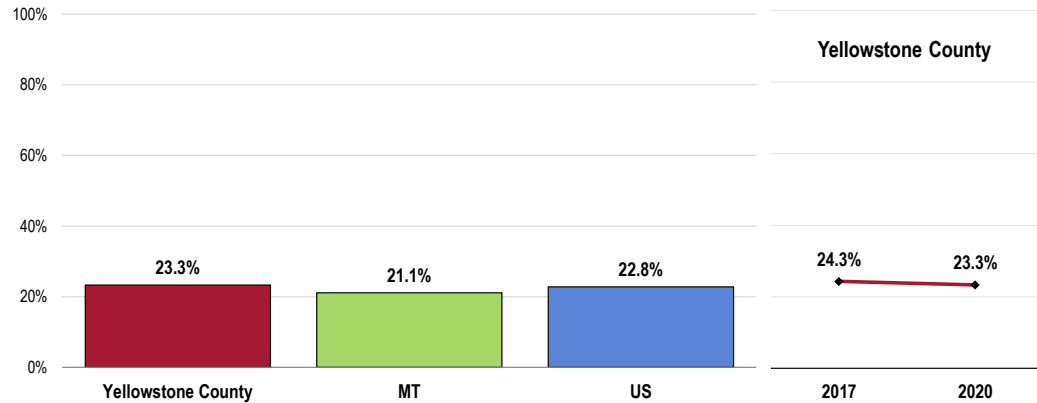
**Strengthening** activity is at least 2 sessions per week of exercise designed to strengthen muscles.

**A total of 23.3% of Yellowstone County adults regularly participate in adequate levels of both aerobic and strengthening activities (meeting physical activity recommendations).**

- **DISPARITY:** Reported less often among women and seniors.

### Meets Physical Activity Recommendations

Healthy People 2020 = 20.1% or Higher

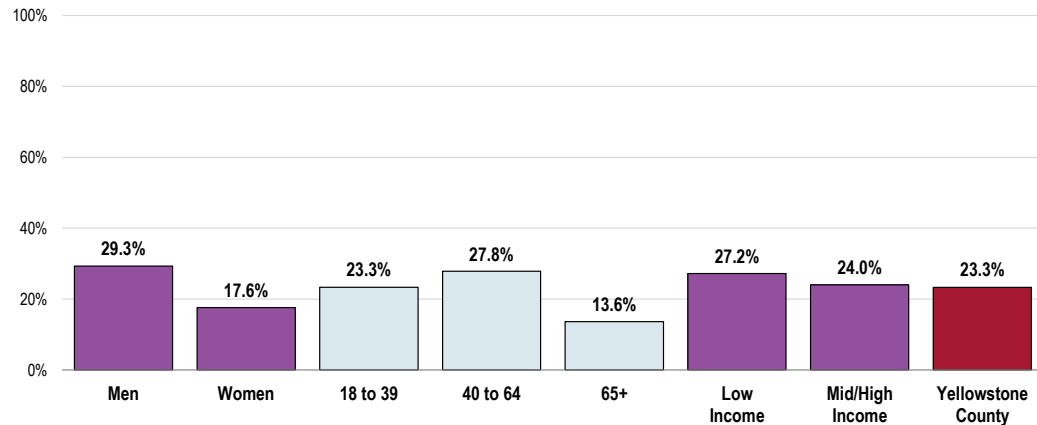


Sources: ● 2020 PRC Community Health Survey, PRC, Inc. [Item 152]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2017 Montana data.  
 ● 2017 PRC National Health Survey, PRC, Inc.  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-2.4]  
 Notes: ● Asked of all respondents.  
 ● Meeting both guidelines is defined as the number of persons age 18+ who report light or moderate aerobic activity for at least 150 minutes per week or who report vigorous physical activity 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity and report doing physical activities specifically designed to strengthen muscles at least twice per week.

### Meets Physical Activity Recommendations

(Yellowstone County, 2020)

Healthy People 2020 = 20.1% or Higher



Sources: ● 2020 PRC Community Health Survey, PRC, Inc. [Item 152]  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-2.4]  
 Notes: ● Asked of all respondents.  
 ● Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 ● Meeting both guidelines is defined as the number of persons age 18+ who report light or moderate aerobic activity for at least 150 minutes per week or who report vigorous physical activity 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity and report doing physical activities specifically designed to strengthen muscles at least twice per week.

## Children

### Recommended Levels of Physical Activity

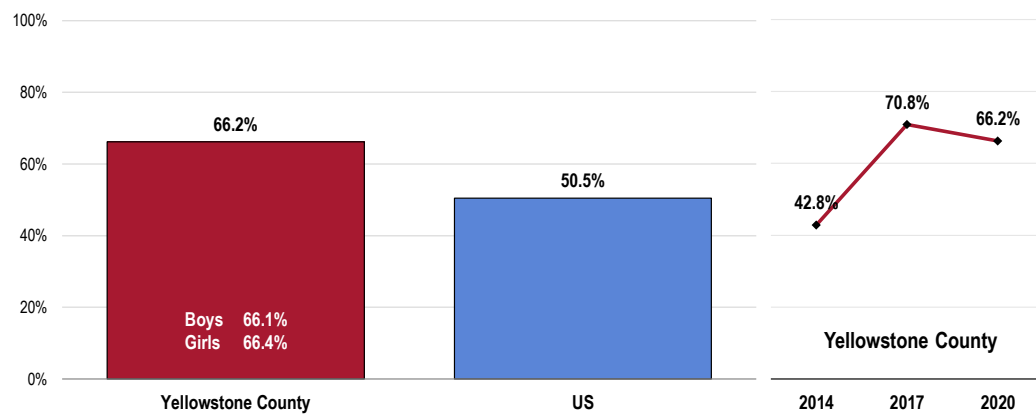
Children and adolescents should do 60 minutes (1 hour) or more of physical activity each day.

— 2013 Physical Activity Guidelines for Americans, US Department of Health and Human Services. [www.cdc.gov/physicalactivity](http://www.cdc.gov/physicalactivity)

Among Yellowstone County children age 2 to 17, 66.2% are reported to have had 60 minutes of physical activity on each of the seven days preceding the interview (1+ hours per day).

- **BENCHMARK:** Better than the national prevalence.
- **TREND:** Marks a statistically significant increase since 2014.

### Child Is Physically Active for One or More Hours per Day (Parents of Children Age 2-17)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 124]  
• 2017 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents with children age 2-17 at home.  
• Includes children reported to have one or more hours of physical activity on each of the seven days preceding the survey.

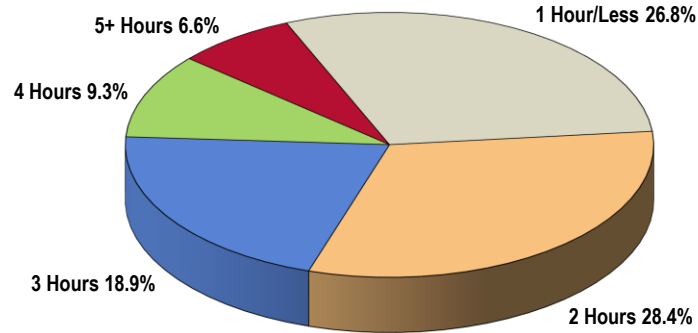
## Screen Time

### Adults

A total of 44.7% of Yellowstone County adults spend three or more hours on screen time for entertainment (whether television or computer, Internet, video games, etc.) per day.

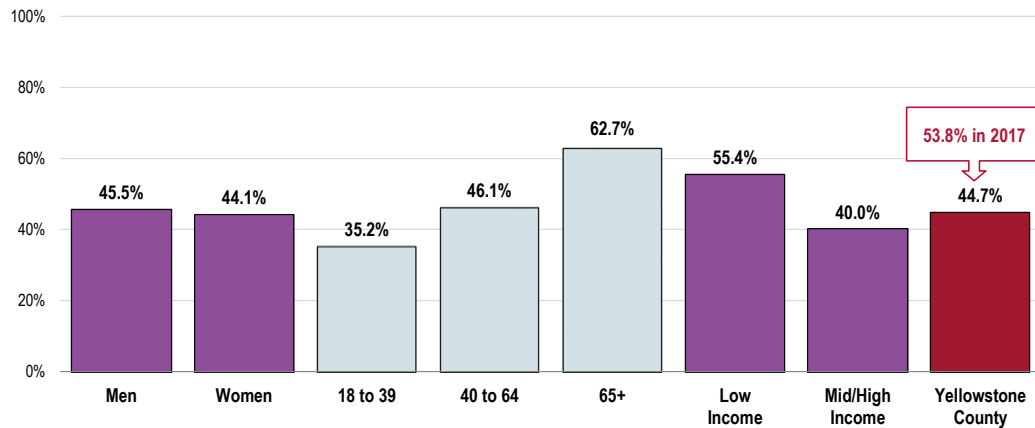
- **TREND:** Denotes a statistically significant decrease (improvement) since first measured in 2017.
- **DISPARITY:** Increases with age and is reported more often among low-income adults.

### Daily Screen Time for Entertainment (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 318]  
 Notes: • Asked of all respondents.

### Three or More Hours of Total Screen Time (TV, Computer, Video Games, Etc.) per Day for Entertainment (Yellowstone County, 2020)

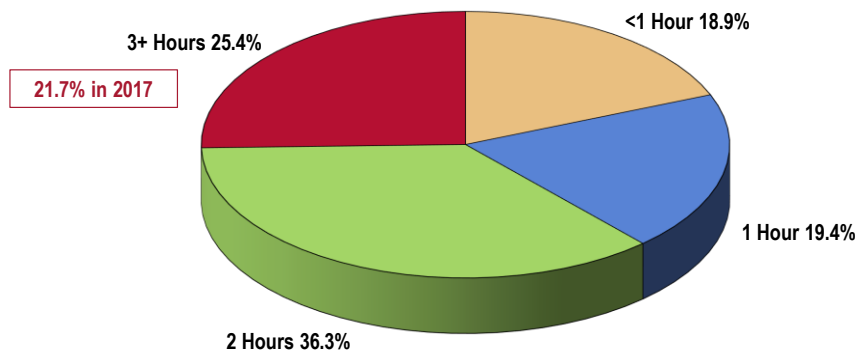


Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 318]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • "Three or more hours" includes reported screen time of 180 minutes or more per day.

### Children

A total of 25.4% of Yellowstone County children age 5 to 17 spend three or more hours on screen time (television, computer, Internet, video games, etc.) for entertainment on an average school day.

**Children’s Screen Time for Entertainment on an Average School Day**  
(Parents of Children Age 5-17; Yellowstone County, 2020)



Sources: • 2017 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 323]  
Notes: • Asked of respondents with a child aged 5 to 17 in the household.

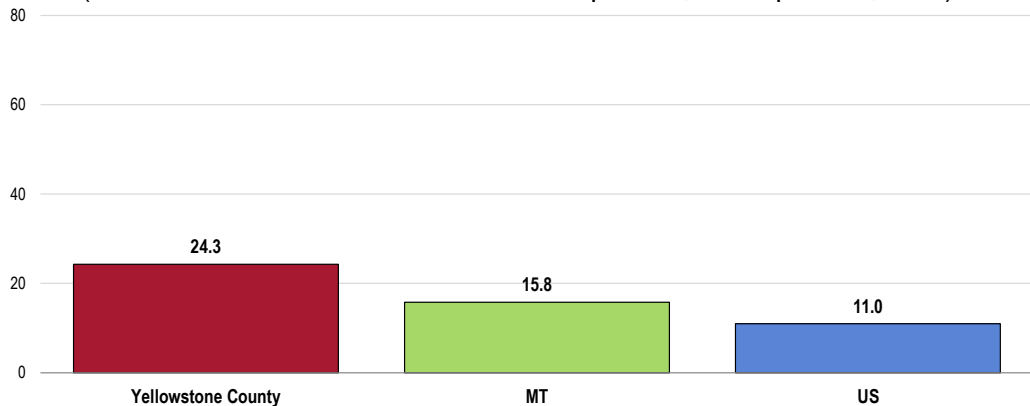
### Access to Physical Activity

#### Recreation & Fitness Facilities

In 2016, the county had 24.3 recreation/fitness facilities for every 100,000 population.

- **BENCHMARK:** Well above the state and national ratios.

**Population With Recreation & Fitness Facility Access**  
(Number of Recreation & Fitness Facilities per 100,000 Population, 2016)



Sources: • US Census Bureau, County Business Patterns. Additional data analysis by CARES.  
• Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.  
Notes: • Recreation and fitness facilities are defined by North American Industry Classification System (NAICS) Code 713940, which include *Establishments engaged in operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports activities."* Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools. This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors.

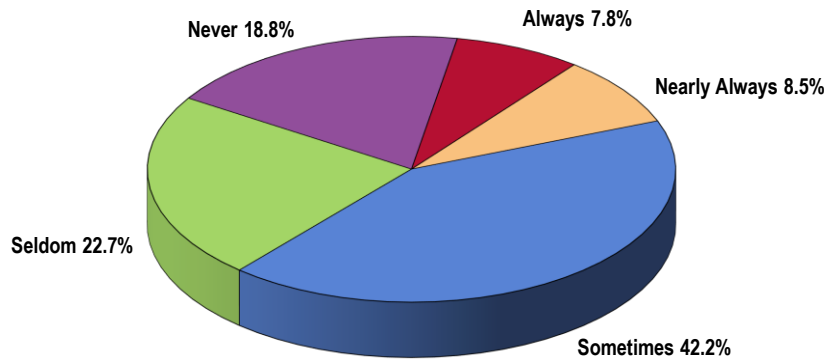
Here, recreation/fitness facilities include establishments engaged in operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports activities."

Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools.

### Weather

A total of 16.3% of respondents report that poor weather “always” or “nearly always” negatively affects their decision to be physically active outdoors.

### Decision to be Physically Active Outdoors is Negatively Affected by Poor Weather (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 315]  
Notes: • Asked of all respondents.

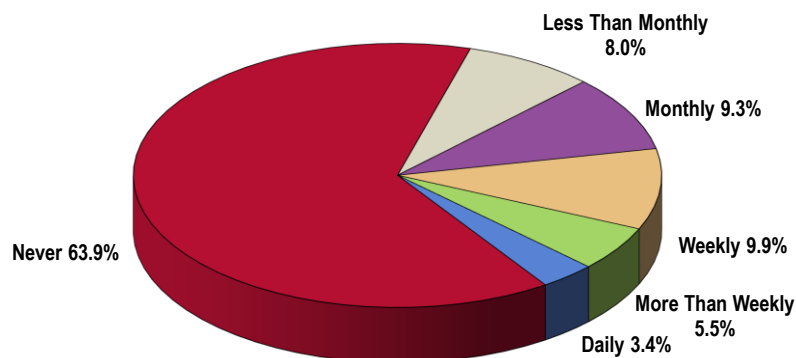
## Incorporating Physical Activity Into Daily Living

### Commuting

Among the total sample of respondents, 63.9% report “never” walking, biking, or using public transportation for their daily commute.

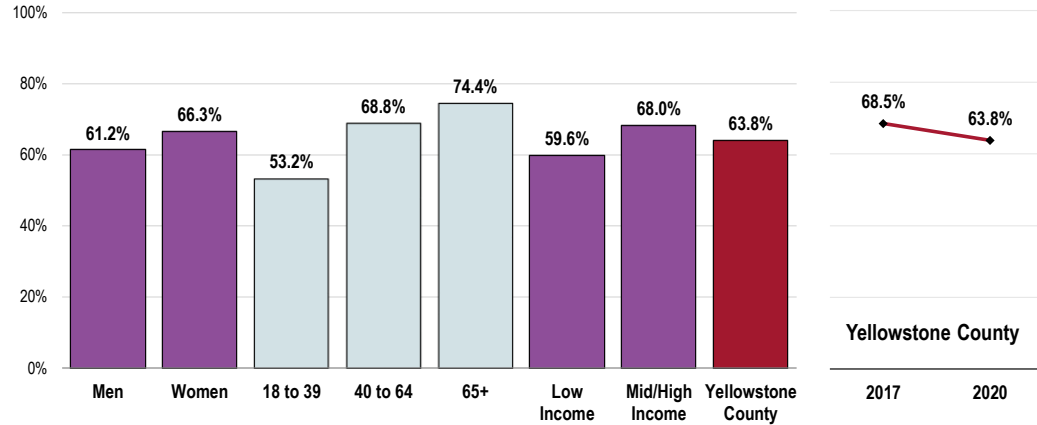
- **DISPARITY:** The prevalence increases with age.

### Frequency of Walking, Biking, or Using Public Transportation for Daily Commute (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 317]  
Notes: • Asked of all respondents.

### “Never” Walked, Biked, or Used Public Transportation to Commute in the Past Year (Yellowstone County, 2020)



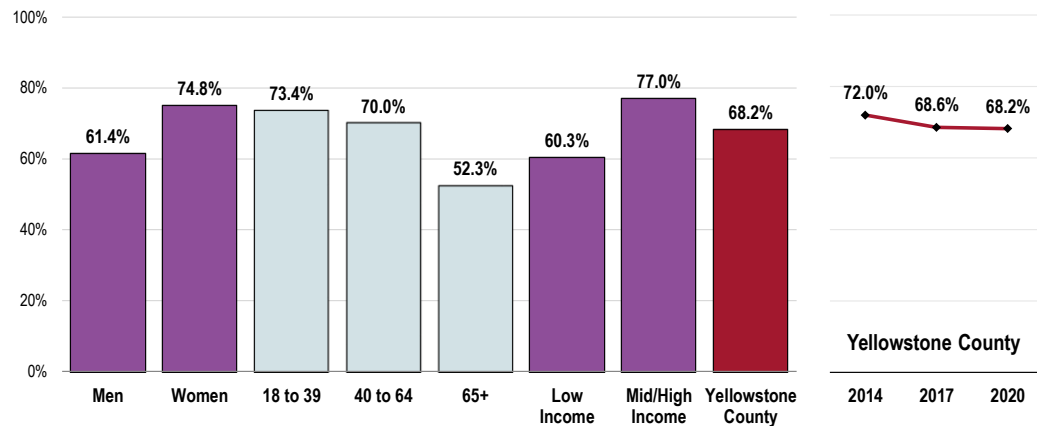
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 317]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.  
 • In this case, everyday behavior might include taking the stairs instead of the elevator, parking farther from a destination, walking or biking instead of driving, etc.

### Behavioral Changes

Over two in three (68.2%) respondents made an attempt in the past year to increase their physical activity through changes to everyday behavior, such as taking the stairs, parking further from destinations, walking or biking instead of driving, etc.

- **DISPARITY:** Reported less often among men, seniors, and low-income adults.

### Made an Attempt in the Past Year to Increase Activity Through Changes to Everyday Behavior (Yellowstone County, 2020)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 316]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.  
 • In this case, everyday behavior might include taking the stairs instead of the elevator, parking farther from a destination, walking or biking instead of driving, etc.

## Weight Status

### About Overweight & Obesity

Because weight is influenced by energy (calories) consumed and expended, interventions to improve weight can support changes in diet or physical activity. They can help change individuals' knowledge and skills, reduce exposure to foods low in nutritional value and high in calories, or increase opportunities for physical activity. Interventions can help prevent unhealthy weight gain or facilitate weight loss among obese people. They can be delivered in multiple settings, including healthcare settings, worksites, or schools.

The social and physical factors affecting diet and physical activity (see Physical Activity topic area) may also have an impact on weight. Obesity is a problem throughout the population. However, among adults, the prevalence is highest for middle-aged people and for non-Hispanic black and Mexican American women. Among children and adolescents, the prevalence of obesity is highest among older and Mexican American children and non-Hispanic black girls. The association of income with obesity varies by age, gender, and race/ethnicity.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

Body Mass Index (BMI), which describes relative weight for height, is significantly correlated with total body fat content. The BMI should be used to assess overweight and obesity and to monitor changes in body weight. In addition, measurements of body weight alone can be used to determine efficacy of weight loss therapy. BMI is calculated as weight (kg)/height squared (m<sup>2</sup>). To estimate BMI using pounds and inches, use: [weight (pounds)/height squared (inches<sup>2</sup>)] x 703.

In this report, overweight is defined as a BMI of 25.0 to 29.9 kg/m<sup>2</sup> and obesity as a BMI ≥30 kg/m<sup>2</sup>. The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25 kg/m<sup>2</sup>. The increase in mortality, however, tends to be modest until a BMI of 30 kg/m<sup>2</sup> is reached. For persons with a BMI ≥30 kg/m<sup>2</sup>, mortality rates from all causes, and especially from cardiovascular disease, are generally increased by 50 to 100 percent above that of persons with BMIs in the range of 20 to 25 kg/m<sup>2</sup>.

— Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

### Adult Weight Status

Classification of Overweight and Obesity by BMI	BMI (kg/m <sup>2</sup> )
Underweight	<18.5
Normal	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	≥30.0

Source: Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.



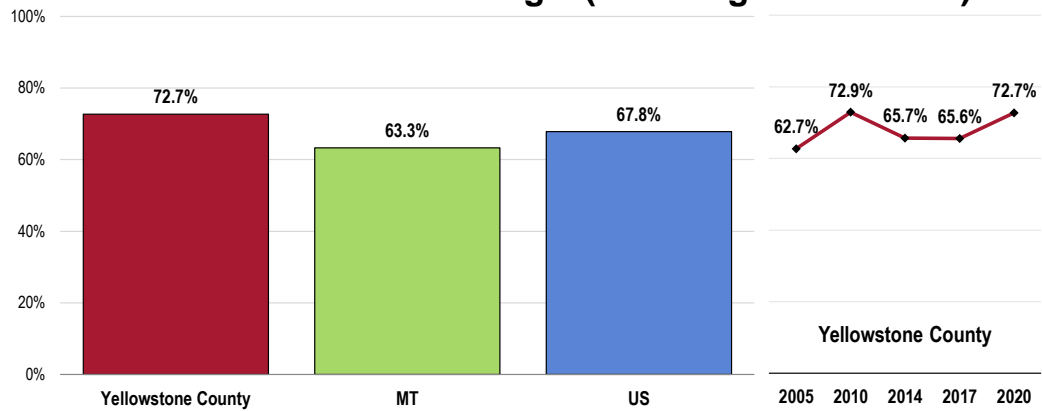
### Overweight Status

A total of **72.7%** of Yellowstone County adults are overweight.

Here, "overweight" includes those respondents with a BMI value  $\geq 25$ .

- **BENCHMARK:** Worse than the statewide figure.
- **TREND:** Marks a statistically significant increase since 2005 (similar to 2010).

### Prevalence of Total Overweight (Overweight and Obese)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 155, 191]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, CDC: 2018 Montana data.  
 • 2017 PRC National Health Survey, PRC, Inc.

Notes: • Based on reported heights and weights, asked of all respondents.  
 • The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.

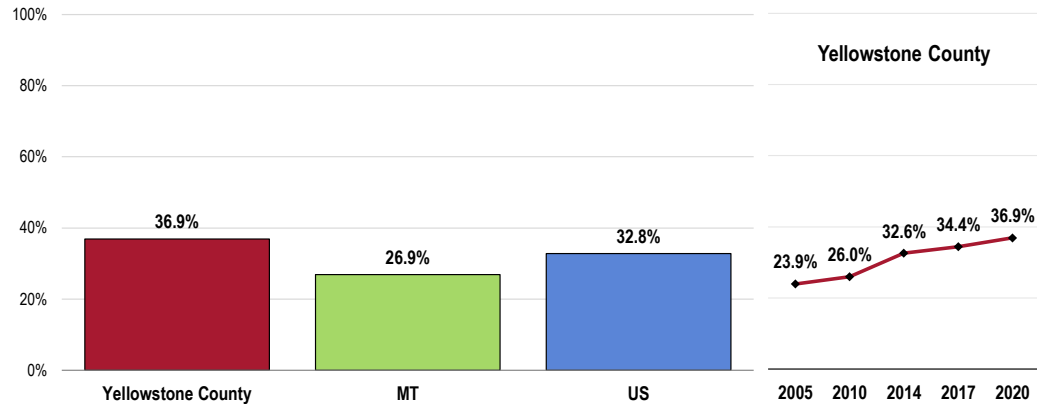
The overweight prevalence above includes **36.9%** of county adults who are obese.

"Obese" (also included in overweight prevalence discussed previously) includes respondents with a BMI value  $\geq 30$ .

- **BENCHMARK:** Worse than the Montana prevalence. Fails to satisfy the Healthy People 2020 objective.
- **TREND:** Denotes a statistically significant increase since 2005.
- **DISPARITY:** Unfavorably high among men in Yellowstone County.

## Prevalence of Obesity

Healthy People 2020 = 30.5% or Lower



Sources:

- 2020 PRC Community Health Survey, PRC, Inc. [Item 154]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, CDC: 2018 Montana data.
- 2017 PRC National Health Survey, PRC, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-9]

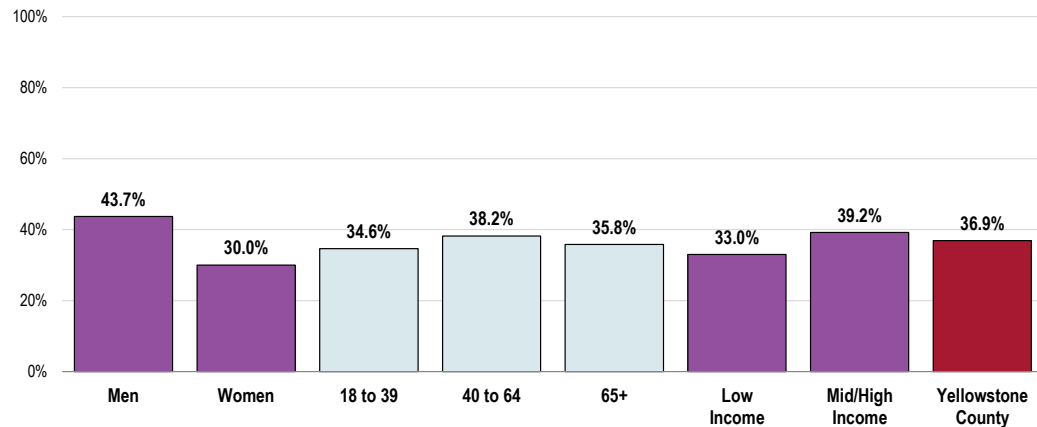
Notes:

- Based on reported heights and weights, asked of all respondents.
- The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

## Prevalence of Obesity

(Yellowstone County, 2020)

Healthy People 2020 = 30.5% or Lower



Sources:

- 2020 PRC Community Health Survey, PRC, Inc. [Item 154]
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-9]

Notes:

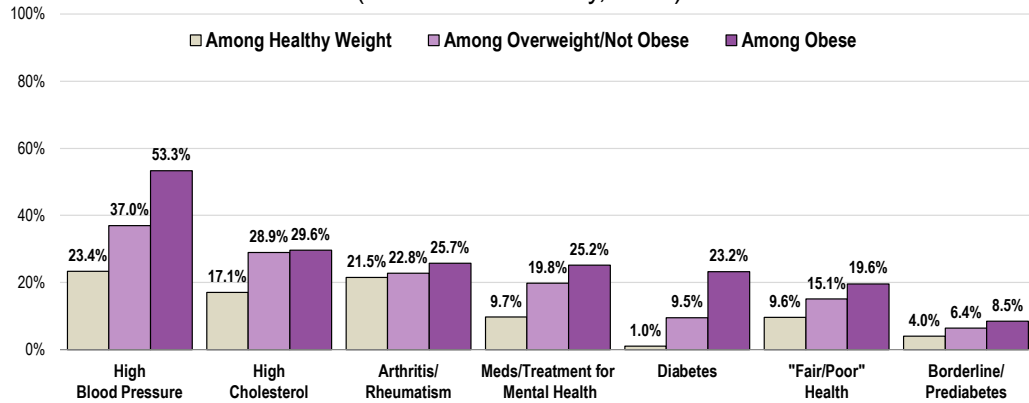
- Based on reported heights and weights, asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

The correlation between overweight and various health issues cannot be disputed.

### Relationship of Overweight With Other Health Issues

Overweight and obese adults are more likely to report a number of adverse health conditions, as outlined in the following chart.

**Relationship of Overweight With Other Health Issues**  
(Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 154]  
Notes: • Based on reported heights and weights, asked of all respondents.

## Children’s Weight Status

### About Weight Status in Children & Teens

In children and teens, body mass index (BMI) is used to assess weight status – underweight, healthy weight, overweight, or obese. After BMI is calculated for children and teens, the BMI number is plotted on the CDC BMI-for-age growth charts (for either girls or boys) to obtain a percentile ranking. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children in the United States. The percentile indicates the relative position of the child’s BMI number among children of the same sex and age.

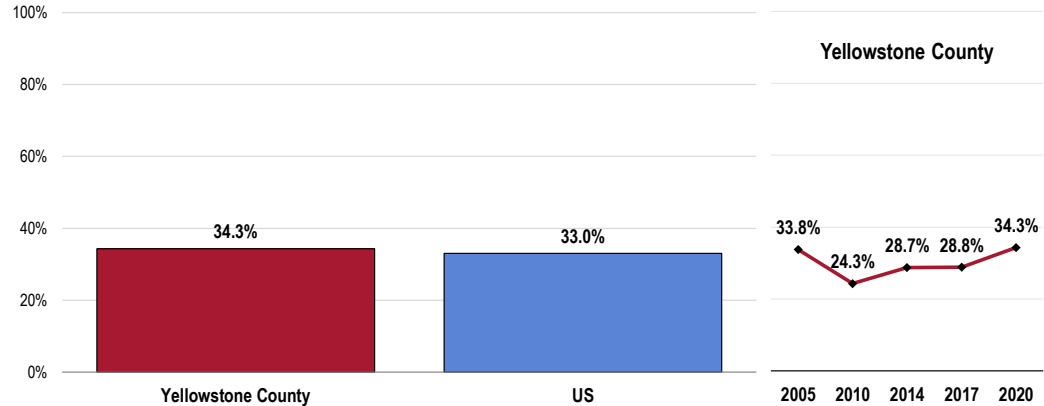
BMI-for-age weight status categories and the corresponding percentiles are shown below:

- Underweight <5<sup>th</sup> percentile
- Healthy Weight ≥5<sup>th</sup> and <85<sup>th</sup> percentile
- Overweight ≥85<sup>th</sup> and <95<sup>th</sup> percentile
- Obese ≥95<sup>th</sup> percentile

— Centers for Disease Control and Prevention

Based on the heights/weights reported by surveyed parents, 34.3% of Yellowstone County children age 5 to 17 are overweight or obese (≥85th percentile).

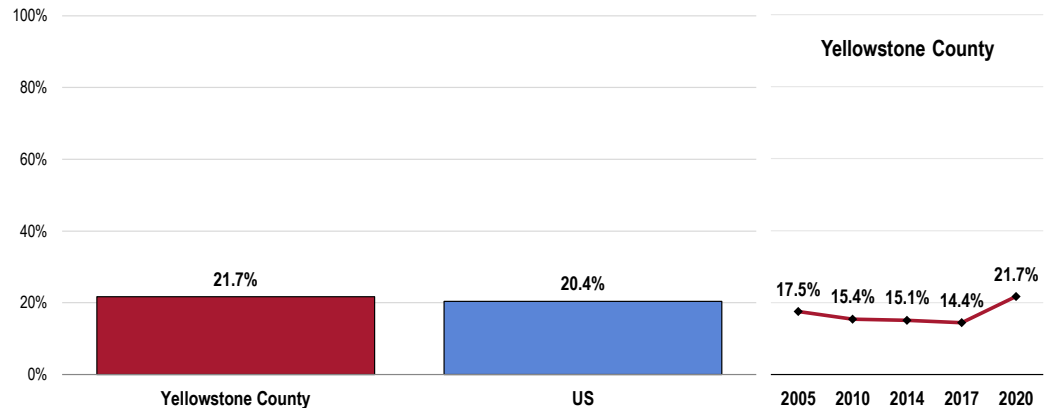
### Prevalence of Overweight in Children (Parents of Children Age 5-17)



- Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 192]
  - 2017 PRC National Health Survey, PRC, Inc.
- Notes:
- Asked of all respondents with children age 5-17 at home.
  - Overweight among children is determined by children's Body Mass Index status at or above the 85<sup>th</sup> percentile of US growth charts by gender and age.

The childhood overweight prevalence above includes 21.7% of area children age 5 to 17 who are obese (≥95th percentile).

### Prevalence of Obesity in Children (Children Age 5-17 Who Are Obese; BMI in the 95<sup>th</sup> Percentile or Higher) Healthy People 2020 = 14.5% or Lower



- Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 158]
  - 2017 PRC National Health Survey, PRC, Inc.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-10.4]
- Notes:
- Asked of all respondents with children age 5-17 at home.
  - Obesity among children is determined by children's Body Mass Index status equal to or above the 95<sup>th</sup> percentile of US growth charts by gender and age.

## Key Informant Input: Nutrition, Physical Activity & Weight

Key informants taking part in an online survey most often characterized *Nutrition, Physical Activity & Weight* as a “moderate problem” in the community.

### Perceptions of Nutrition, Physical Activity, and Weight as a Problem in the Community

(Key Informants, 2020)

■ Major Problem ■ Moderate Problem ■ Minor Problem ■ No Problem At All



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

### Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

#### Contributing Factors

*Eating excessive processed food—it is cheap, available, and convenient. Lack of education about cooking whole foods. Lack of education about metabolic syndrome and the nutritional choices people make that exacerbate the problem. Education about the lifelong benefits of exercise. – Healthcare Provider*

*Many people suffer from overweight issues because gym memberships are expensive and eating healthy foods is expensive and people are busy. – Community Leader*

*Healthy foods are often cost prohibitive. Persons on fixed incomes often eat high carb and high starch foods, as they are affordable. We need to have access to affordable fresh fruits and veggies year around and need to find a way for persons on fixed or limited incomes to be able to purchase fresh foods at a reduced price. We need to have more gyms that are willing to scholarship indigent persons. The YMCA has about 50 percent of its members who are on scholarships. Children also need to learn at a young age the importance of exercise and physical activities so that they grow up with healthy outlets and lifestyles that they carry on into adulthood. – Healthcare Provider*

*Our schools have poor meal choices and provide little nutrition education. So, from a young age our community isn't being taught about importance of good nutrition and physical activity. I think that stigmas associated with “unhealthy” weight are also a major problem. – Community Leader*

*Sedentary lifestyles and poor eating patterns. – Healthcare Provider*

*The lack of exercise and nutritional education is what contributes to the obesity problem in our community. – Public Health Representative*

*Sedentary lifestyles. Transitioning economy, less labor, more desk work. Elevated levels of sugar within the North American diet. Many people become discouraged when the hottest new diet or exercise program fails. Trendy unscientific solutions. – Community Leader*

*Winter, hard to get out and exercise. Easier to sit inside and eat. – Community Leader*

*We have significant poverty in this county. That often contributes to inadequate nutrition. All we have to do is look around and we can see we have issues with weight in our community. – Healthcare Provider*

*We often have snow on the ground for 8-9 months out of the year the last few years. This can make physical activity hard for many individuals to work into their day. Gym memberships can be prohibitive with limited incomes and time. Many people seem to let food just happen to them: no meal planning to facilitate thoughtful food selection and balance to the diet and limiting less healthy food consumption. Pace of life seems to limit people's thoughtfulness of this. Tastes begin to develop early for less healthy foods making choices later take a lot more energy to overcome the inertia on. – Healthcare Provider*

*The biggest challenge is getting people engaged in managing their nutrition, physical activity and weight. There are a large number of people and families who are very fit and make it a high priority but there are others, they do not have the resources to eat healthy and focus on a healthy lifestyle. Many are working more than one job to provide shelter and food for their families. Fitness is a challenge for all of us. There has been great effort to educate and support people in our community. The work needs to continue. It is critical to avoid or manage long term chronic disease as well as improve mental health! – Community Leader*

### **Built Environment**

*We lack free or affordable summer programming for children in our community. Children are left alone at home to play on their mobile devices. Our children lack nutritious food and diet. – Community Leader*

*Ease of access to unhealthy food options. The cost of healthy food. Limited access to healthy food options. Walkability and bike-ability of Billings is not favorable. – Public Health Representative*

*Availability of healthy food choice, especially eating out. Low number of streets and neighborhoods safe for biking and walking. This is a "driving" community. – Public Health Representative*

*Access to affordable fruits and vegetables, but also support and guidance on how to easily prepare these foods for the whole family. Billings has a lot of variety for fast food and restaurant chains so there is a lot of temptation in price and taste. There are many walking and biking opportunities within Billings, but walking clubs are not really a thing here as far as I know. We need to make the healthy choice not only the easy choice, but an affordable choice. It would be great to have culturally diverse approaches to educating people about healthy food and exercise because there are cultural and economic differences in Billings. – Community Leader*

*Much of Yellowstone County isn't friendly to walking, running and biking. The community is set up for driving to most things. – Business Leader*

*Our community makes it challenging by its sprawl pattern design to want to get out and walk. We pretty much need to drive everywhere. – Business Leader*

*Winter makes exercise difficult and not all sidewalks and streets are walk or bike friendly. – Healthcare Provider*

*We don't have a friendly, walkable city. Bike paths are nice, but biking around town is tough, cars don't like bikes on the streets and the drivers are terrible to cyclists. I know, I try to bike around town and it's scary. – Community Leader*

*Creating an active lifestyle starting in childhood. School meals, while monitored, have some challenges with nutritional value. Services not centrally located, built environment encouraging individuals to walk or bike to shopping and work, please. – Public Health Representative*

### **Lifestyle**

*This is a serious and complex problem. Many people in Yellowstone County are at higher risk for major illness (e.g., heart attacks, diabetes) because of their health habits. In 2017 16,030 people were found to be food insecure. Lack of good nutrition for this many people poses a serious risk of causing illnesses. – Government Representative*

*The American Lifestyle is the biggest issue. Even though we can choose to eat healthy and exercise, many people do not. Some because they can't afford to buy healthier food, and don't know how to cook healthy affordable food. The weather is not always conducive to walking so if you can't afford a gym membership, you may not get as much activity as your need during the long periods of very cold weather. Others because they feel they are too pressed for time to make better decisions, or they don't want to change their eating and activity patterns. – Community Leader*

*It is culturally acceptable to live an unhealthy lifestyle. – Educator*

*Individuals eat their feelings so much and so often it becomes the norm. Cheaper to buy processed foods than organic foods. – Healthcare Provider*

*Too plentiful access to fast food. Lack of destigmatized options for weight management. – Healthcare Provider*

**Obesity**

*We are seeing more and more obese patients, their health is bad, they cannot always get into a facility if they need it for additional strengthening due to their size and the issues of caring for them. – Healthcare Provider*

*Too many people in Billings are overweight. They do not see value in eating nutritious food. They do not see value in being physically active. – Healthcare Provider*

*Yellowstone County people have a huge obesity rate. – Business Leader*

*Obesity seems to be prevalent. – Public Health Representative*

*Getting the majority of overweight and obese to adopt some healthy choices. Kids get fewer health and PE classes since the new middle schools were added. At a very early age, we are communicating to students that their health is not a priority. – Community Leader*

**Awareness/Education**

*The community is not aware of what each topic is and how they can help themselves. – Healthcare Provider*

*Family-based education and training and responsibility. – Business Leader*

*Billings does not promote wellness enough. – Community Leader*

**Access to Care/Services**

*The lack of resources. – Business Leader*

*Options, community education and need more trails and paths. – Healthcare Provider*

**Affordable Care/Services**

*Financial barriers prevent people from getting the right kind of guidance for their individual nutrition, physical activity and weight loss needs. – Community Leader*

**Access to Healthy Food**

*Billings is virtually a food desert with little local, organic food available and even less available to indigent communities. – Community Leader*

## Substance Abuse

### About Substance Abuse

Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. These problems include:

- Teenage pregnancy
- Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)
- Other sexually transmitted diseases (STDs)
- Domestic violence
- Child abuse
- Motor vehicle crashes
- Physical fights
- Crime
- Homicide
- Suicide

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Social attitudes and political and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues. In addition to the considerable health implications, substance abuse has been a flash-point in the criminal justice system and a major focal point in discussions about social values: people argue over whether substance abuse is a disease with genetic and biological foundations or a matter of personal choice.

Advances in research have led to the development of evidence-based strategies to effectively address substance abuse. Improvements in brain-imaging technologies and the development of medications that assist in treatment have gradually shifted the research community's perspective on substance abuse. There is now a deeper understanding of substance abuse as a disorder that develops in adolescence and, for some individuals, will develop into a chronic illness that will require lifelong monitoring and care.

Improved evaluation of community-level prevention has enhanced researchers' understanding of environmental and social factors that contribute to the initiation and abuse of alcohol and illicit drugs, leading to a more sophisticated understanding of how to implement evidence-based strategies in specific social and cultural settings.

A stronger emphasis on evaluation has expanded evidence-based practices for drug and alcohol treatment. Improvements have focused on the development of better clinical interventions through research and increasing the skills and qualifications of treatment providers.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

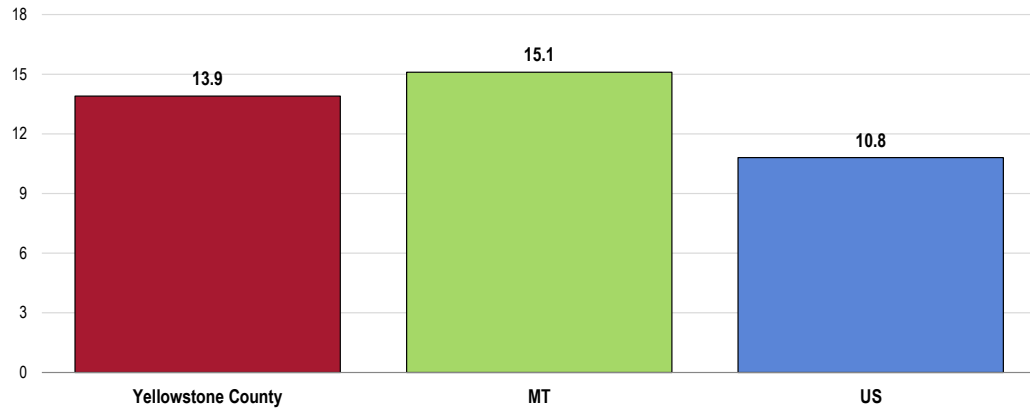
### Age-Adjusted Cirrhosis/Liver Disease Deaths

**Between 2015 and 2017, Yellowstone County reported an annual average age-adjusted cirrhosis/liver disease mortality rate of 13.9 deaths per 100,000 population.**

- **BENCHMARK:** Below the state mortality rate but higher than the US. Fails to satisfy the Healthy People 2020 objective.
- **TREND:** The rate has increased over time, echoing state and national trends.

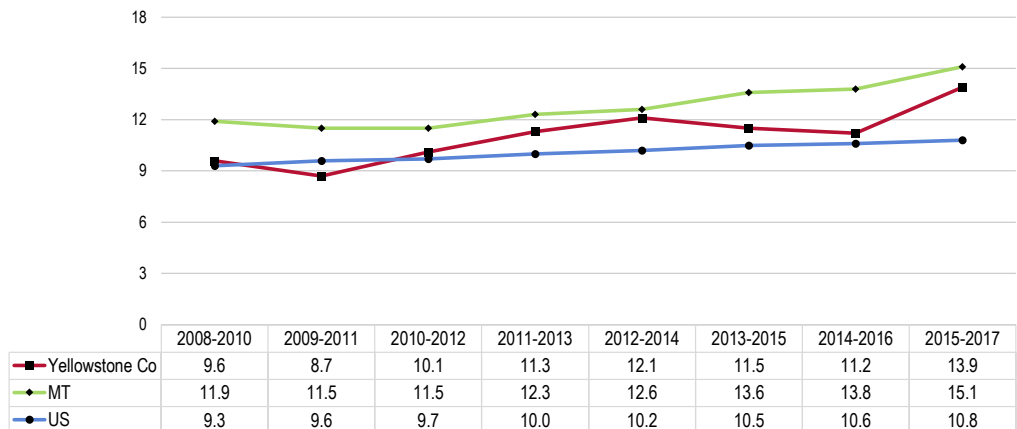


### Cirrhosis/Liver Disease: Age-Adjusted Mortality (2015-2017 Annual Average Deaths per 100,000 Population) Healthy People 2020 = 8.2 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-11]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

### Cirrhosis/Liver Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 = 8.2 or Lower



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-11]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

## Alcohol Use

### Excessive Drinking

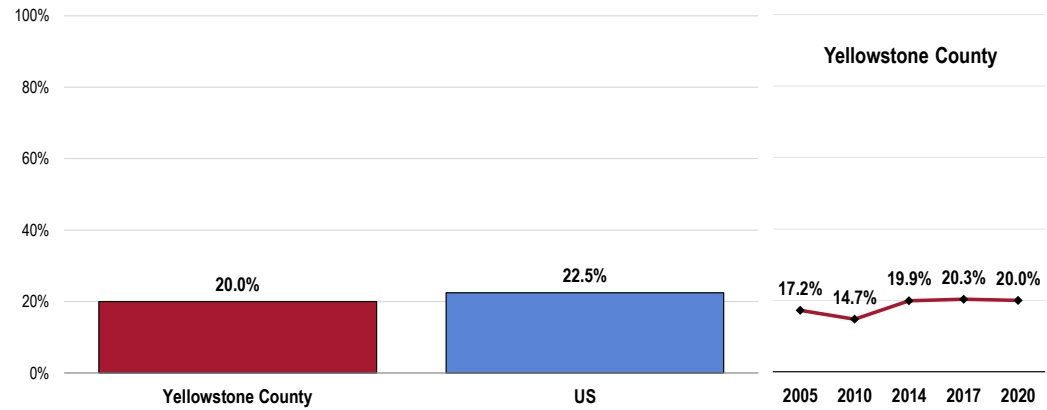
“Excessive drinking” includes heavy and/or binge drinkers:

- **Heavy drinkers** include men reporting 2+ alcoholic drinks per day or women reporting 1+ alcoholic drink per day in the month preceding the interview.
- **Binge drinkers** include men reporting 5+ alcoholic drinks or women reporting 4+ alcoholic drinks on any single occasion during the past month.

**A total of 20.0% of area adults are excessive drinkers (heavy and/or binge drinkers).**

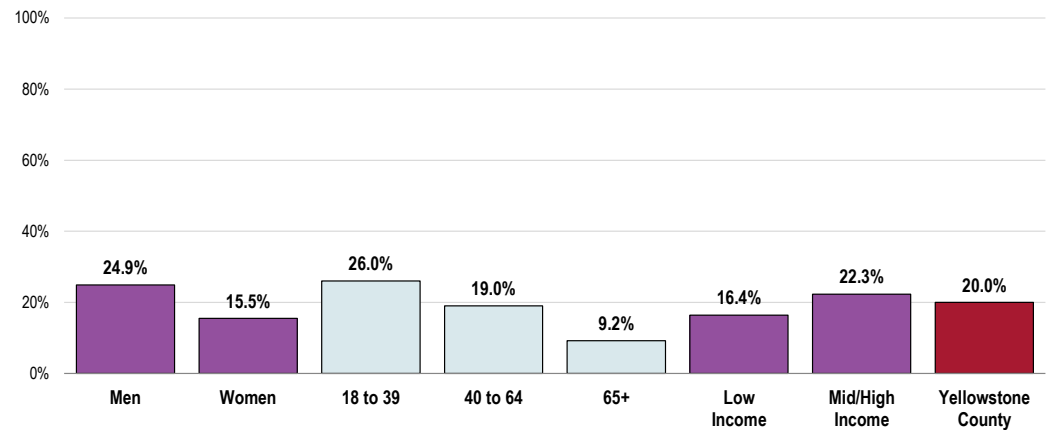
- **BENCHMARK:** Satisfies the Healthy People 2020 objective.
- **DISPARITY:** More prevalent among men and young adults.

### Excessive Drinkers Healthy People 2020 = 25.4% or Lower



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 168]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-15]  
 Notes: • Asked of all respondents.  
 • Excessive drinking reflects the number of persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women) OR who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.

### Excessive Drinkers (Yellowstone County, 2020) Healthy People 2020 = 25.4% or Lower



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 168]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-15]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Excessive drinking reflects the number of persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than one drink per day on average (for women) OR who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.

## Age-Adjusted Unintentional Drug-Related Deaths

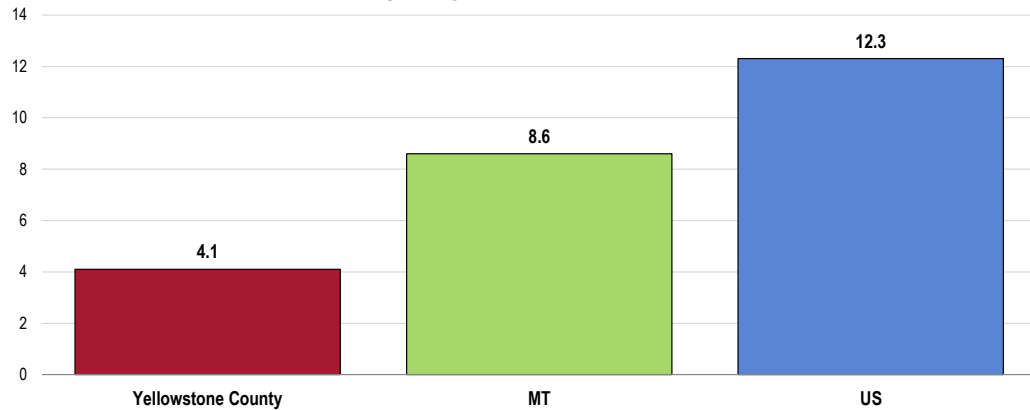
Between 2015 and 2017, there was an annual average age-adjusted unintentional drug-related mortality rate of 4.1 deaths per 100,000 population in Yellowstone County.

- **BENCHMARK:** Well below the state and especially the US rate.

### Unintentional Drug-Related Deaths: Age-Adjusted Mortality

(2015-2017 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 11.3 or Lower



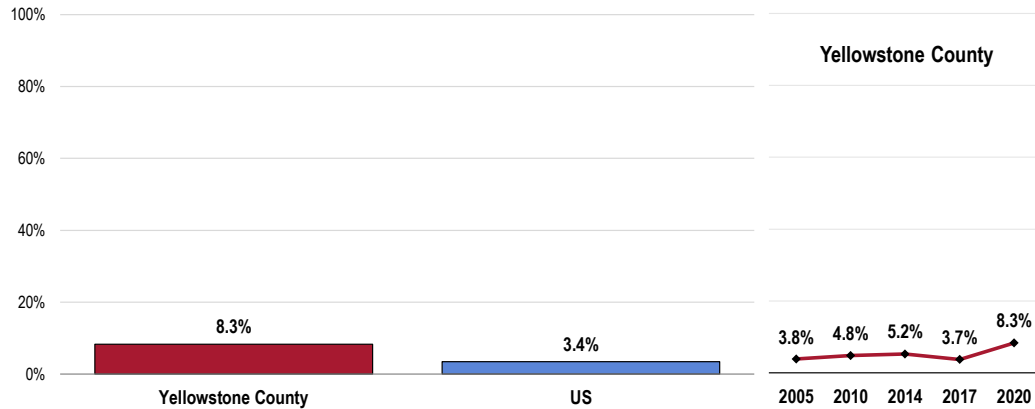
- Sources:
- CDC WONDER Online Query System, Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted October 2019.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-12]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

## Alcohol & Drug Treatment

A total of 8.3% of Yellowstone County adults report that they have sought professional help for an alcohol or drug problem at some point in their lives.

- **BENCHMARK:** More than twice the US prevalence.
- **TREND:** Marks a statistically significant increase since 2005.

### Have Ever Sought Professional Help for an Alcohol/Drug-Related Problem



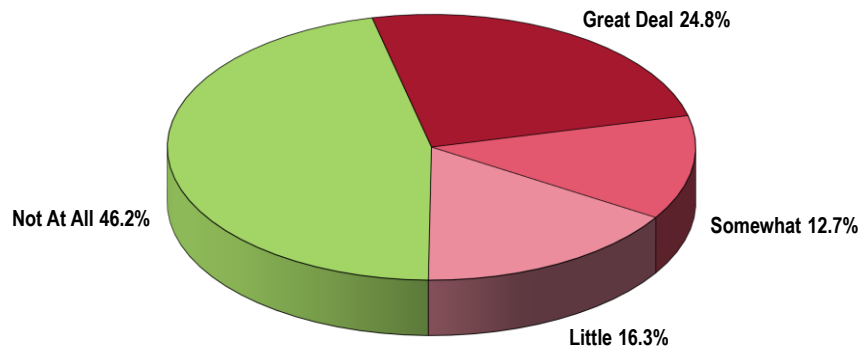
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 60]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

### Personal Impact From Substance Abuse

Area adults were also asked to what degree their lives have been impacted by substance abuse (whether their own abuse or that of another).

**Over half of Yellowstone County residents' lives have been negatively affected by substance abuse (either their own or someone else's).**

### Degree to Which Life Has Been Negatively Affected by Substance Abuse (Self or Other's) (Yellowstone County, 2020)

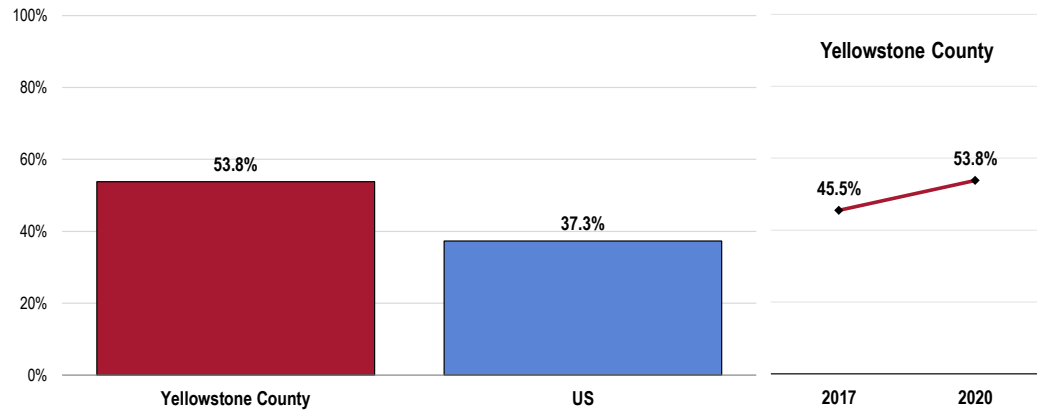


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 61]  
 Notes: • Asked of all respondents.

Specifically, 53.8% have felt a personal impact to some degree (“a little,” “somewhat,” or “a great deal”).

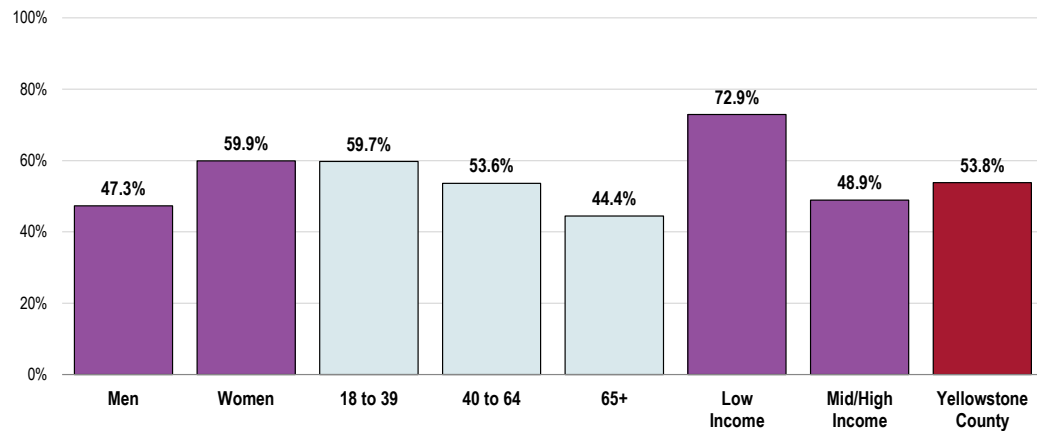
- **BENCHMARK:** Considerably higher than the US prevalence.
- **TREND:** Marks a statistically significant increase since 2017.
- **DISPARITY:** Reported more often among women and low-income respondents.

### Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 195]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.  
 • Includes response of “a great deal,” “somewhat,” and “a little.”

### Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else) (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 195]  
 Notes: • Asked of all respondents.  
 • Includes response of “a great deal,” “somewhat,” and “a little.”  
 • Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

## Key Informant Input: Substance Abuse

The greatest share of key informants taking part in an online survey characterized *Substance Abuse* as a “major problem” in the community.

### Perceptions of Substance Abuse as a Problem in the Community

(Key Informants, 2020)

■ Major Problem   ■ Moderate Problem   ■ Minor Problem   ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

### Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

#### Access to Care/Services

*Limited time and space available for treatment. Need more residential, longer-term, more than 30 days, for people with severe substance abuse. – Educator*

*Lack of resources for this population. Lack of articulated, coordinated efforts to service this population. – Community Leader*

*Lack of availability of rehab services. – Educator*

*Distance from Laurel to Billings is a barrier for some families. – Educator*

*Lack of programs available to patients and high alcohol intake. – Educator*

*Treatment options. Rimrock Treatment Center struggles with laws that prevent them from filling beds. Funding is a huge issue as well. Many people have to get arrested before they can access treatment via drug court or similar options. We have many youth in the district who are getting drug and alcohol involved at younger and younger ages despite preventative education. These kids have to be sent out of state for treatment. Why can't we adequately fund our local programs like Rimrock? – Educator*

*Available resources. – Government Representative*

*Number of inpatient beds, Medicaid limitations on length of inpatient stays, and effective long-term sober living for meth users. – Government Representative*

*Not enough available treatment programs for those who want it. Not enough jail space for those who insist on continuing a career of dealing drugs. – Government Representative*

*Rimrock streamlines individuals that have private insurance and has a two to three month waiting list for Medicare and Medicaid clients. – Healthcare Provider*

*Access just like mental health. The two are intrinsically linked and so the same issues generally plague them both. – Healthcare Provider*

*Treatment options are extremely limited. Rimrock Foundation and the sober living facilities do a great job, but they can't be expected to shoulder the overwhelming burden alone. – Healthcare Provider*

*Billings has no treatment facilities for persons that are readily open and ready for treatment. They all have waiting lists, and many do not have enough resources to serve our indigent population. And some of the persons that have both mental health and substance abuse are denied access to treatment, as they are too severe to be accommodated in our community. – Healthcare Provider*

*Access to in and outpatient treatment. Stigma. – Healthcare Provider*

*Detox often is not available. Very extensive wait list for those with Medicaid needing inpatient treatment. – Public Health Representative*

*Limited resources and places to receive services. Lack of coordinated community services. Drinking culture is prevalent. – Public Health Representative*

*Lack of resources. – Healthcare Provider*

*Not enough resources. Primary care providers and ER providers need more knowledge on working with their patients when treatment is not available. Need more integrated behavioral health and addiction specialists in these settings. Very concerned about special help for pregnant women and mothers with addiction. Need more peer support groups. Need more resources in the school. Need to learn more about the work Portugal has done to decrease drug use in their country and what could be tried in our community. – Healthcare Provider*

### **Contributing Factors**

*Wait lists, hours of operation for assessment, lack of mobile crisis response team integrating behavioral health support with law enforcement crisis response. Stigma and fear, for example, having children removed or losing a job. – Community Leader*

*Treatment on demand. Long-term support system to help maintain sobriety. Assistance with a job and housing while in a treatment program. Stigma and punitive related cores. – Public Health Representative*

*Cost. It is costly to go through rehab. Also, substance abuse is criminalized. Instead of helping individuals seek treatment, we incarcerate them for possession. – Educator*

*I believe the greatest barriers are timeliness, access to payments for treatment and culturally relevant care for various groups within Billings. I think treatment should be available at various levels and should be sought sooner before problems become too out of control. I also think peer recovery support and community support systems need to be strengthened and diverse enough to respond to the complex and different needs and levels of treatment. I think meth treatment needs to be longer and more intense. I also think we should build better partnerships with other treatment centers outside of Billings to fulfill the great need for treatment in our region. I think that substance use issues often get stigmatized in our community and we have struggled identifying root causes and how to minimize the severity of the issues, especially among vulnerable populations. We also have many partnerships and coalitions addressing this issue, but a lack of leadership and communication overall. – Community Leader*

*People choosing not to get help. Drug dealers. Easy access to drugs and alcohol. Need to build stronger and more stable families. – Community Leader*

*I think the greatest barrier is how easily accessible drugs are. Not that I know anyone who deals, but I've heard about it and I've seen a lot of crazy behavior downtown due to drugs. – Community Leader*

*Access to substances is easier and quicker than access to treatment. Billings lacks the treatment capacity, both inpatient and outpatient, for the issues in the community. – Educator*

*The ease of access to legal and illegal drugs. Lack of treatment options and lack of funding. Ever changing rules and regulations that make treatment facilities spend more time figuring out how to get paid rather than treating and helping people. – Healthcare Provider*

*Lack of culturally appropriate treatment centers. After treatment, many programs are faith-based and there are more than sober requirements for living in treatment or sober living houses. – Public Health Representative*

*Most people who need treatment cannot afford to pay for it and are dependent on Medicaid. There have been waiting lists to access Medicaid-approved treatment. – Business Leader*

*Crime and CPS placements. – Community Leader*

*Not enough community support for substance abuse or addiction services. Community attitude is still about "will power" and does not recognize this as a true disease that requires treatment long term. Chronic health problems such as heart disease or diabetes are not blamed on the people who suffer but substance abuse is the fault of the person. – Government Representative*

*Racism, poverty, and an unwillingness of healthcare providers to actively advocate, train and certify Native caregivers and leaders. – Community Leader*

*Meth addiction, culture that normalizes alcohol consumption at unhealthy levels. – Healthcare Provider*

### Prevalence/Incidence

*Billings and Yellowstone County have a high area drug trafficking designation. Meth is the primary concern. 50% impacted by substance abuse. Fentanyl concerns regarding deaths. – Public Health Representative*

*Growing addiction problems. – Educator*

*Meth use is a huge problem. – Business Leader*

*Substance abuse is a problem in Yellowstone County. From my understanding, barriers to treatment include the unstable lives of addicts seeking treatment, overcrowded facilities, and potentially also few options in regard to treatment. – Educator*

*There has been improvement recently with more facilities opening up in the Yellowstone County area, however there is a large meth and opioid crisis in our community. There is an average of 5-10 babies born each week with in-utero drug exposure. – Community Leader*

*We read about it in the paper and hear it on the news. – Community Leader*

*It seems like half the people are suffering from some type of substance abuse. – Community Leader*

*Meth is rampant and law enforcement is overwhelmed. – Community Leader*

*Out of control, only getting worse. – Community Leader*

*Substance abuse is a big problem in Billings. Many individuals who were released from prison because their crimes involved small amounts of illegal substances have returned to Billings. For this group of people who need addiction treatment, there isn't enough access or after-care to meet their needs. Meth is currently the drug of choice. Both hospitals deal with people in the ER who are high drugs and combative. In downtown Billings there are groups of individuals who are alcoholics, drug addicts and/or mentally ill. This is a chronic problem. Overall, Billings does not have enough chemical dependency professionals to handle the number of people who need treatment. – Government Representative*

*Alcohol and Methamphetamine have the highest impact on our community, followed by Marijuana and less by Opiates. Our tribe has overtaken drug and alcohol services and are frequently not available for consultation. Furthermore, the poor staffing of our Behavioral Health dept. worsens the impact. – Healthcare Provider*

*Meth and opiate abuse are both rampant. I don't know what the barriers are to fixing this. We see more and more elderly into their 70s doing meth. It is bad. – Healthcare Provider*

*Meth, opioids. – Public Health Representative*

*Methamphetamine, epidemic again, which increases crime as well. – Healthcare Provider*

### Affordable Care/Services

*Affordability and wait times. I was actually more concerned about the atmosphere of prevention and community strategies for prevention. – Public Health Representative*

*There are not enough affordable, subsidized treatment options available to meet the needs of the community. – Community Leader*

*Costs and only a certain number of Medicaid and Medicare beds available to the community. – Community Leader*

*Coverage, treatment can be expensive. More halfway houses to assist with sobriety. – Public Health Representative*

*Cost and availability. – Community Leader*

*Finances. Treatment is expensive and beds are limited. – Educator*

*Untreated substance abuse, finances, denial, transient and not knowing where resources are. – Healthcare Provider*

*Cost and availability if inpatient treatment is needed. – Healthcare Provider*

*Cost and limited resources. – Healthcare Provider*

*The affordability of treatment and the number of folks that return to substance abuse. Rimrock Foundation seems to have one of the highest rates of return patients in the region. – Community Leader*

*Cost and availability of beds at recovery centers. I also feel 30-day programs are not a fix, just a Band-Aid. – Business Leader*

*Cost. – Community Leader*

*Cost and availability. – Public Health Representative*



*Affordable access to treatment and care is the greatest barrier. Most of those with substance abuse issues can't afford Rimrock and Rimrock has very few spaces available for Medicaid patients. I have actually been involved with trying to get someone help and into this program. The process isn't navigable for those currently in a substance abuse situation. After seeing this process firsthand, I don't see how many with substance abuse can find help or have success overcoming their addiction in our community. – Business Leader*

### **Denial/Stigma**

*In much the same way that we have stigmatized mental health and mental illness, we have stigmatized and misunderstood substance abuse. Instead of treating it as a chronic illness, we continue to treat it as a criminal offense and/or a weakness in moral character; punishing instead of treating. Much like services for mental illness, substance abuse/addiction services are too few and not always utilizing best practices. It is difficult (if not impossible) to get insurance and/or Medicaid/Medicare to pay for effective, long-term treatment and even when this can be accomplished, there is not adequate capacity in services to treat everyone in a timely manner. Wait lists are long and expectations to enter treatment are sometimes unrealistic and prohibitive. – Business Leader*

*Wanting and being motivated to quit smoking. – Healthcare Provider*

*People don't want help quitting substance abuse until they run out of said substance. When said substance becomes available again, they lose interest in quitting altogether. If you make accessing drugs very hard and you make treatment readily available more people are likely to quit. It is easier to get drugs than to get treatment. – Community Leader*

*Persons not wanting to seek help. – Healthcare Provider*

*Accessibility to help, that is not where you may find drug addicts. The stigma of people knowing. Seniors and opioids. – Community Leader*

*People admitting that they have a problem. Access to opioids and other drugs is too easy. – Government Representative*

*Too many stigmas associated with getting help, especially for men. Especially in regard to alcohol, it is hard for men to admit having a problem with substance abuse can be portrayed as "weak" and "unmanly," as drinking culture is so pervasive in the community. – Community Leader*

*Addiction: addicts do not want to be told they have a problem nor do a great majority admit to this disease. – Healthcare Provider*

*Accepting the fact that we have a problem with alcohol abuse. – Business Leader*

### **Funding**

*Funding that is unavailable or too limited to address needs. – Government Representative*

*As a state and a nation, treatment is underfunded. – Healthcare Provider*

*Funding and therapists. – Government Representative*

*Funding for licensed professionals certified to treat substance use and funding for staff to carry out integrated programs and hold participants accountable. – Community Leader*

*Funding, space available, outpatient and sober living. – Government Representative*

*Funding for services and good follow-up and case management, post treatment. – Community Leader*

*Funding for treatment centers and the ability for people to pay for treatment. – Government Representative*

### **Awareness/Education**

*Knowing where to go. – Educator*

*It is such a huge problem that is usually addressed when people are at the bottom. Needs to be discussed and education needs to be made available long before people are in crisis. We need more care givers, particularly for those that cannot afford care. – Community Leader*

*Space within Rimrock Foundation. I also think people are not familiar with the pathways to recovery which is intimidating. I think educating our community on all the multiple pathways to recovery can help bridge someone who is secretly suffering into a pathway that works best for them. Also, helps reduce stigma. – Community Leader*

### **Insurance Issues**

*Lack of insurance. – Business Leader*

*Insurance coverage. – Healthcare Provider*

**Lack of Providers**

*Lack of service providers and lack of money to pay the provider are the key impediments. –  
Community Leader*

**Most Problematic Substances**

Key informants (who rated this as a “major problem”) clearly identified **alcohol** and **methamphetamine/other amphetamines** as the most problematic substances abused in the community, followed by **heroin/other opioids** and prescription medications.

<b>Problematic Substances as Identified by Key Informants</b>				
	Most Problematic	Second-Most Problematic	Third-Most Problematic	Total Mentions
Alcohol	45.5%	31.4%	19.8%	84
Methamphetamines or Other Amphetamines	51.1%	32.6%	7.0%	79
Heroin or Other Opioids	2.3%	12.8%	22.1%	32
Prescription Medications	0.0%	9.3%	26.7%	31
Marijuana	1.1%	9.3%	12.8%	20
Synthetic Drugs (e.g. Bath Salts, K2/Spice)	0.0%	2.3%	4.7%	6
Cocaine or Crack	0.0%	2.3%	2.3%	4
Club Drugs (e.g. MDMA, GHB, Ecstasy, Molly)	0.0%	0.0%	2.3%	2
Over-the-Counter Medications	0.0%	0.0%	2.3%	2

## Tobacco Use

### About Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. Scientific knowledge about the health effects of tobacco use has increased greatly since the first Surgeon General's report on tobacco was released in 1964.

Tobacco use causes:

- Cancer
- Heart disease
- Lung diseases (including emphysema, bronchitis, and chronic airway obstruction)
- Premature birth, low birth weight, stillbirth, and infant death

There is no risk-free level of exposure to secondhand smoke. Secondhand smoke causes heart disease and lung cancer in adults and a number of health problems in infants and children, including: severe asthma attacks; respiratory infections; ear infections; and sudden infant death syndrome (SIDS).

Smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth and gums, periodontitis, and tooth loss. Cigar use causes cancer of the larynx, mouth, esophagus, and lung.

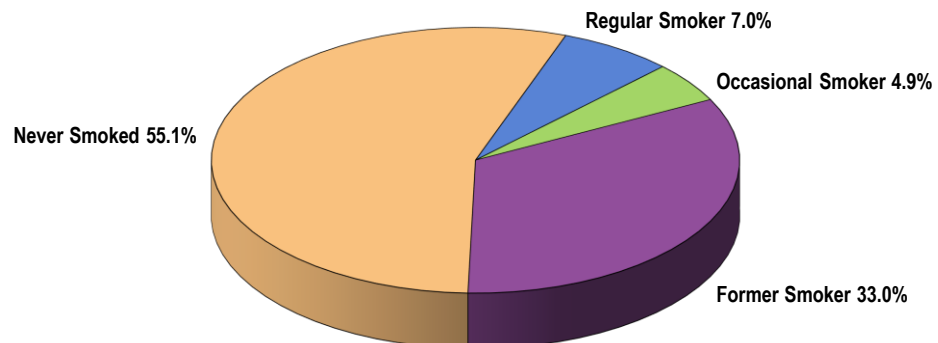
— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Cigarette Smoking

### Cigarette Smoking Prevalence

A total of 11.9% of Yellowstone County adults currently smoke cigarettes, either regularly (every day) or occasionally (on some days).

**Cigarette Smoking Prevalence**  
(Yellowstone County, 2020)



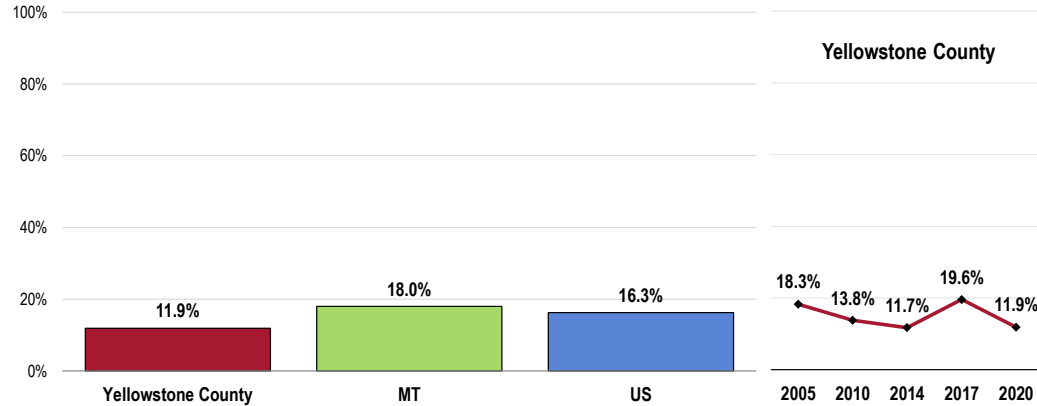
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 159]  
Notes: • Asked of all respondents.

Note the following findings related to cigarette smoking prevalence in Yellowstone County.

- **BENCHMARK:** Lower than the Montana and US figures.
- **TREND:** Denotes a statistically significant decrease since 2005 (despite an uptick in 2017).
- **DISPARITY:** Reported more often among adults under 65 and low-income residents.

### Current Smokers

Healthy People 2020 = 12.0% or Lower

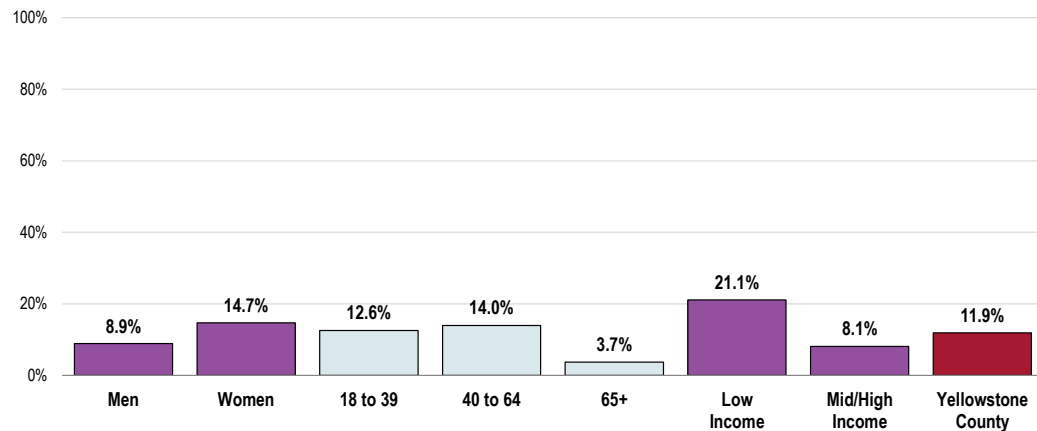


- Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 193]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.
  - 2017 PRC National Health Survey, PRC, Inc.
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.1]
- Notes:
- Asked of all respondents.
  - Includes regular and occasional smokers (those who smoke cigarettes every day or on some days).

### Current Smokers

(Yellowstone County, 2020)

Healthy People 2020 = 12.0% or Lower



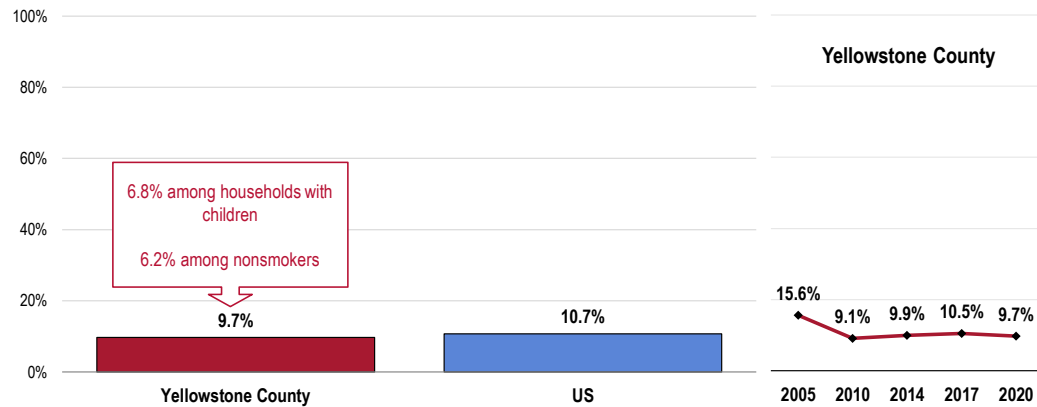
- Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 193]
  - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.1]
- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
  - Includes regular and occasion smokers (every day and some days).

### Environmental Tobacco Smoke

Among all surveyed households in Yellowstone County, 9.7% report that someone has smoked cigarettes in their home on an average of four or more times per week over the past month.

- **TREND:** Decreasing from 2005 survey results (similar to subsequent survey administrations).

### Member of Household Smokes at Home



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 52, 161-162]  
 • 2017 PRC National Health Survey, PRC, Inc.

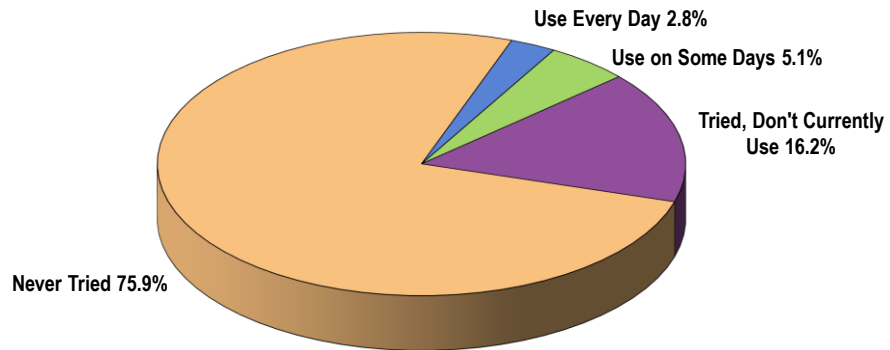
Notes: • Asked of all respondents.  
 • "Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month.

### Other Tobacco Use

#### Use of Vaping Products

Most Yellowstone County adults have never tried electronic cigarettes (e-cigarettes) or other electronic vaping products.

### Use of Vaping Products (Yellowstone County, 2020)

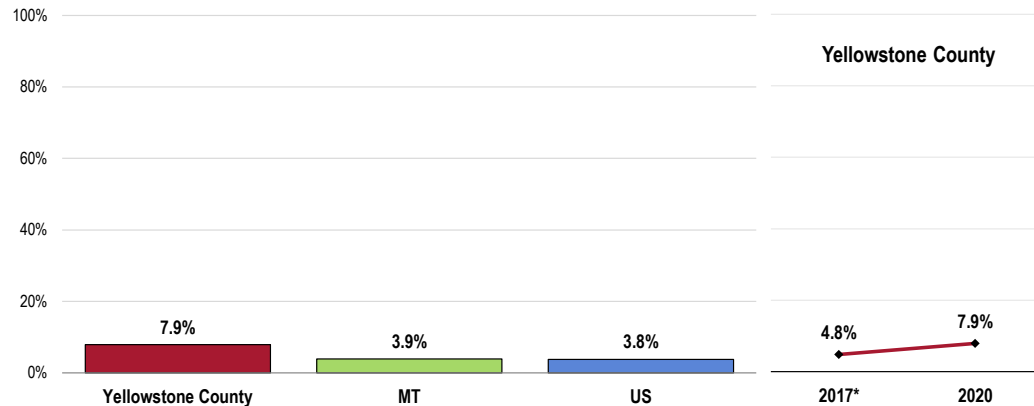


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 163]  
 Notes: • Asked of all respondents.

However, 7.9% currently use vaping products either regularly (every day) or occasionally (on some days).

- **BENCHMARK:** Well above the state and US figures.
- **DISPARITY:** Highest among young adults and low-income residents.

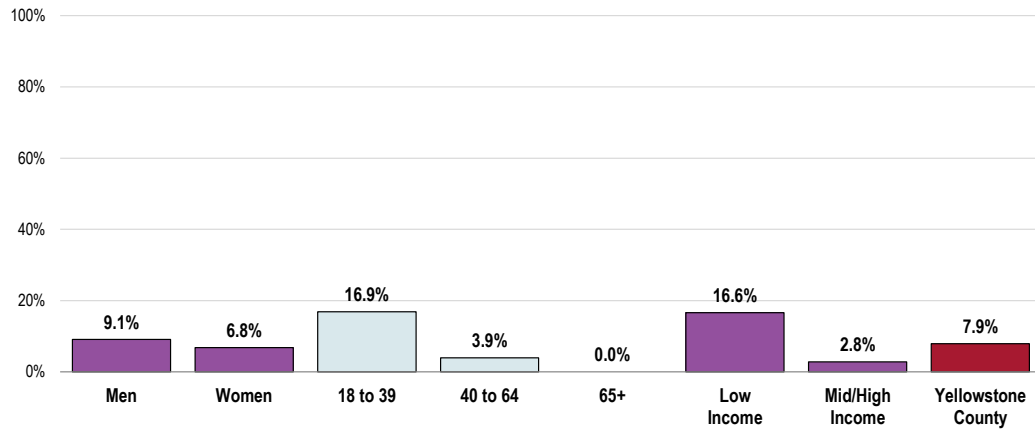
### Currently Use Vaping Products (Every Day or on Some Days)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 194]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2017 Montana data.

Notes: • Asked of all respondents.  
 • Includes regular and occasional users (those who vape and/or smoke e-cigarettes every day or on some days).  
 • \*The 2017 survey asked about e-cigarettes and did not mention vaping.

### Currently Use Vaping Products (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 194]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.  
 • Includes regular and occasional users (those who smoke e-cigarettes every day or on some days).

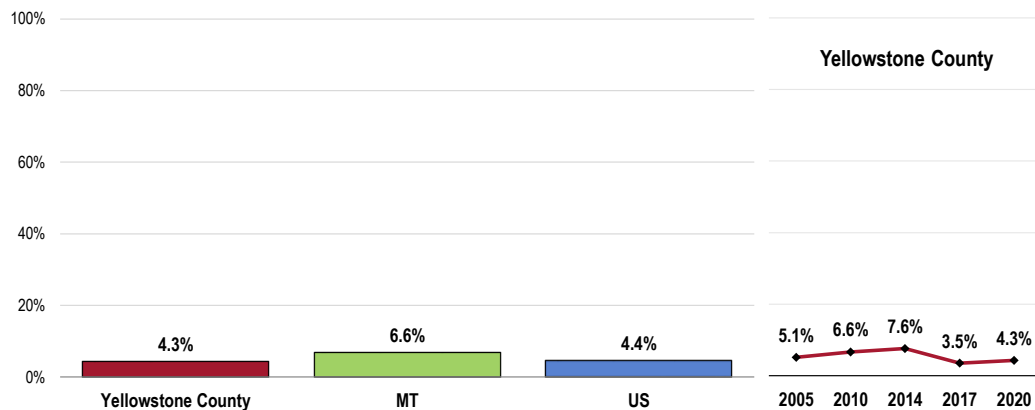
### Smokeless Tobacco

**A total of 4.3% of Yellowstone County adults use some type of smokeless tobacco every day or on some days.**

- **BENCHMARK:** Lower than the Montana percentage but failing to satisfy the Healthy People 2020 objective.

Examples of smokeless tobacco include chewing tobacco, snuff, or "snus."

### Currently Use Smokeless Tobacco HP2020 Goal = 0.3% or Lower



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 308]  
 • 2017 PRC National Health Survey, Professional Research Consultants, Inc.  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Montana data.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.2]  
 Notes: • Asked of all respondents.  
 • Smokeless tobacco includes chewing tobacco or snuff.

## Tobacco Cessation

### About Reducing Tobacco Use

Preventing tobacco use and helping tobacco users quit can improve the health and quality of life for Americans of all ages. People who stop smoking greatly reduce their risk of disease and premature death. Benefits are greater for people who stop at earlier ages but quitting tobacco use is beneficial at any age.

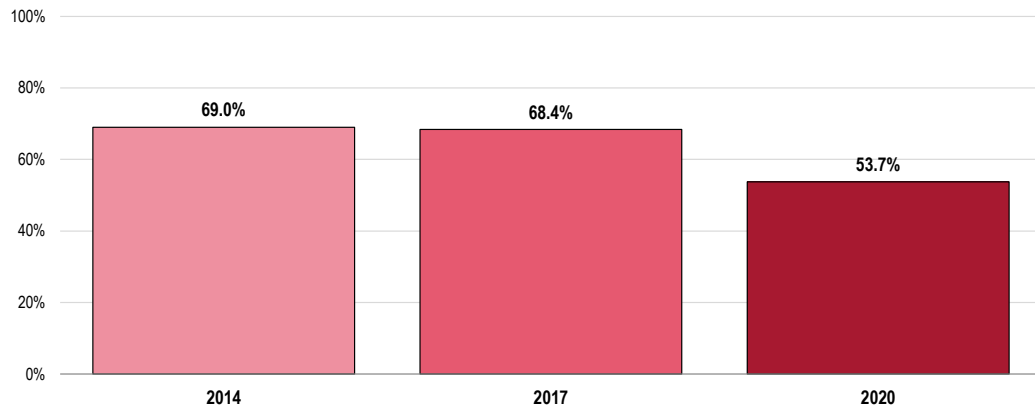
Many factors influence tobacco use, disease, and mortality. Risk factors include race/ethnicity, age, education, and socioeconomic status. Significant disparities in tobacco use exist geographically; such disparities typically result from differences among states in smoke-free protections, tobacco prices, and program funding for tobacco prevention.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**Over half of tobacco users (53.7%; including respondents using cigarettes, smokeless tobacco, and/or electronic cigarettes) have been advised by a healthcare professional to stop using tobacco products at some point in the past year.**

- **TREND:** Marks a statistically significant decrease from previous survey findings.

### Advised by a Healthcare Professional in the Past Year to Stop Using Tobacco Products (Among Current Tobacco Users; Yellowstone County)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 309]

Notes: • Current tobacco users include respondents using cigarettes, smokeless tobacco, or electronic cigarettes.  
• \*In the 2014 survey, this indicator did not include the use of e-cigarettes.



## Key Informant Input: Tobacco Use

The greatest share of key informants taking part in an online survey characterized *Tobacco Use* as a “moderate problem” in the community.

### Perceptions of Tobacco Use as a Problem in the Community (Key Informants, 2020)

■ Major Problem ■ Moderate Problem ■ Minor Problem ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Asked of all respondents.

## Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

### Prevalence/Incidence

*Chewing and smoking is common in Montana and continues to be socially acceptable. – Educator*  
*I walk down the sidewalk and I see a lot of people smoking. I walk through the city parking garage and I have to walk through a cloud of smoke to get to my office. – Business Leader*  
*Because people are dying daily from it. – Community Leader*  
*Visually, you see people smoking often in our community. The littering of cigarette butts on the streets and sidewalks is evidence of a high degree of tobacco use. – Community Leader*  
*Tobacco use and vaping among teenagers and adults is rising. – Educator*  
*So many people smoke even though the health problems are well known. – Government Representative*  
*Number of people I see smoking and number of cigarette butts I see on the ground throughout the community. – Government Representative*  
*I see it way too often with young kids and adults using tobacco products. The dangers are well-documented. – Government Representative*  
*Too many people smoke and/or chew. – Healthcare Provider*  
*We have much higher tobacco use in Montana than other states. – Healthcare Provider*  
*As long as anyone smokes, it is an issue. – Healthcare Provider*  
*Tobacco and vaping and the health risks associated with both. – Healthcare Provider*  
*Montana’s tobacco use rate is higher than the national rate overall. We also have higher rates for teens, women, and Native Americans. – Healthcare Provider*  
*People continue to use tobacco products and e-cigarette use is increasing. – Public Health Representative*  
*Observing the number of people I see smoking, young and old, as well as e-cigarettes and vapor parlors. – Healthcare Provider*

### **E-Cigarettes**

*The younger people are switching from the old style of smoking to vaping and no one is really clear yet just how much harm this new form of smoking does to the body. – Community Leader*

*I think cigarette use is most likely in decline, but vaping is a major issue among youth in Yellowstone County. The city of Milwaukee, I believe, declared vaping a public health emergency and we should consider doing the same. – Community Leader*

*Vaping is out of control in the schools. Kids have no idea what they are messing with. Vapes are easier to hide and use than regular cigarettes and they are seen as cool or popular with peers. – Educator*

*Vapes are becoming the normal because it's not quite a cigarette. It makes it more appealing, therefore people do not think there is a risk or concern. – Community Leader*

*“Vaping”, in particular, is marketed to and being abused by children. The damaging effects of nicotine and the transference of this addiction to other harmful drugs, especially on young developing brains, is an epidemic. The likelihood of childhood substance use issues leading to mental illness in adulthood is high. – Community Leader*

*Vaping has become pervasive among teens and adults and is poorly regulated. Other tobacco products have been bad enough in this community, but the prevalence of vaping is extremely worrisome to me. – Community Leader*

### **Youth**

*Too many children use tobacco products. – Community Leader*

*Young people continue to use tobacco, but now the vaping industry is sucking them in. – Business Leader*

*New local rule for stand-back smoking in doorways and windows along with no vaping inside. Teen use, vaping on the rise, commercials, access, big tobacco marketing to youth by the shape and size of e-cigarettes. – Public Health Representative*

*Smoking and vaping are common in young people. – Business Leader*

### **Contributing Factors**

*High rates of use in all ages, particularly in families where tobacco has been used for generations. E-cigarettes and vaping among youth. Huge impact on pre-term birth and unhealthy pregnancies. – Healthcare Provider*

*People who can't afford a place to live, food or a car somehow manage to buy cigarettes. Living expenses paid by state or local agencies basically free up money for recipients to purchase cigarettes. – Community Leader*

### **Awareness/Education**

*Education and prevention are lacking especially around vaping and e-cigarette use in the teenage population. – Educator*

## Sexual Health

### HIV

#### About Human Immunodeficiency Virus (HIV)

The HIV epidemic in the United States continues to be a major public health crisis. An estimated 1.1 million Americans are living with HIV, and 1 in 5 people with HIV do not know they have it. HIV continues to spread, leading to about 56,000 new HIV infections each year.

HIV is a preventable disease, and effective HIV prevention interventions have been proven to reduce HIV transmission. People who get tested for HIV and learn that they are infected can make significant behavior changes to improve their health and reduce the risk of transmitting HIV to their sex or drug-using partners. More than 50% of new HIV infections occur as a result of the 21% of people who have HIV but do not know it.

In the era of increasingly effective treatments for HIV, people with HIV are living longer, healthier, and more productive lives. Deaths from HIV infection have greatly declined in the United States since the 1990s. As the number of people living with HIV grows, it will be more important than ever to increase national HIV prevention and healthcare programs.

There are gender, race, and ethnicity disparities in new HIV infections:

- Nearly 75% of new HIV infections occur in men.
- More than half occur in gay and bisexual men, regardless of race or ethnicity.
- 45% of new HIV infections occur in African Americans, 35% in whites, and 17% in Hispanics.

Improving access to quality healthcare for populations disproportionately affected by HIV, such as persons of color and gay and bisexual men, is a fundamental public health strategy for HIV prevention.

People getting care for HIV can receive:

- Antiretroviral therapy
- Screening and treatment for other diseases (such as sexually transmitted infections)
- HIV prevention interventions
- Mental health services
- Other health services

As the number of people living with HIV increases and more people become aware of their HIV status, prevention strategies that are targeted specifically for HIV-infected people are becoming more important. Prevention work with people living with HIV focuses on:

- Linking to and staying in treatment.
- Increasing the availability of ongoing HIV prevention interventions.
- Providing prevention services for their partners.

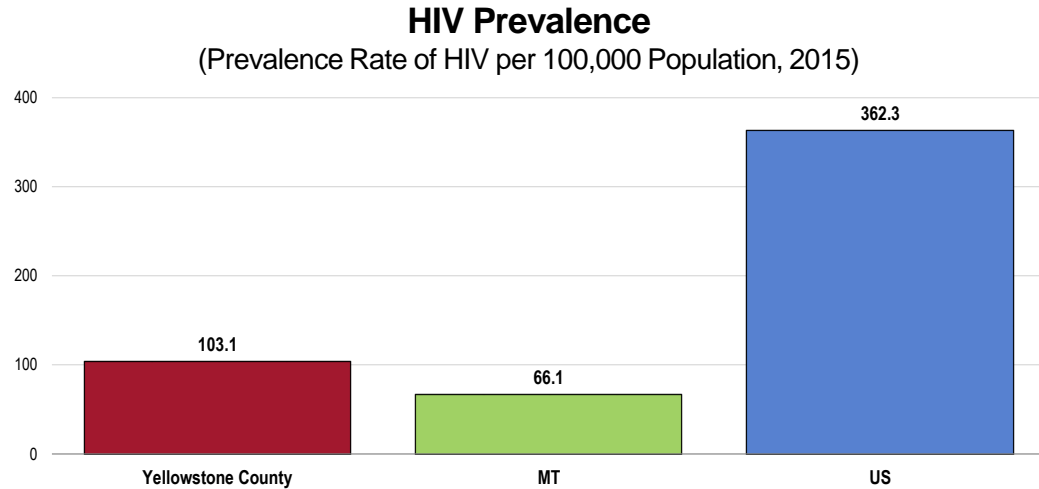
Public perception in the US about the seriousness of the HIV epidemic has declined in recent years. There is evidence that risky behaviors may be increasing among uninfected people, especially gay and bisexual men. Ongoing media and social campaigns for the general public and HIV prevention interventions for uninfected persons who engage in risky behaviors are critical.

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### HIV Prevalence

In 2015, there was a prevalence of 103.1 HIV cases per 100,000 population in Yellowstone County.

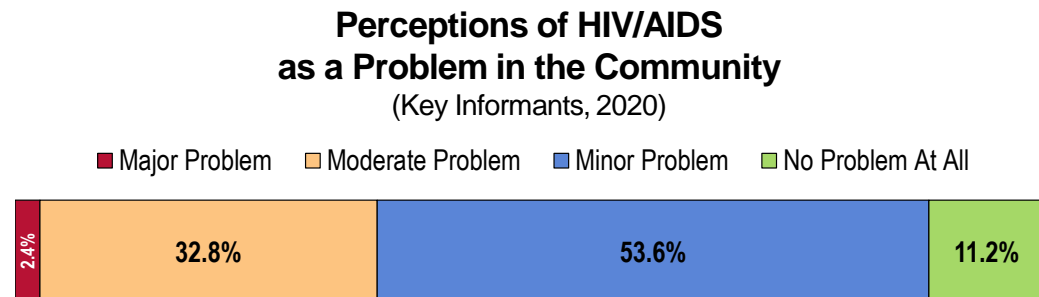
- **BENCHMARK:** Above the Montana prevalence rate but well below the US.



Sources: • Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
 • Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.  
 Notes: • This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

### Key Informant Input: HIV/AIDS

Key informants taking part in an online survey most often characterized *HIV/AIDS* as a “minor problem” in the community.



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

## Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

### Contributing Factors

*Yellowstone AIDS Project closed and there has been a small patchwork of volunteers trying to fill the void of offering care and services to those infected. Riverstone Health has an unfortunate stigma, and many do not want to access services there. There is an overall general lack of education in Yellowstone County in regard to HIV/AIDS infection rates and risks. Providers even lack the ability to discern risk from CDC recommendations. There is a significant amount of sex trafficking happening within our community that has been ignored by everyone including the healthcare industry. – Community Leader*

*Until there is a cure, social media apps geared toward sex hookups are on the rise. I presume STD rates are on the rise, too. HIV follows STD rates. – Community Leader*

## Sexually Transmitted Diseases

### About Sexually Transmitted Diseases

STDs refer to more than 25 infectious organisms that are transmitted primarily through sexual activity. Despite their burdens, costs, and complications, and the fact that they are largely preventable, STDs remain a significant public health problem in the United States. This problem is largely unrecognized by the public, policymakers, and health care professionals. STDs cause many harmful, often irreversible, and costly clinical complications, such as: reproductive health problems; fetal and perinatal health problems; cancer; and facilitation of the sexual transmission of HIV infection.

Because many cases of STDs go undiagnosed—and some common viral infections, such as human papillomavirus (HPV) and genital herpes, are not reported to CDC at all—the reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STDs in the US. Untreated STDs can lead to serious long-term health consequences, especially for adolescent girls and young women. Several factors contribute to the spread of STDs.

**Biological Factors.** STDs are acquired during unprotected sex with an infected partner. Biological factors that affect the spread of STDs include:

- **Asymptomatic nature of STDs.** The majority of STDs either do not produce any symptoms or signs, or they produce symptoms so mild that they are unnoticed; consequently, many infected persons do not know that they need medical care.
- **Gender disparities.** Women suffer more frequent and more serious STD complications than men do. Among the most serious STD complications are pelvic inflammatory disease, ectopic pregnancy (pregnancy outside of the uterus), infertility, and chronic pelvic pain.
- **Age disparities.** Compared to older adults, sexually active adolescents ages 15 to 19 and young adults ages 20 to 24 are at higher risk for getting STDs.
- **Lag time between infection and complications.** Often, a long interval, sometimes years, occurs between acquiring an STD and recognizing a clinically significant health problem.

**Social, Economic, and Behavioral Factors.** The spread of STDs is directly affected by social, economic, and behavioral factors. Such factors may cause serious obstacles to STD prevention due to their influence on social and sexual networks, access to and provision of care, willingness to seek care, and social norms regarding sex and sexuality. Among certain vulnerable populations, historical experience with segregation and discrimination exacerbates these factors. Social, economic, and behavioral factors that affect the spread of STDs include: racial and ethnic disparities; poverty and marginalization; access to healthcare; substance abuse; sexuality and secrecy (stigma and discomfort discussing sex); and sexual networks (persons “linked” by sequential or concurrent sexual partners).

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

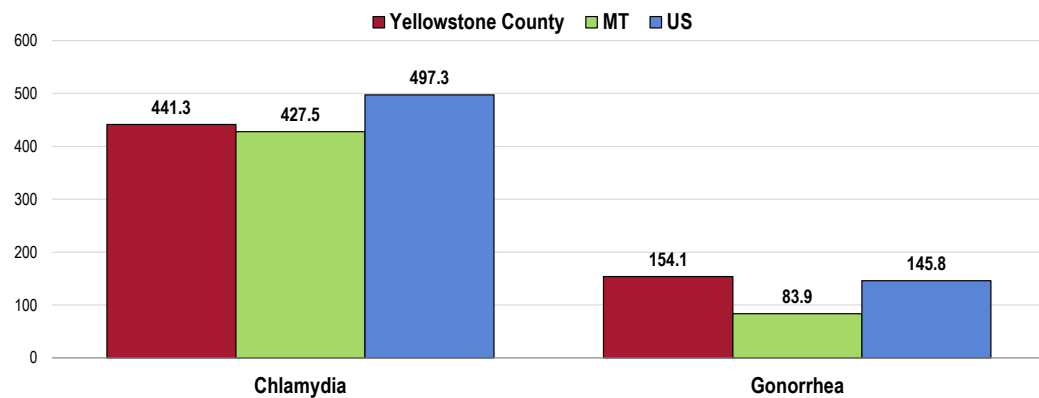
### Chlamydia & Gonorrhea

In 2016, the chlamydia incidence rate in Yellowstone County was 441.3 cases per 100,000 population.

The Yellowstone County gonorrhea incidence rate in 2016 was 154.1 cases per 100,000 population.

- **BENCHMARK:** While the gonorrhea incidence rate exceeds the US and especially the Montana rate, the chlamydia rate falls below the national rate.
- **TREND:** Both rates have increased over time (not shown).

### Chlamydia & Gonorrhea Incidence (Incidence Rate per 100,000 Population, 2016)

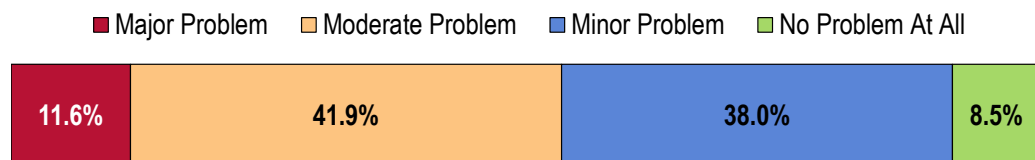


Sources: • Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
 • Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.  
 Notes: • This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

### Key Informant Input: Sexually Transmitted Diseases

Many key informants taking part in an online survey characterized *Sexually Transmitted Diseases* as a “moderate problem” in the community (followed closely by “minor problem” ratings).

### Perceptions of Sexually Transmitted Diseases as a Problem in the Community (Key Informants, 2020)



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

## Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

### Prevalence/Incidence

*Rates of gonorrhea, chlamydia, and syphilis are growing in our community at alarming rates. What happens when we have an antibiotic resistant strain that cannot be treated? High risk behavior in the community- human trafficking, drug use, homelessness, movement in and out of Billings. – Public Health Representative*

*High rates of gonorrhea and syphilis. – Public Health Representative*

*STDs are on the rise in Yellowstone County. – Public Health Representative*

*I don't know if they are or not, but any amount of STDs is an issue. – Healthcare Provider*

*Sexually transmitted disease numbers are the highest they have ever been, especially gonorrhea and chlamydia. – Healthcare Provider*

*Number of STDs are increasing. – Business Leader*

### Contributing Factors

*People are not getting tested. – Healthcare Provider*

*Lots of unprotected sex, often multiple partners, drugs and alcohol frequently involved. – Healthcare Provider*

*We have seen spikes in all STIs, including syphilis. The lack of comprehensive, medically accurate, age-appropriate sex education in SD2 is tragic and such education has been proven to reduce STI rates. – Healthcare Provider*

### Awareness/Education

*Lack of knowledge and prevention. – Healthcare Provider*

# Access to Health Services





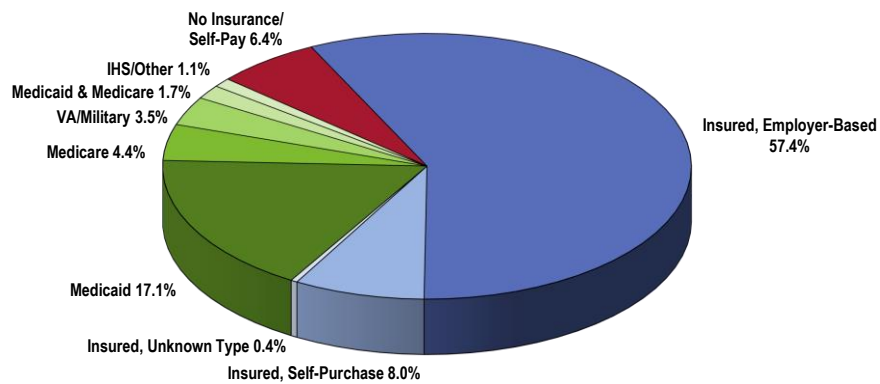
## Health Insurance Coverage

### Type of Healthcare Coverage

A total of 65.8% of Yellowstone County adults age 18 to 64 report having healthcare coverage through private insurance. Another 27.8% report coverage through a government-sponsored program (e.g., Indian Health Services, Medicaid, Medicare, military benefits).

Survey respondents were asked a series of questions to determine their healthcare insurance coverage, if any, from either private or government-sponsored sources.

**Healthcare Insurance Coverage**  
(Adults Age 18-64; Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 169]  
Notes: • Reflects respondents age 18 to 64.

### Lack of Health Insurance Coverage

Among adults age 18 to 64, 6.4% report having no insurance coverage for healthcare expenses.

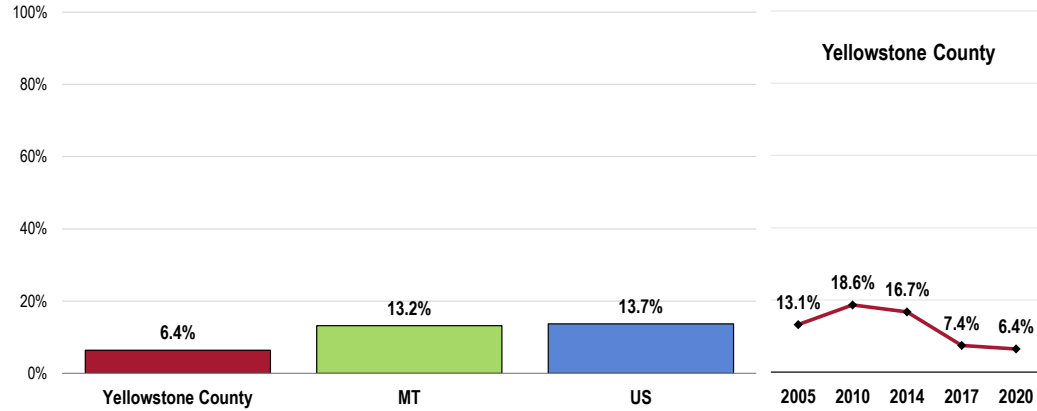
Here, lack of health insurance coverage reflects respondents age 18 to 64 (thus, excluding the Medicare population) who have no type of insurance coverage for healthcare services – neither private insurance nor government-sponsored plans (e.g., Medicaid).

- **BENCHMARK:** Well below the state and US figures. The Healthy People 2020 objective is universal coverage.
- **TREND:** Marks a statistically significant decrease since 2005 (and especially 2010 and 2014).
- **DISPARITY:** Unfavorably high among adults in the higher income breakout.

## Lack of Healthcare Insurance Coverage

(Adults Age 18-64)

Healthy People 2020 = 0.0% (Universal Coverage)



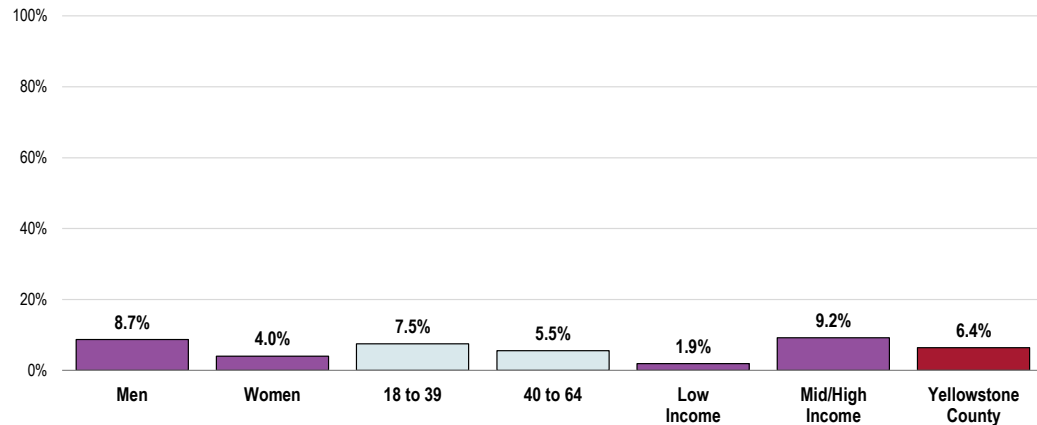
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 169]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 • 2017 PRC National Health Survey, PRC, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-1]

Notes: • Asked of all respondents under the age of 65.

## Lack of Healthcare Insurance Coverage

(Adults Age 18-64; Yellowstone County, 2020)

Healthy People 2020 = 0.0% (Universal Coverage)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 169]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-1]

Notes: • Asked of all respondents under the age of 65.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Difficulties Accessing Healthcare

### About Access to Healthcare

Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. It impacts: overall physical, social, and mental health status; prevention of disease and disability; detection and treatment of health conditions; quality of life; preventable death; and life expectancy.

Access to health services means the timely use of personal health services to achieve the best health outcomes. It requires three distinct steps: 1) Gaining entry into the health care system; 2) Accessing a health care location where needed services are provided; and 3) Finding a health care provider with whom the patient can communicate and trust.

— Healthy People 2020 (www.healthypeople.gov)

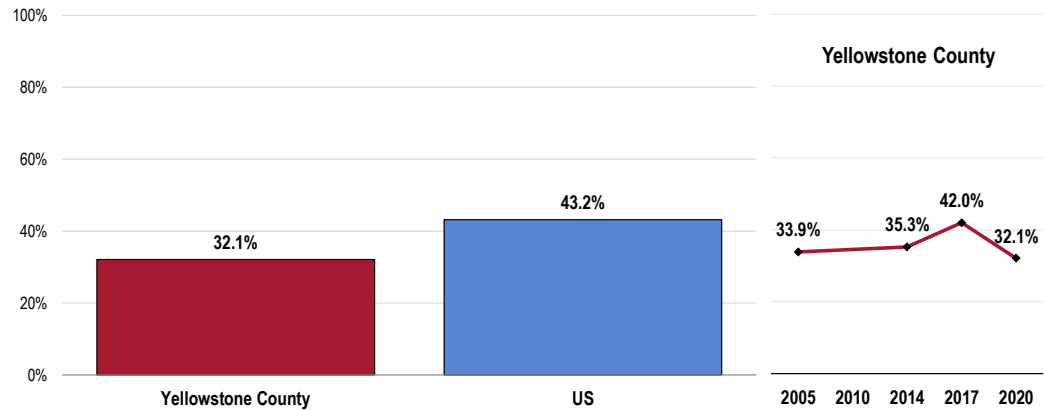
### Difficulties Accessing Services

**A total of 32.1% of Yellowstone County adults report some type of difficulty or delay in obtaining healthcare services in the past year.**

This indicator reflects the percentage of the total population experiencing problems accessing healthcare in the past year, regardless of whether they needed or sought care. It is based on reports of the barriers outlined in the following section.

- **BENCHMARK:** Better than the US prevalence.
- **TREND:** Note the improvement since 2017.
- **DISPARITY:** Reported more often among women and adults age 40 to 64.

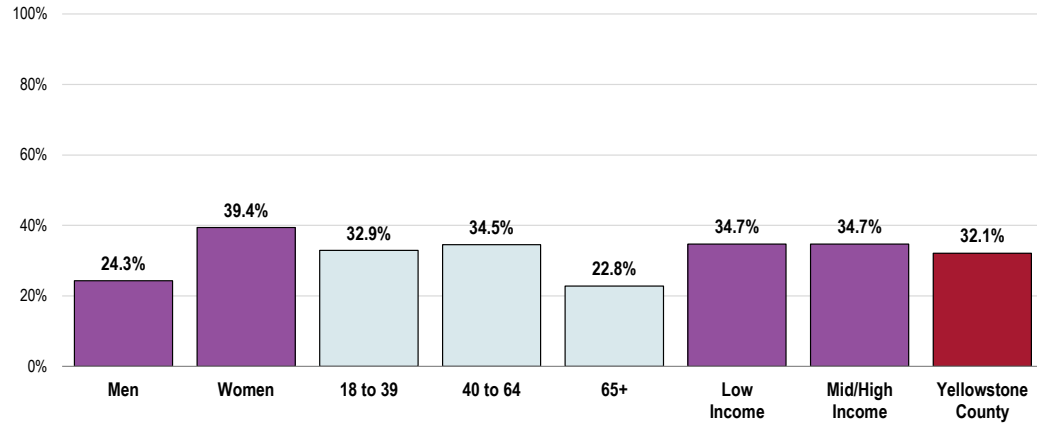
### Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 171]  
 • 2017 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.  
 • Percentage represents the proportion of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.

## Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 171]

Notes: • Asked of all respondents.

• Percentage represents the proportion of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.

• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Barriers to Healthcare Access

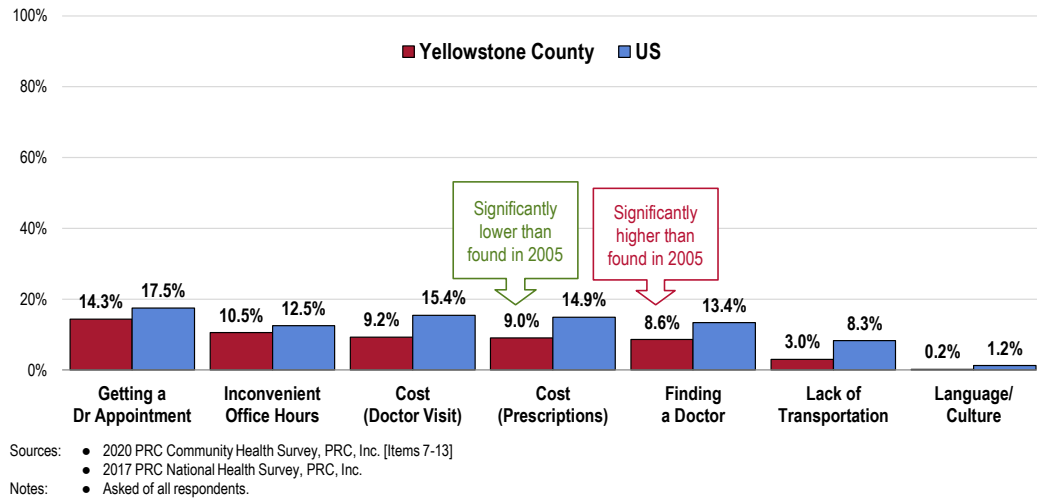
Of the tested barriers, appointment availability impacted the greatest share of Yellowstone County adults.

- **BENCHMARK:** The county fares better than US residents for cost of prescriptions and physician visits, difficulty finding a physician, lack of transportation, and language/culture as a barrier to access.
- **TREND:** Note the improvement over time for the barrier of prescription cost but also the worsening over time for difficulty in finding a physician.

To better understand healthcare access barriers, survey participants were asked whether any of seven types of barriers to access prevented them from seeing a physician or obtaining a needed prescription in the past year.

Again, these percentages reflect the total population, regardless of whether medical care was needed or sought.

## Barriers to Access Have Prevented Medical Care in the Past Year



Note also that 9.5% of Yellowstone County adults have skipped or reduced medication doses in the past year in order to stretch a prescription and save costs.

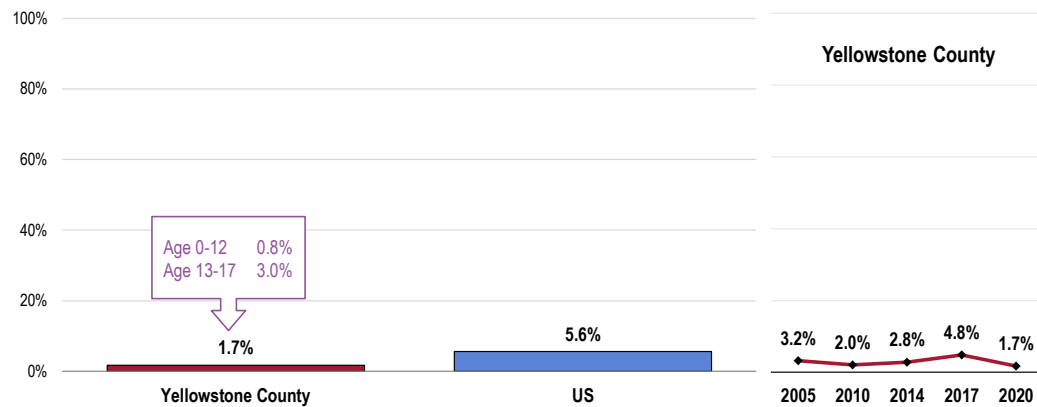
## Accessing Healthcare for Children

A total of 1.7% of parents say there was a time in the past year when they needed medical care for their child but were unable to get it.

- **BENCHMARK:** Well below the national percentage.

Surveyed parents were also asked if, within the past year, they experienced any trouble receiving medical care for a randomly selected child in their household.

## Had Trouble Obtaining Medical Care for Child in the Past Year (Parents of Children 0-17)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 118-119]  
 • 2017 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents with children 0 to 17 in the household.

## Key Informant Input: Access to Healthcare Services

Key informants taking part in an online survey most often characterized **Access to Healthcare Services** as a “moderate problem” in the community.

### Perceptions of Access to Healthcare Services as a Problem in the Community (Key Informants, 2020)

■ Major Problem ■ Moderate Problem ■ Minor Problem ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Asked of all respondents.

## Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

### Insurance Issues

*There is a huge disparity between healthcare access for those who have the money to pay for healthcare services and marginalized communities which have very little access to nutritious food, preventive care, mental health services, and recovery resources. The Native community is rarely represented as caregivers for their community and little is being done to train and certify healthy professionals for the Native community. – Community Leader*

*The number of people who are either underinsured or completely uninsured means though having improved greatly since the passage and implementation of the Affordable Care Act and the Montana Medicaid expansion bill is still at a level which means people are financially not able to access the healthcare they need. Also, physical and programmatic access to clinics and other treatment spaces for persons with disabilities remains less than ideal. – Community Leader*

*Individual cost in a private provider system. Folks that are eligible for ACA benefits find it too difficult to understand the process. – Healthcare Provider*

*Individuals who do not have Medicaid, Medicare or private insurance are still at risk. Now that Medicaid expansion has been approved again by the Montana legislature, this will help. However, there are still many people that fall through the cracks. – Community Leader*

*Lack of insurance or lack of quality insurance. Medicaid requirements and costs related to healthcare sometimes even with insurance is problematic for many in our community. Waiting lists to see physicians can be months long also. – Government Representative*

*Lack of adequate insurance. Transportation and finances. Sometimes folks with problems such as old age, medical condition, memory loss, etc. do not have friend, family or care givers. I think that is a real problem. No one checks on them physically, they do not socialize -leading to depression, they don't have someone checking on whether they take their 'pills', or even if they are taking care of their personal needs. – Community Leader*

### Access to Care/Services

*There are no viable clinics in the community. Patients need to drive at a minimum of 5 miles to receive primary or acute care from a physician. It is very difficult to establish a primary care physician for our families as many use the emergency room or walk in clinic as their primary care facility. – Educator*

*The paperwork and red tape to get qualified and get in to see health providers in a timely manner. – Educator*

*Home health. – Healthcare Provider*

*Case management. – Community Leader*

*Getting in to see a provider in a timely manner, particularly primary care. – Educator*

*Long waits for care with some specialties. – Healthcare Provider*

*Lack of services available for the demand. – Healthcare Provider*

*Access to long-term care services in the community—many of the area nursing homes are transitioning traditional long-term care beds to short-term rehab beds which reduces the number of long-term care beds available in the community. This can make placement difficult for individuals requiring this level of care whether it be for cognitive, functional or medical needs. This can therefore result in individuals living unsafely in the community or increasing length of stay in the hospital if the discharge planners are unable to find appropriate placement for these individuals. Having a more progressive and available palliative care program in the organization as well as the community may help with these challenging situations. – Healthcare Provider*

### **LGBTQ Population**

*There is a significant lack of LGBTQ+ informed, appropriate or sensitive care. There is virtually no healthcare available in Yellowstone County for the transgender community, the nearest gender affirming surgeon is outside of the state and 8+ hours via car away. There are only 2 providers in the area that help with hormone therapy for the transgender community. There are no trauma informed providers trained specifically to work with the LGBTQ+ community thus often LGBTQ+ people avoid getting necessary care. There are not enough mental health providers for the community needs. There is a significant lack of affordable treatment facilities for the number of addicts in our community. There are serious gaps in the availability of pediatric specialist--there is 1 pediatric developmental specialist with a 6+ month wait list, 1 pediatric ophthalmologist who has a 9+ month wait list and there is a 6+ month wait list to get psychiatric care for pediatric patients across the county. – Community Leader*

*Access to gender and sexuality affirming healthcare for LGBTQ individuals. Many do not seek care when they need to because of past traumas within the healthcare system. – Community Leader*

*There is a lack of informed care for the LGBTQ+ community across all aspects of healthcare and there is virtual no informed care for the transgender community in Yellowstone County. LGBTQ+ populations are the least likely to seek care due to the fear of discrimination and rejection and yet have significant risk factors for several diseases such as increased risk for cervical and breast cancer amongst lesbians, increased risk for eating disorders amongst gay men and the higher risk for cardiovascular disease amongst transgender women. LGBTQ+ trauma informed does not exist. – Community Leader*

### **Access to Providers**

*Lack of providers. – Healthcare Provider*

*Not enough physicians per population. It takes several weeks if not months to get a new patient appointment and establish as a patient. Most people use quick clinics and after-hours clinics and are seen by physician assistants or nurse practitioners and not physicians. We also do not have a good hospital bed-to-population ratio for the area served. There is a critical problem of pre-hospital Advanced Life Support care due to an extreme shortage of ambulance availability across the county. It can take over an hour to get an ambulance on a regular basis outside the metropolitan area. – Government Representative*

*The lack of access to healthcare professionals. The lack of physicians and other healthcare workers. The wait times are excessive. – Business Leader*

*Long waits for appointments at many primary care providers. Medicaid expansion has improved coverage, which is a positive. – Healthcare Provider*

*Not enough access to rheumatologists. – Healthcare Provider*

### **Behavioral Health Services**

*Especially related to mental health services, there are extremely limited resources and very little financial incentives for providers to offer up-stream services like: awareness, early identification, case management, and in-home supports for families. These upstream services are much less costly to the system (state and local government, schools, businesses, insurers, etc.) than mandated crisis services which occur when we limit the ability for early intervention. Not only are early intervention services less costly, when performed well they help Montanans continue to live in their home communities, continue to work or go to school, and avoid hospitalization or institutionalization. – Community Leader*

*Access to behavioral health services and psychiatric care. – Public Health Representative*

*Co-occurring mental health and substance abuse. Services are available but limited funding and rules meet the needs of individuals. – Community Leader*

*Waiting lists for behavioral health treatment. Waiting lists for Medicaid nursing home beds. Access to transitional care for the homeless and those in poverty, like upon discharge from the Emergency Room, discharge from the Crisis Center or discharge from acute care. – Community Leader*

*Mental healthcare, safe and orderly wet housing. True rehabilitation where clients are coached to sobriety, not in a system for dollars. – Community Leader*

*People who have mental illnesses and addictions have difficulty navigating the system, especially if they are homeless. Incarceration interrupts treatment and usually requires the individual to start over with applying for assistance. – Business Leader*

**Vulnerable Populations**

*Having homeless and transient population have access to Indian Health and/or the knowledge of resources for services. – Community Leader*

*Homelessness and poverty. – Community Leader*

*Lack of good healthcare for IHS patients. IHS really pays nothing, they have to live on the reservation to get it, and the unemployment there drives people to leave it. These patients don't get healthcare, they don't eat well, and they have difficulty finding housing. – Healthcare Provider*

**Transportation**

*We live in a frontier state where people have to travel many miles to access healthcare. We also live close to reservation communities where stigmas as well as transportation may be an issue. – Educator*

*The biggest issue for many of our patients is inability to get to hospital/clinic for care due to transportation issues. As a result, primary and preventative care are given low priority and chronic diseases do not receive appropriate interval maintenance care, rather the patients wait for complications to arise prior to being seen. – Healthcare Provider*

**Affordable Care/Services**

*Affordability, especially drugs. Difficulty in navigating the huge variation in insurance options. Correlating insurance with Medicare. – Government Representative*

**Type of Care Most Difficult to Access**

**Key informants (who rated this as a “major problem”) most often identified behavioral health/substance abuse treatment as the most difficult to access in the community.**

<b>Medical Care Difficult to Access as Identified by Key Informants</b>				
	<b>Most Difficult</b>	<b>Second-Most Difficult</b>	<b>Third-Most Difficult</b>	<b>Total Mentions</b>
Behavioral Health	56.5%	27.3%	5.0%	20
Substance Abuse Treatment	13.0%	36.4%	35.0%	18
Primary Care	17.4%	13.6%	5.0%	8
Specialty Care	4.3%	4.5%	15.0%	5
Dental Care	0.0%	0.0%	20.0%	4
Elder Care	4.3%	4.5%	5.0%	3
Pain Management	0.0%	0.0%	10.0%	2
Chronic Disease Care	0.0%	4.5%	5.0%	2
Urgent Care	0.0%	9.1%	0.0%	2
Home Health Care	4.3%	0.0%	0.0%	1



## Primary Care Services

### About Primary Care

Improving health care services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes and fewer disparities and costs. Having a primary care provider (PCP) as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community. Having a usual PCP is associated with:

- Greater patient trust in the provider
- Good patient-provider communication
- Increased likelihood that patients will receive appropriate care

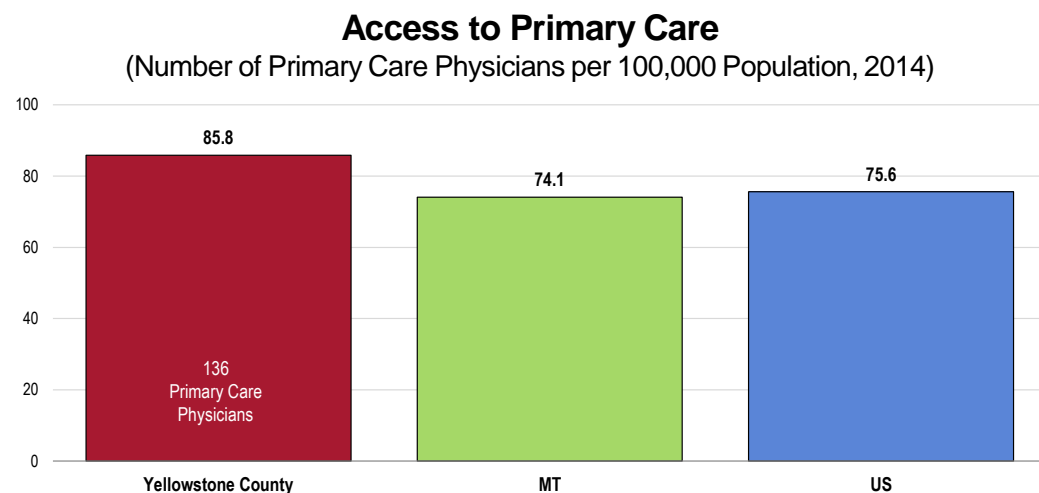
Improving health care services includes increasing access to and use of evidence-based preventive services. Clinical preventive services are services that: **prevent** illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention); or **detect** a disease at an earlier, and often more treatable, stage (secondary prevention).

— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

### Access to Primary Care

In 2014, there were 136 primary care physicians in Yellowstone County, translating to a rate of 85.8 primary care physicians per 100,000 population.

- **BENCHMARK:** Above the state and national ratios.



Sources: • US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File.  
• Retrieved October 2019 from CARES Engagement Network at <https://engagementnetwork.org>.

Notes: • Doctors classified as "primary care physicians" by the AMA include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs, and General Pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

## Specific Source of Ongoing Care

Having a specific source of ongoing care includes having a doctor's office, clinic, urgent care center, walk-in clinic, health center facility, hospital outpatient clinic, HMO or prepaid group, military/VA clinic, or some other kind of place to go if one is sick or needs advice about his or her health. This resource is crucial to the concept of "patient-centered medical homes" (PCMH).

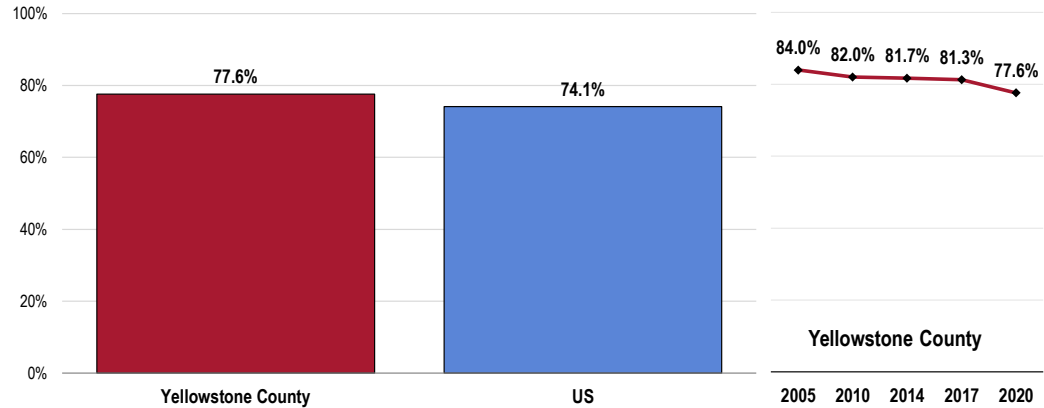
A hospital emergency room is not considered a specific source of ongoing care in this instance.

**A total of 77.6% of Yellowstone County adults were determined to have a specific source of ongoing medical care.**

- **BENCHMARK:** Fails to satisfy the Healthy People 2020 objective.
- **TREND:** Decreasing significantly from 2005 survey findings.

### Have a Specific Source of Ongoing Medical Care

Healthy People 2020 = 95.0% or Higher



Sources: ● 2020 PRC Community Health Survey, PRC, Inc. [Item 170]  
 ● 2017 PRC National Health Survey, PRC, Inc.  
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-5.1]  
 Notes: ● Asked of all respondents.

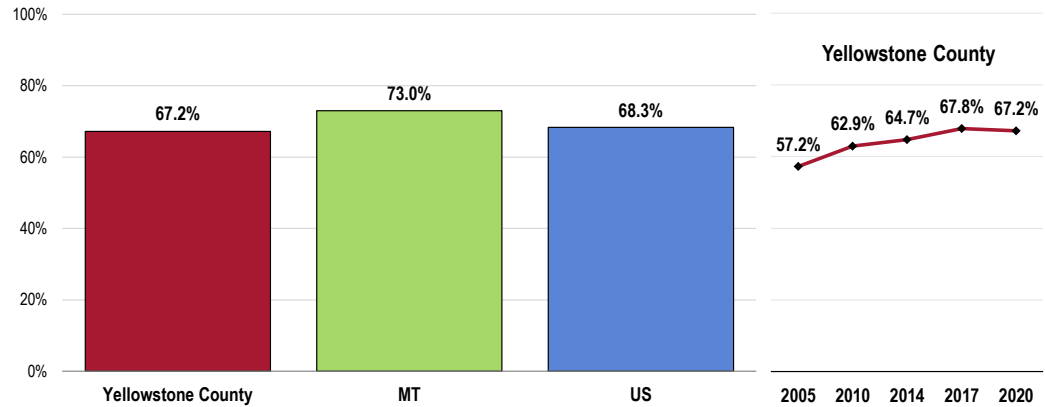
## Utilization of Primary Care Services

### Adults

**Just over two in three adults (67.2%) visited a physician for a routine checkup in the past year.**

- **BENCHMARK:** Lower than the state prevalence.
- **TREND:** Denotes a statistically significant increase since 2005.
- **DISPARITY:** Reported less often among men, young adults, and residents in the higher income breakout.

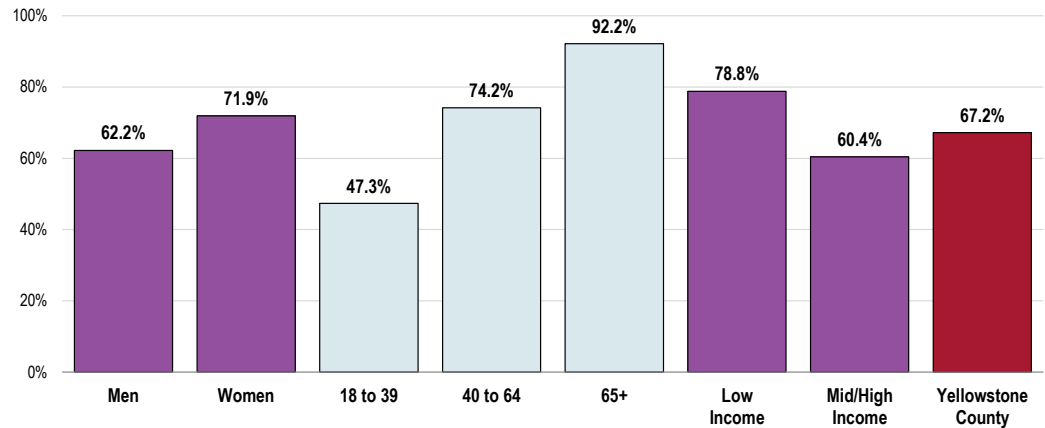
### Have Visited a Physician for a Checkup in the Past Year



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 18]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 • 2017 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.

### Have Visited a Physician for a Checkup in the Past Year (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 18]  
 • Asked of all respondents.

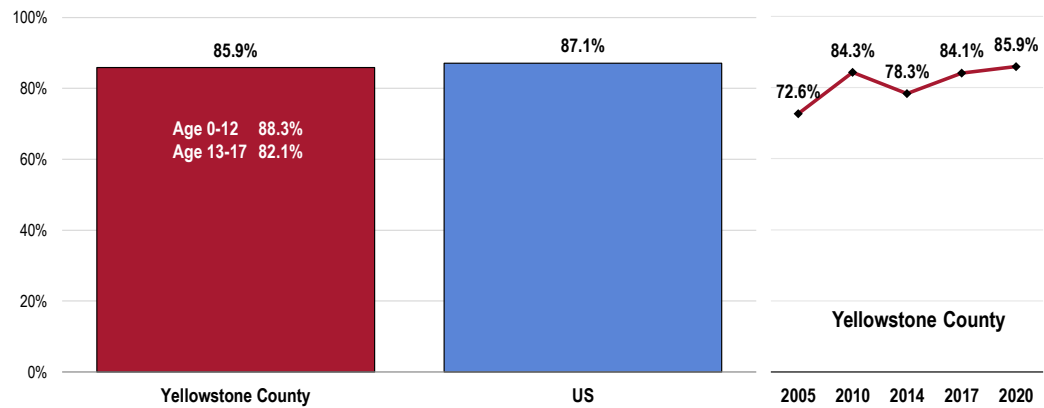
Notes: • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Children

Among surveyed parents, 85.9% report that their child has had a routine checkup in the past year.

- **TREND:** Marks a statistically significant increase from 2005 survey findings.
- **DISPARITY:** The prevalence is lower among teens.

**Child Has Visited a Physician for a Routine Checkup in the Past Year**  
(Parents of Children 0-17)



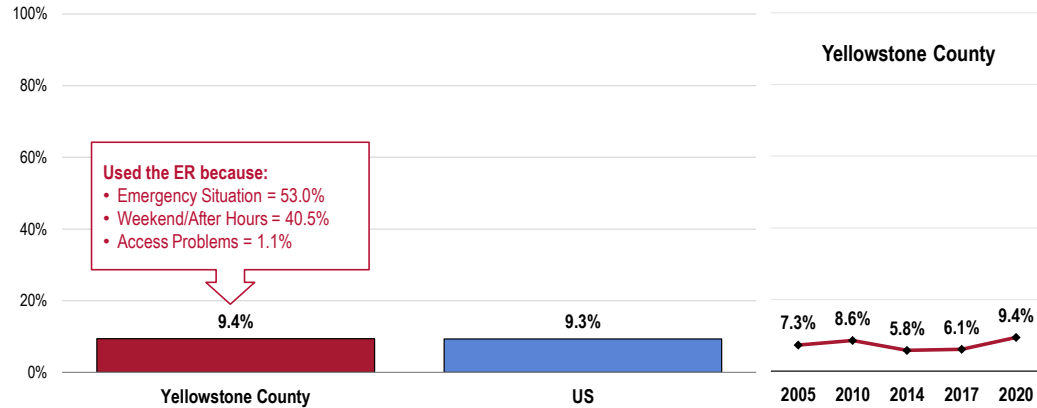
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 120]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents with children 0 to 17 in the household.

## Emergency Room Utilization

A total of 9.4% of Yellowstone County adults have gone to a hospital emergency room more than once in the past year about their own health.

- **DISPARITY:** Unfavorably high among respondents in low-income households.

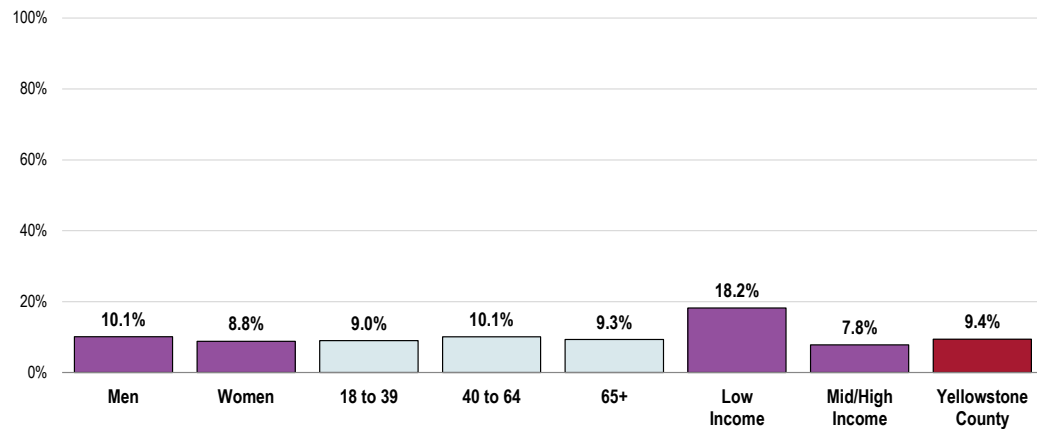
### Have Used a Hospital Emergency Room More Than Once in the Past Year



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 22-23]  
 • 2017 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.

### Have Used a Hospital Emergency Room More Than Once in the Past Year (Yellowstone County, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 22]

Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

## Oral Health

### About Oral Health

Oral health is essential to overall health. Good oral health improves a person's ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions. However, oral diseases, from cavities to oral cancer, cause pain and disability for many Americans. Good self-care, such as brushing with fluoride toothpaste, daily flossing, and professional treatment, is key to good oral health. Health behaviors that can lead to poor oral health include: **tobacco use**; **excessive alcohol use**; and **poor dietary choices**.

The significant improvement in the oral health of Americans over the past 50 years is a public health success story. Most of the gains are a result of effective prevention and treatment efforts. One major success is community water fluoridation, which now benefits about 7 out of 10 Americans who get water through public water systems. However, some Americans do not have access to preventive programs. People who have the least access to preventive services and dental treatment have greater rates of oral diseases. A person's ability to access oral healthcare is associated with factors such as education level, income, race, and ethnicity.

Barriers that can limit a person's use of preventive interventions and treatments include: limited access to and availability of dental services; lack of awareness of the need for care; cost; and fear of dental procedures.

There are also social determinants that affect oral health. In general, people with lower levels of education and income, and people from specific racial/ethnic groups, have higher rates of disease. People with disabilities and other health conditions, like diabetes, are more likely to have poor oral health.

Potential strategies to address these issues include:

- Implementing and evaluating activities that have an impact on health behavior.
- Promoting interventions to reduce tooth decay, such as dental sealants and fluoride use.
- Evaluating and improving methods of monitoring oral diseases and conditions.
- Increasing the capacity of State dental health programs to provide preventive oral health services.
- Increasing the number of community health centers with an oral health component.

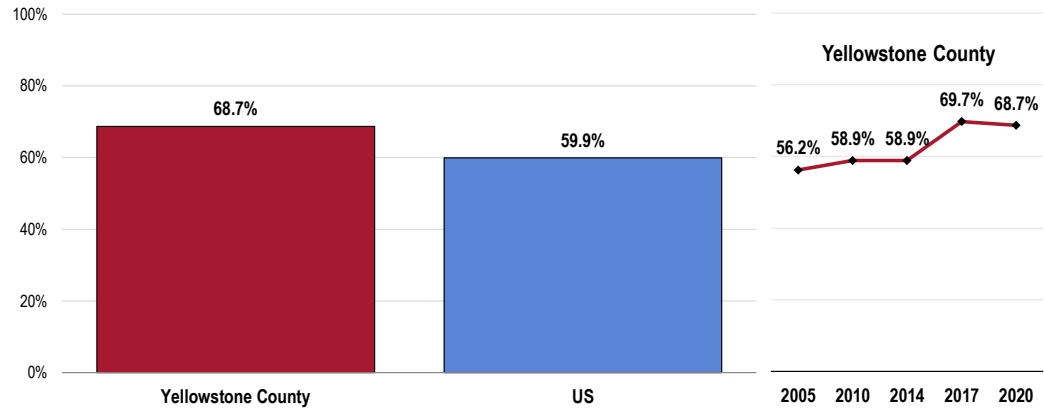
— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Dental Insurance

**Over two-thirds of Yellowstone County adults (68.7%) have dental insurance that covers all or part of their dental care costs.**

- **BENCHMARK:** Above the US prevalence.
- **TREND:** Marks a statistically significant increase from 2005 survey findings.

## Have Insurance Coverage That Pays All or Part of Dental Care Costs



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 21]  
 • 2017 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.

## Dental Care

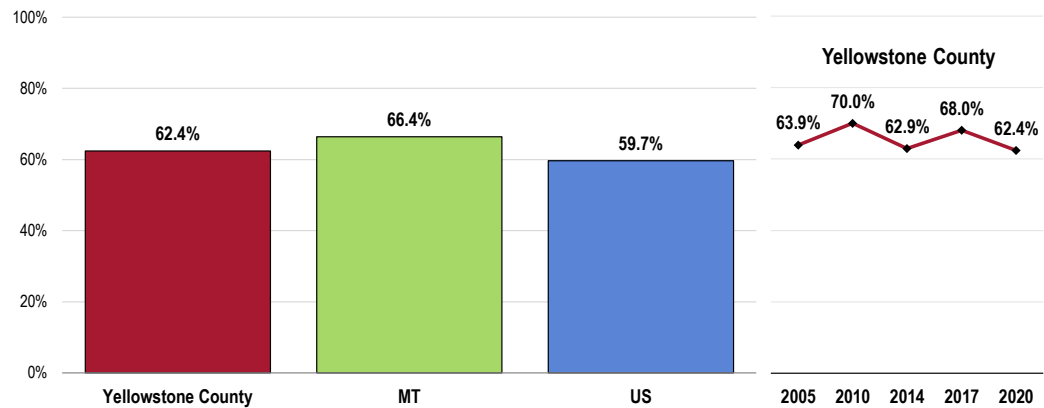
### Adults

A total of 62.4% of Yellowstone County adults have visited a dentist or dental clinic (for any reason) in the past year.

- **BENCHMARK:** Easily satisfies the Healthy People 2020 objective.
- **DISPARITY:** Lower among county residents without dental insurance coverage.

## Have Visited a Dentist or Dental Clinic Within the Past Year

Healthy People 2020 = 49.0% or Higher



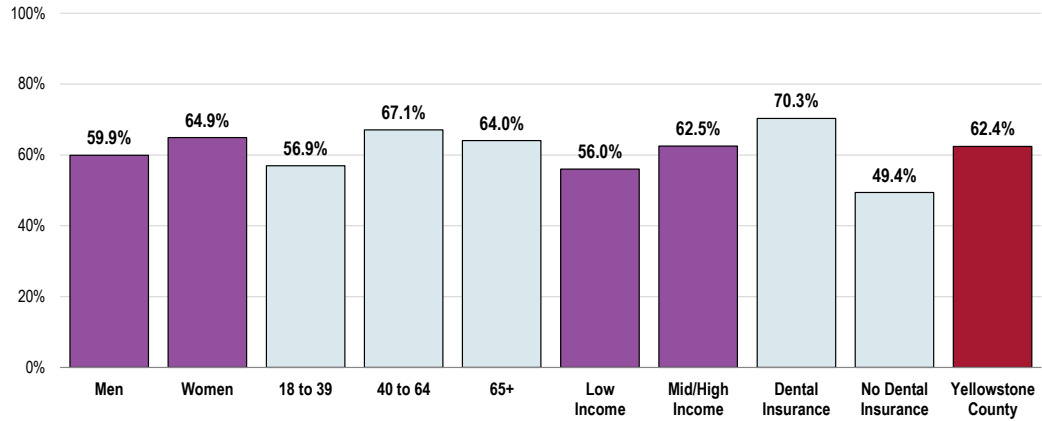
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 20]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 • 2017 PRC National Health Survey, PRC, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]

Notes: • Asked of all respondents.

## Have Visited a Dentist or Dental Clinic Within the Past Year

(Yellowstone County, 2020)

Healthy People 2020 = 49.0% or Higher



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 20]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

### Children

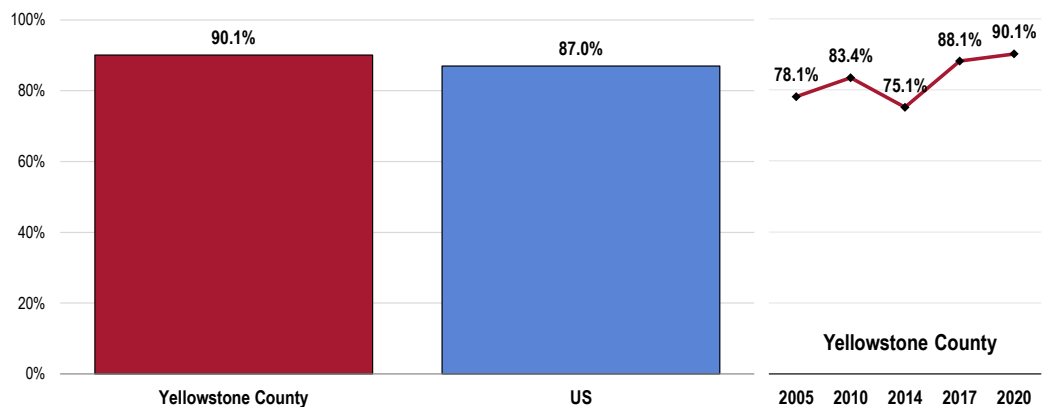
A total of 90.1% of parents report that their child (age 2 to 17) has been to a dentist or dental clinic within the past year.

- **BENCHMARK:** Satisfies the Healthy People 2020 objective.
- **TREND:** Marks a statistically significant increase since 2005.

## Child Has Visited a Dentist or Dental Clinic Within the Past Year

(Parents of Children Age 2-17)

Healthy People 2020 = 49.0% or Higher



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 123]  
 • 2017 PRC National Health Survey, PRC, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]  
 Notes: • Asked of all respondents with children age 2 through 17.



## Key Informant Input: Oral Health

Key informants taking part in an online survey most often characterized *Oral Health* as a “moderate problem” in the community.

### Perceptions of Oral Health as a Problem in the Community

(Key Informants, 2020)

■ Major Problem   ■ Moderate Problem   ■ Minor Problem   ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Asked of all respondents.

### Top Concerns

Among those rating this issue as a “major problem,” reasons related to the following:

#### Affordable Care/Services

*It is expensive and often people aren't insured. I am amazed at how many people have bad teeth. – Healthcare Provider*

*Access to a dentist is expensive and RiverStone has long wait times. – Government Representative*

*Too expensive for most folks. – Business Leader*

*I believe access to oral health and dental care is very minimal for many people in Billings. Many people do not have dental covered under their insurance, so they go without or wait until something really bad occurs before seeing a dentist. – Community Leader*

*It is so expensive. Even if you are lucky enough to have dental insurance, it still costs a fortune to have work done. I feel it should be covered the same way other healthcare is by insurance companies. – Business Leader*

*Seniors not able to get dentures due to cost. – Community Leader*

*A ton of people suffer from dental problems because they cannot afford the care or are scared of getting the care they need. – Community Leader*

*Not everyone can afford dental insurance. – Healthcare Provider*

*Most employers do not offer coverage and the cost to go is very costly. – Educator*

#### Contributing Factors

*Many patients come to the Emergency department with more dental hygiene and dental issues due to no dental care. Many or most dentists don't take Medicaid. Long wait times to get into a dentist at RiverStone. Meth use. – Healthcare Provider*

*Most people don't have dental insurance, and even if you do, it is not very helpful. It is very common to see people missing teeth. Some of this may be due to drug use, but it also shows how costly dental care is. Seeing as how dental disease is linked to heart disease, and we (taxpayers) pay for Medicaid and Medicare, lack of dental care is very costly to our community as a whole. – Community Leader*

*I have no data, but I am guessing it is an issue for many. No fluoride in the water. – Community Leader*

### **Medicaid**

*Not enough assistance from Medicaid or doctors who accept Medicaid. – Community Leader*

*Especially dental care where Medicaid is accepted. – Educator*

*Access for Medicaid or uninsured is difficult and costs are prohibitive. Frequently oral health issues lead to increased health needs. Often times folks choose essential needs, food, shelter, and essential day to day expenses verses dental care. Limited access has conditioned many to seek only when it's an emergency healthcare need. This often applies to clients, staff and community members at large. – Community Leader*

### **Vulnerable Populations**

*We have a large community that is uninsured and/or homeless. – Business Leader*

*Our community has a high percentage of Urban Indians. Because Native Americans often receive very poor dental care through IHS, this population tends to have major problems with oral health and dental care. Medicaid expansion has helped more people access services but getting them those services before there is a major problem or IHS performs multiple extractions is a big challenge. – Community Leader*

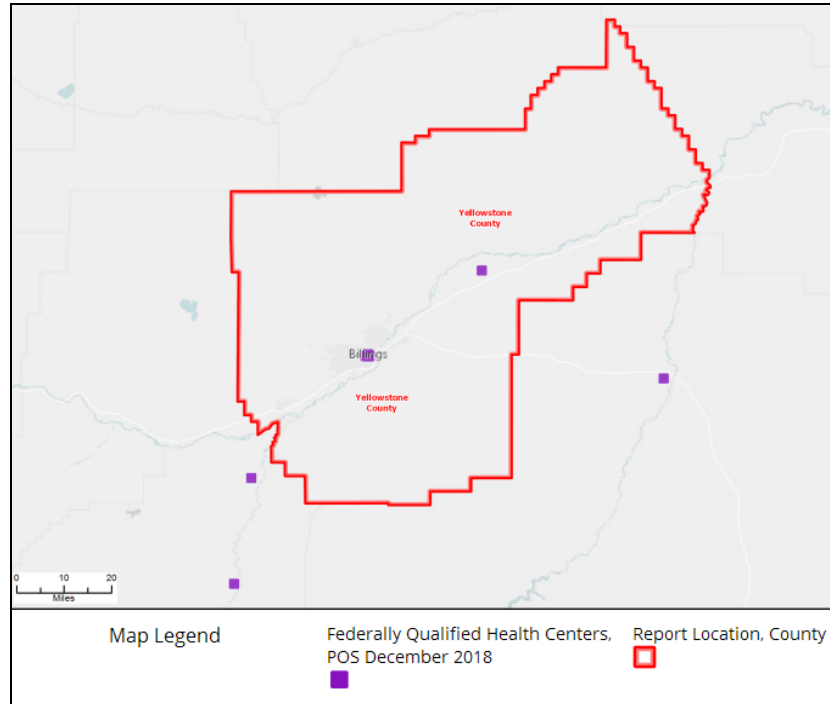
# Local Resources



## Healthcare Resources & Facilities

### Federally Qualified Health Centers (FQHCs)

The following map details Federally Qualified Health Centers (FQHCs) within Yellowstone County as of December 2018.



## Resources Available to Address the Significant Health Needs

The following represent potential measures and resources (such as programs, organizations, and facilities in the community) identified by key informants as available to address the significant health needs identified in this report. This list only reflects input from participants in the Online Key Informant Survey and should not be considered to be exhaustive nor an all-inclusive list of available resources.

### Access to Healthcare Services

- Adult Resource Alliance of Yellowstone County*
- AWARE Inc.*
- Big Sky Senior Services (Senior Helping Hands)*
- Billings Clinic*
- Billings Urban Indian Health and Wellness Center*
- Churches*
- Community Crisis Center*
- Head Start and Early Head Start*
- Home Health Agencies*
- HUB Drop-In Center*
- Indian Health Services*
- La Vie*
- Medicaid*
- Mental Health Center*
- Montana Rescue Mission*
- Native American Development Corporation*
- Office of Public Assistance*
- Planned Parenthood*
- Rimrock Foundation*
- RiverStone Health*
- Rocky Mountain College*
- Rocky Mountain Tribal Leaders Council*
- School System*
- St. Vincent Healthcare*
- The Children's Clinic*
- Tribal Health Centers*
- Veterans Administration*
- Wellbriety Movement*
- Yellowstone Boys and Girls Ranch*

### Arthritis/Osteoporosis/Back Conditions

- Billings Clinic*
- Billings Family YMCA*

- Chiropractic Services (Chiropractic Health Associates)*

- Ortho Montana*
- Physical Therapy Services*
- RiverStone Health*
- St. Vincent Healthcare*

### Cancer

- American Cancer Society*
- Billings Clinic (Cancer Center, Kelker's Kids)*
- Billings Urban Indian Health and Wellness Center*
- Frontier Cancer Center*
- Indian Health Services*
- Montana Cancer Consortium*
- Montana Cancer Control Plan*
- Montana Women's Run*
- RiverStone Health*
- St. Vincent Healthcare*
- Veterans Administration*

### Chronic Kidney Disease

- Billings Clinic*
- Dialysis Clinic, Inc.*
- St. Vincent Healthcare*

### Dementia/Alzheimer's Disease

- Adult Resource Alliance of Yellowstone County*
- Alzheimer's Association*
- Assisted Living, Nursing Homes, or Memory Care Facilities (Meadows Healthcare, The Legacy, Parkview Care Center, St. John's United, Tender Nest, Avantara Billings, Canyon Creek Memory Care Community)*
- Big Sky Senior Services*
- Billings Clinic*
- Community Crisis Center*
- Dementia Friendly Billings*
- HUB Drop-In Center*

*In Home Health Agencies/Services (Right at Home)*

*Medicaid  
Mental Health Center  
Montana Alzheimer's & Dementia State Plan  
Montana Lifespan Respite Coalition  
Nonprofits  
RiverStone Health  
St. Vincent Healthcare  
University of Montana Geriatric Education Center*

**Diabetes**

*American Diabetes Association  
Billings Clinic  
Billings Family YMCA  
Billings Parks & Recreation (Billings Community & Senior Center)  
Billings Public Library  
Billings Urban Indian Health and Wellness Center  
Community Gardens  
Dialysis Clinic, Inc.  
Family Service  
Fitness Centers/Gyms  
Healthy By Design  
Indian Health Services  
Medication Assistance Programs  
Montana Diabetes Prevention Program  
Montana State University Yellowstone County Extension (Nutrition Education Program)  
Native American Development Center  
Pharmacies  
RiverStone Health (Women, Infant, Children [WIC])  
Rocky Mountain Tribal Leaders Council  
School System  
St. Vincent Healthcare  
Yellowstone Valley Farmer's Market  
Youth Empowerment Program*

**Family Planning**

*Billings Clinic  
Family Service  
La Vie  
Montana Medicaid Waiver (Plan First)  
Planned Parenthood  
RiverStone Health  
St. Vincent Healthcare*

**Heart Disease and Stroke**

*American Heart Association  
Billings Clinic  
Billings Family YMCA  
Billings Urban Indian Health and Wellness Center  
CardioVascular Consultants of Montana  
Montana State University Extension Nutrition Education Program  
RiverStone Health  
St. Vincent Healthcare  
Veterans Administration*

**HIV/AIDS**

*Billings Clinic  
Planned Parenthood  
RiverStone Health  
St. Vincent Healthcare*

**Immunization/Infectious Disease**

*Billings Clinic  
La Vie  
Mountain Pacific Quality Health  
Planned Parenthood  
RiverStone Health  
St. Vincent Healthcare  
The Children's Clinic*

**Infant and Child Health**

*Billings Clinic  
Child Protective Services  
Family Tree Center  
RiverStone Health (Women Infants & Children [WIC])  
St. Vincent Healthcare  
Supplemental Nutrition Assistance Program (SNAP)  
Young Families, Inc.*

**Injury and Violence**

*Alcoholics Anonymous (AA) / Narcotics Anonymous (NA)  
Angela's Piazza  
Anger Management Classes  
Billings Adult Municipal Treatment Court  
Billings Area Family Violence Task Force  
Billings Clinic (Sexual Assault Nurse Examiner [SANE] Program)  
Billings Family YMCA  
Bureau of Indian Affairs Social Services  
Community Crisis Center*

Court Appointed Special Advocates (CASA)  
 of Yellowstone County  
 Department of Public Health & Human  
 Services  
 Family Service  
 HUB Drop-In Center  
 Law Enforcement (Billings Police  
 Department, Montana State Highway Patrol,  
 Yellowstone County Sheriff)  
 Mental Health Center  
 Montana Human Trafficking Task Force  
 Montana Rescue Mission  
 Project Safe Neighborhoods  
 Rimrock Foundation  
 RiverStone Health (Healthcare for the  
 Homeless)  
 Shelters for the Homeless  
 St. Vincent Healthcare  
 Suicide Prevention Coalition of Yellowstone  
 Valley  
 Tumbleweed  
 Victim Services (City of Billings, Federal  
 Bureau of Investigation [FBI], Yellowstone  
 County)  
 Yellowstone Boys and Girls Ranch  
 Yellowstone County Family Drug Court  
 Yellowstone County Substance Abuse  
 Connect Coalition  
 YWCA (Gateway House)

### **Mental Health Issues**

Adult Protective Services  
 American Foundation for Suicide Prevention  
 AWARE Inc.  
 Big Sky Psychiatric Services  
 Billings Clinic (Psychiatric Center)  
 Billings Urban Indian Health and Wellness  
 Center  
 Community Crisis Center  
 Counseling Services  
 Employee Assistance Programs  
 First Congregational Church  
 Hotlines for Suicide Prevention  
 HRDC Community Action Agency  
 HUB Drop-In Center  
 Laurel School District  
 Living Independently for Today and  
 Tomorrow (LIFFT)  
 Medicaid  
 Mental Health Center  
 Montana 211  
 Montana Psychiatry and Brain Health Center

Montana Rescue Mission  
 Montana State University Extension  
 National Alliance on Mental Illness (NAMI) –  
 Billings  
 New Day Ranch  
 Rimrock Foundation  
 RiverStone Health (Healthcare for the  
 Homeless)  
 School System  
 Shelters/ Sober Living Housing  
 St. Vincent Healthcare (Pain Center,  
 Behavioral Health Associates)  
 Substance Abuse and Mental Health  
 Services Administration (SAMHSA) & Health  
 Resources and Services Administration  
 (HRSA)  
 Suicide Prevention Coalition of Yellowstone  
 Valley  
 Support and Techniques for Empowering  
 People (STEP), Inc.  
 Supported Employment & Housing  
 Trauma Informed Care  
 Tumbleweed  
 Veterans Administration  
 Walla Walla University Billings Mental Health  
 Clinic  
 Yellowstone Boys and Girls Ranch  
 Yellowstone Counseling Center

### **Nutrition, Physical Activity, and Weight**

Adult Resource Alliance  
 Big Sky State Games (Shape Up Montana  
 and Big Sky Fit Kids)  
 Billings Clinic (Nutrition Services)  
 Billings Family YMCA (Active Living Every  
 Day Classes)  
 Billings Parks and Recreation  
 Billings Public Schools  
 Billings TrailNet  
 Billings Urban Indian Health and Wellness  
 Center  
 Boys and Girls Club  
 Community Gardens (Amend Park, Lady  
 Kate's Garden)  
 Department of Public Health & Human  
 Services  
 Family Service  
 Fitness Centers/ Gyms (including  
 Yellowstone Fitness, The Phoenix)  
 Healthy By Design  
 Montana Food Bank Network Billings Teen  
 Food Pantry

Montana State University Yellowstone  
County Extension  
Private Sector  
RiverStone Health (WIC)  
School Health Advisory Council (SHAC)  
St. Vincent Healthcare (Weight Loss and  
Bariatrics)  
Supplemental Nutrition Assistance Program  
(SNAP)  
Yellowstone Valley Farmer's Market  
YWCA

**Oral Health/Dental Care**

Dental Centers (Brewer Dental Center,  
Turley Dental Care)  
Indian Health Services  
RiverStone Health

**Respiratory Diseases**

Billings Clinic  
St. Vincent Healthcare

**Sexually Transmitted Diseases**

Billings Clinic  
Billings Urban Indian Health and Wellness  
Center  
La Vie  
Planned Parenthood  
RiverStone Health  
School System  
St. Vincent Healthcare

**Substance Abuse**

Alternatives, Inc.  
Angela's Piazza  
AWARE Inc.  
Billings Clinic  
Billings Urban Indian Health and Wellness  
Center (Talking Circles)  
Child Protective Services  
Churches  
Community Crisis Center  
Community Medical Services  
Counseling Services (Billings Addiction  
Counseling)  
Department of Health and Human Services  
Drug Treatment Courts  
Hannah House/CLDI (rename to Community  
Leadership Development, Inc. (Hannah  
House)  
HUB Drop-In Center  
Indian Health Services

Law Enforcement (Billings Police  
Department)  
Medication-Assisted Treatment (Community  
Medical Services)  
Mental Health Center  
Montana Rescue Mission  
New Day Ranch  
Peer Support Networks (Alcoholics  
Anonymous, Narcotics Anonymous,  
Montana's Peer Network, Celebrate  
Recovery, Power for Abundant Recovery)  
Rimrock Foundation  
Riverstone Health  
Sober Living Housing  
St. Vincent Healthcare (Pain Center)  
The Phoenix  
Tribal Chemical Dependency Program  
United Way  
Wellbriety Movement  
Yellowstone Boys and Girls Ranch  
Yellowstone County Jail  
Yellowstone Substance Abuse Connect  
Coalition  
YWCA (Gateway House)

**Tobacco Use**

Billings Clinic (Tobacco Cessation Program)  
Laurel School District  
Montana Tobacco Quit Line  
Montana Tobacco Use Prevention Program  
(MTUPP)  
Planned Parenthood  
reACT Clubs  
Rimrock Foundation  
RiverStone Health  
St. Vincent Healthcare  
Yellowstone Boys and Girls Ranch



## Appendices



## Appendix A: Data Resources for Yellowstone County

Title	Publisher	Data Description	Reference
<b>AARP Livability Index</b>	American Association of Retired Persons (AARP)	Livability index scores neighborhoods on categories including housing, neighborhood, transportation, environment, health, engagement, and opportunity.	<a href="https://livabilityindex.aarp.org/">https://livabilityindex.aarp.org/</a>
<b>Best Beginnings Yellowstone County 2016 Impact Plan</b>	United Way of Yellowstone County	Secondary data related to school achievement and student dropout prevention and independent living among senior citizens	<a href="https://www.unitedwayyellowstone.org/school-readiness">https://www.unitedwayyellowstone.org/school-readiness</a>
<b>Billings Area Bikeway and Trails Master Plan Update – 2017</b>	Billings – Yellowstone Metropolitan Planning Organization	Primary and secondary data regarding bikeway and trail trends, infrastructure, and programming within the Billings metropolitan area	<a href="https://ci.billings.mt.us/2181/Billings-Bike-Plan">https://ci.billings.mt.us/2181/Billings-Bike-Plan</a>
<b>City Health Dashboard</b>	NYU Langone Health	37 measures of health, the factors that shape health, and drivers of health equity to guide local solutions for 500 U.S. cities	<a href="https://www.cityhealthdashboard.com/">https://www.cityhealthdashboard.com/</a>
<b>County Health Rankings: Yellowstone County, MT</b>	Robert Wood Johnson Foundation	Health rankings compiled using county-level measures from a variety of national and state data sources	<a href="http://www.countyhealthrankings.org/">http://www.countyhealthrankings.org/</a>
<b>Economic Pulse – 2018</b>	Big Sky Economic Development, BillingsWorks Workforce Council	Secondary economic indicators to show economic trends in Billings, MT	<a href="https://www.bigskyeconomicdevelopment.org/economic-pulse-2018/">https://www.bigskyeconomicdevelopment.org/economic-pulse-2018/</a>
<b>Health Professional Shortage Areas (HPSA)</b>	Health Resources and Services Administration (HRSA)	Health Professional Shortage Areas (HPSAs) are geographic areas, population groups, or health care facilities that have been designated by HRSA as having a shortage of health professionals. HRSA also designates Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs), which identify geographic areas and populations with a lack of access to primary care services.	<a href="https://data.hrsa.gov/tools/shortage-area/hpsa-find">https://data.hrsa.gov/tools/shortage-area/hpsa-find</a>
<b>National Citizen Survey: Billings, MT Community Livability Report – 2016</b>	National Research Center	Statistically valid survey of resident opinions about community services provided by local government	<a href="https://ci.billings.mt.us/1506/Citizen-Survey-Results">https://ci.billings.mt.us/1506/Citizen-Survey-Results</a>
<b>Opioids and Methamphetamine in Billings, MT</b>	City of Billings Metro VISTA Project	Primary and secondary data regarding opioid and methamphetamine use in Billings, MT	Contact: Tam Rodier <a href="mailto:rodier@billingsmt.us">rodier@billingsmt.us</a>

<b>Project Re: Code Zoning Code Assessment</b>	City of Billings and Yellowstone County	2018 assessment of current zoning code regulations as they relate to adopted community planning goals, to inform the development of a new zoning code in 2020.	<a href="https://ci.billings.mt.us/DocumentCenter/View/37190/BYC-Code-Assessment_PRD-102218">https://ci.billings.mt.us/DocumentCenter/View/37190/BYC-Code-Assessment_PRD-102218</a>
<b>State of the Workforce Report – 2019</b>	Big Sky Economic Development, BillingsWorks Workforce Council	Local workforce data and direct employer input	<a href="https://www.bigskyeconomicdevelopment.org/2018-state-of-the-workforce-report/">https://www.bigskyeconomicdevelopment.org/2018-state-of-the-workforce-report/</a>
<b>Substance Use in Yellowstone County: A Community Level Needs Assessment</b>	United Way of Yellowstone County – Substance Use Connect Coalition	County level	<a href="https://www.unitedwayyellowstone.org/substance-abuse-connect">https://www.unitedwayyellowstone.org/substance-abuse-connect</a>
<b>Yellowstone County 2019 Youth Risk Behavior Survey</b>	CDC, Montana Office of Public Instruction	County level primary survey data regarding youth behaviors of middle and high school students	<a href="https://opi.mt.gov/Leadership/Data-Reporting/Youth-Risk-Behavior-Survey">https://opi.mt.gov/Leadership/Data-Reporting/Youth-Risk-Behavior-Survey</a>
<b>2016 Growth Policy – Billings and Lockwood</b>	Yellowstone City-County Planning and Community Services	Primary and secondary data regarding costs and priorities associated with municipal growth in the metropolitan Billings area	<a href="https://ci.billings.mt.us/184/Planning">https://ci.billings.mt.us/184/Planning</a>
<b>2016 Community Transportation Safety Plan</b>	Yellowstone City-County Planning and Community Services	Primary and secondary data regarding automobile related crashes and injury statistics	<a href="https://www.ci.billings.mt.us/DocumentCenter/View/33404/CTSP_FINAL_DRAFT?bidId=">https://www.ci.billings.mt.us/DocumentCenter/View/33404/CTSP_FINAL_DRAFT?bidId=</a>
<b>2017 Complete Streets Progress Report</b>	Yellowstone City-County Planning and Community Services	Primary and secondary data regarding multi-modal transportation trends	<a href="https://ci.billings.mt.us/DocumentCenter/View/35435/Complete-Street-Progress-Report_Draft">https://ci.billings.mt.us/DocumentCenter/View/35435/Complete-Street-Progress-Report_Draft</a>
<b>2017 Comprehensive Parks and Recreation Master Plan</b>	Billings Parks, Recreation, and Public Lands	Primary and secondary data regarding parks, recreation, and public lands in Billings, MT	<a href="https://www.billingsparks.org/about-us/2017-comprehensive-parks-recreation-master-plan/">https://www.billingsparks.org/about-us/2017-comprehensive-parks-recreation-master-plan/</a>
<b>2018 Behavioral Risk Factor Surveillance System (BRFSS) Questionnaire</b>	Montana Department of Health and Human Services	Primary source for state-based information on health risk behaviors	<a href="https://dphhs.mt.gov/publichealth/brfss">https://dphhs.mt.gov/publichealth/brfss</a>
<b>2019 Youth Risk Behavior Survey (YRBS)</b>	Centers for Disease Control and Prevention, Montana Office of Public Instruction	County level primary survey data on youth behaviors of middle and high school students	<a href="https://opi.mt.gov/Leadership/Data-Reporting/Youth-Risk-Behavior-Survey">https://opi.mt.gov/Leadership/Data-Reporting/Youth-Risk-Behavior-Survey</a>
<b>500 Cities Project: Local Data for Better Health</b>	Robert Wood Johnson Foundation and Centers for Disease Control and Prevention Foundation	City- and census tract-level small area estimates for chronic disease risk factors, health outcomes, and clinical preventive service use for the largest 500 cities in the US	<a href="https://www.cdc.gov/500cities/index.htm">https://www.cdc.gov/500cities/index.htm</a>

## Appendix B: Streetwyze Summary

### 1. Background

The Healthy By Design (HBD) Coalition is a multi-sector collaborative working to improve the quality of life for people who live, learn, work and play in Yellowstone County. HBD works to make the *healthy choice the easy choice*, and are currently leading collective efforts related to physical activity, nutrition, and healthy weight.

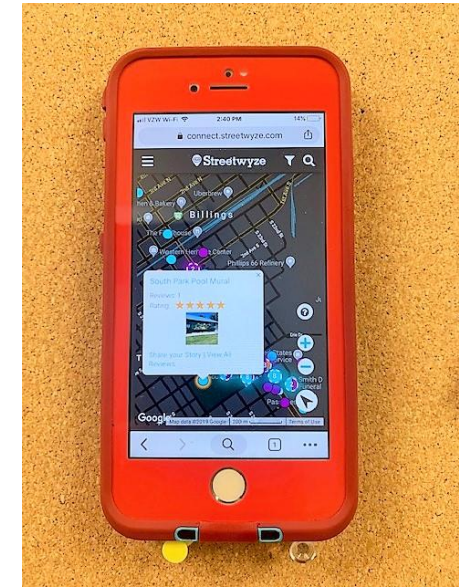
In 2019, HBD partnered with the Kresge Foundation and Streetwyze/ISEED to pilot an online community engagement platform. Streetwyze provided access to the online data collection tool, technical assistance, and a one-time in-person training while HBD provided capacity for user recruitment, training, and promotion of the platform. The goal of the project was to engage additional community members in identifying opportunities and barriers to community health to inform the CHNA and CHIP. The Streetwyze tool asks users to share first-hand perceptions and experiences of their community. A project-specific prompt was created to solicit feedback specifically related to community health barriers and opportunities.

### 2. Methodology

To solicit feedback from diverse groups not traditionally represented in the CHNA data, HBD Coalition members developed two types of recruitment strategies, including *Collect + Connect* events and a general outreach campaign. Coalition members recruited organizations to host *Collect + Connect* events for an incentive of \$500/event. Participating organizers were required to attend a short training on July 25, 2019 and to submit an event sign-in sheet and reporting form. Organizers were encouraged to use incentive funds to address barriers identified through these events as appropriate. HBD staff selected the following prompts:

- *What are barriers and opportunities to your health in Yellowstone County?*
- *What are bright spots on the South Side neighborhood?*

The general *My Healthy Yellowstone* marketing campaign was launched to solicit general feedback from the community. The campaign was promoted via flyers, word of mouth, social media, and other HBD communication outlets. Residents could text a Google Voice account, which triggered the sign up process for them to access Streetwyze. Streetwyze data was collected from July 25 – October 17, 2019. The deadline allowed for Streetwyze data to be analyzed and processed in preparation for the 2019-20 CHNA.



**Streetwyze**

Streetwyze is a mobile mapping and SMS community engagement platform. In other words, it is a map accessed via phone, tablet, computer where you can drop "pins" to identify notable places in your neighborhood and explain why you wanted to bring attention to that place. Think of Yelp! for the community.

### 3. Results

#### 3.1 Overall Results Summary

##### Data Points

- 428 Total Data Points
- 120 Unique User Accounts

##### Geographic Distribution

- 90% of points in Billings
- 4% of points in Lockwood
- 3% of points in Laurel
- 2% of points in surrounding towns (Shepherd, Huntley, Bozeman)

##### Engagement

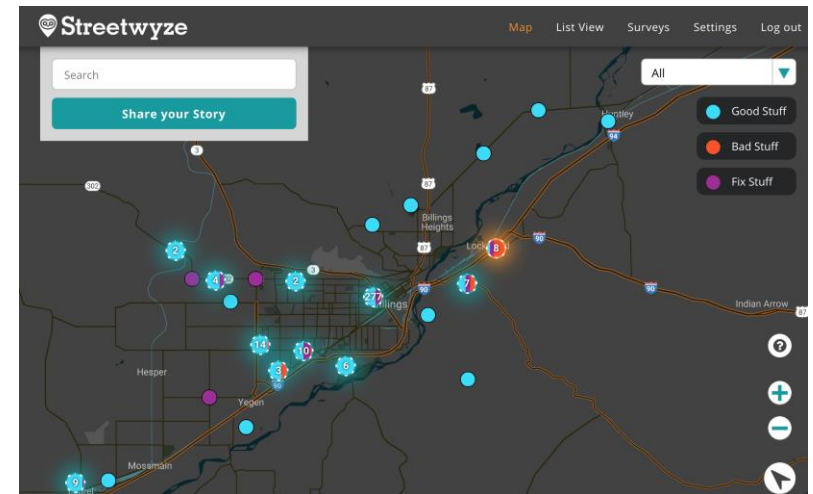
- 41 user registration requests via text-in sign-up
- 7 Collect + Connect Events

##### Quantitative Breakdown

- 63% "Good Stuff"
- 10% "Bad Stuff"
- 27% "Fix Stuff"

##### Categorical Breakdown

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• 20% Public Space</li> <li>• 15% Food</li> <li>• 13% Transportation</li> <li>• 10% Business</li> <li>• 10% Environment</li> </ul> | <ul style="list-style-type: none"> <li>• 4% Public Services</li> <li>• 3% Housing</li> <li>• 2.5% Art</li> <li>• 1% Industry</li> <li>• 1% Tobacco</li> <li>• 1% Social Justice</li> <li>• &lt;1% Network</li> <li>• &lt;1% Wyze Innovation</li> </ul> |
|---|--|



The My Healthy Yellowstone campaign and Collect + Connect events were promoted throughout Yellowstone County, Montana.



### 3.2 User Feedback: Good Stuff

The list below is a snapshot of data categorized as “Good Stuff”, indicated by a **blue dot** in the Streetwyze platform. The following comments represent the most commonly mentioned “bright spots,” or places where community members feel welcome, a sense of social connectedness, and that their needs are being met in some capacity.

Top opportunities to improve health in Yellowstone County, according to residents:

1. Food Outlets/Gardens
2. Parks and Green Spaces
3. Community Centered Spaces, Recreational Clubs and Activities
4. Social and Community Services
5. Street Safety Improvements
6. Public Art and Beautification

**Food Outlets/Gardens - Residents value restaurants and other food spaces that combine healthy food with a welcoming social environment. Most mentioned businesses or organizations are below.**

- Restaurants/Coffee Shops - Lilac, Fieldhouse, Well Pared, Grotto, MoAv Coffee, Craft Local, Great Harvest Bakery, Harper & Madison
- Grocery Stores and Fresh Food Markets – Yellowstone Valley Farmers’ Market, the Healthy By Design Gardeners’ Market, Swanky Roots, Lucky’s Market, Albertson’s

Summary:  
Billings needs to find a better way to connect this Park to the public. The untapped potential for this place to be a Billings icon is huge! Get the public to interact with this place. Allow for more access across the interstate, railroad, and industrial park.

Votes: 0- / 0+

Move report

Author: **KristiD**

Date Created: **2019-09-18T13:58:21-04:00**

Type: **Fix Stuff**

Category: **Public Space**

Rating: ★★★★★

Summary:  
There is so much potential for this park. It is nestled between the river and a great trail, with a significant history as the first town in this area, prior to Billings being established. But the park is just a forgotten chunk of land with overgrown weeds and no interpretation of what was once there. It could be an AWESOME place.

Date Created: **2019-10-01T19:13:59-04:00**

Type: **Good Stuff**

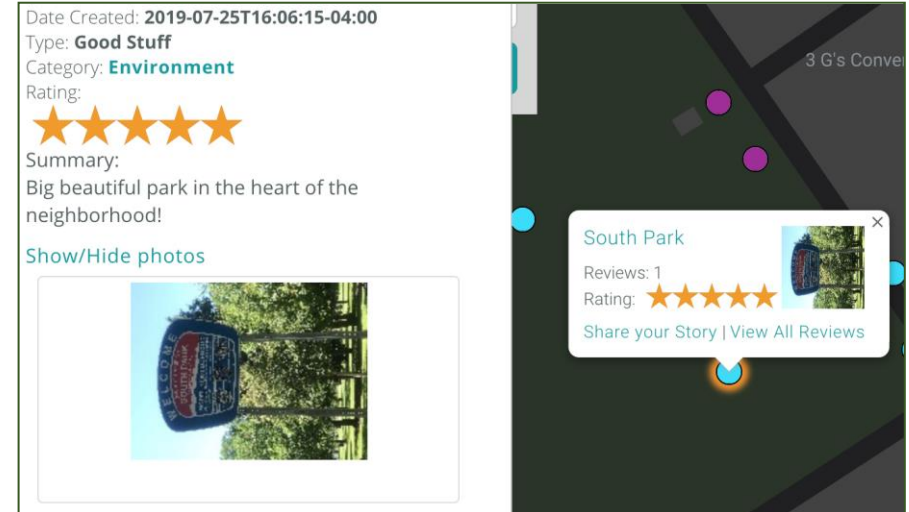
Category: **Environment**

Rating: ★★★★★

Summary:  
First year gardening at the Amend Park Community Garden and it has been awesome. I've so many wonderful people and learned so much. I love the the parks and rec has provided such a great resource for the southside community. Living in an apartment with no balcony limits me tremendously on what I can grow myself. So to be able to use a well amended area to grow food is necessary. Amend Park Community Garden provides that. With there not being a grocery store in my area. Having a plot at the garden was super helpful. Made my ability to provide fresh fruits and veggies to my house throughout the growing season possible. Plus I get the satisfaction that I grew the food myself. Would love to see more community members join the garden. In the future I'd love to see community bbq's, social time and maybe a fall festival at the garden. The community garden could provide a great background for so many events. Hope to see more smiling faces next growing season!

**Parks and Green Spaces** - Yellowstone County residents value green spaces that are family friendly and provide safe spaces for group activities, such as:

- Lillis Park
- Harvest Park
- Walsh Park
- Joel's Pond
- Lions Park
- North Park
- Hawthorne Park
- Barkemeyer Park
- Veteran's Park
- Lake Elmo State Park
- Walden Grove Park
- Dehler Park
- Rose Park
- Acton Recreation Area
- Pioneer Park



**Community Centered Spaces, Recreational Clubs & Activities** - Billings, Laurel, and surrounding area residents like to have space where they can gather and recreate safely. Places include:

- Yellowstone County Museum
- 2905 Building
- Sports Ball
- Babcock Theater
- Art House
- The Art of Play
- Zoo Montana
- Wise Wonders Children's Museum
- Rock Church
- New Life Church
- Craft Local
- Town and Country Lanes
- Yellowstone Art Museum
- Zimmerman Center
- Alive after 5
- Ice Skating at Veterans Park
- Shiloh Common
- This House of Books

**Social and Community Services** - Organizations that Yellowstone County residents appreciate, frequent, or would like to see more of in their community include:

- Healthcare or Related Services- Children’s Clinic Downtown, Yellowstone Family Dental, SCL Health St. Vincent Hospital, Billings Clinic, Wild Roots Therapy
- Governmental or Social Services - Housing Authority of Billings, Tumbleweed, Alternatives, Billings YMCA, Laurel Library, Fraser Tower
- Faith Organizations - Billings First Church
- Businesses - DBA, The Spoke Shop, Book Nook, Chamber of Commerce
- Educational Institutions -Skyview High School, Lockwood Middle School, Bitterroot Elementary School

**Street Safety Improvements** - Streetwyze participants felt that there is ample opportunity to improve built environment infrastructure to increase mobility, physical activity, and neighborhood connectedness for all.

- 54<sup>th</sup> Street walking path
- 54<sup>th</sup> and Rimrock intersection
- Lewis Avenue bike lane
- New bike connection on Kiwanis trails
- Shiloh Road sidewalks
- Harvest Park
- Lewis Street bike paths

Date Created: 2019-09-12T19:59:21-04:00  
 Type: **Good Stuff**  
 Category: **Business**  
 Rating: ★★★★★

**This House of Books**  
 Reviews: 1  
 Rating: ★★★★★  
[Share your Story](#) | [View All Reviews](#)

Summary:  
 Independent bookstore with great tea selection. They can order in almost any book you need. They also have a range of board games and regular gaming nights. Great for socializing.


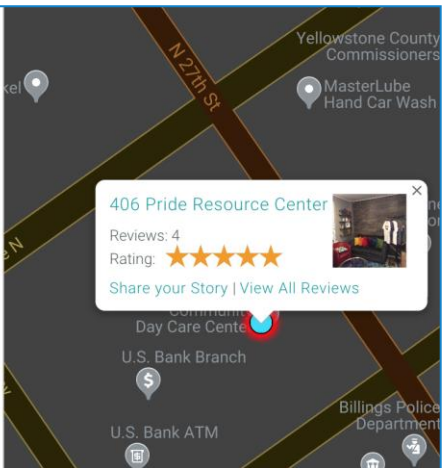


Date Created: 2019-09-12T20:07:56-04:00  
 Type: **Good Stuff**  
 Category: **Social Justice**  
 Rating: ★★★★★

**406 Pride Resource Center**  
 Reviews: 4  
 Rating: ★★★★★  
[Share your Story](#) | [View All Reviews](#)

Summary:  
 An LGBTQ+ Resource Center that has a cool, relaxed vibe. Has an extensive LGBTQ+ library, social events, group meetings and drop in hours.

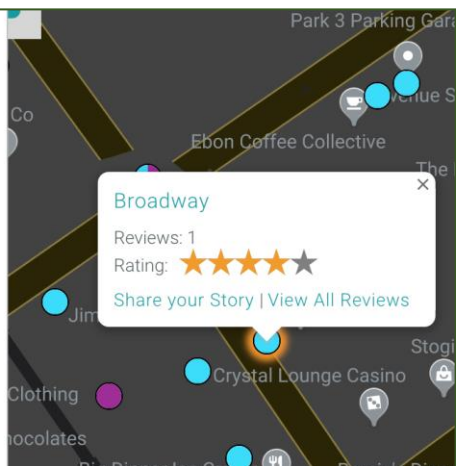
[Show/Hide photos](#)

Date Created: 2019-10-06T15:46:20-04:00  
 Type: **Good Stuff**  
 Category: **Public Space**  
 Rating: ★★★★★

**Broadway**  
 Reviews: 1  
 Rating: ★★★★★  
[Share your Story](#) | [View All Reviews](#)

Summary:  
 This is the most pedestrian oriented Street in town with a whole host of food and entertainment options. A few of the restaurants have outdoor patio seating, which adds to the atmosphere of the place. There are a ton of special events that close down the street, it's usually a great party. I wish they could close down this whole street to vehicle traffic permanently.

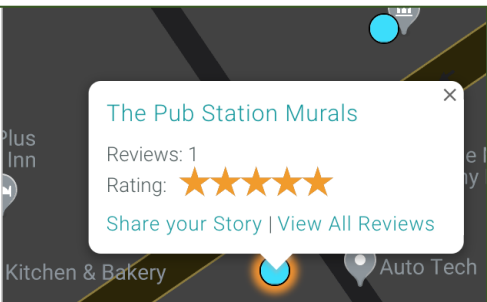




**Public Art and Beautification** - Residents have appreciated and would like to encourage efforts to increase public art and listed the following examples:

- South Park
- VFW Area
- Murals like at South Park and near the Pub Station
- Plant hangers downtown

Date Created: **2019-10-01T12:33:28-04:00**  
 Type: **Good Stuff**  
 Category: **Art**  
 Rating: ★★★★★  
 Summary:  
 The murals have made this a destination place and a wonderful spot for photos.



The Pub Station Murals

Reviews: 1  
 Rating: ★★★★★  
[Share your Story](#) | [View All Reviews](#)

**3.3 User Feedback: Bad Stuff or Fix Stuff**

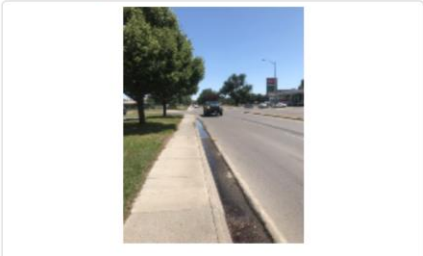
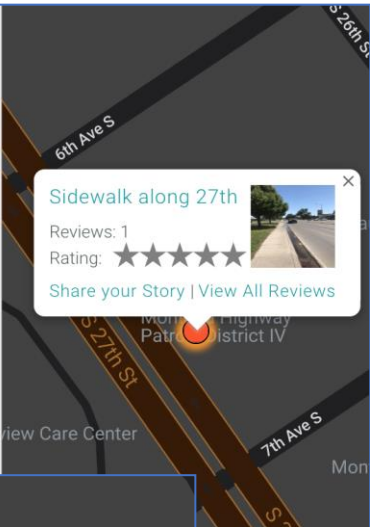
The list below represents the most frequently mentioned concerns and resident-proposed solutions for improvements. Included are the most commonly mentioned places where community members felt unwelcome, unsafe, or felt improvements could be made. Anything categorized as “Bad Stuff” was denoted with an **orange dot** within the Streetwyze platform. Places or things that residents felt were “bad” but had a solution for are a **purple dot**, and were categorized as “Fix Stuff”.

Top barriers to health in Yellowstone County, according to residents include:

1. Pedestrian Safety
2. Environmental Challenges
3. Unwelcome or Uncomfortable Spaces
4. Food Accessibility

Date Created: **2019-07-25T16:23:57-04:00**  
 Type: **Bad Stuff**  
 Category: **Environment**  
 Summary:  
 Sidewalk stinks! Too close to road, unsafe, unpleasant, and cars are way too fast!

[Show/Hide photos](#)


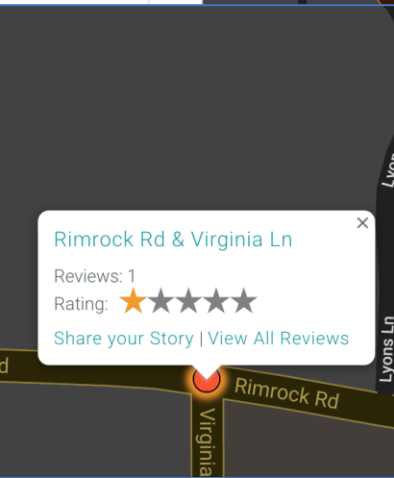
Sidewalk along 27th

Reviews: 1  
 Rating: ★★★★★

[Share your Story](#) | [View All Reviews](#)

Date Created: **2019-09-12T20:15:34-04:00**  
 Type: **Bad Stuff**  
 Category: **Safety**  
 Rating: ★☆☆☆☆  
 Summary:  
 This is a dangerous intersection. When making a left hand turn heading northbound on Virginia Ln, it is nearly impossible to have visibility of eastbound traffic on Rimrock Rd without being in oncoming traffic. A traffic light is long overdue here.

Votes: 0- / 3+

Rimrock Rd & Virginia Ln

Reviews: 1  
 Rating: ★★★★★

[Share your Story](#) | [View All Reviews](#)

**Pedestrian Safety** - This includes street hazards and connectivity improvements. Dangerous streetscapes were by far the most common complaint brought up by community members, presenting barriers to everyday safety and access to and enjoyment of physical and social activities outdoors. Issues include:

- Sidewalks that are too narrow and too close to busy and fast speed traffic
- Lack of sidewalks in general but specifically on roads that are heavily used by students to get to and from school
- Lack of safe bike routes to/from downtown
- Intersections where drivers frequently disobey turn rules, making it dangerous for pedestrians and cyclists to navigate
- Roundabouts with overgrown grass, obstructing vision for drivers and making it dangerous for pedestrians to cross the street
- Frequent disobeying of speed limits, especially in high risk areas like school districts
- Walking paths that are obstructed by poor pavement quality, potholes, gaps, road trash and “difficult for people with low vision or mobility challenges to navigate”
- Crossing signals that are not long enough for youth or elders to cross the street
- Industrial trucks that pass through residential areas posing a threat to residents and youth who utilize residential areas for running (cross country team)

#### Resident Solutions – Pedestrian Safety

Community members offered the following recommendations for street safety improvements:

- New paving in park paths, bike paths, sidewalks, and roads to level surfaces for safe use by all communities
- Elevate the railroad tracks or move them to the outskirts of town so that Downtown can be better connected to other areas and so that cars (especially first responders and emergency vehicles), pedestrians and cyclists don't have wait for long trains to pass
- Create pedestrian only streets to increase social activity without fear of traffic congestion
- Create protected bike lanes and networks throughout the county to connect residents to schools, downtown centers, county trails, and increase physical activity
- Appropriately placed curb cuts that are tactile for blind or low vision
- Increase availability and connectivity of sidewalks through the county and ensure they are leveled and widened for diverse use and accessibility
- Enforce speed limits, especially in high risk areas
- Increase timed crossings for youth, elders, and those with disabilities
- Implement traffic calming developments like roundabouts, rapid flashing beacons, and stop lights to improve safety
- Expand public transportation system to offer later services
- Provide bus shelters so public transportation can be used during all seasons

**Environmental Challenges** – Users highlighted environmental challenges as the second most needed improvement in Yellowstone County. Environmental challenges and green space concerns, which also impact their enjoyment of physical and social activities outdoors, include:

- Poor park cleanliness
- Poor park maintenance, in terms of both infrastructure, recreation and foliage
- Strong opposition towards proposed gravel pit because of the potential well water contamination and disruption to local communities
- Poor air quality (Lockwood)

#### Resident Solutions – Environmental Challenges

Community members offered the following recommendations for green space and environmental improvements:

- Expand trail systems (e.g. banks along city ditches)
- Improve maintenance and cleanliness of parks so they can be fully utilized by the public
- Update recreational infrastructure at parks so they are safer to use by people of all different abilities
- Increase public greenery with tree-lined streets
- Improve city wide recycling containers with educational and instructional signage at parks
- Increase outdoor lighting at parks to discourage illegal activities at night
- Improve restroom accessibility at parks by increasing the number of restrooms, ensuring they function properly and are open and easy to get to
- Improve park trails with green space buffers between the trails and the cars
- Improve connection between the public and parks with activities for all ages so that parks are more utilized

Author: **GSATroop2107**

Date Created: **2019-09-26T13:46:53-04:00**

Type: **Bad Stuff**

Category: **Environment**

Rating:



Summary:

It is bad because it has holes in the ground for toilets. There are bad plants everywhere. There needs to be cement and a sign.

Hillner Park Sunrise Street

Reviews: 1

Rating: ★★★★★

[Share your Story](#) | [View All Reviews](#)

Date Created: **2019-09-23T11:45:16-04:00**

Type: **Fix Stuff**

Category: **Public Services**

Rating:



Summary:

Great place for small children in the summer. Free. Not as much for older children to do here - it would be great to expand to include some things for older children as well.

CastleRock Splash Park

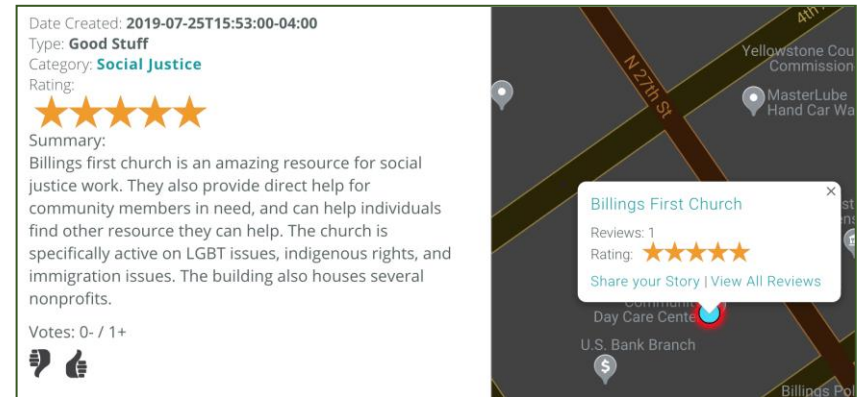
Reviews: 1

Rating: ★★★★★

[Share your Story](#) | [View All Reviews](#)

**Unwelcoming or Uncomfortable Spaces** Residents shared places, locations, and businesses where they did not feel welcome. Reasons varied, including:

- Shelters are unwelcoming or disrespectful to LGBTQIA communities and disability communities
- Businesses with poor customer service
- Dangerous intersections and corner stores with high incidences of traffic accidents or shootings
- Spaces that are uncomfortable to be alone, make certain people feel stigmatized (Lockwood)
- Churches with people that treat others poorly
- Bars that are unsafe and have had stabbings
- Parking structures with high incidences of car break-ins, vandalizing, and human urine/feces
- Gas stations and convenience stores that make people feel unsafe because of frequency of homeless community members who may be on substances
- Vaping at middle schools, making younger youth feel uncomfortable
- High transient population and vacant store fronts in downtown
- The library is said to “not create a welcoming atmosphere”
- A local elementary school is listed as “unsafe after hours, people speed their cars nearby and people hang out to engage in illegal activities”
- A downtown healthcare facility is not LGBTQ friendly to young people
- Poor service and communication with patients at local birth center



#### Resident Solutions – Unwelcoming or Uncomfortable Spaces

Community members offered the following recommendations to improve social connectedness in public spaces:

- Create a “Welcome to Billings” at the city’s entrance to display community pride
- Expand services to reach pre-teens/teens at places that are renowned for youth activity (Art of Play, Castle Rock splash park)
- Offer business incentives for downtown store fronts to avoid vacancy and increase ground level activity
- Create a large sports complex to serve the City including a multitude of sports like ice skating, swimming, indoor track, tennis, etc.
- Transform existing spaces, like the Lewis & Clark track, to be publicly accessible and accessible to those with disabilities
- Promote continuing education at the community college as ways for adults to learn new skills and build community
- Utilize vacant buildings for multipurpose uses

**Food Accessibility** - In regard to food access community members brought up the following concerns:

- There is a need for more fresh food outlets and grocery stores that are accessible throughout the county
- There needs to be grocery stores with wider aisles for those with wheelchairs
- There are many vacant lots that the community would like to see converted into community gardens
- The food bank “is hard to communicate with and needs to be more client centered and offer better food”

Date Created: **2019-09-26T19:01:35-04:00**

Type: **Fix Stuff**

Category: **Food**

Summary:

A community garden would be nice!

Votes: 0- / 0+



Lockwood

Reviews: 1

Rating: ★★★★★

[Share your Story](#) | [View All Reviews](#)

Coulson Ditch

## 4. Conclusion, Limitations and Recommendations

Yellowstone County residents identified more opportunities to their health than barriers. Many of the barriers and opportunities identified align with data in the 2017-20 CHNA and CHIP strategies. Overall, Streetwyze was a useful tool to reinforce quantitative CHNA data through participants’ lived experience and to confirm that CHIP strategies and priorities are relevant to Yellowstone County residents. Streetwyze allowed residents to voice concerns and desires in making their own community a healthier, more vibrant place to live.

Users highlighted several sectors and services within the community that were not considered welcoming or accessible to individuals identifying as LGBTQ+ or living with disabilities. There was significant dialogue in the platform regarding mistreatment of these groups or individuals in different sectors or services within the community.

Limitations of the initiative were staff capacity to provide support to the general marketing campaign and Collect + Connect events. Users were unable to sign themselves up for the platform directly, and the need for HBD staff to activate their accounts may have caused some lag for participant engagement. Platform-specific issues related to signing up and dropping pins accurately caused frustration and confusion among participants. This may have caused some people to not utilize the platform at all, or hindered utilization.

## Appendix C: Lived Experience Survey

### Background

Authentic community engagement is an essential component of community health assessment. Engaging individuals with diverse first hand, or lived, experiences navigating the health system, living with chronic diseases, or experiencing poverty can provide critical information on opportunities, barriers, and strategies to improve a local community's health in ways that may otherwise be overlooked by organizations. While the importance of this primary source of information is recognized, measurement of diverse experiences of CHNA participants is a challenge. In 2016, CHNA staff introduced a short, 3 minute survey. In 2019, this survey was updated by the CHNA advisory committee.

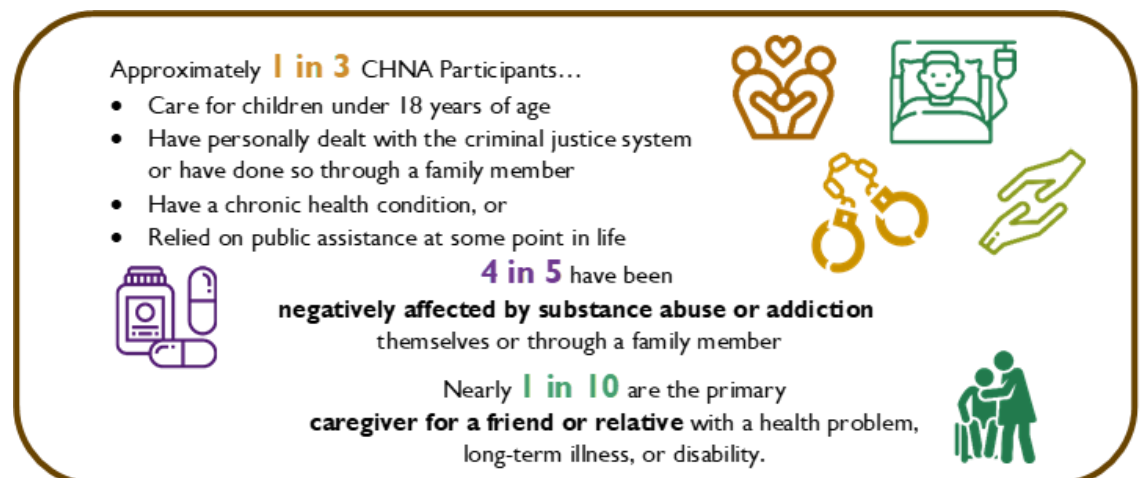


### Methodology



The optional and anonymous lived experience survey was administered through paper and online methods. Survey questions related to respondent demographics and first hand experiences. The target audience for the survey included individuals who had been involved in any aspect of the CHNA process including members of the internal work team, advisory committee, key informant survey respondents, and forum attendees. Paper surveys were distributed during the Community Health Improvement Forum on November 22, 2019, and online via an email sent to CHNA participants between November 26 and December 6.

### Results

A total of 99 survey responses were received; 90 during the forum and 9 via the online format. Demographics and experiences of participants who took the survey are illustrated below.



Icon credit: flaticon.com

Select Characteristics of 2019-2020 CHNA Participants		
<p><b>Age</b></p> <ul style="list-style-type: none"> <li>- 18 years old or younger: 3%</li> <li>- 19-34 years old: 19%</li> <li>- 35-49 years old: 26%</li> <li>- 50-64 years old: 37%</li> <li>- 65 years old or older: 15%</li> </ul>	<p><b>Gender</b></p> <ul style="list-style-type: none"> <li>- Male: 26%</li> <li>- Female: 74%</li> <li>- Gender non-binary: 0%</li> <li>- Other: 0%</li> </ul> <p style="text-align: right;">  </p> <p style="text-align: right;"><b>3 out of 4</b> identify as female.</p>	
<p><b>Education Level</b></p> <ul style="list-style-type: none"> <li>- Middle school: 3%</li> <li>- High school/GED: 5%</li> <li>- Associate’s degree: 2%</li> <li>- Bachelor’s degree: 32%</li> <li>- Graduate degree: 58%</li> </ul>	<p><b>Home Ownership</b></p> <ul style="list-style-type: none"> <li>- Rent home: 12%</li> <li>- Own home: 84%</li> <li>- Homeless or couch surfing: 0%</li> <li>- Other: 4%</li> </ul>	<p><b>Sexual Orientation</b></p> <ul style="list-style-type: none"> <li>- Straight/heterosexual: 97%</li> <li>- Gay: 1%</li> <li>- Lesbian: 1%</li> <li>- Bisexual: 1%</li> <li>- Other: 0%</li> </ul>
<p><b>Physical or Mental Difficulties</b></p> <p><i>Participants could select multiple options</i></p> <ul style="list-style-type: none"> <li>- Seeing: 5%</li> <li>- Hearing: 3%</li> <li>- Walking/climbing: 4%</li> <li>- Remembering/concentrating: 4%</li> <li>- Communicating: 0%</li> <li>- Other difficulty: 3%</li> </ul> <p><i>83% reported no physical or mental difficulties</i></p>	<p><b>Employment Status</b></p> <p><i>Participants could select multiple options</i></p> <ul style="list-style-type: none"> <li>- Full time: 75%</li> <li>- Part time: 10%</li> <li>- Not employed: 1%</li> <li>- Retired: 10%</li> <li>- Student: 5%</li> <li>- Unable to work: 0%</li> <li>- Other: 0%</li> </ul>	<p><b>Race/Ethnicity</b></p> <p><i>Participants could select multiple options</i></p> <ul style="list-style-type: none"> <li>- White: 93%</li> <li>- Black/African American: 1%</li> <li>- Asian: 3%</li> <li>- Native American/Alaska Native: 4%</li> <li>- Hawaiian/Pacific Islander: 1%</li> <li>- Hispanic/Latino: 4%</li> <li>- Other: 1%</li> </ul>
<p><b>Grew Up</b></p> <ul style="list-style-type: none"> <li>- In Yellowstone County: 26%</li> <li>- Elsewhere in Montana: 32%</li> <li>- Other US state: 38%</li> <li>- Outside of the US: 4%</li> </ul> <p style="text-align: center;">  </p> <p style="text-align: center;"><b>Half</b> grew up somewhere in Montana.</p>		<p><b>Residence</b></p> <ul style="list-style-type: none"> <li>- Billings: 91%</li> <li>- Laurel: 2%</li> <li>- Lockwood: 1%</li> <li>- Yellowstone County*: 3%</li> <li>- Other: 3%</li> </ul> <p style="text-align: right;"><i>*Designated township within the County</i></p>

**Recommendations**

Efforts should continue to increase the diversity of perspectives and experiences in the CHNA process, across nearly all areas measured. As CHNA staff convene stakeholders around various areas of opportunity identified in the CHNA and begin to develop the 2020 – 2023 Community Health Improvement Plan (CHIP) in the next 6 months, efforts will continue to build and leverage partnerships with area organizations, organize meetings that are accessible, welcoming, and informative, and seek additional opportunities to implement inclusive practices.

## Appendix D: Yellowstone County Community Health Improvement Plan Progress to Date

### A Longstanding Partnership to Improve Community Health in Yellowstone County, Montana

Billings Clinic | RiverStone Health | St. Vincent Healthcare

Leading the Way for Collective Action

#### 2017 – 2020 Yellowstone County Community Health Improvement Plan

- Reviewed and adopted by Billings Clinic, RiverStone Health, and St. Vincent Healthcare
- Comprehensive, collaborative community health strategies that focus on upstream, policy, system, and built environment approaches to improve health
- Implemented by members of the Healthy By Design Coalition, created and sponsored by Billings Clinic, RiverStone Health, and St. Vincent Healthcare
- Coalition membership includes more than 50 individuals and organizations working to **make the healthy choice, the easy choice** in Yellowstone County



For more information on these activities, visit [Appendices E, F & G.](#)

*Examples:*

- Best Beginnings Council of Yellowstone County
- Billings Action For Healthy Kids
- BillingsWorks – Workforce Development Council
- Community Crisis Center
- Continuum of Care Coalition to Address Homelessness
- MET Transit Coordination Committee
- Opioid Prevention Task Force
- Substance Abuse Connect Coalition
- Suicide Prevention Coalition

Strategic Partnerships

*Examples:*

- Advocacy for Medicaid Expansion in Montana
- Medication Assistance Programs
- Integrated Behavioral Health in Primary Care
- PAX: Good Behavior Game (RiverStone Health)
- Psychiatric Residency Program (Billings Clinic)
- Reducing Substance Abuse During Pregnancy Program (St. Vincent Healthcare)

Mutually Reinforcing Activities



## Leading the Way for Collective Action: 2017 – 2020 Community Health Improvement Plan (CHIP) Overview

The Healthy By Design Coalition (HBD) is a diverse cross sector collaboration of local organizations and advocates committed to making *the healthy choice, the easy choice* in Yellowstone County. Our Coalition works together to identify policy, systems, and built environment opportunities to address our community’s most complex community health needs – identified through the CHNA and CHIP. For more information on the Coalition, visit: [www.hbdyc.org](http://www.hbdyc.org)

Vision – Make the Healthy Choice, the Easy Choice			
<p><b>Overall Approach</b> - Healthy By Design, through policy, systems and environmental change efforts will see a positive effect in Yellowstone County’s physical, behavioral and social wellbeing related to physical activity, nutrition and overall health.</p>			
<p><b>Long Term Measurement Goal</b> - Increase proportion of residents who are at a healthy weight in Yellowstone County by 10% to 35.3% by 2030.</p>	<p>2005: 37.3% 2010: 27.1% 2014: 34.3% 2017: 34.4% <b>2020: 27.3%</b></p>		
CHIP Objectives (in no particular order)			
<p>Increase in reported consumption of 5 servings/day of fruits and vegetables among Yellowstone County residents from 30.8% to 33.88% by 2020</p>	<p>Increase in reported children who are physically active for 1+ hours/day in Yellowstone County from 70.8% to 77.8% by 2020</p>	<p>Increase proportion of adults reporting leisure time physical activity in Yellowstone County from 82% to 90.2% by 2020</p>	<p>Increase in reported Yellowstone County adults whose activities are <u>not</u> limited in some way due to a physical, mental, or emotional problem from 70.4% to 77.44% by 2020</p>
<p>2005: 34.9% 2010: 40.6% 2014: 40.1% 2017: 30.8% <b>2020: 27.7%</b></p>	<p>2005: N/A 2010: N/A 2014: 42.8% 2017: 70.8% <b>2020: 66.2%</b></p>	<p>2005: 73.7% 2010: 77.6% 2014: 76.3% 2017: 82.0% <b>2020: 83.4%</b></p>	<p>2005: 75.7% 2010: 74.3% 2014: 77.6% 2017: 70.4% <b>2020: 69.3%</b></p>
<p><i>Based on guidance from Healthy People 2020.</i></p>			
Adopted Healthy By Design Strategies for the 2017 – 2020 CHIP Cycle			
<ol style="list-style-type: none"> <li>1. Healthy Food Retail and Food Procurement</li> <li>2. Creating and Improving Access to Places, Parks, and Playgrounds for Physical Activity; Creating and Maintaining Safe Neighborhoods</li> <li>3. Providing Space for Activities that Encourage Social Participation and Inclusion</li> <li>4. Community Scale Urban Design and Land Use Policies</li> </ol>			



**2017 – 2020 Yellowstone County  
Community Health Improvement Plan Initiatives**  
Updated January 13, 2020



- Recognition Opportunities
- ● Events
  - ● ● School Wellness Champions
  - ● ● Worksites
  - Food Vendors

- Healthy Neighborhood Project – South Side of Billings
- ● Grocery Store Feasibility Study
  - ● Community Gardening Continuum
  - ● Bright Side of the Tracks Branding
  - ● South Side Stories
  - ● Brighten Up Initiative
  - ● ● South Sidewalks

- ● ● ● Gardeners’ Market at South Park (including Move at the Market)
- ● ● ● Activate Billings
- ● ● Safer Routes to Schools through Creative Placemaking

- Advocacy for Healthy Community Design:  
Project Re:Code, One Big Sky District, Billings Wayfinding Signage Plan

- ● Parks Rx and Pioneer Perks

- ● ● ● Assessing Joint, Shared, and Open Use Agreements in Yellowstone County
- ● 5-2-1-0 Message

Graphics source: venngage.com, 2018

## 2017 – 2020 Healthy By Design Coalition Update – Key CHIP Efforts

In addition to the strategy-specific initiatives listed below, the Coalition continues to seek opportunities to recognize food trucks, businesses, events, and school-based staff who promote healthy eating through various recognition opportunities and to promote the 5-2-1-0 community message.

### Healthy, Affordable Foods:

Since 2017, efforts have largely focused on continuation of the Gardeners' Market at South Park and the completion of a feasibility study for a neighborhood grocery store in the South Side neighborhood of Billings. Through a grant from the USDA, the Gardeners' Market is currently focused on 1) increasing the senior citizen customer base through a marketing campaign and 2) developing a vendor steering committee.

### Physical Activity Opportunities & Welcoming Spaces:

Since 2017, creative placemaking initiatives have been implemented that seek to enhance the walkability of the community through public art as places of interest. These includes designated walking routes showcased through maps and engaging route finding signage. Whenever possible, efforts have sought to engage residents and other stakeholders in the creation and selection of creative placemaking designs to increase social connections and social capital. In addition, HBD has successfully implemented a Parks Rx initiative which included the development of maps to highlight a variety of activities, with an emphasis on those accessible to seniors, individuals living with various impairments, and families, at two large parks in the urban area.

### Healthy Community Design:

Since 2017, HBD Coalition members have sought opportunities to integrate community health, specifically CHIP objectives, into local planning initiatives through a health in all plans or policies approach. Not a one size fits all approach, tactics include promoting community health as a goal or objective, performance measure, or criteria for project selection in a variety of local plans. Plans include, but are not limited to the Billings Area Bikeway and Trail Master Plan Update, Complete Streets Progress Report, One Big Sky District Strategic Plan, and Project Re:Code. In addition, Coalition members have piloted several creative placemaking initiatives on the South Side of Billings in hopes of developing a broader framework for community design efforts moving forward.

### Strengthening Partnerships:

HBD Coalition members and backbone staff continue to seek opportunities to build cross-sector partnerships and data-sharing opportunities to enhance our ability to collectively impact the health of Yellowstone County.



50+

Community Partners

15

Active Projects



To learn more about the CHIP or Healthy By Design Coalition, contact:  
Melissa Henderson, MPH | (406) 651.6569 | [info@hbdyc.org](mailto:info@hbdyc.org) | [www.hbdyc.org](http://www.hbdyc.org)

## Appendix E: Evaluation of Past Activities — Billings Clinic

In 2017, Billings Clinic, RiverStone Health and St. Vincent Healthcare released Yellowstone County's most recent Community Health Needs Assessment with primary, secondary and qualitative research into the health needs in the community. Prioritization ranked three priorities at the top of those needs: 1) nutrition, physical activity and weight; 2) mental health, and 3) substance abuse.

Billings Clinic has been addressing these identified health needs for many years through both collaborative community efforts and our own health care organizational activities.

### *Response to Community Health Needs*

#### **Nutrition, Physical Activity, and Weight**

As a sponsoring entity and member of the Healthy By Design Coalition, Billings Clinic is collaborating with RiverStone Health (city/county public health), St. Vincent Healthcare, United Way and more than 40 other community organizations, to increase healthy weight. Our combined efforts focus on policy, systems and environmental change strategies. Billings Clinic pays one-third of the costs of salaries for the Healthy By Design backbone staff and the Community Health Needs Assessment. Also, the Community Benefit Coordinator attends monthly meetings for both the Operations Committee and Community Health Needs Assessment and Implementation Plan Committees. The Director of Strategic Planning and Marketing Communications attends quarterly meetings and support for the coalition as needed.

During the past three years, the Healthy By Design Coalition:

- Created a business plan for a grocery store in a federally designated food desert – plans continuing this year
- Created recognition criteria and platform for healthy food trucks – 4 local food trucks are now recognized for offering healthy food options, including smaller serving, whole grains, sugar-free beverages, non-fried fruits and vegetables, plant-based entrees
- Recognized 12 worksites for their health and wellness activities
- Developed safe routes to school street sign toppers for two schools
- Provided leadership for community placemaking efforts on the South Side of Billings including signs, murals, traffic signal box wraps, and two historical walking routes based on oral histories
- Created maps with walking routes for our largest city parks, Pioneer and North Parks, including accessible paths and restroom locations in response to CHNA disparities in physical activity for seniors and those with activity limitations
- Provided access to low-cost fresh fruits and vegetables at the Healthy By Design

Gardeners' Market by accepting WIC and SNAP for payment - an average of 216 people attended the market every week in 2019

Billings Clinic supported the following community benefit activities to promote healthy weight through nutrition and physical activity:

- Supported the Billings Commuter Challenge with a free breakfast for active commuters (employees and anyone going through our neighborhood) and implementing Bike-Friendly Business principles on our campus
- Diabetes prevention and self-management education at no or low charge (subsidized) for 1,500 patients per year
- Financial support for major events to encourage thousands of individuals and families to exercise together, including Big Sky State Games, Big Sky Fit Kids, Saturday Live Fun Run, Run Turkey Run, Montana Marathon, Montana Women's Run, and many other run/walk fundraisers for local nonprofit organizations
- "Superstar Awards" \$100 grant awards for 10 teachers per year to encourage physical activity and wellness in their classrooms, for all grades, in partnership with the YMCA
- Financial and in-kind support of Pursue Excellence for Billings Public Schools, a program made up of elected students who are involved in sports and other activities – goal is to improve the school culture and social connection at sports events, concerts and other activities
- Financial donation for an all-inclusive playground, "Every Child Plays – An Inclusive Playground Project" at centrally-located Rose Park Elementary, which serves students from across the city who are medically fragile, in wheelchairs, blind or have other severe health impairments

### **Behavioral Health and Substance Abuse**

- Member of Substance Abuse Connect Coalition, with leadership and expert insight as needed from Psychiatric Services Director and Addiction Psychiatrist Robert Sise, MD
- Billings Clinic provided 3,101 psychiatric hospital admissions at the only inpatient psychiatric hospital for children, teens and adults in central/eastern Montana and northern Wyoming. Billings Clinic's Behavioral Health Clinic also provided 19,929 outpatient visits. Psychiatric services are subsidized at a multi-million-dollar shortfall each year.
- Created new Psychiatric Stabilization Unit to help evaluate, triage, manage medications and determine need for inpatient vs. outpatient care for persons with mental and behavioral health needs
- Bridge Clinic at no charge for medication management after inpatient discharge
- Integrated behavioral health at primary care locations for ease of access

- Screenings for mental health needs at primary care appointments, through the PHQ-2 screening for all patients, with follow-up using PHQ-9 for depression severity rate and GAD-7 for anxiety behavioral health screening. Billings Clinic also uses the Columbia-Suicide Severity Rating Scale (C-SSRS) for suicide screening and Screening, Brief Intervention, and Referral to Treatment (SBIRT) screening for substance use disorder screening in the clinic and hospital environments. The consistent use of these screening tools should result in earlier detection and treatment for individuals in need of treatment and referrals.
- Tele-psychiatry visits for patients in rural areas
- Project ECHO provided training and support to mental health professionals, nurses and physicians across the region throughout the year in educational sessions for the Department of Corrections, Integrated Addictions and Psychiatry and Pediatric Mental Health
- We supported the Community Crisis Center for people with co-occurring disorders of mental health and substance use through financial support, leadership and staffing of mental health workers and social workers, as well as board membership by our Director of Psychiatric Services. The Community Crisis Center served 3,122 individuals with 3,572 visits in the past year with assessments, case management, group therapy, addiction counseling, referrals and stabilization services to people in need 24/7.
- Our latest project to increase access to mental health care is Billings Clinic's new Psychiatric Residency Program, which started in July 2019 with three psychiatric residents who started the first two years at the University of Washington in Seattle, and will continue at the Billings Clinic location for the last two years of residency.
- In addition, we provided financial donations to several mental health organizations received financial donations, including the Out of the Darkness walk for suicide prevention and Rimrock Foundation Pump-n-Run for addiction rehabilitation programs.

### **Access to Health Care Services**

- Member of statewide “Alliance for Healthy Montanans” Coalition
- Advocacy and financial support for Medicaid expansion in Montana
- Telemedicine: Billings Clinic is the home office of the Eastern Montana Telemedicine Network, which provided more than 5,500 telemedicine appointments with medical specialists, as well as administrative and operational support to more 4,000 people attending education and meetings through 40 partner sites in Montana, western North Dakota, and northern Wyoming
- Financial assistance for nearly 11,000 patients whose incomes range from 0-400% of federal poverty guidelines
- Medication assistance for patients who meet financial assistance criteria

- Physician Specialty Outreach Clinics: more than 52 Billings Clinic physicians in 22 specialties travel in excess of 260,000 miles to provide specialty care for residents of rural Montana, Wyoming, and North Dakota
- Regional primary care clinics in medically-underserved areas, including Miles City, Montana and Cody, Wyoming
- Billings Clinic Internal Medicine Residency
- Billings Clinic Psychiatric Residency
- Billings Clinic Pharmacy Residency
- Montana Family Medicine Residency: financial support and leadership on Board
- Health Care Workforce Pipeline: Billings Clinic supports medical careers classes in local high schools, clinical rotations for nursing students, dietary students and pharmacy students each year. In addition, our team of nursing leaders are working with Tumbleweed (a nonprofit helping runaway and homeless teens) to gain training and employment at health care organizations for high-need, entry level job such as certified nurse assistants, phlebotomists, access specialists and more.
- Science, technology, engineering and math (STEM) Saturdays for local students offered three times a year in Yellowstone County
- Support of the new science buildings at MSU-B and Rocky Mountain College

## Chronic Diseases

In addition to the following activities, Billings Clinic makes annual financial donations and provides in-kind leadership, health policy advocacy, special event and committee support for organizations supporting prevention, research and advocacy for many chronic diseases. Some of the organizations that we support include American Cancer Society, American Heart Association, American Diabetes Association, and the Alzheimer's Association. Billings Clinic also partners with the Alliance for Healthy Montanans to advocate for health policies that benefit persons with chronic diseases, including support for Medicaid expansion.

## Cancer

- Free or low-cost screenings for cancer are coordinated and reported on through the Cancer Committee's community outreach task group
- Screenings for breast cancer and cervical cancer with the Women's Wellness fund through support of the Women's Run
- Free or low-cost screenings for lung cancer with the low-dose CT lung cancer screening fund
- Free head and neck cancer screenings at ExpressCare
- Free community education for gynecologic cancer, breast cancer and lung cancer this past year through Lunch and Learns, videos and patient stories
- Evaluation of cancer rates and screenings through the Billings Clinic Cancer Committee with the Cancer Center Annual Report

- Cancer Care Navigators help with non-clinical needs to impact patient's care
- Financial support and coordination for Battleground House, which provides housing for Billings Clinic cancer patients for a low cost or no charge

### **Dementias, including Alzheimer's Disease**

- Research projects are ongoing at the Billings Clinic Collaborative Science and Innovation
- Fundraising support for the Alzheimer's Association

### **Diabetes**

- Free and low-cost pre-diabetes/diabetes self-management education (subsidized)
- Diabetes Prevention Program (state grant and subsidized)

### **Heart Disease and Stroke**

- In-kind donations for PR and coordination of CPR Saturday event in February each year (in addition to financial support)
- Free community education during Heart Month and throughout the year
- Winter shoveling awareness for the signs and symptoms of heart attack
- Cardiac rehabilitation program

### **Injury and Violence**

- Trauma and Injury Prevention is subsidized at a 0.5 (half time) position in the Emergency and Trauma Center by a registered nurse who provided education for safe driving, falls prevention, brain and spinal cord injury prevention, helmet safety and more
- Sexual Assault Nursing Exam (SANE) program provided subsidized medical treatment and emotional support to more than 140 children, teens and adults who were victims of sexual assault. Billings Clinic also subsidized the hours for a family medicine physician to serve at the medical director of the SANE program and to provide free follow-up care for children under 18. The SANE staff and volunteers also provide training in the region.
- Support for alcohol-free graduation parties

### **Potentially Disabling Conditions**

- Support groups for caregivers of persons with disabilities

### **Respiratory Disease and Tobacco Use**

- Advocacy and policy work to prevent and reduce tobacco use include support of the tobacco tax; bills to make it illegal to smoke or use e-cigarette products in schools; work to include e-cigarettes and vaping as part of our Clean Indoor Air Act
- Education for adults and teens about the dangers of vaping
- Tobacco cessation screening and education
- Connection and referrals for tobacco cessation resources in primary care, oncology,



respiratory therapy and cardiovascular rehabilitation

- Reduction in insurance premiums for Billings Clinic employees are don't use tobacco, as well as a free tobacco cessation course

### **Addressing Social Determinants of Health**

- Billings Clinic integrates awareness and support of upstream social determinants of health with our Population Health work, including Care Management. We provide advocacy, in-kind leadership and financial support of a variety of organizations doing work on important issues that affect health, including housing/homelessness, substance abuse, transportation and education.
- Billings Clinic is a member of several coalitions in Yellowstone County working on social determinants of health, including healthy neighborhoods, built environment and social connections (Healthy By Design Coalition); transportation (led by MET Transit); and housing (Continuum of Care Coalition, led by United Way and Tumbleweed).
- Support for patients needing assistance with transportation and housing needs before or after an inpatient hospital stay

Examples of organizations that we support with in-kind and financial donations include:

- Adult Resource Alliance (Meals on Wheels, support for seniors in Yellowstone County)
- Big Sky Senior Services
- Billings Public Schools and Education Foundation
- Billings TrailNet (safe walk/bike trails)
- Boys and Girls Clubs of Yellowstone County
- Continuum of Care (housing)
- Dress for Success (interview skills and clothing for women needing jobs)
- Family Promise (homeless families)
- Family Services (housing, rent, food, clothing)
- Family Tree Center (prevention of child abuse)
- Habitat for Humanity (housing)
- Head Start/Explorers Academy (early childhood education)
- McKinley Elementary School Task Force (education)
- Substance Abuse Connect
- Tumbleweed (teen runaway, housing, counseling,
- United Way of Yellowstone County
- Volunteers of America (veteran housing)
- Young Families (teen parents)
- YWCA

## Economic Development

Board leadership, in-kind and financial support for economic development and security for residents of Yellowstone County and our surrounding region:

- [Big Sky Economic Development](#)
- [Chamber of Commerce \(Billings and Montana state chambers\)](#)

## Appendix F: Evaluation of Past Activities — St. Vincent Healthcare

Three years ago, St. Vincent Healthcare, Billings Clinic, and RiverStone Health released a 2017 Community Health Needs Assessment that detailed a variety of health needs in the community. Ranking at the top of those needs were nutrition, physical activity and weight, mental health, and substance abuse. St. Vincent Healthcare has been addressing these identified health needs through both collaborative community efforts and specific hospital efforts.

### **Nutrition, Physical Activity, and Weight:**

As a sponsoring entity and member of the Healthy By Design Coalition, St. Vincent Healthcare is collaborating to increase the proportion of residents who are at a healthy weight through policy, systems and environmental change strategies. During the past three years, the Healthy By Design Coalition created a business plan for a grocery store in a federally identified food desert, created a recognition platform for healthy food trucks, recognized 12 worksites for their health and wellness activities, developed safe routes to school street sign toppers for two schools, and provided leadership for community placemaking efforts on the Southside of Billings including signs, murals, and box wraps. Maps with walking routes were created for Pioneer and North Parks and were distributed at St. Vincent Healthcare's Primary Care Clinics as part of Parks RX. In addition, the Healthy By Design Gardeners' Market provided access to low-cost fresh fruits and vegetables by accepting WIC and SNAP for payment. An average of 216 people attended the market every week in 2019.

St. Vincent Healthcare continues to offer the evidence-based Diabetes and Heart Disease Prevention Program. Located at the Billings Family YMCA, this CDC Full Recognition program is offered twice a year. Over the past three years, 353 individuals completed the program. Program data shows an average weight loss of 12 pounds and improved measures for physical activity.

We also sponsored the LiveStrong Program at the YMCA which focuses on physical activity, balance and stamina for cancer survivors across the community. In 2017, 33 participants took the pre and post-test and showed outcomes of a 68% increase in balance, a 14% increase in walking stability, a 27% increase in flexibility, and a 43% increase in strength.

To address physical activity and obesity rates in children, St. Vincent Healthcare sponsored the Kids in Motion Program in collaboration with the City of Billings and School District 2. This program combines events such as bicycle tune-up clinics with in-class education to empower youth with the skills and confidence needed to ride their bicycle every day. During the three year period, over 450 bicycles were inspected, and if needed, repaired at 20 schools with an

emphasis on Title One schools. The educational component was offered to over 700 students in 4th and 5th grades at 8 schools.

In addition, St. Vincent Healthcare manages the Kohl's Cares grant partnership with priority Title One schools, providing physical activity and nutrition education and outreach. The project has included running programs, hip hop programs, pound classes, and distribution of running shoes. Approximately 2,000 kids were served each year through the program. We also provided financial support for an inclusive playground at Rose Park Elementary School, which serves students who are medically fragile, non-ambulatory, visually impaired, or have other severe impairments.

St. Vincent Healthcare also provided financial support and leadership for local non-profit organizations focused on obesity prevention, nutrition, and physical activity promotion. These organizations included Billings Action for Healthy Kids, a community coalition focused on school wellness, Trailnet, a local trail advocacy organization, Big Sky State Games, a local organization which provides community physical activity opportunities, Special Olympics, focused on physical activity for individuals with developmental disability, and Eagle Mount, focused on physical activity for individuals with physical disabilities. We advocated for access to healthy foods for low-income individuals and families, including serving as a distribution site for bountiful baskets and delivering food to homeless individuals at St. Vincent de Paul, and providing food donations to community-based organizations serving vulnerable populations including healthy meals for individuals with AIDS.

### **Behavioral Health: Mental Health and Substance Abuse:**

In 2018, St. Vincent Healthcare began offering integrated behavioral health services in primary care clinics. Embedding mental health specialists within primary care provides increased access to mental health treatments and helps to reduce barriers related to stigma. In one year, 54,852 individuals were screened for mental health or substance abuse. 679 of those individuals were identified as needing behavioral health supports and were provided with a warm handoff to a behavioral health specialist. An additional 55 individuals were referred for a higher level of behavioral health care.

St. Vincent Healthcare continues providing financial support to the Community Crisis Center and our Chief Medical Officer serves on their Board of Directors. The Community Crisis Center serves over 3,122 individuals, including over 13,500 visits with assessments, case management, group therapy, addictions counseling, referrals, and stabilization services to people 24 hours a day 365 days a year, regardless of ability to pay for those services.

St. Vincent Healthcare also provided financial support to a student run mental health clinic at Walla Walla University-Billings. The clinic has provided no-cost mental health services to over 315 individuals without insurance coverage while at the same time providing the clinical hours needed for students to complete their MSW degrees, increasing access to mental health

services. Referrals to Walla Walla University-Billings Mental Health Clinic have come from 20 different community sources. To also address provider capacity, St. Vincent Healthcare provided \$130,000 in financial support for the Billings Clinic's Psychiatric Residency Program.

Substance Abuse was addressed through the integrated behavioral health in primary care utilizing SBIRT screenings. In addition, substance use prenatally was addressed through a collaborative with the Northern Cheyenne Tribe by enrolling women into the Reducing Substance Abuse During Pregnancy Program. In 2018, 55 American Indian women were referred into the program with 5 mothers in outpatient treatment. Staff from St. Vincent also participated in the Substance Use Connect Coalition and served on the Executive Committee. These efforts included evaluating current state for prevention and treatment across the community to determine next steps. The Coalition plans to begin implementing interventions in 2021.

Additionally, both mental health and substance use were addressed through in-kind and financial support of non-profit organizations providing behavioral health services including Horses Spirits Healing, Inc., providing equine therapy to 277 veterans with PTSD, the Suicide Prevention Coalition of Yellowstone Valley, providing education and training to prevent suicide, and the American Foundation for Suicide Prevention.

### **Access to Healthcare Services:**

To enhance access to healthcare services, especially for residents in rural and tribal communities, St. Vincent Healthcare provides outreach services such as mobile mammography, visiting clinics, pediatric and midwifery outreach, and virtual health services. In 2018, a school-based mobile clinic was opened in Lockwood. This clinic provided services to 71 patients over the course of a year in a community that previously had no direct access to primary care. Mobile mammography services were provided to over 2,800 women at 55 locations annually, including outreach to American Indian women on the Crow and Northern Cheyenne Reservations and at the Montana State Women's Prison. Since its inception in 2010, the coach has screened over 17,000 women and detected more than 100 breast cancers. Midwifery clinics provided additional outreach to women in the Northern Cheyenne Community, increasing access to early prenatal care.

St. Vincent Healthcare also worked over the past three years to increase workforce capacity to provide healthcare services. These programs included providing clinical rotations for approximately 155 nursing students, 3 dietary students, and 4 pharmacy students each year. Residents from the Montana Family Practice Residency Program were provided with clinical rotations. In addition, St. Vincent Healthcare offers the only accredited Clinical Pastoral Education Program in the state with 31 students trained since the program's inception.

In addition, St. Vincent Healthcare provided financial support to RiverStone Health, a Federally Qualified Health Center, for expansion of their clinic and for staffing the Medication

Assistance program at that location. In 2018, RiverStone's Medication Assistance Program helped 347 patients obtain 604 medications they may have otherwise gone without.

### **Other Significant Health Needs Not Prioritized:**

In addition to our own programs, St. Vincent Healthcare continues to collaborate with community organizations to ensure these needs are addressed.

**Cancer:** St. Vincent Healthcare provides a mobile mammography coach, financial and in-kind support for the American Cancer Society, financial support of the Livestrong physical activity program for cancer patients at the Billings YMCA, lung cancer screenings, head and neck cancer screenings, and cancer navigators for patients. Several screening and prevention events occur each year and outcomes are tracked and reported on as part of the Cancer Committee.

**Dementias**, including Alzheimer's Disease: St. Vincent Healthcare provided financial and in-kind support to the Alzheimer's Society and staff serve on the steering committee for Dementia Friendly Billings Coalition which is providing education and awareness activities throughout the community.

**Diabetes:** Blood glucose screenings were conducted at local events including the MATE Show and Montana State University Powwow. In addition, St. Vincent Healthcare manages the Diabetes Prevention Program at the Billings YMCA.

**Heart Disease and Stroke:** St. Vincent Healthcare offers a stroke camp and monthly support group for area residents. Financial and in-kind support was offered for community CPR training at CPR Saturday. St. Vincent Healthcare provides a cardiac rehabilitation program.

**Injury and Violence:** St. Vincent Healthcare's Trauma and Injury Prevention Coordinator provided distracted driving presentation at over 10 regional schools. Other injury prevention efforts included subsidizing the cost of over 1,000 bike helmets for area schools. Additional pediatric focused injury prevention education took place at events such as Kids Day at the Zoo. In addition, St. Vincent Healthcare provided financial support to the Billings YWCA for development and placement of interpersonal violence awareness campaigns and support of the crisis phone line which received 2,474 calls in 2018.

**Potentially Disabling Conditions:** St. Vincent Healthcare provided financial support to establish a vision assistance program at Family Service to provide eye exams and eyeglasses to 48 adults and children in 2017.

**Respiratory Disease and Tobacco Use:** St. Vincent Healthcare provided the 7-week evidence-based Freedom for Smoking class. In addition, low dose CT scans were provided to 300 current and former heavy smokers to screen for lung cancer. Tobacco cessation education and information was provided in conjunction with those screenings.

**Addressing Social Determinants of Health:**

St. Vincent Healthcare recognizes the need to address underlying factors which influence health in our community such as education, housing, early childhood development and economic security. We sponsor the St. Vincent Healthcare Foster Grandparent Program with 50 low-income seniors mentoring students in need at schools and HeadStart Center resulting in improved academic scores. Many of these factors are being addressed through in-kind and financial support with our community partners focusing on these social needs. One area of focus during the past CHNA cycle was housing. We addressed housing needs by providing financial support to build low-cost apartments in partnership with Community Development Leadership Inc. and transitional housing in partnership with the Billings YWCA.

## Appendix G: RiverStone Health – 2020 Public Health Re-Accreditation

The CHNA addresses myriad accreditation domains set forth by the national Public Health Accreditation Board (below) and serves as an important point-in-time statistically valid survey of the health status of Yellowstone County residents. The CHNA and associated staffing are collaboratively sponsored by Billings Clinic, RiverStone Health, and St. Vincent Healthcare. This assessment meets both the IRS community benefit criteria for hospitals and the requirements to maintain public health accreditation. Primary data from this assessment is supported by other national, state, and regional datasets such as the Montana Youth Risk Behavior Surveillance System (BRFSS) survey and County Health Rankings, and benchmarks such as Healthy People 2020. A public forum centered on the data from the CHNA helped to prioritize areas of opportunity according to 1) ability to impact and 2) scope and severity. The CHNA becomes the galvanizing data source from which the Community Health Improvement Plan is developed, implemented, and evaluated.



### Adherence to Public Health Accreditation Standards, version 1.5

<b>Domain 1. Conduct and disseminate assessments focused on population health status and public health issues facing the community</b>
✓ Standard 1.1. Participate in or Lead a Collaborative Process Resulting in a Comprehensive Community Health Assessment
✓ Standard 1.2. Collect and Maintain Reliable, Comparable, and Valid Data that Provide Information on Conditions of Public Health Importance and On the Health Status of the Population
✓ Standard 1.3. Analyze Public Health Data to Identify Trends in Health Problems, Environmental Public Health Hazards, and Social and Economic Factors that Affect the Public's Health
✓ Standard 1.4. Provide and Use the Results of Health Data Analysis to Develop Recommendations Regarding Public Health Policy, Processes, Programs, or Interventions
<b>Domain 2. Investigate health problems and environmental public health hazards to protect the community</b>
<b>Domain 3. Inform and educate about public health issues and functions.</b>
✓ Standard 3.2. Provide Information on Public Health Issues and Public Health Functions Through Multiple Methods to a Variety of Audiences
<b>Domain 4. Engage with the community to identify and address health problems</b>
✓ Standard 4.1. Engage with the Public Health System and the Community in Identifying and Addressing Health Problems through Collaborative Processes



<ul style="list-style-type: none"> <li>✓ Standard 4.2. Promote the Community's Understanding of and Support for Policies and Strategies that will Improve the Public's Health</li> </ul>
<b>Domain 5. Develop public health policies and plans</b>
<b>Domain 6. Enforce public health laws</b>
<b>Domain 7. Promote strategies to improve access to health care</b>
<ul style="list-style-type: none"> <li>✓ Standard 7.1. Assess Health Care Service Capacity and Access to Health Care Services</li> </ul>
<ul style="list-style-type: none"> <li>✓ Standard 7.2. Identify and Implement Strategies to Improve Access to Health Care Services</li> </ul>
<b>Domain 8. Maintain a competent public health workforce</b>
<b>Domain 9. Evaluate and continuously improve processes, programs, and interventions</b>
<b>Domain 10. Contribute to and apply the evidence base of public health</b>
<b>Domain 11. Maintain administrative and management capacity</b>
<b>Domain 12. Maintain capacity to engage the public health governing entity</b>
<ul style="list-style-type: none"> <li>✓ Standard 12.3. Encourage the Governing Entity's Engagement In the Public Health Department's Overall Obligations and Responsibilities</li> </ul>

Source: Public Health Accreditation Standards. Version 1.5, December 2013. Public Health Accreditation Board.