



# 2020 COMMUNITY HEALTH NEEDS ASSESSMENT

Gallatin, Madison & Park Counties, Montana

*Sponsored by*



**BOZEMAN HEALTH**  
DEACONESS HOSPITAL

*In partnership with*

Community Health Partners (CHP)  
Gallatin City-County Health Department  
Livingston Healthcare  
Park County Health Department

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# PROJECT OVERVIEW

## Project Goals

This Community Health Needs Assessment — a follow-up to similar studies conducted in 2011, 2014, and 2017 — is a systematic, data-driven approach to determining the health status, behaviors, and needs of residents in the Gallatin, Madison, and Park counties in Montana. Subsequently, this information may be used to inform decisions and guide efforts to improve community health and wellness.

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 will serve 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 Bozeman Health, Community Health Partners (CHP), Gallatin City-County Health Department, Livingston Healthcare, and Park County Health Department by PRC, a nationally recognized health care 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 multiple sources, including primary research (through the PRC Community Health Survey and PRC Online Key Informant Survey), as well as secondary research (vital statistics and other existing health-related data). It also allows for trending and comparison to benchmark data at the state and national levels.

## PRC Community Health Survey

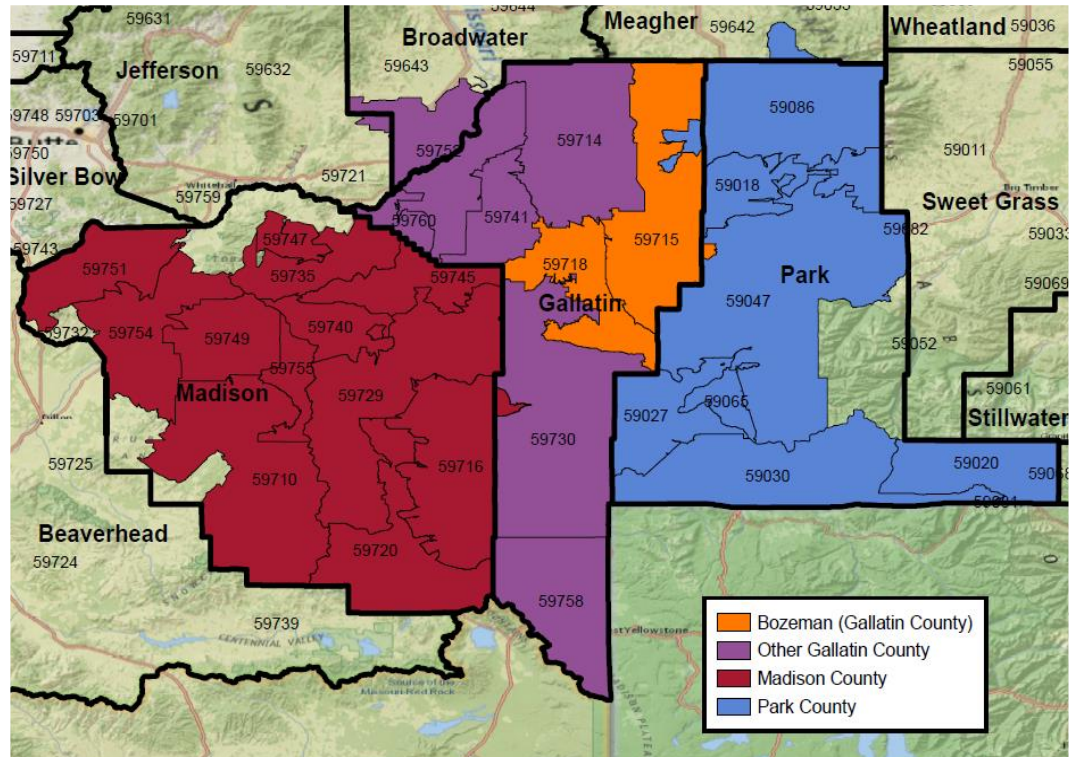
### Survey Instrument

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 the sponsors of this study and PRC and 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 the “Total Area” in this report) is made up of three Montana counties (Gallatin, Madison, and Park); for survey indicators. This community definition the areas served by the study sponsors, and includes those ZIP Codes of residence of most recent patients of Bozeman Health.



## Sample Approach & Design

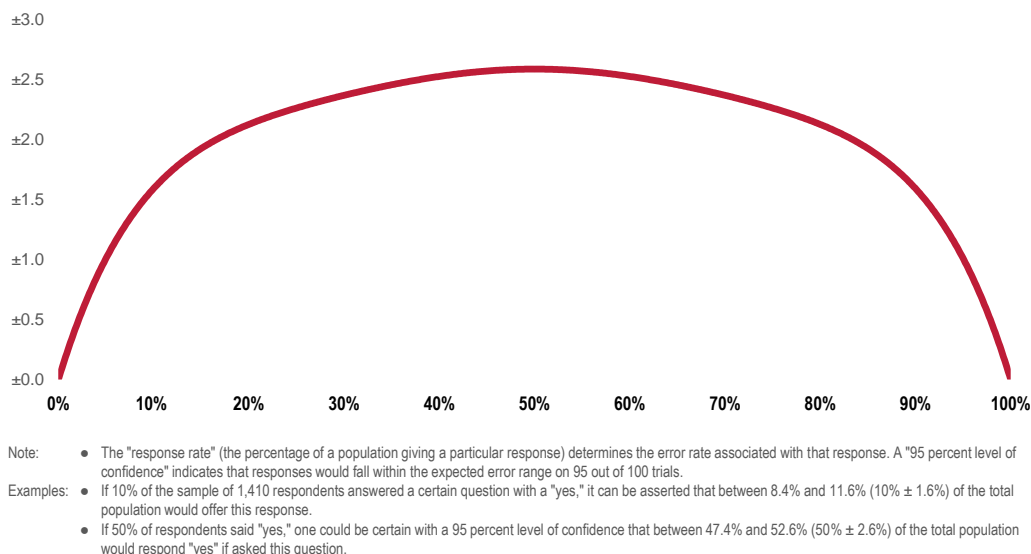
A precise and carefully executed methodology is critical in asserting the validity of the results gathered in the PRC Community Health Survey. Thus, to ensure the best representation of the population surveyed a mixed-mode methodology was implemented. This included surveys conducted via telephone by PRC (landline and cell phone), as well as through online questionnaires promoted by the sponsors of the study.

The sample design used for this effort consisted of a stratified random sample of 1,410 individuals age 18 and older in the Total Area, including 637 in Bozeman ZIP Codes, 376 in Other Gallatin County, 197 in Madison County, and 200 in Park County. It reflects 818 surveys achieved through telephone sampling, and 592 achieved through online questionnaires. Once the surveys were completed, these were weighted in proportion to the actual population distribution so as to appropriately represent the Total Area as a whole. 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 1,410 respondents is  $\pm 2.6\%$  at the 95 percent confidence level.



## Expected Error Ranges for a Sample of 1,410 Respondents at the 95 Percent Level of Confidence



## Sample Characteristics

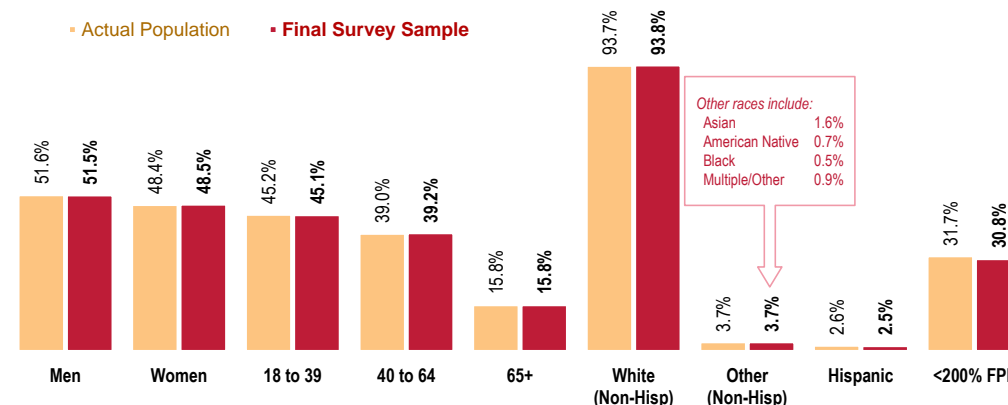
To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. While this random sampling of the population produces a highly representative sample, it is a common and preferred practice to "weight" the 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 the Total Area 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 health care needs, and these children are not represented demographically in this chart.]





## Population & Survey Sample Characteristics (Total Area, 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.

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.

### INCOME & RACE/ETHNICITY

**INCOME** ► 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.

**RACE & ETHNICITY** ► In analyzing survey results, mutually exclusive race and ethnicity categories are used. All Hispanic respondents are grouped, regardless of identity with any other race group. Other race categories are non-Hispanic categorizations (e.g., “White” reflects non-Hispanic White respondents).

### Online Key Informant Survey

To solicit input from key informants, those individuals who have a broad interest 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 Bozeman Health; this list included names and contact information for physicians, public health representatives, other health professionals, social service providers, 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, 166 community stakeholders took part in the Online Key Informant Survey, as outlined below:

ONLINE KEY INFORMANT SURVEY PARTICIPATION	
KEY INFORMANT TYPE	NUMBER PARTICIPATING
Physicians	31
Public Health Representatives	13
Other Health Providers	32
Social Services Providers	28
Other Community Leaders	62

Final participation included representatives of the organizations outlined below.

- Absaroka Emergency Physicians
- Adult Protective Services, Montana
- Alcohol and Drug Services of Gallatin County
- ASPEN
- Belgrade Community Library
- Belgrade School District 44
- Belgrade Senior Center
- Big Sky Community Organization
- Big Sky Fire Department
- Big Sky Resort
- Big Sky School District 72
- Big Sky Youth Empowerment
- Bozeman Area Chamber of Commerce
- Bozeman Health
  - Bozeman Health Behavioral Health
  - Bozeman Health Cancer Center
  - Bozeman Health Cardiology Clinic
  - Bozeman Health Case Management
  - Bozeman Health Deaconess Hospital Emergency Department
  - Bozeman Health Diabetes Center
  - Bozeman Health Family Birth Center
  - Bozeman Health Family Medicine Clinic
  - Bozeman Health Family Medicine Clinic
  - Bozeman Health Family Medicine Clinic
  - Bozeman Health GI Clinic
  - Bozeman Health Hillcrest Senior Living
  - Bozeman Health Internal Medicine Clinic
  - Bozeman Health Nephrology Clinic
  - Bozeman Health Neuroscience Center
  - Bozeman Health Pediatric Clinic
  - Bozeman Health Pediatric Clinic
  - Bozeman Health Pediatrics
  - Bozeman Health Retail Health
  - Bozeman Health Spiritual Care
  - Bozeman Health Urology Clinic
  - Bozeman Health Women's Specialists Clinic



- Bozeman Job Service, Montana
- Bozeman Open & Local Coalition
- Bozeman School District 7
- Bozeman Symphony
- Bridger Ski Foundation and Apollo
- Bridgercare
- Cancer Support Community
- Cashman Nursery
- Child Care Connections
- City of Belgrade
- Community Coalition On Drug Awareness (C-CODA)
- Community Health Partners
  - Community Health Partners–Belgrade
  - Community Health Partners–Bozeman
  - Community Health Partners–Learning Partners
  - Community Health Partners–West Yellowstone
- Congregation Beth Shalom
- Conoco, Big Sky
- Cottonwood Elementary School District
- County Superintendent of Schools
- EBP Concepts
- Family Outreach, Bozeman
- First Choice Home Health
- First Interstate Bank
- Forward Montana
- Frontier Home Health and Hospice
- Gallatin College
- Gallatin County Commissioner
- Gallatin County Sheriff's Department
- Gallatin County Victim Services
- Gallatin Gateway Elementary School District
- Gallatin Mental Health Center
- Gallatin Valley Farm to School
- Gallatin Valley Land Trust
- Gallatin Valley YMCA
- Gallatin-County Health Department
- Gender Equality Montana
- Greater Gallatin Homeless Action Coalition (GGHAC)
- Greater Gallatin United Way
- Harrison Public School District
- HAVEN
- Help Center – 211
- The Human Resource Development Council (HRDC)
  - HRDC–Big Sky Community Food Bank
  - HRDC–Gallatin Valley Food Bank
  - HRDC–Head Start
  - HRDC–Housing
  - HRDC–Senior Programs
- Intermountain Healthcare
- Kasting, Kauffman & Mersen, PC
- KLJ Solutions
- L'esprit Mental Health
- Lamotte Elementary School District
- LINKS for Learning
- Living Hope Church
- Livingston Fire and Rescue
- Livingston Food Resource Center
- Livingston Healthcare
- Livingston Police Department
- Livingston Public Schools
- Madison County Commissioner
- Madison County Public Health Department
- Mammoth Clinic at Yellowstone
- Manhattan School District
- Montana Health Care Foundation
- Montana Immigrant Justice Alliance (MIJA)



- Montana Office of Public Assistance
- Montana State University (MSU)
  - MSU Alumni Foundation
  - MSU Department of Earth Sciences
  - MSU Department of Microbiology and Immunology
  - MSU Department of Native American Studies
  - MSU Diversity and Inclusion Student Commons
  - MSU University Health Partners
  - MSU Veterans Services
  - MSU Western Transit Institute
- Office of the State Public Defender, Montana
- Pacific Ventures Management
- Park County Government
- Park County Health Department
- Park County Office of Emergency Management
- Park County Senior Citizens Corporation
- Printing for Less, Montana
- Reach Inc.
- RM Properties
- Route Finder Consulting
- Schmieding Dental Group
- Sheridan School District
- Shields Valley School District
- Southwest Chemical Dependency Program (SWCDP)
- Spring Creek Inn
- Three Forks School District
- Thrive
- Town of West Yellowstone
- West Paw
- West Yellowstone Schools
- Western Montana Mental Health
- Women in Action
- Yellowstone Club
- Youth Court Services/Probation
- Youth Dynamics

Through this process, input was gathered from several individuals whose organizations work with 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 the Total Area were obtained from the following sources (specific citations are included with the graphs throughout this report):

- 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 the Total Area in 2011, 2014, and 2017 by PRC on behalf of Bozeman Health. 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 most recent *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, 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

Bozeman Health made its prior Community Health Needs Assessment (CHNA) report publicly available through its website; through that mechanism, the hospital requested from the public written comments and feedback regarding the CHNA and implementation strategy. At the time of this writing, Bozeman Health 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. Bozeman Health will continue to use its website as a tool to solicit public comments and ensure that these comments are considered in the development of future CHNAs.



# 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 (2019)		See Report Page
Part V Section B Line 3a	A definition of the community served by the hospital facility	6
Part V Section B Line 3b	Demographics of the community	38
Part V Section B Line 3c	Existing health care facilities and resources within the community that are available to respond to the health needs of the community	208
Part V Section B Line 3d	How data was obtained	6
Part V Section B Line 3e	The significant health needs of the community	17
Part V Section B Line 3f	Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups	Addressed Throughout
Part V Section B Line 3g	The process for identifying and prioritizing community health needs and services to meet the community health needs	18
Part V Section B Line 3h	The process for consulting with persons representing the community's interests	9
Part V Section B Line 3i	The impact of any actions taken to address the significant health needs identified in the hospital facility's prior CHNA(s)	219



# 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 following health issues (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	
ACCESS TO HEALTH CARE SERVICES	<ul style="list-style-type: none"><li>▪ Routine Medical Care (Adults)</li></ul>
CANCER	<ul style="list-style-type: none"><li>▪ Leading Cause of Death</li><li>▪ Prostate Cancer Deaths</li><li>▪ Cancer (Non-Skin) Prevalence</li><li>▪ Cervical Cancer Screening [Age 21-65]</li><li>▪ Colorectal Cancer Screening [Age 50-75]</li></ul>
DIABETES	<ul style="list-style-type: none"><li>▪ Prevalence of Borderline/Pre-Diabetes</li></ul>
HEART DISEASE & STROKE	<ul style="list-style-type: none"><li>▪ Leading Cause of Death</li><li>▪ Overall Cardiovascular Risk</li></ul>
INJURY & VIOLENCE	<ul style="list-style-type: none"><li>▪ Falls [Age 65+] Deaths</li><li>▪ Firearm-Related Deaths</li><li>▪ Distracted Driving</li><li>▪ Intimate Partner Violence</li></ul>
MENTAL HEALTH	<ul style="list-style-type: none"><li>▪ “Fair/Poor” Mental Health</li><li>▪ Diagnosed Depression</li><li>▪ Symptoms of Chronic Depression</li><li>▪ Stress</li><li>▪ Suicide Deaths</li><li>▪ Receiving Treatment for Mental Health</li><li>▪ Difficulty Obtaining Mental Health Services</li><li>▪ Key Informants: Mental health ranked as a top concern.</li></ul>
NUTRITION, PHYSICAL ACTIVITY & WEIGHT	<ul style="list-style-type: none"><li>▪ Fruit/Vegetable Consumption</li><li>▪ Overweight &amp; Obesity [Adults]</li><li>▪ Overweight &amp; Obesity [Children]</li></ul>

—continued on the following page—



AREAS OF OPPORTUNITY (continued)	
ORAL HEALTH	<ul style="list-style-type: none"> <li>Dental Insurance Coverage</li> </ul>
POTENTIALLY DISABLING CONDITIONS	<ul style="list-style-type: none"> <li>Activity Limitations</li> <li>Sciatica/Chronic Back Pain</li> </ul>
RESPIRATORY DISEASE	<ul style="list-style-type: none"> <li>Asthma Prevalence [Adults]</li> </ul>
SEXUAL HEALTH	<ul style="list-style-type: none"> <li>HIV Testing [Age 18 to 44]</li> </ul>
SUBSTANCE ABUSE	<ul style="list-style-type: none"> <li>Excessive Drinking</li> <li>Drinking &amp; Driving</li> <li>Illicit Drug Use</li> <li>Personally Impacted by Substance Abuse (Self or Other's)</li> <li>Key Informants: Substance abuse ranked as a top concern.</li> </ul>
TOBACCO USE	<ul style="list-style-type: none"> <li>Smoking Cessation</li> </ul>

## Community Feedback on Prioritization of Health Needs

During the week of August 31, 2020, the sponsors of this assessment held a series of five virtual meetings, convening 138 community residents and stakeholders (representing a cross-section of community-based agencies and organizations) to evaluate, discuss and prioritize health issues for community, based on findings of this Community Health Needs Assessment (CHNA). Professional Research Consultants, Inc. (PRC) began the meeting with a presentation of key findings from the CHNA, highlighting the significant health issues identified from the research (see Areas of Opportunity above). Following the data review, PRC answered any questions. Finally, participants were provided an overview of the prioritization exercise that followed.

In order to assign priority to the identified health needs (i.e., Areas of Opportunity), an online voting platform was used to allow each participant to register and submit his/her ratings in real time. 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 hospital 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).





## Identified Health Priorities

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. Access to Health Care Services
4. Nutrition, Physical Activity & Weight
5. Heart Disease & Stroke
6. Diabetes
7. Cancer
8. Injury & Violence
9. Tobacco Use
10. Sexual Health
11. Oral Health
12. Respiratory Disease
13. Potentially Disabling Conditions

## Hospital Implementation Strategy

Bozeman Health will use the information from this Community Health Needs Assessment to develop an Implementation Strategy to address the significant health needs in the community. While the hospital 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 hospital's action plan to guide community health improvement efforts in the coming years.

Note: An evaluation of the hospital's past activities to address the needs identified in prior CHNAs can be found as an appendix to this report.



# Summary Tables: Comparisons With Benchmark Data

## Reading the Summary Tables

■ In the following tables, Total Area results are shown in the larger, gray column.

■ The columns to the left of the Total Area column provide comparisons between Bozeman and the balance of Gallatin County, as well as among the three counties (Gallatin, Madison, and Park), identifying differences for each as “better than” (☀), “worse than” (☹), or “similar to” (☺) the combined opposing area/counties.

■ The columns to the right of the Total Area column provide trending, as well as comparisons between local data and any available state and national findings, and Healthy People 2020 objectives. Again, symbols indicate whether the Total Area 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.

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

### TREND SUMMARY

(Current vs. Baseline Data)

#### SURVEY DATA INDICATORS:




































Trends for survey-derived indicators represent significant changes since 2011 (or earliest available data). Note that survey data reflect the ZIP Code-defined Total Area.

#### 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	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Linguistically Isolated Population (Percent)			 0.5	 2.4	 0.3
Population in Poverty (Percent)			 11.9	 10.6	 12.5
Children in Poverty (Percent)			 7.7	 14.7	 13.2
No High School Diploma (Age 25+, Percent)			 3.3	 4.7	 4.6
% Worry/Stress Over Rent/Mortgage in Past Year	 25.6	 22.3	 24.6	 20.1	 24.9
% Experience of Homelessness	 3.4	 2.5	 3.1	 0.1	 1.1
% [Parents of Child <18] Availability of Childcare is "Fair/Poor"	 52.9	 54.4	 53.4		
% Worried About Running Out of Food	 13.3	 6.2	 11.1	 13.1	 13.7
% 4+ Adverse Childhood Experiences (High ACEs Score)	 15.5	 15.5	 15.5	 10.4	 21.9






Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
0.6	 0.3	 4.4		
11.9	 13.7	 14.1		
8.7	 16.4	 19.5		
3.6	 6.8	 12.3		
24.3		 32.2		 26.1
2.6				
50.9				
11.6		 30.0		 15.0
15.9		 16.3		







  
better









































  
similar












  
worse


































OVERALL HEALTH	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% "Fair/Poor" Overall Health	 6.4	 10.5	 7.6	 9.0	 13.7

Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.















Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
8.5	 15.1	 12.6		 14.1
	 better	 similar	 worse	

ACCESS TO HEALTH CARE	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% [Age 18-64] Lack Health Insurance	 7.4	 16.0	 10.0	 8.0	 15.7
% [Insured] Went Without Insurance in the Past Year	 6.4	 4.1	 5.7	 11.3	 7.2
% Difficulty Accessing Health Care in Past Year (Composite)	 35.4	 25.4	 32.4	 25.5	 28.8
% Difficulty Finding PCP in Past Year	 10.9	 3.9	 8.8	 4.5	 7.5
% Difficulty Getting PCP Appointment in Past Year	 18.6	 11.9	 16.6	 12.4	 11.9
% Cost Prevented PCP Visit in Past Year	 10.7	 7.4	 9.7	 7.9	 8.6
% Transportation Hindered PCP Visit in Past Year	 1.2	 0.9	 1.2	 3.8	 3.9
% Inconvenient Hrs Prevented PCP Visit in Past Year	 7.9	 9.4	 8.3	 9.3	 6.7

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
10.5	 13.2	 8.7	 0.0	 22.0
6.4				 8.3
31.4		 35.0		 36.8
8.3				 10.7
15.6				 14.9
9.4				 7.4
1.7				 5.4
8.2				 11.6

ACCESS TO HEALTH CARE (continued)	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% Cost Prevented Getting Prescription in Past Year	 7.3	 4.7	 6.5	 5.7	 6.9
% Language/Culture Hindered PCP Care in Past Year	 0.0	 0.0	 0.0	 0.4	 0.4
% Difficulty Understanding Health Professionals	 5.6	 6.3	 5.8	 8.6	 6.0
Primary Care Doctors per 100,000			 81.0	 83.5	 133.8
% Have a Specific Source of Ongoing Care	 80.3	 78.1	 79.7	 75.1	 70.5
% Have Had Routine Checkup in Past Year	 59.0	 53.2	 57.2	 57.2	 60.2
% Two or More ER Visits in Past Year	 4.0	 6.9	 4.8	 5.5	 12.1

Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
6.5		 12.8		 13.9
0.1				 0.1
6.1				 10.1
87.7	 80.0	 76.6		
78.1		 74.2	 95.0	 79.7
57.6	 73.0	 70.5		 58.6
5.9		 10.1		 5.4






better










similar




















































worse


CANCER	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Cancer (Age-Adjusted Death Rate)			 123.9	 119.0	 147.8
Lung Cancer (Age-Adjusted Death Rate)					

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
128.5	 146.4	 152.5	 161.4	 141.9
22.4	 32.6	 36.6	 45.5	


















CANCER (continued)	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Prostate Cancer (Age-Adjusted Death Rate)					
Female Breast Cancer (Age-Adjusted Death Rate)					
Colorectal Cancer (Age-Adjusted Death Rate)					
Cancer Incidence Rate (All Sites)			 427.2	 346.0	 460.9
Female Breast Cancer Incidence Rate			 129.2	 93.3	 127.3
Prostate Cancer Incidence Rate			 128.6	 62.8	 119.0
Lung Cancer Incidence Rate			 33.4	 39.1	 44.2
Colorectal Cancer Incidence Rate			 30.3	 40.2	 34.1
% Skin Cancer	 7.9	 4.6	 6.9	 9.9	 7.5
% Cancer (Other Than Skin)	 6.8	 7.9	 7.2	 7.4	 8.0
% [Women 50-74] Mammogram in Past 2 Years	 75.0	 62.5	 70.7	 74.6	 63.6
% [Women 21-65] Cervical Cancer Screening	 78.0	 72.1	 76.2	 64.8	 62.0









Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
30.8	 23.0	 18.9	 21.8	
18.1	 17.9	 19.9	 20.7	
10.8	 12.7	 13.7	 14.5	
424.8	 454.4	 448.0		
124.8	 124.0	 125.2		
117.8	 113.0	 104.1		
36.3	 54.8	 59.2		
32.1	 38.0	 38.7		
7.3	 7.6	 6.1		 6.3
7.3	 7.9	 5.6		 5.0
69.7	 74.3	 76.1	 81.1	 74.2
73.7	 77.1	 73.8	 93.0	 88.7








	DISPARITY AMONG SUBAREAS				
CANCER (continued)	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% [Age 50-75] Colorectal Cancer Screening	 78.9	 65.2	 73.8	 69.2	 61.8















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	DISPARITY AMONG SUBAREAS				
DIABETES	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Diabetes (Age-Adjusted Death Rate)					
% Diabetes/High Blood Sugar	 3.1	 8.8	 4.8	 7.2	 8.7
% Borderline/Pre-Diabetes	 4.7	 7.4	 5.5	 7.7	 5.6
% [Non-Diabetics] Blood Sugar Tested in Past 3 Years	 38.3	 44.4	 40.1	 43.3	 55.2























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	DISPARITY AMONG SUBAREAS				
HEART DISEASE & STROKE	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Diseases of the Heart (Age-Adjusted Death Rate)			 136.3	 103.4	 109.3
% Heart Disease (Heart Attack, Angina, Coronary Disease)	 2.1	 3.2	 2.4	 4.2	 5.0

















	TOTAL AREA vs. BENCHMARKS			
Total Area	vs. MT	vs. US	vs. HP2020	TREND
70.9	 64.8	 77.4	 70.5	 61.8
	 better	 similar	 worse	

	TOTAL AREA vs. BENCHMARKS			
Total Area	vs. MT	vs. US	vs. HP2020	TREND
11.5	 21.4	 21.3	 20.5	 10.7
5.5	 9.4	 13.8		 4.1
5.7		 9.7		 3.7
42.3		 43.3		 44.1
	 better	 similar	 worse	










	TOTAL AREA vs. BENCHMARKS			
Total Area	vs. MT	vs. US	vs. HP2020	TREND
127.3	 157.5	 164.7	 156.9	 146.3
2.9	 6.8	 6.1		 4.9

	DISPARITY AMONG SUBAREAS				
HEART DISEASE & STROKE (continued)	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Stroke (Age-Adjusted Death Rate)			 29.8		 44.3
% Stroke	 0.7	 2.0	 1.1	 1.0	 2.2
% Told Have High Blood Pressure	 18.6	 32.0	 22.7	 35.3	 37.1
% Told Have High Cholesterol	 20.1	 25.1	 21.6	 29.7	 28.9
% 1+ Cardiovascular Risk Factor	 65.4	 85.5	 71.5	 72.1	 87.9










Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

	TOTAL AREA vs. BENCHMARKS			
Total Area	vs. MT	vs. US	vs. HP2020	TREND
32.4	 32.7	 37.3	 34.8	 31.9
1.3	 3.5	 4.3		 1.9
25.6	 29.0	 36.9	 26.9	 24.4
23.2		 32.7	 13.5	 25.6
73.7		 84.6		 66.8































 better  similar  worse

	DISPARITY AMONG SUBAREAS				
INFANT HEALTH & FAMILY PLANNING	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Low Birthweight Births (Percent)			 7.0		 6.0
Infant Death Rate					
Births to Adolescents Age 15 to 19 (Rate per 1,000)			 9.2	 16.9	
% [Age 18 to 49] Unable to Receive Reproductive Care/Past Yr	 7.8	 8.7	 8.0	 3.2	 1.2













Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

	TOTAL AREA vs. BENCHMARKS			
Total Area	vs. MT	vs. US	vs. HP2020	TREND
6.6	 7.3	 8.2	 7.8	
3.4	 5.1	 5.7	 6.0	 4.9
9.6	 24.6	 22.7		
7.1				

 better  similar  worse

INJURY & VIOLENCE	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Unintentional Injury (Age-Adjusted Death Rate)			 30.0		 61.2
Motor Vehicle Crashes (Age-Adjusted Death Rate)					
% Distracted Driving	 59.0	 51.1	 56.6	 43.7	 39.8
% "Always" Wear a Seat Belt	 88.6	 77.6	 85.3	 78.7	 78.9
[65+] Falls (Age-Adjusted Death Rate)					
% [Age 45+] Fell in the Past Year	 31.1	 40.4	 34.6	 46.2	 30.7
Firearm-Related Deaths (Age-Adjusted Death Rate)					
% Unlocked Firearm In or Around the Home	 29.9	 37.9	 32.4	 41.0	 42.7
Violent Crime Rate			 255.7	 67.2	 213.6
% Victim of Intimate Partner Violence	 11.4	 13.2	 11.9	 10.5	 21.6

Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
36.7	 51.8	 48.3	 36.4	 46.6
12.6	 16.5	 11.5	 12.4	
53.3				 26.0
83.9				 79.1
44.9	 84.1	 63.4	 47.0	
35.2		 27.5		 37.1
16.7	 19.6	 11.9		
34.5				
238.8	 393.7	 416.0		
13.1		 13.7		 8.6



better









similar























































worse

KIDNEY DISEASE	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Kidney Disease (Age-Adjusted Death Rate)					




















Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
6.9	 10.3	 13.0		 6.5
	 better	 similar	 worse	





MENTAL HEALTH	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% "Fair/Poor" Mental Health	 21.5	 15.4	 19.7	 9.7	 16.0
% Diagnosed Depression	 25.1	 23.4	 24.6	 20.7	 24.8
% Symptoms of Chronic Depression (2+ Years)	 34.2	 28.3	 32.5	 21.1	 32.4
% Typical Day Is "Extremely/Very" Stressful	 14.9	 10.6	 13.6	 12.1	 11.9
Suicide (Age-Adjusted Death Rate)					
Mental Health Providers per 100,000			 312.8	 45.6	 251.0
% Have Ever Sought Help for Mental Health	 49.9	 37.4	 46.1	 29.8	 44.6
% Taking Rx/Receiving Mental Health Trtmt	 24.1	 16.6	 21.9	 10.4	 19.5

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
18.3		 13.4		 6.7
24.3	 21.9	 20.6		 23.5
31.5		 30.3		 22.3
13.2		 16.1		 8.6
23.5	 26.6	 13.9	 10.2	 19.6
288.3	 303.0	 202.8		
44.6		 30.0		 24.7
20.6		 16.8		 15.0



MENTAL HEALTH (continued)	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% [Those With Diagnosed Depression] Receiving Treatment	 98.5	 96.8	 98.0		
% Unable to Get Mental Health Svcs in Past Yr	 9.8	 2.2	 7.6	 3.8	 3.1
% Average <7 Hours of Sleep per Night	 22.1	 29.1	 24.2	 24.7	 36.2
% Child [Age 5-17] Rec'd Mental Health Svcs/Past Yr	 17.4	 16.1	 17.0		
% Child [Age 5-17] Has Had a Mental Health Issue	 9.7	 19.2	 12.9		

Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
96.7		 85.4		
6.7		 7.8		 4.6
25.8				 31.3
17.6				
14.9				





















better


















































similar



worse

NUTRITION, PHYSICAL ACTIVITY & WEIGHT	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Population With Low Food Access (Percent)			 20.0	 30.2	 33.9
% 5+ Servings of Fruits/Vegetables per Day	 34.9	 26.7	 32.4	 30.3	 35.4
% 7+ Sugar-Sweetened Drinks in Past Week	 13.8	 25.9	 17.4	 22.4	 22.3
% No Leisure-Time Physical Activity	 9.1	 17.8	 11.7	 8.5	 19.6

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
22.6	 24.3	 22.4		
32.6		 32.7		 50.8
18.5				 25.8
12.5	 22.7	 31.3	 32.6	 10.7

	DISPARITY AMONG SUBAREAS				
NUTRITION, PHYSICAL ACTIVITY & WEIGHT (cont.)	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% Meeting Physical Activity Guidelines	 42.1	 23.6	 36.5	 44.2	 24.4
% Child [Age 2-17] Physically Active 1+ Hours per Day	 47.7	 62.8	 52.9		
Recreation/Fitness Facilities per 100,000			 30.2		
% Healthy Weight (BMI 18.5-24.9)	 43.3	 22.8	 37.2	 39.9	 27.8
% Overweight (BMI 25+)	 55.5	 75.9	 61.5	 60.0	 69.1
% Obese (BMI 30+)	 19.5	 35.7	 24.3	 20.0	 24.9
% [Overweights] Counseled About Weight in Past Year	 18.8	 21.0	 19.6	 22.1	 22.8
% Children [Age 5-17] Healthy Weight	 60.3	 55.9	 59.0		
% Children [Age 5-17] Overweight (85th Percentile)	 26.1	 27.1	 26.4		
% Children [Age 5-17] Obese (95th Percentile)	 13.3	 15.5	 13.9		

Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

	TOTAL AREA vs. BENCHMARKS			
Total Area	vs. MT	vs. US	vs. HP2020	TREND
35.5	 21.1	 21.4	 20.1	 26.1
56.3		 33.0		 42.9
30.2	 17.4	 11.8		
36.1	 34.7	 34.5	 33.9	 45.1
62.4	 63.2	 61.0		 53.2
24.0	 26.9	 31.3	 30.5	 12.3
20.3		 24.7		
59.4		 47.6		
25.8		 32.3		 16.6
13.7		 16.0	 14.5	 6.5













better












similar


















worse












ORAL HEALTH	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% Have Dental Insurance	 67.4	 64.2	 66.5	 46.8	 51.2
% [Age 18+] Dental Visit in Past Year	 66.7	 64.7	 66.1	 58.7	 68.5




























Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
62.9		 68.7		 44.7
65.8	 66.4	 62.0	 49.0	 68.5
	 better	 similar	 worse	

POTENTIALLY DISABLING CONDITIONS	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% 3+ Chronic Conditions	 25.2	 29.5	 26.5	 29.7	 29.9
% Activity Limitations	 26.3	 20.8	 24.7	 23.7	 26.2
% Sciatica/Chronic Back Pain	 21.7	 25.7	 22.9	 24.4	 19.7
Alzheimer's Disease (Age-Adjusted Death Rate)					

Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
27.2		 32.5		
24.8		 24.0		 20.2
22.6		 16.5		 18.9
14.7	 21.7	 30.6		 17.2
	 better	 similar	 worse	

RESPIRATORY DISEASE	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
CLRD (Age-Adjusted Death Rate)			 31.6		 35.8
Pneumonia/Influenza (Age-Adjusted Death Rate)					
% [Age 65+] Flu Vaccine in Past Year	 68.3	 52.3	 62.6	 50.0	 39.7
% [Age 65+] Pneumonia Vaccine Ever	 83.0	 85.5	 83.9	 75.9	 74.2
% [Adult] Asthma	 12.2	 8.7	 11.2	 15.8	 10.9
% COPD (Lung Disease)	 6.0	 8.6	 6.8	 3.3	 4.5
% Household Tested for Radon Gas	 43.1	 41.8	 42.7	 24.3	 31.5

Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
33.4	 50.8	 40.4		 33.8
8.1	 11.7	 14.2		 12.0
80.9	 57.3	 71.0	 70.0	 54.7
80.9		 71.6		 57.8
11.5	 10.0	 12.9		 7.3
6.2	 6.0	 6.4		 5.0
39.7				 43.9



























better



similar



worse

SEXUAL HEALTH	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
HIV Prevalence Rate			 53.5		 75.1
% [Age 18-44] HIV Test in the Past Year	 18.1	 9.6	 16.0		
% [Age 18 to 44] Tested for Non-HIV STD in the Past Year	 24.3	 19.4	 23.5		
% Rec'd HPV Info from Health Provider/Past 3 Yrs	 30.8	 31.1	 30.9	 24.6	 25.1
% [Age 18-49] Have Had an HPV Vaccination (3 Shots)	 16.5	 5.4	 13.7	 23.2	 4.0
Chlamydia Incidence Rate			 500.9	 159.0	 171.2
Gonorrhea Incidence Rate			 24.1	 12.2	 30.6

Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
56.4	 71.8	 372.8		
14.5		 22.0		 14.1
22.0				
29.6				 26.8
13.3				
439.0	 468.1	 539.9		
24.2	 112.4	 179.1		

































better























similar



worse

SUBSTANCE ABUSE	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)					
% Excessive Drinker	 33.5	 27.7	 31.8	 28.3	 27.2
% Drinking & Driving in Past Month	 3.7	 2.6	 3.4	 8.6	 4.0
% Rode With a Drunk Driver in the Past Month	 10.3	 2.0	 7.8	 6.2	 2.8
Unintentional Drug-Related Deaths (Age-Adjusted Death Rate)					
% Illicit Drug Use in Past Month	 7.1	 5.1	 6.5	 4.6	 3.1
% Ever Sought Help for Alcohol or Drug Problem	 6.5	 3.8	 5.7	 10.3	 4.0
% Personally Impacted by Substance Abuse	 48.7	 43.9	 47.3	 46.5	 57.5
























Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
5.1	 13.9	 10.9	 8.2	 6.1
30.9	 20.1	 27.2	 25.4	 23.8
3.9	 3.7			 0.9
7.0				
	 8.8	 18.1	 11.3	
5.9		 2.0	 7.1	 1.9
5.9		 5.4		 3.8
48.6		 35.8		 48.4




















  
better

  
similar

  
worse

TOBACCO USE	DISPARITY AMONG SUBAREAS				
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% Current Smoker	 6.3	 10.0	 7.4	 3.8	 18.1
% Someone Smokes at Home	 4.6	 6.4	 5.2	 4.8	 7.5
% [Household With Children] Someone Smokes in the Home	 0.4	 6.7	 2.6		
% [Smokers] Have Quit Smoking 1+ Days in Past Year					
% [Smokers] Received Advice to Quit Smoking					
% Currently Use Vaping Products	 3.3	 0.9	 2.6	 3.7	 7.5
% Use Smokeless Tobacco	 4.0	 6.3	 4.7	 8.9	 6.0

Note: In the section above, each county is compared against the other two combined; Bozeman and Other Gallatin are compared to one another. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total Area	TOTAL AREA vs. BENCHMARKS			
	vs. MT	vs. US	vs. HP2020	TREND
8.6	 18.0	 17.4	 12.0	 9.8
5.4		 14.6		 4.0
2.3		 17.4		 1.3
32.1	 50.6	 42.8	 80.0	 53.2
71.0		 59.6		 44.8
3.4	 3.9	 8.9		 4.2
5.2	 6.6			 8.6



better



similar



worse

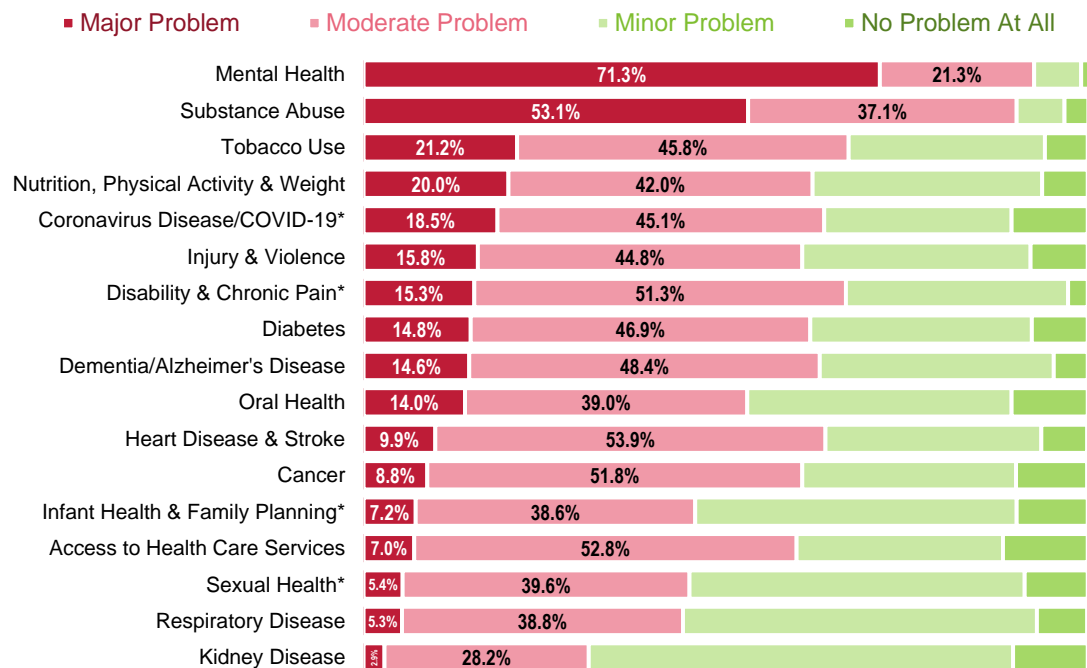


## Summary of Key Informant Perceptions

In the Online Key Informant Survey, community stakeholders were asked to rate the degree to which each of 17 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.)

NOTE: Because the Park County portion of the Online Key Informant Survey was administered separately at an earlier date, there was some variation in the health issues addressed and thus Park County is excluded from a few of these measures (as indicated).

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



Sources: • \*Not asked of Park County key informants.





# COMMUNITY DESCRIPTION

# POPULATION CHARACTERISTICS

## Total Population

The Total Area (Gallatin, Madison, and Park counties), the focus of this Community Health Needs Assessment, encompasses nearly 9,000 square miles and houses a total population of 129,193 residents, according to latest census estimates.

	TOTAL POPULATION	TOTAL LAND AREA (square miles)	POPULATION DENSITY (per square mile)
Gallatin County	104,729	2,605.02	40.20
Madison County	8,218	3,588.16	2.29
Park County	16,246	2,802.47	5.80
<b>Total Area</b>	<b>129,193</b>	<b>8,995.64</b>	<b>14.36</b>
Montana	1,041,732	145,546.98	7.16
United States	322,903,030	3,532,068.58	91.42

Sources: 

- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap ([sparkmap.org](http://sparkmap.org)).

## Population Change 2000-2010

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

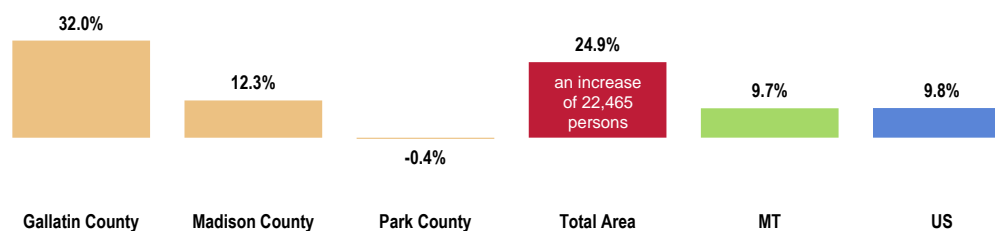
**Between the 2000 and 2010 US Censuses, the population of the Total Area increased by 22,465 persons, or 24.9%.**

**BENCHMARK** ► More than twice the proportional increase reported in Montana and the US overall.

**DISPARITY** ► Note the considerable increase in Gallatin County compared with the slight decrease in Park County.

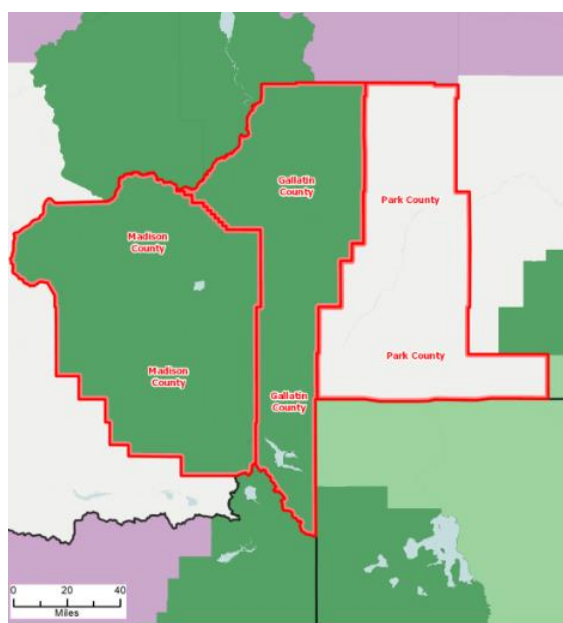


## Change in Total Population (Percentage Change Between 2000 and 2010)



Sources: • US Census Bureau Decennial Census (2000-2010).  
 • Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.org).  
 Notes: • A significant positive or negative shift in total population over time impacts health care providers and the utilization of community resources.

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



Map Legend

Population Change, Percent by County, US  
Census 2000 - 2010

- Over 10.0% Increase (+)
- 2.0 - 10.0% Increase (+)
- Less Than 2.0% Change (+/-)
- 2.0 - 10.0% Decrease (-)
- Over 10.0% Decrease (-)
- No Population or No Data

Report Location, County



SparkMap



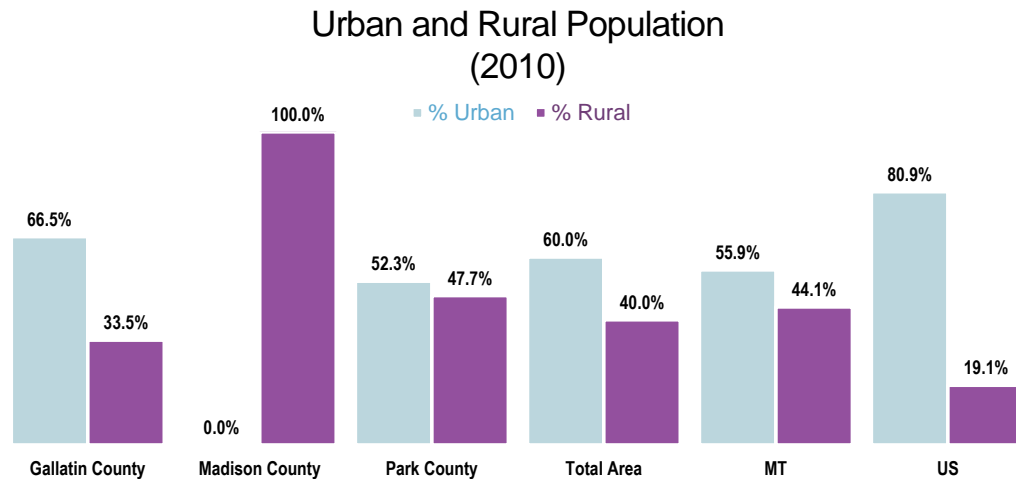
## Urban/Rural Population

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.

**The Total Area is predominantly urban, with 60.0% of the population living in areas designated as urban.**

**BENCHMARK** ► The prevalence is well below the US percentage.

**DISPARITY** ► Note that Madison County is considered to be entirely rural.

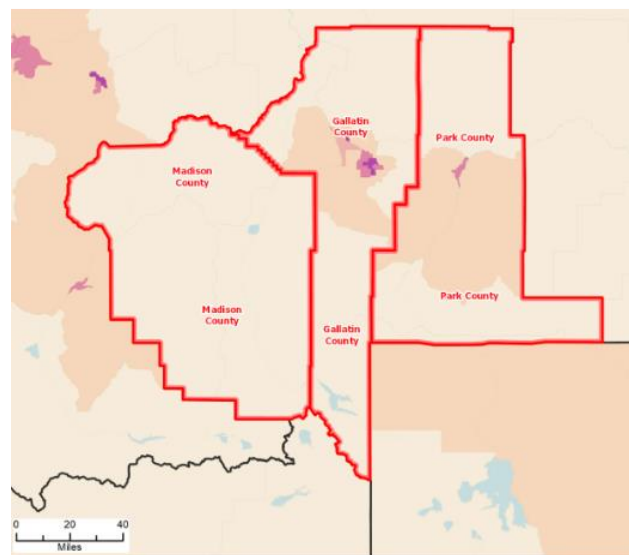


**Sources:**

- US Census Bureau Decennial Census.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap ([sparkmap.org](http://sparkmap.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.



## Age

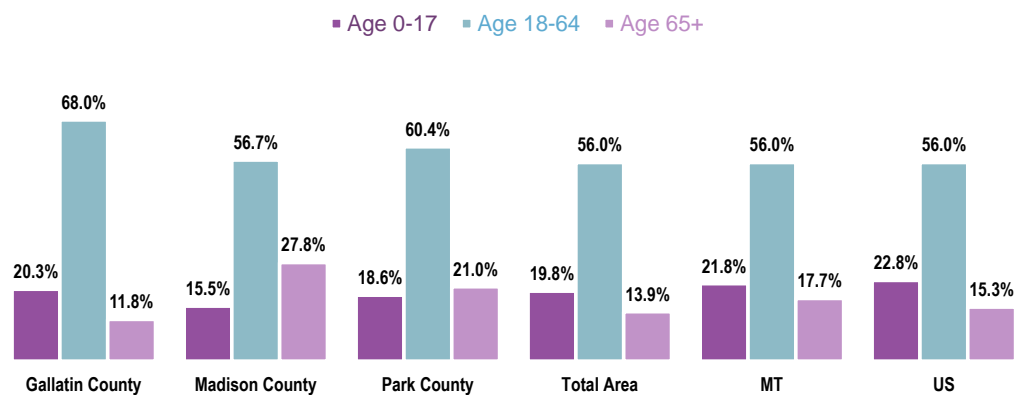
It is important to understand the age distribution of the population, as different age groups have unique health needs that should be considered separately from others along the age spectrum.

**In the Total Area, 19.8% of the population are children age 0-17; another 56.0% are age 18 to 64, while 13.9% are age 65 and older.**

**BENCHMARK** ► The proportion of seniors (age 65+) is overall lower than the US and Montana percentages (largely due to the low proportion in Gallatin County).

**DISPARITY** ► The proportion of seniors is much higher in Madison and Park counties.

**Total Population by Age Groups**  
(2014-2018)



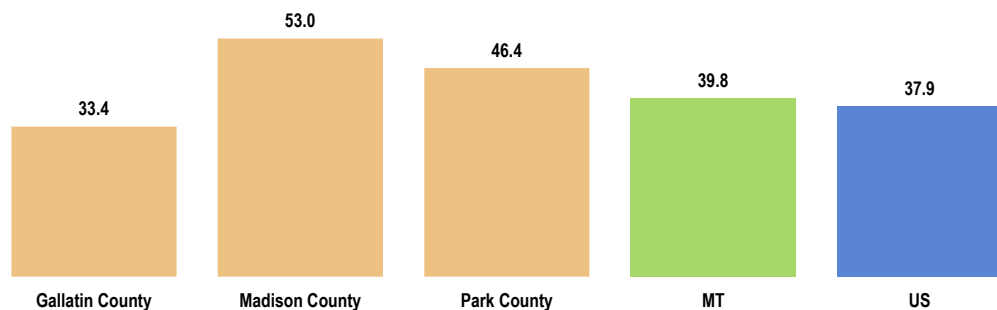
Sources: 

- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.org).

## Median Age

**Madison and Park counties are “older” than the state and the nation in that the median ages are higher.**

**Median Age**  
(2014-2018)



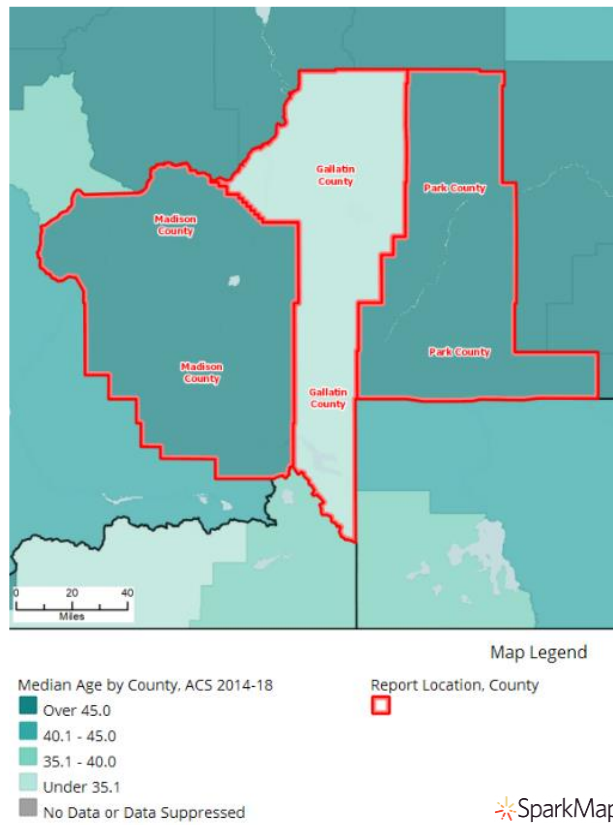
Sources: 

- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.org).





The following map provides an illustration of the median age in the Total Area, segmented by county.



## Race & Ethnicity

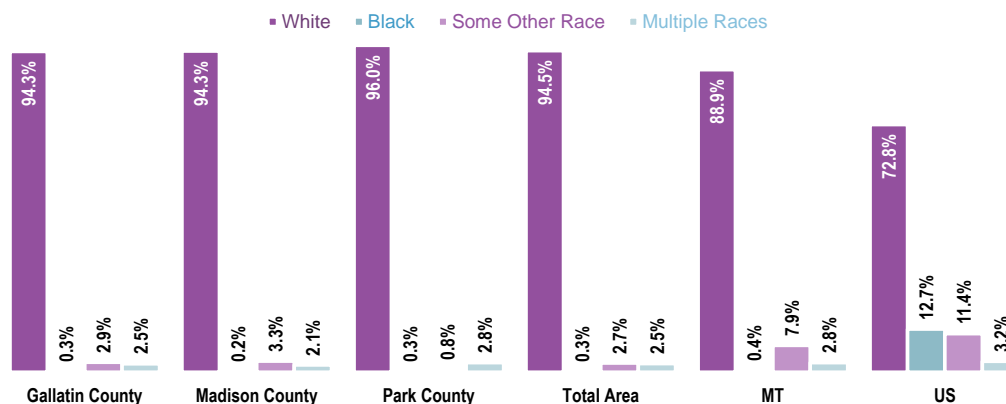
### Race

In looking at race independent of ethnicity (Hispanic or Latino origin), the vast majority of residents of the Total Area are White.

BENCHMARK ► The area is less diverse than the state and especially the US.



## Total Population by Race Alone (2014-2018)



Sources: 

- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.org).

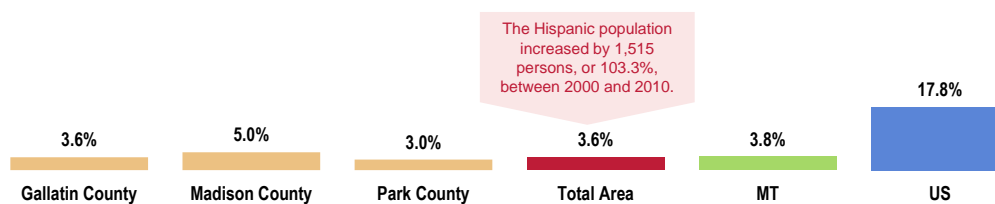
## Ethnicity

**A total of 3.6% of Total Area residents are Hispanic or Latino.**

**BENCHMARK** ► This proportion is considerably lower than the US proportion.

**DISPARITY** ► In the Total Area, the highest percentage of Hispanics lives in Madison County.

## Hispanic Population (2014-2018)



Sources: 

- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.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.





# Linguistic Isolation

Less than one percent of the Total Area 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”).

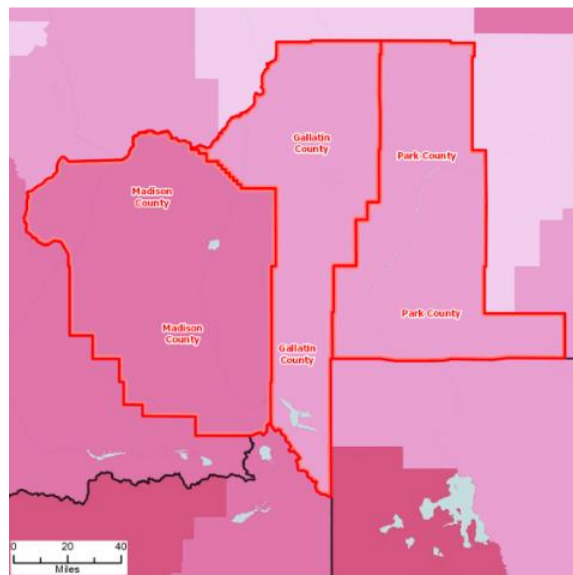
**BENCHMARK** ► Though the percentage is twice the Montana figure, it is well below the US.

**DISPARITY** ► Notably higher in Madison County.

## Linguistically Isolated Population (2014-2018)



Sources: • US Census Bureau American Community Survey 5-year estimates.  
 • Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.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.”



Population in Linguistically Isolated Households, Percent by County, ACS 2014-18

- Over 3.0%
- 1.1 - 3.0%
- 0.1 - 1.1%
- No Population in Linguistically Isolated Households
- No Data or Data Suppressed

Report Location, County

Map Legend

SparkMap



# 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 11.9% of the area's total population living below the federal poverty level.

**BENCHMARK** ► Lower than the state and national figures.

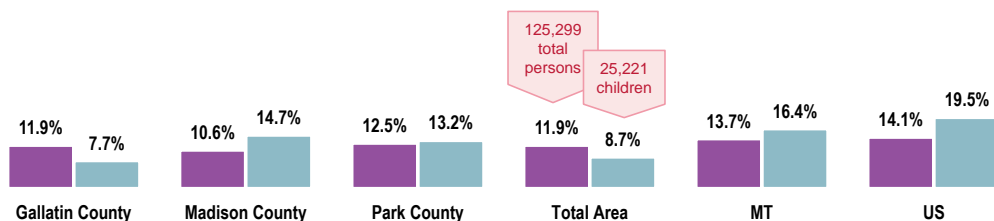
Among just children (ages 0 to 17), this percentage in the Total Area is 8.7% (representing over 25,000 children).

**BENCHMARK** ► Well below the state and US figures.

**DISPARITY** ► Lowest in Gallatin County.

### Population in Poverty (Populations Living Below the Poverty Level; 2014-2018)

■ Total Population ■ Children



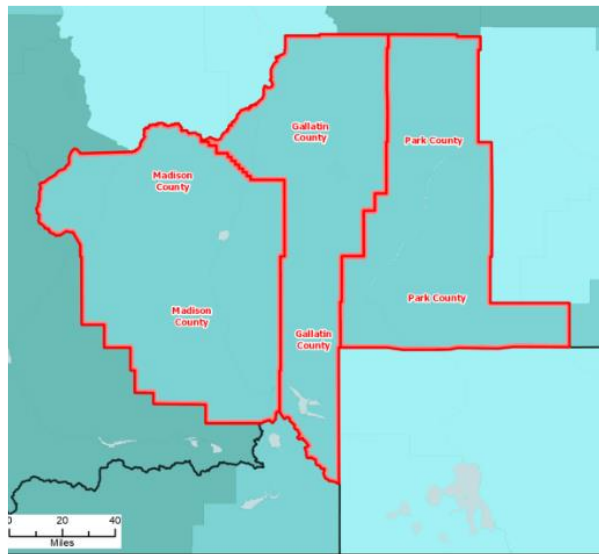
Sources: • US Census Bureau American Community Survey 5-year estimates.

• Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap ([sparkmap.org](http://sparkmap.org)).

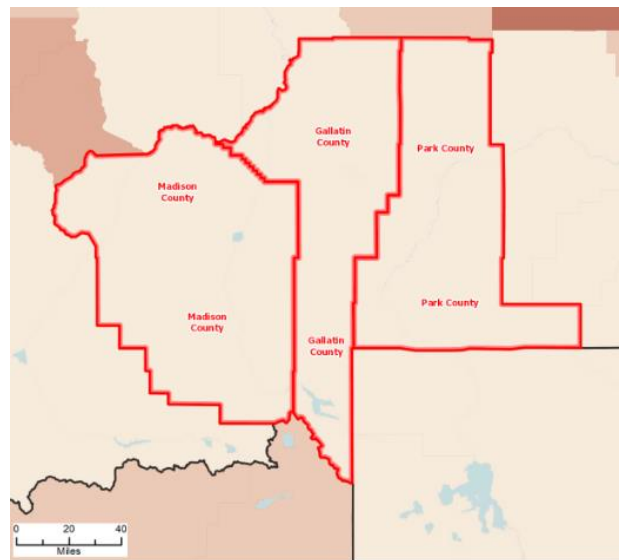
Notes: • Poverty is considered a key driver of health status. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.



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



SparkMap



SparkMap



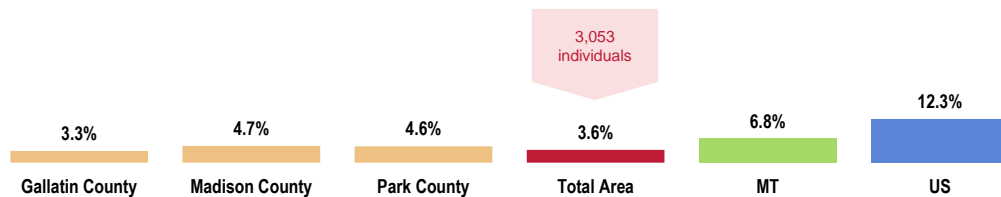
## Education

Among the Total Area population age 25 and older, an estimated 3.6% (over 3,000 people) do not have a high school education.

**BENCHMARK** ► Below the Montana percentage and especially the US figure.

**DISPARITY** ► Lowest among residents of Gallatin County.

### Population With No High School Diploma (Population Age 25+ Without a High School Diploma or Equivalent, 2014-2018)

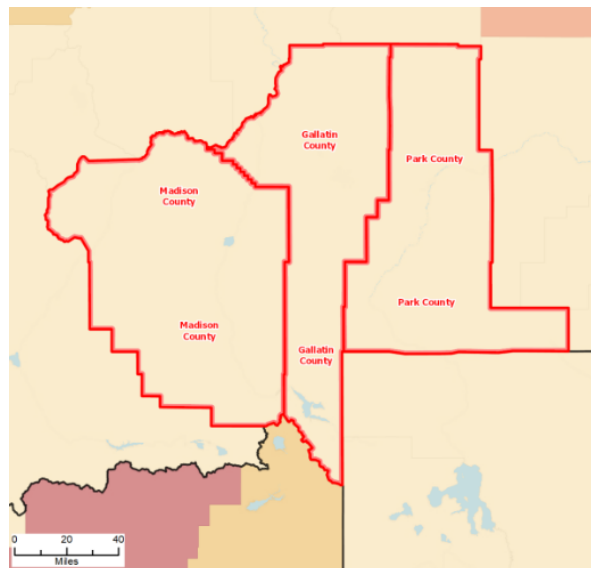


Sources: 

- US Census Bureau American Community Survey 5-year estimates.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.org).

Notes: 

- This indicator is relevant because educational attainment is linked to positive health outcomes.



Map Legend

Population with No High School Diploma (Age 25+), Percent by County, ACS 2014-18

- Over 21.0%
- 16.1 - 21.0%
- 11.1 - 16.0%
- Under 11.1%
- No Data or Data Suppressed

Report Location, County



SparkMap



## Life Expectancy

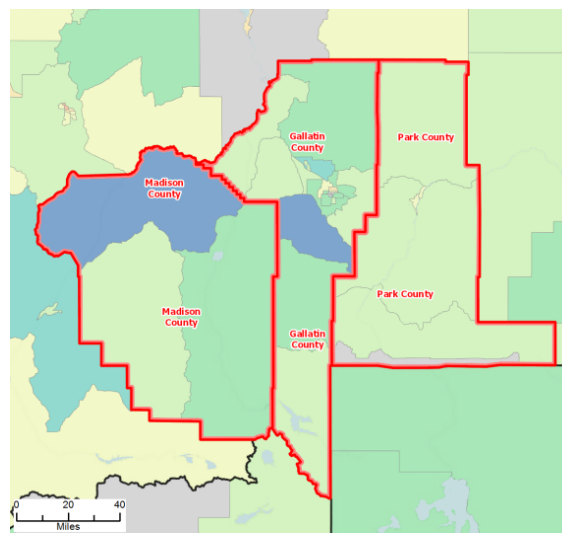
For the first time in our history, the United States is raising a generation of children who may live sicker and shorter lives than their parents. Reversing this trend will of course depend on healthy choices by each of us. But not everyone in America has the same opportunities to be healthy.

According to the most recent data available from the Centers for Disease Control and Prevention, life expectancy in the United States is 78.7 years—76.2 years for men and 81.2 years for women. In 2018, the National Center for Health Statistics has released first-of-its-kind neighborhood-level data on life expectancy, which shows that life expectancy estimates vary greatly even at the census tract level, from block to block.

Affordable, high-quality health care is essential to our health. But where we live can have an even greater impact. Improving health and longevity in communities starts with ensuring access to healthy food, good schools, affordable housing, and jobs that provide us the resources necessary to care for ourselves and our families—in essence, the types of conditions that can help keep us from getting sick in the first place.

- Robert Wood Johnson Foundation, *Life Expectancy: Could where you live influence how long you live?* (<https://www.rwjf.org/en/library/interactives/whereyouliveaffectshowlongyoulive.html>)

The following map details 2010-2015 average life expectancy at birth within the Total Area, segmented by census tract.



Map Legend

Life Expectancy At Birth, Years by Tract, CDC and NCHS 2010-15

- Over 87 Years
- 84 - 87 Years
- 81 - 84 Years
- 78 - 81 Years
- 75 - 78 Years
- 72 - 75 Years
- 72 Years or Less
- No Data or Data Suppressed

Report Location, County



SparkMap

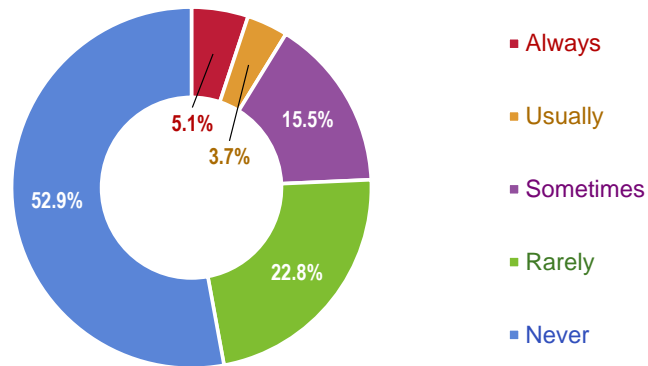


# Housing

## Housing Insecurity

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

Frequency of Worry or Stress  
Over Paying Rent or Mortgage in the Past Year  
(Total Area, 2020)



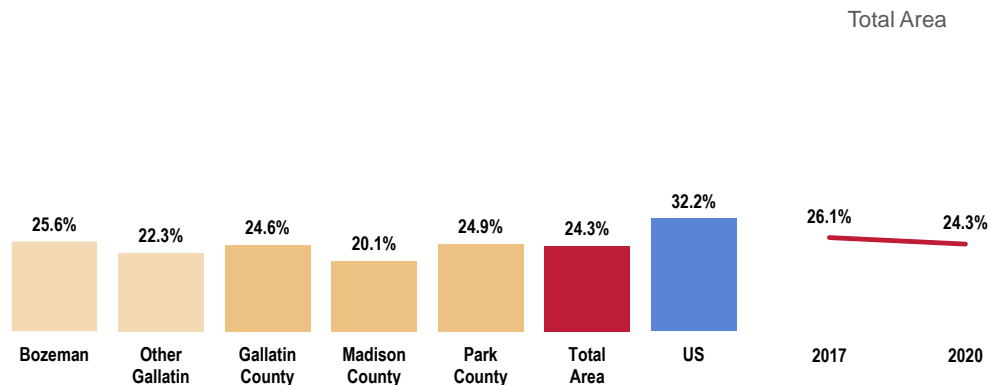
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 71]  
Notes: • Asked of all respondents.

However, a considerable share (24.3%) report that they were “sometimes,” “usually,” or “always” worried or stressed about having enough money to pay their rent or mortgage in the past year.

**BENCHMARK** ► Lower than the US prevalence.

**DISPARITY** ► Decreases with age and is higher among women, low-income residents, and Whites.

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



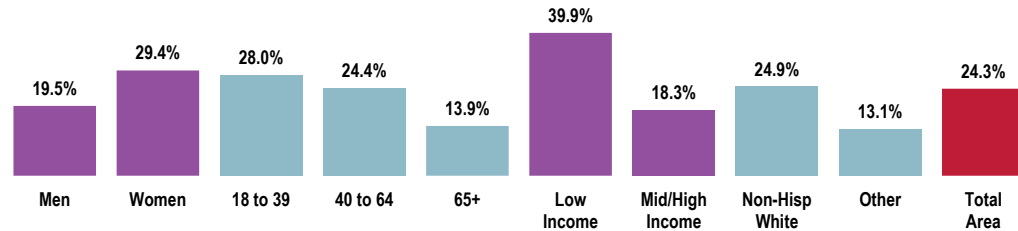
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 196]  
• 2020 PRC National Health Survey, PRC, Inc.  
Notes: • Asked of all respondents.



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

Here, “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.

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



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

Online key informants gave these comments about a perceived lack of affordable housing in the community:

Affordable housing. In many areas of Gallatin County, affordable housing does not exist. Adequate, affordable housing is a critical piece of the puzzle when it comes to health. When housing is available, housing costs have increased, and wages have not kept up resulting in adequate housing being unreachable. In many cases, housing just doesn't exist such as in Bozeman, Big Sky and West Yellowstone. In other areas such as Manhattan, Belgrade and Three Forks, the housing may exist, but it is costly and unattainable by those who need it. – Public Health Representative (Gallatin County)

I would argue that affordable housing IS a health issue because it is causing and/or exacerbating many of these health issues you've covered in your survey. Domestic violence, planning pregnancy, preventative care, healthy diet/nutrition... if someone can't afford their rent, then they certainly aren't going to be able to prioritize their health or that of their dependents. We need to look at the issues underpinning generational poverty and systemic health issues, and address those at the source. – Community Leader (Gallatin & Madison Counties)

Lack of affordable housing. Substandard or lack of housing greatly affects a person's health. – Social Services Provider (Gallatin & Madison Counties)



## Experience of Homelessness

A total of 2.6% of Total Area residents report being homeless at some point in the past two years.

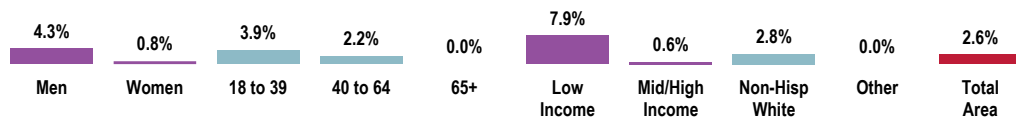
**DISPARITY** ► The experience is highest in Gallatin County. More often reported among men, younger adults, and residents in low-income households.

### Have Been Homeless at Some Point in the Past Two Years



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 324]  
 Notes: • Asked of all respondents.  
 • Includes respondents who say they lived on the street, in a car, in a temporary shelter, or were without housing at some point in the past two years.

### Have Been Homeless at Some Point in the Past Two Years (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 324]  
 Notes: • Asked of all respondents.  
 • Includes respondents who say they lived on the street, in a car, in a temporary shelter, or were without housing at some point in the past two years.





# Food Access

## Low Food Access

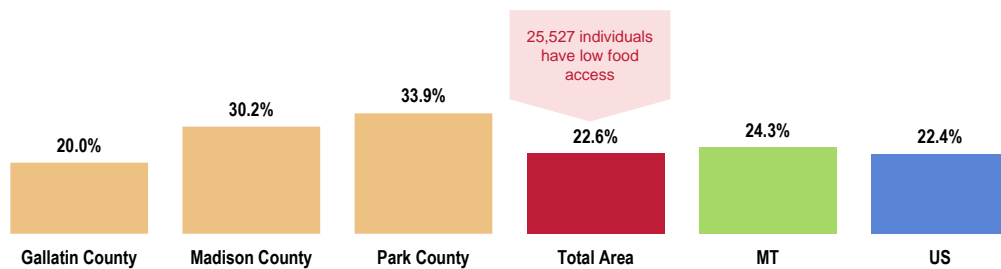
US Department of Agriculture data show that 22.6% of the Total Area population (representing over 25,500 residents) have low food access, meaning that they do not live near a supermarket or large grocery store.

DISPARITY ► Lowest in Gallatin County.

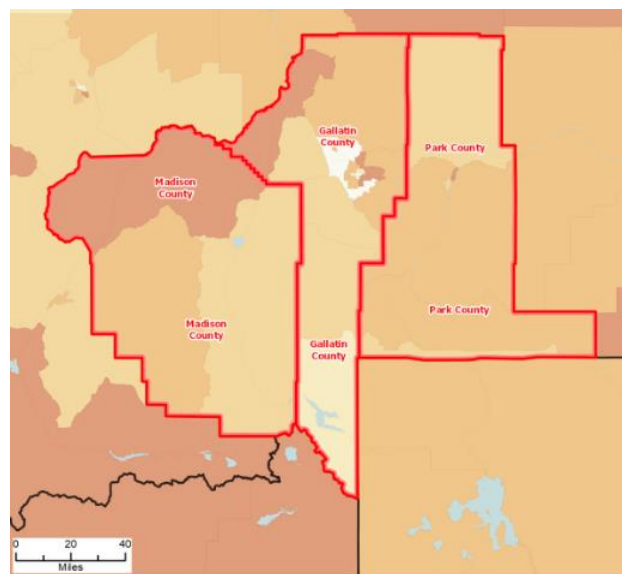
Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store.

RELATED ISSUE  
See also *Nutrition, Physical Activity & Weight* in the **Modifiable Health Risks** section of this report.

**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).  
• Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.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.



Population with Limited Food Access, Percent by Tract, FARA 2015

Over 50.0%  
20.1 - 50.0%  
5.1 - 20.0%  
Under 5.1%  
No Low Food Access

Report Location, County



Map Legend

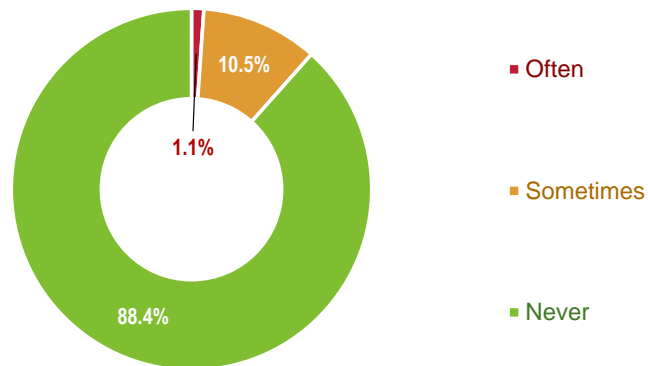
SparkMap



## Food Insecurity

Overall, 11.6% of survey respondents worried about running out of food in the past year.

### Worried About Running Out of Food in the Past Year (Total Area, 2020)



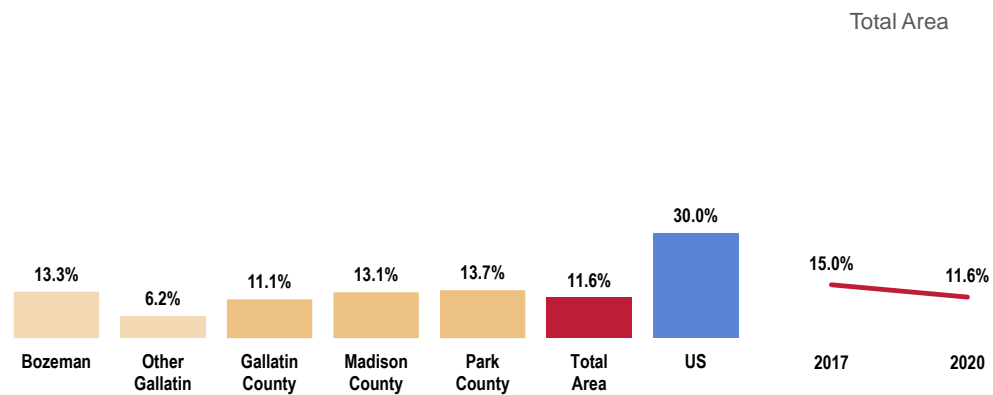
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 87]  
Notes: • Asked of all respondents.

**BENCHMARK** ► Well below the national prevalence.

**TREND** ► Marks a statistically significant improvement since 2017.

**DISPARITY** ► Over twice as high in Bozeman when compared with Other Gallatin. Decreases with age and is especially high among low-income residents.

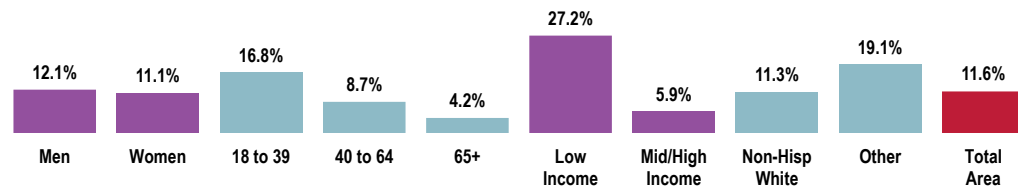
### Worried About Running Out of Food in the Past Year



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 87]  
• 2020 PRC National Health Survey, PRC, Inc.  
Notes: • Asked of all respondents.



## Worried About Running Out of Food in the Past Year (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 87]  
Notes: • Asked of all respondents.

## Health Literacy

### Understanding Health Information

When asked how difficult it is to understand information given by doctors, nurses, or other health professionals, 6.1% of Total Area adults said that it is “somewhat” or “very” difficult.

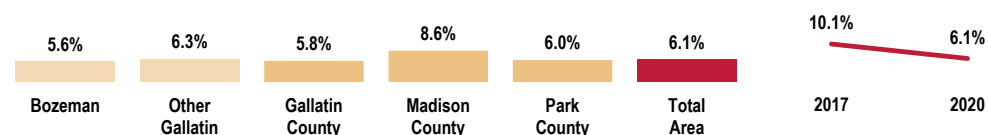
**TREND** ► Denotes a statistically significant decrease since 2017.

**DISPARITY** ► The prevalence is especially high in communities of color.

“How difficult is it for you to understand information that doctors, nurses, and other health professionals tell you? Would you say it is: Very Easy, Somewhat Easy, Somewhat Difficult, or Very Difficult?”

## Have Difficulty Understanding Health Professionals

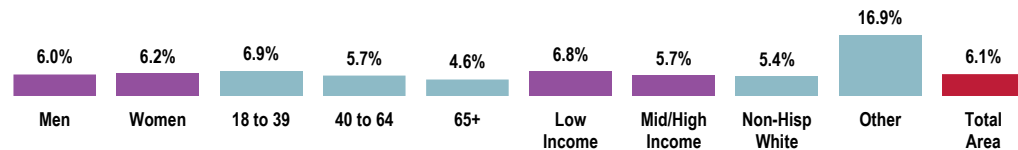
Total Area



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 326]  
Notes: • Asked of all respondents.  
• Percentages represent combined “somewhat difficult” and “very difficult” responses.



## Have Difficulty Understanding Health Professionals (Total Area, 2020)

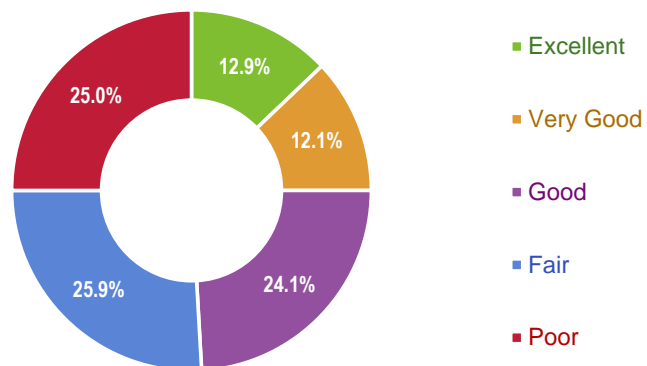


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 326]  
 Notes: • Asked of all respondents.  
 • Percentages represent combined "somewhat difficult" and "very difficult" responses.

## Availability of Affordable Childcare

When asked about the perceived availability of affordable childcare in the community, half of surveyed parents (50.9%) gave "fair" or "poor" ratings.

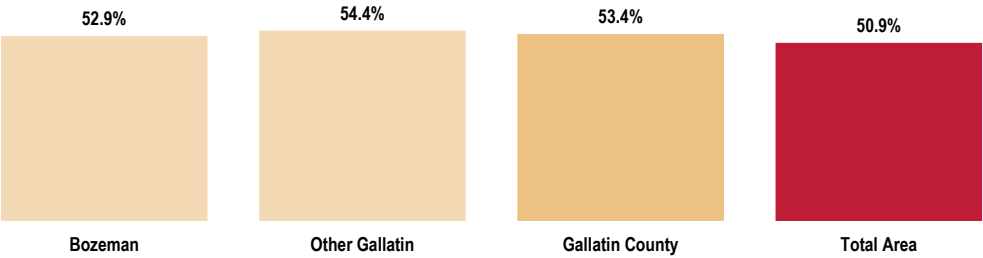
### Perceived Availability of Affordable Childcare (Total Area Adults With Children <18, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 352]  
 Notes: • Asked of all respondents with a child under 18 at home.



Availability of Affordable Childcare is “Fair/Poor”  
(Total Area Adults With Children <18, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 352]  
Notes: • Asked of all respondents with a child under 18 at home.

Online key informants gave these comments about a perceived lack of childcare in the community:

Lack of Childcare

Lack of childcare or use of unlicensed childcare is a health issue for families and communities. – Social Services Provider (Gallatin County)



# Adverse Childhood Experiences (ACEs)

## ABOUT ACEs

Adverse Childhood Experiences (ACEs) are stressful or traumatic events, including abuse and neglect. They are a significant risk factor for substance abuse disorders and can impact prevention efforts. ACEs include:

- Physical abuse
- Sexual abuse
- Emotional abuse
- Physical neglect
- Emotional neglect
- Intimate partner violence
- Mother treated violently
- Household substance misuse
- Household mental illness
- Parental separation/divorce
- Incarcerated household member

A series of 11 survey questions were used to identify adults' experiences of adverse childhood events prior to the age of 18 years. These 11 questions align with 8 ACEs categories, as outlined in the following table.

## Adverse Childhood Experiences (ACEs)

CATEGORY	QUESTION
HOUSEHOLD MENTAL ILLNESS	Before you were 18 years of age, did you live with anyone who was depressed, mentally ill, or suicidal?
HOUSEHOLD SUBSTANCE ABUSE	Before you were 18 years of age, did you live with anyone who was a problem drinker or alcoholic?
	Before you were 18 years of age, did you live with anyone who used illegal street drugs or who abused prescription medications?
INCARCERATED HOUSEHOLD MEMBER	Before you were 18 years of age, did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
PARENTAL SEPARATION OR DIVORCE	Before you were 18 years of age, were your parents separated or divorced?
INTIMATE PARTNER VIOLENCE	Before age 18, how often did your parents or adults in your home slap, hit, kick, punch or beat each other up?
PHYSICAL ABUSE	Before age 18, how often did a parent or adult in your home hit, beat, kick, or physically hurt you in any way? Do not include spanking.
EMOTIONAL ABUSE	Before age 18, how often did a parent or adult in your home swear at you, insult you, or put you down?
SEXUAL ABUSE	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you touch you sexually?
	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you try to make you touch them sexually?
	Before you were 18 years of age, how often did an adult or anyone at least 5 years older than you force you to have sex?

Sources: • 2020 PRC Community Health Survey, PRC, Inc.

Notes: • Reflects the total sample of respondents.

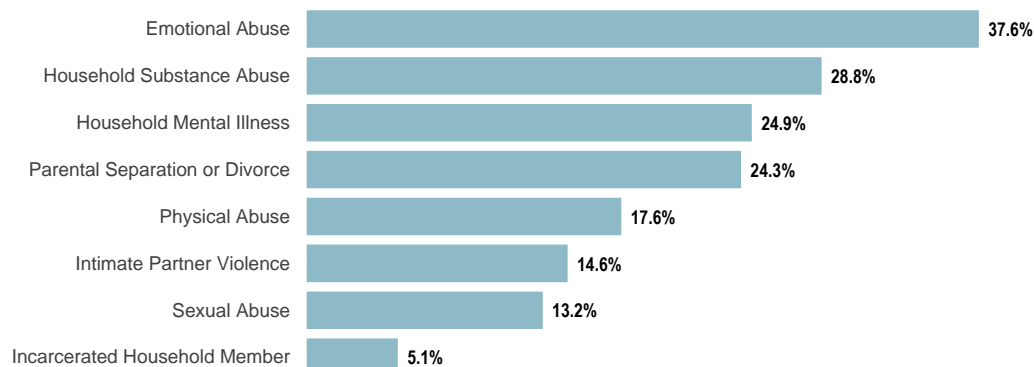
**By category, ACEs were most prevalent in the Total Area for emotional abuse (affirmed by 37.6% of respondents), followed by household substance abuse (28.8%), household mental illness (24.9%), and parental separation or divorce (24.3%).**

► Fewer residents experienced physical abuse (17.6%), intimate partner violence (14.6%), or sexual abuse as a child (13.2%).

► A total of 5.1% reported having had an incarcerated household member.



## Adverse Childhood Experiences (ACEs) (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 357-364]

Notes: • Reflects the total sample of respondents.

• ACEs are stressful or traumatic events, including abuse and neglect. They are a significant risk factor for substance abuse disorders and can impact prevention efforts.

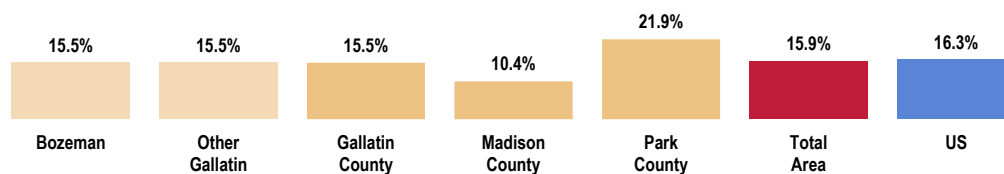
### High ACE Scores

In scoring the ACE series, survey respondents receive one “point” for each of the 8 ACEs categories containing an affirmative response. A score of 4 or higher is determined to be a “high” ACE score.

**In all, 15.9% of Total Area residents reported 4 or more of the adverse childhood experiences tested (a high ACE score).**

**DISPARITY** ► High ACE scores are more prevalent in Park County. By demographics, the prevalence is highest among women, young adults, low-income residents, and communities of color.

## Prevalence of High ACE Scores (Four or More ACEs) (Total Area, 2020)



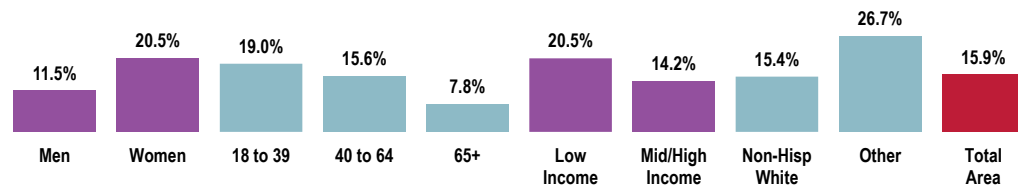
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 365]

Notes: • Asked of all respondents.

• Adults who report four or more ACEs is categorized as having a high ACE score.



## Prevalence of High ACE Scores (Four or More ACEs) (Total Area, 2020)



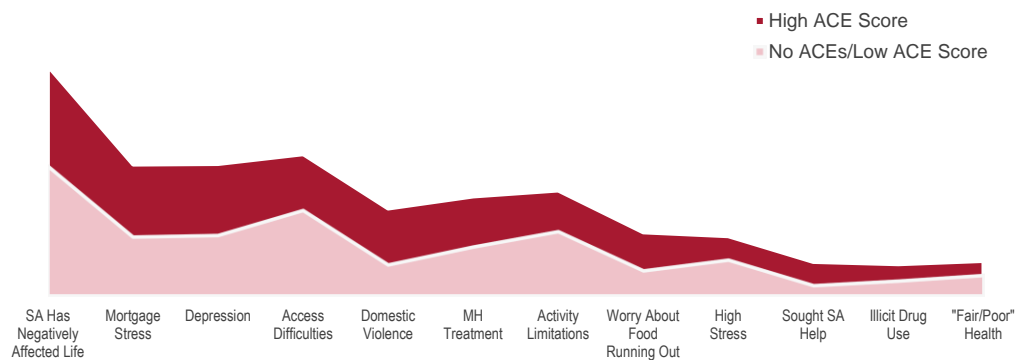
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 365]  
 Notes: • Asked of all respondents.  
 • Adults who report four or more ACEs is categorized as having a high ACE score.

### Relationship of ACEs with Other Health Issues

As a person's ACE score increases, so does their risk for disease, social issues, and emotional problems.

**Note the following strong correlations of various health indicators in the Total Area, comparing those reporting no ACEs with those with low (1–3) and high (4+) ACE risk.**

### Relationship of ACEs With Other Health Issues (By ACE Risk Classification; Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 366]  
 Notes: • Asked of all respondents.  
 • Adults with at least one ACE are categorized as having a low score (1 to 3 ACEs) or a high score (4+ ACEs).







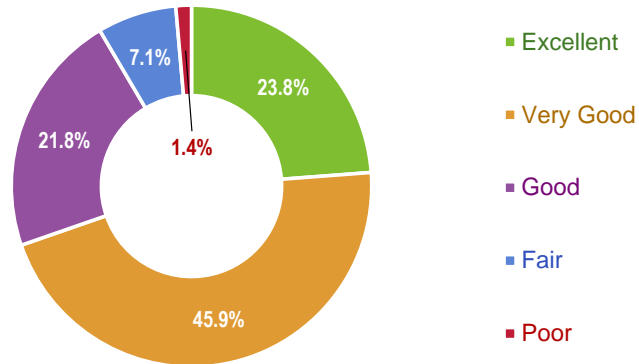
# HEALTH STATUS

# OVERALL HEALTH STATUS

The initial inquiry of the PRC Community Health Survey asked: "Would you say that in general your health is: Excellent, Very Good, Good, Fair, or Poor?"

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

Self-Reported Health Status  
(Total Area, 2020)



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

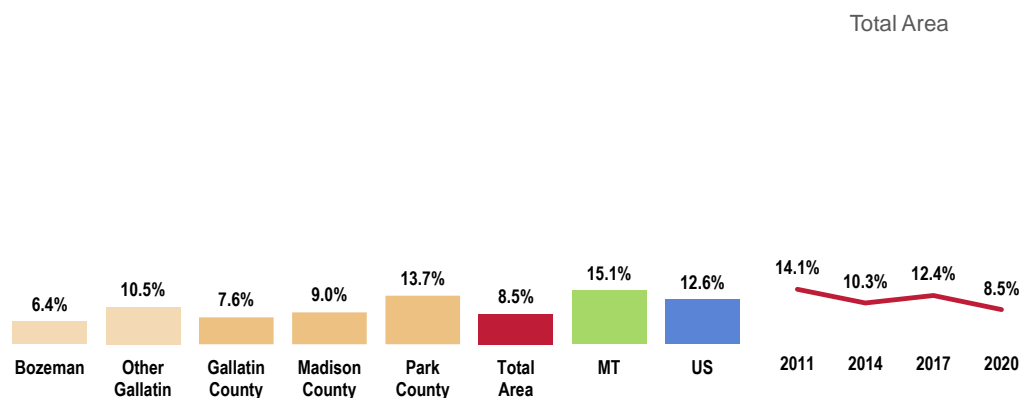
**However, 8.5% of Total Area adults believe that their overall health is "fair" or "poor."**

**BENCHMARK** ► Below the national and especially the Montana prevalence.

**TREND** ► Marks a statistically significant decrease from 2011 survey findings.

**DISPARITY** ► Unfavorably high in Park County. Increases with age and is higher among men, adults in low-income households, and communities of color.

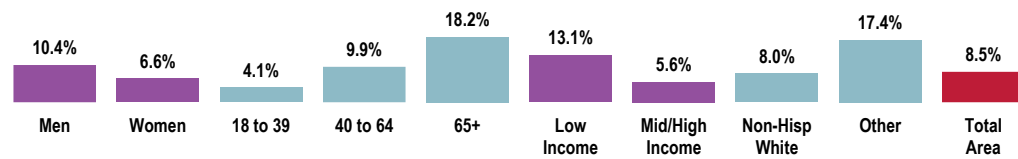
## Experience "Fair" or "Poor" Overall Health



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.  
• 2020 PRC National Health Survey, PRC, Inc.  
Notes: • Asked of all respondents.



## Experience “Fair” or “Poor” Overall Health (Total Area, 2020)



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



# 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.

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.

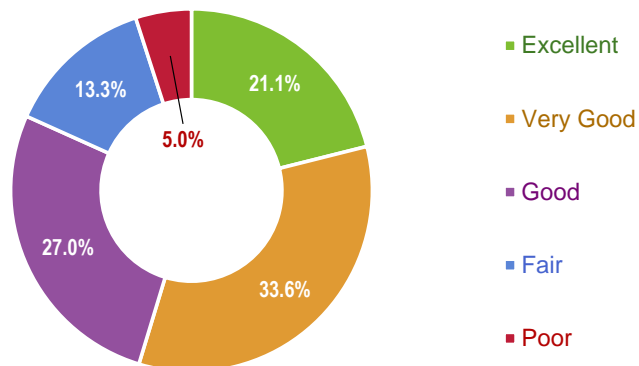
The existing model for understanding mental health and mental disorders emphasizes the interaction of social, environmental, and genetic factors throughout the lifespan. In behavioral health, researchers identify: risk factors, which predispose individuals to mental illness; and protective factors, which 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.

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

## Mental Health Status

**Most Total Area adults rate their overall mental health favorably (“excellent,” “very good,” or “good”).**

Self-Reported Mental Health Status  
(Total Area, 2020)



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

“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?”



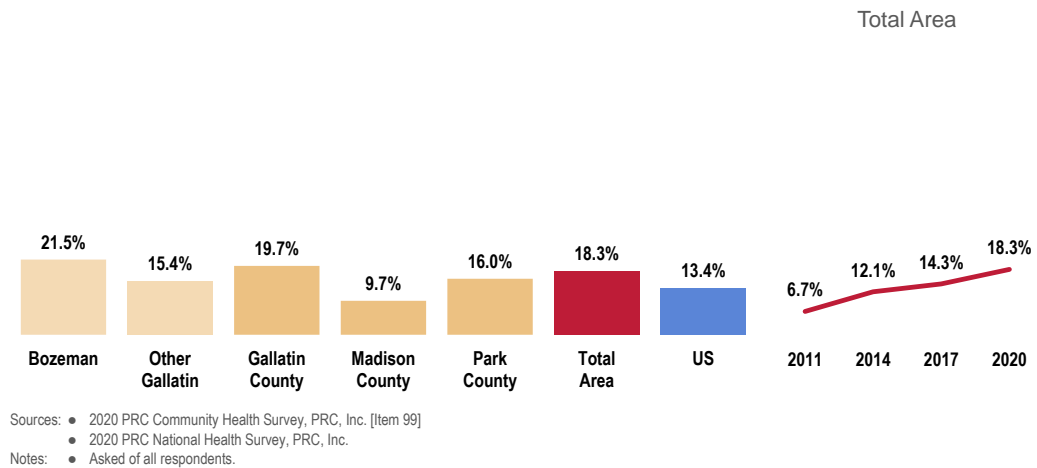
However, 18.3% believe that their overall mental health is “fair” or “poor.”

BENCHMARK ► Well above the US figure.

TREND ► Increasing significantly since 2011.

DISPARITY ► Unfavorably high in Gallatin County (especially Bozeman).

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



## Depression

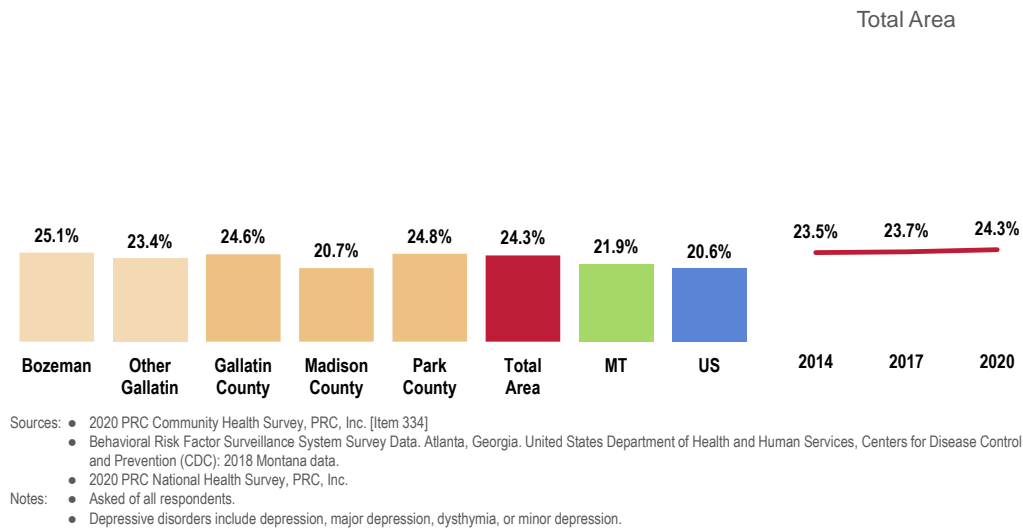
### Diagnosed Depression

A total of 24.3% of Total Area adults have been diagnosed by a physician or other health care provider as having a depressive disorder (such as depression, major depression, dysthymia, or minor depression).

BENCHMARK ► Worse than the national prevalence.



## Have Been Diagnosed With a Depressive Disorder



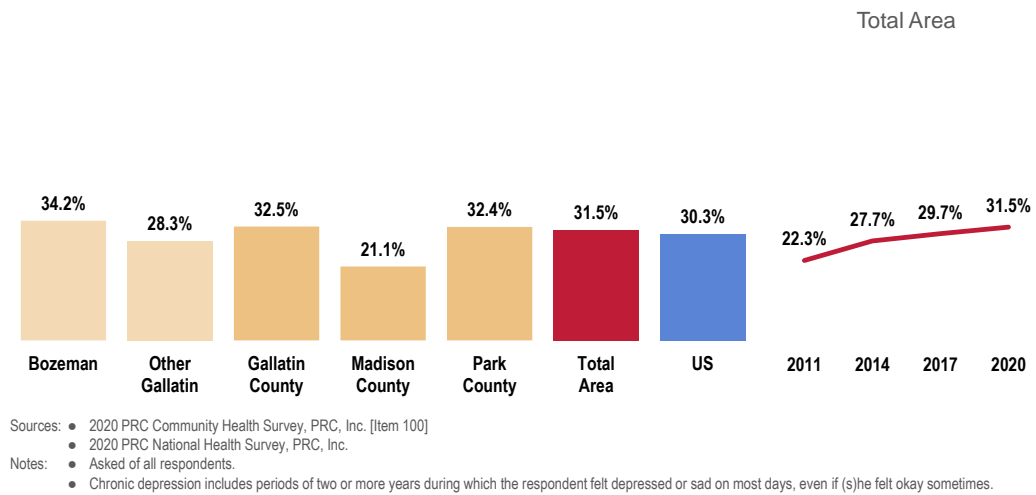
## Symptoms of Chronic Depression

**A total of 31.5% of Total Area 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).**

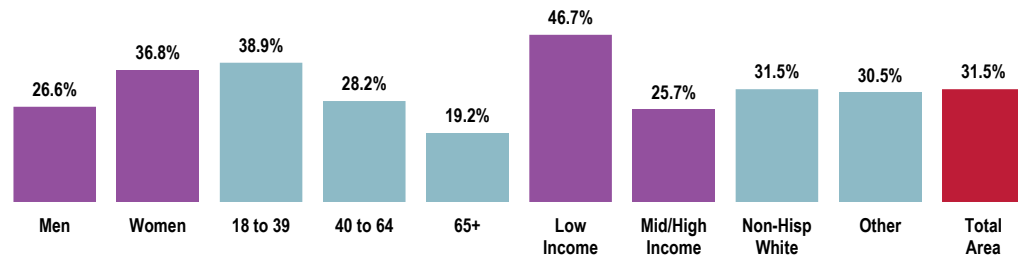
**TREND** ► Increasing significantly from 2011 survey findings.

**DISPARITY** ► Lowest in Madison County. Decreases with age and is unfavorably high among women and especially low-income residents.

## Have Experienced Symptoms of Chronic Depression



## Have Experienced Symptoms of Chronic Depression (Total Area, 2020)

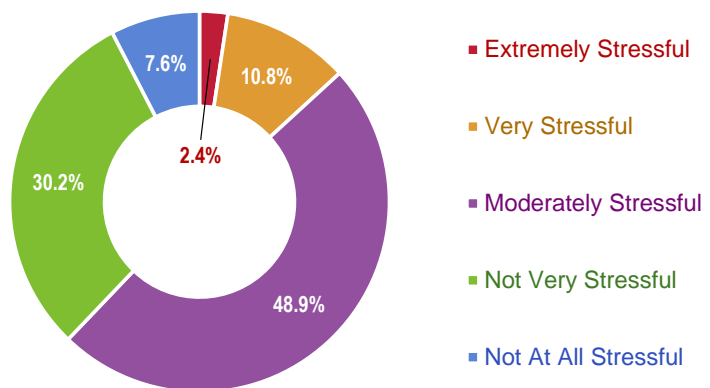


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 100]  
 Notes: • Asked of all respondents.  
 • Chronic depression includes periods of two or more years during which the respondent felt depressed or sad on most days, even if (s)he felt okay sometimes.

## Stress

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

## Perceived Level of Stress On a Typical Day (Total Area, 2020)



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



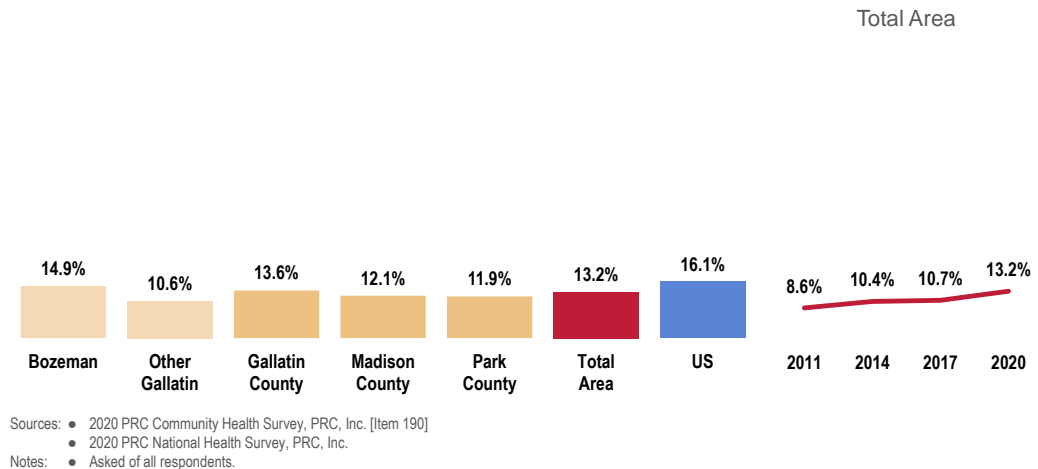
In contrast, 13.2% of Total Area adults feel that most days for them are “very” or “extremely” stressful.

**BENCHMARK** ► Lower than the US figure.

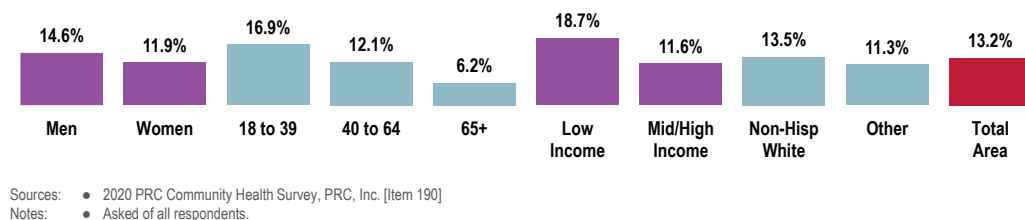
**TREND** ► Denotes a statistically significant increase over time.

**DISPARITY** ► Higher among young adults and low-income residents.

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



## Perceive Most Days as “Extremely” or “Very” Stressful (Total Area, 2020)





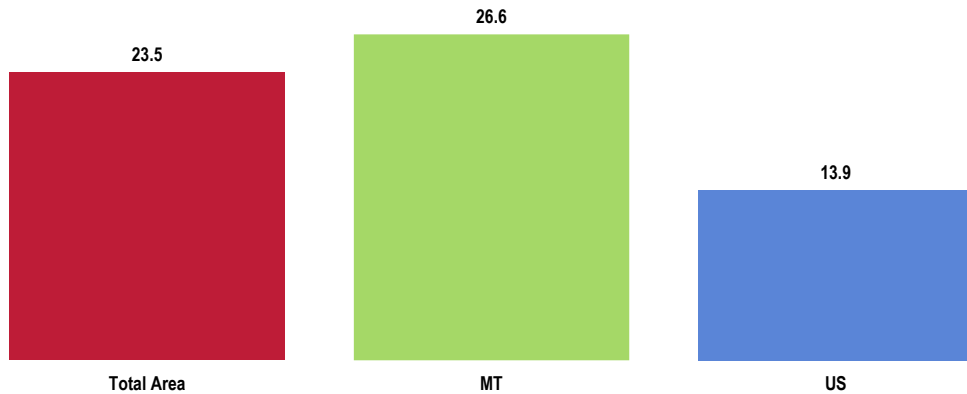
## Suicide

In the Total Area, there were 23.5 suicides per 100,000 population (2016-2018 annual average age-adjusted rate).

**BENCHMARK** ► Above the US suicide rate and far from reaching the Healthy People 2020 objective.

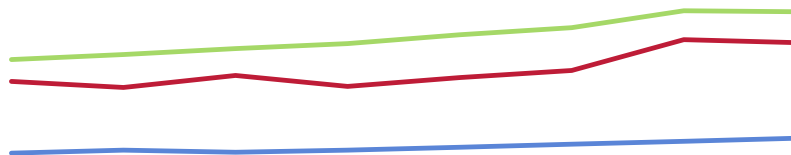
**TREND** ► The rate of Total Area suicides has increased over time, echoing the state trend.

**Suicide: Age-Adjusted Mortality**  
(2016-2018 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 May 2020.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MHMD-1]

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



	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
Total Area	19.6	19.0	20.2	19.1	20.0	20.7	23.8	23.5
MT	21.8	22.3	22.9	23.4	24.3	25.0	26.7	26.6
US	12.4	12.7	12.5	12.7	13.0	13.3	13.6	13.9

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MHMD-1]



# Mental Health Treatment

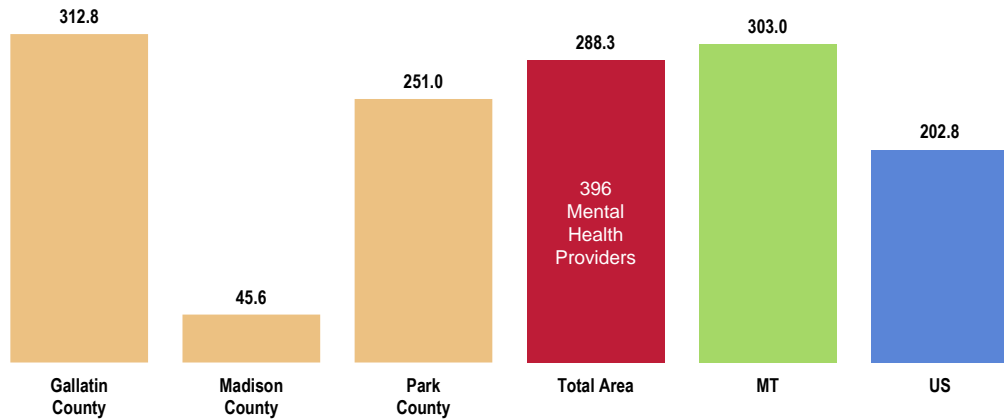
## Mental Health Providers

In the Total Area in 2019, there were 288.3 mental health providers for every 100,000 population.

BENCHMARK ► Well above the US ratio.

DISPARITY ► Unfavorably low in Madison County.

Access to Mental Health Providers  
(Number of Mental Health Providers per 100,000 Population, 2019)



Sources: • University of Wisconsin Population Health Institute, County Health Rankings.

• Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.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 20.6% 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.

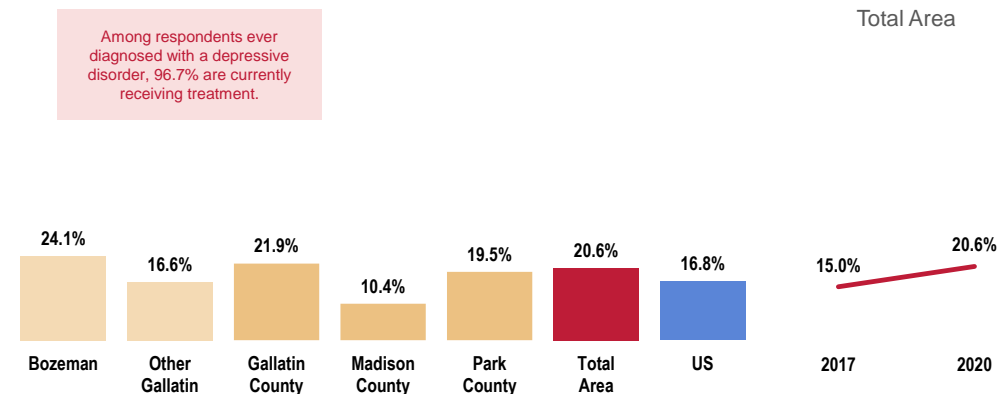
TREND ► Increasing significantly since 2017.

DISPARITY ► Highest in Bozeman/Gallatin County.



## Currently Receiving Mental Health Treatment

Among respondents ever diagnosed with a depressive disorder, 96.7% are currently receiving treatment.



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 104, 335]  
 • 2020 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.  
 • "Treatment" can include taking medications for mental health.

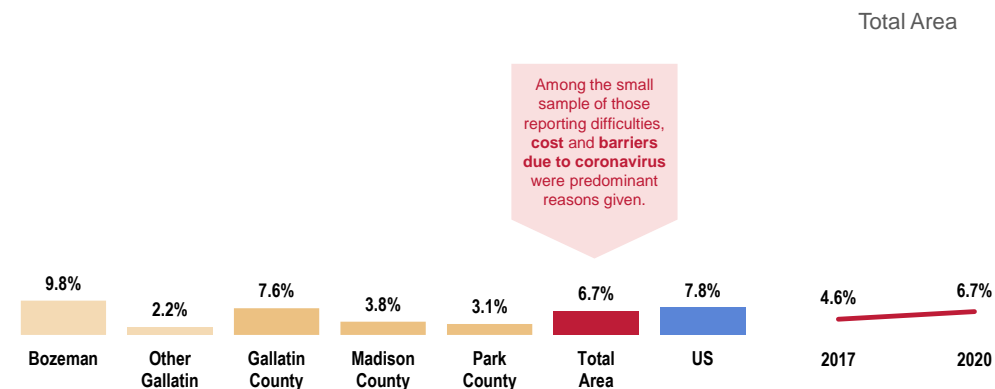
## Difficulty Accessing Mental Health Services

**A total of 6.7% of Total Area adults report a time in the past year when they needed mental health services but were not able to get them.**

**TREND** ► Increasing from 2017 survey findings.

**DISPARITY** ► The prevalence of difficulties is much higher in Gallatin County (especially Bozeman). Correlates with age and is higher among low-income residents as well.

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

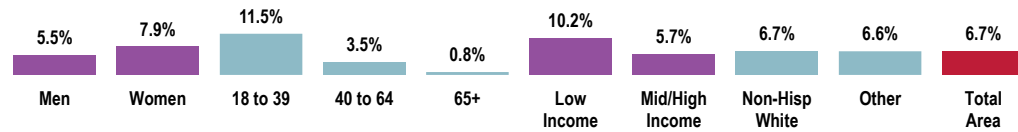


Among the small sample of those reporting difficulties, cost and barriers due to coronavirus were predominant reasons given.

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



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



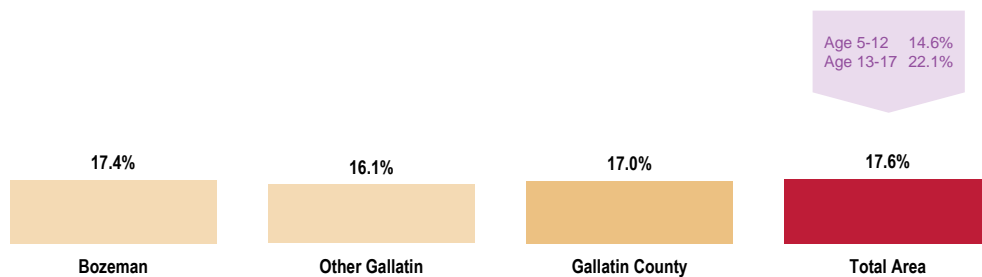
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 105]  
Notes: • Asked of all respondents.

When asked what it is they believe most often prevents people who need mental health services from getting that care, most survey respondents mentioned stigma, cost, and availability of services.

## Children's Mental Health

A total of 17.6% of Total Area parents with children age 5 to 17 indicate that their child received professional services for mental health in the past year.

## Child Received Professional Mental Health Services in the Past Year (Parents of Children 5-17)



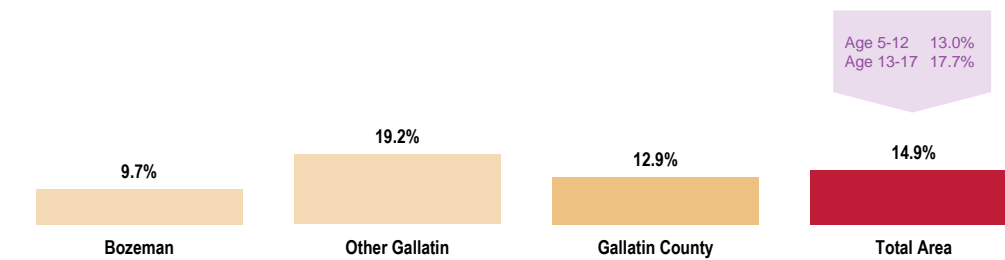
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 350]  
Notes: • Asked of all respondents with children 5 to 17 in the household.



Another 14.9% of parents with children age 5 to 17 report that their child has suffered from or been diagnosed with a mental, emotional, or behavioral health issue.

DISPARITY ► Highest outside of Bozeman.

### Child Has Suffered From or Been Diagnosed With a Mental, Emotional, or Behavioral Health Issue (Parents of Children 5-17)

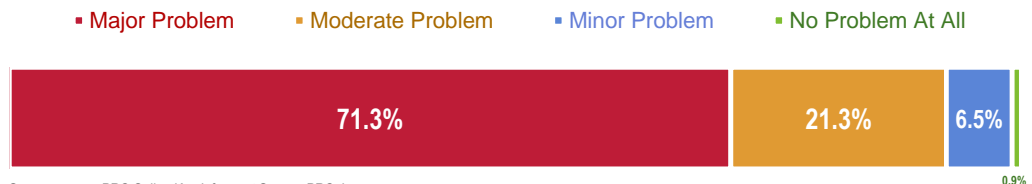


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 351]  
Notes: • Asked of all respondents with children 5 to 17 in the household.

## 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)



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

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

#### Access to Care/Services

Access to care in a timely manner, continuity of care and access to escalating care when needed. – Physician (Gallatin & Madison Counties)



Access to mental health care, whether financial barriers (frequently not covered by insurance) or limited community providers; stigma around mental health and sometimes even more stigma around treatment options; few resources for acute care outside of Bozeman; limited addiction/substance abuse resources; cost for medications; limited inpatient stabilization; very limited resources for children/teens. – Physician (Gallatin & Madison Counties)

Complete lack of appropriate specialty care for patients without good insurance. Limited resources for in-crisis patient. This is by far the most inadequate of our local resources. – Physician (Gallatin & Madison Counties)

Access to quality services and being able to see a licensed therapist within a reasonable time and at a reasonable rate. I have three family members/friends who utilize mental health services within our community and two of them constantly ask when Bozeman Health will step up to the plate to address this growing crisis. In addition, we need to crest the stigma associated with mental/behavioral health, and Bozeman Health is well primed to be a leader in this arena. – Community Leader (Gallatin County)

Access to care. Not many available options. – Physician (Gallatin Gateway, Big Sky & West Yellowstone)

Access to counseling services outside of Bozeman. – Physician (Gallatin Gateway, Big Sky & West Yellowstone)

Access to mental health help for people of all socioeconomical statuses. – Community Leader (Gallatin & Madison Counties)

Lack of access. Insufficient providers. – Physician (Gallatin & Madison Counties)

Lack of crisis services. Lack of providers who will see patients on Medicaid. Difficulty of patients taking the extra step to seek help. Lack of pediatric mental health services including day treatment programs and inpatient psychiatric. – Physician (Gallatin & Madison Counties)

Challenges with accessing services, stigma related to seeking services, cost of ongoing support, and services for individuals. – Social Services Provider (Gallatin County)

Primarily a lack of resources. I wish there was a mental health crisis worker we could call instead of a police officer when we have a crisis out in the community. We need more shelter services so we can stabilize people before trying to provide mental health counseling. – Social Services Provider (Gallatin County)

Not enough access to skilled therapists; mental health agency has trouble supporting the community, maintaining staff, having good leadership; lack of affordability with high deductibles; challenges with behavioral health at Bozeman Health; lack of trained therapists to work with young children and provide parenting support; lack of licensed addiction counselors. – Other Health Provider (Gallatin County)

Immediate access to care. We seem to have an abundance of mental health services and providers, but the wait time to access ongoing services can be long. Affordable options for uninsured or under-insured can especially be hard to get in to. Stigma around seeking help is getting better, but still high. Hope House is an amazing resource, but 72-hour limits on stays is not good enough for many. An inpatient psychiatric unit for adults and kids is needed in our area. Not having a place for kids to be admitted locally is a real challenge and brings a lot of strain to families and schools to try and keep the kids safe until they can see a provider. – Social Services Provider (Gallatin & Madison Counties)

Lack of mental health resources, depending on specific geographic location. Substance abuse, isolation, access to firearms, lack of LGBTQ acceptance, stigma around accessing mental health support. – Community Leader (Gallatin & Madison Counties)

Access to mental health providers, services. – Community Leader (Gallatin & Madison Counties)

Access to adequate care, stigma, and cost. – Public Health Representative (Gallatin County)

Availability of resources in crisis outside of the emergency room. Ongoing development of acute resources at Bozeman Health will improve the situation. – Physician (Gallatin & Madison Counties)

Finding available counselors who are well-suited to individuals is tough. – Community Leader (Gallatin County)

Access to service providers. – Social Services Provider (Gallatin & Madison Counties)

Regular access to care, including definitive inpatient care. Stigmatization that limits people from reaching out to access care. Decreased awareness at the individual and family level of mental health risks. Suicide. – Physician (Gallatin County)

There are not enough mental health resources for adults, and many times it is not affordable. Crisis care is limited, and it is odd that the Gallatin Mental Health Center and Hope House have buildings but do not have adequate services. Who is standing in the way? Then, youth and teen mental health services have been inadequate for many years. We need more mental health professionals in the schools—not just counselors who help kids get into college. – Other Health Provider (Gallatin & Madison Counties)

Access and affordability, access for young children. – Social Services Provider (Gallatin & Madison Counties)

Access to care, coverage for care, basic needs being met. Drug and alcohol abuse. – Social Services Provider (Gallatin & Madison Counties)

Access to care. – Other Health Provider (Gallatin County)

Access to services, walk-in/call-in services regardless of ability to pay, especially in the outlying areas of our county. – Community Leader (Gallatin County)





Given our current precautions related to Covid-19, we are unable to have in-person visits for mental health. This is particularly challenging given that we have patients who would benefit from mental health support but struggle with telehealth visits due to their cognition. – Other Health Provider (Gallatin & Madison Counties)

There are many who are not eligible for services and fall through the cracks. I have many clients who are not eligible for mental health services but desperately need them. Gallatin Mental Health is the major mental health provider and they cannot serve anyone. They have a large staff turnover and are underfunded. – Social Services Provider (Gallatin & Madison Counties)

Lack of a behavioral health unit (hospitalization) and over-reliance on an underfunded and poorly operated crisis house. Access to immediate openings for counseling to divert a crisis. Lack of behavioral health clinicians that will work with “high risk” individuals. Lack of psychiatrists/APRN's with availability and will take Medicaid. – Other Health Provider (Gallatin & Madison Counties)

We have no inpatient availability for mental health here in Bozeman. It is very difficult for people to get mental health care that is affordable. – Physician (Gallatin County)

Resources for support, most importantly family supports, education, and intervention. – Social Services Provider (Gallatin County)

Access to mental health assistance including talk therapy, psychiatrists, and support groups. Figuring out a way to offer low cost services. The general stigma around mental health issues. – Community Leader (Gallatin & Madison Counties)

Access to and affordability of mental health services. Stigma. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

There is poor coordination between health care facilities and mental health providers. There is a lack of access to acute levels of care (inpatient psych), lack of access to psychiatrists, lack of access to mental health providers who are qualified and able to provide crisis counseling. The current community mental health center has poor leadership and poor services that are difficult to access. – Other Health Provider (Gallatin & Madison Counties)

I think it is the mental health policies, not so much the centers for treatment. If they don't kill someone it is impossible to get them long-term help. – Community Leader (Gallatin & Madison Counties)

Lack of access to care, too few providers who see seriously ill patients, too few providers who serve the underinsured. – Physician (Gallatin & Madison Counties)

Not enough access to mental health providers. We need more providers and better access to mental health. – Other Health Provider (Gallatin Gateway, Big Sky & West Yellowstone)

Disconnected services; there are a lot of programs but they aren't linked. Funding: how does one pay for it if they have little or no insurance? – Community Leader (Gallatin County)

Access to help. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

We do not have a good amount of higher level mental health evaluation and diagnosis. Our local people are often overburdened, our emergency department sometimes is 2/3 mental health issues, and getting inpatient treatment is nearly impossible for many people. I have a friend whose daughter who would have gone for inpatient treatment but they couldn't get her in and she sat here in our local hospital on suicide watch for days and then got sent home. – Other Health Provider (Gallatin & Madison Counties)

Access to services. – Physician (Gallatin & Madison Counties)

The biggest issues connected with mental health in our community remain access and treatment, crisis, and children's services. Many individuals and families continue to struggle with finding a quality mental health clinician who has openings in a private practice setting. Medical providers also continue to have difficulty finding an available appropriate referral for their patients needing ongoing mental health interventions rather than short-term interventions. Cost of mental health services also continues to be an issue for many families and individuals and may keep them from seeking services. The community also lacks differing levels of care including more intensive outpatient options. Children's services also continue to be a challenge both for ongoing treatment as well as more intensive services. Substance abuse treatment and detox are also areas of need. Lastly, there is a lack of consistency in suicide prevention training for providers, including medical providers, which impacts early intervention. – Other Health Provider (Gallatin & Madison Counties)

Lack of access to mental health services. – Physician (Gallatin & Madison Counties)

Accessibility and availability of resources. – Social Services Provider (Gallatin & Madison Counties)

I think that one of the biggest issues that comes up with mental health is the fact that access to services is very difficult. Emergency care exists in a small capacity, general care has improved a bit but it can still take a long time to get in and see someone for even just a general mental health check-in. I have noticed that primary care has begun to do a better job of asking questions about mental health. Another huge component is the stigma that is attached to mental health issues. Montana is very much an independent, tough state which can lead to feelings of isolation and not seeking out help when it is really necessary. – Community Leader (Gallatin County)

CHP has provided a mental health counselor in West Yellowstone once a week and mental telehealth. I still find the need for more one-on-one in the community and more days. It takes four to five weeks or longer to get a counselor when most times it is needed immediately. – Social Services Provider (Gallatin Gateway, Big Sky & West Yellowstone)

Lack of mental health specialty facilities. – Physician (Gallatin & Madison Counties)

Lack of access, stigma. I believe we currently have two mental health therapists come down once a week. They have long wait lists. It would be great to have a child psychologist available. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

There are not adequate mental health support services or substance abuse treatment, which go hand-in-hand, in this community. – Other Health Provider (Gallatin & Madison Counties)

There are not enough mental health facilities in the area to provide services. A lot of these individuals cannot afford a counselor or are very limited who they can see due to insurance coverage (if they have any). The area lacks an inpatient mental health facility, and this area lacks people going out to provide education to skilled nursing facilities about mental health. There remains such a great stigma about mental health and the instability of these individuals that trying to connect these individuals to services is a challenge. – Other Health Provider (Gallatin & Madison Counties)

Lack of resources and providers for the uninsured. – Other Health Provider (Gallatin County)

Access and cost. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

Lack of resources and help for these people. – Community Leader (Gallatin & Madison Counties)

Lack of programmatic solutions and resources. – Community Leader (Gallatin County)

Lack of access to quality behavioral health services—particularly for severe mental health disorders. Difficulty with early recognition and treatment of depression and suicidality, particularly in school-aged kids. Stigma associated with being diagnosed and treating mental health issues. – Physician (Park County)

Availability of services. Discreet access to services and funding. – Community Leader (Park County)

Lack of services and access. – Community Leader (Park County)

We have no state funded mental health clinic. Since the 1990's mental health services to kids and adults have been slashed by our legislature. Our services are minimal. – Other Health Provider (Park County)

Since the local MHC office closed, there have been some attempts to address this issue. I am not sure that these attempts have come close to meeting this need in our community. Therefore, there are only limited resources available to serve the mentally ill folks in our county. To see an actual psychiatrist, someone can go to Livingston Health Care to see one of their 2 providers, but their schedules are full for quite a while from today's date. As for the psychiatric needs for children/youth, someone would have to go to Bozeman, Billings, or some other larger community to get that type of help. Then we come to inpatient psychiatric treatment, this would require going to Billings, Helena, Great Falls, Missoula, or Kalispell. When a person is in a mental health crisis, it is difficult to have to seek these services so far away from our home and support systems. Again, transportation is a major barrier. – Other Health Provider (Park County)

Difficult to access existing resources. Insurance obstacles to paying for resources. Many people feel judged and unable to ask for help without consequences. – Other Health Provider (Park County)

Not enough available services, not enough case managers, not enough outreach to contact those without Medicaid or social security and assistance to obtain these benefits. Not enough housing for MI and others, with criminal, sexual addiction and backgrounds. – Social Services Provider (Park County)

Lack of availability of pediatric and adolescent mental health services. Inadequate coordination of services. Lack of substance abuse treatment. Increase in demand for mental health services. No inpatient facility for patients. Often those with mental health issues enter criminal justice/legal system rather than treatment. – Public Health Representative (Park County)

Timely, appropriate, and comprehensive care. – Public Health Representative (Park County)

We do not have a state sponsored mental health facility for our chronic mental health patients. It is difficult to track them when they are off their medication. Often see a revolving door of patients in and out of Warm Springs. No case management of home-based services for adult mental health. – Social Services Provider (Park County)

No community resources, stigma, we are basically abandoning those with mental health issues and how to best treat and provide for those who suffer and their families. – Social Services Provider (Park County)

Access to appropriate care in a timely manner. Lack of mental health providers in area. Lack of specialty mental health providers. – Other Health Provider (Park County)

There are no resources or providers in Park County to address mental health issues. – Social Services Provider (Park County)

## Denial/Stigma

There has been great movement in our community to identify need, improve access, and coordinate services, but we cannot let up; removing the stigma and ensuring that individuals get the help they need is a sea change. Focused, ongoing work is crucial. Added challenges are the stresses from the pandemic, the economic impact of shutdown, the fear of the unknown—as well as the societal unrest over police brutality and violence. I support any and all efforts in this area. – Community Leader (Gallatin County)

Perceived and real stigma against mental health. Access to mental health services, lack of state funding for mental health. No inpatient mental health facility. – Community Leader (Gallatin & Madison Counties)

Stigma, lack of providers, recognizing symptoms and signs. – Social Services Provider (Gallatin & Madison Counties)





Stigma reduction, access to affordable services for uninsured and/or publicly insured people. Reliable access to higher levels of care in our community such as inpatient psychiatric care, intensive outpatient services, youth services. – Public Health Representative (Gallatin County)

In our community and in every community, it is getting help to people who need it but who may not know they need it. – Community Leader (Gallatin County)

A major challenge in our community is stigma. Although there is more open communication about mental health, there continue to be barriers related to stigma. Also, access to services is a major challenge. There are limited providers who accept Medicaid/Medicare creating long waits for services. Also, even for people who have private insurance or pay out of pocket for services, the waitlists can be long and the variety of providers with specialty can be limited. Also, many of the services in our community do not take into account or do not have resources to account for the varying components of supporting a healthy mental state, including access to stable housing, access to nutritious food, and community support/involvement. – Other Health Provider (Gallatin & Madison Counties)

Stigma, cost, lack of services, the services we have are so far booked out that new patients can't get in. – Community Leader (Gallatin County)

The stigma around mental health and seeking support. Access to a range of practitioners and information to help select the best provider. Simplification and clarity of insurance, funding to support care. – Community Leader (Gallatin County)

Stigma, cost of counseling, not enough resources, especially for children and teens. – Community Leader (Gallatin & Madison Counties)

Social stigma of those with mental health conditions. This causes those in need to resist accessing health care and motivates inadequate funding of social resources to address the problem. The rural community setting becomes a barrier for those in need because they don't expect their health information and situation will remain private and anonymous. – Community Leader (Gallatin County)

Stigma. Lacking resources, process for community mental health intervention. There is a need for community/group debriefing, defusing similarly to CISM for first responders. – Community Leader (Park County)

Stigma of seeking mental health care and the availability or lack thereof of providers. – Community Leader (Park County)

The stigma of getting mental health services. Access to mental health services. Lack of both depth and breadth of mental health services. – Social Services Provider (Park County)

## Affordable Care/Services

Access to affordable and qualified psychologists and psychiatrists for child counseling and mental health issues. – Community Leader (Gallatin & Madison Counties)

Access to affordable and timely care. Even students at MSU are now waiting a month or months to be able to get regular counseling. Our county needs more mental health providers who are willing to accept Medicaid. – Public Health Representative (Gallatin County)

Affordability of care and stigma of receiving care. – Public Health Representative (Gallatin Gateway, Big Sky & West Yellowstone)

Affordable, talented providers with openings. – Community Leader (Gallatin County)

Access to affordable mental health care, no matter the patient's income level. – Social Services Provider (Gallatin & Madison Counties)

Lack of availability of affordable or free counseling and crisis counseling. The new mental health urgent care is a wonderful idea and I really hope it continues. We need it so folks can get mental health care when they need it by competent providers who are confident and well versed in mental health—not just general health care providers who can prescribe some meds but not address the larger needs. – Other Health Provider (Gallatin County)

Access to affordable services. – Public Health Representative (Gallatin County)

Access to affordable care. There is no designated place for individuals with mental health issues to contact for help. If there is it is not widely publicized. If I were facing a mental health crisis, where do I turn? Our community has a mental health crisis for children and teens, because they can't advocate for their own care and must have an adult sign off on a care plan. Many parents have their own issues and are unwilling to advocate for mental health care for their child, nor do they have the income to pay for mental health care. – Community Leader (Gallatin & Madison Counties)

Affordable health care. – Social Services Provider (Gallatin County)

Affordable counseling services. Suicide prevention. Not just our community but technology has created a vastly different way to communicate. People are not sharing emotions face to face. Education on the effect of technology and mental health should be an area of focus. – Community Leader (Park County)

## Lack of Providers

Lack of providers, lack of inpatient care, difficult to find counseling if you have Medicaid or Medicare or no insurance. Even worse for pediatrics. – Physician (Gallatin & Madison Counties)



Lack of certified therapists and especially licensed clinical addiction counselors. Not addressing underlying social determinants that increase risk for mental health problems, including but not limited to poverty, substance abuse, child neglect, poor parenting skills, lack of food. Stigma with mental health and related issues, such as domestic violence, which delays care. – Other Health Provider (Gallatin & Madison Counties)

There's no one qualified to help with mental health. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

Lack of providers, difficulty accessing providers. – Social Services Provider (Gallatin County)

Recruitment for LCSW/LCPC providers is difficult. More billable behavioral health providers are going into private practice because it is more lucrative. This makes it hard for nonprofits and other health care providers to provide behavioral health services because they simply can't recruit these employees at an hourly rate. Additionally, private payers are not required to reimburse other licensed behavioral health professionals like marriage and family therapists. – Other Health Provider (Gallatin & Madison Counties)

Access, not enough counselors, especially those on Medicaid or sliding fee scale. – Public Health Representative (Gallatin County)

There are very few per capita mental health providers, especially psychiatrists. People may have to wait three months to be seen or simply be referred to county mental health. Many private counselors and therapists do not accept Medicare. There are no private inpatient facilities in our County. – Community Leader (Gallatin County)

Not enough providers. Too many insurance constraints to adequately take care of this population. – Physician (Gallatin & Madison Counties)

Lack of access to care. We need more mental health providers, psychiatrists and therapists. – Physician (Gallatin & Madison Counties)

Limited number of counselors. Many friends have a hard time finding someone who can accept new patients. Cost and health insurance coverage of counseling as well. – Community Leader (Gallatin & Madison Counties)

We don't have enough counselors to meet the needs due to our transient population. I think that brings people with more mental illness who struggle to work regular jobs that are not seasonal. – Other Health Provider (Gallatin Gateway, Big Sky & West Yellowstone)

Not enough mental health providers available for the county, specifically the rural communities and services for children. Schools are desperate for mental health counselors on site. Many community partners are looking for solutions for rural communities and the schools but have not found an easy answer (or any answer yet). – Community Leader (Park County)

We essentially have no mental health providers like psychiatry, psychiatric NPs, etc. In other words, there exists nothing for people with severe mental disorders. – Other Health Provider (Park County)

Only one available psychiatrist within 60 miles. – Physician (Park County)

As a subset of mental health, care for the caregiver is a major concern needing attention. The burnout rate for school staff, health care providers, and mental health providers needs to be addressed. – Community Leader (Park County)

## Contributing Factors

Poor access and inability to pay. Stigma. No significant substance abuse resources. – Other Health Provider (Gallatin & Madison Counties)

Access to appropriate services, knowledge of how to access services, awareness of when to access services, understanding of the value of behavioral health services, relationship between substance abuse and mental health, availability of services in languages other than English, availability of culturally appropriate services, decreasing the stigma surrounding access to services, integration of mental health into general health status assessment, and inclusion in treatment plans. – Public Health Representative (Gallatin County)

Access to care, including not only geographic location, but also ability to pay (for example when a person has health insurance that doesn't cover mental health services, such as a bronze plan). Also, it may be difficult for a person to find a mental health provider who has expertise in that person's experience, like if they are a member of the LGBTQ+ community. And of course there is still a relatively large amount of stigma around accessing mental health services in much of Montana, with Gallatin and Madison counties being no exception. And of course, COVID-19. Those who are high-risk (or who have family members that are high-risk) may still be anxious about accessing in-person services and may not be getting the same level of help from tele-health as in-person services, or may simply not be going to their appointments at all. – Public Health Representative (Gallatin & Madison Counties)

Many people who experience mental health issues are homeless and thus isolate themselves from those who would be able to help. However, their issues continue to escalate because of their homelessness. Isolation and despair has increased as a result of the Covid crisis. – Social Services Provider (Gallatin & Madison Counties)

We had one mental health personnel that speaks Spanish and was very popular in our community but then she left or she stopped working with our community. Patients who are undocumented can't receive Medicaid or government help, so if a patient has to pay out of pocket, a lot of the times they can't because they can't afford it. – Community Leader (Gallatin & Madison Counties)



Social isolation, stigma, shame, and limited access to mental health resources due to distance or financial constraints. Anxiety, depression, and intergenerational trauma or unprocessed grief are common. Acceptability, availability, and accessibility regarding seeking/receiving help. – Other Health Provider (Gallatin & Madison Counties)

Social and emotional isolation from others, loneliness, and inhibitions regarding asking for, receiving help and medical care compound. All health issues and disease prevention. – Other Health Provider (Gallatin & Madison Counties)

Consumption of social media has revolutionized the levels of anxiety and social distrust in our citizens. We encounter, at a consistently increasing rate, citizens that are completely immersed in fear, anger, and distrust of their community because of the social media filter bubble they exist in on a permanent basis. I understand this is easier to categorize as a mental health problem, but this is a situational reality that mental health services and the medical system are not designed or equipped to address. – Community Leader (Gallatin County)

Social Health – it can be in mental health but I think that it overlooks the fact that many people who live here come from different places and so lack some of the extensive social networks that exist when you stay in a place that you grew up in, went to college in, or have family in. Mental health, substance abuse, isolation, missing links of health care (dental, eye, primary care), all stem from a lack of social connection as well. – Community Leader (Gallatin County)

Our collective society is suffering from trauma right now. This is particularly true for young people, communities of color, and low-income communities. – Social Services Provider (Gallatin & Madison Counties)

Continuity of care, access to substances of abuse and poverty. – Physician (Park County)

Limited resources for treatment of serious mental illness. Lack of affordable counseling options. Lack of seamless system of crisis care. Lack of comprehensive community well-being strategy. – Physician (Park County)

Even in Livingston, where a fairly large menu of services exists, inordinate numbers of individuals seem to face mental health struggles correlated with substance abuse and trauma. Access to services can be limited by ability to pay — some who do not qualify for Medicaid cannot pay for services and do not access them. High suicide rates, frequent and severe disruptive and physically aggressive behavior among school-aged children, and, widespread self-medication is among the indicators of the mental health crisis in Livingston. – Community Leader (Park County)

Consistent care, housing and nutrition. – Social Services Provider (Park County)

The problem is multi-variate. Poverty, relationship skills, employability skills, drugs, alcohol and incarceration. – Community Leader (Park County)

Poverty, stress, lack of resources, education or support. Overmedication and lack of individualization. – Physician (Park County)

Lack of direct sunlight, Vitamin D. – Public Health Representative (Park County)

We have a high percentage of people with mental health issues. Socioeconomic challenges contribute to these issues, as do substance abuse issues. We have one of this highest suicide rates in the nation. – Other Health Provider (Park County)

## Prevalence/Incidence

Mental health issues are rampant in our youth, which is the population I am involved with. There is a lot of anxiety and depression in youth in this county, and access to care can be limited to the very rich or very poor. – Other Health Provider (Park County)

Customers and clients disclosing diagnosed and undiagnosed mental health conditions. – Social Services Provider (Park County)

Consistently identified as one of the biggest health problems in our community couple with inadequate treatment resources. Often comorbidity with substance confounds the situation. – Community Leader (Park County)

There is an increased number of youth and adults presenting for depression, anxiety, and suicidal ideation. This of course means there are also many who are not accessing care for one reason or another with the same issues. Financial stress, adverse childhood experiences, drug and alcohol use, and hopelessness are definitely a good part of the problem. Recent suicides in our community and in social media, have made that seem like a viable option. – Other Health Provider (Park County)

## Alcohol/Drug Use

I do believe that we have serious substance abuse issues, and many times the root cause of substance abuse is related to mental health issues. – Community Leader (Gallatin & Madison Counties)

There is a lot of drug and alcohol abuse in the community as well as mental health disorders. There doesn't seem to be easy access to counseling or help when needed. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

High rates of depression exacerbated by alcohol/substance abuse. The source of depression is difficult to pinpoint; however, our efforts need to focus on middle-aged men. For this particular demographic, a major challenge is getting them to utilize the available services. – Public Health Representative (Gallatin County)



Alcohol and drug abuse. – Community Leader (Park County)

## Insurance Barriers

Take Medicare, Medicaid that will actually provide care to patient. Exercise biofeedback, CBT, and such. – Physician (Gallatin & Madison Counties)

Access to care. Providers who take Medicaid. Social pressure that sees mental health as a weakness. – Public Health Representative (Gallatin County)

Access to care, especially to a psychiatrist and especially without insurance. Also, there is no chemical dependency unit and no easy access to inpatient beds. – Physician (Gallatin County)

Access and having insurance or money to pay for these services; general stigma of mental illness. – Other Health Provider (Gallatin County)

## Awareness/Education

Knowing who to call in a crisis. Patients are reluctant to attend counseling because they do not believe it will help them. Fear of contacting a counselor because they do not want to tell their story over and over to someone who they may not connect with or who may not be able to help them. For postpartum depression, patients are afraid to seek counseling because they fear their baby will be taken away if they are diagnosed with a mental illness. In a small community such as this, patients especially professional people are reluctant to seek counseling because they fear their confidentiality will not be protected. – Physician (Gallatin & Madison Counties)

Healthy respectful relationships across political, gender, racial lines—and within families, among peers and co-workers—is critical. Lack of healthy respectful relationships (and poor skills to build/maintain/expand these relationships) feeds hate, mistrust, strife, and discord. These emotions feed stress, despair, fear and unhealthy behaviors. – Community Leader (Gallatin & Madison Counties)

Need for better outreach to community leaders, like HR directors, clergy, schoolteachers, on how to handle and what services are available when they come into contact with someone needing help. Need more promotional outreach to let those needing help feel comfortable reaching out to a local help system. Then, establishing highly effective process/people to provide the services in a timely, affordable, and locally based way. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

## Suicide Rates

Suicide is a bimodal problem. I believe there are issues for veterans (PTSD). There are also problems at the university level and at the high school/junior high level with this (relationships, abuse, depression and the like). The origins are different. Substance abuse may also contribute. There are also problems with relationships, abuse, and depression at levels above K-12 but they are different. These are not just about suicide but how to manage life when under stress, either personally or in relationship to others. There are a variety of resources to help with these challenges, but there are barriers. The person in trouble must recognize the problem, must want to deal with it, and know where to get help. It is often difficult to admit there is a problem. Once that step has been reached, knowing where to get help is an issue, and then screwing up the courage to ask for help. I believe there is help, but there are limited shelters, etc. – Public Health Representative (Gallatin County)

Montana has been in the top 3 states with the highest suicide rates for decades! This is unacceptable. There are some factors we cannot fix, like being a rural state, long winters, lower income/higher levels of poverty, etc., but we can completely change how accessible and affordable mental health care is for people! And by making this a normal part of health care, you help destigmatize the idea of going to a counselor and/or asking for help. – Community Leader (Gallatin & Madison Counties)

Park County's suicide rate is the third highest in the state and Montana's suicide rate is the highest in the nation. There is a gross lack of mental health services in Park County. – Social Services Provider (Park County)

Park County has more than its share of people who live in stressful situations with an especially high rate of suicide. Lack of money and resources to get proper care. – Social Services Provider (Park County)

## Disease Management

Therapy and medicinal assistance. – Community Leader (Park County)

I feel that one of the biggest challenges for people with mental health issues in our community is the ability to seek out care. Typically, they shut down and don't communicate with others, instead of reaching out, and then it is too late. I also feel that we could use more advocates and supports for people who require mental health care in our community. The schools are doing a great job of providing resources and supports, but there are simply too many students who require these types of supports and not enough funding. – Public Health Representative (Park County)

Counseling, medications and crisis intervention. – Community Leader (Park County)

## Funding

GMHC is not working anymore. We need more funding for that organization. Alcoholism. No rehab in Bozeman, limited access to those on state insurance. – Social Services Provider (Gallatin & Madison Counties)

Increasing challenges from both funding and Covid-19. – Social Services Provider (Gallatin & Madison Counties)





# DEATH, DISEASE & CHRONIC CONDITIONS

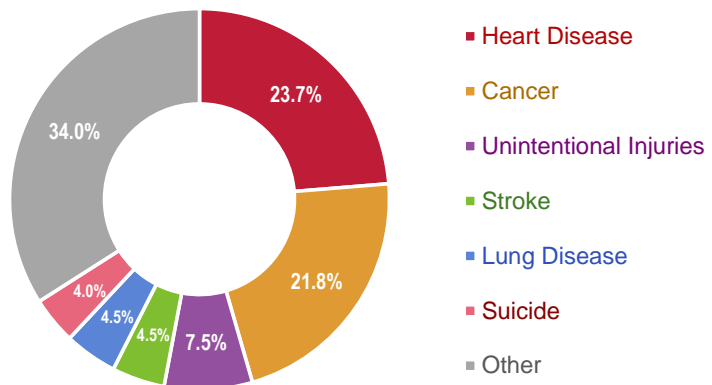


# LEADING CAUSES OF DEATH

## Distribution of Deaths by Cause

Together, heart disease and cancers accounted for the largest share of deaths in the Total Area in 2018.

Leading Causes of Death  
(Total Area, 2018)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.  
Notes: • Lung disease is CLRD, or chronic lower respiratory disease.

## Age-Adjusted Death Rates for Selected Causes

### 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.

Note that 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 following chart outlines 2016-2018 annual average age-adjusted death rates per 100,000 population for selected causes of death in the Total Area.



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

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

## Age-Adjusted Death Rates for Selected Causes (2016-2018 Deaths per 100,000 Population)

	Total Area	Montana	US	HP2020
<b>Malignant Neoplasms (Cancers)</b>	128.5	146.4	152.5	161.4
<b>Diseases of the Heart</b>	127.3	157.5	164.7	156.9*
<b>Fall-Related Deaths (65+)</b>	44.9	84.1	63.4	47.0
<b>Unintentional Injuries</b>	36.7	51.8	48.3	36.4
<b>Chronic Lower Respiratory Disease (CLRD)</b>	33.4	50.8	40.4	n/a
<b>Cerebrovascular Disease (Stroke)</b>	32.4	32.7	37.3	34.8
<b>Intentional Self-Harm (Suicide)</b>	23.5	26.6	13.9	10.2
<b>Firearm-Related</b>	16.7	19.6	11.9	9.3
<b>Alzheimer's Disease</b>	14.7	21.7	30.6	n/a
<b>Motor Vehicle Deaths</b>	12.6	16.5	11.5	12.4
<b>Diabetes Mellitus</b>	11.5	21.4	21.3	20.5*
<b>Pneumonia/Influenza</b>	8.1	11.7	14.2	n/a
<b>Kidney Disease</b>	6.9	10.3	13.0	n/a
<b>Cirrhosis/Liver Disease</b>	5.1	13.9	10.9	8.2

Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.

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

Note: ● \*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.... 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 health care.

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

## Age-Adjusted Heart Disease & Stroke Deaths

### Heart Disease Deaths

**Between 2016 and 2018, there was an annual average age-adjusted heart disease mortality rate of 127.3 deaths per 100,000 population in the Total Area.**

**BENCHMARK** ► Below the state and national rates; easily satisfying the Healthy People 2020 goal.

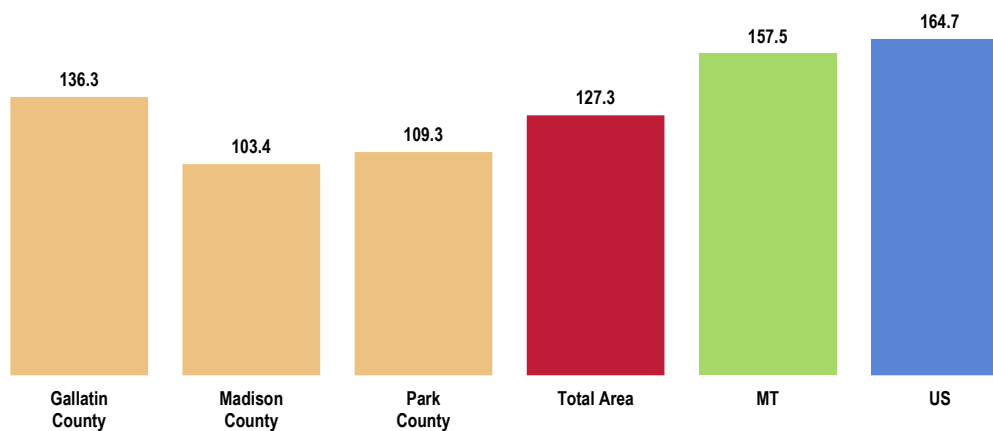
**DISPARITY** ► Highest in Gallatin County.

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





## Heart Disease: Age-Adjusted Mortality (2016-2018 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 May 2020.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-2]

Notes: 

- 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 May 2020.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-2]

Notes: 

- The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.



## Stroke Deaths

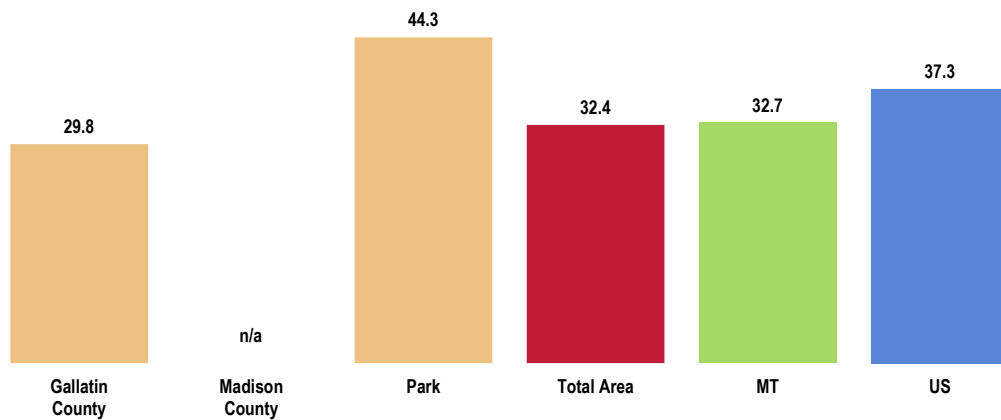
Between 2016 and 2018, there was an annual average age-adjusted stroke mortality rate of 32.4 deaths per 100,000 population in the Total Area.

**BENCHMARK** ► Below the US mortality rate.

**DISPARITY** ► Much higher in Park County than in Gallatin County (data not available for Madison County).

### Stroke: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 34.8 or Lower

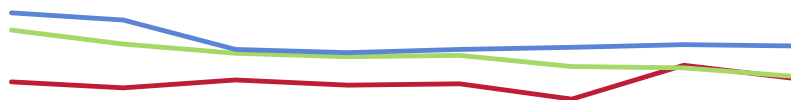


Sources: 

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-3]

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

Healthy People 2020 = 34.8 or Lower



	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
Total Area	31.9	31.0	32.2	31.4	31.6	29.3	34.4	32.4
MT	39.7	37.6	36.2	35.7	35.9	34.2	34.0	32.7
US	42.3	41.2	36.8	36.3	36.8	37.1	37.5	37.3

Sources: 

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-3]



# Prevalence of Heart Disease & Stroke

## Prevalence of Heart Disease

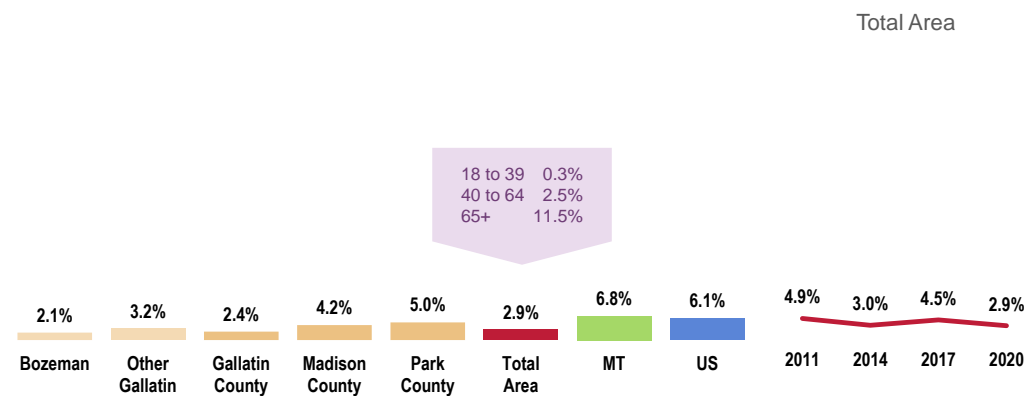
A total of 2.9% of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina, or heart attack.

**BENCHMARK** ► Well below the state and national figures.

**TREND** ► Decreasing from 2011 survey findings.

**DISPARITY** ► Significantly lower in Gallatin County. Correlates with age in the Total Area.

## Prevalence of Heart Disease



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 128]  
• 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.  
• 2020 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 1.3% of surveyed adults report that they suffer from or have been diagnosed with cerebrovascular disease (a stroke).

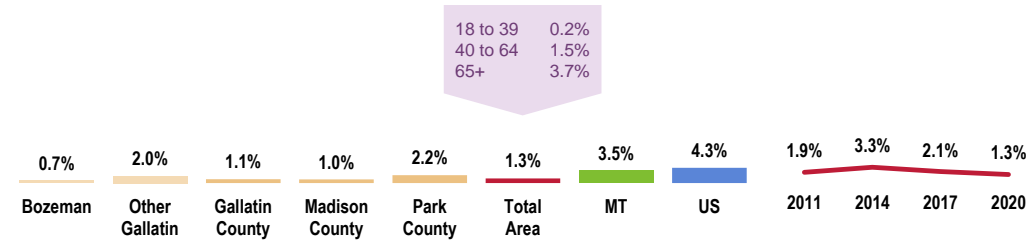
**BENCHMARK** ► Well below the state and US prevalence.

**DISPARITY** ► Increases with age among Total Area residents.



## Prevalence of Stroke

Total Area



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.  
 • 2020 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.

## Cardiovascular Risk Factors

### Blood Pressure & Cholesterol

**A total of 25.6% of Total Area adults have been told by a health professional at some point that their **blood pressure** was high.**

**BENCHMARK** ► Lower than the Montana percentage and especially the US percentage.

**DISPARITY** ► Favorably low in Gallatin County [especially Bozeman] (not shown).

**A total of 23.2% of adults have been told by a health professional that their **cholesterol level** was high.**

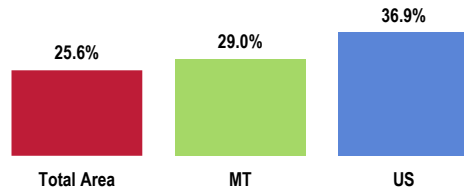
**BENCHMARK** ► Well below the US figure.

**DISPARITY** ► Lowest in Gallatin County (not shown).



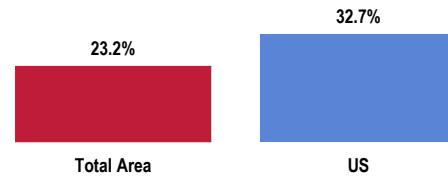
### Prevalence of High Blood Pressure

Healthy People 2020 = 26.9% or Lower



### Prevalence of High Blood Cholesterol

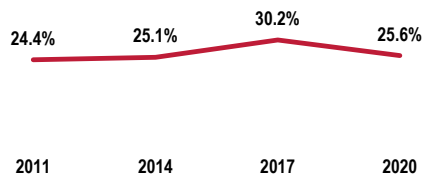
Healthy People 2020 = 13.5% or Lower



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.  
 • 2020 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.

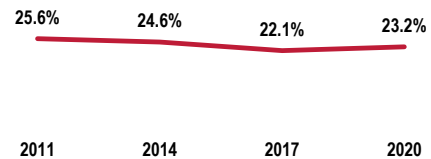
### Prevalence of High Blood Pressure (Total Area)

Healthy People 2020 = 26.9% or Lower



### Prevalence of High Blood Cholesterol (Total Area)

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

Total cardiovascular risk reflects the individual-level risk factors which put a person at increased risk for cardiovascular disease, including:

- High Blood Pressure
- High Blood Cholesterol
- Cigarette Smoking
- Physical Inactivity
- Overweight/Obesity

Modifying these behaviors and adhering to treatment for high blood pressure and cholesterol are critical both for preventing and for controlling cardiovascular disease.

**A total of 73.7% of Total Area adults report one or more cardiovascular risk factors, such as being overweight, smoking cigarettes, being physically inactive, or having high blood pressure or cholesterol.**

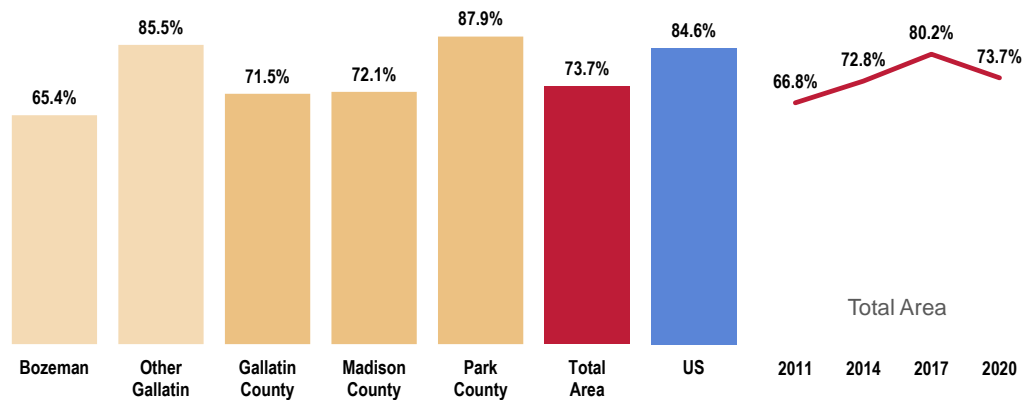
**BENCHMARK** ► Lower than the US percentage.

**TREND** ► Marks a statistically significant increase from baseline survey findings.

**DISPARITY** ► Unfavorably high in Other Gallatin and Park County. Correlates with age and is higher among Total Area men than women.

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

### Present One or More Cardiovascular Risks or Behaviors



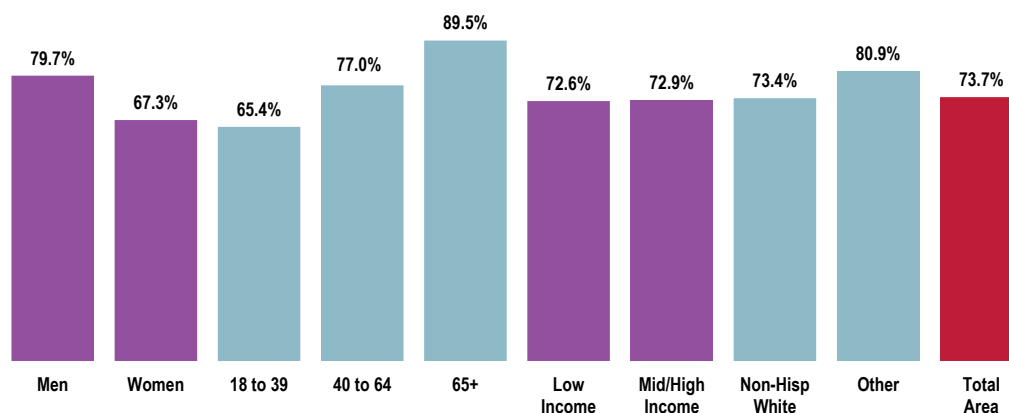
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 131]  
• 2020 PRC National Health Survey, PRC, Inc.

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 (Total Area, 2020)

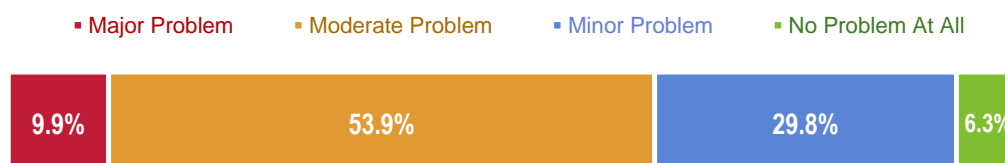


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 131]  
 Notes: • Reflects all respondents.  
 • Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) high blood pressure; 4) high blood cholesterol; and/or 5) being overweight/obese.

## Key Informant Input: Heart Disease & Stroke

The greatest share 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)



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

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

### Prevalence/Incidence



I've experienced an influx of friends, family and community members who are experiencing heart disease and also stroke. Public education seems lacking. – Other Health Provider (Gallatin & Madison Counties)

It is everywhere and the Gallatin Valley is no different. – Community Leader (Gallatin & Madison Counties)

This remains one of the most common causes of death in the county, as everywhere. – Physician (Gallatin Gateway, Big Sky & West Yellowstone)

I have not experienced it myself. I know that most patients are referred to Billings Clinic for surgery. – Community Leader (Gallatin & Madison Counties)

This is prevalent in the United States. – Social Services Provider (Gallatin & Madison Counties)

I see a lot of people with heart disease and stroke. – Social Services Provider (Park County)  
Leading causes of death and disability in our state and community. – Public Health Representative (Park County)  
High prevalence in Park County, and there isn't a cardiologist in Park County full time. LHC has a visiting cardiologist and is trying to recruit a full-time cardiologist, but the position has not been filled. – Community Leader (Park County)

## Contributing Factors

As our community ages and attracts new and older residents, the probability of strokes will increase. I don't know of support groups that support those with heart disease, therefore leaving residents to find information on their own. – Community Leader (Gallatin & Madison Counties)  
Ethnicity of our population. – Other Health Provider (Gallatin County)  
Lack of exercise and obesity issues, too much screen time. – Community Leader (Gallatin County)  
Resistance to engage in care to identify & manage risk factors, limited knowledge/education of risk factors, resistance to taking medication (especially statins), patients frequently delaying care for acute events, limited rehab services outside of Bozeman, hospital location. – Physician (Gallatin & Madison Counties)  
Obesity, smoking, alcohol, and drugs are common in a resort community. – Social Services Provider (Gallatin Gateway, Big Sky & West Yellowstone)  
Smoking, poor nutrition, obesity, and lifestyle. – Social Services Provider (Park County)  
Age of population. – Community Leader (Park County)

## Awareness/Education

They are for any community, lack of education. – Public Health Representative (Park County)  
Lack of education around multiple cardiovascular risk factors, having the focus be on only cholesterol. – Physician (Park County)





# 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 2016 and 2018, there was an annual average age-adjusted cancer mortality rate of 128.5 deaths per 100,000 population in the Total Area.**

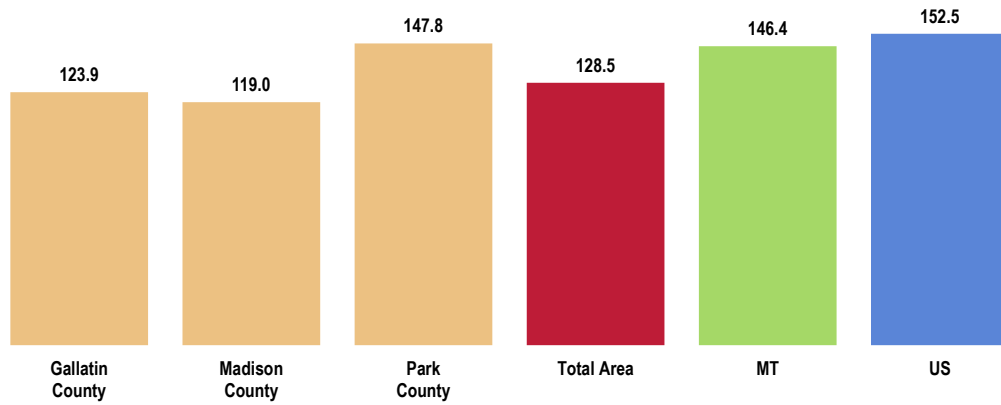
**BENCHMARK** ► Well below the US mortality rate and satisfying the Healthy People 2020 objective.

**DISPARITY** ► Highest in Park County.



## Cancer: Age-Adjusted Mortality (2016-2018 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 May 2020.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-1]

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

Healthy People 2020 = 161.4 or Lower



	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
Total Area	141.9	143.0	138.6	127.6	122.1	121.1	128.0	128.5
MT	162.9	160.3	158.0	155.2	155.8	153.0	151.8	146.4
US	176.8	173.3	165.1	162.5	161.0	158.5	155.6	152.5

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-1]



## Cancer Deaths by Site

The prostate cancer death rate has the highest age-adjusted death rate of all 2016-2018 cancer deaths in the Total Area.

Other leading sites include lung cancer, female breast cancer, and colorectal cancer.

### BENCHMARK

Prostate Cancer ► Higher than both state and national rates. Fails to satisfy the Healthy People 2020 objective.

Lung Cancer ► Lower than both state and national rates. Satisfies the Healthy People 2020 objective.

Female Breast Cancer ► Similar to benchmark reporting.

Colorectal Cancer ► Lower than both state and national rates. Satisfies the Healthy People 2020 objective.

Age-Adjusted Cancer Death Rates by Site  
(2016-2018 Annual Average Deaths per 100,000 Population)

	Total Area	MT	US	HP2020
ALL CANCERS	128.5	146.4	152.5	161.4
Prostate Cancer	30.8	23.0	18.9	21.8
Lung Cancer	22.4	32.6	36.6	45.5
Female Breast Cancer	18.1	17.9	19.9	20.7
Colorectal Cancer	10.8	12.7	13.7	14.5

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



# Cancer Incidence

“Incidence rate” or “case rate” is the number of newly diagnosed cases in a given population in a given year, regardless of outcome. These rates are also age-adjusted. It is usually expressed as cases per 100,000 population per year.

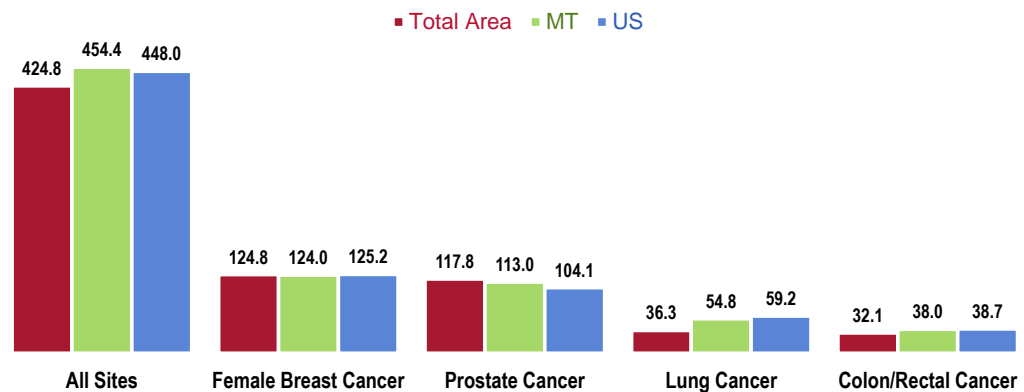
**The highest cancer incidence rates are for female breast cancer and prostate cancer.**

## BENCHMARK

Lung Cancer ► Lower than both state and national rates.

Colorectal Cancer ► Lower than both state and national rates.

**Cancer Incidence Rates by Site**  
(Annual Average Age-Adjusted Incidence per 100,000 Population, 2012-2016)



Sources: • State Cancer Profiles.  
• Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.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

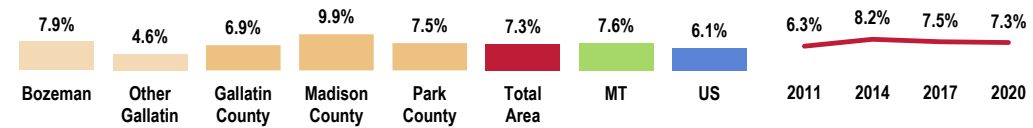
**A total of 7.3% of surveyed Total Area adults report having been diagnosed with skin cancer.**

DISPARITY ► Higher in Bozeman than Other Gallatin County.



## Prevalence of Skin Cancer

Total Area



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.  
 • 2020 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.

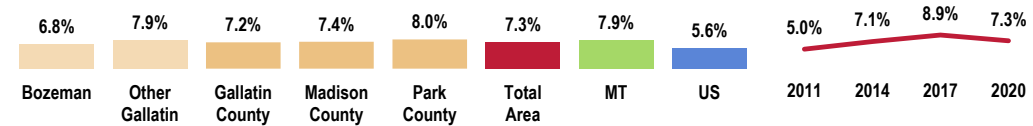
## Other Cancers

**Another 7.3% of survey respondents have been diagnosed with some type of (non-skin) cancer.**

**TREND** ► The prevalence has increased significantly since 2011.

## Prevalence of Cancer (Other Than Skin Cancer)

Total Area



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.  
 • 2020 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.



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

## 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/HPV testing); and colorectal cancer (colonoscopy/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) recommends screening for cervical cancer every 3 years with cervical cytology alone in women aged 21 to 29 years. For women aged 30 to 65 years, the USPSTF recommends screening every 3 years with cervical cytology alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV testing in combination with cytology (cotesting). The USPSTF recommends against screening for cervical cancer in women who have had a hysterectomy with removal of the cervix and do not have a history of a high-grade precancerous lesion (i.e., cervical intraepithelial neoplasia [CIN] grade 2 or 3) or cervical cancer.

### 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, 69.7% have had a mammogram within the past 2 years.**

**BENCHMARK** ► Fails to satisfy the Healthy People 2020 objective.

**DISPARITY** ► Higher in Bozeman than Other Gallatin (not shown).

“Appropriate cervical cancer screening” includes Pap smear testing (cervical cytology) every three years in women age 21 to 29 and Pap smear testing and/or HPV testing every 5 years in women age 30 to 65. Women 21 to 65 with hysterectomy are excluded.

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

**Among Total Area women age 21 to 65, 73.7% have had appropriate cervical cancer screening.**

**BENCHMARK** ► Fails to satisfy the Healthy People 2020 objective.

**TREND** ► Marks a significant decrease from 2011 and 2014 survey findings.

**DISPARITY** ► Highest in Gallatin County and lowest in Park County (not shown).

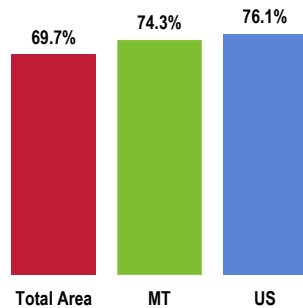
**Among all adults age 50-75, 70.9% have had appropriate colorectal cancer screening.**

**BENCHMARK** ► Above the Montana prevalence but below the US prevalence.

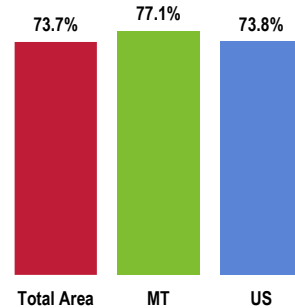
**TREND** ► Marks a statistically significant increase since 2011.

**DISPARITY** ► Highest in Bozeman/Gallatin County (not shown).

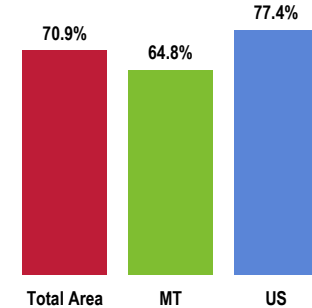
**Breast Cancer Screening**  
(Women Age 50-74)  
Healthy People 2020 = 81.1% or Higher



**Cervical Cancer Screening**  
(Women Age 21-65)  
Healthy People 2020 = 93.0% or Higher



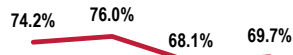
**Colorectal Cancer Screening**  
(All Adults Age 50-75)  
Healthy People 2020 = 70.5% or Higher



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.  
• 2020 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.

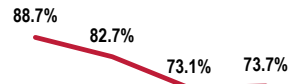


**Breast Cancer Screening**  
(Women Age 50-74)  
Healthy People 2020 = 81.1% or Higher



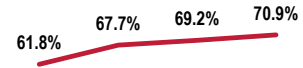
2011 2014 2017 2020

**Cervical Cancer Screening**  
(Women Age 21-65)  
Healthy People 2020 = 93.0% or Higher



2011 2014 2017 2020

**Colorectal Cancer Screening**  
(All Adults Age 50-75)  
Healthy People 2020 = 70.5% or Higher



2011 2014 2017 2020

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

Over half 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)

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



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

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

### Prevalence/Incidence

I don't know if it's just because we are in a small town and know most locals, but it seems like our community has had more than its fair share of cancer patients in the last ten years. Not sure why. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

It is so prevalent. – Community Leader (Gallatin County)





Cancer touches everyone and with our growing community, the health system needs to keep working to increase its ability to respond with appropriate specialty care. The system of cancer care has grown so much, and we are ready to unite the whole cancer system of breast care, GI, urology under the same tent. As our population grows, it will also be important to look bringing some specialty care closer to home like gyn-oncology, pediatric cancer, etc. – Other Health Provider (Gallatin & Madison Counties)

Very common. Effects many families in our area. Some treatments are not located locally. – Physician (Gallatin & Madison Counties)

In the fire service cancer is a major problem. Nationally we need to do a better job of educating our firefighters and the community. – Social Services Provider (Gallatin Gateway, Big Sky & West Yellowstone)

It is the second leading cause of mortality in our communities. Community members are not receiving preventive care or are delaying care for their symptoms. – Public Health Representative (Park County)

## Access to Care/Services

While the care that is provided here for cancer is really good, there are so many cancers that cannot be treated here or they are not recommended to be treated here. – Social Services Provider (Gallatin & Madison Counties)

Pediatric cancer services. Major problem in access here. – Other Health Provider (Gallatin & Madison Counties)

People struggle to get to their treatments because of our location. – Other Health Provider (Gallatin Gateway, Big Sky & West Yellowstone)

People leave the area to be treated. It's a major US problem. – Social Services Provider (Gallatin & Madison Counties)

There is not a resource available to serve folks with this condition. Someone would have to go to Bozeman Health, the Cancer Center, or go to Billings or some other larger community to get help and support for cancer. For a lot of our residents, transportation is a huge barrier. – Other Health Provider (Park County)

## Awareness/Education

There are a lot of patients that are newly diagnosed while hospitalized. There is not a lot of community education/support groups related to cancer prevention or support. Especially at the junior high/high school level. There are more and more young adults that are vaping, and there is the lack of education provided to young adults as to why it is not a healthy alternative to smoking. – Other Health Provider (Gallatin & Madison Counties)

## Culturally Appropriate Services

I speak about the Hispanic community, and I feel like we don't have enough resources in Spanish or where to go if they were diagnosed with cancer. The couple of patients that we had in our community were very lost and didn't know what support group or who to go to. – Community Leader (Gallatin & Madison Counties)

## Contributing Factors

Lots of people in the community are diagnosed with cancer. I believe a lot has to do with the contamination of soil and water from years ago when chemicals were discharged without proper handling. We are paying for mistakes made years ago along with that is all the chemicals in food, poor diets, excess hormones in meat, milk, etc. – Social Services Provider (Park County)

Age of population. – Community Leader (Park County)



# 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 health care system, the burden of respiratory diseases also falls on society; it is paid for with higher health insurance rates, lost productivity, and tax dollars.

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

## Age-Adjusted Respiratory Disease Deaths

### Chronic Lower Respiratory Disease Deaths (CLRD)

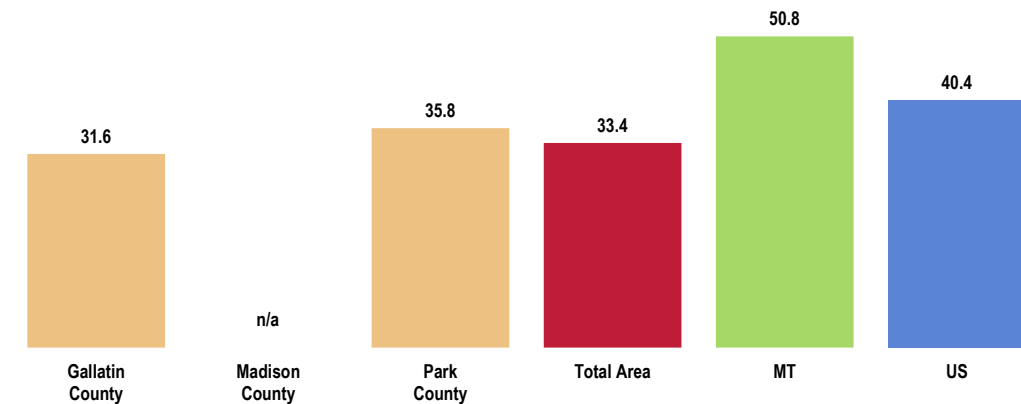
**Between 2016 and 2018, there was an annual average age-adjusted CLRD mortality rate of 33.4 deaths per 100,000 population in the Total Area.**

**BENCHMARK** ► Below the state and US rates.

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

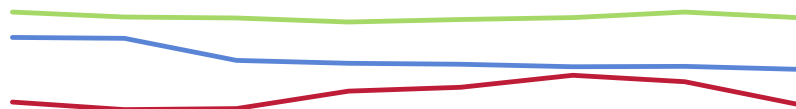


## CLRD: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.  
Notes: • CLRD is chronic lower respiratory disease.

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



	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
Total Area	33.8	32.3	32.5	36.0	36.8	39.2	37.9	33.4
MT	51.9	50.9	50.7	49.9	50.4	50.8	51.9	50.8
US	46.8	46.6	42.2	41.6	41.4	40.9	41.0	40.4

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.  
Notes: • CLRD is chronic lower respiratory disease.



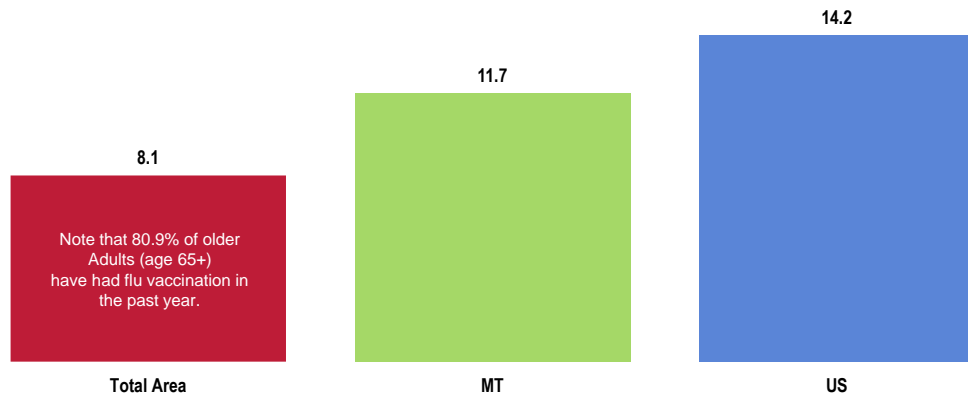
## Pneumonia/Influenza Deaths

Between 2016 and 2018, the Total Area reported an annual average age-adjusted pneumonia influenza mortality rate of 8.1 deaths per 100,000 population.

**BENCHMARK** ► Lower than the state and national rates.

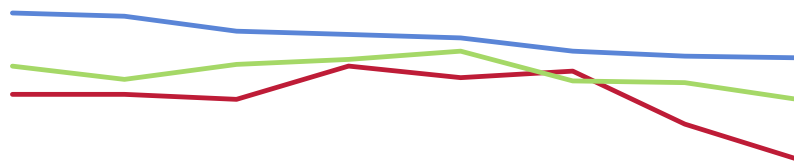
**TREND** ► Marks a decreasing trend in recent years.

**Pneumonia/Influenza: Age-Adjusted Mortality**  
(2016-2018 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 May 2020.

**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 May 2020.



# Prevalence of Respiratory Disease

## Asthma

### Adults

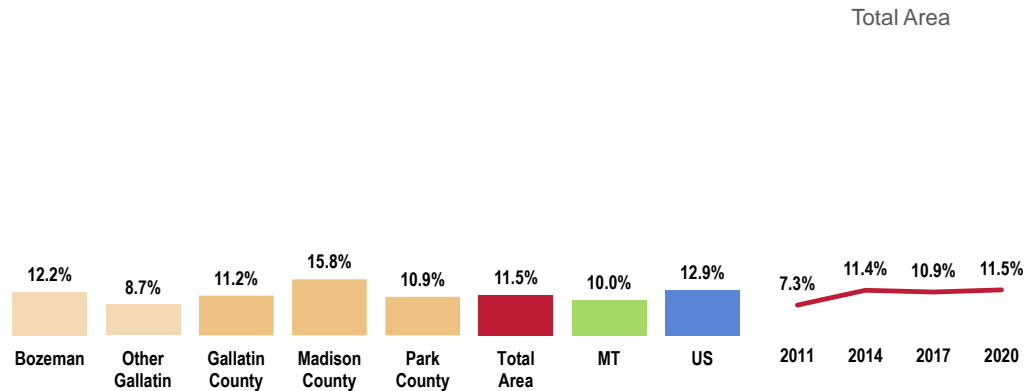
**A total of 11.5% of Total Area adults currently suffer from asthma.**

**TREND** ► The prevalence is significantly higher than 2011 findings (similar to the other survey administrations).

**DISPARITY** ► Asthma prevalence is higher among women, young adults, higher-income residents, and communities of color in the Total Area.

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

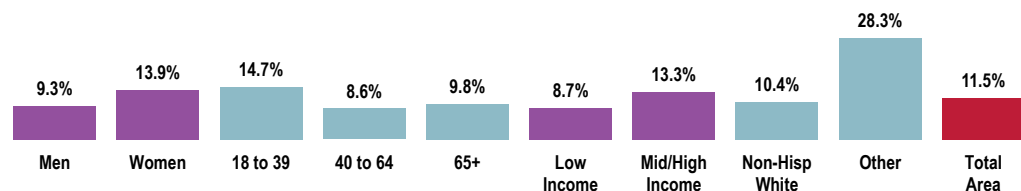
### Prevalence of Asthma



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.  
 • 2020 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 (Total Area, 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.



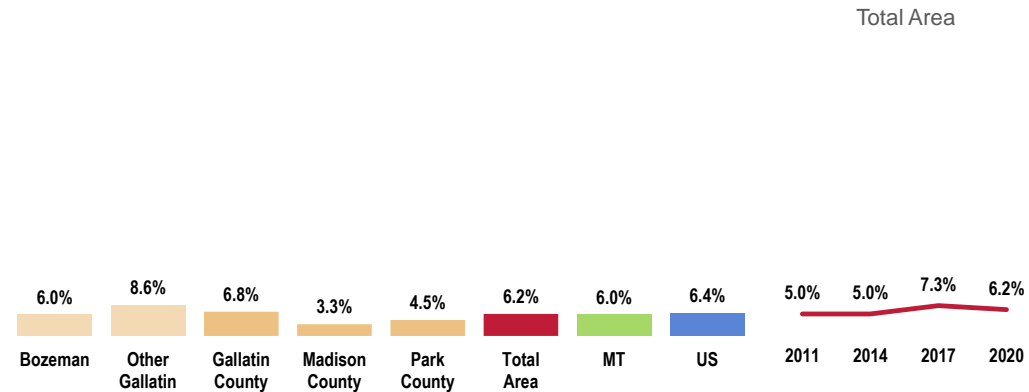
## Chronic Obstructive Pulmonary Disease (COPD)

A total of 6.2% of Total Area adults suffer from chronic obstructive pulmonary disease (COPD, including emphysema and bronchitis).

DISPARITY ► Unfavorably high in Gallatin County.

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

### 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.  
 • 2020 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.

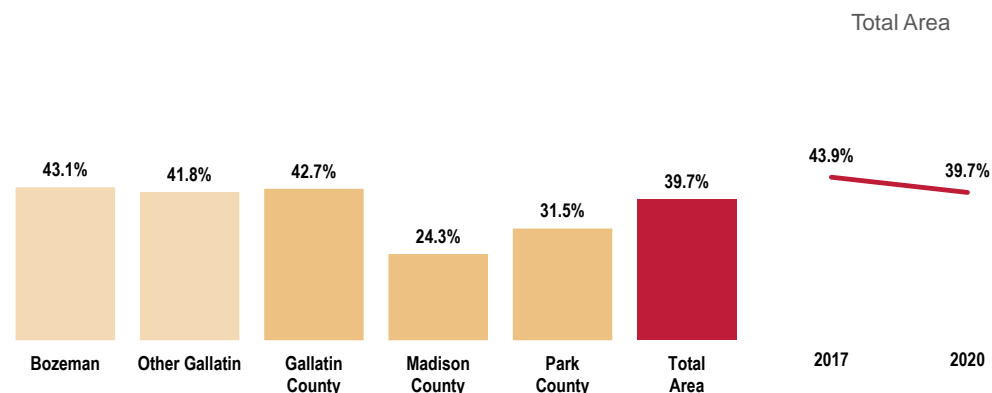
## Household Testing for Radon

A total of 39.7% of Total Area adults say that their household air has been tested for the presence of radon gas.

DISPARITY ► Much higher in Gallatin County. By demographics, lower among young adults, seniors, and especially low-income residents.

RELATED ISSUE  
 See also *Lung Cancer* in the **Cancer** section of this report.

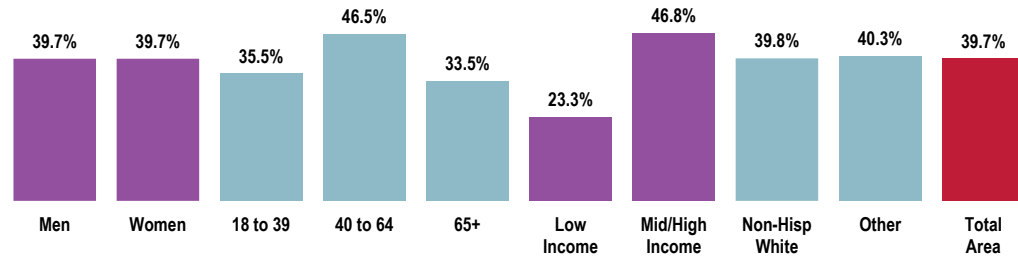
### Household Air Ever Tested for Radon Gas



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 313]  
 Notes: • Asked of all respondents.



## Household Air Ever Tested for Radon Gas (Total Area, 2020)

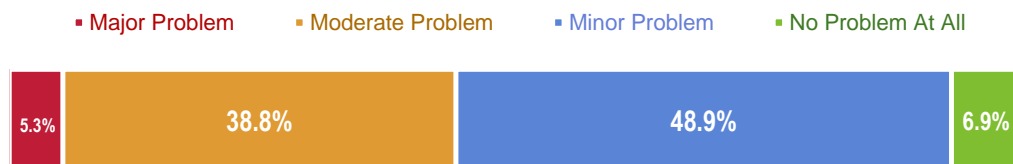


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 313]  
 Notes: • Asked of all respondents.  
 • Includes those who have ever been diagnosed with asthma and report that they still have asthma.

## Key Informant Input: Respiratory Disease

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

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



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

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

#### Awareness/Education

A lot of these individuals are former smokers who have quit. Some still smoke. The majority of these patients require home oxygen. It goes back to educating young people to the dangers of not taking care of their respiratory health. – Other Health Provider (Gallatin & Madison Counties)

#### Contributing Factors

We have patients who have asthma and don’t know where to go. The language barrier becomes a problem. – Community Leader (Gallatin & Madison Counties)



Wildfire smoke and allergies seasons. – Public Health Representative (Park County)  
Smoking, air quality and lifestyle choices. – Social Services Provider (Park County)

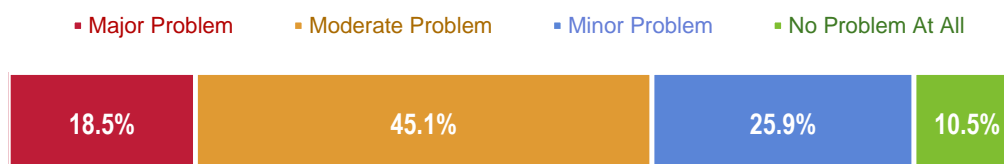
## Prevalence/Incidence

Personal acquaintances. – Social Services Provider (Gallatin & Madison Counties)  
A lot of Asthma, COPD, respiratory illness in the community. A lot of community acquired pneumonia. – Social Services Provider (Park County)

## Key Informant Input: Coronavirus Disease/COVID-19

The greatest share of key informants taking part in an online survey characterized *Coronavirus Disease/COVID-19* as a “moderate problem” in the community (not asked of Park County respondents).

### Perceptions of Coronavirus Disease/COVID-19 as a Problem in the Community (Key Informants, 2020)



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
Notes: • Park County key informants are not included in this distribution.

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

### Impact on Quality of Life

People are having to shelter in place for months, and maybe years on end, because we cannot identify who is a carrier and who is not. Vulnerable populations could face high rates of death from this illness. – Social Services Provider (Gallatin & Madison Counties)

Everyone is at risk, and large proportions of our population are at elevated risk due to age, high blood pressure, diabetes, asthma, working in a job with significant public exposure, etc. There are tremendous public health, economic and educational impacts on our community. I am especially concerned about what (1) moving into Phase 2 and the tourist season (with lifting of the 14 day quarantine), as well as (2) the return of thousands of students from all over the country (and internationally?) to MSU in August will mean for our County infection and hospitalization rates. Will we continue to screen arrivals at the airport? Will MSU screen students before they move into their dorms/housing/off campus rental units? – Public Health Representative (Gallatin County)

The economic impacts and the sense of isolation affected my community mental well-being and increased domestic violence and alcohol use. – Other Health Provider (Gallatin & Madison Counties)

Fear of Covid-19 is a major problem. Loss of income, increased stress on families, increased risk of child abuse and neglect and domestic violence due to shelter in place restrictions and remote learning. – Community Leader (Gallatin County)

Like many communities in the United States, I have concerns about the predicted dire consequences if the nation reopens its economy too soon and that we still lack critical testing capacity and the ability to trace the contacts of those infected. – Social Services Provider (Gallatin County)

Mortality and impact on economy. – Physician (Gallatin & Madison Counties)

Covid-19 has no vaccine or successful treatment. With the non-symptom contagion, the county could have a major outbreak at any time. – Community Leader (Gallatin & Madison Counties)





## Tourism

Bozeman, Big Sky, and West Yellowstone are all gateway communities for tourism and world travel along with Montana State University having 49% of its student population classified as out-of-state (approximately 8,000 students). While we are riding a low wave, we anticipate a resurgence in the virus as travel restrictions are eased and stay at home orders are lifted. The hospital itself is well positioned to deal with a low impact event, but if we experience a large spike, then I believe our community is not as prepared as we may think. – Community Leader (Gallatin County)

Due to our tourism industry I believe our community is at greater risk. – Social Services Provider (Gallatin & Madison Counties)

Because Gallatin is a tourist destination, has a large amount of second/seasonal homes, and has a lot of travel, we stand to be most impacted with new surges of Covid. We need to continue to scale testing higher than current levels. I believe Bozeman Deaconess is much better prepared, though I believe there is a major problem with preparation, testing and potential treatment in West Yellowstone. – Community Leader (Gallatin County)

This is a resort community that is currently closed because of the Covid-19. We normally have many visitors from all over which puts us at risk for an outbreak. – Physician (Gallatin Gateway, Big Sky & West Yellowstone)

## Complacency

There is a false sense of security that since our number of active cases is very low, that we are at low risk for continued spread. However, with phase 2 starting June 1, we will see more and more tourists who could potentially infected with COVID. There is a valid concern for a spike to occur. There is a great concern for the assisted living facilities in the community and the lack of ability they have to care for a COVID + resident. Especially with the lack of proper PPE. Some of the residential communities will be heavily dependent on the hospital to care any of their positive residents. – Other Health Provider (Gallatin & Madison Counties)

I see more and more people without masks in public buildings, and numbers are rising. – Other Health Provider (Gallatin & Madison Counties)

Complacency about Covid-19 and the rising number of cases in Gallatin County. – Other Health Provider (Gallatin & Madison Counties)

## Delaying of Regular Medical Care

Lack of access to “regular” medical care during COVID-19. During the shutdown, I heard a few examples where medical care was needed right away but the service was not available or patient was too afraid to reach out for care. In one instance an older woman stayed home with a broken hip for 4 days, a friend scheduled for a double mastectomy due to cancer was not allowed to have her procedure until June which is 3 months past her original surgery date. A friend with lupus had her annual exam scheduled for the end of April but her appointment was canceled due to COVID. She was able to get her medication refilled but never received a call back from her practitioner to answer her questions. All of these situations took a physical and mental toll on the patient. If there is a community shutdown again, we need to figure out how to meet the needs of non-COVID patients during that time frame. – Community Leader (Gallatin County)

Continues to affect access to care for other medical, mental health services. – Physician (Gallatin & Madison Counties)

We are seeing people delay necessary health care and preventative health screenings. This will ultimately culminate in later diagnosis and delay in treatment. In addition, the trauma of the pandemic will affect people's behavioral health for years. Our behavioral health services are already inadequate. – Other Health Provider (Gallatin & Madison Counties)

## Contributing Factors

Gaining testing, PPE's, surge care is essential to allowing businesses to be open and people to move around the community. This will just take time. – Other Health Provider (Gallatin & Madison Counties)

Having a new virus around, being prepared, testing. – Community Leader (Gallatin & Madison Counties)

1. We lack the social infrastructure to support the recommendations from the health department that will increase exposure and numbers of positive cases. 2. As people are required to go back to work, there is no child care--leaving children in physically and mentally unsafe environments or at home alone. This puts children's physical and mental health at risk for short term and long-term issues. COVID-19, like other community disasters, has greatly increased family violence rates and shown decreased child abuse and neglect reports. This increase is expected to last many months or years. 3. Our state does not have a misinformation campaign for vaccines. If a COVID vaccine is released I don't know the response acceptance rate would be from our community. – Social Services Provider (Gallatin County)

## Prevalence/Incidence

Covid 19 is a major problem for our entire country with the impact is having on society including economy. – Physician (Gallatin & Madison Counties)

It's highly contractible and potentially fatal. – Social Services Provider (Gallatin & Madison Counties)



Gallatin County leads the state of Montana in the number of cases per county and per resident. It has been dealt with appropriately, but the reality is that it has had profound effect on the physical, mental and economic well-being of the county residents. We are responding appropriately, but none-the-less has made a profound impact in our community of Bozeman. – Social Services Provider (Gallatin County)

### Access to COVID-19 Testing

We do not have adequate testing, it has a major impact on our community. – Social Services Provider (Gallatin County)

We still don't have as thorough of testing as I would like to feel completely safe until we get a vaccine. – Physician (Gallatin & Madison Counties)

### Cultural/Personal Beliefs

Bozeman is one of the larger communities in Montana and considered a gateway to Yellowstone. There are a lot of people with wide ranges of backgrounds in terms of belief systems, understandings of science, different trust levels in government, and different willingness to comply with orders and posted rulings. This is a major problem because in order for the coronavirus disease/COVID-19 to be eliminated from the community, people will need to continue to comply with social distancing recommendations for a lot longer than they want. The importance of not jumping back into normal life (pre-COVID-19) will help eliminate or at least flatten the occurrences of COVID-19 in the community. However, I already see people gathering in unsafe ways, and Phase 2 has not even begun. – Community Leader (Gallatin & Madison Counties)

### Government Response

Socially, the responses to the virus by our government and private business have motivated deep and long lasting divisions in our county. This is why I rate it as 'major problem'. The actual medical impact of the disease on the population as a whole has not resulted in a 'major problem,' but this is arguably because of the social interventions that were implemented by local government, schools, and businesses to prevent an unmanageable outbreak. – Community Leader (Gallatin County)

### Awareness/Education

Lack of consistent information. We get too many completely different information that we have to disseminate. – Community Leader (Gallatin & Madison Counties)



# 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.

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).

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 2016 and 2018, there was an annual average age-adjusted unintentional injury mortality rate of 36.7 deaths per 100,000 population in the Total Area.**

**BENCHMARK** ► Well below the Montana and US mortality rates.

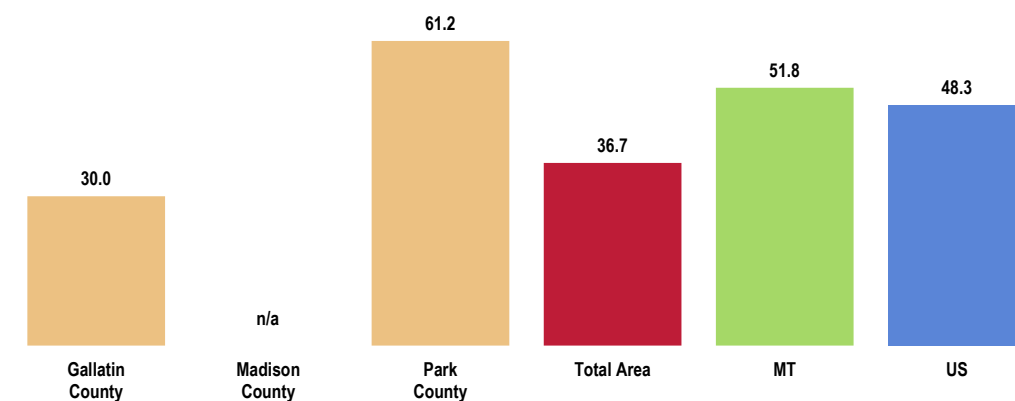
**TREND** ► Decreasing over time, in contrast to the upward US trend.

**DISPARITY** ► Considerably higher in Park County.



## Unintentional Injuries: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population)

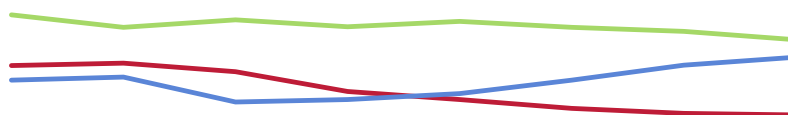
Healthy People 2020 = 36.4 or Lower



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

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

Healthy People 2020 = 36.4 or Lower



	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
Total Area	46.6	47.1	45.4	41.4	39.8	38.0	37.0	36.7
MT	56.8	54.3	55.8	54.4	55.5	54.3	53.5	51.8
US	43.7	44.3	39.3	39.8	41.0	43.7	46.7	48.3

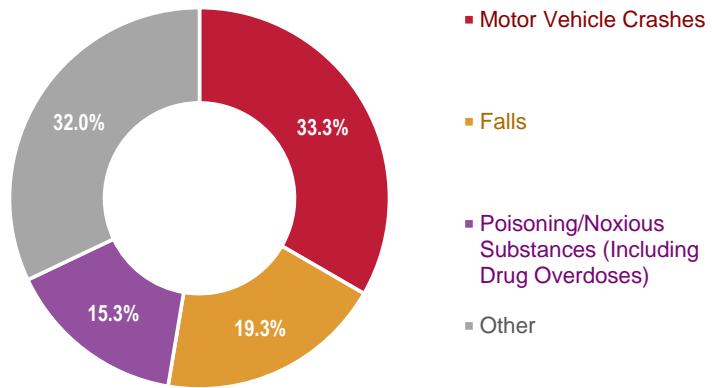
Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>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



## Leading Causes of Unintentional Injury Deaths

Motor vehicle crashes, falls, and poisoning (including unintentional drug overdose) accounted for most unintentional injury deaths in the Total Area between 2016 and 2018.

Leading Causes of Unintentional Injury Deaths  
(Total Area, 2016-2018)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.

## Motor Vehicle Safety

### Seat Belt Usage

**Most survey respondents (83.9%) report “always” wearing a seat belt when driving or riding in a vehicle.**

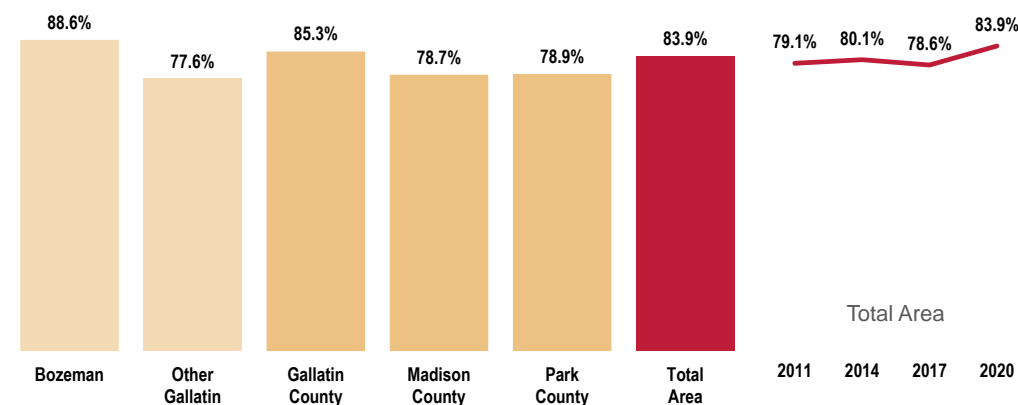
**TREND** ► Increasing from previous survey findings.

**DISPARITY** ► Lower outside of Bozeman. By demographic characteristics, lower among men, older residents, and especially adults in low-income households.



## “Always” Wear a Seat Belt When Driving or Riding in a Vehicle

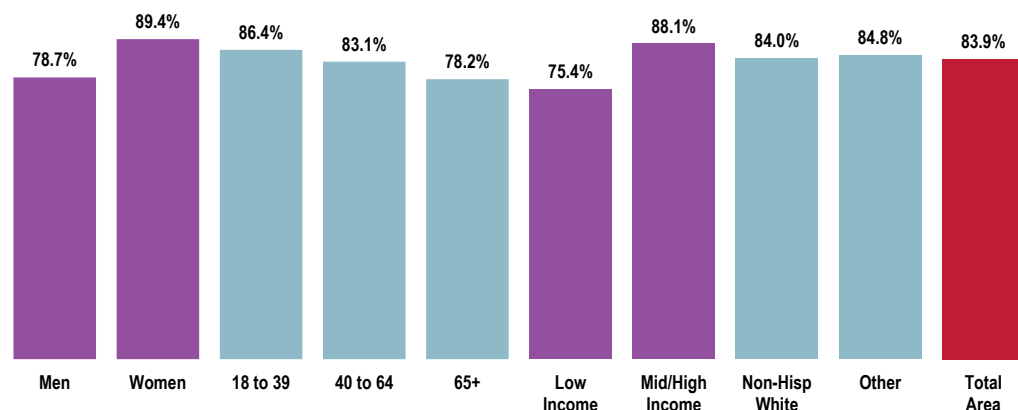
Healthy People 2020 = 92.0% or Higher



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 315]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-15]  
 Notes: • Asked of all respondents.

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

Healthy People 2020 = 92.0% or Higher



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 315]  
 Notes: • Asked of all respondents.

## Distracted Driving

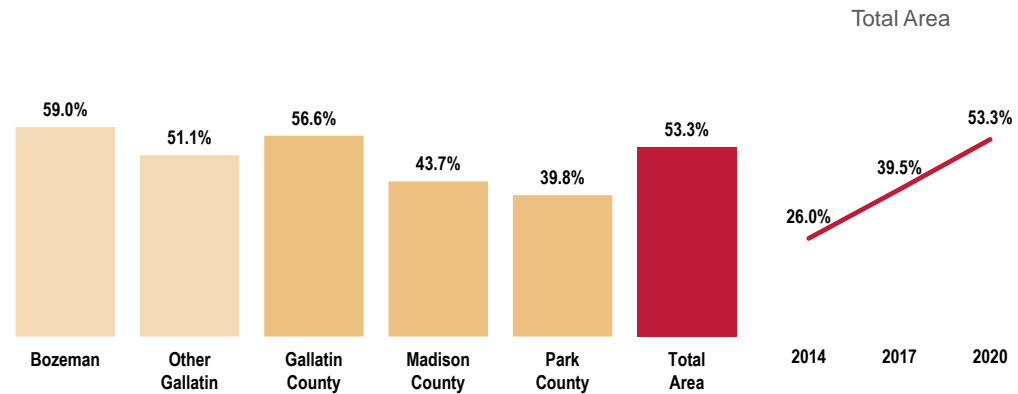
**Over half of Total Area adults (53.3%) report that in the past month, they read or sent a text message or email while driving (and the car was in motion); this includes 41.0% who did so three or more times.**

**TREND** ► The prevalence has doubled since 2014.

**DISPARITY** ► Much higher in Gallatin County. Correlates with age and is higher among higher-income adults and non-Hispanic Whites.

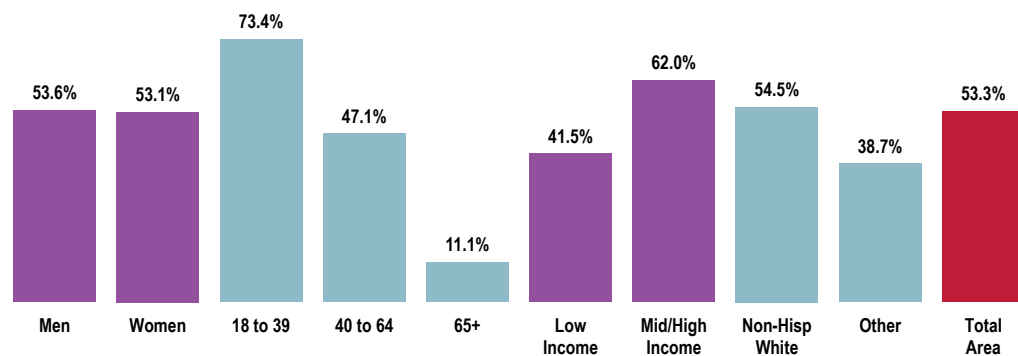


## Read/Sent Text or Email While Driving in the Past Month



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 314]  
 Notes: • Asked of all respondents.

## Read/Sent Text or Email While Driving in the Past Month (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 314]  
 Notes: • Asked of all respondents.



## Falls

### ABOUT FALLS

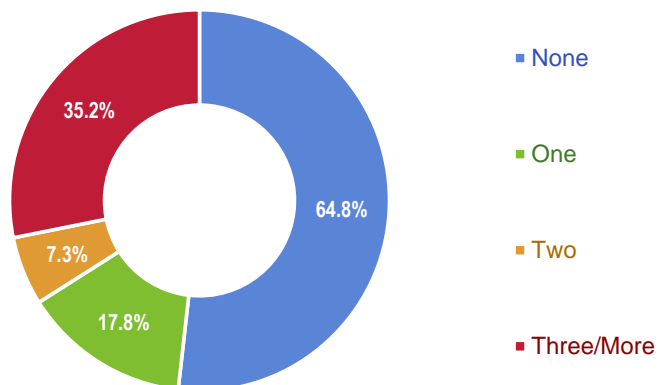
Falls are the leading cause of fatal and nonfatal injuries for persons aged  $\geq 65$  years .... Even when those injuries are minor, they can seriously affect older adults' quality of life by inducing a fear of falling, which can lead to self-imposed activity restrictions, social isolation, and depression.

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 Total Area 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; Total Area, 2020)



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

**However, 35.2% have experienced a fall at least once in the past year.**

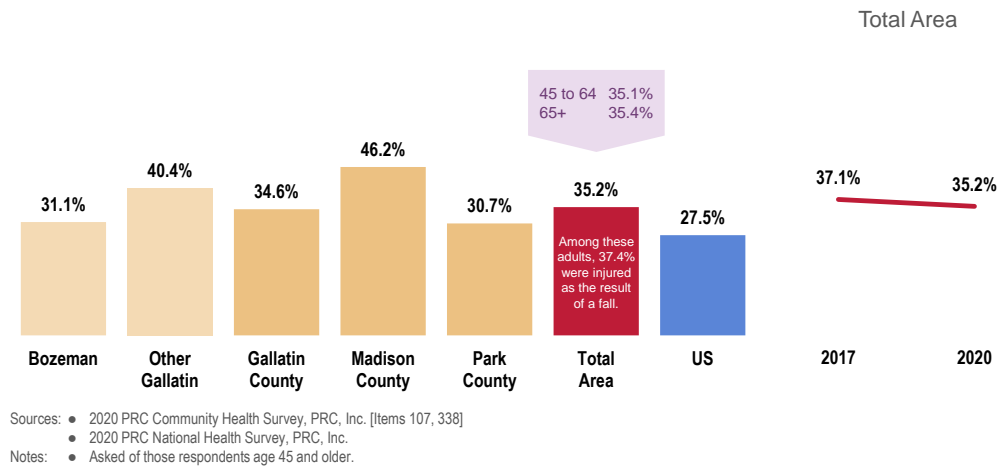
**BENCHMARK** ► Above the US percentage.

**DISPARITY** ► Higher in Other Gallatin and in Madison County.





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

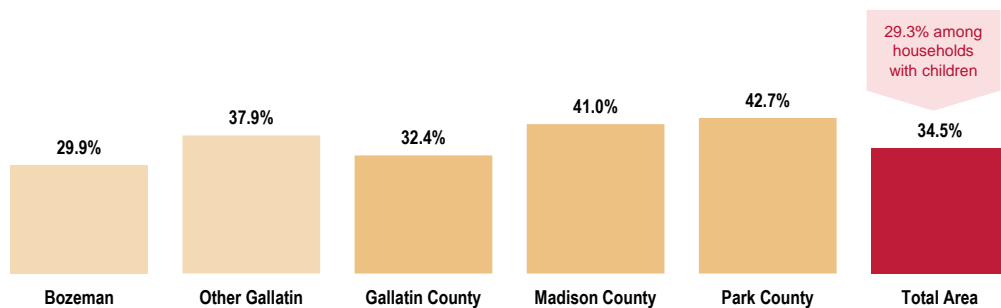


## Firearm Storage

Overall, 34.5% of survey respondents have an unlocked firearm kept in or around their home.

DISPARITY ► The prevalence is higher outside Bozeman.

### Have an Unlocked Firearm Kept in or Around the Home



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 316]  
Notes: • Asked of all respondents.



# Intentional Injury (Violence)

## Violent Crime

### Violent Crime Rates

**Between 2015 and 2017, the area reported 238.8 violent crimes per 100,000 population.**

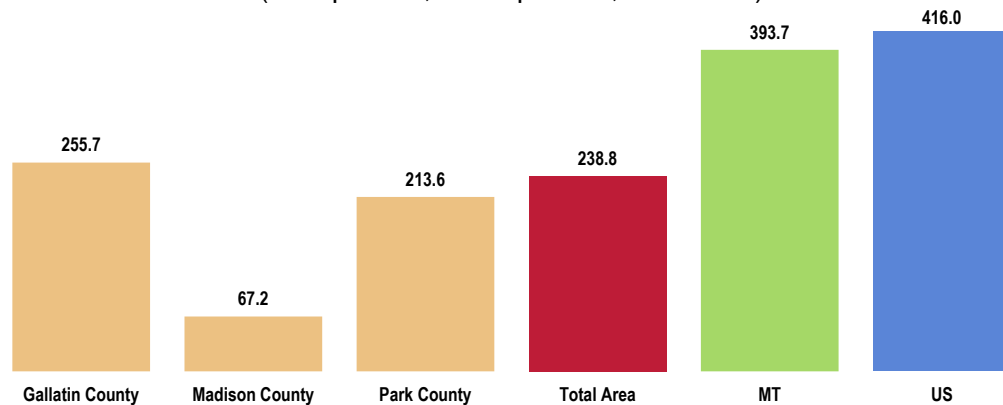
**BENCHMARK** ► Well below the state and national crime rates.

**DISPARITY** ► Ranging considerably by county (much lower in Madison County).

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, 2015-2017)



Sources: 

- Federal Bureau of Investigation, FBI Uniform Crime Reports.
- Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.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 13.1% of Total Area adults acknowledge that they have ever been hit, slapped, pushed, kicked, or otherwise hurt by an intimate partner.**

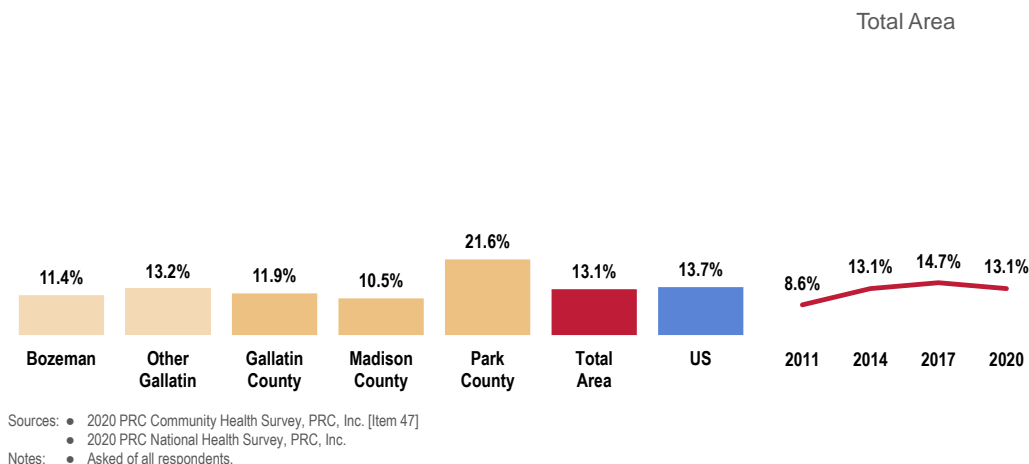
**TREND** ► The prevalence has increased significantly from 2011 survey findings.

**DISPARITY** ► Considerably higher among Park County residents.

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."



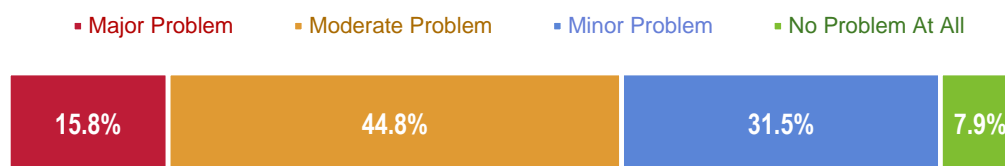
## Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner



## Key Informant Input: Injury & Violence

A plurality of key informants taking part in an online survey characterized *Injury & Violence* as a “moderate problem” in the community.

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



Sources: • PRC Online Key Informant Survey, PRC, Inc.

Notes: • Asked of all respondents.

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

### Domestic/Family Violence

Domestic violence and abuse will always be a major problem until we can create a culture that values consent, healthy relationships, and honest, nonjudgmental communications. – Social Services Provider (Gallatin & Madison Counties)

Working in the field of domestic violence intervention and prevention, I see firsthand every day how severe the intimate partner violence is in our community. Additionally, the Bozeman area has had a very high number of domestic violence-related fatalities in the past four years. – Social Services Provider (Gallatin & Madison Counties)

I believe that our domestic violence shelter is usually full. Montana has higher rates of driving after drinking alcohol. – Public Health Representative (Gallatin County)



Domestic violence is a huge issue in Montana (and everywhere, let's be honest), and it is exponentially worse right now during the pandemic due to the isolation/confinement of social distancing. This is an issue that predominately affects people who identify as women and thus, I would argue, does not get as much funding and attention as it deserves. Add to that the shame of experiencing domestic violence, and you've got a silent epidemic on your hands. – Community Leader (Gallatin & Madison Counties)

Domestic and interpersonal violence—they are all too prevalent in this community and often there are not enough protections for those being victimized. We have seen so many incidents of interpersonal and sexual violence that negatively impact individuals and our community. – Community Leader (Gallatin & Madison Counties)

Domestic abuse. – Social Services Provider (Gallatin Gateway, Big Sky & West Yellowstone)

Interpersonal violence, domestic abuse, human trafficking. These are hidden health issues but patient encounters and statistics from relevant victims' services agencies indicate that this is a major problem in the area. – Other Health Provider (Gallatin & Madison Counties)

Domestic abuse. High incidence of spousal and child abuse in the region. – Community Leader (Gallatin & Madison Counties)

We continue to see law enforcement responding to domestic violence incidents. – Social Services Provider (Gallatin County)

From experience I know violence and especially intimate partner violence is a problem. I only know of ASPEN as a resource. – Social Services Provider (Park County)

Intimate partner violence and access to support services is a very real issue in our community. There is also a significant amount of child neglect and abuse in our community and inadequate local resources to manage the problem and support our families. We also see violence and injury related directly to substance use and abuse. – Physician (Park County)

## Prevalence/Incidence

Neighbors, community members, and patients at the clinic where I work share about abuse and violence in their families and relationships. There are also many injuries that occur due to lack of protective gear like helmets, seat belts, and other safety measures. – Other Health Provider (Gallatin & Madison Counties)

There are more and more people who are victims of injury or violence who require coping skills after the major event. Montana has a high ethanol rate that contributes to the injury or violence to either themselves or others. This could also be due to seasonal changes in moods, lack of employment, or financial struggles. This area has a high cost of living, and a person cannot live on entry level wages, which creates stress and that person may not have good coping skills. – Other Health Provider (Gallatin & Madison Counties)

Athletic area, lots of injury. – Physician (Gallatin & Madison Counties)

I am probably biased because I work with victims of violence and have a high case load. – Social Services Provider (Gallatin County)

Staggering rates of self-directed violence and interpersonal violence. – Other Health Provider (Gallatin County)

Injury, our recreation economy comes with real risk. Violence, there is always too much. – Community Leader (Park County)

Number of accidental deaths in the community. – Social Services Provider (Park County)

## Alcohol/Drug Use

We have issues with drugs and alcohol and a transient community. We also had a 12-year-old in the community who was murdered by his family members. – Other Health Provider (Gallatin Gateway, Big Sky & West Yellowstone)

Due to the high rates of alcoholism in Montana and very limited services around alcohol, I believe it bleeds into our injury and violence issues. I work with homeless individuals, and violence/injury is rampant in that community. – Social Services Provider (Gallatin & Madison Counties)

Drinking and driving as well as domestic violence and bullying in schools are problems in this community. – Social Services Provider (Park County)

Drinking and driving, other car accidents, suicide, addiction, domestic abuse, child abuse, too many guns, mental illness and frontier mentality. – Social Services Provider (Park County)

Goes along with substance use and abuse. Results are driving related injuries, domestic violence and suicide. – Community Leader (Park County)

## Contributing Factors

Low seat belt adherence, lots of dangerous outdoor activity, binge drinking. – Public Health Representative (Gallatin County)



I include vehicular casualties and suicide in my evaluation, along with the more obvious violence such as domestic violence. I know suicide also deserves to be included under mental health. Montana culture has foundational components (individualism, isolation, resistance to asking for help, prevalence of gun ownership, binge drinking as a coping mechanism, stigma of depression) that fuel violence against those in the family and the individual themselves (suicide). We have high drinking rates and long distances to travel to get places. This fuels our high vehicular mortality and injury rates. – Community Leader (Gallatin County)

Mental health, social determinants of health, access for firearms, substance abuse especially alcohol. – Physician (Park County)

We have a lot of people who have multiple semi-automatic weapons and military-style weapons. This is a huge risk factor for violence in our community. – Other Health Provider (Park County)

## Suicide

I was referencing the high rate of suicide in our county when answering this question. It was possibly a mistaken answer and should have been addressed in the “anxiety” question. – Other Health Provider (Park County)

Our incidence rate for suicide ideation and completion are at an alarming rate in our community. – Community Leader (Park County)

## Access to Care/Services

No urgent care to help with injury. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

There are few services for kids in home situations where violence is a factor. Our DPHHS services have been cut to the bare minimum and even kids in dangerous situations seem to get few services because their parents are in charge of the opportunity to do so. – Other Health Provider (Park County)



# 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 health care 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))

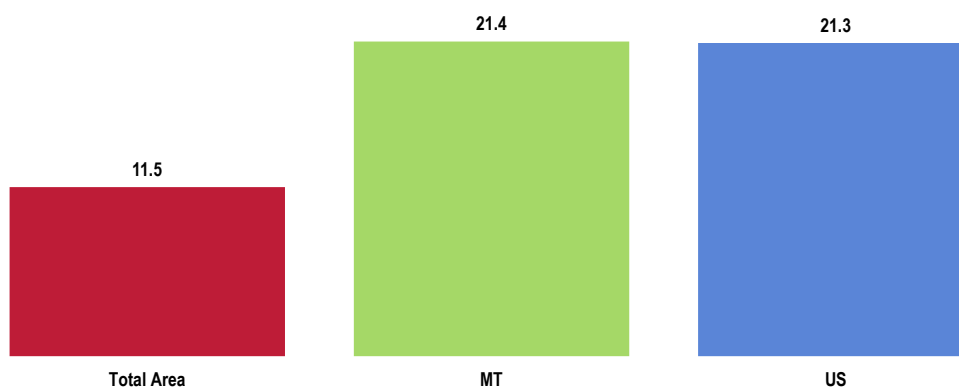
## Age-Adjusted Diabetes Deaths

**Between 2016 and 2018, there was an annual average age-adjusted diabetes mortality rate of 11.5 deaths per 100,000 population in the Total Area.**

**BENCHMARK** ► Well below the Montana and US mortality rates.



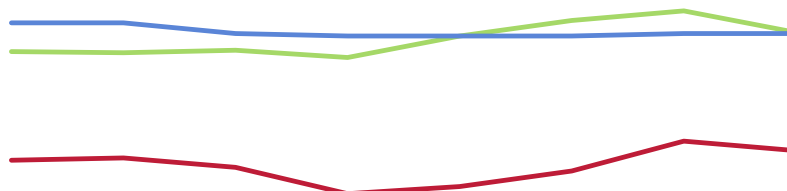
## Diabetes: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population) Healthy People 2020 = 20.5 or Lower (Adjusted)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective D-3]

Notes: • 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)



	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
Total Area	10.7	10.9	10.1	7.9	8.5	9.8	12.3	11.5
MT	19.8	19.7	19.9	19.3	21.1	22.4	23.2	21.4
US	22.2	22.2	21.3	21.1	21.1	21.1	21.3	21.3

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective D-3]

Notes: • The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.



# Prevalence of Diabetes

**A total of 5.5% of Total Area adults report having been diagnosed with diabetes.**

**BENCHMARK** ► Well below the state and especially the US prevalence.

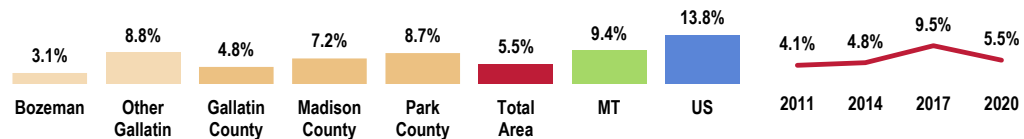
**TREND** ► Similar to 2011 survey findings, despite a significant decrease since 2017.

**DISPARITY** ► The prevalence is lowest in Bozeman. Note the correlation with age among Total Area respondents.

## Prevalence of Diabetes

Another 5.7% of adults have been diagnosed with "pre-diabetes" or "borderline" diabetes.

Total Area

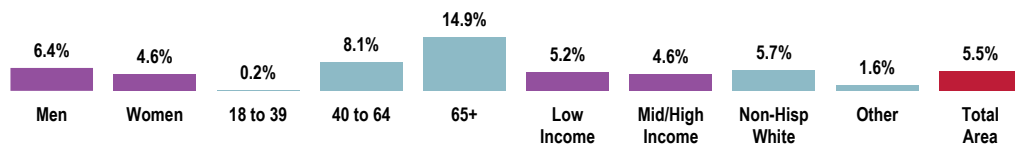


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 140]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Montana data.  
 • 2020 PRC National Health Survey,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

Notes: • Asked of all respondents.

## Prevalence of Diabetes (Total Area, 2020)

Note that among adults who have not been diagnosed with diabetes, 42.3% report having had their blood sugar level tested within the past three years.



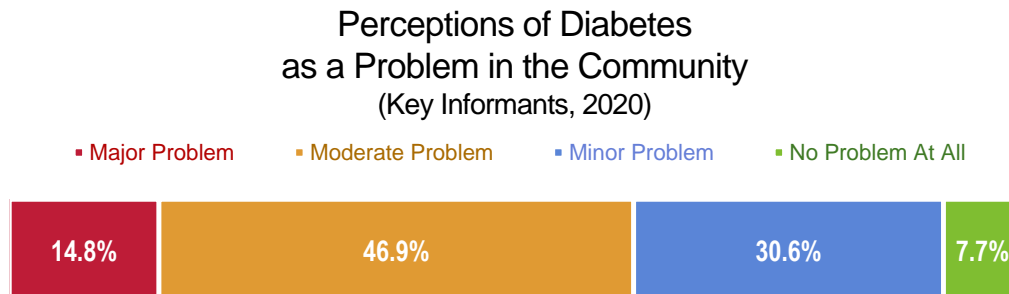
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 37, 140]  
 Notes: • Asked of all respondents.  
 • Excludes gestational diabetes (occurring only during pregnancy).





## Key Informant Input: Diabetes

A high percentage of key informants taking part in an online survey characterized *Diabetes* as a “moderate problem” in the community.



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

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

### Awareness/Education

Implementing nutrition and exercise advice. Poor understanding of exactly how to modify their diet to improve blood glucose levels and reduce weight. – Physician (Gallatin & Madison Counties)  
We are seeing undocumented patients or patients who speak no English. We need some type of support group that can speak Spanish. – Community Leader (Gallatin & Madison Counties)  
Access to diabetes education and nutrition education specifically, specialty diabetes care, cost of medications. – Physician (Gallatin & Madison Counties)  
Nutritional education and support once diabetes is diagnosed. Pre-diabetic conditions such as low blood sugar are seldom discussed. – Social Services Provider (Park County)  
Lack of education of the disease. – Public Health Representative (Park County)  
Awareness of disease prevalence and access to care that is supportive of the struggles of diabetes and other comorbid conditions. – Community Leader (Park County)

### Contributing Factors

Support around nutrition and exercise, more direct discussion about the dangers of childhood obesity. The importance of physical activity and diet. – Other Health Provider (Gallatin & Madison Counties)  
Underlying issues surrounding Type-2 diabetes: lack of proper nutrition and obesity. – Social Services Provider (Gallatin County)  
Poor community opportunities for fitness, weight loss, and active living. – Physician (Park County)  
Good nutrition, behavior management, and cost to treat. – Social Services Provider (Park County)  
Nutrition support, lifestyle support and alternative approaches. – Physician (Park County)  
Access to medications. Access to adequate nutritional counseling. Access to adequate food supplies due to lack of money. – Other Health Provider (Park County)

### Access to Healthy Food

Access to affordable healthy food options. No major social support groups, especially for kids. Lack of fun, physical activities that promote exercise. – Community Leader (Gallatin & Madison Counties)  
Cost of healthy food and medications. – Social Services Provider (Gallatin & Madison Counties)  
Difficulty understanding and obtaining healthy food choices. – Physician (Park County)  
Affordability of healthy food. Friend groups to recreate/exercise with. – Community Leader (Park County)

### Access to Care/Services

Access to comprehensive care team in a timely fashion. – Physician (Gallatin & Madison Counties)



Access to primary care provider for screenings. – Physician (Gallatin & Madison Counties)  
Medication affordability and health insurance. – Social Services Provider (Park County)  
The cost of prescription medication. – Social Services Provider (Park County)  
Cost of insulin. – Community Leader (Park County)  
No support community that would include exercise, diet and medication resources and activities within their community addressing their challenges. – Public Health Representative (Park County)



# 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.

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.

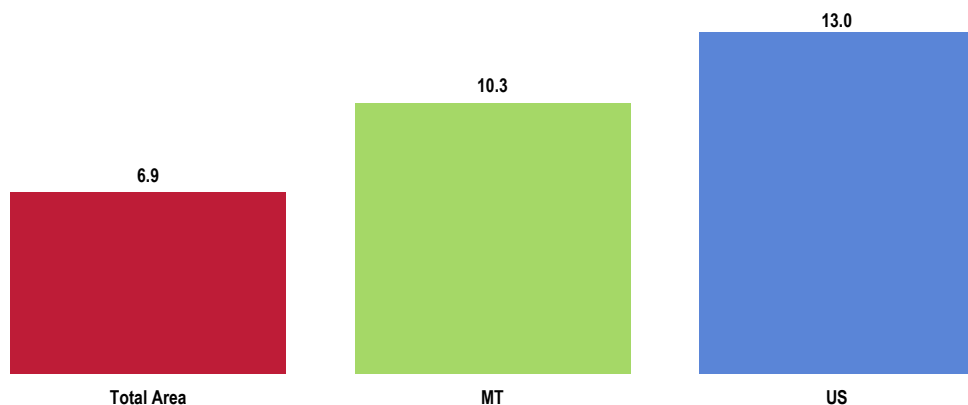
— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Age-Adjusted Kidney Disease Deaths

**Between 2016 and 2018, there was an annual average age-adjusted kidney disease mortality rate of 6.9 deaths per 100,000 population in the Total Area.**

**BENCHMARK** ► Well below the state and national mortality rates.

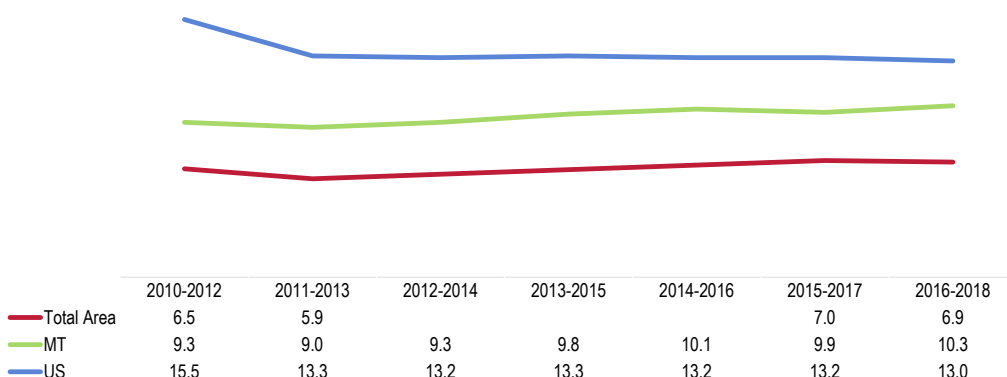
**Kidney Disease: Age-Adjusted Mortality**  
(2016-2018 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.



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

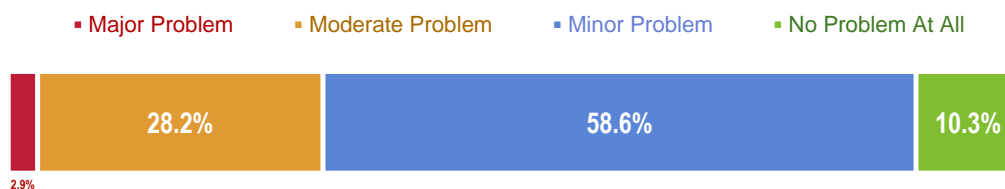


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.

## Key Informant Input: Kidney Disease

Key informants taking part in an online survey generally characterized *Kidney Disease* as 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.

The key informant rating this issue as a “major problem” gave the following reason:

#### Access to Care/Services

Do not have dialysis in our local community. Becomes a major problem to get chronic kidney or diabetes patients over the hill for treatment. – Social Services Provider (Park County)

There are no dialysis resources available to serve folks with these conditions in Livingston. Someone would have to go to Bozeman or some other larger community to get help with their treatment by a doctor and to receive dialysis. A lot of our residents do not leave Livingston and/or do not have dependable transportation, plus they would need someone to take them because I believe driving after being dialyzed is not always a safe choice. – Other Health Provider (Park County)

#### Prevalence/Incidence

It is an issue nationally. Bozeman is no different. – Community Leader (Gallatin & Madison Counties)

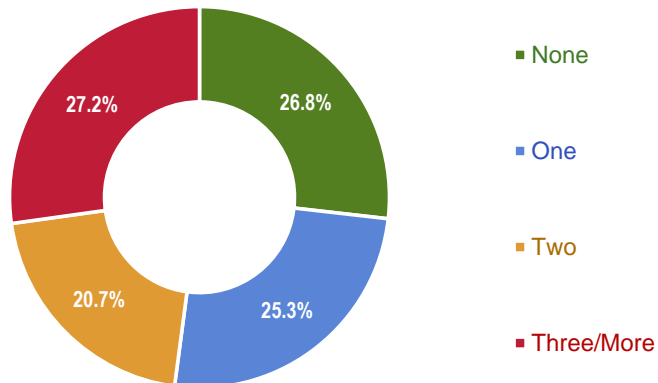


# POTENTIALLY DISABLING CONDITIONS

## Multiple Chronic Conditions

Among Total Area survey respondents, most report currently having at least one chronic health condition.

Number of Current Chronic Conditions  
(Total Area, 2020)



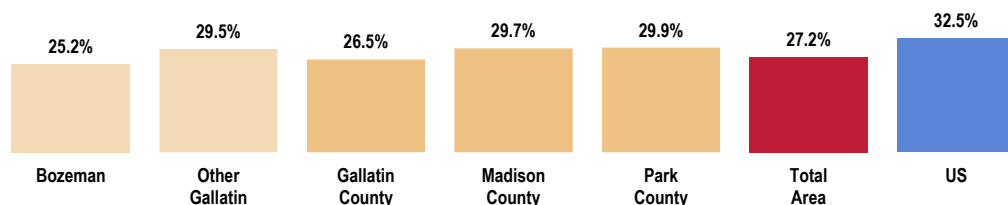
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 143]  
Notes: • Asked of all respondents.  
• In this case, chronic conditions include lung disease, sciatica, cancer, heart attack/angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, and/or diagnosed depression.

In fact, 27.2% of Total Area adults report having three or more chronic conditions.

**BENCHMARK** ► Lower than the national prevalence.

**DISPARITY** ► Correlates with age among Total Area adults and is higher in low-income households.

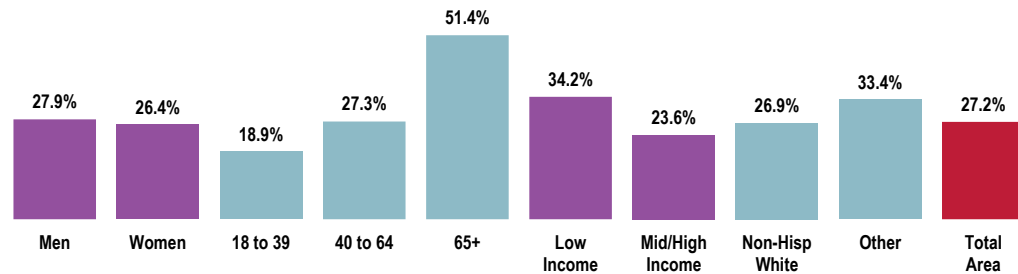
## Currently Have Three or More Chronic Conditions



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 143]  
• 2020 PRC National Health Survey, PRC, Inc.  
Notes: • Asked of all respondents.  
• In this case, chronic conditions include lung disease, cancer, heart attack/angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, chronic pain, and/or diagnosed depression.



## Currently Have Three or More Chronic Conditions (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 143]

Notes: • Asked of all respondents.

• In this case, chronic conditions include lung disease, cancer, heart attack/angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, chronic pain, and/or diagnosed depression.

## Activity Limitations

### ABOUT DISABILITY & HEALTH

An individual can get a disabling impairment or chronic condition at any point in life.

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))

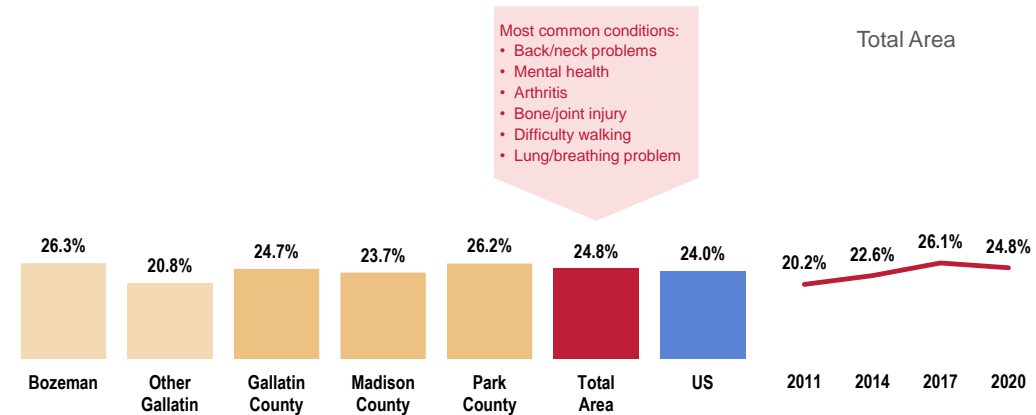


**A total of 24.8% of Total Area adults are limited in some way in some activities due to a physical, mental, or emotional problem.**

**TREND** ► Denotes a statistically significant increase since 2011.

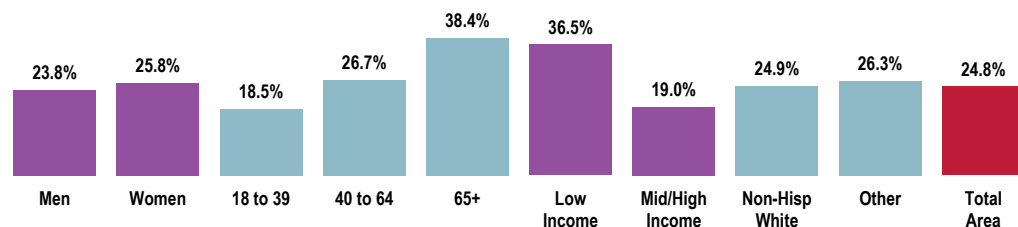
**DISPARITY** ► Highest in Bozeman. Increases with age and is especially high among low-income residents.

## 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]  
• 2020 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 (Total Area, 2020)



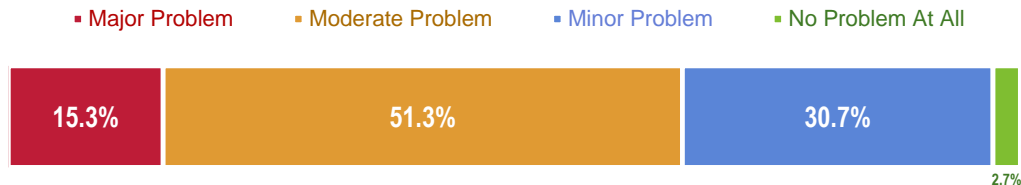
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 109]  
Notes: • Asked of all respondents.



## Key Informant Input: Disability & Chronic Pain

Just over half of key informants taking part in an online survey characterized *Disability & Chronic Pain* as a “moderate problem” in the community (not asked among Park County OKIS respondents).

### Perceptions of Disability & Chronic Pain as a Problem in the Community (Key Informants, 2020)



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Park County key informants are not included in this distribution.

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

#### Impact on Quality of Life

Housing and support for with those with disabilities is very limited and the housing is not of the highest standard. Many times those with disabilities or chronic pain have higher rates of depression, usually have state insurance, and our mental health services are very limited in Gallatin County for those with Medicaid. – Social Services Provider (Gallatin & Madison Counties)

I often see people that are dealing with chronic pain through self-medication strategies that further exacerbate their health problems. I also see far too many people with disabilities that cannot be classified as so, and therefore receive no financial support, leaving them vulnerable to homelessness and hunger. – Social Services Provider (Gallatin County)

Relates to suicide, access to care, linkages to addiction treatment. – Physician (Gallatin & Madison Counties)

When you have people with chronic pain/disability, it is difficult for them to have good quality of life when their symptoms are not taken seriously or they are unable to see a pain specialist. There is no real palliative care/pain specialist for people to connect with in order to attempt to gain some quality of life. This is impactful to both the inpatient and outpatient setting because these people are seeking care in areas that do not specialize in the management of chronic pain or disabilities. If there are any support groups, it is not well advertised. – Other Health Provider (Gallatin & Madison Counties)

#### Lack of Specialists

There are no local chronic pain specialists. – Physician (Gallatin & Madison Counties)

Poor resources for patients to turn to manage long-term chronic pain issues. – Physician (Gallatin & Madison Counties)

No easily accessible pain management specialist; area providers treating chronic pain inappropriately. Need for behavioral health intervention options. – Physician (Gallatin & Madison Counties)

We have no chronic pain specialist in the community to handle these complex problems. – Physician (Gallatin County)

There are no resources available to serve folks with these conditions. Someone would have to go to Bozeman, Billings, or some other larger community to get help and a lot of our residents do not leave Livingston and/or do not have dependable transportation. – Other Health Provider (Park County)

There is not audiology available in Livingston, as far as I know. There is audiology on Bozeman, and most people who need hearing aids cannot afford them. There is virtually no visual care for those without some kind of insurance. We have lots of diabetics that need inexpensive eye exams. – Other Health Provider (Park County)

#### Diagnosis/Treatment

Addressing pain to meet community disparity between perception and ability to solve chronic pain. – Physician (Gallatin & Madison Counties)





People with chronic pain are always searching for answers. Palliative care needs to be expanded and addressed as something for all with chronic disease—not just end of life. Does Bozeman provide the care and treatment necessary for those with disabilities to live fully in our community? – Community Leader (Gallatin County)

Pain is undertreated in dementia patients. We require increased assistance in assessing and managing pain pharmacologically and through other modalities. – Other Health Provider (Gallatin & Madison Counties)

## Denial/Stigma

Chronic pain patients believe they are treated like drug dealers or seekers and not heard by their PCPs. There is a desire among this population for specialty care, to be heard and understood. – Other Health Provider (Gallatin & Madison Counties)

Chronic pain as a symptom and disease is stigmatized throughout our community. Most providers have been trained about how bad opioids are and refuse to prescribe them. The correct approach would be much more patient-centered. Insurance is also a major issue for this community as they do not pay for a lot for the alternative treatments that we know help with chronic pain. Also, many of these patients have psychiatric issues that are not well treated and often are not paid for by insurance. – Other Health Provider (Gallatin County)

## Aging Population

I see many aging people who suffer with these conditions every week. – Community Leader (Gallatin & Madison Counties)

We live in an area with a growing aging population as well as people who may acquire a late in life disability due to our active lifestyle here. – Social Services Provider (Gallatin & Madison Counties)

Seniors requesting financial assistance or putting off hearing and vision care. – Social Services Provider (Park County)

## Contributing Factors

There are many people in my community who experience work injuries through manual and farm labor. There are many motor vehicle accidents that result in injuries and chronic pain and disability. – Other Health Provider (Gallatin & Madison Counties)

Aging population and a blue-collar economy. Lots of folks who do physical work. – Social Services Provider (Park County)

## Prevalence/Incidence

I know many people who either have a disability or have chronic pain issues. – Community Leader (Gallatin & Madison Counties)

We have a huge number of patients have chronic pain due to arthritis and back pain. This is one of the most common issues seen, and we have limited resources for helping these issues. – Other Health Provider (Park County)



# 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 ... continues to be the most common cause of disability. 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).

**Chronic back pain** is common, costly, and potentially disabling.

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))

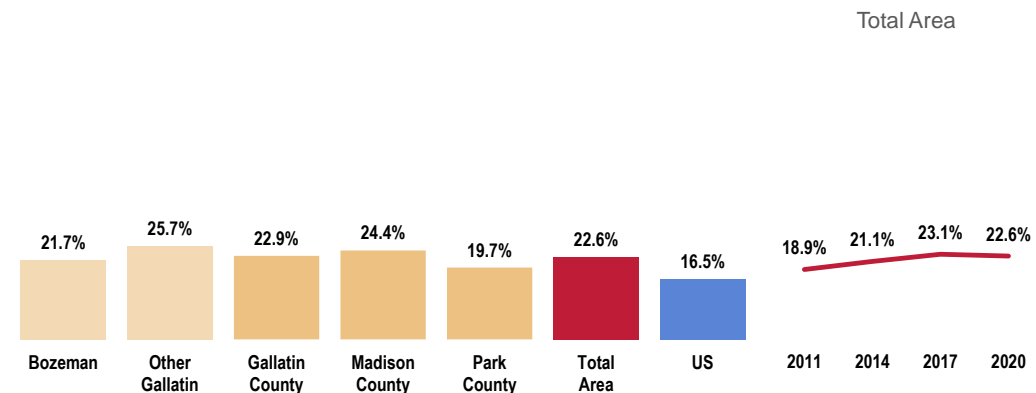
**A total of 22.6% of Total Area adults (18 and older) suffer from chronic back pain or sciatica.**

**BENCHMARK** ► Well above the US figure.

**TREND** ► Increasing significantly from 2011 survey findings.

**DISPARITY** ► Lowest among Park County residents.

## Prevalence of Sciatica/Chronic Back Pain



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 26]  
 • 2020 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.



# 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 prevalence is] 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](http://www.healthypeople.gov))

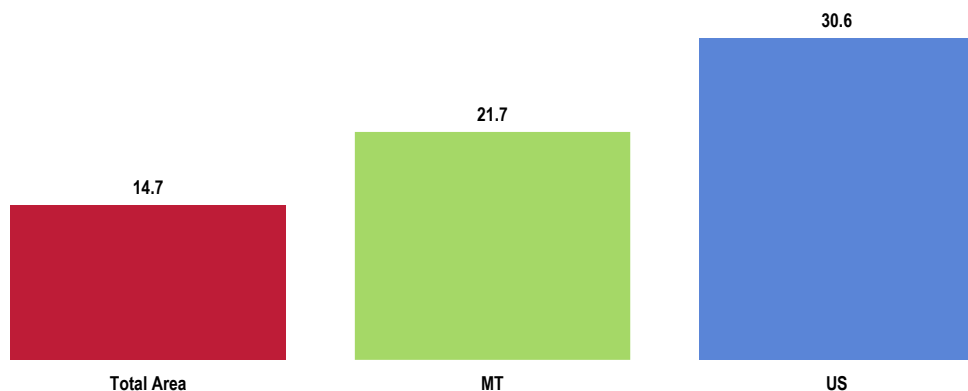
## Age-Adjusted Alzheimer's Disease Deaths

**Between 2016 and 2018, there was an annual average age-adjusted Alzheimer's disease mortality rate of 14.7 deaths per 100,000 population in the Total Area.**

**BENCHMARK** ► Below the state and especially the national mortality rate.

**TREND** ► Decreasing over time, in contrast to the increasing trend reported nationwide.

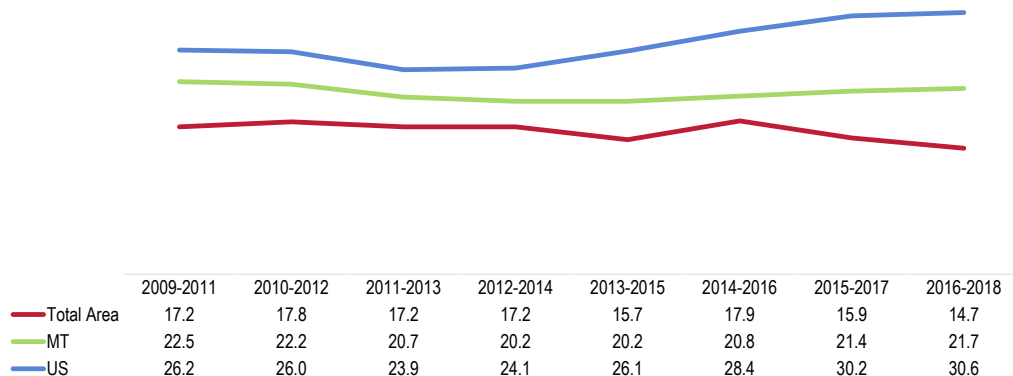
Alzheimer's Disease: Age-Adjusted Mortality  
(2016-2018 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.



## Alzheimer's Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

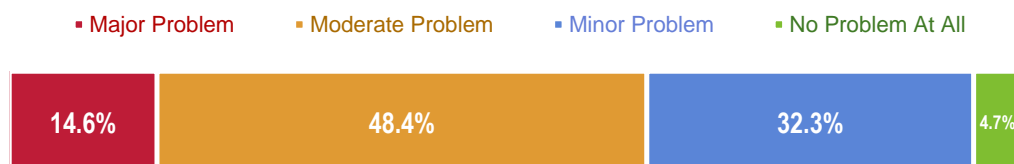


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted May 2020.

## Key Informant Input: Dementia/Alzheimer's Disease

Key informants taking part in an online survey are most likely to consider *Dementia/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.

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

### Prevalence/Incidence

We are a memory care community; 100 percent of our residents have a diagnosis of cognitive impairment and thus require specialized medical care. – Other Health Provider (Gallatin & Madison Counties)

There is so much of it. – Community Leader (Gallatin County)

Alzheimer's and memory care are becoming ever-prevalent in the world and Montana. Caring for these folks in the home can be dangerous, and many people cannot afford to get long-term care. – Other Health Provider (Gallatin & Madison Counties)

Personal interaction with individuals looking for resources and requiring higher levels of care. – Other Health Provider (Gallatin County)

The rate at which the senior population experiences dementia and Alzheimer's is increasing. The number of younger people with these issues is increasing. The resources, professional help, and facilities are lacking in this area. – Community Leader (Gallatin & Madison Counties)



I am involved with seniors. I am more exposed to the issues this brings and how difficult it can be for folks to find the help they need. – Community Leader (Gallatin & Madison Counties)  
Personal experience. – Community Leader (Park County)

## Aging Population

People are living longer, and family members do not keep in touch with elderly family. – Community Leader (Gallatin & Madison Counties)  
We have a quickly aging population retiring here and in Montana and not enough facilities that provide affordable care. – Social Services Provider (Gallatin & Madison Counties)  
Aging population with limited resources financially, but also limited community resources for dementia and Alzheimer's disease. – Public Health Representative (Gallatin Gateway, Big Sky & West Yellowstone)  
Park County's aging population is estimated to be 30% 65 and older and growing. I see people every day who are either in some stage of dementia or are caring for someone who is. The sheer numbers of those who are dealing with this is one thing, but the community is not prepared or equipped to deal with it in an appropriate way and this will only get worse without serious attention. – Social Services Provider (Park County)  
Elderly often remain pretty isolated in their homes increasing progression of symptoms and risks. – Public Health Representative (Park County)  
Growing population of older residents living longer. Growing number of individuals with dementia. Also, too few medical professionals trained in treating mental deterioration in the aged. – Community Leader (Park County)

## Awareness/Education

Our library is offering classes to address this issue. We have worked with state groups to bring awareness to the community. – Social Services Provider (Gallatin & Madison Counties)  
Most practitioners are not trained in appropriately diagnosing dementia, recognizing it as a disease, or knowing how to provide care for this complicated disease. There are also not enough community resources to help families cope with this disease. There need to be better day care centers, support for caregivers, and education in the community (both medical and community-wide) to meet this need. – Other Health Provider (Gallatin County)

## Access to Care/Services

No specialists available. – Community Leader (Gallatin County)  
Caregiving. Lack of caregiving resources, caregiving costs. – Other Health Provider (Gallatin & Madison Counties)  
I do not believe there are local resources or respite care in Livingston, at least not at a level needed. Seniors will be more than 33% of Park County's population by 2025 and this will need to be addressed. – Social Services Provider (Park County)  
Minimal resources and not care for these individuals. – Other Health Provider (Park County)  
There are no specific medical resources available to serve folks with these types of conditions other than "the memory unit at the Frontier." I do not think this is a good resource for someone that has this type of condition. The person would have to go to Bozeman, Billings, or some other larger community to get the help they need. Again, transportation is a barrier for some folks. – Other Health Provider (Park County)  
Our community lacks a good memory care unit. We have Frontier Assisted Living, which has a locked memory care unit, but they are frequently understaffed and have an incredible amount of turnover. We also lack a support group for caregivers of dementia/Alzheimer's patients. – Other Health Provider (Park County)  
Access to good affordable care. – Social Services Provider (Park County)  
Screening is insufficient. More brain scans needed to identify and prevent onset. – Social Services Provider (Park County)





# BIRTHS

# BIRTH OUTCOMES & RISKS

## Low-Weight Births

### ABOUT INFANT & CHILD HEALTH

Improving the well-being of mothers, infants, and children is an important public health goal for the US. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system. The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality preconception (before pregnancy) and inter-conception (between pregnancies) care. Moreover, healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. Many factors can affect pregnancy and childbirth, including pre-conception health status, age, access to appropriate health care, and poverty.

Infant and child health are similarly influenced by socio-demographic factors, such as family income, but are also linked to the physical and mental health of parents and caregivers. There are racial and ethnic disparities in mortality and morbidity for mothers and children, particularly for African Americans. These differences are likely the result of many factors, including social determinants (such as racial and ethnic disparities in infant mortality; family income; educational attainment among household members; and health insurance coverage) and physical determinants (i.e., the health, nutrition, and behaviors of the mother during pregnancy and early childhood).

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

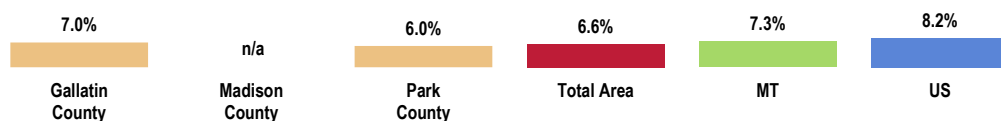
**A total of 6.6% of 2006-2012 Total Area births were low weight.**

**BENCHMARK** ► Below the US percentage and satisfying the Healthy People 2020 objective.

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.

### Low-Weight Births (Percent of Live Births, 2006-2012) 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 May 2020.
- 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

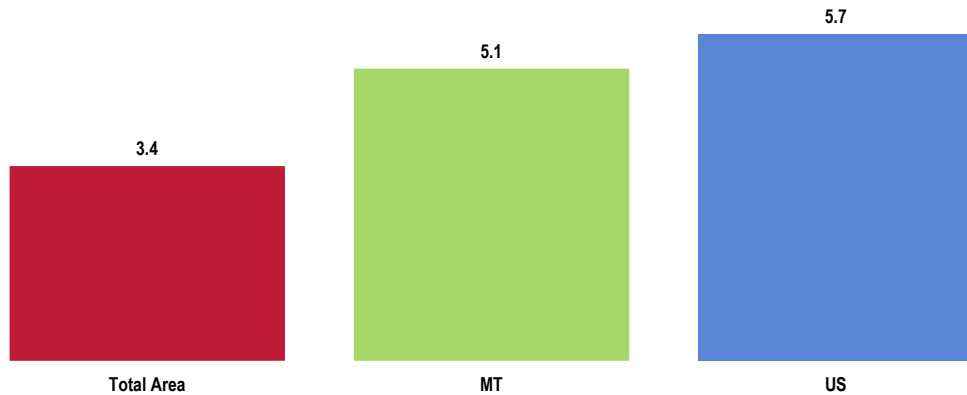
Infant mortality rates reflect deaths of children less than one year old per 1,000 live births.

Between 2016 and 2018, there was an annual average of 3.4 infant deaths per 1,000 live births.

**BENCHMARK** ▶ Below the state and national rates. Satisfies the Healthy People 2020 objective.

**TREND** ▶ Marks a decrease in infant mortality rates in recent years.

**Infant Mortality Rate**  
(Annual Average Infant Deaths per 1,000 Live Births, 2016-2018)  
Healthy People 2020 = 6.0 or Lower



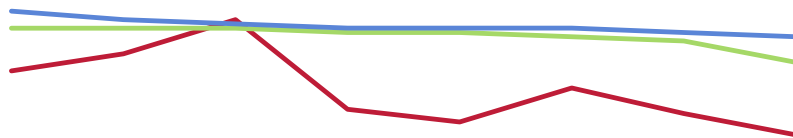
Sources: 

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted May 2020.
- 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



	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
Total Area	4.9	5.3	6.1	4.0	3.7	4.5	3.9	3.4
MT	5.9	5.9	5.9	5.8	5.8	5.7	5.6	5.1
US	6.3	6.1	6.0	5.9	5.9	5.9	5.8	5.7

Sources: 

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted May 2020.
- 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.





# FAMILY PLANNING

## Reproductive Care

Among survey respondents age 18 to 49, 7.1% have been unable to receive health care related to reproductive health when needed at some point in the past year.

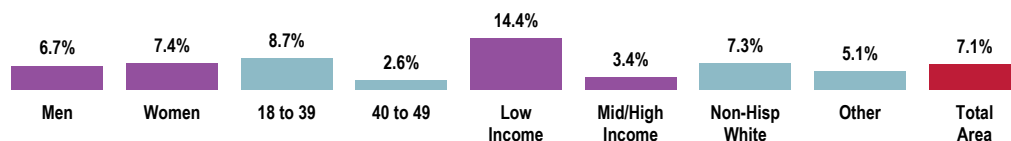
**DISPARITY** ► Highest in Gallatin County. By demographics, higher among young adults and especially low-income residents.

Unable to Receive Reproductive Health Care  
When Needed in the Past Year  
(Total Area Adults Age 18 to 49; 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 332]  
Notes: • Asked of all respondents under age 50.

Unable to Receive Reproductive Health Care  
When Needed in the Past Year  
(Total Area Adults Age 18 to 49)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 332]  
Notes: • Asked of all respondents under age 50.



# 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 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.

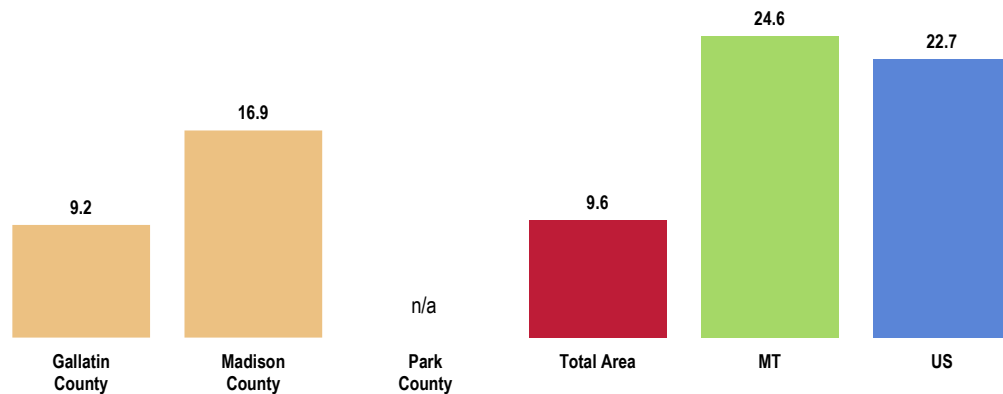
– Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

**Between 2014 and 2018, there were 9.6 births to adolescents age 15 to 19 per 1,000 women age 15 to 19 in the Total Area.**

**BENCHMARK** ► Well below the state and US rates.

**DISPARITY** ► The Madison County rate was much higher than the Gallatin County rate.

**Teen Birth Rate**  
(Births to Adolescents Age 15-19 per 1,000 Females Age 15-19, 2014-2018)



Sources: 

- Centers for Disease Control and Prevention, National Vital Statistics System.
- Retrieved from Community Commons at <http://www.chna.org>.

Notes: 

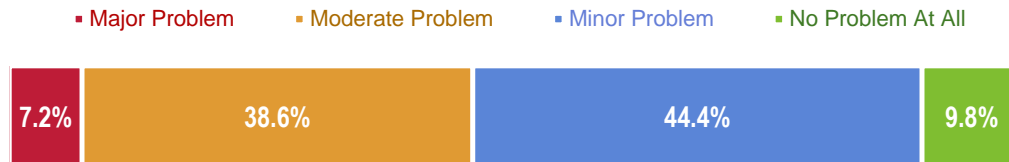
- This indicator reports the rate of total births to women under the age of 15–19 per 1,000 female population age 15–19. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.



# Key Informant Input: Infant Health & Family Planning

Key informants taking part in an online survey largely characterized *Infant Health & Family Planning* as a “minor problem” in the community (not asked of Park County respondents).

## Perceptions of Infant Health and Family Planning as a Problem in the Community (Key Informants, 2020)



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Park County key informants are not included in this distribution.

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

### Awareness/Education

The community I work with are young parents or hopeful parents. I think there are a lot of questions about having and raising a child during this time. – Social Services Provider (Gallatin & Madison Counties)

I am not sure this is a “major problem,” but if we are not doing an adequate job, infants will have a lifetime of health problems; families will have children they did not want and perhaps cannot afford the time and resources to raise well. Excellent support for family planning and infant health are the foundation of long-term community health. GCHHD needs to have secure funding to continue its outreach programs to families, including its support of fathers. – Public Health Representative (Gallatin County)

I think a big part of family planning is budgeting and awareness of how budgets will change while pregnant and then with a young child. I don’t see a lot of programming around this and would like to see more so that families are taking that into account when planning families. – Community Leader (Gallatin & Madison Counties)

In rural Park County there continues to be a reluctance to discuss and acknowledge the importance of all reproductive health issues. – Public Health Representative (Park County)

Effective family Planning is foundational to building strong families, communities, counties, states, countries and a strong human family on the planet. – Community Leader (Park County)

There is a number of children born in Livingston lost to follow up. These infants may come from another county and once they are born, they go back to the county they live in and do not follow up. Substance abuse and mental health in pregnant women in Park County is being addressed through a Perinatal Behavioral Health grant to provide pre- and post-natal care for moms and babies. Access for rural communities is very limited. Gardiner, Emigrant, Pray, Willsall, Clyde Park, Cook City have to make the journey to Livingston for care. – Community Leader (Park County)

### Access to Care/Services

There is no access to OB/GYNs in Big Sky, also no pediatricians. – Community Leader (Gallatin County)

Need for parenting help and support, universal home visiting. Parent, mental illness impacting parent-child relationship. – Other Health Provider (Gallatin County)

Almost half of pregnancies are unplanned, and our community is no exception to that statistic. Add to that low wages and the lack of affordable housing, and an unplanned pregnancy can be a total economic disaster for an individual or family at any age. There is also very limited funding for family planning in Montana specifically, but also nationally as well. This realm of health care has been politicized and small independent family planning clinics are incredibly threatened right now, especially in the midst of a global pandemic. – Community Leader (Gallatin & Madison Counties)

Far more support is needed for young mothers/parents. – Community Leader (Park County)

There are not very many affordable OB/GYN doctors in Park County, and there are zero abortion services in the county. Sex education is limited and access to accurate, science-based information is also limited. – Social Services Provider (Park County)



## Substance Abuse

We have a lot of new babies being born in our community, and many parents are not prepared at all. There are also a lot of issues with drug and alcohol abuse among some of our new parents. – Other Health Provider (Gallatin Gateway, Big Sky & West Yellowstone)

## Family Planning

Unplanned pregnancies. – Social Services Provider (Park County)

Too many young parents are not mentally, educationally or financially equipped to adequately care for their children. – Community Leader (Park County)

## Childcare

The cost and availability of childcare is something I hear from people a lot. – Community Leader (Gallatin & Madison Counties)





# 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, health care organizations, and communities.

The goal of promoting healthful diets and healthy weight encompasses increasing household food security and eliminating hunger.

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.

**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 32.6% of Total Area adults report eating five or more servings of fruits and/or vegetables per day.**

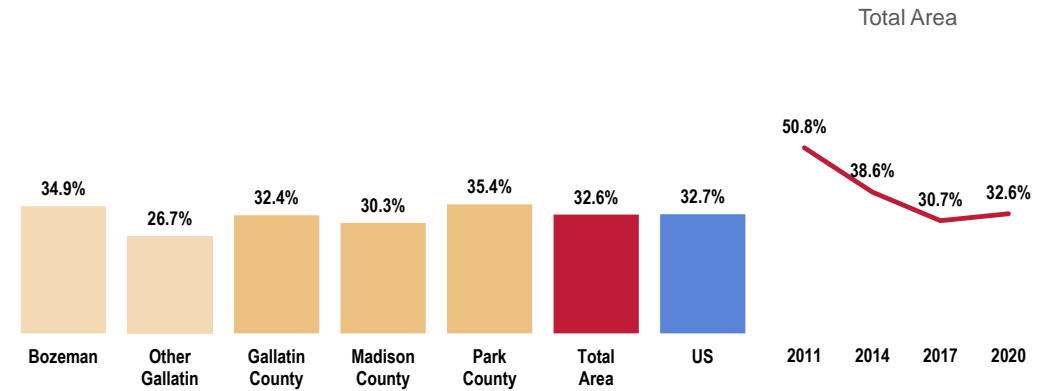
**TREND** ► Decreasing considerably from 2011 and 2014 survey findings.

**DISPARITY** ► Better in Bozeman than Other Gallatin County. Reported less often among men, low-income residents, and communities of color.

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.

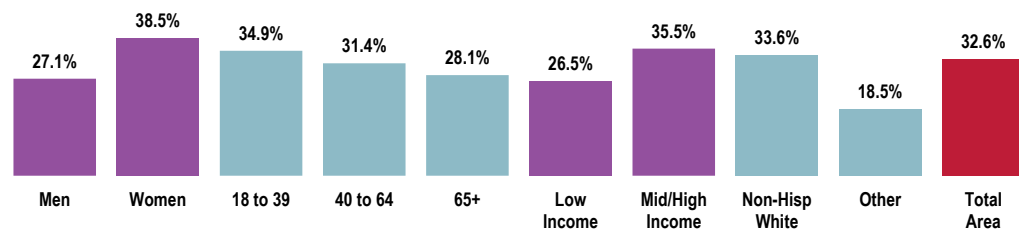


## Consume Five or More Servings of Fruits/Vegetables Per Day



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 148]  
 • 2020 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 (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 148]  
 Notes: • Asked of all respondents.  
 • For this issue, respondents were asked to recall their food intake on the previous day.





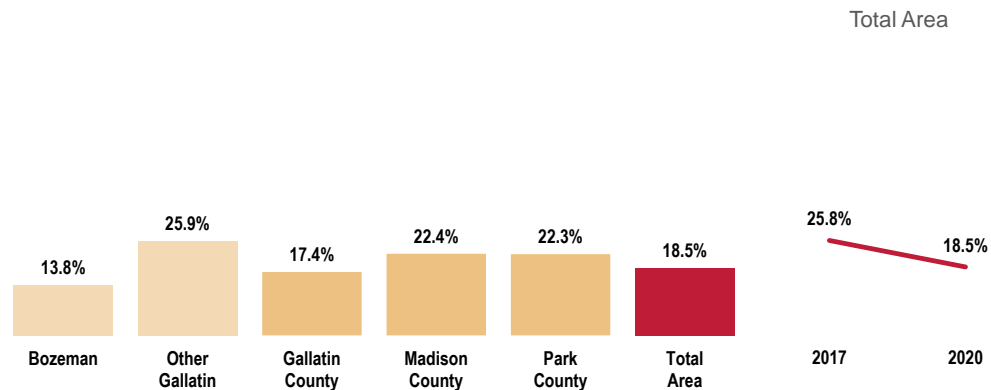
## Sugar-Sweetened Beverages

A total of 18.5% of Total Area adults report drinking an average of at least one sugar-sweetened beverage per day in the past week.

**TREND** ► Improving significantly since 2017.

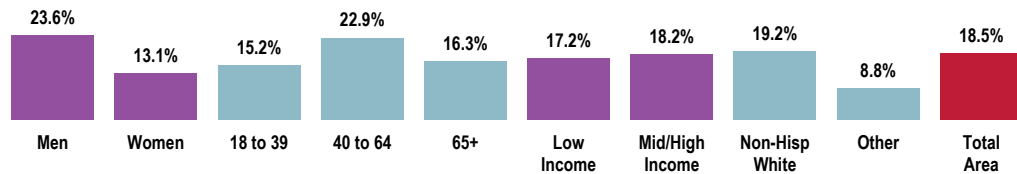
**DISPARITY** ► Lowest in Bozeman. The prevalence is higher among men, adults age 40 to 64, and Whites.

### Had Seven or More Sugar-Sweetened Beverages in the Past Week



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 356]  
Notes: • Asked of all respondents.

### Had Seven or More Sugar-Sweetened Beverages in the Past Week (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 356]  
Notes: • Asked of all respondents.





# 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.

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

## Leisure-Time Physical Activity

**A total of 12.5% of Total Area adults report no leisure-time physical activity in the past month.**

**BENCHMARK** ► Well below state and US figures. Easily satisfies the Healthy People 2020 objective.

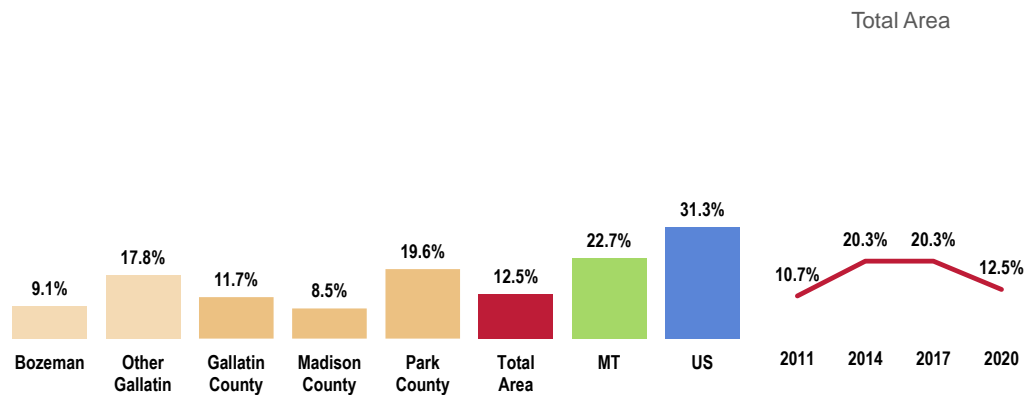
**TREND** ► Similar to 2011 findings, though much lower than 2014 and 2017 survey results.

**DISPARITY** ► Unfavorably high in Other Gallatin and Park County.

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.

### 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.  
 • 2020 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

### 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)

**A total of 35.5% of Total Area adults regularly participate in adequate levels of both aerobic and strengthening activities (meeting physical activity recommendations).**

**BENCHMARK** ► Well above the Montana and US percentages. Satisfies the Healthy People 2020 objective.

**TREND** ► Denotes a statistically significant increase since 2017.

**DISPARITY** ► Unfavorably low in Other Gallatin County as well as Park County. Correlates with age in the Total Area.

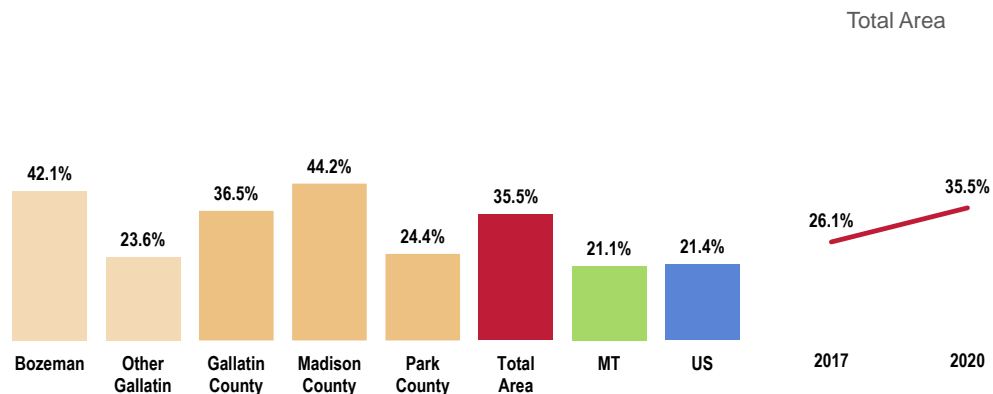
“Meeting physical activity recommendations” includes adequate levels of both aerobic and strengthening activities:

**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.

### Meets Physical Activity Recommendations

Healthy People 2020 = 20.1% or Higher

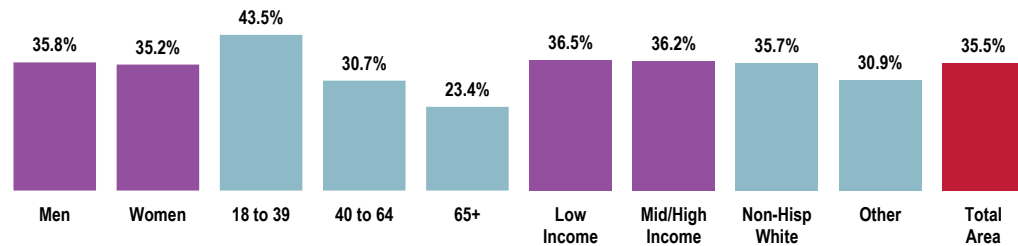


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 152]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 • 2020 PRC National Health Survey, 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 (Total Area, 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.

• 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

### 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 Total Area children age 2 to 17, 56.3% are reported to have had 60 minutes of physical activity on each of the seven days preceding the interview (1+ hours per day).**

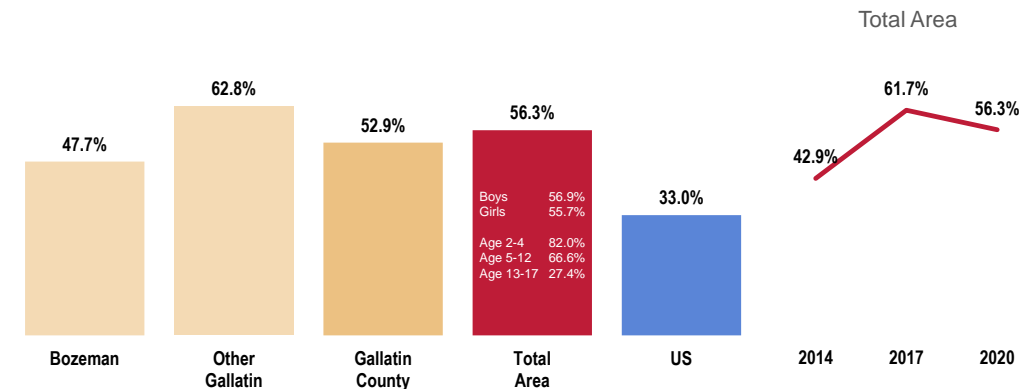
**BENCHMARK** ► Well above the US prevalence.

**TREND** ► Though fluctuating over time, the percentage is higher than the 2014 survey results.

**DISPARITY** ► Higher in the Other Gallatin County area (data cannot be independently shown for Madison and Park counties due to small sample sizes, although they are figured into the Total Area result).



## Child Is Physically Active for One or More Hours per Day (Parents of Children Age 2-17)



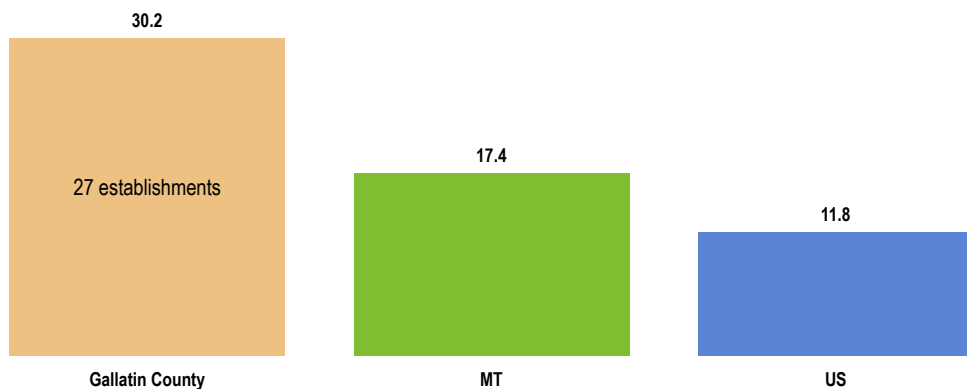
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 124]  
 • 2020 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents with children age 2-17 at home.  
 • Includes children reported to have one or more hours of physical activity on each of the seven days preceding the survey.

## Access to Physical Activity

In Gallatin County, there were 30.2 recreation/fitness facilities for every 100,000 population in 2017.

**BENCHMARK** ► Well above the state and national ratios.

### Population With Recreation & Fitness Facility Access (Number of Recreation & Fitness Facilities per 100,000 Population, 2017)



Sources: • US Census Bureau, County Business Patterns. Additional data analysis by CARES.  
 • Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.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.



# 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 health care 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 ( $m^2$ ). 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  $kg/m^2$  and obesity as a BMI  $\geq 30 kg/m^2$ . The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25  $kg/m^2$ . The increase in mortality, however, tends to be modest until a BMI of 30  $kg/m^2$  is reached. For persons with a BMI  $\geq 30 kg/m^2$ , 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  $kg/m^2$ .

- 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 ( $kg/m^2$ )
Underweight	<18.5
Normal	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	$\geq 30.0$

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

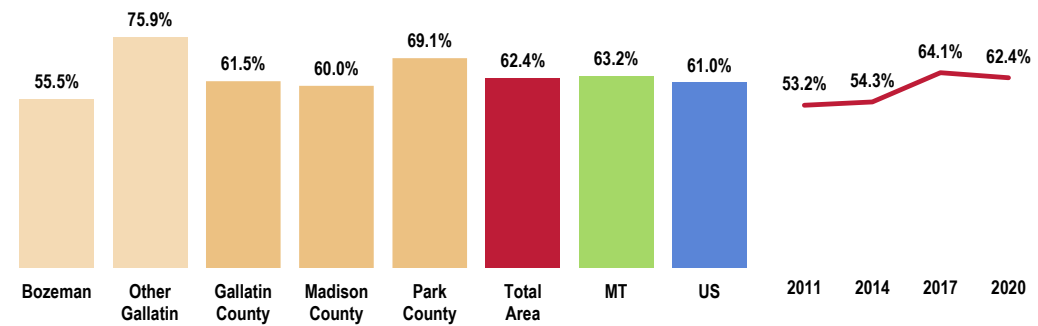
Over 6 in 10 Total Area adults (62.4%) are **overweight**.

**TREND** ► Denotes a statistically significant increase from 2011 and 2014 survey findings.

**DISPARITY** ► Considerably higher in the Other Gallatin area as well as Park County.

### Prevalence of Total Overweight (Overweight and Obese)

Note that 20.3% of overweight adults have been given advice about their weight by a health professional in the past year (while most have not).



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, Centers for Disease Control and Prevention (CDC): 2018 Montana data.  
 • 2020 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 24.0% of Total Area adults who are **obese**.

**BENCHMARK** ► Well below the state and US figures. Satisfies the Healthy People 2020 objective.

**TREND** ► Increasing significantly from 2011 and 2014 findings.

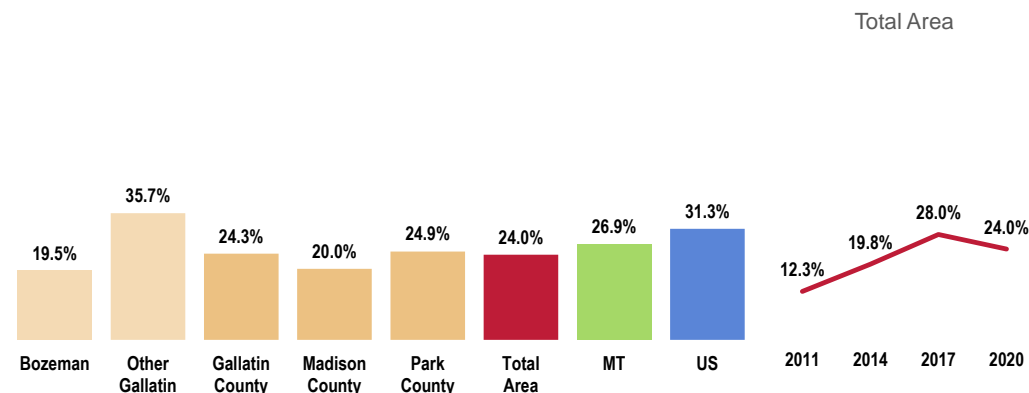
**DISPARITY** ► Significantly higher among Other Gallatin County residents when compared with those in Bozeman. Statistically higher among low-income residents.

“Obese” (also included in overweight prevalence discussed previously) includes respondents with a BMI value  $\geq 30$ .



## 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, Centers for Disease Control and Prevention (CDC); 2018 Montana data.
- 2020 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]

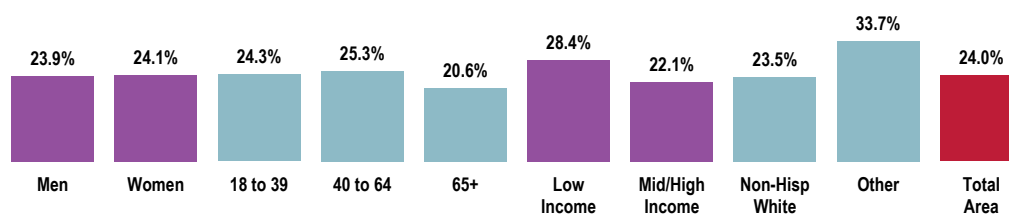
Notes:

- 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

(Total Area, 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.
- 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.

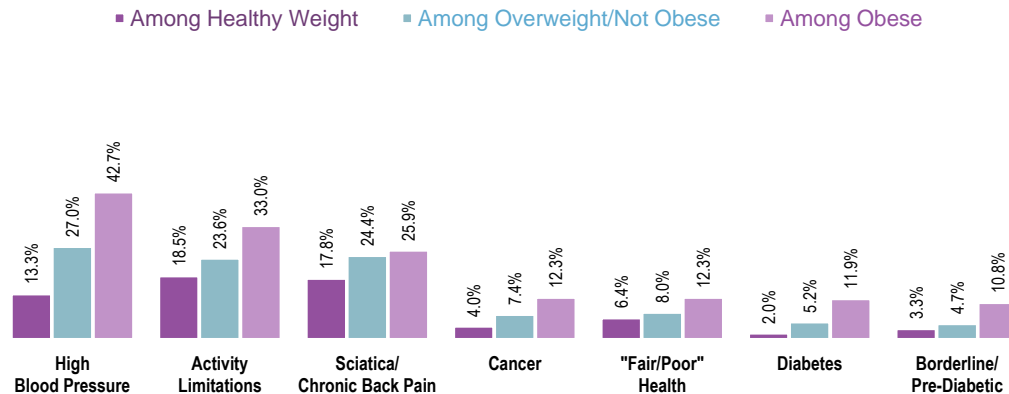


## Relationship of Overweight With Other Health Issues

Overweight and obese adults are more likely to report a number of adverse health conditions, as outlined in the following chart.

The correlation between overweight and various health issues cannot be disputed.

### Relationship of Overweight With Other Health Issues (Total Area, 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

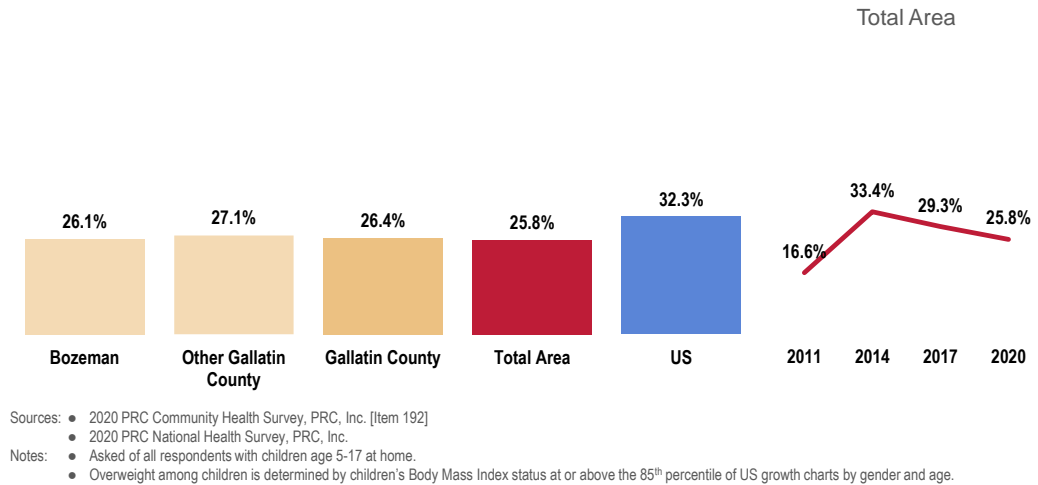
**Based on the heights/weights reported by surveyed parents, 25.8% of Total Area children age 5 to 17 are overweight or obese (≥85th percentile).**

**TREND** ► Though decreasing in recent years, the prevalence is significantly higher than 2011 survey results.





## Prevalence of Overweight in Children (Parents of Children Age 5-17)

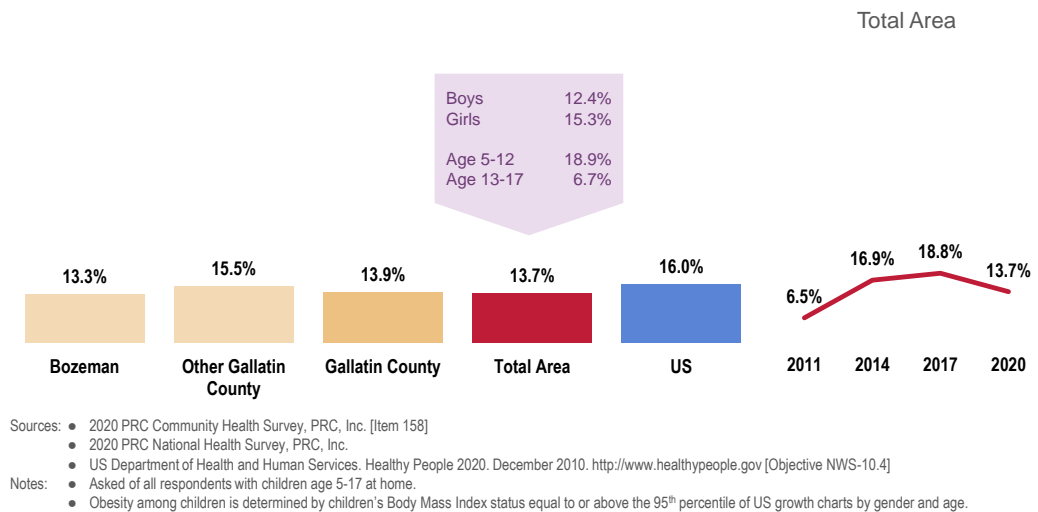


**The childhood overweight prevalence above includes 13.7% of area children age 5 to 17 who are obese (≥95<sup>th</sup> percentile).**

**TREND** ► Though decreasing in recent years, the prevalence remains significantly higher than 2011 survey results.

**DISPARITY** ► Much higher among children age 5 to 12 than among teens.

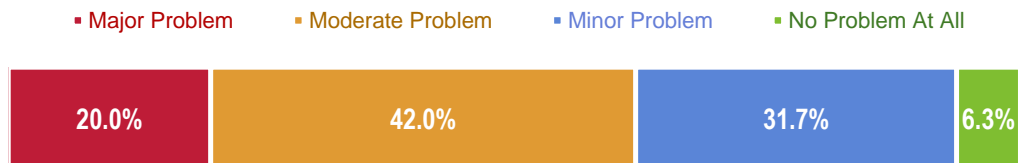
## Prevalence of Obesity in Children (Children Age 5-17 Who Are Obese; BMI in the 95<sup>th</sup> Percentile or Higher) Healthy People 2020 = 14.5% or Lower



## 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)



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

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

#### Contributing Factors

We need a common culture that supports healthy eating and physical activity, as well as affordable access to healthy foods and places to exercise (especially in the winter) for all. I think this is a major issue nationally, with 42% of our US population being obese. The consequences for public health and burden on our health care system are tremendous. – Public Health Representative (Gallatin County)

Food insecurities for lower income households. Increased rates of obesity among adults and children. – Other Health Provider (Gallatin & Madison Counties)

Personal responsibility. – Other Health Provider (Gallatin County)

I think people will be struggling with motivation to stay active and motivated because of the collective trauma everyone is experiencing. – Social Services Provider (Gallatin & Madison Counties)

Winter months, a person will have the equipment, such a cross-country skiing. However, many or most of our population is low income and has no equipment. It is and can be a depressing time and most “hibernate” until summer. When summer comes, most of the population works two or more jobs to put away for the winter. Food is very expensive here. Many do not have vehicles to travel to Bozeman or Rexburg to Walmart for cheaper prices. Food stamps helps a lot but many people purchase fast premade meals that are not healthy. The bus doesn't allow bags of food. – Social Services Provider (Gallatin Gateway, Big Sky & West Yellowstone)

Societal reprioritization of physical activity, nutrition, and weight management. Stigmatization. Financial resources to focus on these areas. – Physician (Gallatin County)

Access to healthy nutrition and affordability. Motivation of people to get out and do physical activity. – Social Services Provider (Gallatin & Madison Counties)

Access to affordable healthy food, increased wages, and mental health issues, smoking. – Social Services Provider (Gallatin & Madison Counties)

Physical activity. Lack of safe and accessible walking or biking system. Nutrition, lack of education on proper nutrition. Weight, customers disclosing battling with achieving weight loss. – Social Services Provider (Park County)

Lack of education, weather keeping folks indoors nine months of the year, lack of money to engage in classes, etc. – Physician (Park County)

Indoor recreation is lacking. Lack of adult education about accessibility of good nutritious food and poverty. – Physician (Park County)

The complacent attitude about the extreme dangers of poor nutrition, limited activity and poor nutrition. – Public Health Representative (Park County)



Families who are struggling to make rent, heat, etc. cannot afford healthy food for their families. Even if they are aware of the importance of eating nutritious food, they don't always have the resources to obtain healthy food. Making their food budget stretch to include fresh fruits and veggies is just not possible so they are forced to feed their families less expensive processed foods instead. This perpetuates obesity, diabetes and other illnesses. It also leads to learning loss and the lack of emotional stability in young children. – Social Services Provider (Park County)

A population with a large percentage of citizens living below poverty level is a set up for poor nutrition. Healthy food is expensive and sedentary lifestyles. – Social Services Provider (Park County)

A cultural shift toward highly bio-available carbohydrate diets and away from physical activity. – Community Leader (Park County)

Cost of food, lack of nutrition awareness, bad choices and unhealthy lifestyles. – Social Services Provider (Park County)

## Access to Healthy Food

Access to healthy nutrition and affordability. Motivation of people to get out and do physical activity. – Social Services Provider (Gallatin & Madison Counties)

Food supply is not as nutritionally rich as other areas. One-on-one support for those struggling. – Social Services Provider (Gallatin & Madison Counties)

In Madison county there are only two grocery stores. The one in Sheridan closes earlier, which reduces access, and the only other option would then be to eat at a bar. No exercise facility in Sheridan. – Other Health Provider (Gallatin & Madison Counties)

Sustainability for food sources. – Other Health Provider (Gallatin & Madison Counties)

## Awareness/Education

Education on balanced diet, exercise recommendations, and options for types of exercise. Resources for low income patients, lack of evidence-based weight loss program, cost, lack of insurance coverage. – Physician (Gallatin & Madison Counties)

Lack of knowledge regarding nutrition and limited access financially to fresh foods. For exercise, having a variety of options and normalizing this as a constant self-care and wellness activity is needed. – Other Health Provider (Gallatin & Madison Counties)

Again we have no one education in our community in Spanish about health. I would love to work with the Bozeman health department to get something going. – Community Leader (Gallatin & Madison Counties)

Not enough education around the subject; computer screen time for adults and children replacing healthy outdoor and other physical activities. – Social Services Provider (Park County)

An educated culture of nutrition, activity, and lifestyle is not pervasive. – Community Leader (Park County)

## Obesity

While Bozeman and Gallatin Valley are on the lower level of obesity compared to the rest of the country, it is still a day-to-day issue for many people. Access to easy-to-understand information that makes enough of an impact to affect a change in day-to-day habits, the high cost of gym memberships for lower income populations (a lot of the community) make joining gyms a barrier to physical activity, and the convenience of fast food for lunch or dinner for the whole family have an impact on all three of these things. – Community Leader (Gallatin & Madison Counties)

There are a significant number of people in the community that are obese or overweight due to poor nutrition and lack of physical activity. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

There are way too many people that are overweight. – Community Leader (Gallatin County)

Although less than some areas throughout the country, obesity and nutrition concerns still exist in the community. These contribute to other health problems such as diabetes, heart disease and musculoskeletal issues. There is limited access to indoor facilities during winter months (gyms, pool). Gym memberships can be cost prohibitive for people. – Public Health Representative (Park County)

## Sedentary Lifestyle

Sedentary due to devices and screens. – Public Health Representative (Park County)

Sedentary lifestyle (sitting at work, video games and TV at home) coupled with poor eating habits and expense of health choices means that many people in our community are overweight and at risk of higher rates of health disease, diabetes, some cancers, and joint problems. – Community Leader (Park County)

Sedentary adults and children. I believe there is a certain percentage of our community that does not get enough physical activity. – Community Leader (Park County)



## Co-Occurrences

These are often underlying issues that cause or exacerbate many of the conditions mentioned in this survey. – Social Services Provider (Gallatin & Madison Counties)

Weight changes are anticipated with natural disease progression; however, we struggle to find providers who can navigate this conversation with families in a meaningful way. There is often a pressure to pursue medications to enhance appetites, which can produce side effects. We have also had to alter our visitation guidelines and activity programming in response to Covid-19, which has resulted in a change in our residents' activity levels. – Other Health Provider (Gallatin & Madison Counties)

## Built Environment

There are certain populations within the community who are unable to be physically active because of the built environment. Within Bozeman, residents have access to trails, parks, multi-modal transportation. Outside Bozeman, the picture looks much different; the built environment encourages sedentary lifestyles and driving in cars. Outside Bozeman, residents must get in a car to have access to healthy foods. Some residents have low access to transportation (no access to personal vehicle, unsafe biking/walking conditions, and public transportation services are nonexistent or very infrequent), preventing them from accessing a grocery store. Purchasing food at gas stations is much more expensive, and residents are then subjected to additional sugary, fatty, and processed foods, in addition to tobacco and alcohol advertising. – Public Health Representative (Gallatin County)

Lacking a recreational center. – Other Health Provider (Park County)

Lack of free or very low-cost access to exercise facilities year-round, lack of fully connected in-town trail system, grocery stores located only on the West end of town while more affordable housing is located downtown or on the East end of town. Inclement winter weather limiting outdoor activity for the elderly or less able-bodied. – Physician (Park County)

## Access to Care/Services

There is nothing in town to help with that. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)



# SLEEP

## SLEEP

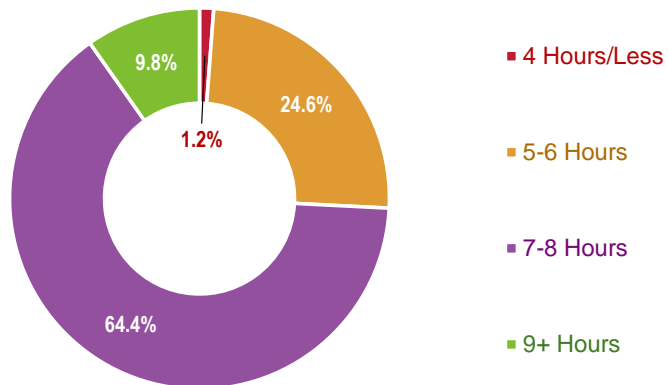
According to professional sleep societies, adults aged 18 to 60 years should sleep at least 7 hours each night for the best health and wellness.

Sleeping less than 7 hours per night is linked to increased risk of chronic diseases such as diabetes, stroke, high blood pressure, heart disease, obesity, and poor mental health, as well as early death. Not getting the recommended amount of sleep can affect one's ability to make good decisions and increases the chances of motor vehicle crashes.

- Institute of Medicine (US) Committee on Sleep Medicine and Research; 2014 Behavioral Risk Factor Surveillance System (BRFSS), CDC

**A total of 25.8% of Total Area adults reporting getting an average of less than seven hours of sleep per night.**

Average Hours of Sleep Per Night  
(Total Area, 2020)



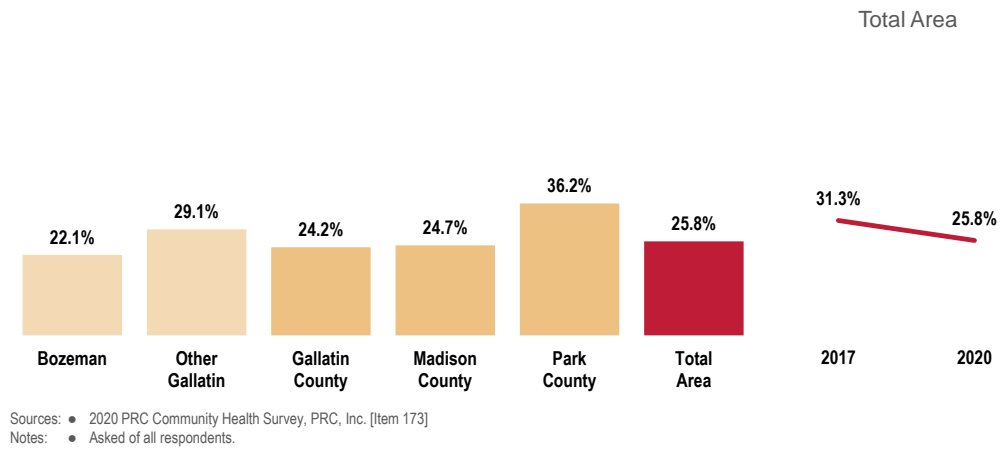
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 337]  
Notes: • Asked of all respondents.

**TREND** ► Marks a significant improvement since first asked in 2017.

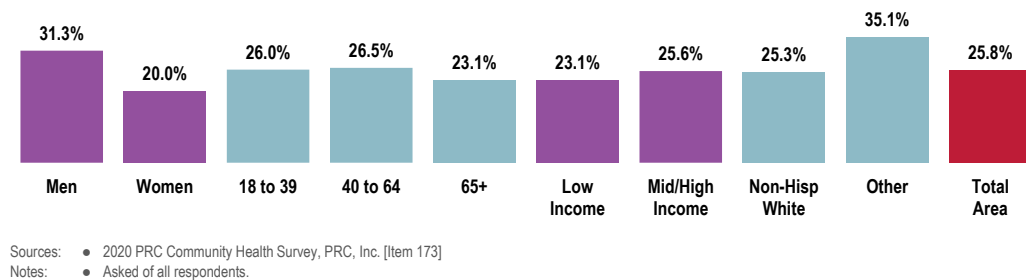
**DISPARITY** ► Unfavorably high in Other Gallatin County and Park County. Also high among Total Area men.



## Generally Sleep Less Than Seven Hours Per Night



## Generally Sleep Less Than Seven Hours Per Night (Total Area, 2020)



# 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 2016 and 2018, the Total Area reported an annual average age-adjusted cirrhosis/liver disease mortality rate of 5.1 deaths per 100,000 population.**

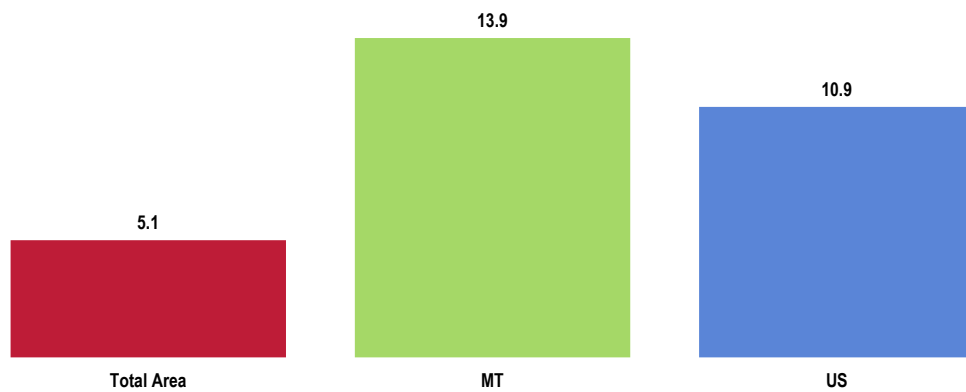
**BENCHMARK** ► Well below the state and US mortality rates. Satisfies the Healthy People 2020 objective.

**TREND** ► No clear trend is evident, although the most recent rate is the lowest reported over the past decade.



## Cirrhosis/Liver Disease: Age-Adjusted Mortality (2016-2018 Annual Average Deaths per 100,000 Population)

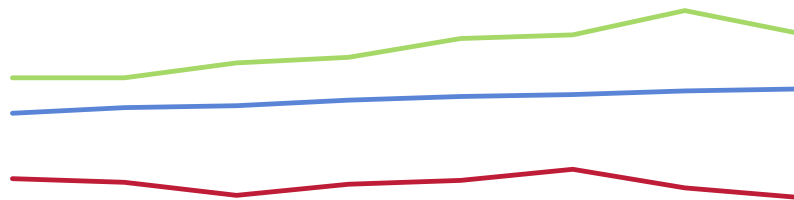
Healthy People 2020 = 8.2 or Lower



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

## Cirrhosis/Liver Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

Healthy People 2020 = 8.2 or Lower



	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
Total Area	6.1	5.9	5.2	5.8	6.0	6.6	5.6	5.1
MT	11.5	11.5	12.3	12.6	13.6	13.8	15.1	13.9
US	9.6	9.9	10.0	10.3	10.5	10.6	10.8	10.9

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





# Alcohol Use

## Excessive Drinking

**Excessive drinking** includes heavy and/or binge drinkers:

- **HEAVY DRINKERS** ► men reporting 2+ alcoholic drinks per day or women reporting 1+ alcoholic drink per day in the month preceding the interview.
- **BINGE DRINKERS** ► men reporting 5+ alcoholic drinks or women reporting 4+ alcoholic drinks on any single occasion during the past month.

**A total of 30.9% of area adults are excessive drinkers (heavy and/or binge drinkers).**

**BENCHMARK** ► Well above the Montana and US percentages. Fails to satisfy the Healthy People 2020 objective.

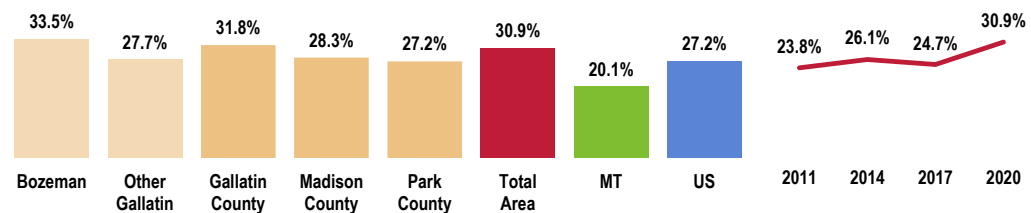
**TREND** ► Marks a statistically significant increase from previous survey findings.

**DISPARITY** ► More prevalent among men, younger adults, and higher-income residents.

### Excessive Drinkers

Healthy People 2020 = 25.4% or Lower

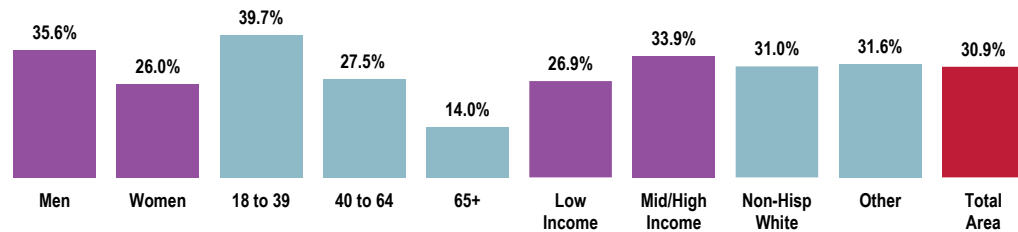
Total Area



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 168]  
• 2020 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); 2018 Montana data.  
• 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 (Total Area, 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.  
• 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.

## Drinking & Driving

**A total of 3.9% of Total Area adults acknowledge having driven in the past month after perhaps having too much to drink.**

**TREND** ► Though decreasing in recent years, the prevalence remains much higher than 2011 findings.

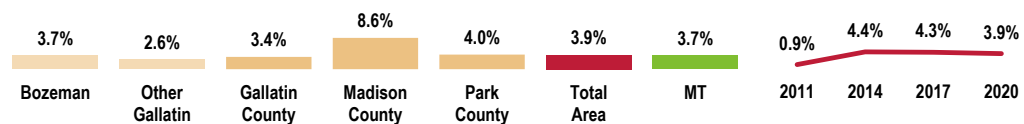
**DISPARITY** ► Considerably higher in Madison County.

Note: As a self-reported measure – and because this indicator reflects potentially illegal behavior – it is reasonable to expect that it might be underreported and that the actual incidence of riding with a drunk driver is likely higher in the community.

## Have Driven in the Past Month After Perhaps Having Too Much to Drink

Note that 7.0% of survey respondents acknowledged riding in the past month with a driver who had perhaps had too much to drink.

Total Area



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 58, 319]  
• 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.

Notes: • Asked of all respondents.



# Illicit Drug Use

For the purposes of this survey, "illicit drug use" includes use of illegal substances or of prescription drugs taken without a physician's order.

Note: As a self-reported measure – and because this indicator reflects potentially illegal behavior – it is reasonable to expect that it might be underreported, and that actual illicit drug use in the community is likely higher.

**A total of 5.9% of Total Area adults acknowledge using an illicit drug in the past month.**

**BENCHMARK** ▶ Nearly three times the US percentage.

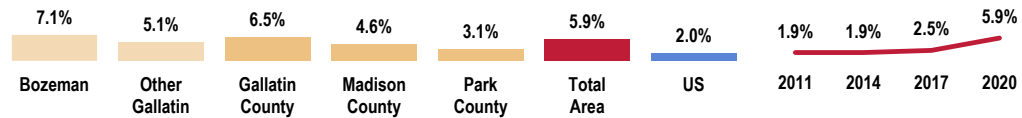
**TREND** ▶ Denotes a significant increase from previous survey findings.

**DISPARITY** ▶ Highest in Gallatin County. The prevalence decreases with age and is higher among higher-income residents and communities of color.

## Illicit Drug Use in the Past Month

Healthy People 2020 = 7.1% or Lower

Total Area

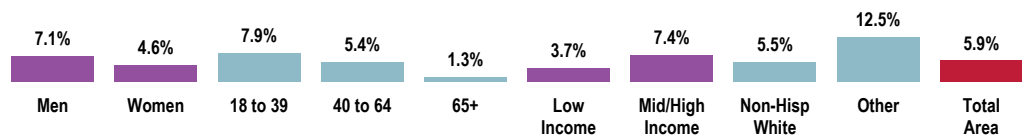


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 59]  
 • 2020 PRC National Health Survey, PRC, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-13.3]  
 Notes: • Asked of all respondents.

## Illicit Drug Use in the Past Month

(Total Area, 2020)

Healthy People 2020 = 7.1% or Lower



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 59]  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-13.3]  
 Notes: • Asked of all respondents.



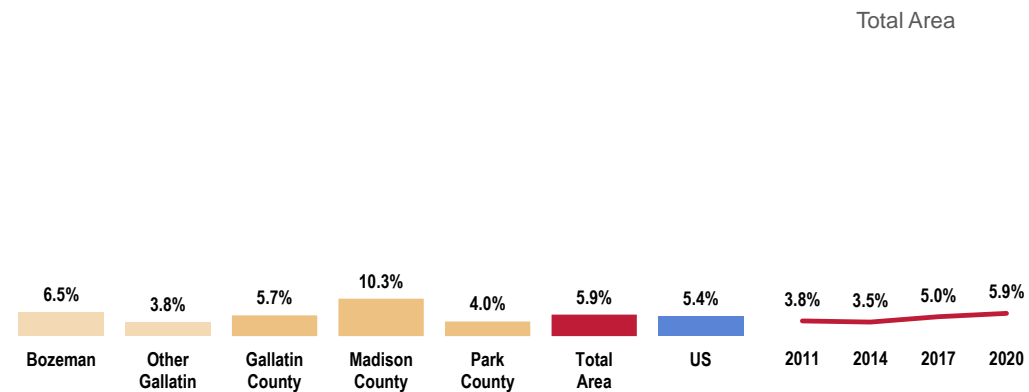
## Alcohol & Drug Treatment

A total of 5.9% of Total Area adults report that they have sought professional help for an alcohol or drug problem at some point in their lives.

**TREND** ► Increasing significantly from 2011 and 2014 survey findings.

**DISPARITY** ► Notably higher in Madison County.

### Have Ever Sought Professional Help for an Alcohol/Drug-Related Problem

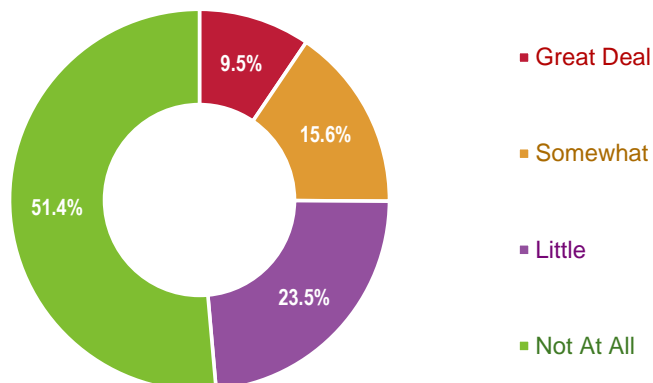


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 60]  
• 2020 PRC National Health Survey, PRC, Inc.  
Notes: • Asked of all respondents.

## Personal Impact From Substance Abuse

Most Total Area residents' lives have not 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) (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 61]  
Notes: • Asked of all respondents.

Area adults were also asked to what degree their lives have been impacted by substance abuse (whether their own abuse or that of another).

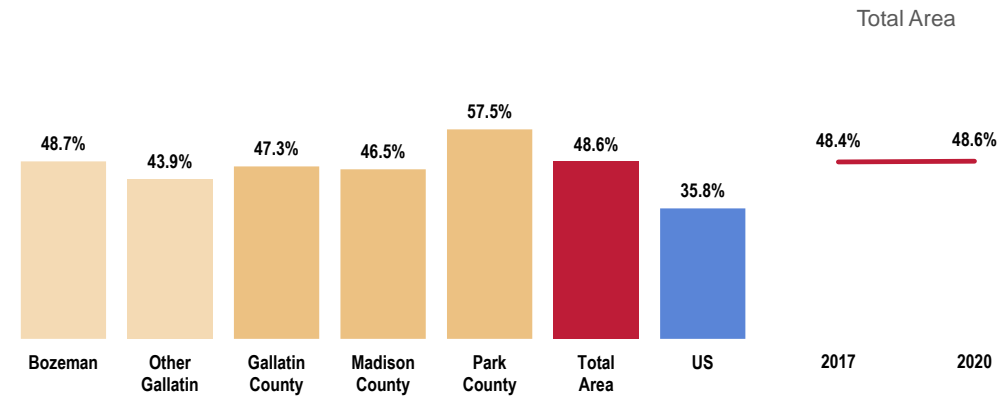


However, 48.6% have felt a personal impact to some degree (“a little,” “somewhat,” or “a great deal”).

**BENCHMARK** ► Much worse than the US prevalence.

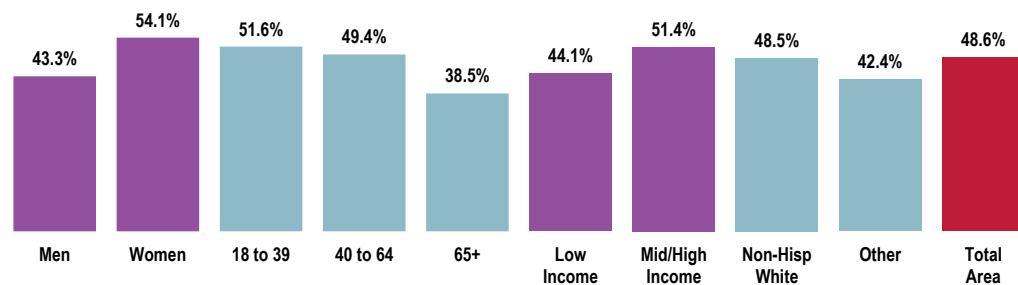
**DISPARITY** ► Highest in Park County. Decreases with age in the Total Area and is higher among women and higher-income residents.

### Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 195]  
• 2020 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) (Total Area, 2020)

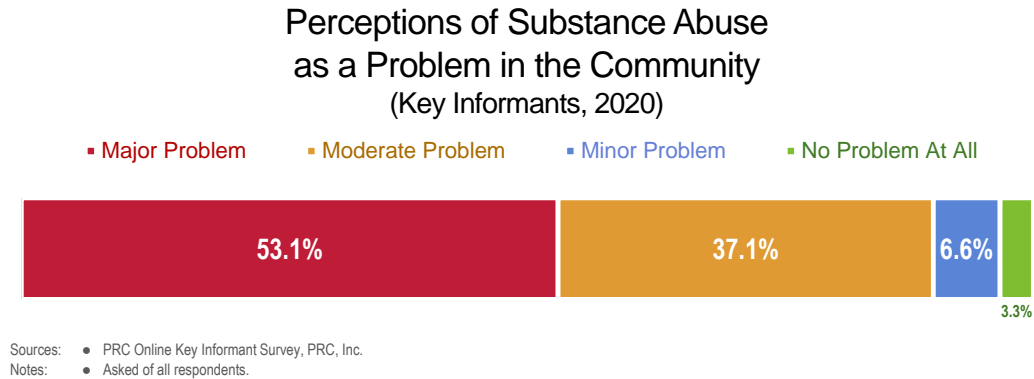


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 195]  
Notes: • Asked of all respondents.  
• Includes response of “a great deal,” “somewhat,” and “a little.”



## Key Informant Input: Substance Abuse

A majority of key informants taking part in an online survey characterized **Substance Abuse** as a “major problem” in the community.



Key informants (who rated this as a “major problem”) identified **alcohol** as causing the most problems in the community followed by **methamphetamine or other amphetamines**.

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

### Access to Care/Services

- Lack of inpatient facility. – Community Leader (Gallatin County)
- Access to service providers. – Social Services Provider (Gallatin & Madison Counties)
- Limited resources, high need, poor insurance coverage, stigma of substance abuse label. – Physician (Gallatin & Madison Counties)
- Lack of access to services. – Physician (Gallatin & Madison Counties)
- We don't have inpatient treatment for substance abuse. There are not enough therapists that specialize in substance abuse. – Physician (Gallatin & Madison Counties)
- Safe recovery housing, especially for women. – Social Services Provider (Gallatin & Madison Counties)
- Lack of licensed clinical addiction counselors. Lack of detox and treatment centers. – Other Health Provider (Gallatin & Madison Counties)
- resources that are available for all community members, not just those that have court-mandated appearances. This has been the criticism of the Gallatin County Drug and Alcohol treatment program—that with all the court-mandated “patients” it does not provide a good environment for ordinary citizens to seek substance abuse treatment. – Physician (Gallatin & Madison Counties)
- Lack of local treatment beyond outpatient and the wait there is substantial. – Physician (Gallatin & Madison Counties)
- No facility. Few trained professionals. – Physician (Gallatin County)
- Falls along with limited mental health services. There is not a lot for people to do if they aren't outdoorsy people. They just go to bars and drink. – Other Health Provider (Gallatin Gateway, Big Sky & West Yellowstone)
- Access to treatment. – Other Health Provider (Gallatin County)
- Lack of treatment options. – Physician (Gallatin & Madison Counties)
- Substance abuse prevention and treatment is only available one or two days a month in West Yellowstone. Treatment can be done in Bozeman, but the availability of prevention services and evaluation services is very limited. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)
- Limited treatment option, no recovery or detox center. – Social Services Provider (Gallatin County)
- Access to support services. – Public Health Representative (Gallatin County)
- We only have outpatient services currently, which is very limiting when it comes to recovery. I believe Alcohol and Drug Services also has a wait list but am not 100 percent sure. Treatment can be incredibly expensive as well. – Social Services Provider (Gallatin & Madison Counties)



Lack of a detox facility, lack of inpatient care, lack of space in residential setting, lack of promising practice treatment models, lack of specialized addiction counselors. – Social Services Provider (Gallatin & Madison Counties)

Alcohol and Drug Services has limited services, many people whom I work with have been frustrated with them and refuse to return. Their office is not on a bus line so many people feel they cannot get there. We need a rehab in our community. – Social Services Provider (Gallatin & Madison Counties)

Availability, confidentiality, social norms. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

No local inpatient facility or structured sober housing with build in IOP and other services. Lack of MAT resources including opioid treatment programs. Insurance to a degree. – Other Health Provider (Gallatin & Madison Counties)

Covid has kept patients on waiting list for rehab and other treatment programs. AA, Al-Anon meetings aren't available to people who have no access to internet. – Other Health Provider (Gallatin & Madison Counties)

There is only one place in town that provides assessments and treatment that is underfunded and overloaded. There is no acute center to help people with detox first. There is a lack of LAC's in town and the LACs in town don't all take Medicaid and are often overbooked as well. – Other Health Provider (Gallatin & Madison Counties)

Trained providers and insurance coverage. – Other Health Provider (Gallatin & Madison Counties)

No facility, no inpatient type assistance. – Community Leader (Gallatin County)

Limited resources for inpatient treatment, no urgent access to help people emergently. – Physician (Gallatin & Madison Counties)

Availability and skill of professionals. – Other Health Provider (Gallatin County)

It is hard to get a treatment bed for people. There is a long waiting list and people need to drive to Billings or Missoula. – Public Health Representative (Gallatin County)

Alcohol and drugs come up one a week at time to help with people required by court to get help. Outside of that we have no programs at all. – Social Services Provider (Gallatin Gateway, Big Sky & West Yellowstone)

Not available enough. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

As with mental health: lack of resources, lack of providers, no inpatient treatment program, no day treatment programs. – Physician (Gallatin & Madison Counties)

No medical detox, residential facilities, or sobering houses. – Other Health Provider (Gallatin County)

For the most part lack of wanting to access them is the greatest barrier. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

Not enough resources exist. – Community Leader (Gallatin & Madison Counties)

There are insufficient services and it often is not covered by insurance. – Other Health Provider (Gallatin & Madison Counties)

Availability of treatment options, cost of care. Montana's drinking culture. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

No resources and fear to get help. Too many obstacles to get appropriate treatment. – Other Health Provider (Park County)

We don't have many options for treatment here in Livingston and none that I know of in the rural communities. South West Chemical Dependency does a decent job however, they are the only SUD treatment facility and it is outpatient. SWCD does have a halfway house, however, teens and women with children are not accepted. – Community Leader (Park County)

No options for inpatient treatment. – Other Health Provider (Park County)

Total lack of substance abuse treatment in area. No inpatient treatment or prolonged treatment available. – Other Health Provider (Park County)

Lack of consistent providers at SWCD, lack of inpatient and intense outpatient care. – Physician (Park County)

There are no treatment centers, that I am aware of, in this community. – Public Health Representative (Park County)

Not enough resources to deal with all the users. – Social Services Provider (Park County)

Lack of facilities and modalities to treat substance abuse. Lack of quality services. – Social Services Provider (Park County)

The only substance abuse treatment agency does not seem to be very effective from my point of view. There seem to be a disproportionate number of alcoholics for a community this size. – Social Services Provider (Park County)

## Cultural/Personal Beliefs

The pro-alcohol culture we have is a significant barrier. Binge drinking is not really seen as a problem to those who partake in it, preventing them from seeking support. – Social Services Provider (Gallatin & Madison Counties)

Culture. – Social Services Provider (Gallatin & Madison Counties)



There are cultural issues surrounding substance use in Montana. Alcohol is considered a part of the norm. There is no control over density of bars in our community and alcohol is not seen by residents as a problem because it is such a major part of the culture. We have one large AA group in the city of Bozeman, and there are no real options for inpatient treatment in our state. – Public Health Representative (Gallatin & Madison Counties)

I think culture is one barrier. I think many do not know where to turn for help. – Social Services Provider (Gallatin County)

We have a culture that accepts alcohol and drug abuse as normative. – Community Leader (Gallatin County)

## Affordable Care/Services

Lack of resources to access like finances, travel. – Social Services Provider (Gallatin & Madison Counties)

There is not an affordable inpatient substance abuse treatment facility. There does not seem to be much support in the outpatient setting for individuals trying to get clean. There are not enough people specialized in this area available to provide services. – Other Health Provider (Gallatin & Madison Counties)

We don't have a way to help low income addicts. Jail is the best option for treatment right now. – Other Health Provider (Gallatin & Madison Counties)

Cost and knowledge about where the resources are. – Community Leader (Gallatin County)

Affordable treatment. – Social Services Provider (Gallatin County)

## Denial/Stigma

Individuals not realizing, accepting that there is a problem. Social norms in our community encouraging substance abuse. – Public Health Representative (Gallatin County)

Stigma of needing help and asking for help. Not knowing where to go to get help. Access to substances is easy. – Community Leader (Gallatin & Madison Counties)

Acceptance of patient to understand their issue with substance abuse and willingness to seek help, mental health issues prevent patients from seeking substance abuse counseling and care, dual diagnosis of substance abuse and mental health issues, i.e., which symptoms are due to which disorder, which came first, which issue to deal with, acceptance by the patient to treatment, ability to comply with treatment (housing, food, income, health insurance, mental capacity to comply, physical capacity to comply, family support), understanding how and where to access services, availability of services to low-income/uninsured/underinsured people, cultural- and linguistic-appropriate service availability and accessibility. – Public Health Representative (Gallatin County)

Lack of recognizing the problem and the risk and protective factors. – Social Services Provider (Gallatin & Madison Counties)

Shame, social stigma, doctors threatening parents that if they seek the help needed for substance treatment, they will lose their kids. Programs not covered by insurance, no support from employer or PTO. – Social Services Provider (Gallatin County)

Stigma associated with seeking treatment. Serious lack of licensed addiction treatment professionals. Lack of professionals trained in using medically assisted treatment. – Community Leader (Park County)

People don't think they have a problem. Alcohol is used as a fundraiser for every non-profit in the county including children's nonprofits. Often alcohol is seen as a solution, rather than a problem. – Community Leader (Park County)

People don't think they have a problem. Substance use is a disease where one of its top symptoms is denial. People deny they have a problem. Prevention activities have been cut due to funding cuts. People are not receiving enough routine education about substance use prevention and intervention. – Social Services Provider (Park County)

Same as mental health, stigma and limited qualified providers. – Community Leader (Park County)

In some social circles the stigma associated with addiction stops those needing help to seek it out. Fear of losing their job or social status and shame creates a barrier to recovery. – Social Services Provider (Park County)

## Prevalence/Incidence

High binge drinking in Bozeman, seasonality of economy, low wage state. – Public Health Representative (Gallatin County)

I hear from many people that this is a critical issue. – Public Health Representative (Gallatin County)

Having just talked to 10 women serving time in our local detention center, the reason 90% of them were in jail was because of substance abuse issues. That was the root cause anyways. Alcohol, meth, opioids, we've got it all. And the parallels between mental health issues and substance abuse are directly related, which makes the clear argument that this is a huge issue in our local community. I mean, just look at the number of DUIs we issue in our county. We need more support here! – Community Leader (Gallatin & Madison Counties)

Alcohol use is a predominant part of social and family structures, which makes it difficult to bring about change. Substances are also used to self-medicate symptoms of depression, anxiety, or PTSD, as well as used to curb loneliness. – Other Health Provider (Gallatin & Madison Counties)

Drugs. – Public Health Representative (Gallatin County)





Meth, not certain which category it is under. My own son had to leave Bozeman to get away from his friends who started using meth. It killed one of his friends. – Social Services Provider (Gallatin & Madison Counties)

Drugs and alcohol are prevalent in resort communities. A large number of people traveling into the community seem to bring other issues with them along with many locals. – Social Services Provider (Gallatin Gateway, Big Sky & West Yellowstone)

Methamphetamine abuse is rampant and proliferation of opioid abuse in Park County seems imminent. Children are being impacted in utero, which, either because of physical changes to the developing brain or because of the likelihood of reactive attachment disorder after birth, correlates directly with struggles in school with focus and disruptive and physically aggressive behavior. Violent crime is often associated with substance abuse. – Community Leader (Park County)

Montana has a high rate alcohol abuse. Only treatment I am aware of is Southwest Montana Chemical Dependency. From what I know a lot of people are court ordered to receive these services. Services are available for general public but are not intensive programs. – Community Leader (Park County)

There is a huge problem with the abuse of alcohol and other drugs in our community. There are no inpatient or residential resources available to serve folks with these conditions, and there is only one provider serving the outpatient/intensive outpatient needs of our county. If someone has had an issue with this program, there are no other options available. Someone would have to go to Bozeman, Billings, Butte, or some other larger community to get inpatient/residential help for their alcohol and drug problems. Again, a lot of our residents do not have the ability to leave Livingston due to their substance abuse issues. Again, transportation to these facilities is a major challenge to arrange. – Other Health Provider (Park County)

## Awareness/Education

Patients and providers don't know who to call to get patients the help they need. – Physician (Gallatin & Madison Counties)

I'm not aware of many substance abuse programs or services in the community. I just know it is a community issue that is often under-addressed. Also substance abuse, mental health, and home/food insecurity commonly intersect. – Community Leader (Gallatin & Madison Counties)

Education and individual acceptance. People in Montana drink too much, and sadly drink and drive. – Community Leader (Gallatin County)

Knowledge of where to receive care and whether we are willing to meet people in their time of crisis rather than expecting them to come to Bozeman Health. – Community Leader (Gallatin County)

Lack of awareness that the substance abuse is a problem. – Other Health Provider (Park County)

## Contributing Factors

Insurance coverage, stigma, lack of community resources like inpatient treatment. – Community Leader (Gallatin County)

Health insurance and stigma. – Community Leader (Gallatin & Madison Counties)

Accessibility to drugs, lack and cost of accessibility to treatment. A well-connected system for response. – Social Services Provider (Gallatin & Madison Counties)

The culture of our community lends itself toward substance abuse. People know and are accepting of other's abuse, rather than inspired to help people change. There is a perceived lack of access to mental health experts and/or lack of perceived need for help. People seem generally content with their lives, rather than striving for a lifestyle free from substance use. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

Police have indicated they are losing the substance abuse battle. It is too culturally acceptable. – Community Leader (Park County)

The bars, the culture and denial. – Community Leader (Park County)

Cultural acceptance. – Community Leader (Park County)

The culture and availability. – Community Leader (Park County)

Few locations that will accept Medicaid or slide and have current openings. – Other Health Provider (Park County)

Lack of desire to quit. Hard to quit and easy to start again. – Social Services Provider (Park County)

Substance abuse, medical marijuana isn't medical, alcohol consumption by townspeople. Talk with law enforcement about this problem: drug-addicted, active parents. – Other Health Provider (Park County)

Funding being pulled, lack of education around what creates an addiction, and money. I don't think it's necessarily specific to our community, but it is a highly stressful world these days. Many people are numbing out. There is a need to teach healthy tools for relaxation and calming the system. – Physician (Park County)

Awareness of resources, willingness to seek help. Peer pressure to not seek help. Stigma related to seeking help. Generational substance use and no familial support. – Social Services Provider (Park County)

Cost and availability. – Social Services Provider (Park County)



We have SWCDC to assist with counseling – inpatient- and referral to outpatient. It is closely tied in with court system and probation, and clients often go elsewhere where they have to pay or be on insurance, which is at times non-existent, so go without treatment trying to recover on their own. Abstinence-based treatment doesn't work – harm reduction not practiced. – Social Services Provider (Park County)

Cost and denial. – Community Leader (Park County)

Reluctance to participate in group treatment programs. Shame. Town culture that endorses alcohol use. Small town atmosphere makes recovery and behavior change difficult. High early childhood trauma rates contributing to comorbid mental health disorders. Lack of treatment resources. – Physician (Park County)

More referrals to adults and some youth could be a more preventive approach regarding this health issue. Youth are often on probation and they are not drug tested. Their usage often times will increase once released from probation. – Social Services Provider (Park County)

## Funding

Funding for programs and treatment are the barriers related to accessing treatment. – Community Leader (Gallatin & Madison Counties)

Sustainable funding for innovative models of care. – Public Health Representative (Gallatin County)

General lack of funding and resources. – Physician (Gallatin County)

Probably funding for adequate counseling and designated space. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

Funding for substance abuse prevention, education, counseling and treatment. – Community Leader (Park County)

Funding for substance abuse prevention, education, counseling and treatment. – Community Leader (Park County)

## Lack of Providers

There are not enough providers, nor are there varied layers of services available. – Other Health Provider (Gallatin & Madison Counties)

Lack of licensed addiction counselors, waitlists and need for local treatment programs. – Other Health Provider (Gallatin County)

No providers. – Other Health Provider (Gallatin Gateway, Big Sky & West Yellowstone)

Lack of effective treatment options. SWCD is not integrated into care system limiting its effectiveness. No clear system of treatment; e.g. intensive use of resources treating alcohol withdrawal in LHC with no clear or good options for follow up care. Not enough providers offering MAT. – Physician (Park County)

Currently have to send patient to Billings for substance abuse treatment 130 miles away. – Physician (Park County)



# 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.

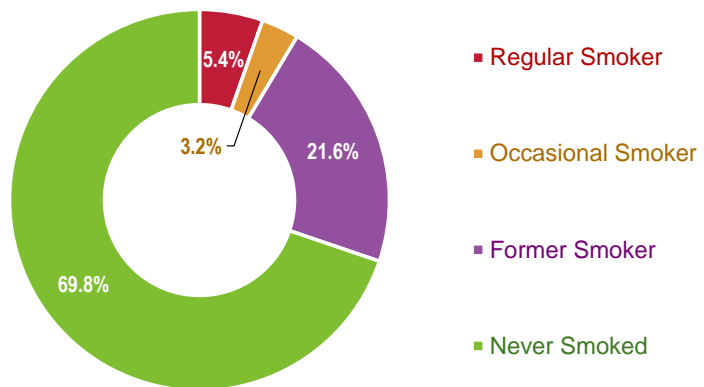
— Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Cigarette Smoking

### Cigarette Smoking Prevalence

**A total of 8.6% of Total Area adults currently smoke cigarettes, either regularly (every day) or occasionally (on some days).**

Cigarette Smoking Prevalence  
(Total Area, 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 the Total Area.

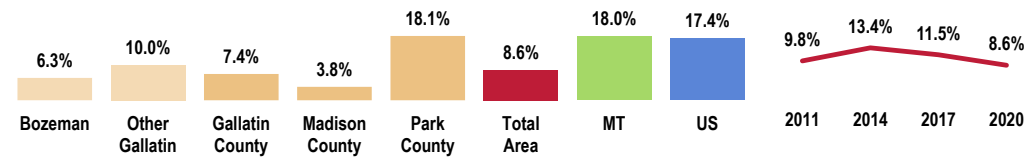
**BENCHMARK** ► Much lower than Montana and US percentages. Satisfies the Healthy People 2020 objective.

**DISPARITY** ► Dramatically higher in Park County. Correlates with age and is especially prevalent among low-income residents.

## Current Smokers

Healthy People 2020 = 12.0% or Lower

Total Area



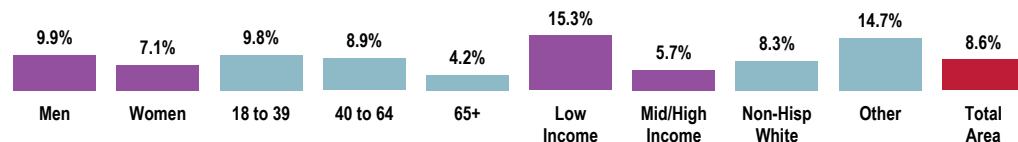
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 193]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Montana data.  
 • 2020 PRC National Health Survey, 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

(Total Area, 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.  
 • Includes regular and occasion smokers (every day and some days).

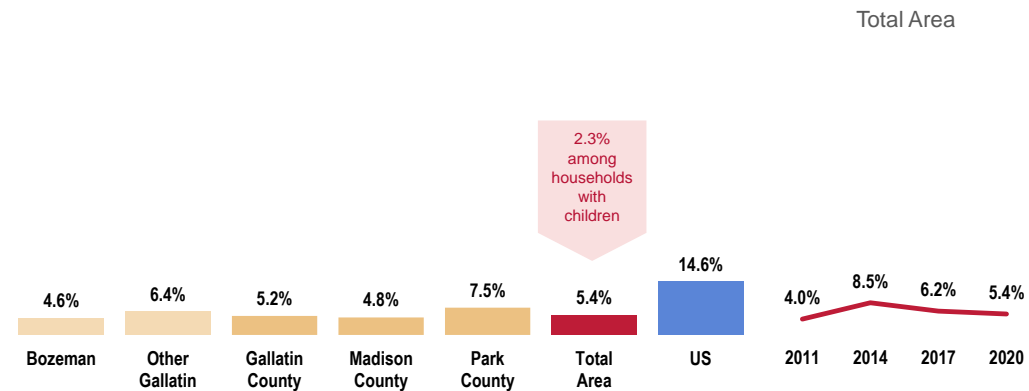


## Environmental Tobacco Smoke

Among all surveyed households in the Total Area, 5.4% report that someone has smoked cigarettes in their home on an average of four or more times per week over the past month.

**BENCHMARK** ► Well below the US percentage.

### Member of Household Smokes at Home



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 52, 162]  
• 2020 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.

## Smoking 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))

**Just less than one-third of regular smokers (32.1%) went without smoking for one day or longer in the past year because they were trying to quit smoking.**

**BENCHMARK** ► Less favorable than the Montana prevalence.

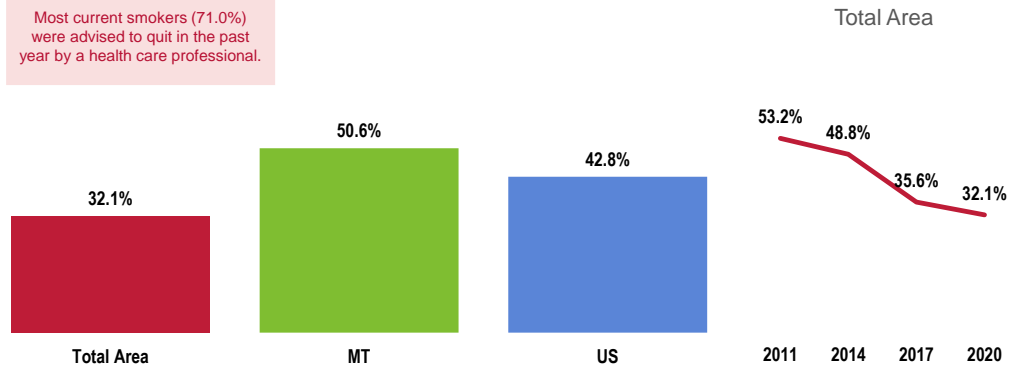
**TREND** ► Marks a significant decrease over time in smoking cessation attempts.



## Have Stopped Smoking for One Day or Longer in the Past Year (Everyday Smokers)

Healthy People 2020 = 80.0% or Higher

Most current smokers (71.0%)  
were advised to quit in the past  
year by a health care professional.



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 50-51]  
 • 2020 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): 2018 Montana data.  
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-4.1]

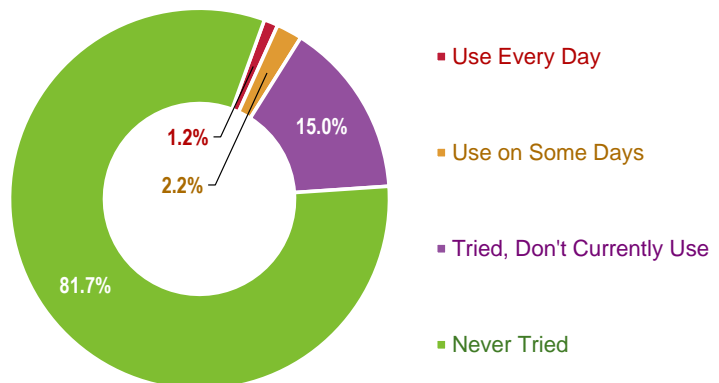
Notes: • Asked of respondents who smoke cigarettes every day.

## Other Tobacco Use

### Use of Vaping Products

**Most Total Area adults have never tried electronic cigarettes (e-cigarettes) or other electronic vaping products.**

### Use of Vaping Products (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 163]  
 Notes: • Asked of all respondents.



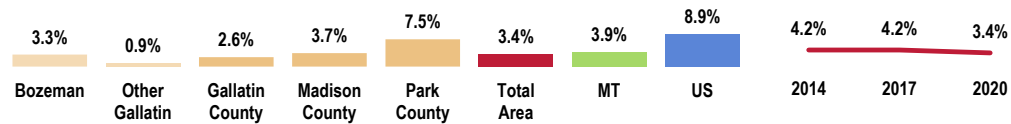
However, 3.4% currently use vaping products either regularly (every day) or occasionally (on some days).

**BENCHMARK** ► Well below the US figure.

**DISPARITY** ► Highest in Park County. Also much higher in Bozeman than Other Gallatin County. Correlates with age in the Total Area and is higher among low-income residents.

## Currently Use Vaping Products (Every Day or on Some Days)

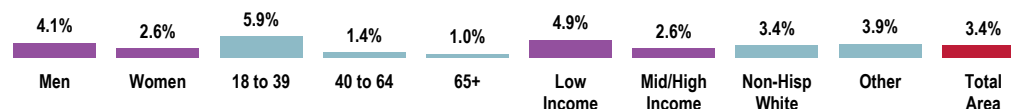
Total Area



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 194]  
 • 2020 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): 2018 Montana data.

Notes: • Asked of all respondents.  
 • Includes regular and occasional users (those who smoke e-cigarettes every day or on some days).

## Currently Use Vaping Products (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 194]  
 Notes: • Asked of all respondents.  
 • Includes regular and occasional users (those who smoke e-cigarettes every day or on some days).



Asked why they started using vaping products, most of these respondents mentioned an attempt to reduce or quit using cigarettes.

## Smokeless Tobacco

Examples of smokeless tobacco include chewing tobacco, snuff, or “snus.”

**A total of 5.2% of Total Area adults use some type of smokeless tobacco every day or on some days.**

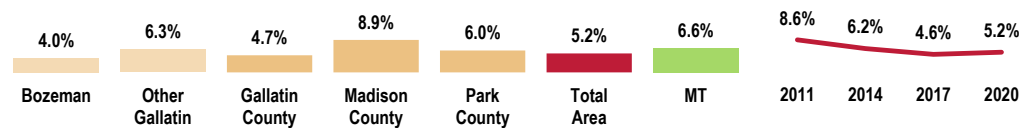
**BENCHMARK** ► Lower than the Montana percentage.

**TREND** ► Denotes a significant decrease from 2011 survey results.

### Currently Use Smokeless Tobacco

Healthy People Goal = 0.2% or Lower

Total Area



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 317]  
 • 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]

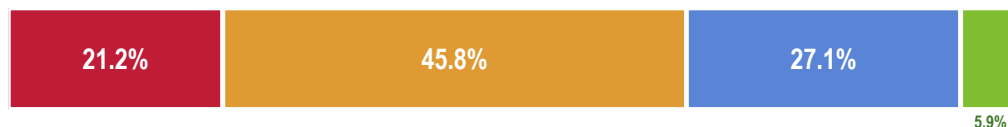
Notes: • Reflects the total sample of respondents.  
 • Smokeless tobacco includes chewing tobacco or snuff.

## 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.





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

## Prevalence/Incidence

Lots of people smoking. Younger and older people. Leads to lots of medical problems costing our system problems. – Social Services Provider (Gallatin & Madison Counties)

We are tasked with asking every patient if they smoke, and a significant number of patients we encounter smoke or use smokeless tobacco. – Other Health Provider (Gallatin & Madison Counties)

High use of both chewing tobacco and cigarettes. – Physician (Gallatin & Madison Counties)

Lots of use and not very many resources. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

We have several people who smoke and several parents smoke around their kids in the home. – Other Health Provider (Gallatin Gateway, Big Sky & West Yellowstone)

There is a high use of tobacco in Montana and Gallatin county. – Other Health Provider (Gallatin & Madison Counties)

Tobacco use is the leading cause of preventable death and disease in the United States and in Gallatin County. – Public Health Representative (Gallatin County)

Too many smokers and chewers in this community with no desire to stop. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

High use in community of chewing tobacco and cigarettes. – Social Services Provider (Park County)

I see the majority of my friends/family relying on tobacco products on a consistent basis. – Public Health Representative (Park County)

High rate of use with long term health implications. – Physician (Park County)

I just see a lot of people smoking. I also see a lot of people come into the hospital with lung issues related to smoking, COPD. – Other Health Provider (Park County)

Simply walking the streets of our community is a visible indication of the incidence rate of smoking in Livingston. Vaping is also a problem. – Community Leader (Park County)

Many still smoke, chew, or JUUL. – Community Leader (Park County)

Poverty, low income, drug and alcohol use, obesity and self-medicating. – Social Services Provider (Park County)

Waste of money, increases health burdens for poor community. – Physician (Park County)

Drug and alcohol use are very high in Park County according to the CHIP statistics. Tobacco use goes hand in hand with drugs and alcohol. – Social Services Provider (Park County)

People were raised with tobacco and have a hard time quitting as adults. New devices such as JUUL are opening the doors to this addictive behavior. – Public Health Representative (Park County)

Strong tobacco culture in this western town. High teen smoking rates. High rates of comorbid conditions such as substance use and mental health disorders. – Physician (Park County)

## Impact on Quality of Life

It kills people. – Physician (Gallatin & Madison Counties)

It is costly to the health care system and people, quality of life. – Social Services Provider (Gallatin & Madison Counties)

Health implications. – Public Health Representative (Gallatin County)

## Co-Occurrences

Tobacco use causes lung cancer and other lung ailments, heart disease, restricted breathing, costs money when money is short, is addictive (on purpose). It is very hard to kick the habit once started, and tobacco is marketed to children through product placement, advertisements that make smoking look sexy, and peer pressure. We are now facing the vaping epidemic, which has many of the same problems as tobacco and the marketing is definitely focused on kids. The idea that vaping helps stop smoking is oxymoronic in that most vaping products contain nicotine (the addictive substance). People say it helps stop them from smoking. Sort of. The tar is gone, but other chemicals and addictive properties are still there. – Public Health Representative (Gallatin County)

It continues to be a large contributing factor for heart disease, cancer, respiratory illness. – Social Services Provider (Gallatin County)

## E-Cigarettes

Vaping among youth is increasing. – Other Health Provider (Gallatin & Madison Counties)

People are still smoking and some individuals have switched to vaping thinking that is a healthier alternative. – Other Health Provider (Gallatin & Madison Counties)



Vaping in middle and high school. I see daily driving around town people smoking in their cars. Children in the back seats. I also see where I work a large number of males using smokeless tobacco. – Community Leader (Park County)

The schools have identified vaping as a growing and critical problem for our youth. – Community Leader (Park County)

### Easy Access

Chewing tobacco, vapes pens, and pot are very available to our youth. – Social Services Provider (Gallatin & Madison Counties)

Tobacco is easily accessible and creates major health problems. The use of tobacco is fairly normalized in Montana. – Other Health Provider (Gallatin & Madison Counties)

### Cultural/Personal Beliefs

Although most of the people we know do not smoke, I perceive this to be a lifestyle issue associated with rural and farming communities. – Community Leader (Gallatin County)

Culture. – Social Services Provider (Gallatin & Madison Counties)



# SEXUAL HEALTH

## HIV

### ABOUT HUMAN IMMUNODEFICIENCY VIRUS (HIV)

The HIV epidemic in the United States continues to be a major public health crisis.

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.

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 health care programs.

Improving access to quality health care 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 2018, there was a prevalence of 56.4 HIV cases per 100,000 population in the Total Area.**

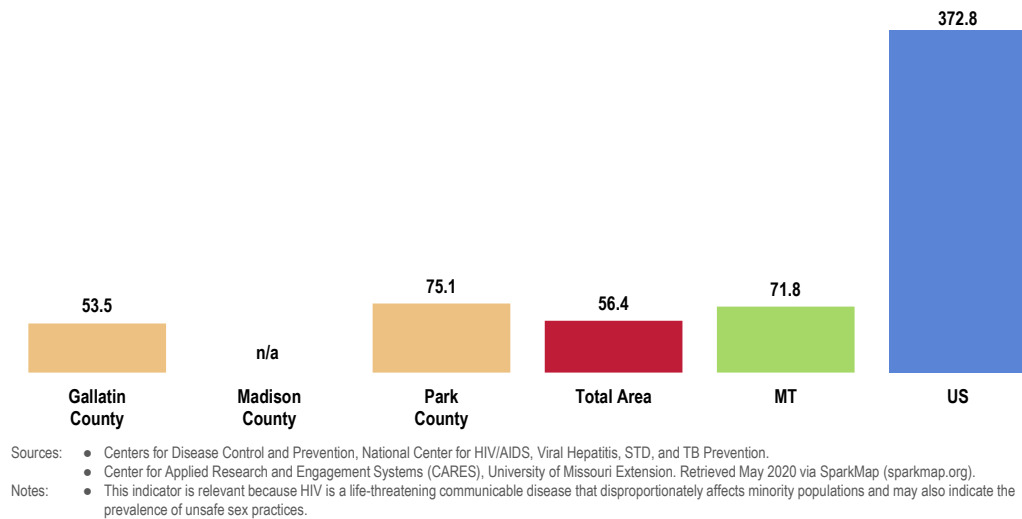
**BENCHMARK** ► Below the state and especially the US prevalence rates.

**DISPARITY** ► Lowest in Gallatin County.



## HIV Prevalence

(Prevalence Rate of HIV per 100,000 Population, 2018)



## HIV Testing

Among Total Area adults age 18-44, 14.5% report that they have been tested for HIV in the past year.

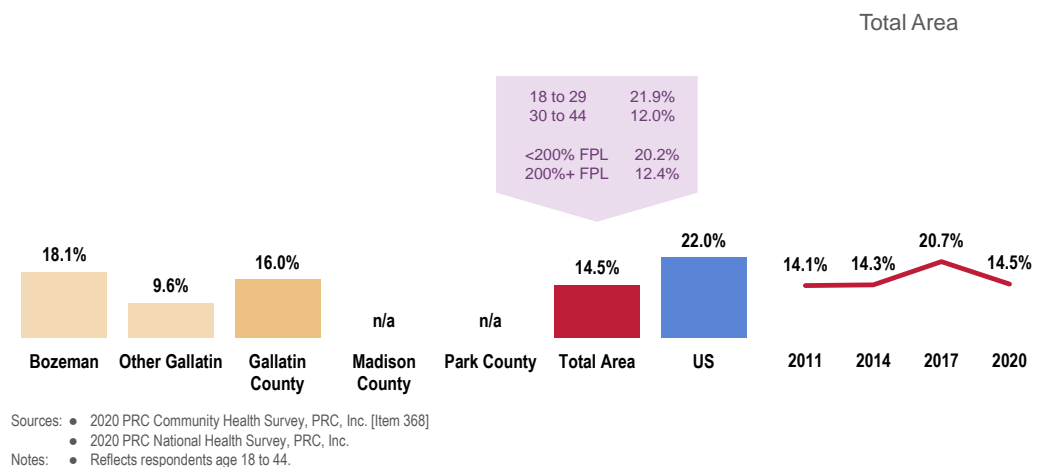
**BENCHMARK** ► Lower than the US testing prevalence.

**TREND** ► Despite a spike in testing reported in 2017, the prevalence is similar to 2011 and 2014 results.

**DISPARITY** ► The prevalence is much higher in Bozeman (note that data cannot be shown for Madison and Park counties due to low sample sizes, although they are calculated into the Total Area prevalence). By demographics: especially high among adults age 18 to 29 and those in the lower-income breakout.

## Tested for HIV in the Past Year

(Adults Age 18-44)



# 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.

**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 health care; 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 2018, the chlamydia incidence rate in the Total Area was 439.0 cases per 100,000 population.**

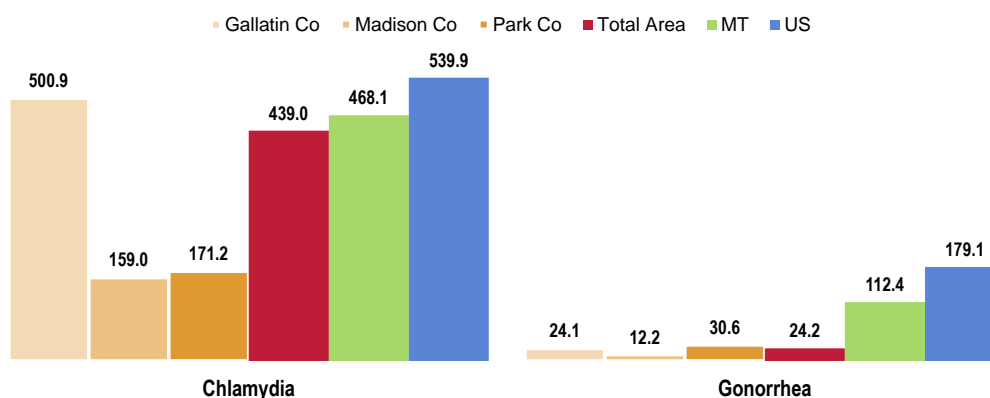
**The Total Area gonorrhea incidence rate in 2018 was 24.2 cases per 100,000 population.**

**BENCHMARK** ► Both incidence rates are below the correlating US rates; the area’s gonorrhea incidence rate also falls below the Montana rate.

**DISPARITY** ► The chlamydia rate is highest in Gallatin County, while the gonorrhea rate is highest in Park County.



## Chlamydia & Gonorrhea Incidence (Incidence Rate per 100,000 Population, 2018)



Sources: • Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
• Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap (sparkmap.org).  
Notes: • This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

## HPV (Human Papillomavirus)

### ABOUT HUMAN PAPILLOMAVIRUS

Human papillomavirus (HPV) is the most common sexually transmitted infection in the United States. You can get HPV by having vaginal, anal, or oral sex with someone who has the virus. It is most commonly spread during vaginal or anal sex. HPV can be passed even when an infected person has no signs or symptoms.

Anyone who is sexually active can get HPV, even if you have had sex with only one person. You also can develop symptoms years after you have sex with someone who is infected.

In most cases, HPV goes away on its own and does not cause any health problems. But when HPV does not go away, it can cause health problems like genital warts and cancer. Some health effects caused by HPV can be prevented by the HPV vaccines.

The HPV vaccine is safe and effective. It can protect against diseases (including cancers) caused by HPV when given in the recommended age groups. CDC recommends HPV vaccination at age 11 or 12 years (or can start at age 9 years) and for everyone through age 26 years, if not vaccinated already.

Vaccination is not recommended for everyone older than age 26 years. However, some adults age 27 through 45 years who are not already vaccinated may decide to get the HPV vaccine after speaking with their healthcare provider about their risk for new HPV infections and the possible benefits of vaccination. HPV vaccination in this age range provides less benefit. Most sexually active adults have already been exposed to HPV, although not necessarily all of the HPV types targeted by vaccination.

— Centers for Disease Control and Prevention (CDC)

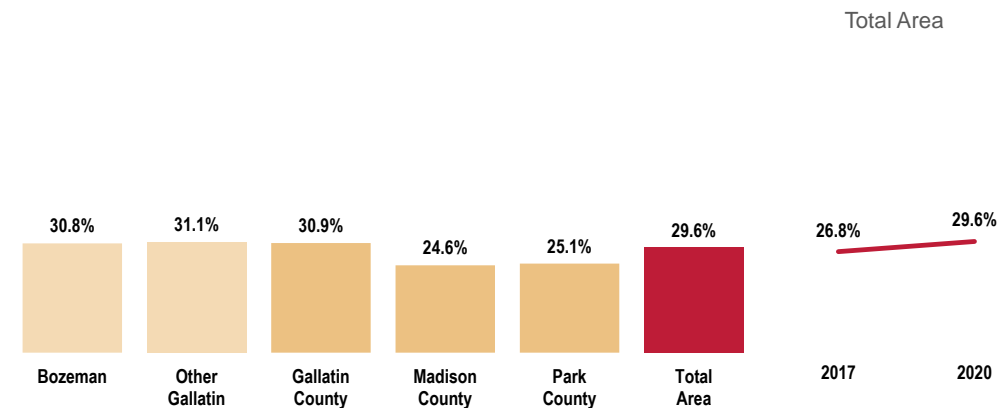


## HPV Information

**A total of 29.6% of all surveyed adults have received information from a health professional about HPV in the past three years.**

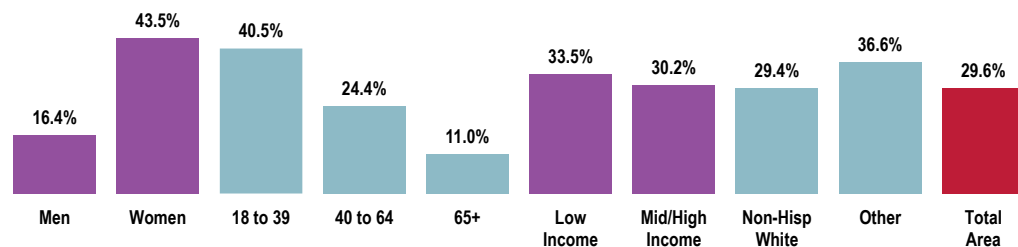
**DISPARITY** ► By county, the prevalence is highest in Gallatin County. Reported more often among women and young adults in the Total Area.

### Received Info on HPV from a Health Professional in the Past Three Years (Total Area)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 327]  
Notes: • Asked of all respondents; includes both written and spoken information.

### Received Info on HPV from a Health Professional in the Past Three Years (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 327]  
Notes: • Asked of all respondents; includes both written and spoken information.

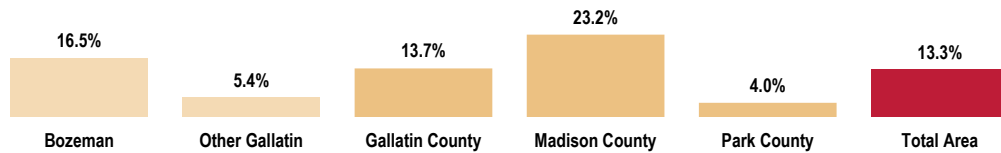


## HPV Vaccination

**Among surveyed adults under the age of 50 years, 13.3% have completed an HPV vaccination series that included a total of three shots.**

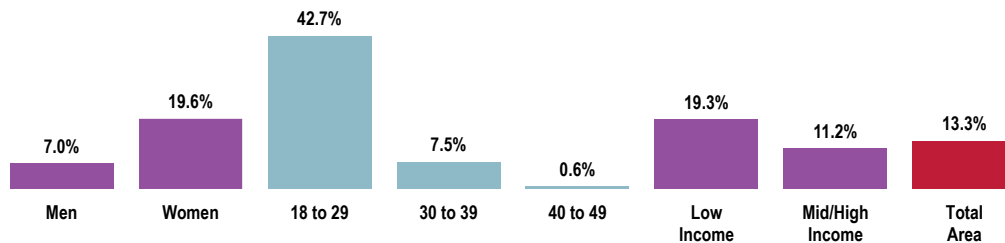
**DISPARITY** ► Vaccination prevalence is especially low in Other Gallatin County and Park County. By demographics, adults under 30 are especially more likely to report HPV vaccination. It is also higher among women and low-income residents.

### Have Had an HPV Vaccination Series (Three Shots) (Total Area Adults Age 18 to 49)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 367]  
Notes: • Asked of all respondents under age 50.

### Have Had an HPV Vaccination Series (Three Shots) (Total Area Adults Age 18 to 49, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 367]  
Notes: • Asked of all respondents under age 50.



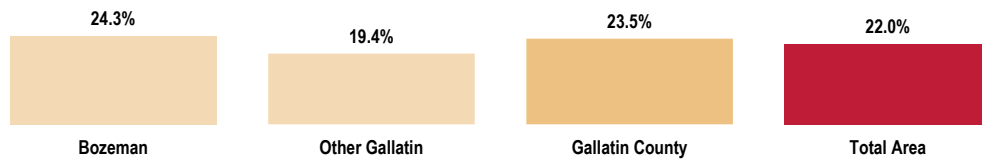


## STD Testing

A total of 22.0% of survey respondents age 18 to 44 have been tested for an STD (non-HIV) in the past year.

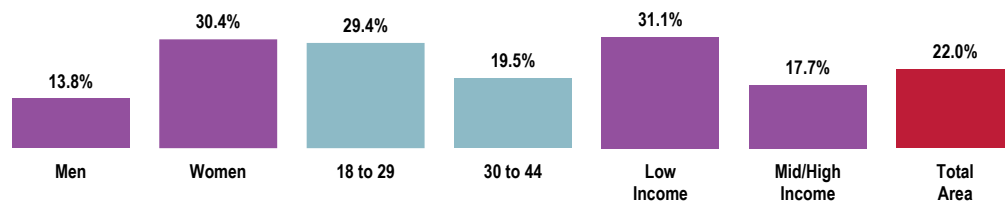
**DISPARITY** ► Adults more likely to have been tested in the past year include women and those in low-income households.

Tested for a Non-HIV STD in the Past Year  
(Total Area Adults Age 18 to 44, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 355]  
Notes: • Asked of all respondents age 18 to 44.  
• Includes such STDs as HPV, gonorrhea, chlamydia, and syphilis.

Tested for a Non-HIV STD in the Past Year  
(Total Area Adults Age 18 to 44, 2020)

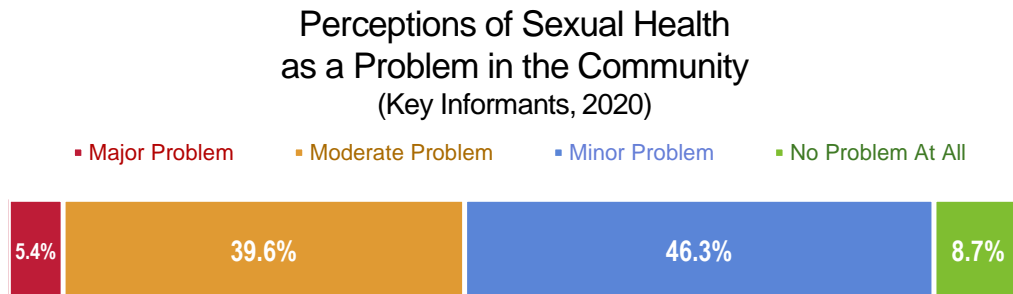


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 355]  
Notes: • Asked of all respondents age 18 to 44.  
• Includes such STDs as HPV, gonorrhea, chlamydia, and syphilis.



## Key Informant Input: Sexual Health

A plurality of key informants taking part in an online survey characterized *Sexual Health* as a “minor problem” in the community (not asked of Park County respondents).



Sources: • PRC Online Key Informant Survey, PRC, Inc.  
Notes: • Asked of all respondents; not asked of Park County OKIS respondents.

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

### Contributing Factors

Rates of STIs are increasing at an alarming rate nationally, and those same trends are reflected here in our local community. Birth control is also increasing in expense and mandates for insurance to cover birth control are highly contested. We are seeing more and more barriers arising that make it difficult for people, especially low income individuals and vulnerable populations, to get access to the affordable and affirming care they deserve. Like I said before, the funding threat for small, independent family planning clinics is absolutely alarming. If there isn't an administration change come this November, all Title X clinics in Montana will be incredibly vulnerable to additional funding cuts and possible closure. – Community Leader (Gallatin & Madison Counties)

High amounts of tourism. – Public Health Representative (Park County)

Transient nature of parts of the county, misinformation and/or apathy of the problem. – Public Health Representative (Park County)

Unsafe sex which is always an issue, but also goes in hand with alcohol and drug abuse. – Social Services Provider (Park County)

More People ages 15–40 consider sexual activity as an aspect of “friendship” and are having prolific, unprotected sex. Sexually transmitted diseases are therefore transmitted between sex partners. – Social Services Provider (Park County)

No support groups and stigma. – Other Health Provider (Park County)

### Awareness/Education

Sexual “freedom” seems to be the message conveyed in our community to young people, but with little understanding of the risks associated with it, including pregnancy, STIs (including long-term consequences), not to mention relational, emotional, ethical, and spiritual perspectives. – Community Leader (Gallatin County)

Sexual health is super important! I work with incredible young people across the county and ensuring that young people have the knowledge and access to make their own sexual and relationship decision is extremely critical. Starting early with a good base on healthy relationships and sex-positive education will go a long ways towards building self-esteem and confidence, and reduce abusive behavior and unhealthy relationships. – Social Services Provider (Gallatin & Madison Counties)

It is not talked about nor do I personally know of available resources. – Social Services Provider (Park County)

No support groups and stigma. – Other Health Provider (Park County)



## Denial/Stigma

There is a stigma in the LGBTQ community. For those individuals who are not part of that community, find themselves feeling like they have to treat them differently for fear of offending them. There is so many definitions related to this population of people that it is hard sometimes addressing them. Which goes back to education. There is not enough open discussion on sexual health that many individuals are either naive or curious and try things they normally wouldn't try because they do not know any better. – Other Health Provider (Gallatin & Madison Counties)

## Teen Pregnancy

This year we've had five Hispanic teen pregnancies before graduating from high school. Yikes, that's a huge number in our community. We don't have any resources for the Hispanic culture to get educated on sexuality. – Community Leader (Gallatin & Madison Counties)

## STI Incidence

Rising STI rates. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)





# ACCESS TO HEALTH CARE

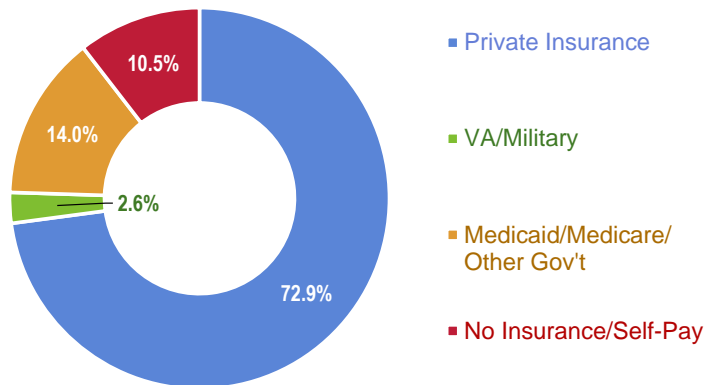
# HEALTH INSURANCE COVERAGE

## Type of Health Care Coverage

A total of 72.9% of Total Area adults age 18 to 64 report having health care coverage through private insurance. Another 16.6% report coverage through a government-sponsored program (e.g., Medicaid, Medicare, military benefits).

Survey respondents were asked a series of questions to determine their health care insurance coverage, if any, from either private or government-sponsored sources.

Health Care Insurance Coverage  
(Adults Age 18-64; Total Area, 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, 10.5% report having no insurance coverage for health care expenses.

**BENCHMARK** ► Better than the Montana prevalence. The Healthy People 2020 objective is universal coverage.

**TREND** ► Denotes a statistically significant improvement since 2011.

**DISPARITY** ► Most favorable in Bozeman. By demographics, less favorable among men, low-income residents, and especially communities of color.

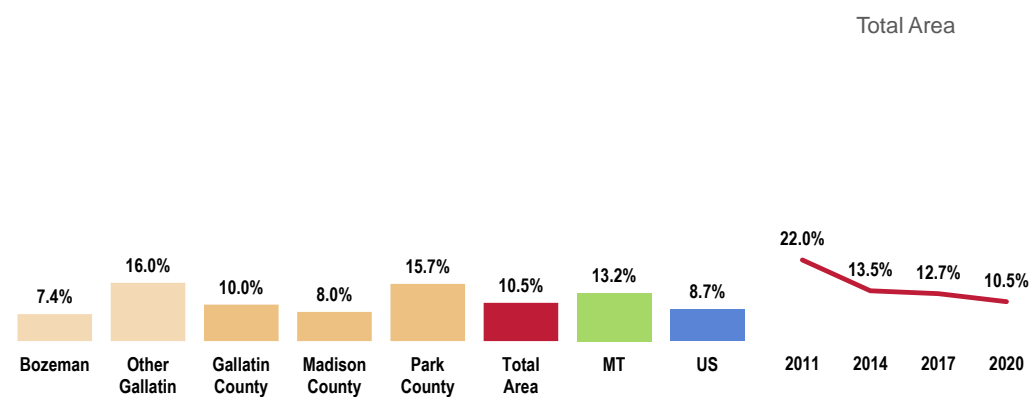
Here, lack of health insurance coverage reflects respondents age 18 to 64 (thus, excluding the Medicare population) who have no type of insurance coverage for health care services – neither private insurance nor government-sponsored plans (e.g., Medicaid).



## Lack of Health Care Insurance Coverage

(Adults Age 18-64)

Healthy People 2020 = 0.0% (Universal Coverage)



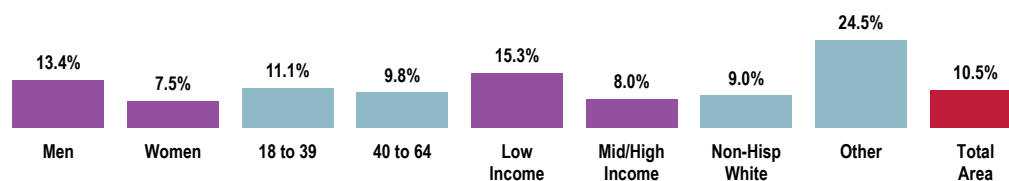
Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 169]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2018 Montana data.  
 • 2020 PRC National Health Survey, 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 Health Care Insurance Coverage

(Adults Age 18-64; Total Area, 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.

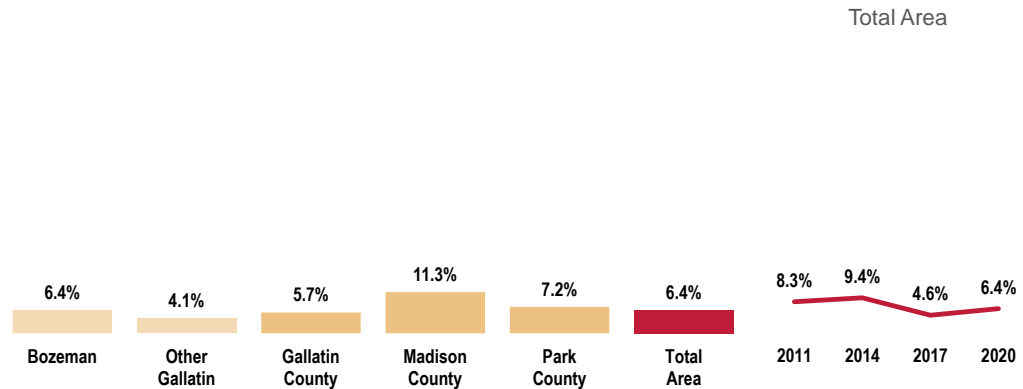


## Insurance Instability

Among insured adults, 6.4% went without health insurance coverage at some point in the past year.

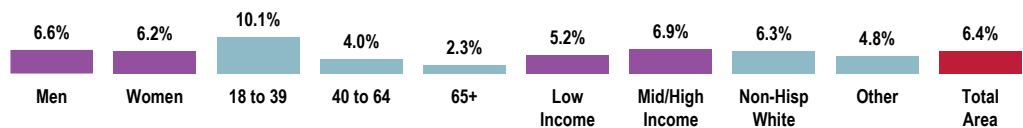
DISPARITY ► Unfavorably high in Madison County. Correlates with age in the Total Area.

### Went Without Insurance Coverage at Some Point in the Past Year (Total Area Insured Adults)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 325]  
Notes: • Asked of all insured respondents.

### Went Without Insurance Coverage at Some Point in the Past Year (Total Area Insured Adults)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 325]  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-1]  
Notes: • Asked of all insured respondents.



# DIFFICULTIES ACCESSING HEALTH CARE

## ABOUT ACCESS TO HEALTH CARE

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](http://www.healthypeople.gov))

## Barriers to Health Care Access

To better understand health care access barriers, survey participants were asked whether any of seven types of barriers to access prevented them from seeing a primary care provider (PCP) 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.

**Of the tested barriers to accessing primary care, difficulty getting a primary care provider (PCP) appointment impacted the greatest share of Total Area adults (15.6% say that difficulty obtaining an appointment prevented their primary care in the past year).**

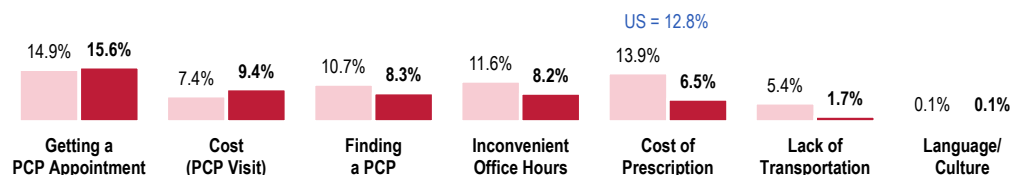
**BENCHMARK** ► The percent of respondents affected by the barrier of prescription expense is much lower than the US figure.

**TREND** ► Note the **improvements** in access for these barriers since 2017: transportation, office hours, and cost of prescriptions.

**DISPARITY** ► Adults in Bozeman were much more likely to report difficulty finding a primary care provider and getting an appointment for care.

### Barriers to Access Have Prevented Primary Medical Care in the Past Year (Total Area)

■ 2017 ■ 2020

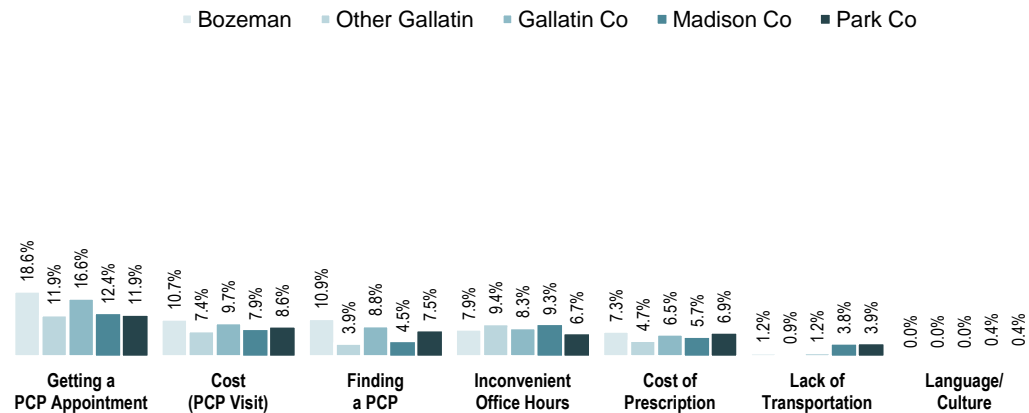


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 13, 302-307]  
• 2020 PRC National Health Survey, PRC, Inc.  
Notes: • Asked of all respondents.





## Barriers to Access Have Prevented Primary Medical Care in the Past Year (By Area, 2020)

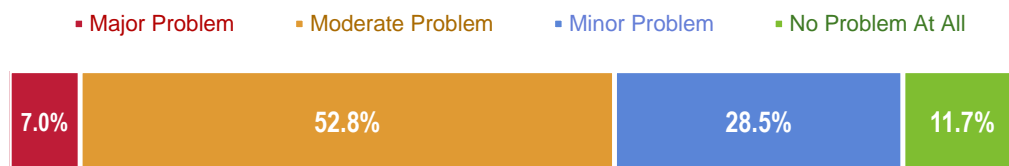


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 302-307]  
Notes: • Asked of all respondents.

## Key Informant Input: Access to Health Care Services

Key informants taking part in an online survey most often characterized *Access to Health Care Services* as a “moderate problem” in the community.

### Perceptions of Access to Health Care Services as a Problem in the Community (Key Informants, 2020)



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

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

#### Access to Care/Services



It's hard to get to the hospital, and getting an appointment at the clinic here in West is sometimes impossible. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

We do not have the health care available in West that we need. There is no urgent care style facility here. The current provider does what they can do within their scope, but more is needed. How to pay for this is a major problem. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

The community continues to grow quickly. Health services and providers must be readily available for established and new patients. But the biggest concern is providing care for those without adequate insurance. Everyone deserves accessible, quality health care. – Community Leader (Gallatin County)

Unavailability of services to those most vulnerable populations. – Social Services Provider (Gallatin & Madison Counties)

Many of my customers do not have health care insurance and are intimidated by the application procedure and perceived costs. Many are unaware what options exist on a “sliding scale” and have no primary care provider. Many have never had health care insurance or a regular, primary care provider in their lifetime and are unfamiliar with or wary of the health care system as a whole. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

Currently most providers in valley are employed by organization that may be more economic; competition-centered than patient-centered. This is a problem because it tends to run off patients who need us most. – Physician (Gallatin & Madison Counties)

Providers are concentrated in Livingston. Rural community members have a long way to drive. Missing work opportunities. It's costly on many levels. – Public Health Representative (Park County)

Distance and discretion. Proximity to services is a challenge for much of Park County. In small communities and rural areas, being able to access services discreetly can be a challenge. – Community Leader (Park County)

Access to specialty care, particularly cardiology. – Community Leader (Park County)

Need improved access to LHC for people with transportation barriers. How can you build a community hospital without a way for most vulnerable to get to it? Need walking/bike path completed. – Physician (Park County)

## Culturally Appropriate Services

Affirming health care for LGBTQ individuals. – Community Leader (Gallatin & Madison Counties)

Culturally appropriate care for marginalized groups. These include racial minorities, persons for whom English is not their first language, members of the LGBTQ+ community, people with low socioeconomic status and obese patients, though may also include other minorities I am not currently thinking of. I feel this is a problem in our community because I know it's a problem in our country and have heard firsthand accounts of bias in health care towards patients of the LGBTQ+ community or those that are obese. Additionally, I know there is a lack of in-person translators (though phone interpreters are common in most clinical settings, but people still have to be able to make an appointment) and many offices do not want to accept Medicaid, making it more difficult for those with low socioeconomic status to access certain types of health care services. – Public Health Representative (Gallatin & Madison Counties)

## Specialty Care

Lack of neurosurgical care. – Physician (Gallatin County)

Right now Bozeman Health has only inpatient palliative medicine. They have no outpatient palliative medicine, which is a specific discipline and is greatly needed in the community. – Other Health Provider (Gallatin County)

## Insurance Issues

There is no comprehensive health care coverage for many of the families we serve. Either they do not have access to health insurance at all or they are “covered” but lack access due to high costs, premiums, and copays. Many of these folks work in or support the health care industry. – Social Services Provider (Gallatin County)

Cost and lack of insurance. – Community Leader (Park County)

## Affordable Care/Services

Cost and lack of or inadequate health insurance. This often causes people to delay treatment until it becomes a more serious issue. – Social Services Provider (Gallatin & Madison Counties)

Cost of care and access to specialty care locally. – Community Leader (Park County)

Insurance and cost. Rural EMS is not sustainable. Declining number of EMTs. Healthcare is geographically distant for many. – Community Leader (Park County)



# 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).

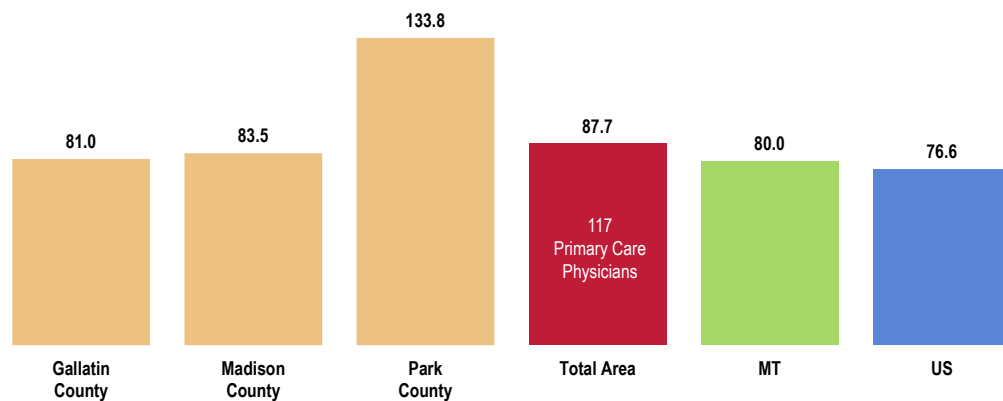
- Healthy People 2020 ([www.healthypeople.gov](http://www.healthypeople.gov))

## Access to Primary Care

In 2017, there were 117 primary care physicians in the Total Area, translating to a rate of 87.7 primary care physicians per 100,000 population.

DISPARITY ► Considerably higher in Park County.

Access to Primary Care  
(Number of Primary Care Physicians per 100,000 Population, 2017)



Sources: • US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File.  
• Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved May 2020 via SparkMap ([sparkmap.org](http://sparkmap.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

**A total of 78.1% of Total Area adults were determined to have a specific source of ongoing medical care.**

**BENCHMARK** ► Better than the US figure but failing to satisfy the Healthy People 2020 objective.

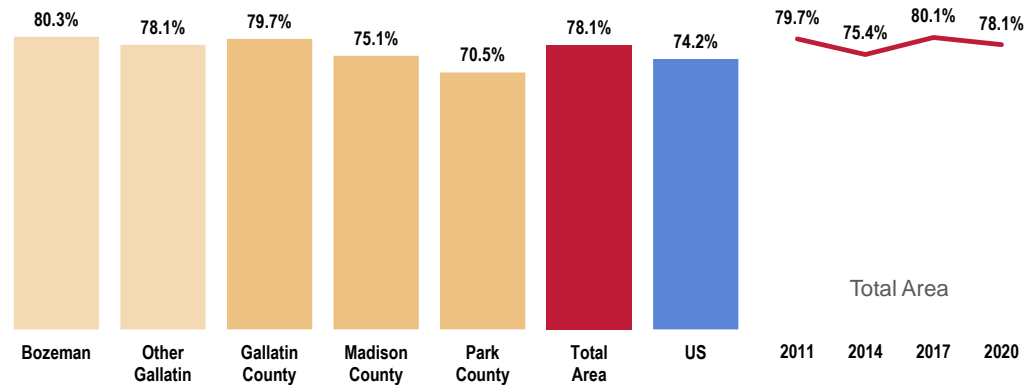
**DISPARITY** ► Lowest among Park County respondents.

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.

### 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]  
 • 2020 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

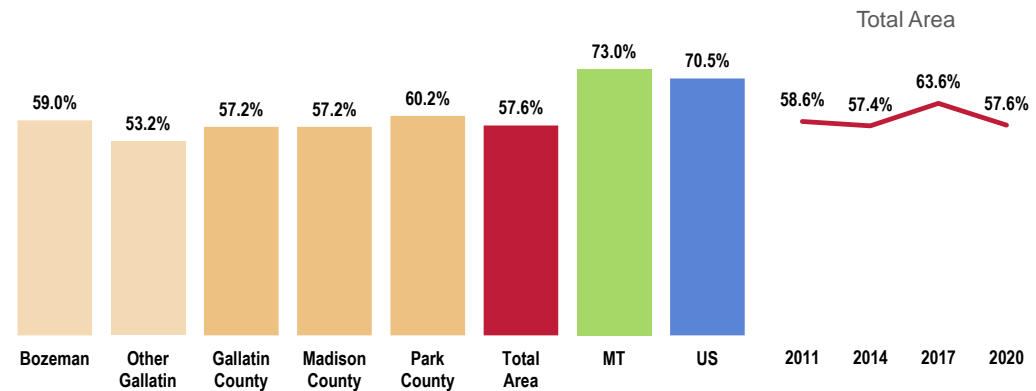
**A total of 57.6% of adults visited a physician for a routine checkup in the past year.**

**BENCHMARK** ► Well below the Montana and US percentages.

**DISPARITY** ► Lower among men, adults under 65, and communities of color.



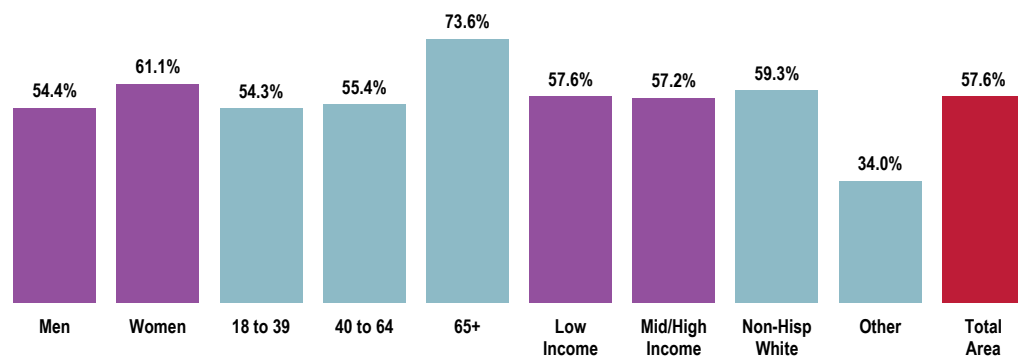
## Have Visited a Physician or Other Health Professional for a Checkup in the Past Year



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 309]  
 • 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.  
 • 2020 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.

## Have Visited a Physician or Other Health Professional for a Checkup in the Past Year (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 309]  
 Notes: • Asked of all respondents.



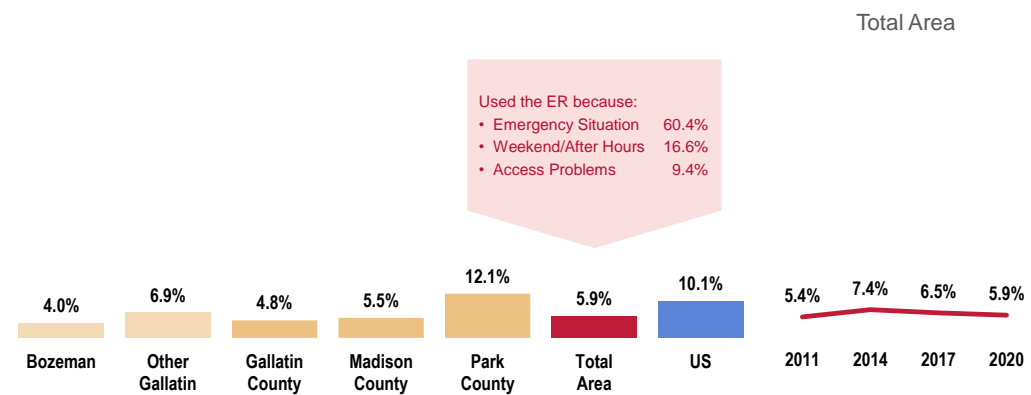
# EMERGENCY ROOM UTILIZATION

A total of 5.9% of Total Area adults have gone to a hospital emergency room more than once in the past year about their own health.

**BENCHMARK** ► Well below the national prevalence.

**DISPARITY** ► Unfavorably high among Park County adults. Increases with age in the Total Area and is higher among men, low-income residents, and communities of color.

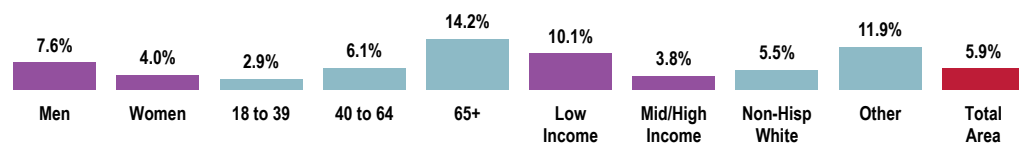
## Have Used a Hospital Emergency Room More Than Once in the Past Year



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Items 22, 310]  
• 2020 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.

## Have Used a Hospital Emergency Room More Than Once in the Past Year (Total Area, 2020)



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 22]  
Notes: • Asked of all respondents.



# 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.

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.

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

## Dental Insurance

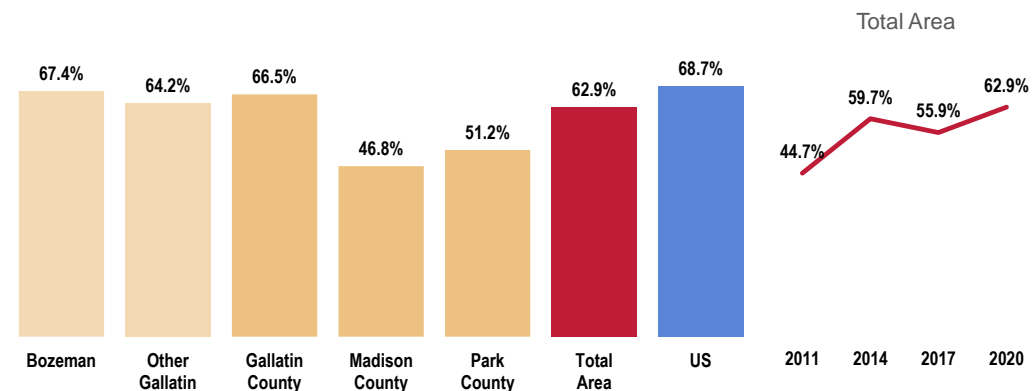
**Over 6 in 10 Total Area adults (62.9%) have dental insurance that covers all or part of their dental care costs.**

**BENCHMARK** ► Below the US figure.

**TREND** ► Marks a significant increase from 2011 survey findings.

**DISPARITY** ► The prevalence of coverage is much lower in Madison and Park counties.

### Have Insurance Coverage That Pays All or Part of Dental Care Costs



Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 21]  
• 2020 PRC National Health Survey, PRC, Inc.

Notes: • Asked of all respondents.



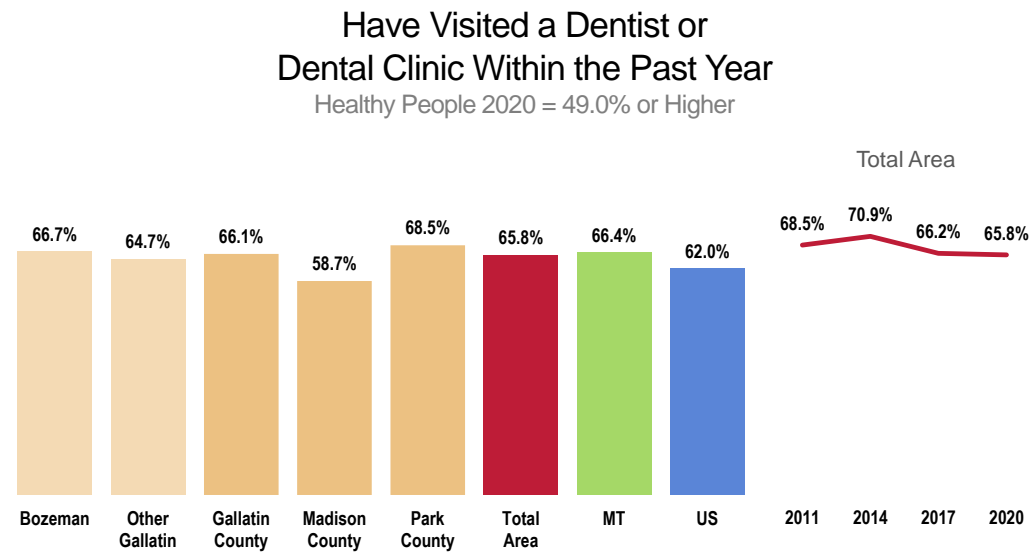
# Dental Care

## Adults

A total of 65.8% of Total Area adults have visited a dentist or dental clinic (for any reason) in the past year.

**BENCHMARK** ► Easily satisfies the Healthy People 2020 objective.

**DISPARITY** ► Lowest in Madison County. Reported less often among men, young adults, residents in low-income households, and those without dental coverage.



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.  
• 2020 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]

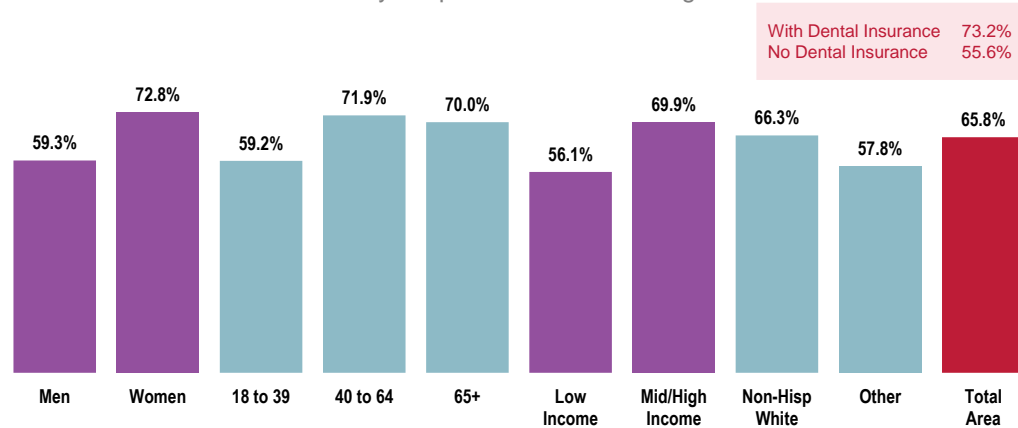
Notes: • Asked of all respondents.





## Have Visited a Dentist or Dental Clinic Within the Past Year (Total Area, 2020)

Healthy People 2020 = 49.0% or Higher

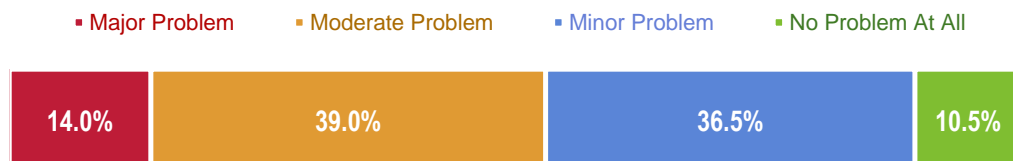


Sources: • 2020 PRC Community Health Survey, PRC, Inc. [Item 20]  
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]  
Notes: • Asked of all respondents.

## 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, followed closely by “minor problem” ratings.

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



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

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

### Insurance Issues

Oral health is not covered for adults on Medicaid and some Medicare. It is for children who are on Medicaid. We have one dentist here that may take Montana Medicaid but he is from Idaho. He comes one to two times a week. Community Health Partner Dental is first-come/first-service walk-in appointments. I have at times helped individuals by talking to office staff and being allowed to make an appointment later in the day due to the bus bringing individuals around 10 a.m. Low income struggle to survive and brushing teeth comes second place at times until the pain comes and then they want the tooth pulled because it is cheaper than filling it or root canals.  
– Social Services Provider (Gallatin Gateway, Big Sky & West Yellowstone)



The vast majority of my customers have no dental insurance, and many never have had a regular dentist in their lives. Most of my clients have no regular at-home cleaning practice and only access dental care in an emergency (i.e., broken or rotten teeth). Most opt for tooth pulling, rather than fixing/implants, due to dental care costs. Oral health is the most fundamental piece of overall health, as healthy eating is difficult when teeth are sore/injured. – Community Leader (Gallatin Gateway, Big Sky & West Yellowstone)

Many people lack dental insurance, and the cost of dental procedures can be very expensive. Also, dental practices do not always accept Medicaid. Emergency dental services are lacking for those low-income and/or uninsured people. Dental health is related closely to general health and impacts people in many ways other than mouth pain and discomfort. It impacts self-esteem, the ability to gain employment and maintain employment, professional image, to name a few. It also impacts heart health, and untreated oral health can and does promote general ill health. – Public Health Representative (Gallatin County)

Access to care for adults with Medicaid or without insurance is only through CHP. Demand is much higher than capacity. – Public Health Representative (Gallatin County)

Access to private dentists when the patient has no insurance. Community Health Partners presents a good option for low income patients, but they struggle to keep up with the need. – Physician (Gallatin County)

Community Health Partners, as far as I know is the only option available if you don't have insurance. – Social Services Provider (Park County)

Lack of dental insurance, not enough money to see dentist when you are paying bills, utilities, rent and food. I do think kids are covered pretty well if we can get them in, but a lot of times adults lack the resources. – Social Services Provider (Park County)

Most adults do not have insurance. Adults not generally covered by Medicaid. – Community Leader (Park County)

I believe access and cost are issues in our community. – Social Services Provider (Park County)

There are major issues with dental. Just not enough available resources for especially people needing dentures. – Other Health Provider (Park County)

Lack of access for Medicaid insured. – Physician (Park County)

## Affordable Care/Services

It's so expensive to go to the dentist, so minorities will not be coming here if they don't have any type of financial help. – Community Leader (Gallatin & Madison Counties)

Many people cannot afford it, many dentists require payment upfront and force patients to get care credit. Denture assistance is ridiculously limited. – Social Services Provider (Gallatin & Madison Counties)

Dental health is so expensive, not paid for well by insurance and is a large deficit for people who cannot afford their own care. We need clinics set up for people who cannot afford care, as well as changes to insurance reimbursement to allow people to get the care they need. Dental health is not cosmetic—it is essential and needs to be treated as such. – Other Health Provider (Gallatin & Madison Counties)

Oral health for so long has been separated from overall health, and to the detriment of people who often cannot access appropriate dental care, thus dealing with chronic pain and inflammation. – Social Services Provider (Gallatin County)

Oral health is so important to overall health. There are plenty of dentists available in our community—but are they affordable and accessible for those in need? Do primary care physicians emphasize the importance of oral health and help patients seek appropriate treatment? – Community Leader (Gallatin County)

Go out into the community and pay attention to people smiling or speaking. There is a large number of people who cannot afford good dental care. Appointments are so far out, that if they have a dental emergency, it would be hard to get an individual in to be seen timely. – Other Health Provider (Gallatin & Madison Counties)

Dentist don't see people unless they can pay. – Physician (Gallatin County)

Customers requesting financial help to pay for oral/dental care due to years of neglect due to lacking health coverage. – Social Services Provider (Park County)

There is a huge lack of qualified, affordable dentist in Park County and most dentist don't take adults with Medicaid. – Social Services Provider (Park County)

Cost. – Social Services Provider (Park County)

## Contributing Factors

Poor insurance coverage, long wait times, low health literacy on the importance of oral health. – Physician (Gallatin & Madison Counties)

Meth is a problem in our community and meth users have poor oral hygiene. Also, there are many people who don't have dental insurance and are in a "gray area" where they make enough to live and pay rent but don't have enough to pay for crowns or root canals so they put it off and manage the issue when it is an emergency. – Social Services Provider (Park County)

Poor diet coupled with poor oral hygiene and lack of ready access to dental care means more people with potentially lifelong oral health problems and associated other health problems. – Community Leader (Park County)



## Aging Population

Given that our residents have dementia, dental procedures with providers who have not been trained to handle this patient population are difficult. Transporting our residents to new environments (such as a dental office) can induce more agitation and anxiety. – Other Health Provider (Gallatin & Madison Counties)

## Awareness/Education

Several people have poor dentition, and we struggle getting the point across that this is an important thing to take care of. – Other Health Provider (Gallatin Gateway, Big Sky & West Yellowstone)



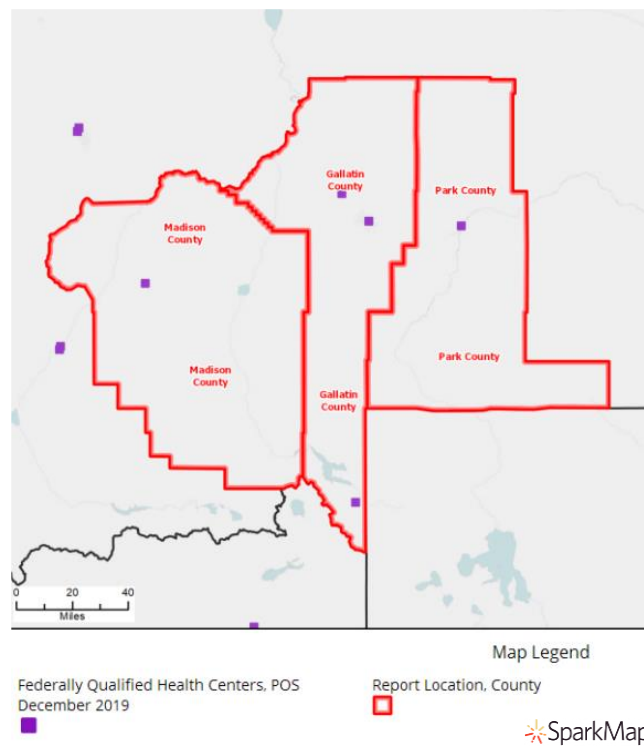


# LOCAL RESOURCES

# HEALTH CARE RESOURCES & FACILITIES

## Federally Qualified Health Centers (FQHCs)

The following map details Federally Qualified Health Centers (FQHCs) within the Total Area as of December 2019.



## 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 Health Care Services

211  
Acorn Pediatrics  
Angel Line  
B2 Big Sky  
Big Sky Medical Center  
Billings Clinic  
Bozeman Health  
Bridgercare  
Community Health Partners  
Gallatin City-County Health Department  
HMK/Medicaid Transportation Assistance  
HRDC  
Karst Stage Transportation  
L'esprit Mental Health  
Lifeflight Air Ambulance  
Livingston Healthcare  
Ranger Clinic  
United Way  
West Yellowstone Foundation  
Western Montana Mental Health Center  
Women in Action

Bozeman Yellowstone Airport  
Bridgercare  
Center for Disease Control  
City of Bozeman  
City of Three Forks Help Line  
Community Health Partners  
Food Bank/HRDC  
Gallatin City-County Health Department  
Gallatin County Mental Health Center  
Hospital Incident Command  
HRDC  
Mental Health Center  
Montana DPHHS  
Montana State University  
State COVID Insurance and Housing Program  
State of Montana Governor  
Three Rivers Medical Clinic  
Thrive  
Unemployment Insurance  
United Way  
Youth Dynamics

### Cancer

Bozeman Care Van  
Bozeman Deaconess Cancer Center  
Bozeman Deaconess Hospital  
Bozeman Health Cancer Center  
Community Health Partners  
Department of Public Health & Human Services  
Eastern Idaho Regional Medical Center  
Livingston HealthCare  
Loaves and Fishes  
Oncology Specialty Care  
St. Vincent's Healthcare  
West Yellowstone Foundation

### Arthritis/Osteoporosis/Back Conditions

Chico Hot Springs  
Community Health Partners  
Livingston HealthCare

### Dementia/Alzheimer's Disease

Alzheimer's Association  
Bozeman Health  
Bozeman Health Hospice Services  
Bozeman Senior Center  
Community Health Partners  
Council on Aging  
Dementia Association  
Frontier Memory Unit  
Geriatric Team  
Home Health  
Livingston HealthCare  
Memory Care Units  
Park County Assisted Living  
Park County Senior Center  
State Agency on Aging  
Spring Creek Inn

### Coronavirus

211  
Big Sky Medical Center  
Bozeman Deaconess Hospital  
Bozeman Health  
Bozeman Public Schools  
Bozeman United Methodist Church  
Bozeman VA Clinic



## Diabetes

Bozeman Deaconess Diabetes Center  
Bozeman Deaconess Hospital  
Bozeman Health  
Bozeman Health Diabetes Center  
Bridgercare  
Community Health Partners  
Diabetes Center  
Gallatin and Madison County Health Departments  
Gallatin City-County Health Department  
Gardiner Food Bank  
Healthy Gallatin  
HRDC  
Live Now/Act Now  
Livingston Food Resource Center  
Livingston HealthCare  
Meals on Wheels  
Medicare/Medicaid  
Montana State University  
Park County Health Department  
Personal Shopper/Personal Chef  
Ruby Valley Hospital  
YMCA

## Disabilities

Bozeman Health  
Bozeman Health Hospice Services  
Bozeman Health Palliative Care  
Bridger  
Community Health Partners  
Eagle Mount  
Food Bank/HRDC  
Gallatin City-County Health Department  
Hope House  
HRDC  
Licensed Addiction Counselors  
Montana Independent Living Project  
Reach Inc.  
Three Forks Chiropractic  
Three Forks Physical Therapist  
Three Rivers Medical Clinic

## Family Planning

ASPEN  
Bozeman Deaconess Hospital  
Bozeman Health  
Bridgercare  
Childcare Connections  
Community Health Partners  
Department of Public Health and Human Services  
Gallatin County Health Department  
Head Start  
HRDC

Livingston HealthCare  
Montana State University  
Park County Health Department  
Planned Parenthood  
Ranger Clinic  
Roots Collaborative  
St. Catherine's  
Thrive  
United Way  
YMCA  
Zoe Care

## Heart Disease

Big Sky Medical Center  
Bozeman Deaconess Hospital  
Bozeman Health  
Bozeman Health Cardiology  
Community Health Partners  
Gallatin/Park County Public Health  
Healthy Steps  
Live Now/Act Now  
Livingston HealthCare  
Parks and Recreation  
Senior Center

## Injury and Violence

211  
Adult Protective Services  
ASPEN  
Bozeman Fire and Central Valley Fire  
Bozeman Health  
Bozeman Police Department  
Department of Public Health and Human Svcs  
Community Health Partners  
Gallatin City-County Health Department  
Gallatin County Sheriff's Office  
Gallatin County Victim Services  
Haven  
Hope House  
HRDC  
Hunter Safety  
L'esprit Mental Health  
Livingston HealthCare  
Livingston Police Department  
Livingston School District  
Montana State University  
Parents as Teachers  
Park County Health Department  
Rise Montana  
Southwest Chemical Dependency Program (SWCDP)  
Three Rivers Medical Clinic  
Victims Support Service  
Voice Center  
Western Montana Mental Health Center





## Mental Health

211  
1-800-283-TALK  
AA/NA  
ASPEN  
Advocacy Center in the Law and Justice Center  
AWARE: Parents as Teachers  
Battered Women's Help Line and Shelter  
Behavioral Health Urgent Care  
Big Sky Medical Center  
Billings Clinic  
Bozeman Deaconess Mental Health Center  
Bozeman Health Behavioral Health  
Bozeman Help Center  
Bozeman Public Schools  
Bozeman United Methodist Church  
Bridger Peaks Counseling  
Bridger Psychiatric Services  
Bridgercare  
Community-Based Crisis Therapist  
Community Health Centers  
Community Health Partners  
Crisis Response Team  
Eastern Idaho Regional Medical Center  
Elevating Behavioral Health  
Family Promise  
Gallatin City-County Health Department  
Gallatin County  
Gallatin County Drug and Alcohol Services  
Gallatin County Mental Health Center  
Gallatin Valley Mental Health  
Haven  
Healthy Gallatin  
Heart and Hand Counseling  
Help Center  
Hope House  
HRDC  
Human Development Clinic  
Intermountain  
L'esprit Mental Health  
Little Bear Counseling  
Livewell 49  
Livingston HealthCare  
Livingston Hospital  
Livingston School District  
Love, Inc.  
Medicare/Medicaid  
Mental Health Local Advisory Council  
Mental Health Urgent Care  
Montana State University  
NAMI  
nCenter in Belgrade

Office of Public Assistance  
Parents as Teachers  
Park County Health Department  
PFLAG Bozeman/Gallatin Valley  
Providence Mental Health Services  
Psychiatry Associates  
Rise Montana  
Roots Collaborative  
School System  
Shodair  
Silver Sneakers  
Snap  
Southwest Chemical Dependency Program  
Suffer Out Loud  
Suicide Hotline  
Teletherapy  
The Help Line  
Three Rivers Medical Clinic  
Thrive  
Town and Country  
Towne's Harvest  
United Way  
Veterans Crisis Line  
Veterans Services  
West Yellowstone Food Bank  
West Yellowstone Foundation  
West Yellowstone Social Services  
Western Montana Mental Health Center  
We Will Listen  
Women in Action  
Western Montana Mental Health Center  
Youth Dynamics

## Nutrition, Physical Activity, and Weight

Act Now  
Bozeman Health  
Bozeman Health Hospice Services  
Bridger Ski Foundation  
Civic Center  
Community Gardens  
Community Health Partners  
County Active Transportation Committee  
Facebook Workout Group  
Farmer's Market  
Farm to School  
Fitness Centers/Gyms  
Food Bank/HRDC  
Gallatin City-County Health Department  
Gallatin County Planning  
Gallatin Valley Farm to School  
Health Department  
HRDC  
Livewell 49  
Livingston Food Resource Center





Livingston HealthCare  
 Loaves and Fishes  
 Montana Department of Transportation  
 Nutrition Services  
 Park County Health Department  
 Parks and Recreation  
 Snap  
 Three Rivers Medical Clinic  
 Town and Country  
 Towne's Harvest  
 V 42 Gym  
 Walk with a Doc  
 Weight Watchers  
 West Yellowstone Rec Program  
 West Yellowstone School  
 WIC  
 YMCA

#### Oral Health

Amen Clinic  
 Big Sky Medical Center  
 Bridger Dentistry  
 Community Closet Grant  
 Community Health Partners  
 Friends of the Community  
 Gallatin Community Health  
 Livingston HealthCare  
 Medicare/Medicaid  
 Mountain Pearls Dentistry  
 Park County Health Department  
 State of Montana Dental Cost Assistance Program  
 West Yellowstone Dental

#### Respiratory Disease

Bozeman Health COPD Clinic  
 Community Health Partners  
 Livingston HealthCare  
 Park County Health Department

#### Sexual Health

AIDS Outreach  
 Bozeman Creek Family Health  
 Bozeman Health  
 Bridgercare  
 Community Health Partners  
 Haven  
 Livingston HealthCare  
 Montana State University  
 Park County Health Department  
 University Health Services  
 ZoeCare

#### Substance Abuse

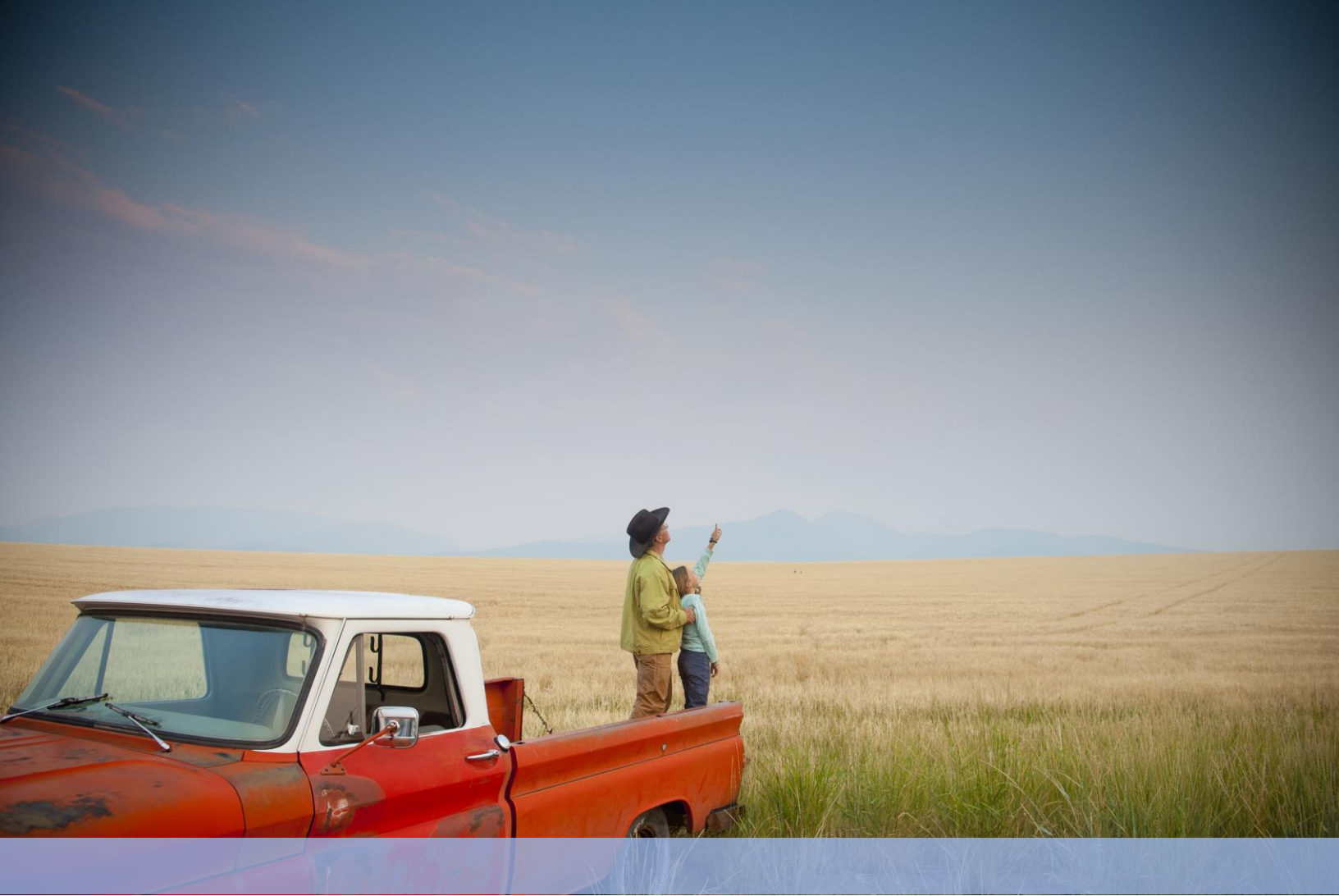
211  
 AA/NA  
 Adolescent Resource Center  
 Alcohol and Addiction Services  
 Alcohol and Drug Assistance Center of MSU  
 Behavioral Health Services  
 Behavioral Health Urgent Care  
 Big Sky Medical Center  
 Bozeman Health  
 Bozeman Recovery House  
 Bridger Peaks Counseling  
 Celebrate Recovery  
 Community Health Partners  
 County Counseling  
 County Mental Health  
 Crisis Line  
 DARE  
 Drug and Alcohol Resource Center  
 Drug Court  
 Eating Disorder Center of Montana  
 Eastern Idaho Regional Medical Center  
 Fellowship Hall  
 Gallatin City-County Health Department  
 Gallatin County Drug and Alcohol Services  
 Gallatin County Mental Health Center  
 Gallatin Detention Center  
 Gallatin Valley Mental Health  
 Healthy Mothers, Healthy Babies  
 Help Center  
 HRDC  
 Ideal Option  
 L'Esprit Mental Health  
 Licensed Addiction Counselors  
 Livingston HealthCare  
 Livingston Hospital  
 MCDC–Butte  
 Methadone Clinic  
 Montana Recovery Community  
 Montana State University  
 Olive Branch  
 Park County Health Department  
 Prime for Life  
 Recovery Homes  
 RimRock  
 SMART Recovery  
 Southwest  
 Substance Abuse Center  
 Three Rivers Medical Clinic  
 Tobacco Quit Line  
 Veterans Services  
 Western Montana Mental Health Center  
 Women in Action



## **Tobacco Use**

Bozeman Health  
Bozeman Public Schools  
City and County Government  
Community Health Partners  
Downtown Bozeman Association  
Gallatin City-County Health Department  
HRDC  
Livingston HealthCare  
Montana State University  
Park County Community Foundation  
Park County Health Department  
Ranger Clinic  
Tobacco Quit Line





# APPENDICES

# APPENDIX I: HEALTH DISPARITIES IN AT-RISK POPULATIONS

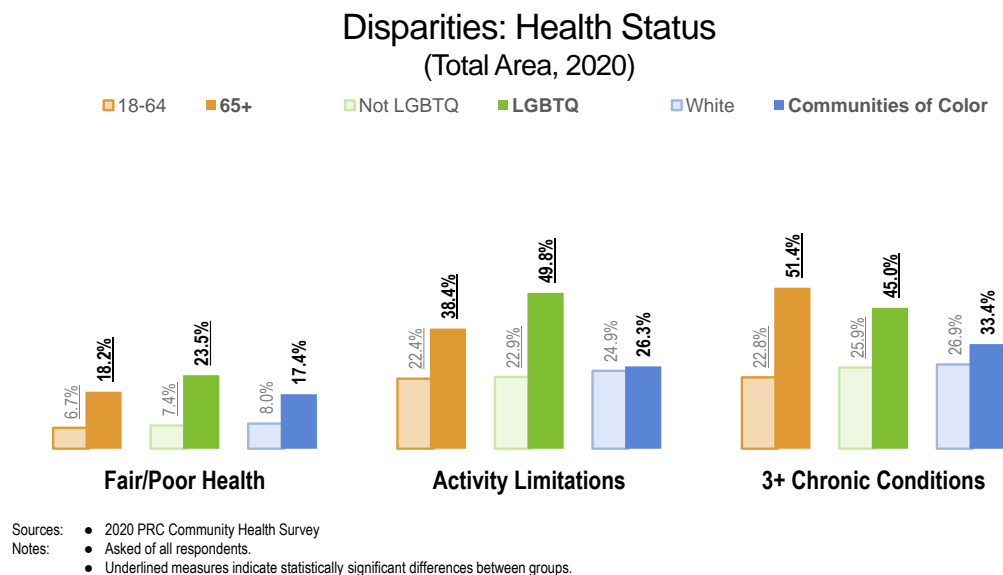
Results presented earlier in this CHNA show that health is not equally distributed throughout the region, with significant differences in health status, behaviors, and outcomes among the population according to gender, age, income, and race/ethnicity. To further highlight some of the health disparities that exist in the community, the following section also outlines data for select survey indicators among three distinct population groups (older adults, LGBTQ residents, and communities of color), in contrast to their counterparts.

In reviewing these findings, it is important to note that the samples of LGBTQ and communities of color shown are relatively small (74 and 62 respondents, respectively) and carry wider margins of error. In addition, the demographic makeup of these samples are notably different from the total sample of respondents in terms of age (both are younger) and in income (LGBTQ respondents tended to be lower income, while communities of color tended to be higher income than the overall sample); these differences also impact status and outcomes for these samples. Despite these caveats, disparities for these groups for many of these indicators are clear.

## Health Status

The following chart looks at three indicators of general health status. Note:

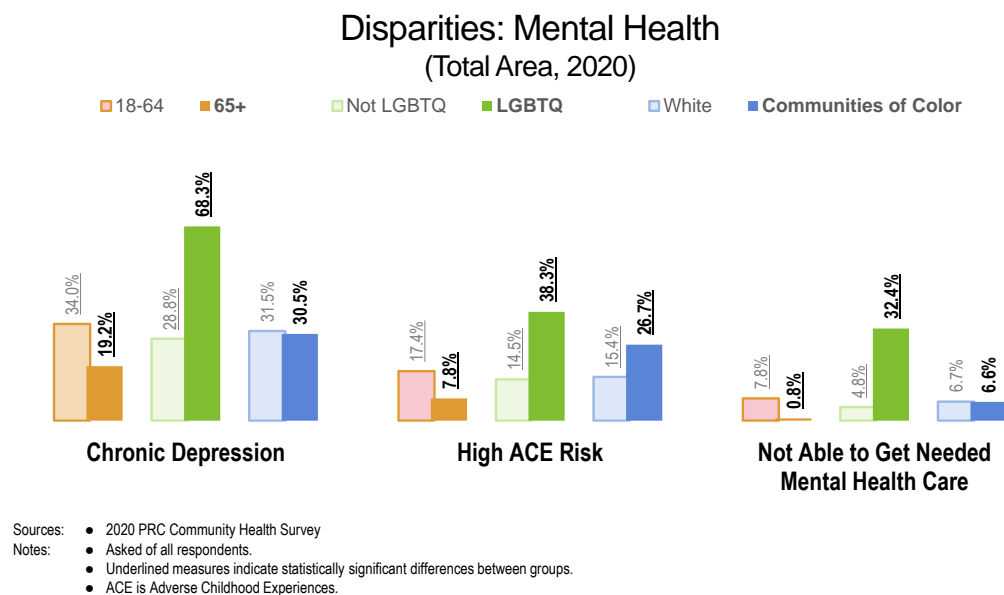
- Significant disparities exist in these indicators for both older adults and LGBTQ residents.
- Differences noted for communities of color, although higher, are not statistically significant.



## Behavioral Health

The following chart outlines select indicators of mental health, including symptoms of chronic depression (two or more years feeling sad or depressed), high ACE risk (having a history of four or more adverse childhood experiences), and inability to get needed mental health care in the past year. Note that:

- Older adults fare significantly better than younger adults for each of these indicators.
- In contrast, LGBTQ residents fare dramatically worse than non-LGBTQ adults.
- Communities of color tend to have higher prevalence of multiple adverse childhood experiences, although differences for the depression and access measures shown do not vary significantly from White residents in the community.

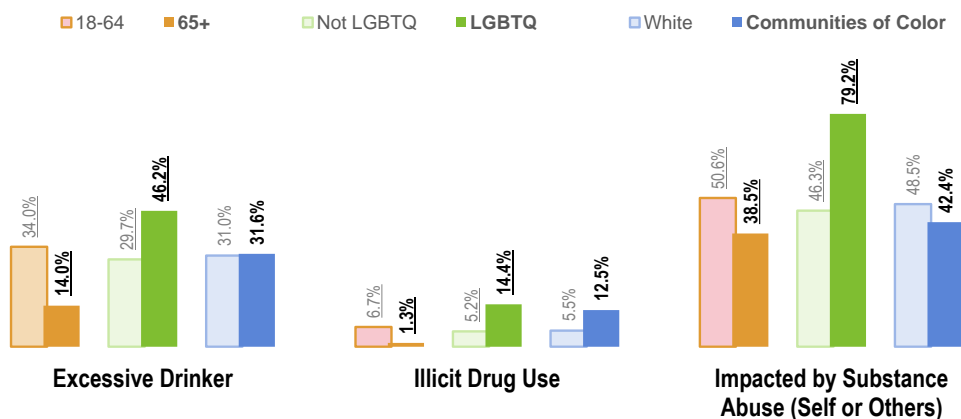


Substance abuse indicators shown here include excessive drinking (binge drinking or high number of drinks per day in the past month), use of illicit drugs (illegal drugs or medications without a prescription), and the perceived impact of substance abuse on individuals' lives.

- Results among older adults are lower (better) than among younger adults for each of these measures.
- LGBTQ residents demonstrate a much higher impact from these measures than others in the community.
- No statistically significant differences are noted between communities of color and White residents for these measures.



## Disparities: Substance Abuse (Total Area, 2020)



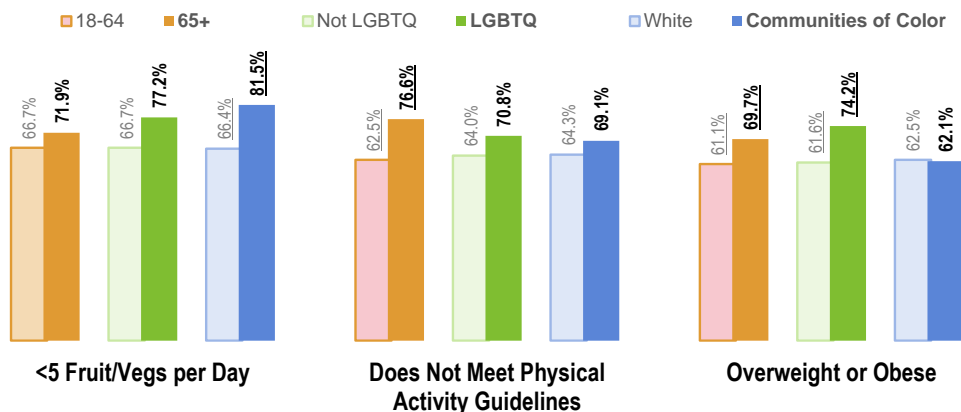
Sources: • 2020 PRC Community Health Survey  
 Notes: • Asked of all respondents.  
 • Underlined measures indicate statistically significant differences between groups.

## Modifiable Health Risks

Note the following findings related to disparities for nutrition, physical activity, and weight status.

- Older adults report similar fruit/vegetable consumption as younger adults, but are less likely to get enough exercise and are more likely to be overweight or obese.
- For LGBTQ residents, these nutrition and physical activity measures are similar to others in the community, although they are more likely to be overweight or obese.
- Communities of color report less fruit/vegetable consumption, but exhibit similar levels of physical activity and overweight/obesity prevalence.

## Disparities: Modifiable Health Risks (Total Area, 2020)



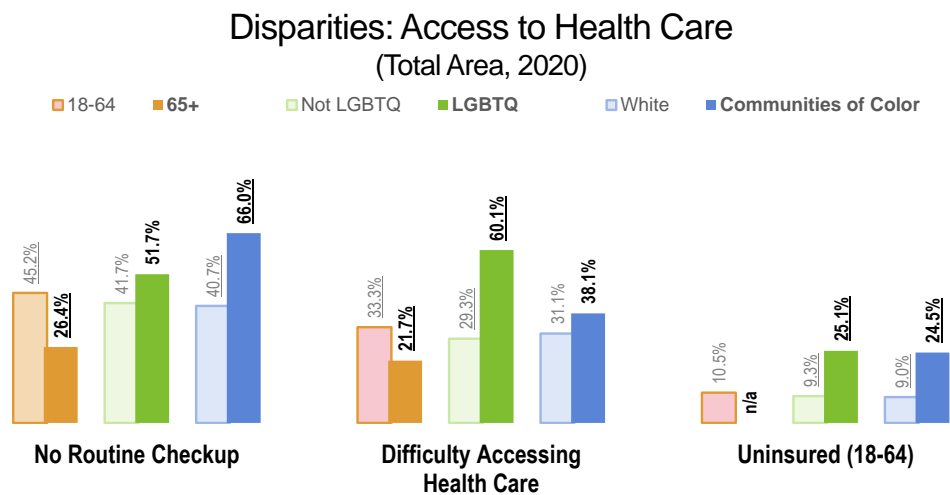
Sources: • 2020 PRC Community Health Survey  
 Notes: • Asked of all respondents.  
 • Underlined measures indicate statistically significant differences between groups.



## Access to Health Care

Finally, note the following indicators relative to accessing health care services in the community.

- Older adults are more likely to get regular checkups and less likely to report access difficulties than are adults under age 65.
- LGBTQ residents receive routine checkups at a level that is statistically similar to others in the community, but are more likely to report difficulties accessing services, and are more likely to be without insurance coverage.
- Communities of color are much less likely to get routine checkups than White residents. And, while they don't report access difficulties to a significantly greater degree, they are significantly more likely to be without health insurance coverage.



Sources: • 2020 PRC Community Health Survey  
 Notes: • Asked of all respondents.  
 • Underlined measures indicate statistically significant differences between groups.



## APPENDIX II: EVALUATION OF PAST ACTIVITIES

Once the data were collected for the 2020 Community Health Needs Assessment, 57 key stakeholders were re-engaged to provide feedback through an online survey regarding Bozeman Health's past community health improvement efforts. The following findings outline their evaluations of the work Bozeman Health Deaconess Hospital has engaged in since the 2017 Community Health Needs Assessment to address the significant health issues identified through that prior assessment.

### General Evaluations

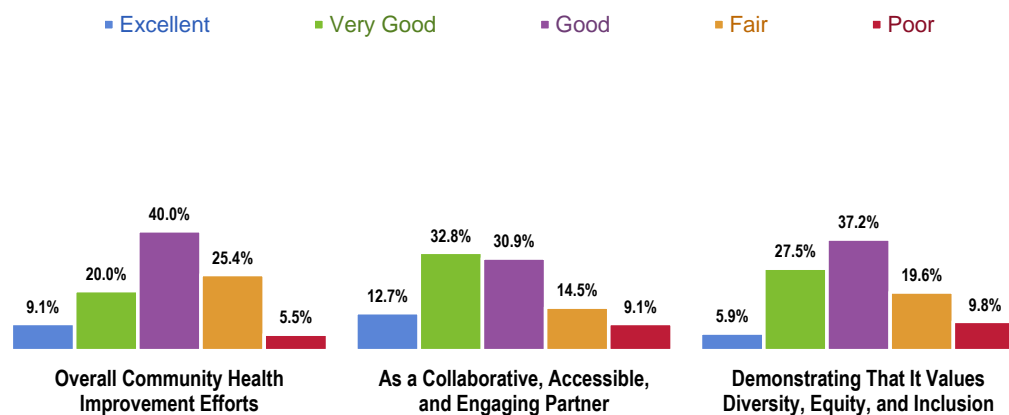
**Nearly 70% of key informants evaluation Bozeman Health Deaconess Hospital's overall community health improvement efforts favorably, rating them as "excellent," "very good," or "good."**

- A total of 30.9% rated these efforts as "fair" or "poor."

Additionally:

- ▶ 76.4% gave Bozeman Health Deaconess Hospital (BHDH) "excellent/very good/good" evaluations as a **collaborative, accessible, and engaging partner**. 23.6% rated this as "fair/poor."
- ▶ 70.6% gave BHDH "excellent/very good/good" evaluations for demonstrating that it values **diversity, equity, and inclusion** in the community. 29.4% rated this as "fair/poor."

#### General Evaluations of Bozeman Health Deaconess Hospital's Community Efforts



Sources: • 2020 PRC Online Key Informant Feedback Survey

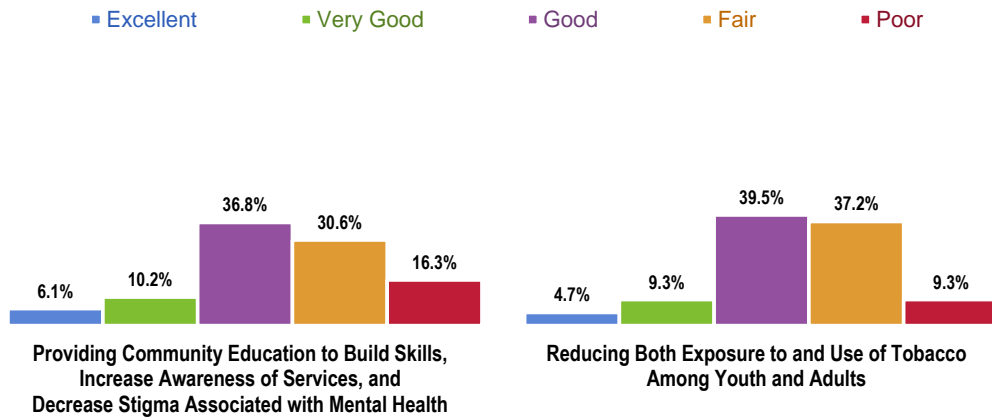




## Behavioral Health

- 53.1% of stakeholders gave BHDH “excellent/very good/good” evaluations for providing community education (including school-based) education to build skills, increase awareness of services, and decrease stigma associated with **mental health**. 46.9% rated this as “fair/poor.”
- 53.5% gave BHDH “excellent/very good/good” evaluations for reducing both exposure to and use of **tobacco** among youth and adults. 46.5% rated this as “fair/poor.”

### Evaluation of Bozeman Health Deaconess Hospital's Efforts to Address **Behavioral Health**

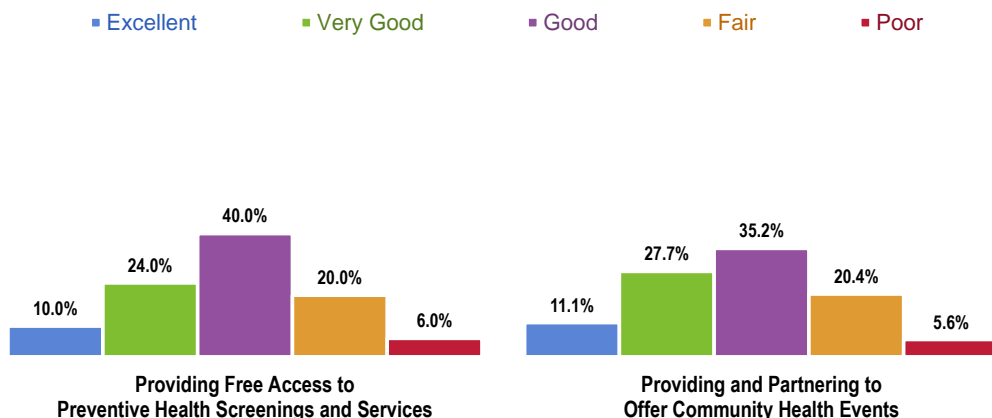


Sources: • 2020 PRC Online Key Informant Feedback Survey

## Access to Health Services

- 74.0% of stakeholders gave BHDH “excellent/very good/good” evaluations for providing free access to **preventive health screenings and services** (26.0% “fair/poor”).
- 74.0% also gave BHDH “excellent/very good/good” evaluations for providing and partnering to offer **community health events** (health fairs, webinars, health literacy programs, etc.). 26.0% rated this as “fair/poor.”

### Evaluation of Bozeman Health Deaconess Hospital's Efforts to Address **Access to Health Services**



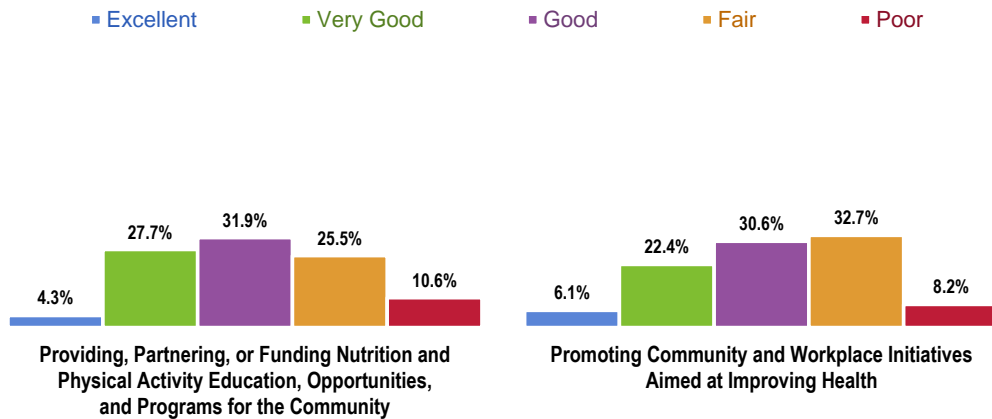
Sources: • 2020 PRC Online Key Informant Feedback Survey



## Healthy Lifestyles

- ▶ 63.9% of stakeholders rate BHDH as “excellent/very good/good” for providing, partnering, or funding **nutrition and physical activity** education, opportunities, and programs for the community (36.1% “fair/poor”).
- ▶ 59.1% gave BHDH “excellent/very good/good” evaluations for promoting **community and workplace initiatives** aimed at improving health (40.9% “fair/poor”).

### Evaluation of Bozeman Health Deaconess Hospital's Efforts to Address **Healthy Lifestyles**

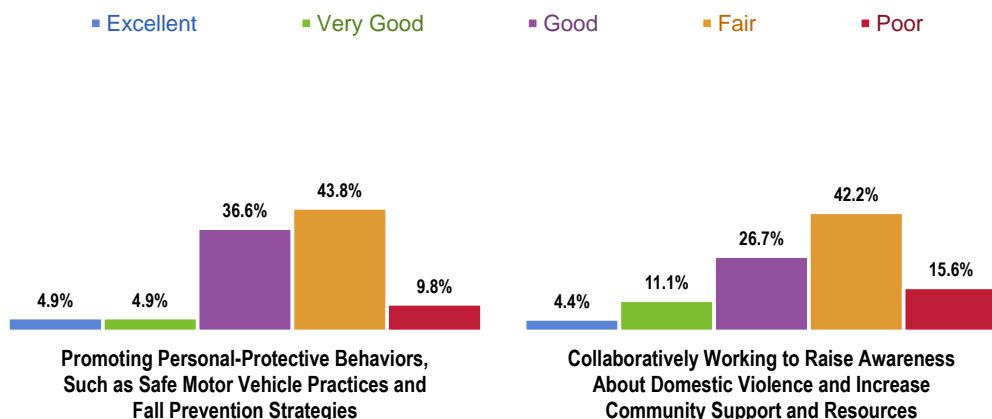


Sources: • 2020 PRC Online Key Informant Feedback Survey

## Injury & Violence

- ▶ 46.4% of stakeholders gave BHDH “excellent/very good/good” evaluations for promoting **personal-protective behaviors**, such as safe motor vehicle practices and fall prevention strategies. Note the higher “fair/poor” response (53.6%).
- ▶ 42.2% gave BHDH “excellent/very good/good” evaluations for collaboratively working to raise awareness about **domestic violence** and increase community support and resources. Again, note the higher “fair/poor” response (57.8%).

### Evaluation of Bozeman Health Deaconess Hospital's Efforts to Address **Injury & Violence**



Sources: • 2020 PRC Online Key Informant Feedback Survey

