

2011 PRC Community Health Report

Sponsored by
Bozeman Deaconess Hospital
Community Health Partners (CHP)
Gallatin City-County Health Department

Gallatin, Madison & Park Counties, Montana



Professional Research Consultants, Inc.

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Table Of Contents

INTRODUCTION	5
Project Overview	6
Project Goals	6
Methodology	6
Summary of Findings	11
Areas of Opportunity for Community Health Improvement	11
Summary Tables: Comparisons With Benchmark Data	12
GENERAL HEALTH STATUS	25
Overall Health Status	26
Self-Reported Health Status	26
Activity Limitations	28
Mental Health & Mental Disorders	31
Mental Health Status	32
Depression	33
Stress	35
Suicide	37
Mental Health Treatment	38
Children & ADD/ADHD	38
DEATH, DISEASE & CHRONIC CONDITIONS	39
Leading Causes of Death	40
Distribution of Deaths by Cause	40
Age-Adjusted Death Rates for Selected Causes	40
Cardiovascular Disease	42
Age-Adjusted Heart Disease & Stroke Deaths	42
Prevalence of Heart Disease & Stroke	45
Cardiovascular Risk Factors	47
Cancer	54
Age-Adjusted Cancer Deaths	54
Prevalence of Cancer	56
Cancer Screenings	57
Respiratory Disease	63
Age-Adjusted Respiratory Disease Deaths	63
Prevalence of Respiratory Conditions	65
Injury & Violence	68
Leading Causes of Accidental Death	68
Unintentional Injury	69
Intentional Injury (Violence)	75
Diabetes	80
Age-Adjusted Diabetes Deaths	80
Prevalence of Diabetes	82
Diabetes Treatment	83
Alzheimer's Disease	84
Age-Adjusted Alzheimer's Disease Deaths	84
Kidney Disease	86
Age-Adjusted Kidney Disease Deaths	86

Environmental Health	87
Ambient Air Quality	87
Wood-Burning Stoves	88
Potentially Disabling Conditions	90
Arthritis, Osteoporosis, & Chronic Pain	90
Vision & Hearing Impairment	94

INFECTIOUS DISEASE 96

Childhood Vaccinations	97
Childhood Immunization Coverage	97
Vaccination of Area Children	97
Perceptions of Childhood Vaccines	99
Vaccine-Preventable Conditions	101
Measles, Mumps, Rubella	101
Pertussis	101
Tuberculosis.....	103
HIV	104
HIV Testing	104
Sexually Transmitted Diseases.....	106
Gonorrhea	107
Syphilis	108
Chlamydia	109
Safe Sexual Practices	110

BIRTHS 112

Prenatal Care.....	113
Birth Outcomes & Risks	114
Low-Weight Births	114
Infant Mortality	115
Family Planning	116
Births to Teen Mothers	116
Children in Poverty	117

MODIFIABLE HEALTH RISKS 118

Actual Causes Of Death.....	119
Nutrition	120
Daily Recommended Servings of Fruits/Vegetables	121
Health Advice About Diet & Nutrition	123
Access to Healthful Foods	124
Physical Activity.....	126
Level of Activity at Work	127
Leisure-Time Physical Activity	128
Activity Levels	129
Health Advice About Physical Activity & Exercise	131
Physical Activity & the Built Environment	132
Weight Status.....	136
Adult Weight Status	136
Weight Management	141
Childhood Overweight & Obesity	143
Child's Weight Status	143
Perception of Child's Weight	144

Substance Abuse	146
Age-Adjusted Cirrhosis/Liver Disease Deaths	147
High-Risk Alcohol Use	148
Age-Adjusted Drug-Induced Deaths	151
Illicit Drug Use	152
Alcohol & Drug Treatment	152
Tobacco Use	153
Cigarette Smoking	153
Other Tobacco Use	158

ACCESS TO HEALTH SERVICES 159

Health Insurance Coverage	160
Type of Healthcare Coverage	160
Lack of Health Insurance Coverage	163
Difficulties Accessing Healthcare	165
Difficulties Accessing Services	165
Barriers to Healthcare Access	166
Prescriptions	167
Accessing Healthcare for Children	168
Primary Care Services	169
Primary Care Providers	169
Specific Source of Ongoing Care	170
Utilization of Primary Care Services	172
Emergency Room Utilization	174
Oral Health	176
Dental Care	177
Dental Insurance	179
Vision Care	180

HEALTH EDUCATION & OUTREACH 181

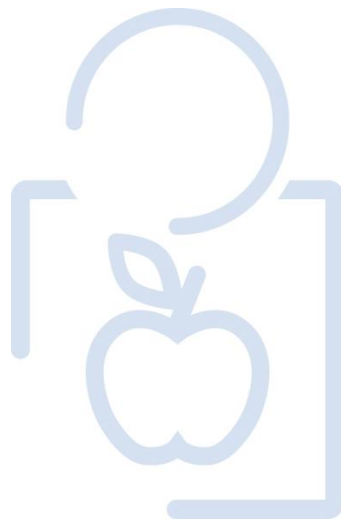
Healthcare Information Sources	182
Participation in Health Promotion Events	183

PERCEPTIONS OF HEALTHCARE 185

Ratings of Local Healthcare Services	186
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INTRODUCTION

The PRC Community Health Assessment is a systematic, data-driven approach to determining the health status, behaviors and needs of our community residents.



Project Overview

Project Goals

This PRC Community Health Assessment is a systematic, data-driven approach to determining the health status, behaviors and needs of residents in Gallatin, Madison & Park Counties, Montana. Subsequently, this information may be used to inform decisions and guide efforts to improve community health and wellness.

A community health assessment provides the 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 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 which have historically 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.

Methodology

This assessment incorporates data from primary research (the 2011 PRC Community Health Survey) and secondary research (vital statistics and other existing health-related data). It also allows for comparison to benchmark data at the state and national levels.

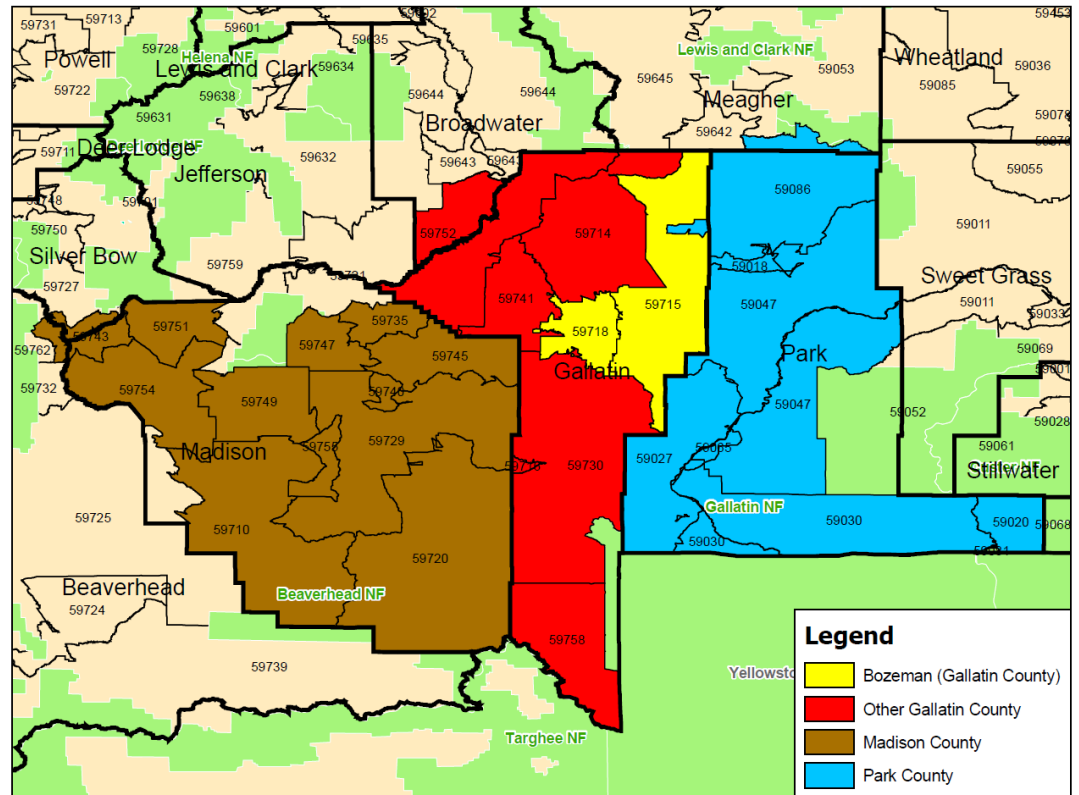
2011 PRC Community Health Survey

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 Bozeman Deaconess Hospital, Community Health Partners (CHP), and the Gallatin City-County Health Department, in conjunction with Professional Research Consultants (PRC).

Community Defined for This Assessment

The “community” defined for this assessment is made up of three Montana counties (Gallatin, Madison & Park Counties); additionally, the city of Bozeman is examined separately from the remainder of Gallatin County. Throughout this assessment, the three-county area is referred to as the “Total Area.” A geographical description is illustrated in the following map.



Sample Approach & Design

A precise and carefully executed methodology is critical in asserting the validity of the results gathered in the 2011 PRC Community Health Survey. Thus, to ensure the best representation of the population surveyed, a telephone interview methodology was employed. The primary advantages of telephone interviewing are timeliness, efficiency and random-selection capabilities.

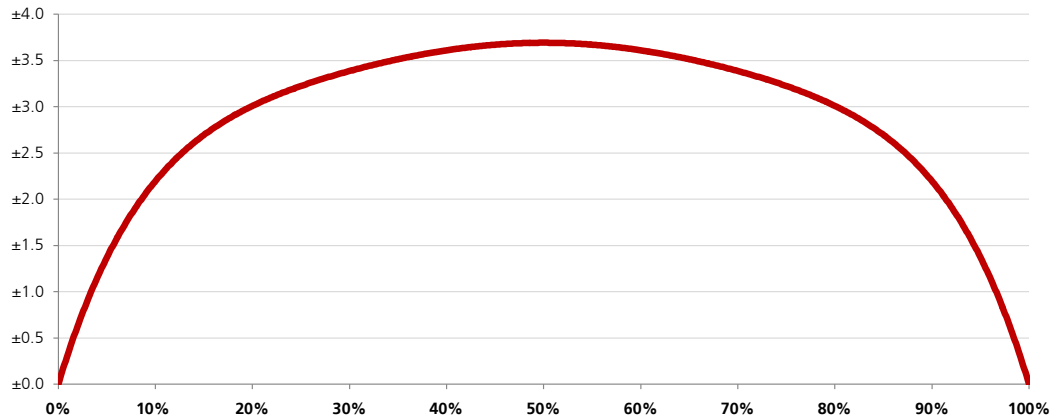
The sample design used for this effort consisted of a stratified random sample of 700 individuals age 18 and older in defined area. The sample was stratified to include 200 interviews in Bozeman, 200 in Other Gallatin County, and 150 in each of Madison and Park Counties; after the data were collected, the interviews were weighted in proportion to the actual population distribution of these areas so that overall findings properly reflect the Total Area as a whole.

All administration of the surveys, data collection and data analysis was conducted by Professional Research Consultants, Inc. (PRC).

Sampling Error

For statistical purposes, the maximum rate of error associated with a sample size of 700 respondents is $\pm 3.7\%$ at the 95 percent level of confidence.

Expected Error Ranges for a Sample of 700 Respondents at the 95 Percent Level of Confidence



- Note:
- The "response rate" (the percentage of a population giving a particular response) determines the error rate associated with that response. A "95 percent level of confidence" indicates that responses would fall within the expected error range on 95 out of 100 trials.
- Examples:
- If 10% of the sample of 700 respondents answered a certain question with a "yes," it can be asserted that between 7.8% and 12.2% ($10\% \pm 2.2\%$) of the total population would offer this response.
 - If 50% of respondents said "yes," one could be certain with a 95 percent level of confidence that between 46.3% and 53.7% ($50\% \pm 3.7\%$) of the total population would respond "yes" if asked this question.

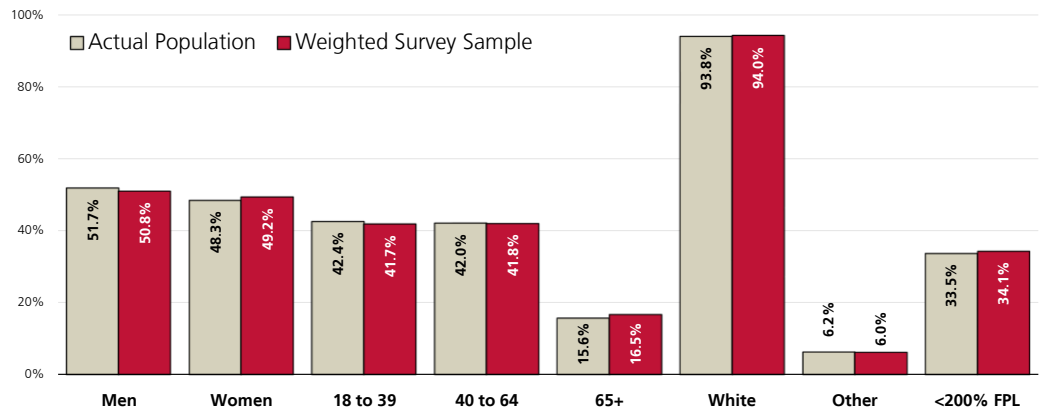
Sample Characteristics

To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. And, 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 gender, 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 charts outline 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 healthcare needs, and these children are not represented demographically in this chart.]

Population & Sample Characteristics

(Total Area, 2011)



Sources:

- GeoLytics Demographic Estimates & Projections, 2008.
- PRC Community Health Survey, Professional Research Consultants, Inc.

Further note that the poverty descriptions and segmentation used in this report are based on administrative poverty thresholds determined by the US Department of Health & Human Services. These guidelines define poverty status by household income level and number of persons in the household (e.g., *the 2011 guidelines place the poverty threshold for a family of four at \$22,350 annual household income or lower*). In sample segmentation: "<200% FPL" (or less than twice the Federal Poverty Level) refers to community members living in a household with defined poverty status, along with those households living just above the poverty level, earning up to twice the poverty threshold; and "200%+" refers to those households living on incomes which are twice or more the federal poverty level.

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

Public Health, Vital Statistics & Other Data

A variety of existing (secondary) data sources was consulted to complement the research quality of this Community Health Assessment. Data for Gallatin, Madison, and Park Counties were provided by the Gallatin City-County Health Department and by PRC from the following sources (specific citations are included with the graphs throughout this report):

- Centers for Disease Control & Prevention
- County Health Rankings, University of Wisconsin Population Health Institute
- GeoLytics Demographic Estimates & Projections
- Montana Board of Crime Control
- Montana Department of Public Health and Human Services
- US Census Bureau
- US Department of Health and Human Services, National Center for Health Statistics
- US Department of Justice, Federal Bureau of Investigation
- US National Immunization Survey

Benchmark Data

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 are reported in the most recent *BRFSS (Behavioral Risk Factor Surveillance System) Prevalence and Trend Data* published by the Centers for Disease Control and Prevention and the US Department of Health & Human Services. 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 *2011 PRC National Health Survey*; the methodological approach for the national study is identical 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. The Healthy People initiative is grounded in the principle that setting national objectives and monitoring progress can motivate action. For three decades,

Healthy People has established benchmarks and monitored progress over time in order to:

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

Healthy People 2020 is the product of an extensive stakeholder feedback process that is unparalleled in government and health. It integrates input from public health and prevention experts, a wide range of federal, state and local government officials, a consortium of more than 2,000 organizations, and perhaps most importantly, the public. More than 8,000 comments were considered in drafting a comprehensive set of Healthy People 2020 objectives.

Summary of Findings

Areas of Opportunity for Community Health Improvement

The following “health priorities” represent recommended areas of intervention, based on the information gathered through this Community Health Assessment and the guidelines set forth in *Healthy People 2020*. From these data, opportunities for health improvement exist in the region with regard to the following health areas (see also the summary tables presented in the following section). These areas of concern are subject to the discretion of area providers, the steering committee, or other local organizations and community leaders as to actionability and priority.

Areas of Opportunity Identified Through This Assessment		
	TOTAL AREA	CITY/COUNTY-SPECIFIC
Access to Healthcare	<ul style="list-style-type: none"> Healthcare Insurance Coverage (Including Insurance Instability & Prescription Coverage) Barriers to Healthcare Access (Including Cost & Inconvenient Hours) Specific Source of Ongoing Care Routine Medical Checkups Routine Vision Care Dental Insurance Coverage 	<ul style="list-style-type: none"> Ratio of Primary Care Providers to Population [Madison Co.] Routine Dental Care [Madison Co.]
Cancer	<ul style="list-style-type: none"> Colorectal Cancer Screenings Women’s Cancer Screenings 	<ul style="list-style-type: none"> Skin Cancer [Madison Co.]
Chronic Pain	<ul style="list-style-type: none"> Chronic Neck Pain 	<ul style="list-style-type: none"> Arthritis [Madison County]
Dementias		<ul style="list-style-type: none"> Alzheimer’s Disease Deaths [Madison Co.]
Diabetes		<ul style="list-style-type: none"> Diabetes Deaths [Park County]
Heart Disease & Stroke	<ul style="list-style-type: none"> Blood Pressure & Cholesterol Screenings High Cholesterol Prevalence 	<ul style="list-style-type: none"> Stroke Deaths [Madison Co.]
HIV/AIDS	<ul style="list-style-type: none"> HIV Testing 	
Injury & Violence	<ul style="list-style-type: none"> Unintentional Injury Deaths (Including Motor Vehicle Crashes) Seatbelt Usage Firearm-Related Deaths Firearm Safety (Especially in Homes With Children) 	<ul style="list-style-type: none"> Domestic Violence [Park Co.]
Maternal & Infant Health		<ul style="list-style-type: none"> Prenatal Care [Madison Co.]
Mental Health	<ul style="list-style-type: none"> Suicides 	<ul style="list-style-type: none"> Stress [Park Co.] Mental Health Treatment [Madison Co.]
Nutrition & Weight Status	<ul style="list-style-type: none"> Medical Advice About Nutrition, Weight & Physical Activity 	<ul style="list-style-type: none"> Healthy Food Outlets [Madison/ Park Cos.] Safe Places for Exercise [Madison Co.]
Respiratory Disease	<ul style="list-style-type: none"> Tuberculosis Incidence 	<ul style="list-style-type: none"> Asthma [Park Co.] Chronic Lung Disease [Park Co.] Air Quality: Particulate Matter [Park Co.]
Substance Abuse	<ul style="list-style-type: none"> Alcohol Use 	<ul style="list-style-type: none"> Chronic Drinking [Bozeman] Binge Drinking [Bozeman] Drinking & Driving [Bozeman]
Tobacco Use	<ul style="list-style-type: none"> Use of Smokeless Tobacco & Cigars Cigarette Smoking Cessation & Medical Advice to Quit 	

Summary Tables: Comparisons With Benchmark Data

The following tables provide an overview of indicators in the Total Area, including comparisons among the individual areas. These data are grouped to correspond with the Focus Areas presented in Healthy People 2020.

Reading the Summary Tables

- In the following charts, Total Area results are shown in the larger, blue column.
- The green columns [to the left of Total Area column] provide comparisons between Bozeman and the balance of Gallatin County, as well as among the three counties (Gallatin, Madison, Park), identifying differences for each county as “better than” (☀️), “worse than” (🌧️), or “similar to” (☁️) the combined opposing counties.
- The columns to the right of Total Area column provide comparisons between the Total Area and any available state and national findings, as well as Healthy People 2020 targets. Again, symbols indicate whether 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.

Access to Health Services	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% [Age 18-64] Lack Health Insurance	20.9	24.8	22.1	22.0	20.8	22.0	22.6	14.9	0.0
% [65+] With Medicare Supplement Insurance						76.8	75.5		
% [Insured] Insurance Covers Prescriptions	86.4	86.6	86.5	77.8	81.6	85.1		93.9	
% [Insured] Went Without Coverage in Past Year	9.3	8.9	9.1	4.7	5.8	8.3		4.8	
% Difficulty Accessing Healthcare in Past Year (Composite)	41.1	30.8	37.6	22.6	39.1	36.8		37.3	
% Inconvenient Hrs Prevented Dr Visit in Past Year	8.5	4.9	7.3	4.9	5.3	6.9		14.3	
% Cost Prevented Getting Prescription in Past Year	16.9	8.9	14.2	7.7	14.9	13.9		15.0	
% Cost Prevented Physician Visit in Past Year	24.7	14.7	21.3	9.3	19.6	20.3		14.0	
% Difficulty Getting Appointment in Past Year	16.6	8.8	14.0	5.0	13.1	13.3		16.5	
% Difficulty Finding Physician in Past Year	6.0	5.7	5.9	4.8	10.2	6.5		10.7	
% Transportation Hindered Dr Visit in Past Year	2.9	3.6	3.1	3.3	3.9	3.2		7.7	
% Skipped Prescription Doses to Save Costs	12.1	10.0	11.4	12.9	12.9	11.7		14.8	
% Difficulty Getting Child's Healthcare in Past Year	3.0	3.1	3.0		5.3	3.4		1.9	
% [Age 18-64] Have a Specific Source of Ongoing Care	76.8	84.0	79.1	79.0	75.2	78.6		75.1	89.4
% [Age 65+] Have a Specific Source of Ongoing Care						81.4		82.6	100.0
% Have Had Routine Checkup in Past Year	59.9	56.0	58.6	59.7	58.2	58.6		67.3	
% Child Has Had Checkup in Past Year	72.5	68.3	71.1		73.0	71.5		87.0	
Population Per Primary Care Provider (2008)			696.0	829.0	597.0		813.0		
% Two or More ER Visits in Past Year	7.9	2.4	6.1	2.6	2.9	5.4		6.5	
% Rate Local Healthcare "Fair/Poor"	11.2	21.9	14.7	16.6	20.1	15.6		15.3	

Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.



Arthritis, Osteoporosis & Chronic Back Conditions	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks			
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020	
% [50+] Arthritis/Rheumatism	32.4	27.5	30.5	46.3	34.0	32.5				
% [50+] Osteoporosis	4.7	5.9	5.1	17.4	8.4		6.8			
% Sciatica/Chronic Back Pain	17.9	17.2	17.6	22.8	24.3		18.9			
% Migraine/Severe Headaches	12.8	15.8	13.8	10.2	13.1		13.5			
% Chronic Neck Pain	12.0	12.6	12.2	9.1	13.5		12.2			
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>						better similar worse				

Cancer	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks			
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020	
Cancer (Age-Adjusted Death Rate)			148.4	158.2	177.4	156.1				
Lung Cancer (Age-Adjusted Death Rate)							33.2			
Prostate Cancer (Age-Adjusted Death Rate)							17.1			
Female Breast Cancer (Age-Adjusted Death Rate)							17.7			
Colorectal Cancer (Age-Adjusted Death Rate)							13.9			
% Skin Cancer	5.1	7.2	5.8	12.3	6.1	6.3				
% Cancer (Other Than Skin)	4.1	5.0	4.4	5.9	8.0		5.0			
% [Men 50+] Prostate Exam in Past 2 Years	75.0	68.6	72.8		76.7		73.8			
% [Women 50-74] Mammogram in Past 2 Years	72.5	76.8	74.3		73.9		74.2			
% [Women 21-65] Pap Smear in Past 3 Years	92.0	86.0	89.8	76.8	88.6		88.7			
% [Age 50+] Sigmoid/Colonoscopy Ever	71.5	59.7	67.0	59.0	59.8	65.0				
% [Age 50+] Blood Stool Test in Past 2 Years	28.0	17.3	23.8	27.5	16.3		22.8			
% [Age 50-75] Colorectal Cancer Screening							61.8			
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>							better similar worse			

Chronic Kidney Disease	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
Kidney Disease (Age-Adjusted Death Rate)			5.5	11.1		7.2	10.7	14.1	
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>							better	similar	worse

Diabetes	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
Diabetes Mellitus (Age-Adjusted Death Rate)			15.4	11.5	25.8	17.1	23.8	24.5	19.6
% Diabetes/High Blood Sugar	2.4	6.2	3.7	5.7	5.9	4.1	7.0	10.1	
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>							better	similar	worse

Dementias, Including Alzheimer's Disease	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
Alzheimer's Disease (Age-Adjusted Death Rate)			15.9	21.7		16.2	22.7	20.7	
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>							better	similar	worse

Educational & Community-Based Programs	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% Attended Health Event in Past Year	24.4	15.0	21.2	37.0	27.2	23.1		22.2	
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>							better	similar	worse

Environmental Health	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% Use a Wood-Burning Stove to Heat the Home	26.7	32.0	28.5	44.6	33.5	30.3			
% Stove Has a Catalytic Convertor [Among Stove Owners]			42.8	45.0	41.4	42.7			
# of Days w/PM2.5 Levels Over National Standard			8.0	4.0	14.0				
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>							better	similar	worse

Family Planning	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% Births to Teenagers			6.9	7.6	9.7	7.2	13.1		
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>							better	similar	worse

General Health Status	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% "Fair/Poor" Physical Health	17.3	8.1	14.2	8.0	16.3	14.1	15.0	16.8	
% Activity Limitations	21.6	16.3	19.8	17.3	23.8		20.2	24.0	17.0
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>							better	similar	worse

Hearing & Other Sensory or Communication Disorders	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% Deafness/Trouble Hearing	10.5	14.6	11.9	17.9	12.2	12.3	9.6		
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>								better	similar

Heart Disease & Stroke	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
Diseases of the Heart (Age-Adjusted Death Rate)			144.5	203.8	153.6	153.1	185.5	228.2	152.7
% Heart Attack	2.9	4.5	3.4	5.8	2.5		3.5	4.5	
Stroke (Age-Adjusted Death Rate)			51.9	61.8	37.5	49.4	51.8	52.1	33.8
% Angina/Coronary Heart Disease	3.0	3.4	3.1	5.6	3.3		3.3	3.7	
% Heart Disease (Heart Attack, Angina, Coronary Disease)	4.2	6.0	4.8	7.6	4.5	4.9	6.1		
% Stroke	1.4	2.2	1.7	3.2	2.5		1.9	2.7	2.7
% Blood Pressure Checked in Past 2 Years	86.2	89.2	87.3	91.4	91.9	88.2	94.7	94.9	
% Told Have High Blood Pressure (Ever)	21.3	29.3	24.0	32.7	22.7		24.4	27.7	34.3
% [HBP] Taking Action to Control High Blood Pressure						93.9	89.1		
% Cholesterol Checked in Past 5 Years	80.2	80.1	80.2	85.7	79.0		80.4	72.0	90.7
% Told Have High Cholesterol (Ever)	22.9	26.7	24.1	28.9	32.1	25.6	36.5	31.4	13.5
% [HBC] Taking Action to Control High Blood Cholesterol	85.8	83.0	84.8	87.6	88.9		85.7	89.1	
% 1+ Cardiovascular Risk Factor	59.8	76.3	65.3	74.2	71.3	66.8	86.3		
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>								better	similar

HIV	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% [Age 18-64] Ever Tested for HIV	48.0	41.6	45.9	36.6	43.6	45.1	55.5		
% [Age 18-44] HIV Test in the Past Year	16.1	16.8	16.3	1.9			14.1	19.9 16.9	
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>						better similar worse			

Immunization & Infectious Diseases	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% Children (19-35 Mos) Immunized Appropriately (4:3:1)						75.0			
% Feel Childhood Vaccines Extremely Important [Parents of Child 7-17]						79.9			
% Have Refused Child's Vaccination [Parents of Child 7-17]						17.1			
% Child Vaccinated Only Because of the Law [Parents of Child 7-17]						5.3			
% Would Want All Immunizations for a Newborn [Parents of Child 7-17]						90.3			
% Feel Immunizations Are Extremely Safe [Parents of Child 7-17]						43.3			
Measles per 100,000			0.0	0.0	0.0	0.0	0.0	0.0	
Mumps per 100,000			0.0	0.0	0.0	0.0	0.0	0.9	
Rubella per 100,000						0.0	0.0	0.0	
Pertussis per 100,000			5.0	4.5		4.2	4.4		
Tuberculosis Incidence per 100,000			1.5	0.0	2.1	1.5	1.0	4.4	1.0
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>						better similar worse			

Injury & Violence Prevention	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
Unintentional Injury (Age-Adjusted Death Rate)			41.1	65.8	59.8	44.6	54.3	37.5	36.0
Motor Vehicle Crashes (Age-Adjusted Death Rate)			19.6	37.8	31.9	22.0	24.7	14.3	12.4
% "Always" Wear Seat Belt	79.2	81.0	79.8	73.9	77.6	79.1		85.3	92.4
% Child [Age 0-17] "Always" Uses Seat Belt/Car Seat	94.8	91.8	93.8		91.0	93.3		91.6	
% Child [Age 5-17] "Always" Wears Bicycle Helmet						32.4		35.3	
Firearm-Related Deaths (Age-Adjusted Death Rate)			13.4	26.4	22.2	15.5	14.7	10.3	9.2
% Firearm in Home	67.7	75.8	70.3	81.3	73.9	71.5		37.9	
% [Homes With Children] Firearm in Home	66.9	84.1	72.5		79.4	73.6		34.4	
% [Homes With Firearms] Weapon(s) Unlocked & Loaded	11.2	22.3	15.1	23.5	16.1	15.8		16.9	
Homicide (Age-Adjusted Death Rate)			1.5			1.8	3.4	6.2	5.5
Violent Crime per 100,000			190.7	112.1	291.2	199.8	256.1	450.3	
% Victim of Violent Crime in Past 5 Years	0.9	2.5	1.4	0.4	1.3	1.3		1.6	
Domestic Violence Offenses per 100,000			283.4	228.7	551.2	317.9	433.5		
% Ever Threatened With Violence by Intimate Partner	9.6	4.6	7.9	6.3	8.0	7.8		11.7	
% Victim of Domestic Violence (Ever)	7.5	7.1	7.4	9.4	15.3	8.6		13.5	
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>									
							better	similar	worse

Maternal, Infant & Child Health	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks			
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020	
% Received Prenatal Care in First Trimester			86.3	60.0	67.0	83.0		83.7	77.9	
% of Low Birthweight Births			5.9	4.0	6.0		5.8	7.0	8.2	7.8
Infant Death Rate			6.0			5.6	6.2	7.0	6.0	
% Children 5-17 Living in Poverty			11.7	14.9	15.3		18.4			
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>										
							better	similar	worse	

Mental Health & Mental Disorders	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks			
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020	
% "Fair/Poor" Mental Health	7.3	5.6	6.7	8.0	6.5	6.7		11.7		
% Major Depression	10.9	5.4	9.0	8.2	7.0		8.7		11.7	
% Symptoms of Chronic Depression (2+ Years)	25.2	16.7	22.3	16.4	24.6	22.3		26.5		
Suicide (Age-Adjusted Death Rate)			17.3	28.4	25.2	19.6	19.3	10.8	10.2	
% Have Ever Sought Help for Mental Health	28.0	20.9	25.6	12.1	25.2		24.7		24.4	
% [Those With Major Depression] Seeking Help						90.3		82.0	75.1	
% Typical Day Is "Extremely/Very" Stressful	6.8	9.5	7.8	7.9	14.2		8.6		11.5	
% Child [Age 5-17] Takes Prescription for ADD/ADHD	7.6	2.5	5.7	0.0		4.7		6.5		
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>										
							better	similar	worse	

Nutrition & Weight Status	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% Eat 5+ Servings of Fruit or Vegetables per Day	54.9	42.9	50.9	53.0	49.5	50.8	48.8		
% Eat 2+ Servings of Fruit per Day	68.1	59.6	65.3	72.4	63.6	65.5	60.5		
% Eat 3+ Servings of Vegetables per Day	50.0	40.5	46.8	46.0	39.3	45.6	40.1		
% It is Easy to Buy Healthy Foods in the Neighborhood	84.6	83.9	84.3	77.8	85.7	84.1			
% Medical Advice on Nutrition in Past Year	22.3	34.8	26.5	22.6	32.6	27.1	41.9		
% Healthy Weight (BMI 18.5-24.9)	46.3	38.6	43.7	47.3	51.8	45.1	31.7	33.9	
% Overweight	51.9	59.2	54.4	51.6	46.8	53.2	61.3	66.9	
% Obese	9.5	17.0	12.0	15.2	12.1	12.3	23.5	28.5	30.6
% Perceive Self as Somewhat/Very Overweight	33.2	50.8	39.2	38.8	39.6	39.1			
% Medical Advice on Weight in Past Year	12.8	25.4	17.1	9.0	19.5	16.9	25.7		
% [Overweights] Counselored About Weight in Past Year	22.4	36.9	27.7	13.1	29.6	27.0	30.9		
% [Obese Adults] Counselored About Weight in Past Year						58.5	47.4	31.8	
% [Overweights] Trying to Lose Weight Both Diet/Exercise	32.8	37.4	34.5	33.0	41.4	35.3	38.6		
% Children [Age 5-17] Overweight						16.6	30.7		
% Children [Age 5-17] Obese						6.5	18.9	14.6	
% [Parents] Perceive Child [2-17] "Somewhat/Very" Overwt	3.3	5.4	4.0	1.8		3.6	9.9		
% [Parents] Have Been Told That Child [2-17] Is Overweight	0.4	0.0	0.3	1.0		0.4	3.2		
% of ZIP Codes w/Healthy Food Outlets			86.0	29.0	33.0		41.0		

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better similar worse

Oral Health	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% [Age 18+] Dental Visit in Past Year	75.9	59.5	70.3	55.9	64.7	68.5	61.1	66.9	49.0
% Child [Age 2-17] Dental Visit in Past Year	73.0	71.4	72.5		82.4		74.2	79.2	49.0
% Have Dental Insurance	46.3	43.7	45.5	38.2	43.2	44.7	60.8		
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>									
							better	similar	worse
















Physical Activity	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% [Employed] Job Entails Mostly Sitting/Standing	62.4	43.7	55.3	34.1	49.3	53.1		63.2	
% No Leisure-Time Physical Activity	6.7	14.0	9.1	18.1	16.1		10.7	21.6	28.7
% Meeting Physical Activity Guidelines	58.7	58.0	58.5	53.9	54.2	57.6	58.6	42.7	
% Moderate Physical Activity	40.8	38.5	40.1	36.6	29.7	38.4		23.9	
% Vigorous Physical Activity	45.1	40.1	43.4	40.3	40.9	42.9	36.3	34.8	
% Medical Advice on Physical Activity in Past Year	29.8	39.5	33.1	26.9	33.0	32.6		47.8	
% Neighborhood Has Places to Safely Walk, Run, or Bike	78.6	72.2	76.4	47.2	72.2	73.9			
% Neighborhood is NOT a Pleasant Place for Walking	1.1	4.8	2.3	1.7	6.4	2.9			
% It is NOT Easy to Walk to Important Destinations	34.4	50.8	40.0	44.8	44.2	40.9			
% Have Access to Public Exercise Facilities in Neighborhood	57.4	38.3	50.9	49.7	50.3	50.8			
% Child [Age 7-17] Walks/Bikes to School						9.6			
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>									
							better	similar	worse

Respiratory Diseases	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks			
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020	
CLRD (Age-Adjusted Death Rate)			35.3	39.2	38.0	36.3	56.2	42.8		
Pneumonia/Influenza (Age-Adjusted Death Rate)			19.7	19.7	21.3	20.1	19.9	20.7		
% Nasal/Hay Fever Allergies	34.3	26.7	31.7	24.7	25.7	30.4		27.3		
% Sinusitis	7.9	18.3	11.4	10.1	13.4	11.6		19.4		
% Chronic Lung Disease	3.7	4.2	3.9	5.5	11.0	5.0		8.4		
% Adults Asthma (Ever Diagnosed)	11.7	13.2	12.2	10.8	17.3	12.8	12.9			
% [Adult] Currently Has Asthma	5.8	6.7	6.1	7.4	13.8	7.3	9.1	7.5		
% Child [Age 2-17] Asthma (Ever Diagnosed)	5.6	5.9	5.7		12.8	7.0				
% [Child 2-17] Currently Has Asthma	4.3	5.2	4.6		10.8	5.7		6.8		
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>										
							better	similar	worse	

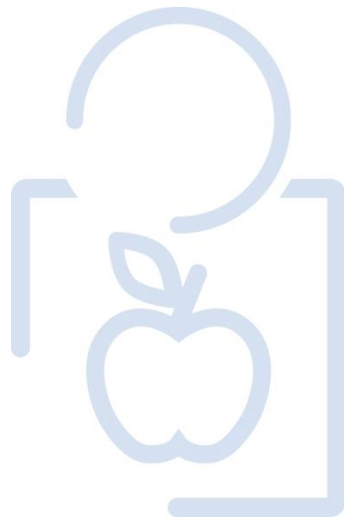
Sexually Transmitted Diseases	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks			
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020	
% Used Condom During Last Sexual Intercourse [Unmarried 18-64]						32.4		18.9		
% [Age 18-64 Unmarried] 3+ Sexual Partners in Past Year						8.5		7.1		
Gonorrhea Incidence per 100,000			9.0	9.0	2.1	8.0	11.3	109.3		
Primary & Secondary Syphilis Incidence per 100,000			1.1	0.0	0.0	0.9	0.8	4.3		
Chlamydia Incidence per 100,000			289.4	58.3	79.0	244.2	305.6	391.6		
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>										
							better	similar	worse	

Substance Abuse	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks			
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020	
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)			3.1	10.8		5.7	10.8	9.2	8.2	
% Current Drinker	72.7	69.2	71.6	61.7	64.4	69.9	58.5	58.8		
% Chronic Drinker (Average 2+ Drinks/Day)	10.4	3.7	8.1	3.8	7.6	7.8	5.3	5.6		
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	23.3	15.5	20.7	14.5	14.4	19.4	17.0	16.7	24.3	
% Drinking & Driving in Past Month	0.2	1.0	0.4	1.2	3.4	0.9		3.5		
% Rode With Drunk Driver in Past Month	9.3	0.5	6.3	1.5	2.2	5.4				
% Driving Drunk or Riding with Drunk Driver	9.6	1.4	6.8	2.1	5.2	6.3		5.5		
Drug-Induced Deaths (Age-Adjusted Death Rate)			3.6	11.4		5.8	10.8	9.7	11.3	
% Illicit Drug Use in Past Month	3.3	0.7	2.4	0.0	0.3	1.9		1.7	7.1	
% Ever Sought Help for Alcohol or Drug Problem	5.2	1.4	3.9	3.5	3.3	3.8		3.9		
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>										
							better	similar	worse	

Tobacco Use	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks			
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020	
% Current Smoker	7.5	13.7	9.6	8.7	11.6	9.8	18.8	16.6	12.0	
% Someone Smokes at Home	3.7	1.9	3.1	8.2	7.1	4.0		13.6		
% [Non-Smokers] Someone Smokes in the Home	2.4	0.7	1.9	2.4	2.9	2.0		5.7		
% [Household With Children] Someone Smokes in the Home	0.8	0.9	0.9		3.2	1.3		12.1		
% [Smokers] Received Advice to Quit Smoking						44.8		63.7		
% [Smokers] Have Quit Smoking 1+ Days in Past Year						53.2		56.2	80.0	
% Smoke Cigars	2.0	6.2	3.4	1.3	4.1	3.3		4.2	0.2	
% Use Smokeless Tobacco	10.8	7.0	9.5	8.6	5.3	8.8		2.8	0.3	
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>										
							better	similar	worse	

Vision	Bozeman vs. Other Gallatin		Each County vs. Others Combined			Total Area	Total Area vs. Benchmarks		
	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County		vs. MT	vs. US	vs. HP2020
% Blindness/Trouble Seeing	 7.6	 4.6	 6.6	 6.1	 5.7	6.5	 6.9		
% Eye Exam in Past 2 Years	 47.0	 48.7	 47.5	 45.0	 60.0		49.2	 57.5	
<p>Note: In the green section, Bozeman is compared against other areas of Gallatin County, and each county as a whole is compared against the other two combined. 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.</p>									
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GENERAL HEALTH STATUS



Overall Health Status

The initial inquiry of the 2011 PRC Community Health Survey asked respondents the following:

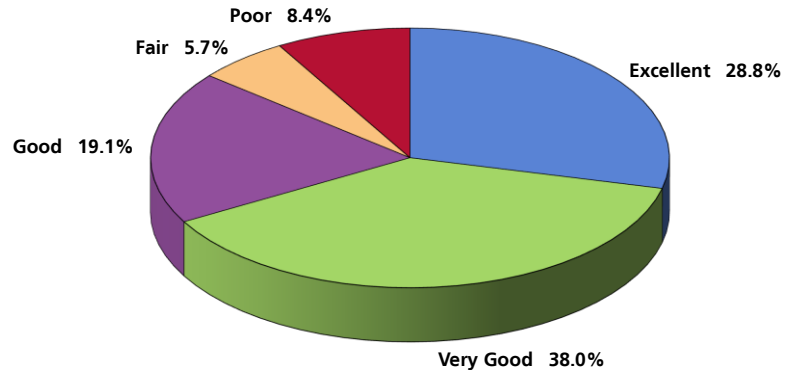
"Would you say that in general your health is: excellent, very good, good, fair or poor?"

Self-Reported Health Status

Two-thirds (66.8%) of Total Area adults rate their overall health as "excellent" or "very good."

- Another 19.1% gave "good" ratings of their overall health.

Self-Reported Health Status
(Total Area, 2011)



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

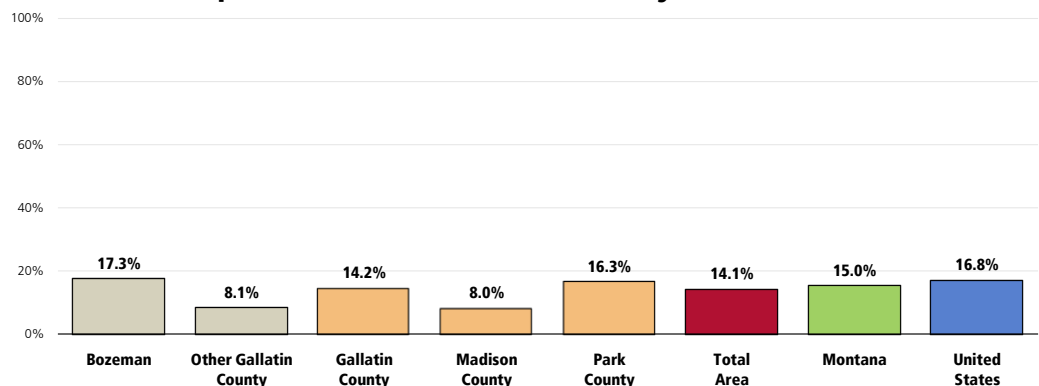
However, 14.1% of Total Area adults believe that their overall health is "fair" or "poor."

- Similar to statewide findings.
- Similar to the national percentage.
- Within Gallatin County, higher (less favorable) in the Bozeman community than in the remainder of the county.
- By county, notably lower (more favorable) in Madison County.

NOTE:

- Differences noted in the text represent significant differences determined through statistical testing.
- Where sample sizes permit, community-level data are provided.

Experience "Fair" or "Poor" Physical Health



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 5]
• Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.
• Professional Research Consultants. PRC National Health Survey. 2011.
Notes: • Asked of all respondents.

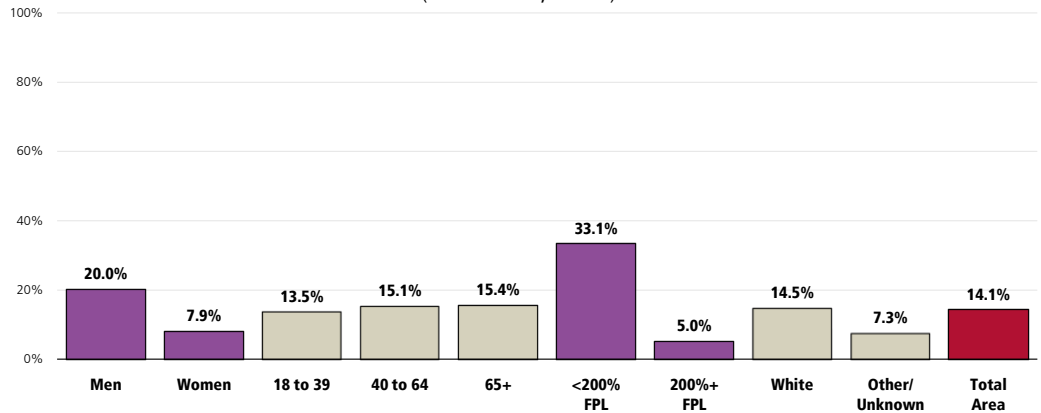
Adults more likely to report experiencing “fair” or “poor” overall health include:

- Men.
- Residents living at lower incomes.
- Other differences within demographic groups, as illustrated in the following chart, are not statistically significant.

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

Experience “Fair” or “Poor” Physical Health

(Total Area, 2011)



Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 5]
Notes: Asked of all respondents.
Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Activity Limitations

An individual can get a disabling impairment or chronic condition at any point in life. Compared with people without disabilities, people with disabilities are more likely to:

- Experience difficulties or delays in getting the health care they need.
- Not have had an annual dental visit.
- Not have had a mammogram in past 2 years.
- Not have had a Pap test within the past 3 years.
- Not engage in fitness activities.
- Use tobacco.
- Be overweight or obese.
- Have high blood pressure.
- Experience symptoms of psychological distress.
- Receive less social-emotional support.
- Have lower employment rates.

There are many social and physical factors that influence the health of people with disabilities. The following three areas for public health action have been identified, using the International Classification of Functioning, Disability, and Health (ICF) and the three World Health Organization (WHO) principles of action for addressing health determinants.

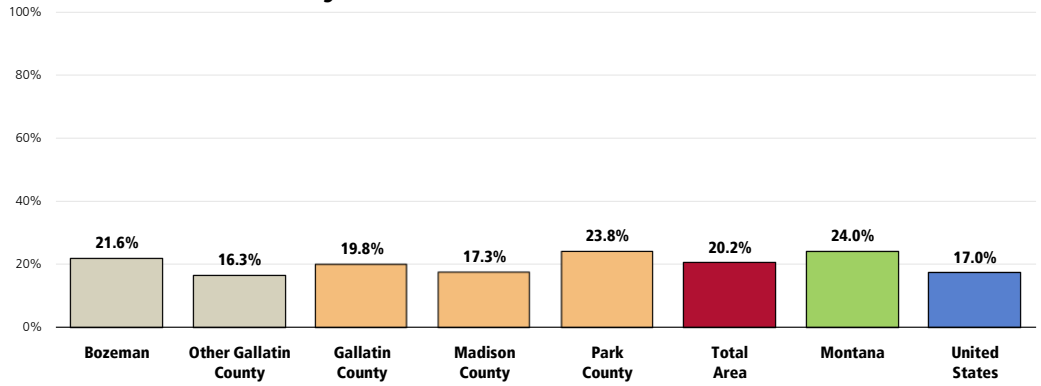
- **Improve the conditions of daily life** by: encouraging communities to be accessible so all can live in, move through, and interact with their environment; encouraging community living; and removing barriers in the environment using both physical universal design concepts and operational policy shifts.
- **Address the inequitable distribution of resources among people with disabilities and those without disabilities** by increasing: appropriate health care for people with disabilities; education and work opportunities; social participation; and access to needed technologies and assistive supports.
- **Expand the knowledge base and raise awareness about determinants of health for people with disabilities** by increasing: the inclusion of people with disabilities in public health data collection efforts across the lifespan; the inclusion of people with disabilities in health promotion activities; and the expansion of disability and health training opportunities for public health and health care professionals.

– Healthy People 2020 (www.healthypeople.gov)

A total of 20.2% of Total Area adults are limited in some way in some activities due to a physical, mental or emotional problem.

- More favorable than the prevalence statewide.
- Similar to the national prevalence.
- Within Gallatin County, no statistical difference by area.
- No significant difference by county.

Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 120]
- Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.
- Professional Research Consultants. PRC National Health Survey. 2011.

 Notes:

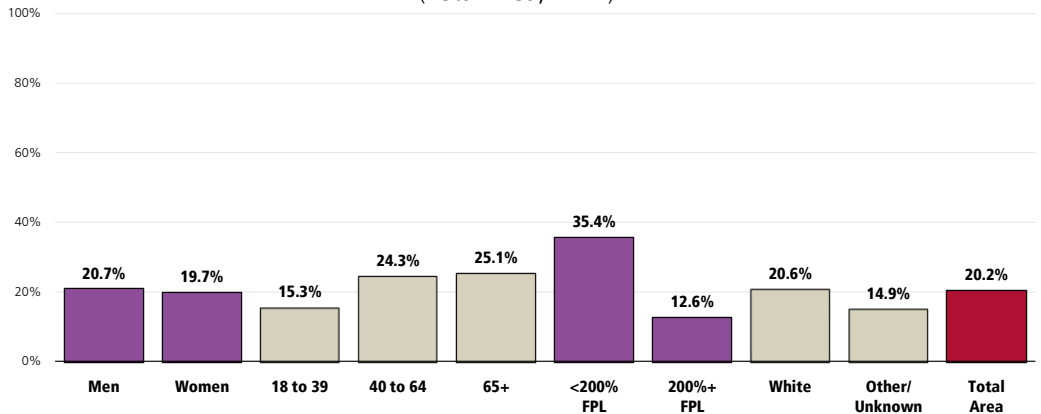
- Asked of all respondents.

In looking at responses by key demographic characteristics, the following population segments are more likely to report activity limitations:

- Adults age 40 and older.
- Lower-income residents.

Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem

(Total Area, 2011)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 120]

 Notes:

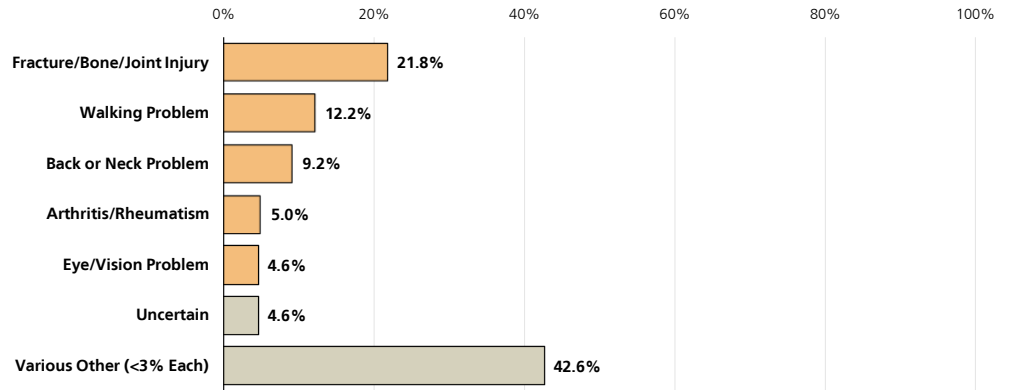
- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

RELATED ISSUE:
See also
Potentially Disabling Conditions in the Death, Disease & Chronic Conditions section of this report.

Among persons reporting activity limitations, these are most often attributed to musculoskeletal issues, such as fractures or bone/joint injuries, problems walking, back/neck problems, or arthritis/rheumatism.

Type of Problem That Limits Activities

(Among Those Reporting Activity Limitations; Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 121]
Notes: • Asked of those respondents reporting activity limitations.

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. According to the national Institute of Mental Health (NIMH), in any given year, an estimated 13 million American adults (approximately 1 in 17) have a seriously debilitating mental illness. Mental health disorders are the leading cause of disability in the United States and Canada, accounting for 25% of all years of life lost to disability and premature mortality. Moreover, suicide is the 11th leading cause of death in the United States, accounting for the deaths of approximately 30,000 Americans each year.

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

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

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

In addition to advancements in the prevention of mental disorders, there continues to be steady progress in treating mental disorders as new drugs and stronger evidence-based outcomes become available.

– Healthy People 2020 (www.healthypeople.gov)

"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?"

Mental Health Status

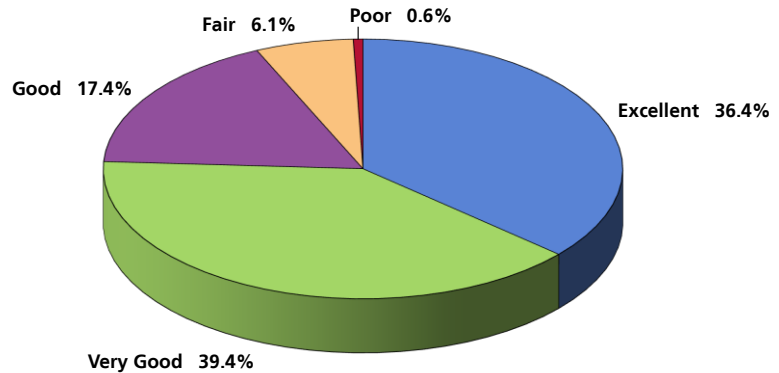
Self-Reported Mental Health Status

Three in four (75.8%) Total Area adults rate their overall mental health as "excellent" or "very good."

- Another 17.4% gave "good" ratings of their own mental health status.

Self-Reported Mental Health Status

(Total Area, 2011)

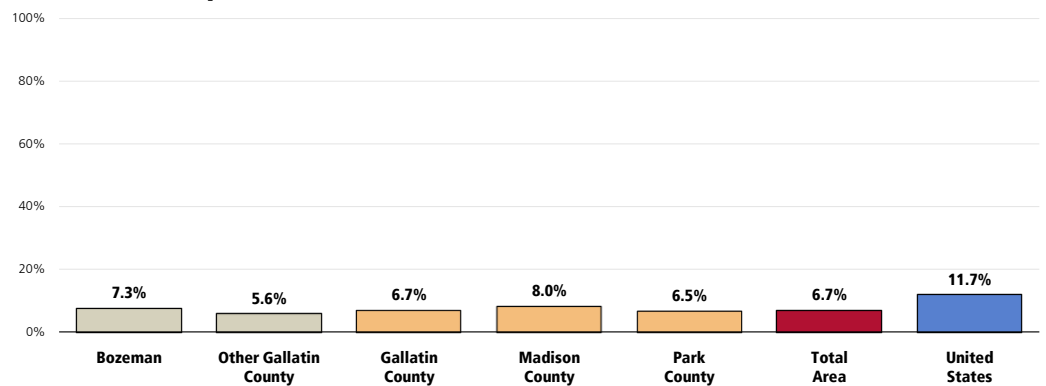


Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 116]
Notes: • Asked of all respondents.

A total of 6.7% of Total Area adults, however, believe that their overall mental health is "fair" or "poor."

- More favorable than the "fair/poor" response reported nationally.
- Statistically similar between Bozeman and the rest of Gallatin County.
- No significant difference among the three counties.

Experience "Fair" or "Poor" Mental Health

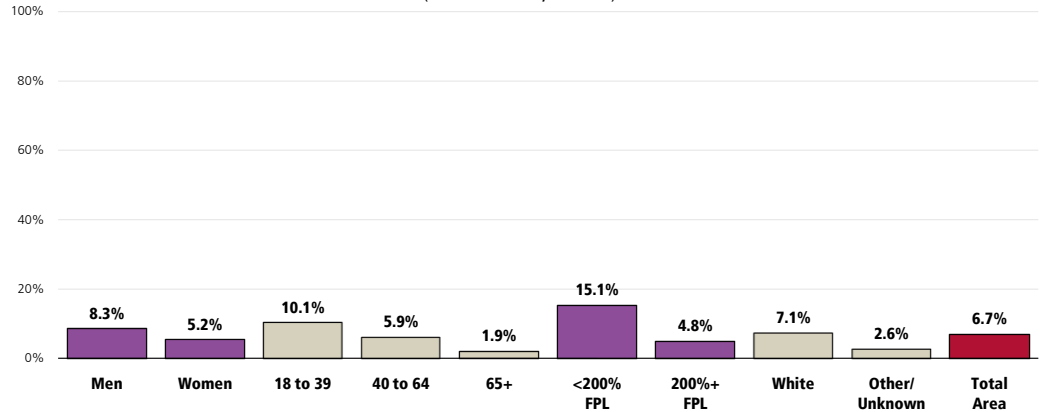


Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 116]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.
Notes: • Asked of all respondents.

👤 Residents more likely to report “fair” or “poor” mental health include those under 40 and adults living on lower incomes.

Experience “Fair” or “Poor” Mental Health

(Total Area, 2011)



Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 116]
 Notes: Asked of all respondents.
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

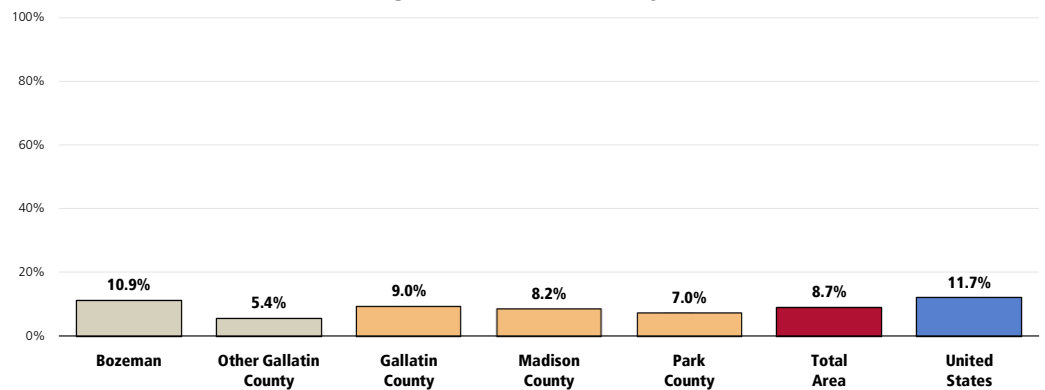
Depression

Major Depression

A total of 8.7% of Total Area adults have been diagnosed with major depression by a physician or other healthcare professional.

- Lower than the national finding.
- Within Gallatin County, notably higher in Bozeman.
- No significant difference by county.

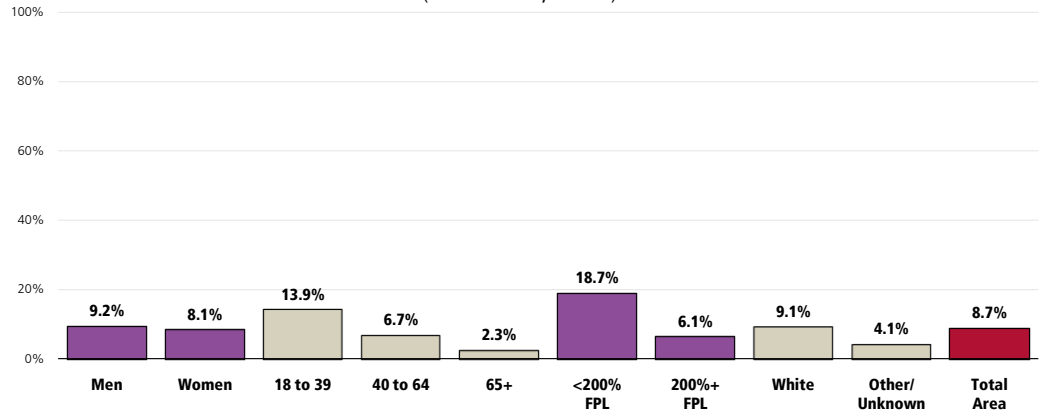
Have Been Diagnosed With Major Depression



Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 33]
 Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: Asked of all respondents.

Viewed by demographic characteristics, adults under 40 and those living on lower incomes are more likely to report a diagnosis of depression.

Have Been Diagnosed With Major Depression (Total Area, 2011)



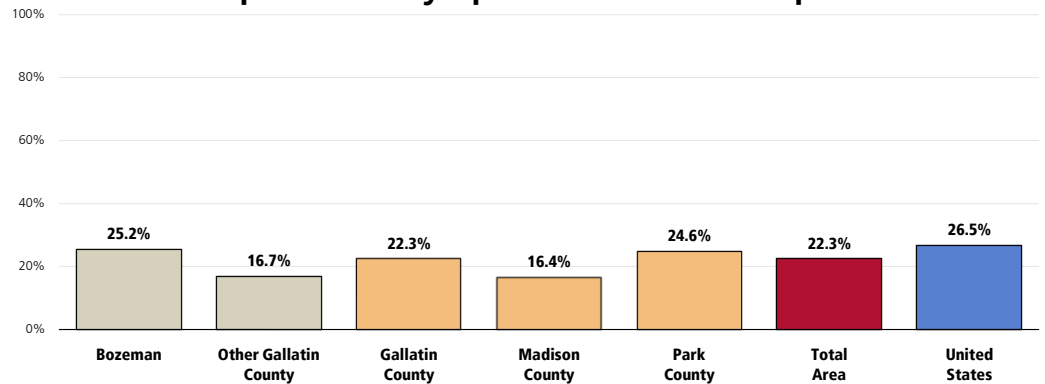
Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 33]
 Notes: Asked of all respondents.
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Symptoms of Chronic Depression

A total of 22.3% 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).

- More favorable than national findings.
- In Gallatin County, much higher within the Bozeman community.
- No significant difference by county.

Have Experienced Symptoms of Chronic Depression



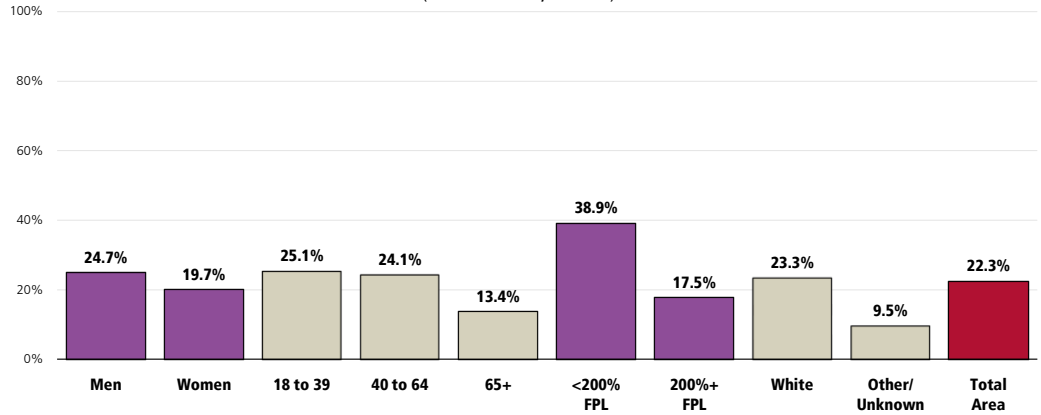
Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 117]
 Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: Asked of all respondents.

Note that the prevalence of chronic depression is notably higher among:

- 👤 Adults under 65.
- 👤 Adults living below the 200% poverty threshold.
- 👤 Whites.

Have Experienced Symptoms of Chronic Depression

(Total Area, 2011)



Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 117]
 Notes: Asked of all respondents.
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Stress

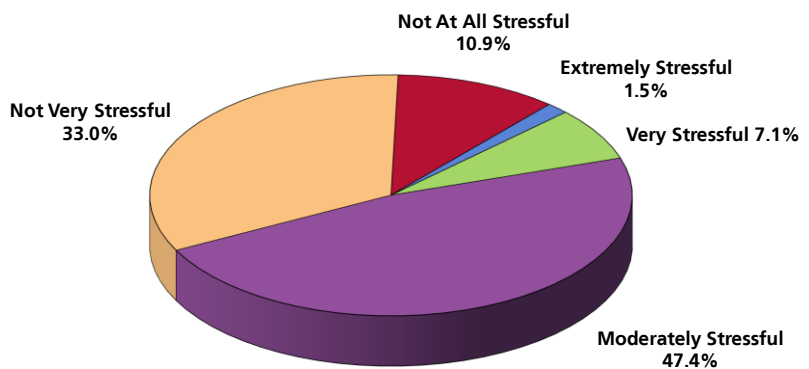
RELATED ISSUE:
 See also *Substance Abuse*
 in the **Modifiable Health Risks** section
 of this report.

More than 4 in 10 Total Area adults consider their typical day to be “not very stressful” (33.0%) or “not at all stressful” (10.9%).

- The largest share of respondents (47.4%) characterizes their typical day as “moderately stressful.”

Perceived Level of Stress On a Typical Day

(Total Area, 2011)

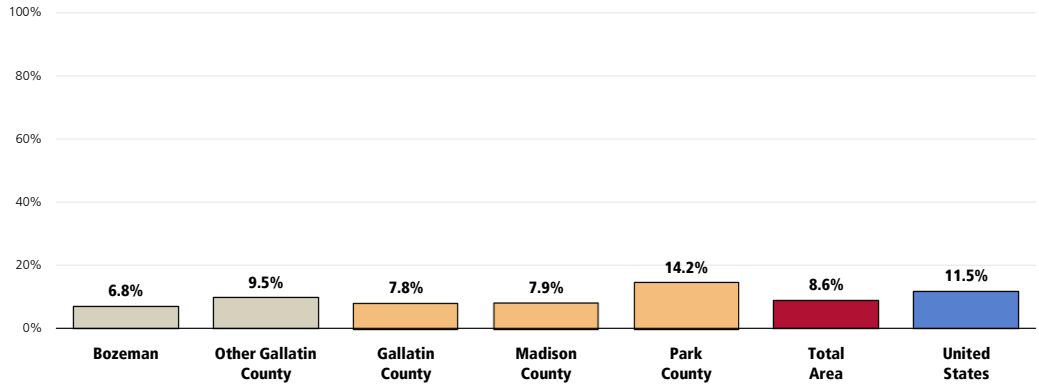


Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 118]
 Notes: Asked of all respondents.

In contrast, 8.6% of Total Area adults experience “very” or “extremely” stressful days on a regular basis.

- Lower than national findings.
- Within Gallatin County, no difference by area.
- Unfavorably high in Park County.

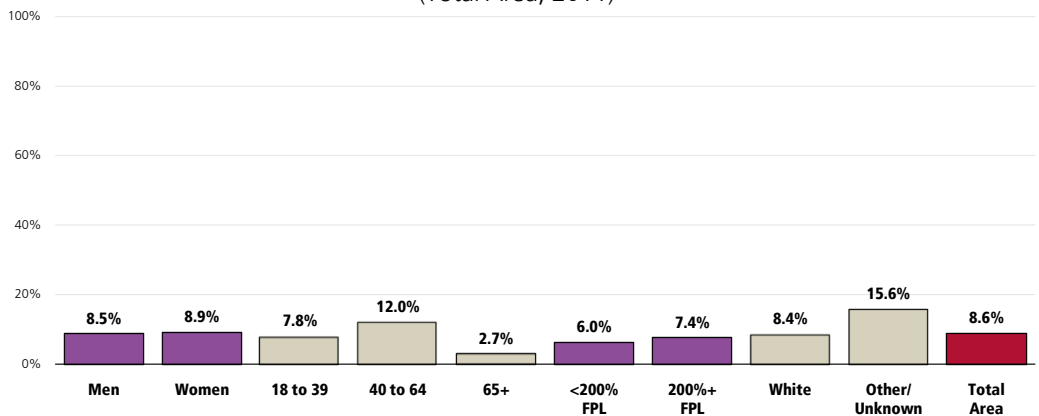
Perceive Most Days As “Extremely” or “Very” Stressful



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 118]
 • Professional Research Consultants, Inc. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents.

Note that high stress levels are more prevalent among adults between the ages of 40 and 64.

Perceive Most Days as “Extremely” or “Very” Stressful
 (Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 118]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

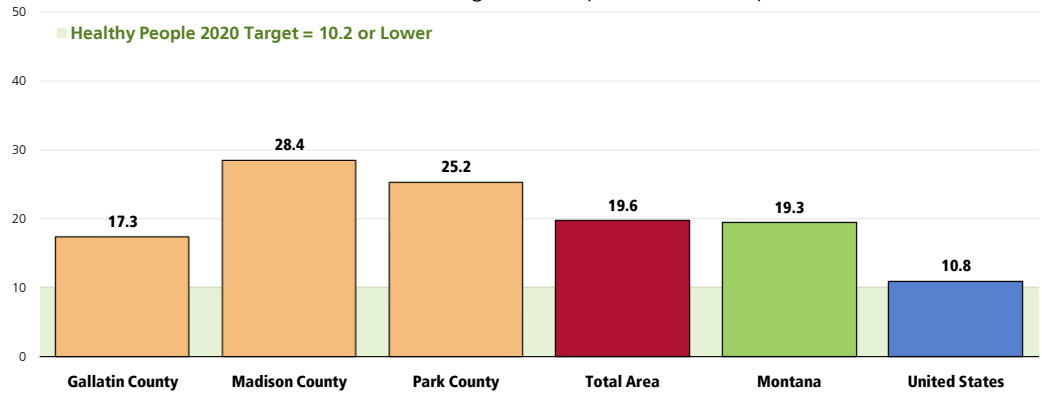
Suicide

Between 1999 and 2007, there was an annual average age-adjusted suicide rate of 19.6 deaths per 100,000 population in the Total Area.

- Nearly identical to the statewide rate.
- Higher than the national rate.
- Fails to satisfy the Healthy People 2020 target of 10.2 or lower.
- Lowest in Gallatin County; highest in Madison County.

Suicide: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)

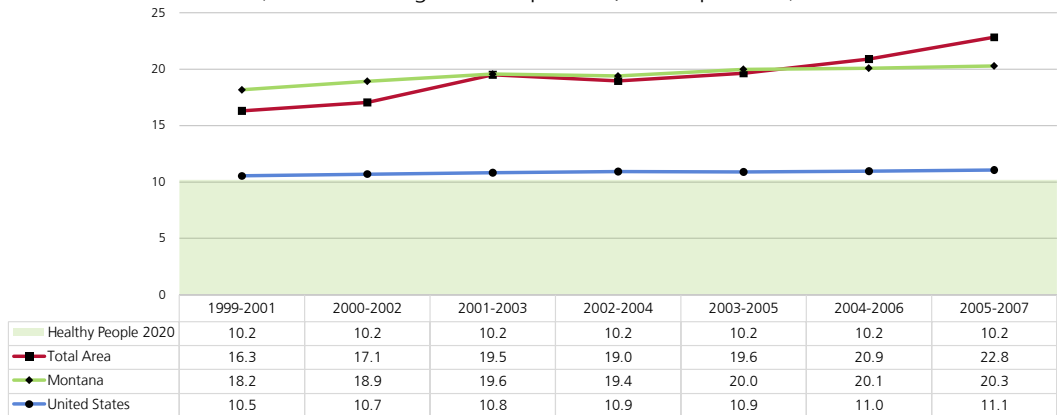


- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective MHMD-1]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

⚠ Total Area suicide rates have increased significantly in recent years; across Montana and the US, rates have increased as well, although not nearly as sharply.

Suicide: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective MHMD-1]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - State and national data are simple three-year averages.

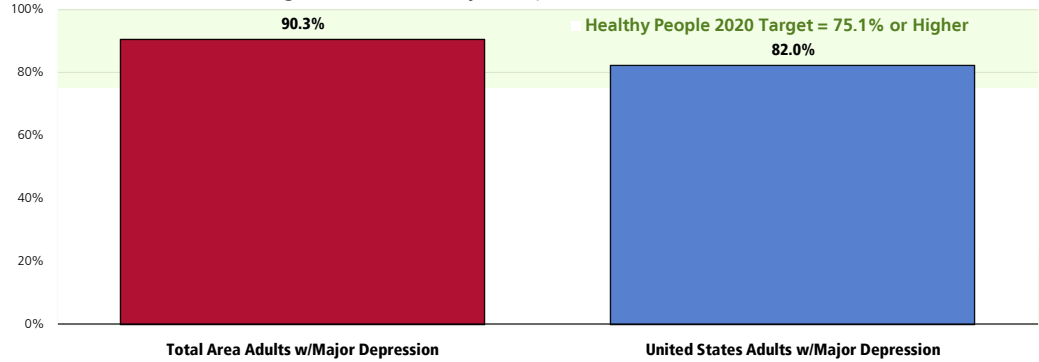
Mental Health Treatment

“Diagnosed depression” includes respondents reporting a past diagnosis of major depression by a physician.

Among adults with diagnosed depression, 90.3% acknowledge that they have sought professional help for a mental or emotional problem.

- Statistically similar to national findings.
- Satisfies the Healthy People 2020 goal of 75.1% or higher.

Have Sought Professional Help for a Mental or Emotional Problem
(Among Those With Major Depression; Total Area, 2011)



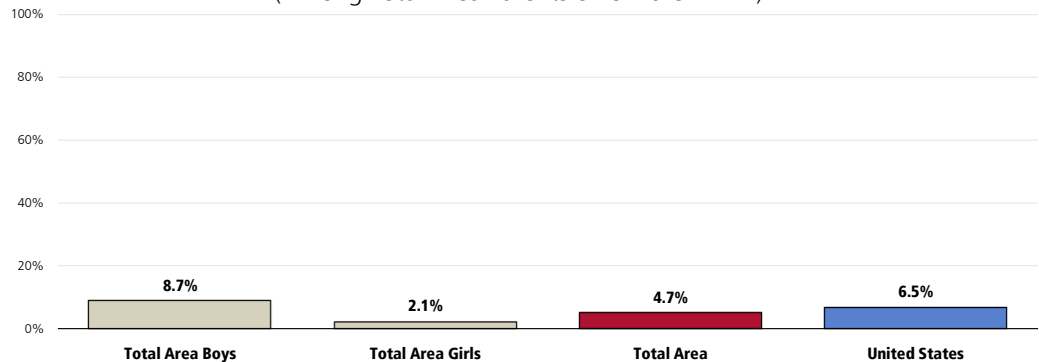
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 152]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective MHMD-9.1]
 Notes: • Asked of those respondents with major depression.

Children & ADD/ADHD

Among Total Area adults with children age 5 to 17, 4.7% report that their child takes medication for ADD/ADHD.

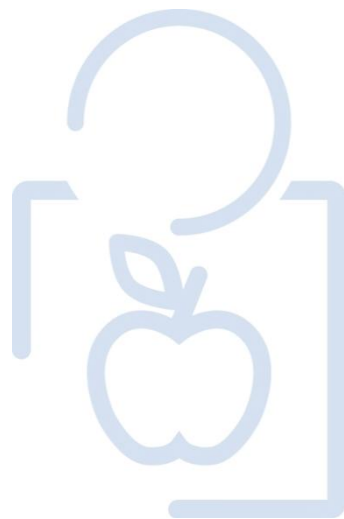
- Comparable to the prevalence reported across the US.
 - Children with ADD/ADHD (medicated) were only noted among parents in Gallatin County (not shown).
- 👨👩 The difference by gender is not statistically significant due to sample size.

Child Takes Medication for ADD/ADHD
(Among Total Area Parents of Children 5-17)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 135]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents with children aged 5-17 at home.

DEATH, DISEASE & CHRONIC CONDITIONS



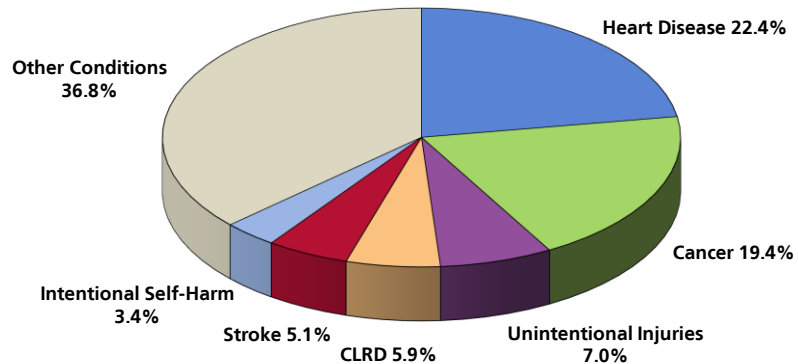
Leading Causes of Death

Distribution of Deaths by Cause

Together, cardiovascular disease (including heart disease and stroke) and cancers accounted for nearly one-half of all deaths across the Total Area in 2009.

Leading Causes of Death

(Total Area, 2009)



Sources: • Montana Department of Public Health and Human Services
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
• CLRD is chronic lower respiratory disease.

Age-Adjusted Death Rates for Selected Causes

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* targets.

The following chart outlines 1999-2007 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.

Age-adjusted mortality rates in the Total Area are better than national rates for each of the causes illustrated below, with the exceptions of suicide, unintentional injuries (including motor vehicle accidents), and firearm-related deaths.

Of the causes outlined in the following chart for which Healthy People 2020 objectives have been established, rates in the Total Area fail to satisfy the goals set for suicide, stroke, unintentional injuries (including motor vehicle accidents), and firearm-related deaths.

Age-Adjusted Death Rates for Selected Causes (1999-2007 Deaths per 100,000)

	Total Area	Montana	US	HP2020
Malignant Neoplasms (Cancers)	156.1	185.8	189.5	160.6
Diseases of the Heart	153.1	185.5	228.2	152.7*
Cerebrovascular Disease (Stroke)	49.4	51.8	52.1	33.8
Unintentional Injuries	44.6	54.3	37.5	36.0
Chronic Lower Respiratory Disease (CLRD)	36.3	56.2	42.8	n/a
Motor Vehicle Crashes	22.0	24.7	14.3	12.4
Pneumonia/Influenza	20.1	19.9	20.7	n/a
Intentional Self-Harm (Suicide)	19.6	19.3	10.8	10.2
Diabetes Mellitus	17.1	23.8	24.5	19.6*
Alzheimer's Disease	16.2	22.7	20.7	n/a
Firearm-Related	15.5	14.7	10.3	9.2
Kidney Disease	7.2	10.7	14.1	n/a
Drug-Induced	5.8	10.8	9.7	11.3
Cirrhosis/Liver Disease	5.7	10.8	9.2	8.2
Homicide/Legal Intervention	1.8	3.4	6.2	5.5

Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.

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

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

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

Cardiovascular Disease

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

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

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

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

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

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

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

– Healthy People 2020 (www.healthypeople.gov)

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

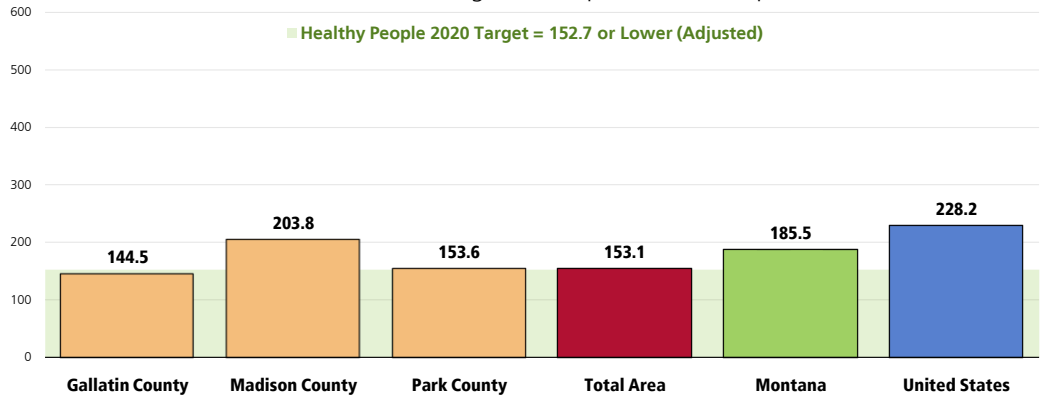
Age-Adjusted Heart Disease & Stroke Deaths

Heart Disease Deaths

Between 1999 and 2007, there was an annual average age-adjusted heart disease mortality rate of 153.1 deaths per 100,000 population in the Total Area.

- Lower than the statewide rate.
- Lower than the national rate.
- Similar to the Healthy People 2020 objective (as adjusted to account for all diseases of the heart).
- Lowest in Gallatin County; highest in Madison County.

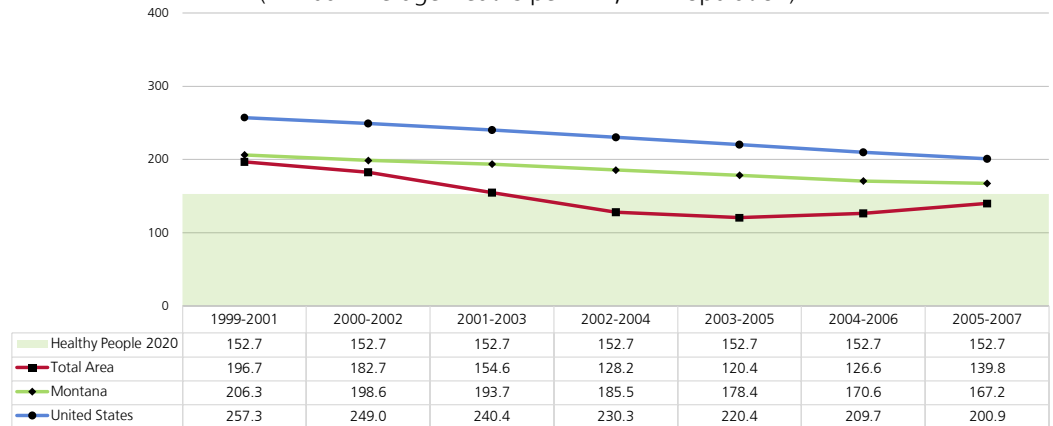
Heart Disease: Age-Adjusted Mortality (1999-2007 Annual Average Deaths per 100,000 Population)



- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HDS-2]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

☒ Heart disease mortality rates have decreased in the Total Area, echoing the decreasing trends across Montana and the US overall.

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



- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HDS-2]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - State and national data are simple three-year averages.
 - The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

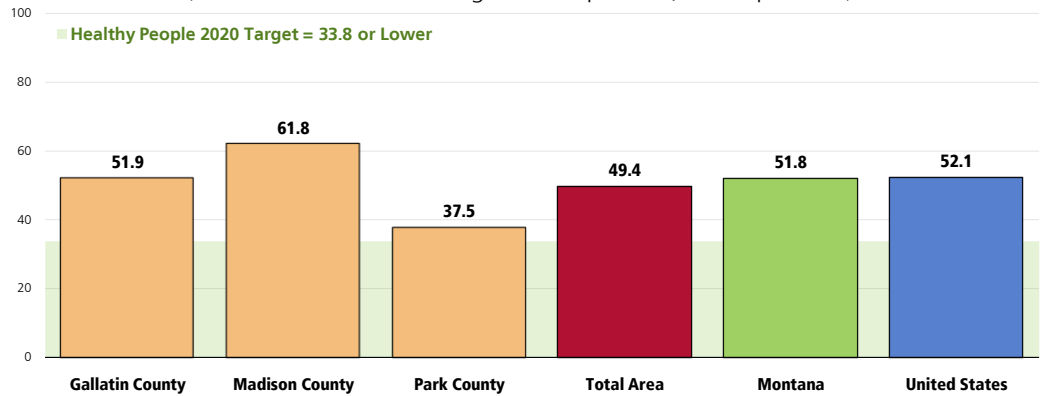
Stroke Deaths

Between 1999 and 2007, there was an annual average age-adjusted stroke mortality rate of 49.4 deaths per 100,000 population in the Total Area.

- Just below the Montana rate.
- More favorable than the national rate.
- Fails to satisfy the Healthy People 2020 target of 33.8 or lower.
- Lowest in Park County; highest in Madison County.

Stroke: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)

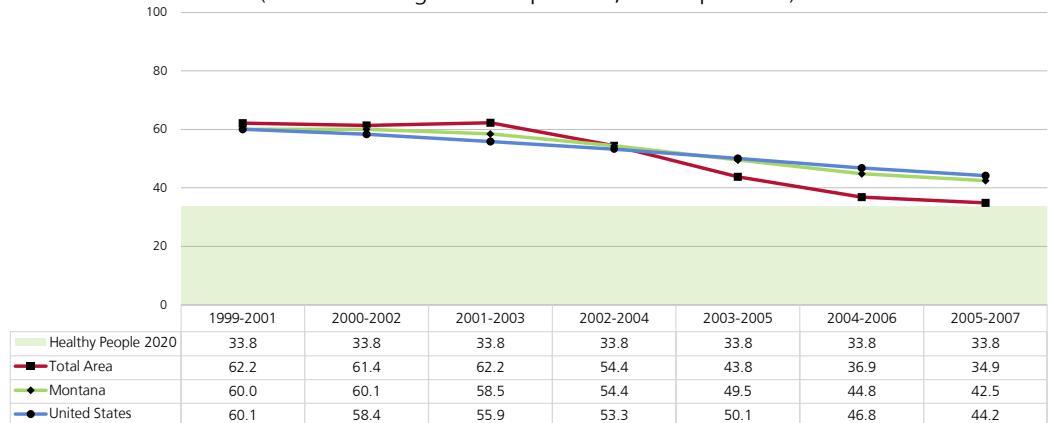


- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HDS-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

☒ Stroke rates have declined considerably in recent years; the same can be said both statewide and nationwide.

Stroke: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HDS-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - State and national data are simple three-year averages.

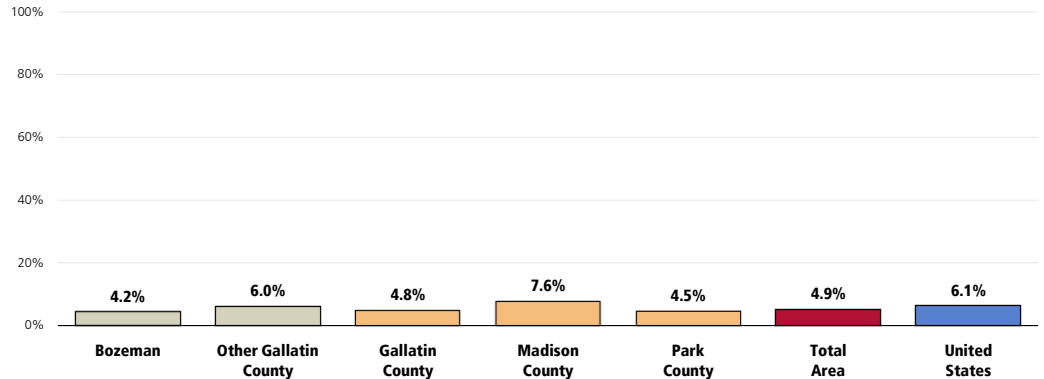
Prevalence of Heart Disease & Stroke

Prevalence of Heart Disease

A total of 4.9% of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina or heart attack.

- Similar to the national prevalence.
- No significant difference within Gallatin County.
- No significant difference by county.

Prevalence of Heart Disease



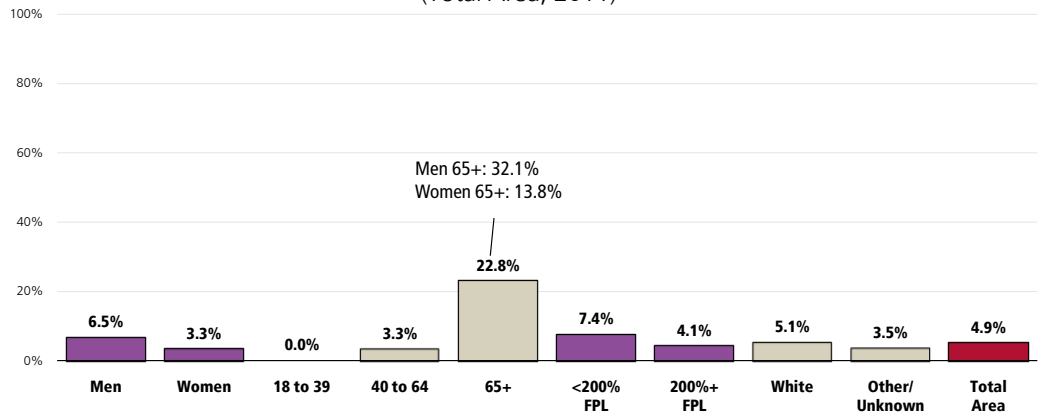
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 153]
 • Professional Research Consultants, Inc. PRC National Health Survey. 2011.

Notes: • Asked of all respondents.

👴 Adults aged 65 and older (especially males) are more likely to have been diagnosed with chronic heart disease.

Prevalence of Heart Disease

(Total Area, 2011)




Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 153]

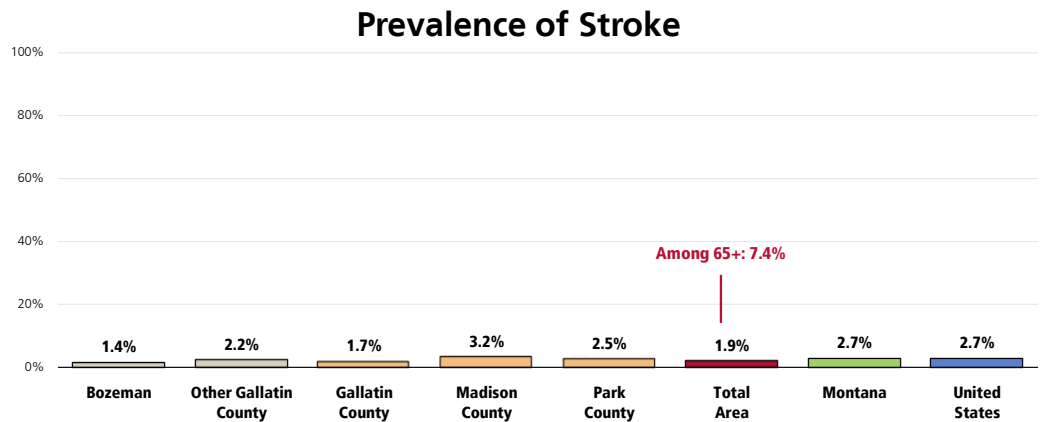
Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Prevalence of Stroke

Just 1.9% of surveyed adults report that they suffer from or have been diagnosed with cerebrovascular disease (a stroke).

- Comparable to statewide findings.
- Comparable to national findings.
- Within Gallatin County, no significant difference.
- Comparable by county.

 Note: Among residents age 65 and older, 7.4% have had a stroke.



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 40]
- Professional Research Consultants. PRC National Health Survey. 2011.
- Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.

Notes:

- Asked of all respondents.

Cardiovascular Risk Factors

Hypertension (High Blood Pressure)

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

– Healthy People 2020 (www.healthypeople.gov)

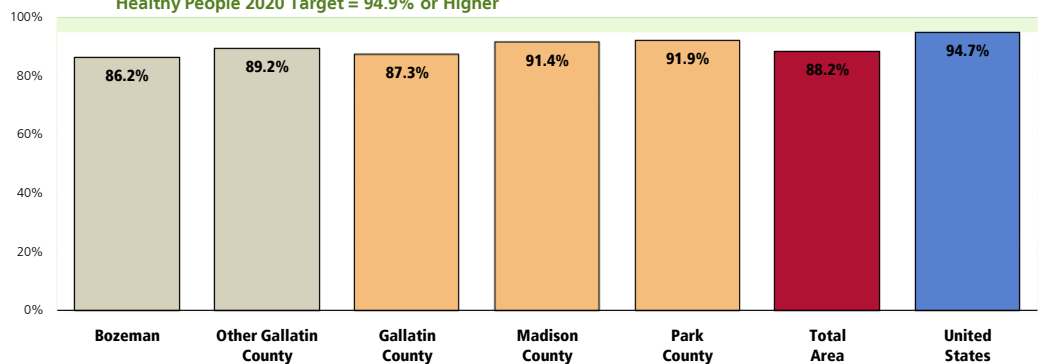
High Blood Pressure Testing

A total of 88.2% of Total Area adults have had their blood pressure tested within the past two years.

- Less favorable than national findings.
- Fails to satisfy the Healthy People 2020 target (94.9% or higher).
- Within Gallatin County, no significant difference.
- Similar by county.

Have Had Blood Pressure Checked in the Past 2 Years

Healthy People 2020 Target = 94.9% or Higher



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 49]
• Professional Research Consultants, Inc. PRC National Health Survey, 2011.
• US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HDS-4]
Notes: • Asked of all respondents.

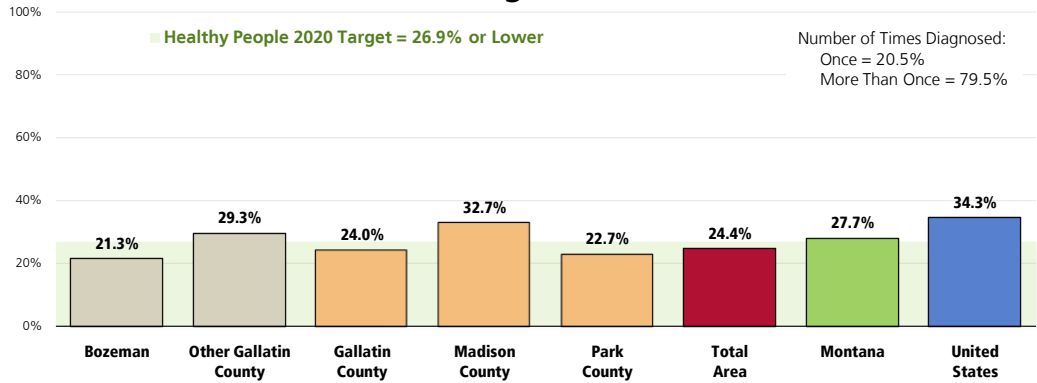
Prevalence of Hypertension

A total of 24.4% of adults have been told at some point that their blood pressure was high.

- Similar to the Montana prevalence.
- More favorable than the national prevalence.
- Similar to the Healthy People 2020 target (26.9% or lower).
- Similar findings between Bozeman and the remainder of Gallatin County.
- Higher in Madison County.

👥 Among hypertensive adults, 79.5% have been diagnosed with high blood pressure more than once.

Prevalence of High Blood Pressure



Sources:





- Professional Research Consultants, Inc. PRC Community Health Survey. [Items 47, 154]
- Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2009 Montana Data.
- Professional Research Consultants. PRC National Health Survey, 2011.
- US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HDS-5.1]

Notes:

- Asked of all respondents.

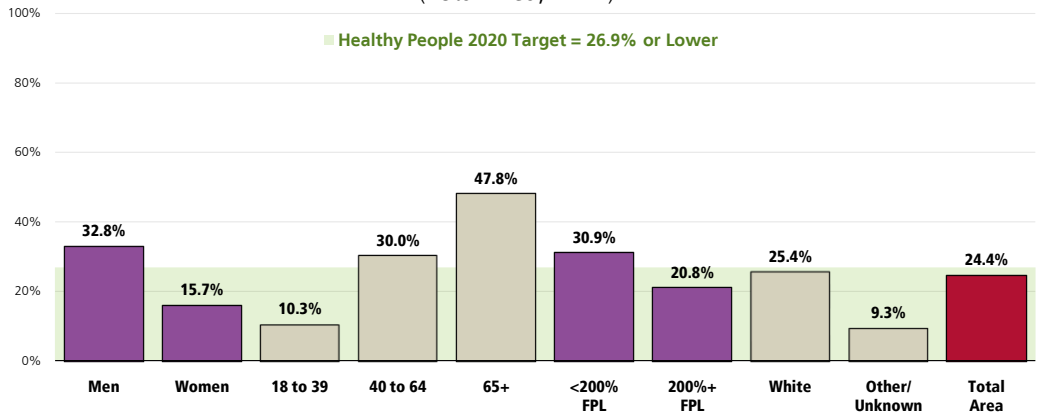
Note that 9.2% of Total Area adults report not having high blood pressure, but: 1) have never had their blood pressure tested; 2) have not been screened in the past 5 years; or 3) do not recall when their last screening was. For these individuals, current prevalence is unknown.

Hypertension diagnoses are higher among:

-  Men.
-  Adults aged 40 and older.
-  Lower-income residents.
-  Whites.

Prevalence of High Blood Pressure

(Total Area, 2011)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 154]
- US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HDS-5.1]

Notes:

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Respondents reporting high blood pressure were further asked:

“Are you currently taking any action to help control your high blood pressure, such as taking medication, changing your diet, or exercising?”

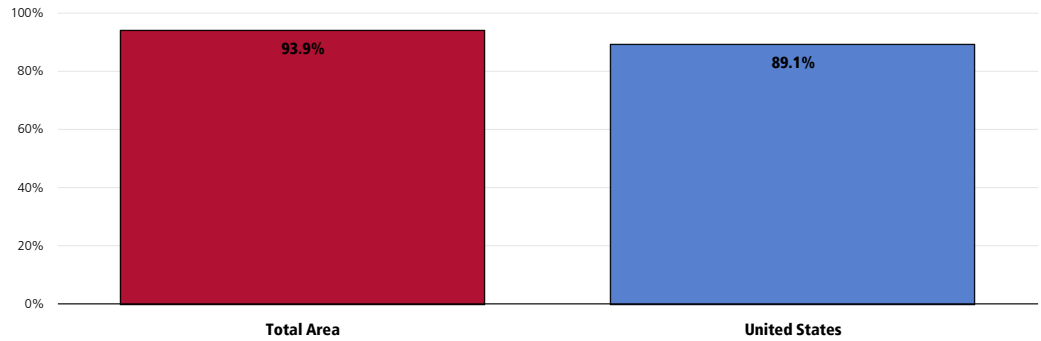
Hypertension Management

Among respondents who have been told that their blood pressure was high, 93.9% report that they are currently taking actions to control their condition.

- Comparable to national findings.

Taking Action to Control Hypertension

(Among Total Area Adults with High BP, 2010)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 48]
 • Professional Research Consultants, PRC National Health Survey. 2011.
 Notes: • Asked of all respondents who have been diagnosed with high blood pressure.
 • In this case, the term "action" refers to medication, change in diet, and/or exercise.

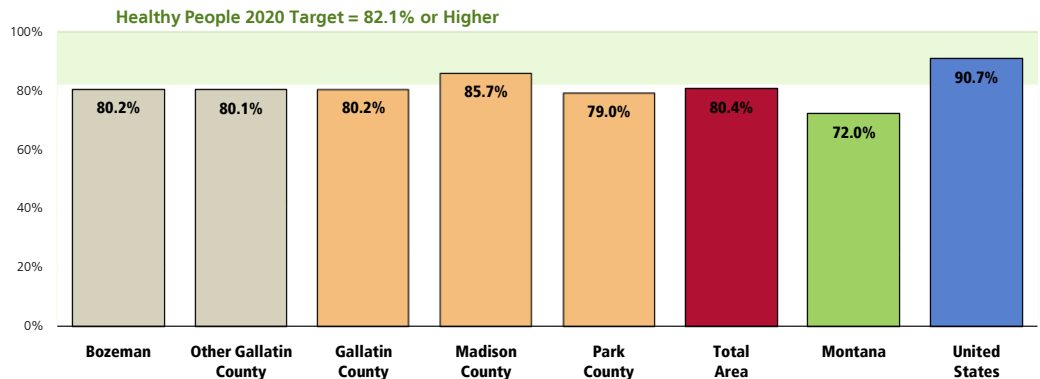
High Blood Cholesterol

Blood Cholesterol Testing

A total of 80.4% of Total Area adults have had their blood cholesterol checked within the past five years.



- More favorable than Montana findings.
- Less favorable than the national findings.
- Similar to the Healthy People 2020 target (82.1% or higher).
- No significant difference within Gallatin County.
- No significant difference by county.

Have Had Blood Cholesterol Levels Checked in the Past 5 Years

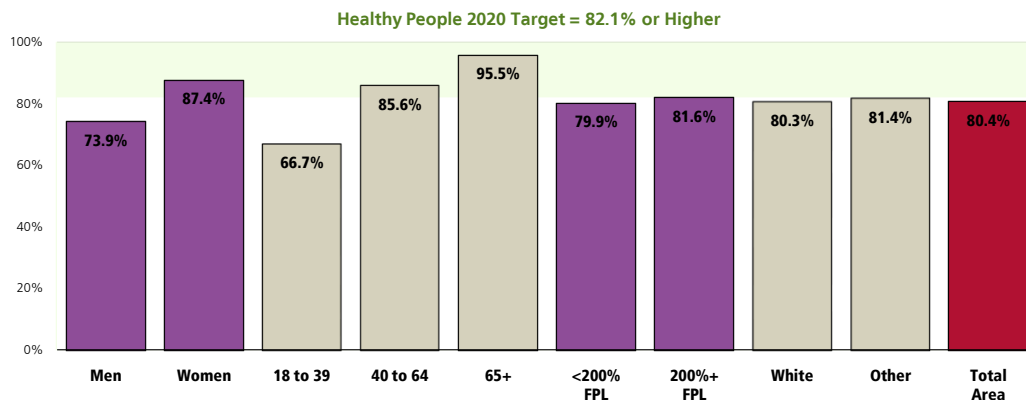


Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 52]
 • Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2009 Montana Data.
 • Professional Research Consultants, PRC National Health Survey. 2011.
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HDS-6]
 Notes: • Asked of all respondents.

The following demographic segments report lower screening levels:

-  Men.
-  Young adults.

Have Had Blood Cholesterol Levels Checked in the Past 5 Years (Total Area, 2011)



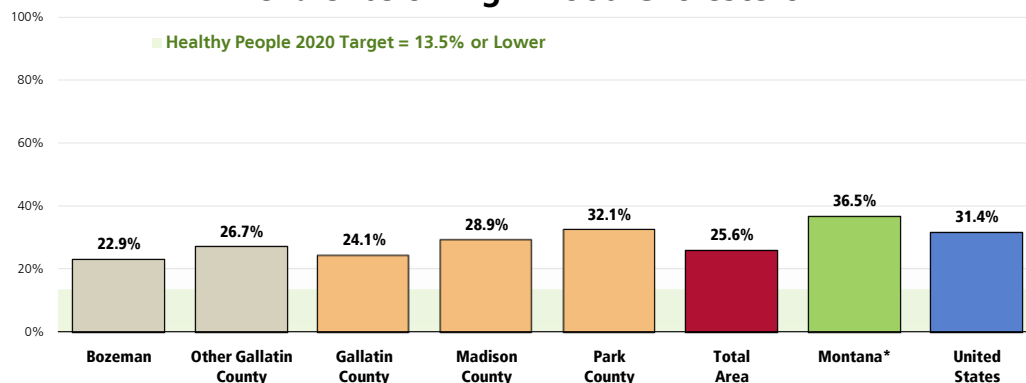
- Sources:
- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 52]
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HDS-6]
- Notes:
- Asked of all respondents.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Self-Reported High Blood Cholesterol

A total of 25.6% of adults have been told by a health professional that their cholesterol level was high.

- More favorable than Montana findings.
- More favorable than the national prevalence.
- Fails to satisfy the Healthy People 2020 target (13.5% or lower).
- Within Gallatin County, no significant difference.
- Most favorable in Gallatin County when compared with Madison and Park Counties.

Prevalence of High Blood Cholesterol

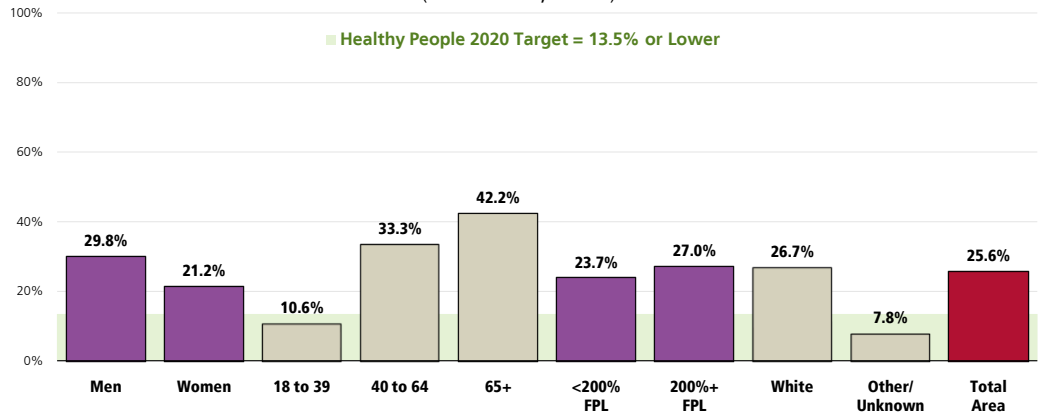


- Sources:
- Professional Research Consultants, Inc. PRC Community Health Survey. [Items155]
 - Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2009 Montana Data.
 - Professional Research Consultants, Inc. PRC National Health Survey, 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HDS-7]
- Notes:
- Asked of all respondents.
 - *The Montana data reflects those adults who have been tested for high cholesterol and who have been diagnosed with it.

Note that 23.2% of Total Area adults report not having high blood cholesterol, but: 1) have never had their cholesterol tested; 2) have not been screened in the past 5 years; or 3) do not recall when their last screening was. For these individuals, current prevalence is unknown.

- 👤 Men are more likely than women to report high cholesterol levels.
- 👤 Note the higher prevalence among adults 40 and older.
- 👤 Whites report a much higher prevalence than Non-Whites.
- 👤 Keep in mind that “unknowns” are relatively high in men, young adults, and Non-Whites.

Prevalence of High Blood Cholesterol (Total Area, 2011)



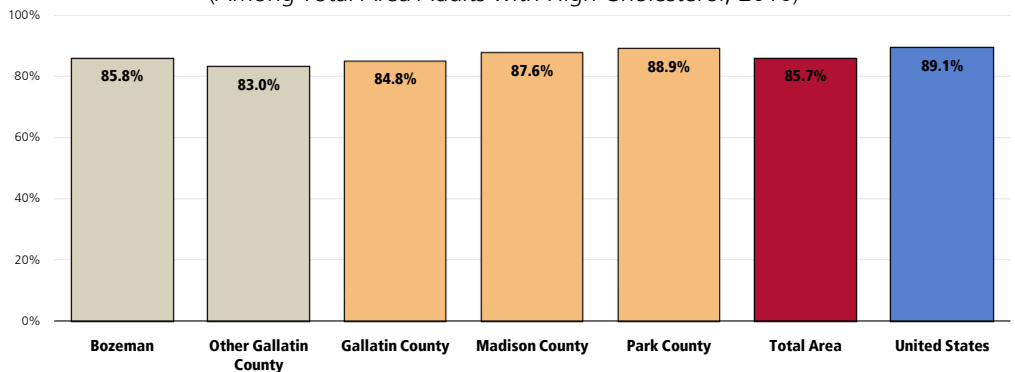
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 155]
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HDS-7]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

High Cholesterol Management

Among adults who have been told that their blood cholesterol was high, 85.7% report that they are currently taking actions to control their cholesterol levels.

- Similar to that found nationwide.
- Similar by geography.

Taking Action to Control High Blood Cholesterol Levels (Among Total Area Adults with High Cholesterol, 2010)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 51]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents who have been diagnosed with high blood cholesterol levels.
 • In this case, the term “action” refers to medication, change in diet, and/or exercise.

Respondents reporting high cholesterol were further asked:

“Are you currently taking any action to help control your high cholesterol, such as taking medication, changing your diet, or exercising?”

Total Cardiovascular Risk

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

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

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

Three health-related behaviors contribute markedly to cardiovascular disease:

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

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

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

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

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

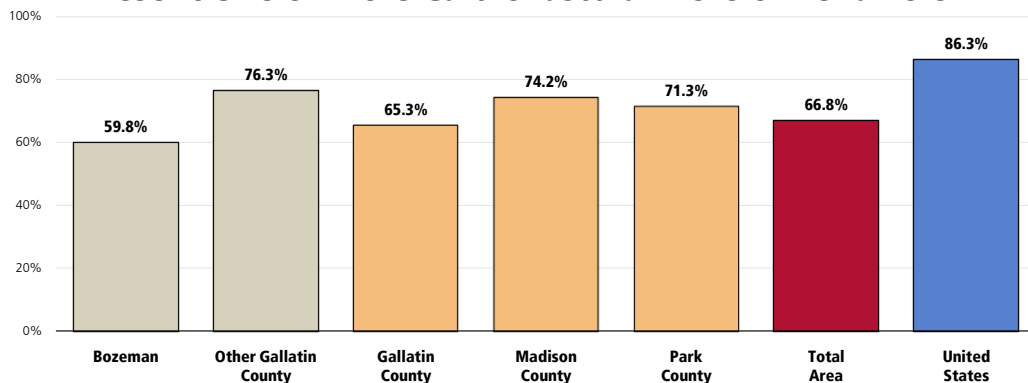
RELATED ISSUE:

See also *Nutrition & Overweight, Physical Activity & Fitness and Tobacco Use* in the **Modifiable Health Risk** section of this report.

Two in three (66.8%) 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.

- Much more favorable than national findings.
- In Gallatin County, more favorable in the Bozeman community.
- Lowest in Gallatin County overall.

Present One or More Cardiovascular Risks or Behaviors



Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 156]

● Professional Research Consultants. PRC National Health Survey. 2011.

Notes: ● Asked of all respondents.

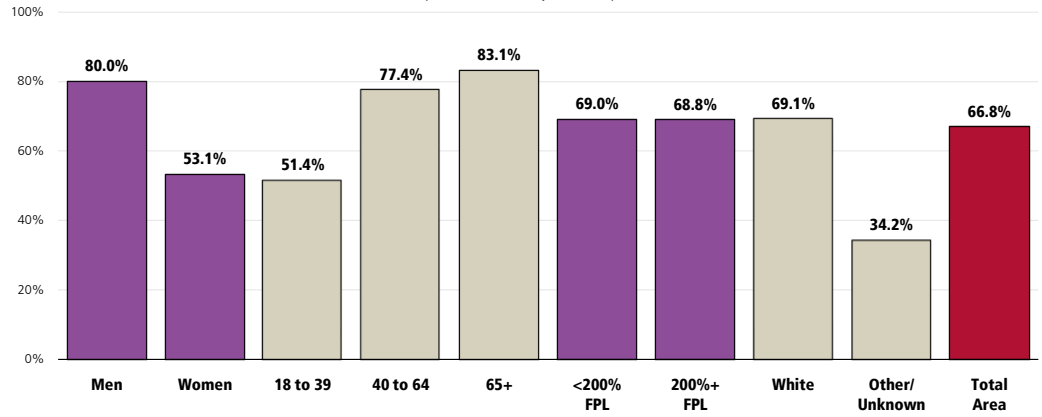
Notes: ● Cardiovascular risk is defined as having no leisure-time physical activity OR regular/occasional smoking OR hypertension OR high blood cholesterol OR being overweight/obese.

Adults more likely to exhibit cardiovascular risk factors include:

- Men.
- Adults aged 40 and older.
- Whites.

Present One or More Cardiovascular Risks or Behaviors

(Total Area, 2011)



Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 156]
Notes: Asked of all respondents.
Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.
Cardiovascular risk is defined as having no leisure-time physical activity OR regular/occasional smoking OR hypertension OR high blood cholesterol OR being overweight/obese.

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)

Age-Adjusted Cancer Deaths

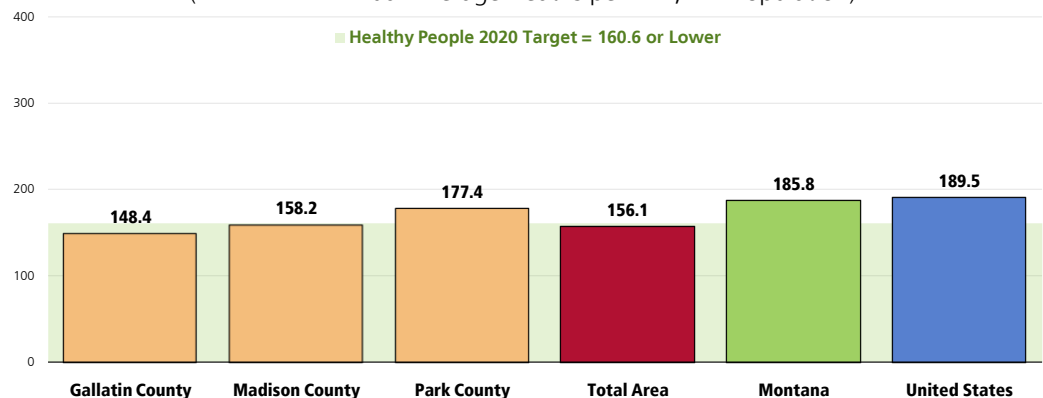
All Cancer Deaths

Between 1999 and 2007, there was an annual average age-adjusted cancer mortality rate of 156.1 deaths per 100,000 population in the Total Area.

- More favorable than the statewide rate.
- More favorable than the national rate.
- Similar to the Healthy People 2020 target of 160.6 or lower.
- Lowest in Gallatin County; highest in Park County.

Cancer: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)

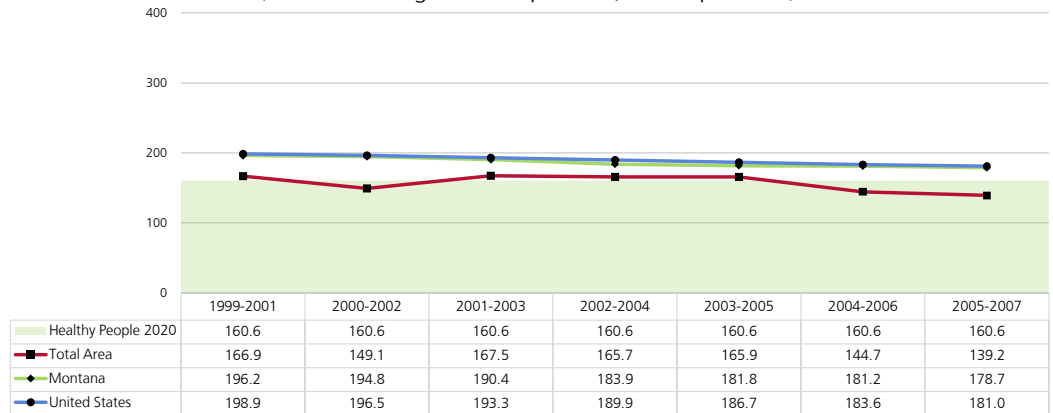


Sources: ● Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 ● US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective C-1]
 Notes: ● Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 ● Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

- ☒ Cancer mortality rates have decreased over the past decade in the Total Area; the same trend is apparent both statewide and nationwide.

Cancer: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective C-1]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - State and national data are simple three-year averages.

Cancer Deaths by Site

Lung cancer is by far the leading cause of cancer deaths in the Total Area (2005-2007 data).

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

As can be seen in the following chart (referencing annual average age-adjusted death rates), **each** of the Total Area cancer death rates is more favorable than both the state and national rates

Note that **each** Total Area cancer death rate is also close to or below the related Healthy People 2020 objectives.

Age-Adjusted Cancer Death Rates by Site

(2005-2007)

	Total Area	Montana	US	HP2020
Lung Cancer	33.2	50.7	51.6	45.5
Female Breast Cancer	17.7	20.6	23.5	20.6
Prostate Cancer	17.1	27.5	23.9	21.2
Colorectal Cancer	13.9	16.9	17.2	14.5

- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>.

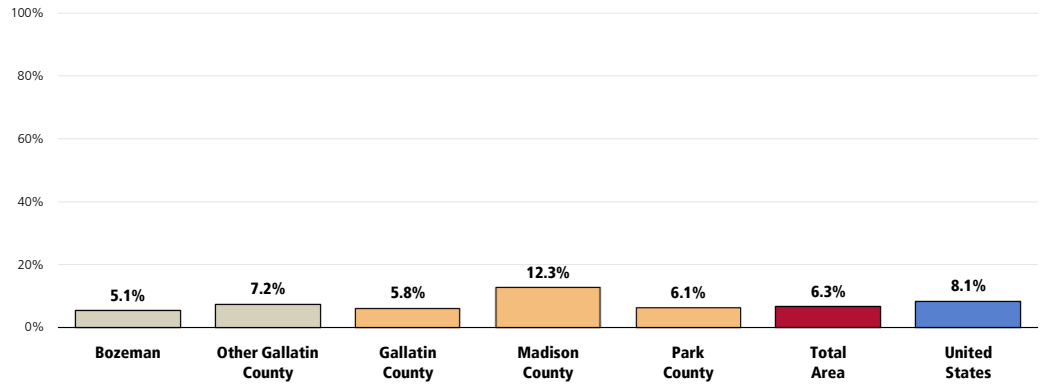
Prevalence of Cancer

Skin Cancer

A total of 6.3% of surveyed Total Area adults report having been diagnosed with skin cancer.

- Comparable to the national average.
- Similar within Gallatin County.
- Higher (less favorable) in Madison County.

Prevalence of Skin Cancer



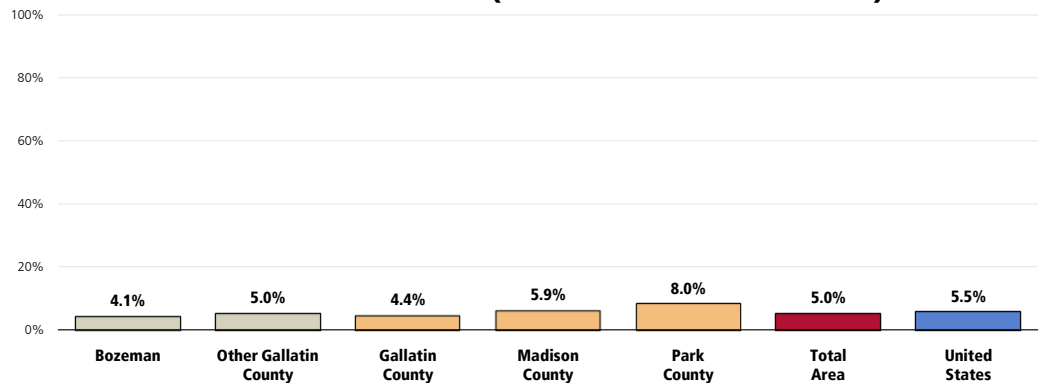
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 31]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.
Notes: • Asked of all respondents.

Other Cancer

A total of 5.0% of respondents have been diagnosed with some type of (non-skin) cancer.

- Similar to the national prevalence.
- Within Gallatin County, no significant difference.
- Similar by county.

Prevalence of Cancer (Other Than Skin Cancer)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 30]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.
Notes: • Asked of all respondents.

Cancer Risk

RELATED ISSUE:
See also
*Nutrition &
Overweight, Physical
Activity & Fitness* and
Tobacco Use in the
**Modifiable Health
Risk** section of this
report.

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 2011 Community Health Survey relative to four cancer sites: prostate cancer (prostate-specific antigen testing and digital rectal examination); female breast cancer (mammography); cervical cancer (Pap smear testing); and colorectal cancer (sigmoidoscopy and fecal occult blood testing).

Prostate Cancer Screenings

The US Preventive Services Task Force (USPSTF) concludes that the current evidence is insufficient to assess the balance of benefits and harms of prostate cancer screening in men younger than age 75 years.

Rationale: Prostate cancer is the most common nonskin cancer and the second-leading cause of cancer death in men in the United States. The USPSTF found convincing evidence that prostate-specific antigen (PSA) screening can detect some cases of prostate cancer.

In men younger than age 75 years, the USPSTF found inadequate evidence to determine whether treatment for prostate cancer detected by screening improves health outcomes compared with treatment after clinical detection.

The USPSTF found convincing evidence that treatment for prostate cancer detected by screening causes moderate-to-substantial harms, such as erectile dysfunction, urinary incontinence, bowel dysfunction, and death. These harms are especially important because some men with prostate cancer who are treated would never have developed symptoms related to cancer during their lifetime.

There is also adequate evidence that the screening process produces at least small harms, including pain and discomfort associated with prostate biopsy and psychological effects of false-positive test results.

The USPSTF recommends against screening for prostate cancer in men age 75 years or older.

Rationale: In men age 75 years or older, the USPSTF found adequate evidence that the incremental benefits of treatment for prostate cancer detected by screening are small to none.

Given the uncertainties and controversy surrounding prostate cancer screening in men younger than age 75 years, a clinician should not order the PSA test without first discussing with the patient the potential but uncertain benefits and the known harms of prostate cancer screening and treatment. Men should be informed of the gaps in the evidence and should be assisted in considering their personal preferences before deciding whether to be tested.

– 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.

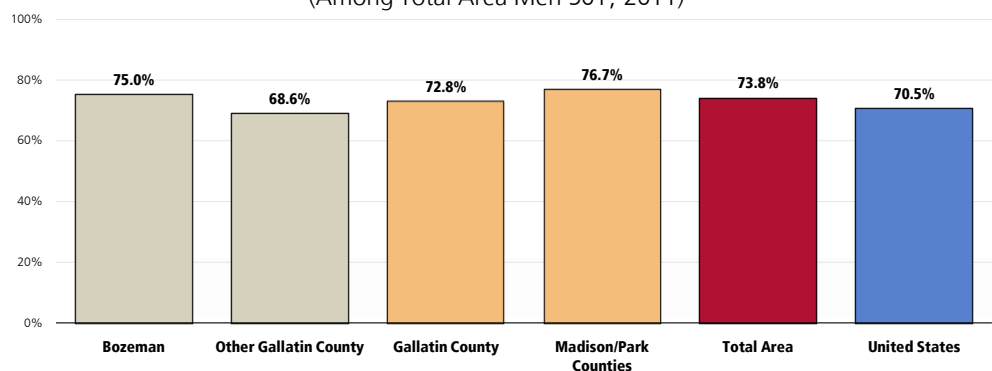
PSA Testing and/or Digital Rectal Examination

73.8% of men 50+ have had a PSA (prostate-specific antigen) test and/or a digital rectal examination for prostate problems in the past 2 years.

- Similar to national findings.
- Similar among geographies (note that Madison and Park County data were combined to allow for adequate sample size).

Have Had a Prostate Screening in the Past 2 Years

(Among Total Area Men 50+, 2011)



Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 160]
● Professional Research Consultants. PRC National Health Survey. 2011.
Notes: ● Asked of all male respondents aged 50 and older.
● Madison and Park County data were combined for reliability.

Note: Due to recent (2008) changes in clinical recommendations against routine PSA testing, it is anticipated that testing levels will begin to decline.

Female Breast Cancer Screening

The US Preventive Services Task Force (USPSTF) recommends screening mammography, with or without clinical breast examination (CBE), every 1-2 years for women age 40 and older.

Rationale: The USPSTF found fair evidence that mammography screening every 12-33 months significantly reduces mortality from breast cancer. Evidence is strongest for women age 50-69, the age group generally included in screening trials. For women age 40-49, the evidence that screening mammography reduces mortality from breast cancer is weaker, and the absolute benefit of mammography is smaller, than it is for older women. Most, but not all, studies indicate a mortality benefit for women undergoing mammography at ages 40-49, but the delay in observed benefit in women younger than 50 makes it difficult to determine the incremental benefit of beginning screening at age 40 rather than at age 50.

The absolute benefit is smaller because the incidence of breast cancer is lower among women in their 40s than it is among older women. The USPSTF concluded that the evidence is also generalizable to women age 70 and older (who face a higher absolute risk for breast cancer) if their life expectancy is not compromised by comorbid disease. The absolute probability of benefits of regular mammography increase along a continuum with age, whereas the likelihood of harms from screening (false-positive results and unnecessary anxiety, biopsies, and cost) diminish from ages 40-70. The balance of benefits and potential harms, therefore, grows more favorable as women age. The precise age at which the potential benefits of mammography justify the possible harms is a subjective choice. The USPSTF did not find sufficient evidence to specify the optimal screening interval for women age 40-49.

– 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.

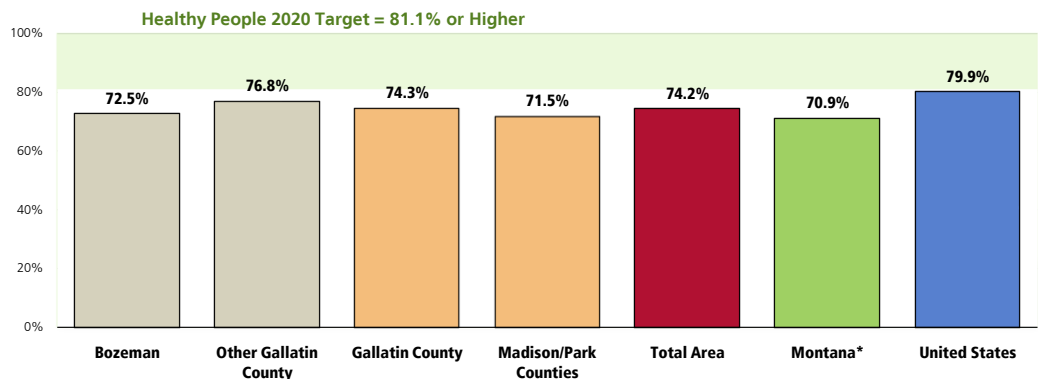
Mammography

Among women aged 50-74, 74.2% have had a mammogram within the past two years.

- Similar to the statewide figure (which reflects all women 50+).
- Similar to national findings.
- Fails to satisfy the Healthy People 2020 target (81.1% or higher).
- No significant difference by geographies (Madison and Park County data were combined to allow for adequate sample size).

Have Had a Mammogram in the Past Two Years

(Among Total Area Women 50-74, 2011)



- Sources:
- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 158]
 - Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010. Montana Data.
 - Professional Research Consultants. PRC National Health Survey. 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective C-17]
- Notes:
- Asked of all female respondents aged 50 to 74 and older.
 - *Note that state data reflects all women 50 and older (compared with women 50-74 represented in the county and US figures).
 - Madison and Park County data were combined for reliability.

Cervical Cancer Screenings

The US Preventive Services Task Force (USPSTF) strongly recommends screening for cervical cancer in women who have been sexually active and have a cervix.

Rationale: The USPSTF found good evidence from multiple observational studies that screening with cervical cytology (Pap smears) reduces incidence of and mortality from cervical cancer. Direct evidence to determine the optimal starting and stopping age and interval for screening is limited. Indirect evidence suggests most of the benefit can be obtained by beginning screening within 3 years of onset of sexual activity or age 21 (whichever comes first) and screening at least every 3 years. The USPSTF concludes that the benefits of screening substantially outweigh potential harms.

The USPSTF recommends against routinely screening women older than age 65 for cervical cancer if they have had adequate recent screening with normal Pap smears and are not otherwise at high risk for cervical cancer.

Rationale: The USPSTF found limited evidence to determine the benefits of continued screening in women older than 65. The yield of screening is low in previously screened women older than 65 due to the declining incidence of high-grade cervical lesions after middle age. There is fair evidence that screening women older than 65 is associated with an increased risk for potential harms, including false-positive results and invasive procedures. The USPSTF concludes that the potential harms of screening are likely to exceed benefits among older women who have had normal results previously and who are not otherwise at high risk for cervical cancer.

The USPSTF recommends against routine Pap smear screening in women who have had a total hysterectomy for benign disease.

Rationale: The USPSTF found fair evidence that the yield of cytologic screening is very low in women after hysterectomy and poor evidence that screening to detect vaginal cancer improves health outcomes. The USPSTF concludes that potential harms of continued screening after hysterectomy are likely to exceed benefits.

– 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.

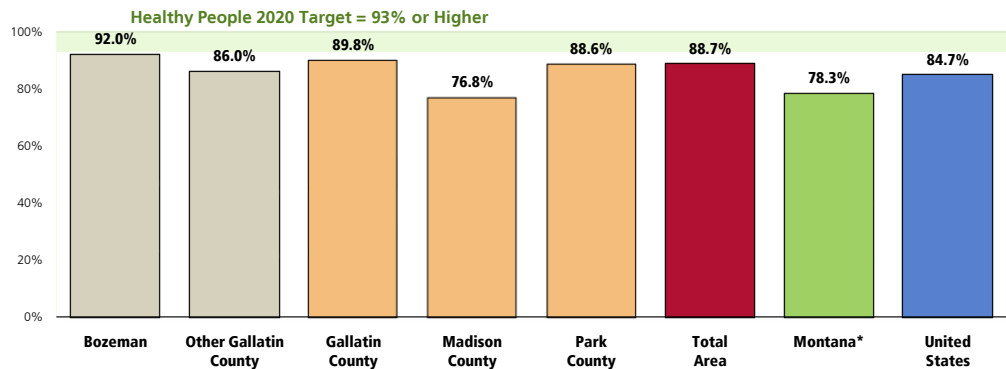
Pap Smear Testing

Among women age 21-65, 88.7% have had a Pap smear in the past 3 years.

- More favorable than the Montana figure (which reflects all women 18+).
- Similar to national findings.
- Fails to satisfy the Healthy People 2020 target (93% or higher).
- Within Gallatin County, no significant difference.
- Least favorable in Madison County.

Have Had a Pap Smear in the Past 3 Years

(Among Total Area Women 21-65, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Items 159]
 • Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.
 • Professional Research Consultants. PRC National Health Survey. 2011.
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective C-15]

Notes: • Asked of female respondents aged 21 to 65.
 • *Note that the Montana percentage represents all women aged 18 and older.

Colorectal Cancer Screenings

The USPSTF recommends screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy in adults, beginning at age 50 years and continuing until age 75 years.

The evidence is convincing that screening for colorectal cancer with fecal occult blood testing, sigmoidoscopy, or colonoscopy detects early-stage cancer and adenomatous polyps. There is convincing evidence that screening with any of the three recommended tests (FOBT, sigmoidoscopy, colonoscopy) reduces colorectal cancer mortality in adults age 50 to 75 years. Follow-up of positive screening test results requires colonoscopy regardless of the screening test used.

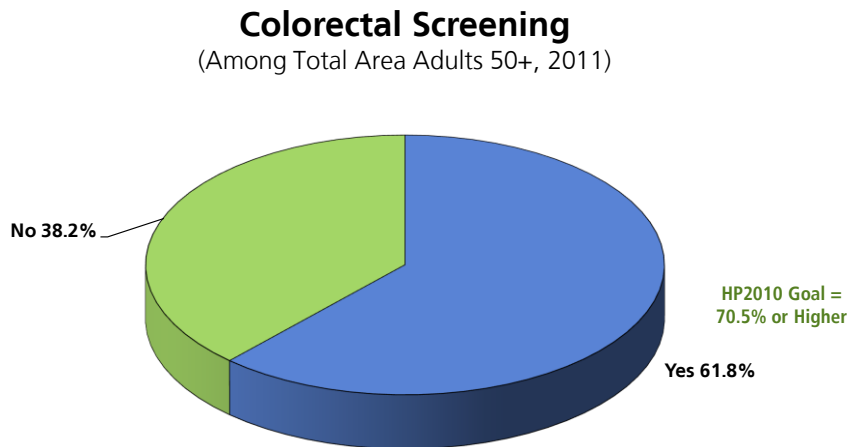
– US Preventive Services Task Force, Agency for Healthcare Research and Quality, US Department of Health & Human Services.

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.

Colorectal Cancer Screening

Among adults age 50-75, 61.8% have had appropriate colorectal cancer screening (fecal occult blood test in the past year and/or lower endoscopy [sigmoidoscopy or colonoscopy] in the past 10 years).

- Fails to satisfy the Healthy People 2020 target (70.5% or higher).



Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Items 94-95]
● US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective C-16]
Notes: ● Asked of respondents aged 50 to 75.
: ● In this case, the term "colorectal screening" refers to adults receiving either a FOBT in the past year and/or a lower endoscopy (sigmoidoscopy/colonoscopy) in the past 10 years.

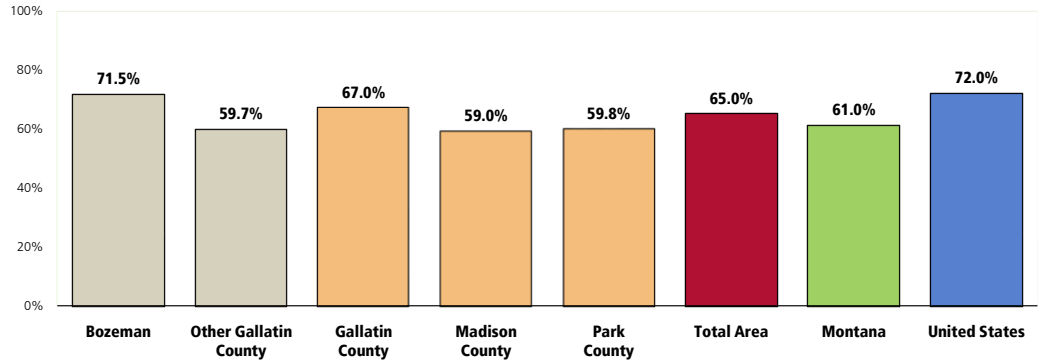
Sigmoidoscopy/Colonoscopy

Among adults age 50 and older, nearly 2 in 3 (65.0%) have had a sigmoidoscopy or colonoscopy at some point in their lives.

- Comparable to Montana findings.
- Less favorable than national findings.
- Within Gallatin County, much higher in the Bozeman community.
- Similar by county.

Have Ever Had a Sigmoidoscopy/Colonoscopy Exam

(Among Total Area Adults 50+, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 161]
 • Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.
 • Professional Research Consultants. PRC National Health Survey. 2011.

Notes: • Asked of all respondents aged 50 and older.

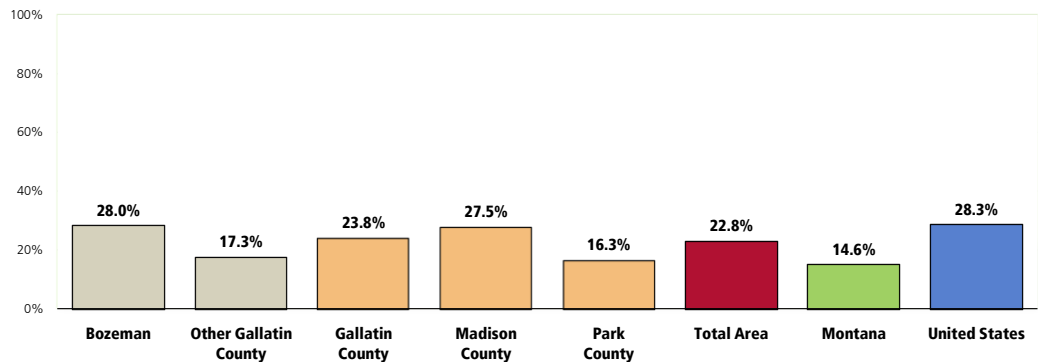
Blood Stool Testing

Among adults age 50 and older, 22.8% have had a blood stool test (aka "fecal occult blood test") within the past two years.

- More favorable than Montana findings.
- Less favorable than national findings.
- Within Gallatin County, much higher among Bozeman adults.
- No statistical difference when viewed by county.

Have Had a Blood Stool Test in the Past 2 Years

(Among Total Area Adults 50+, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 162]
 • Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.
 • Professional Research Consultants. PRC National Health Survey. 2011.

Notes: • Asked of all respondents aged 50 and older.

Respiratory Disease

Age-Adjusted Respiratory Disease Deaths

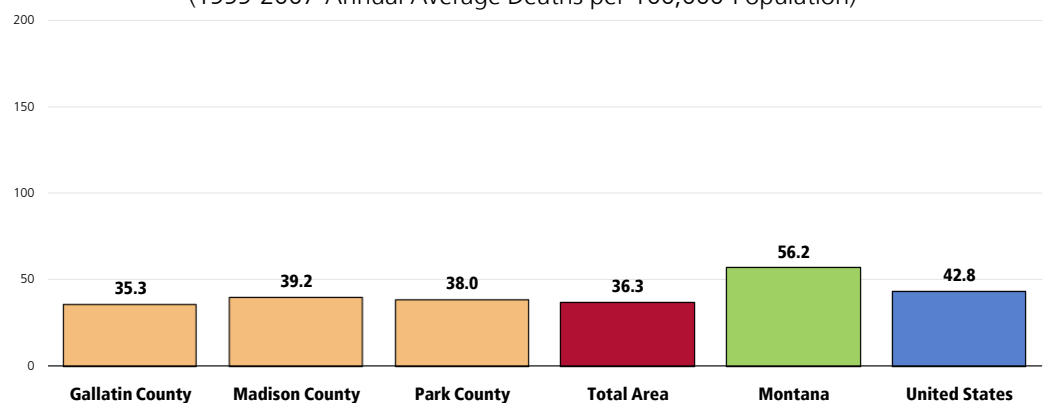
Chronic Lower Respiratory Disease Deaths (CLRD)

Between 1999 and 2007, there was an annual average age-adjusted CLRD mortality rate of 36.3 deaths per 100,000 population in the Total Area.

- More favorable than that found statewide.
- More favorable than national rate.
- Lowest in Gallatin County; higher in Madison County.

CLRD: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)

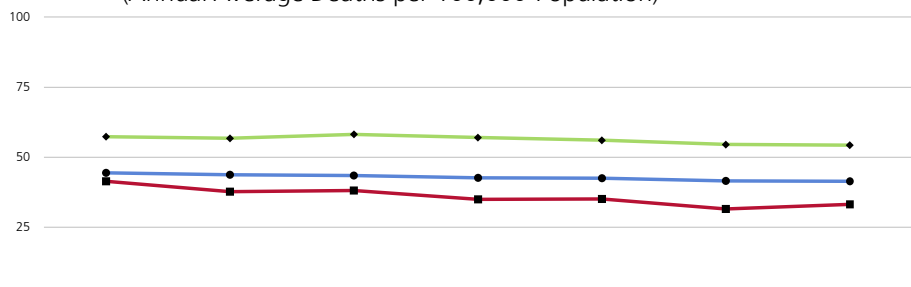


Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

☒ CLRD mortality in the Total Area has decreased over time, mirroring the trends reported both statewide and nationwide.

CLRD: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 • State and national data are simple three-year averages.

For prevalence of vaccinations for pneumonia and influenza, see also "Immunization & Infectious Disease."

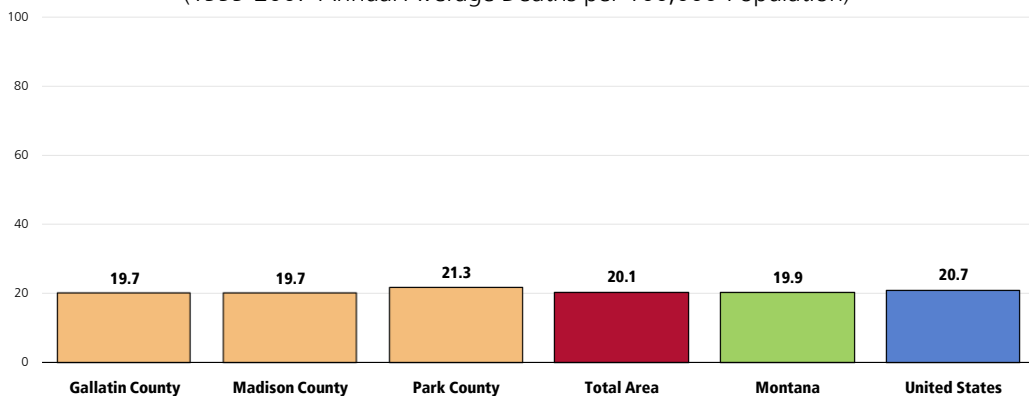
Pneumonia/Influenza Deaths

Between 1999 and 2007, there was an annual average age-adjusted pneumonia/influenza mortality rate of 20.1 deaths per 100,000 population in the Total Area.

- Comparable to that found statewide.
- Comparable to the national rate.
- Higher in Park County.

Pneumonia/Influenza: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)

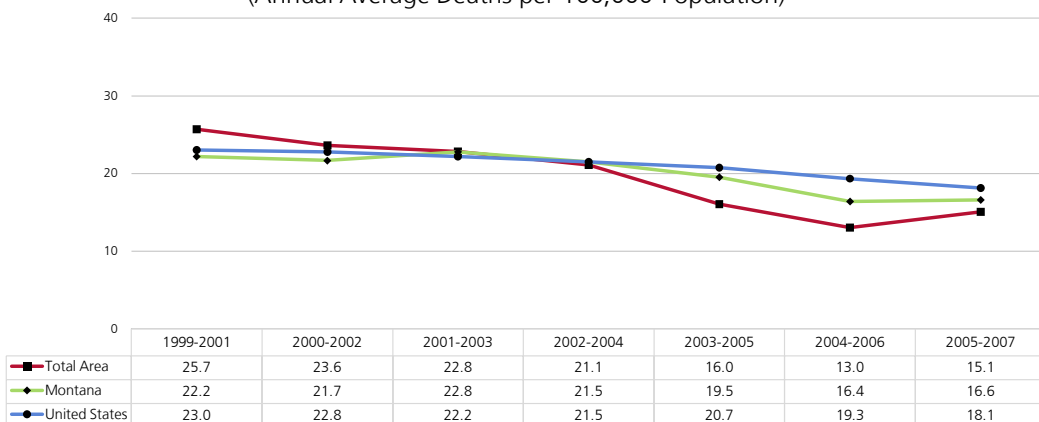


Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

☒ Total Area pneumonia/influenza mortality rates have decreased in recent years, echoing the state and national trends.

Pneumonia/Influenza: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 • State and national data are simple three-year averages.

Survey respondents were next asked to indicate whether they suffer from or have been diagnosed with certain respiratory conditions, including nasal/hay fever allergies, sinusitis, asthma and/or chronic lung disease.

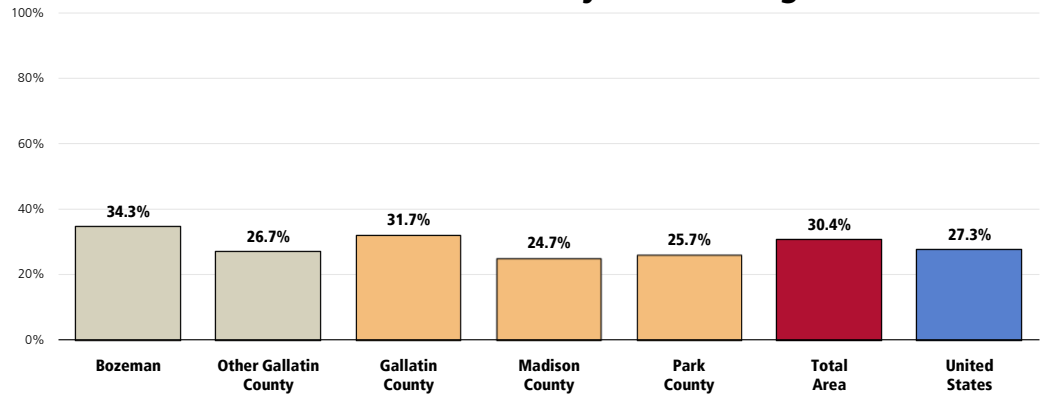
Prevalence of Respiratory Conditions

Nasal/Hay Fever Allergies

A total of 30.4% of Total Area adults currently suffer from or have been diagnosed with nasal/hay fever allergies.

- Similar to the national prevalence.
- No significant difference to report within Gallatin County.
- No significant difference among the three counties.

Prevalence of Nasal/Hay Fever Allergies



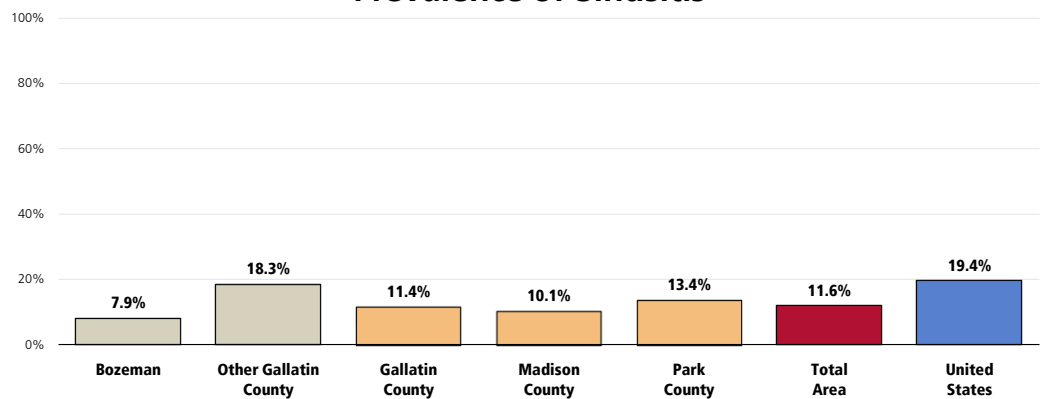
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 35]
 • Professional Research Consultants, Inc. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents.

Sinusitis

A total of 11.6% of Total Area adults suffer from sinusitis.

- More favorable than the national prevalence.
- Within Gallatin County, much lower (more favorable) in Bozeman.
- No significant difference by county.

Prevalence of Sinusitis



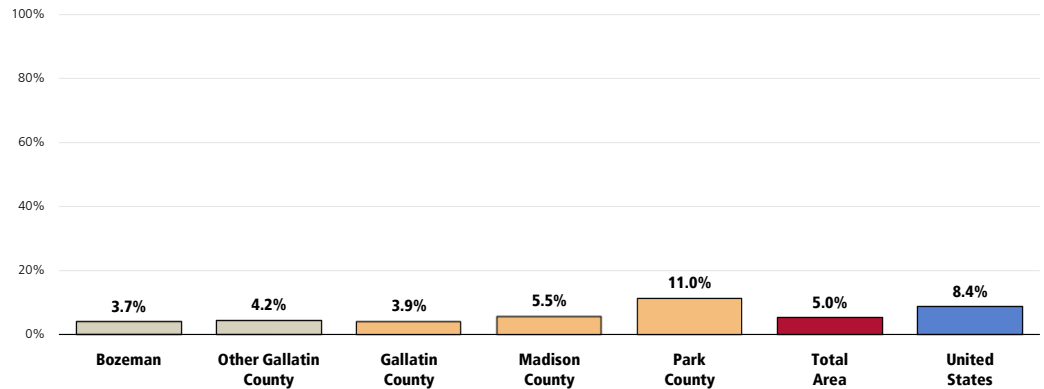
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 34]
 • Professional Research Consultants, Inc. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents.

Chronic Lung Disease

A total of 5.0% of Total Area adults suffer from chronic lung disease.

- More favorable than the national prevalence.
- Similar by area within Gallatin County.
- Lowest in Gallatin County; particularly high in Park County.

Prevalence of Chronic Lung Disease



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 25]
• Professional Research Consultants. PRC National Health Survey. 2011.

Notes: • Asked of all respondents.

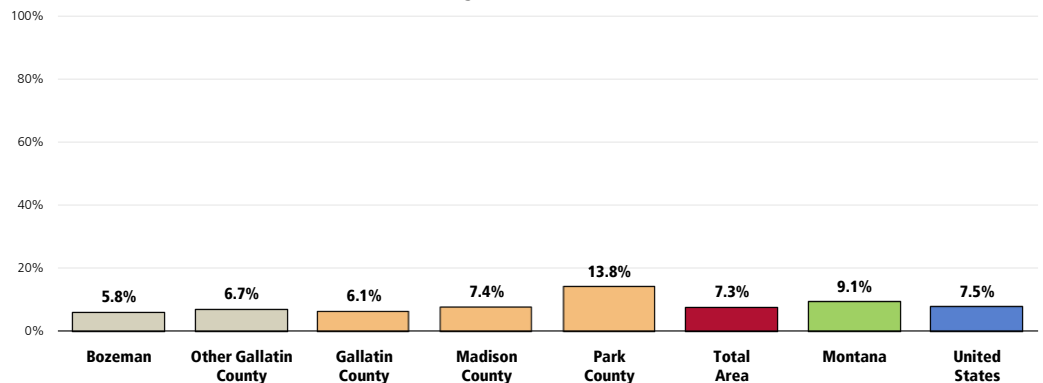
Asthma

Adults

A total of 7.3% of Total Area adults currently suffer from asthma.

- Similar to the statewide prevalence.
- Similar to the national prevalence.
- Within Gallatin County, no significant difference to report.
- Lowest in Gallatin County; particularly high in Park County.

Currently Have Asthma



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 164]
• Professional Research Consultants. PRC National Health Survey. 2011.

• Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.

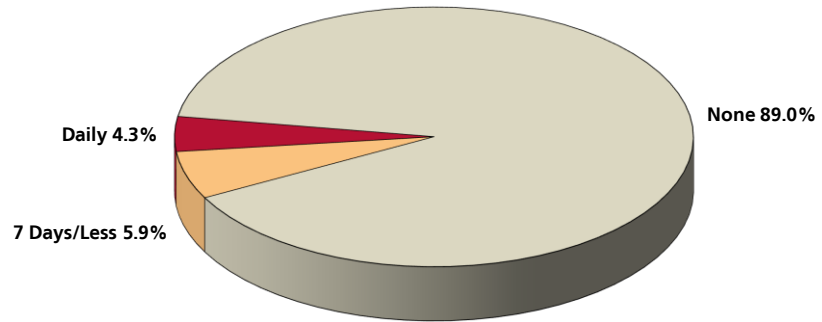
Notes: • Asked of all respondents.

Among Total Area adults with asthma, 4.3% report that they are limited by their asthma on a daily basis.

- In contrast, the majority (89.0%) reports that their asthma does not limit their activities.

Number of Days in Past Year When Asthma Limited Activities

(Among Total Area Adults With Asthma, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 43]
 Notes: • Asked of Total Area residents with asthma.

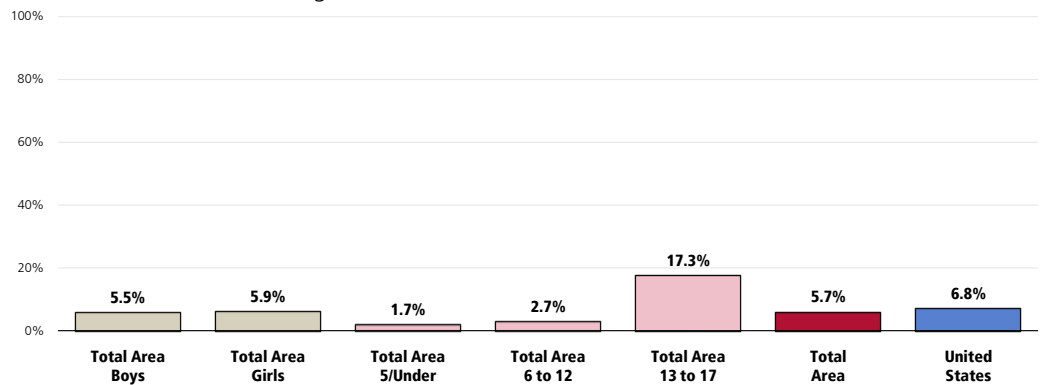
Children

Among Total Area children under age 18, 5.7% currently have asthma.

- Comparable to national findings.
- 👨👩👧 Similar by gender; much higher among Total Area teens.

Child Has Asthma

(Among Parents of Children <18; Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 165]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents with children under 18 at home.

Injury & Violence

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

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

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

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

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

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

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

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

Efforts to prevent violence may focus on:

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

– Healthy People 2020 (www.healthypeople.gov)

Leading Causes of Accidental Death

Motor vehicle accidents accounted for 57.7% of accidental deaths in the Total Area between 2005-2007.

Unintentional Injury

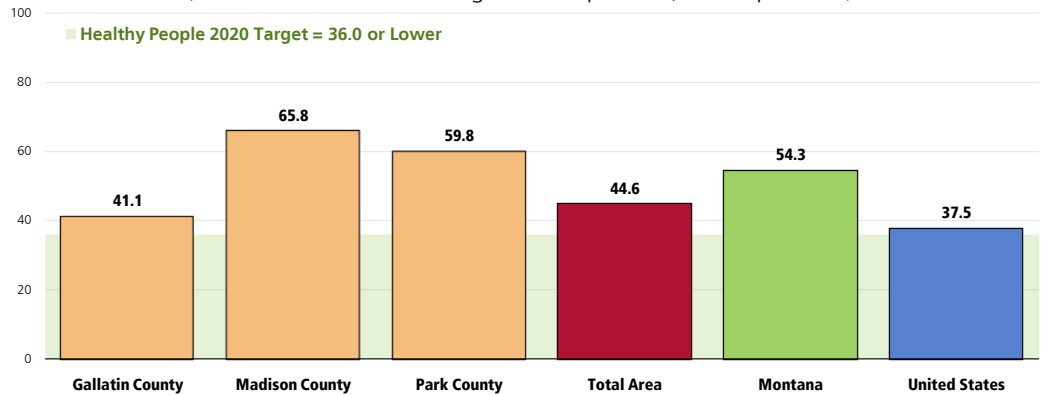
Age-Adjusted Unintentional Injury Deaths

Between 1999 and 2007, there was an annual average age-adjusted unintentional injury mortality rate of 44.6 deaths per 100,000 population in the Total Area.

- More favorable than the Montana rate.
- Less favorable than the national rate.
- Fails to satisfy the Healthy People 2020 target (36.0 or lower).
- Lowest in Gallatin County; highest in Madison County.

Unintentional Injuries: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)

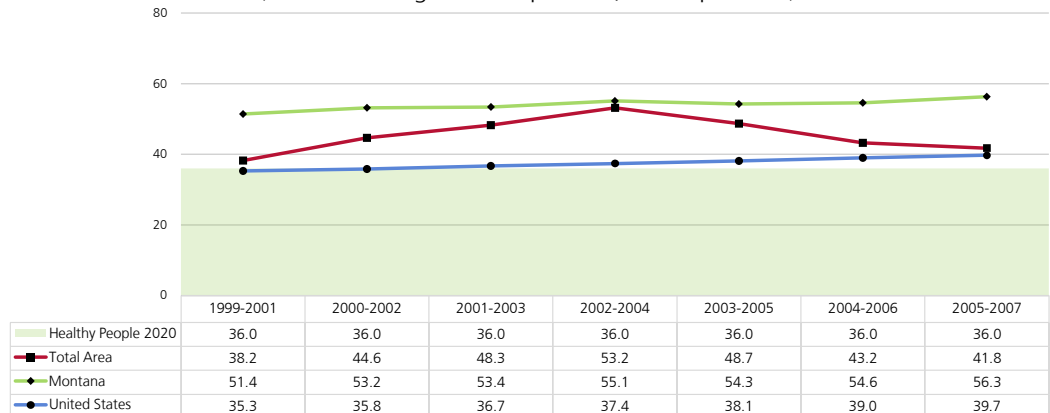


Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective IVP-11]
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Regionally, this rate increased in the early 2000s, but has since begun to decline.

Unintentional Injuries: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective IVP-11]
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 • State and national data are simple three-year averages.

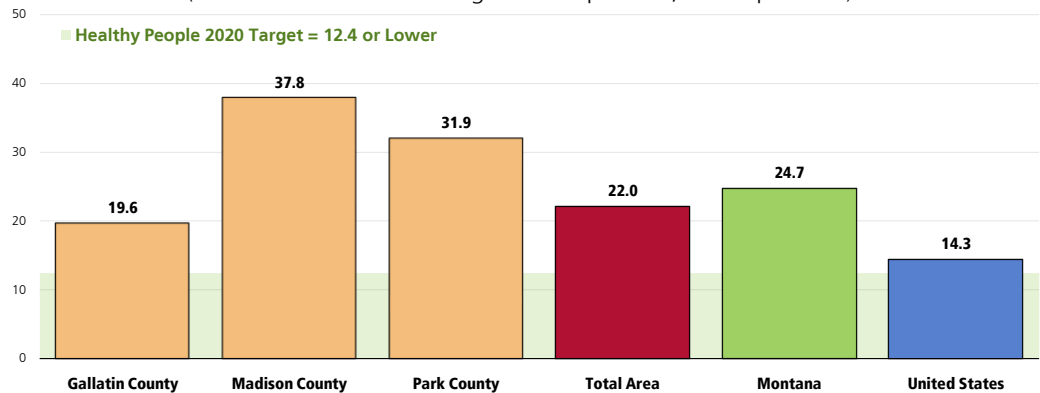
Motor Vehicle Safety

Age-Adjusted Motor-Vehicle Related Deaths

Between 1999 and 2007, there was an annual average age-adjusted motor vehicle crash mortality rate of 22.0 deaths per 100,000 population in the Total Area.

- Lower than found statewide.
- Higher than found nationally.
- Far from satisfying the Healthy People 2020 target (12.4 or lower).
- More favorable in Gallatin County; particularly high in Madison County.

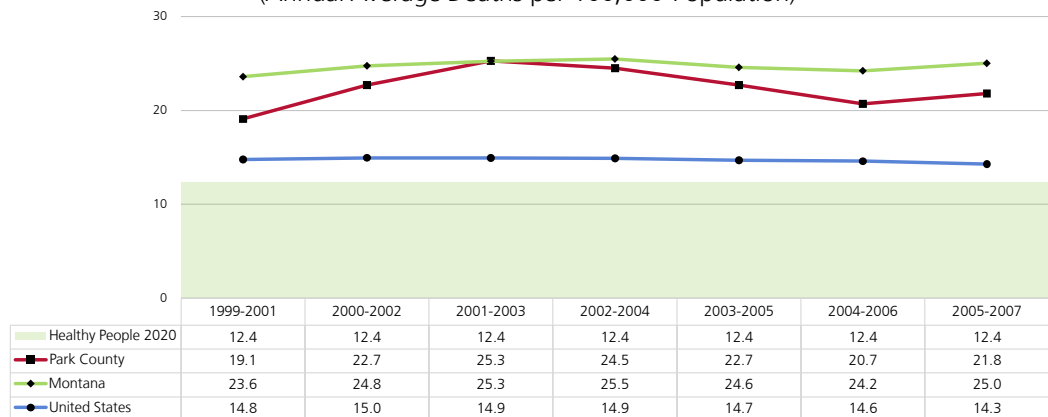
Motor Vehicle Crashes: Age-Adjusted Mortality (1999-2007 Annual Average Deaths per 100,000 Population)



- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective IVP-13.1]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

⚠ Although increasing overall, mortality rates in the Total Area showed no clear trend over the past decade. Rates were relatively stable across the US overall.

Motor Vehicle Crashes: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



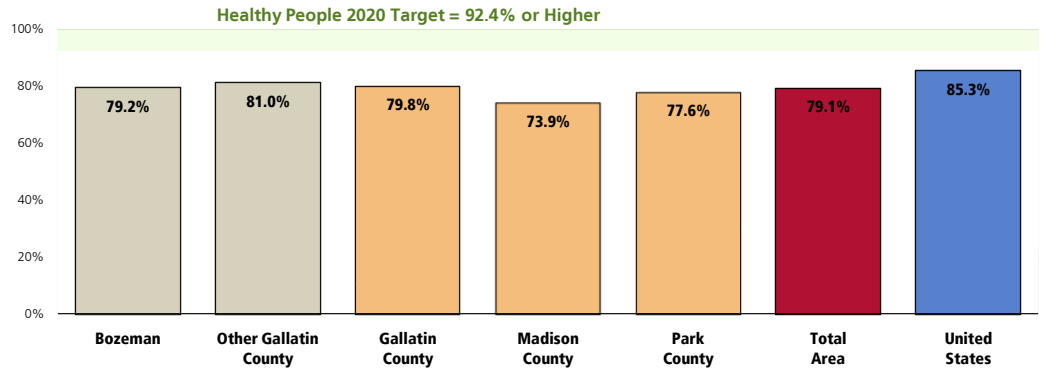
- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective IVP-13.1]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - State and national data are simple three-year averages.

Seat Belt Usage - Adults

Most Total Area adults (79.1%) report “always” wearing a seat belt when driving or riding in a vehicle.

- Less favorable than the percentage found nationally.
- Fails to satisfy the Healthy People 2020 objective of 92.4% or higher.
- Within Gallatin County, no significant difference.
- Similar by county.

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



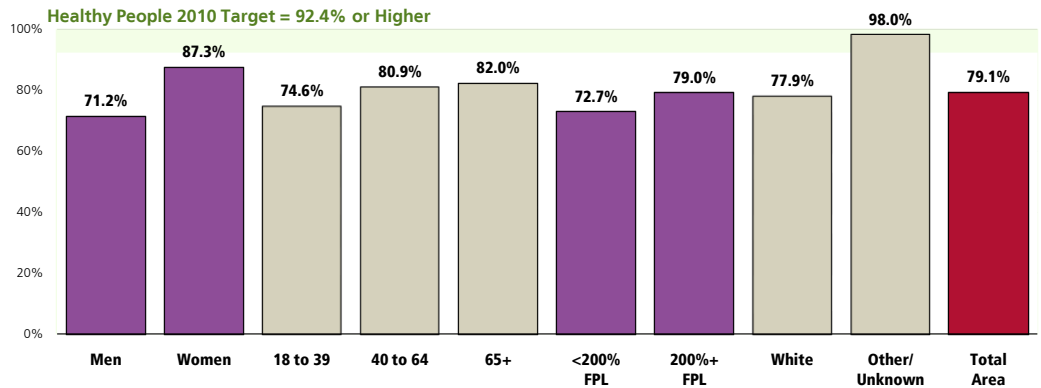
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 53]
 • Professional Research Consultants, Inc. PRC National Health Survey, 2011.
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective IPV-15]
 Notes: • Asked of all respondents.

These population segments are less likely to report consistent seat belt usage:

- Men.
- Whites.

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



(Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 53]
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective IPV-15]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

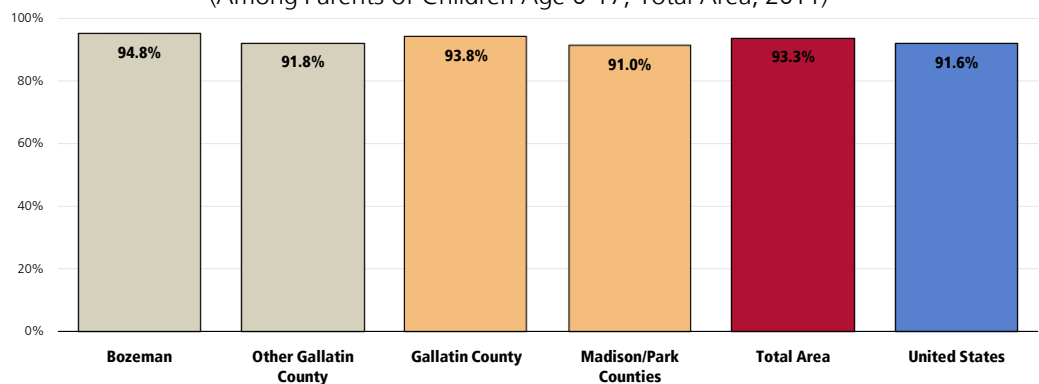
Seat Belt Usage - Children

A full 93.3% of Total Area parents report that their child (age 0 to 17) "always" wears a seat belt (or appropriate car seat for younger children) when riding in a vehicle.

- Statistically similar to what is found nationally.
 - No significant difference by area within Gallatin County.
 - Similar between Gallatin and the combined Madison/Park counties.
-  Among children under age 5, 100% are reported to consistently use appropriate seat belts/safety seats (more favorable than the US figure).
-  Among children age 5-17, 90.4% report consistent safety belt usage, similar to that found nationally.

Child "Always" Wears a Seatbelt or Appropriate Restraint When Riding in a Vehicle

(Among Parents of Children Age 0-17; Total Area, 2011)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Items 136, 168-169]
- Professional Research Consultants, Inc. PRC National Health Survey. 2011.

Notes:

- Asked of all respondents with children under 18 at home.
- Madison and Park County data were combined for reliability.

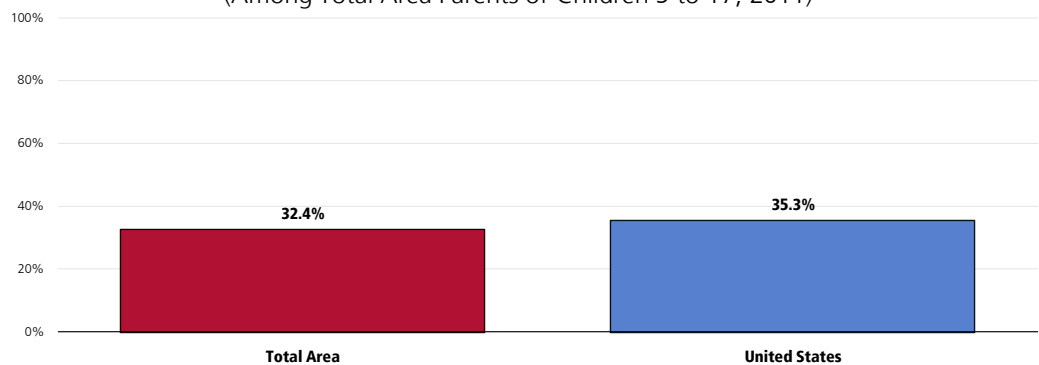
Bicycle Safety

Nearly one in three Total Area children age 5 to 17 (32.4%) is reported to "always" wear a helmet when riding a bicycle.

- Similar to the national prevalence.

Child "Always" Wears a Helmet When Riding a Bicycle

(Among Total Area Parents of Children 5 to 17, 2011)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 141]
- Professional Research Consultants. PRC National Health Survey. 2011.

Notes:

- Asked of all respondents with children aged 5 to 17 at home.

Firearm Safety

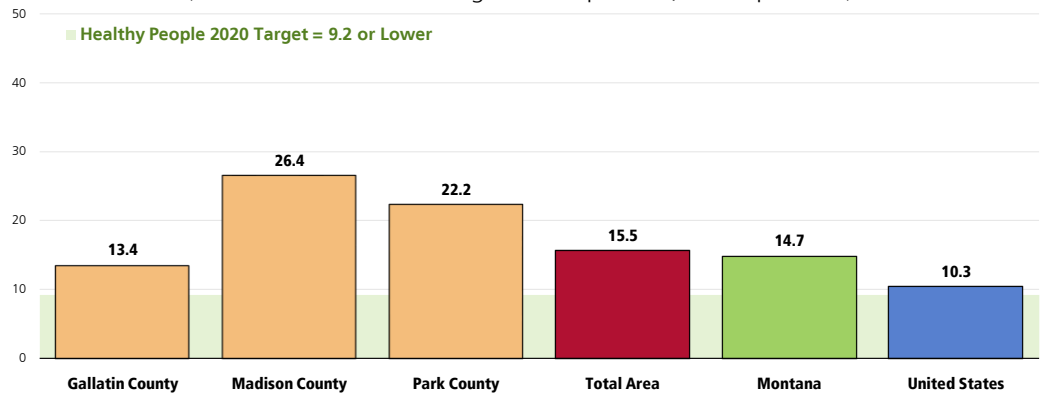
Firearm-Related Deaths

Between 1999 and 2007, there was an annual average age-adjusted firearm-related mortality rate of 15.5 deaths per 100,000 population in the Total Area.

- Less favorable than found statewide.
- Less favorable than found nationally.
- Fails to satisfy the Healthy People 2020 objective of 9.2 or lower.
- Lower in Gallatin County; especially high in Madison County.

Firearm-Related Deaths: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)

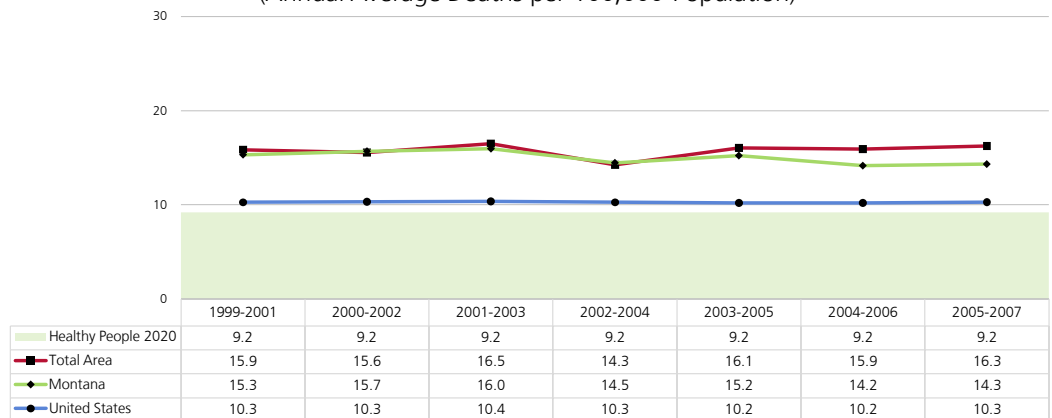


- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective IVP-30]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

- ☒ Mortality rates in the Total Area have tracked fairly closely with Montana rates over the past several years, although slightly higher in the latter reporting periods.

Firearms-Related Deaths: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective IVP-30]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - State and national data are simple three-year averages.

Survey respondents were further asked about the presence of weapons in the home:

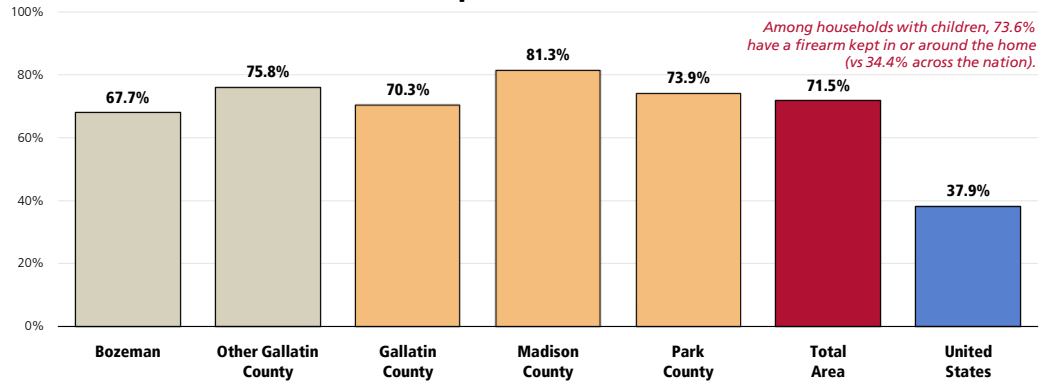
“Are there any firearms now kept in or around your home, including those kept in a garage, outdoor storage area, truck, or car? For the purposes of this inquiry, ‘firearms’ include pistols, shotguns, rifles, and other types of guns, but do NOT include starter pistols, BB guns, or guns that cannot fire.”

Presence of Firearms in Homes

More than 7 in 10 Total Area adults (71.5%) have a firearm kept in or around their home.

- Approaching twice the national prevalence.
 - Within Gallatin County, no significant difference.
 - Highest among Madison County households.
- 👤 Among Total Area households with children, 73.6% keep a firearm in or around the house (more than twice that reported nationally).

Have a Firearm Kept in or Around the Home



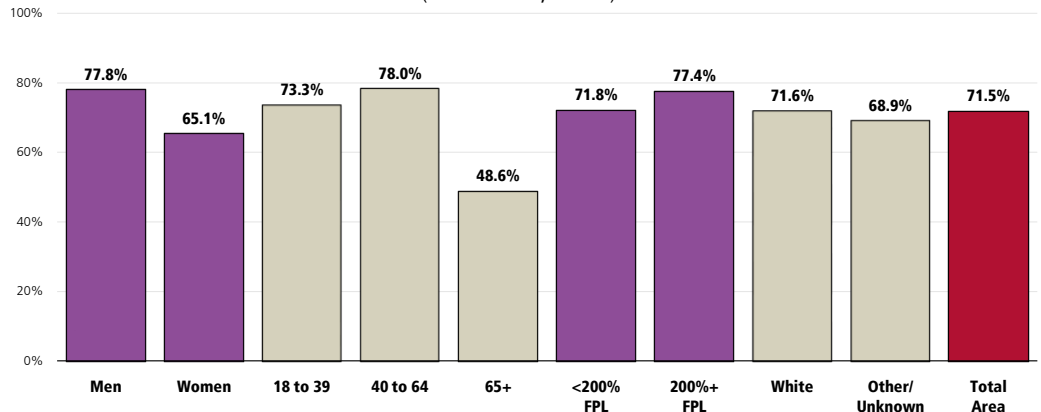
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Items 57, 166]
 • Professional Research Consultants, Inc. PRC National Health Survey, 2011.

Notes: • Asked of all respondents.

Reports of firearms in or around the home are more prevalent among:

- 👤 Men.
- 👤 Residents under the age of 65.

Have a Firearm Kept in or Around the House (Total Area, 2011)



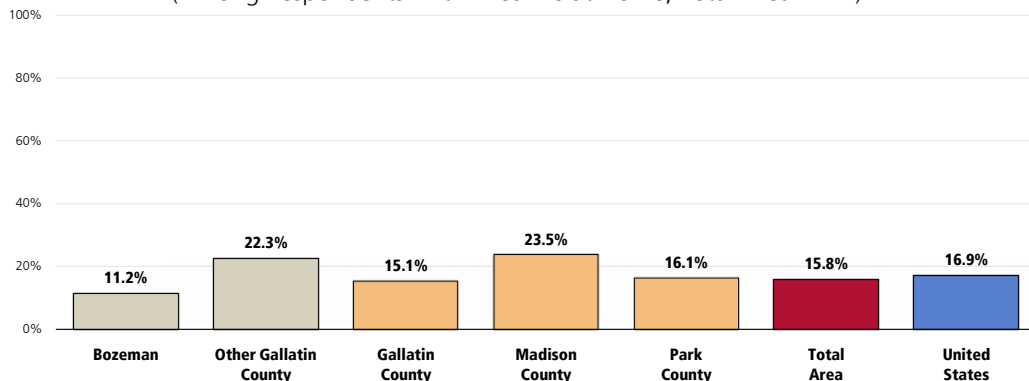
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 57]

Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Among Total Area households with firearms, 15.8% report that there is at least one weapon that is kept unlocked and loaded.

- Statistically similar to that found nationally.
- In Gallatin County, twice as high outside the Bozeman community.
- No significant difference by county.

Household Has an Unlocked/Loaded Firearm
(Among Respondents With Firearms at Home; Total Area 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 167]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents with firearms in or around the home.

Intentional Injury (Violence)

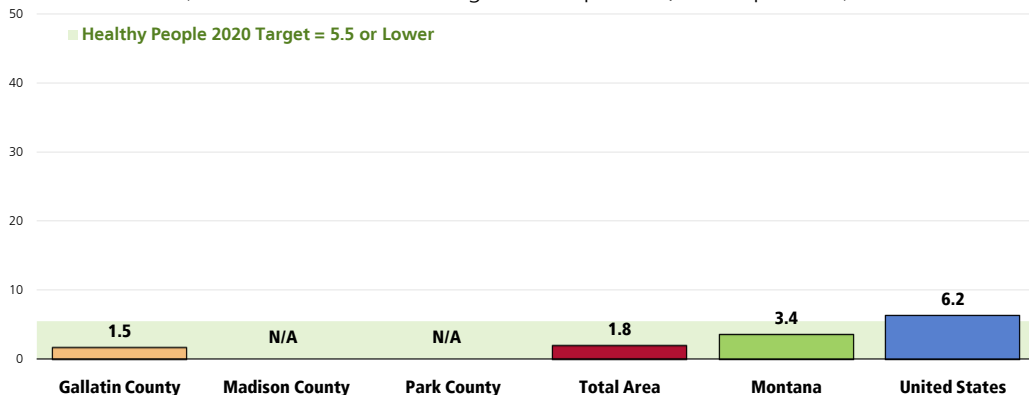
Age-Adjusted Homicide Deaths

Between 1999 and 2007, there was an annual average age-adjusted homicide rate of 1.8 deaths per 100,000 population in the Total Area.

- More favorable than the rate found statewide.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target of 5.5 or lower.
- Note that rates for Madison and Park Counties were not reliable due to low counts.

Homicide: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)



Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective IPV-29]
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 • All Total Area homicide death rates are unreliable due to the low number of deaths in the community.

RELATED ISSUE:
See also *Suicide* in the **Mental Health & Mental Disorders** section of this report.

Violent Crime

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.

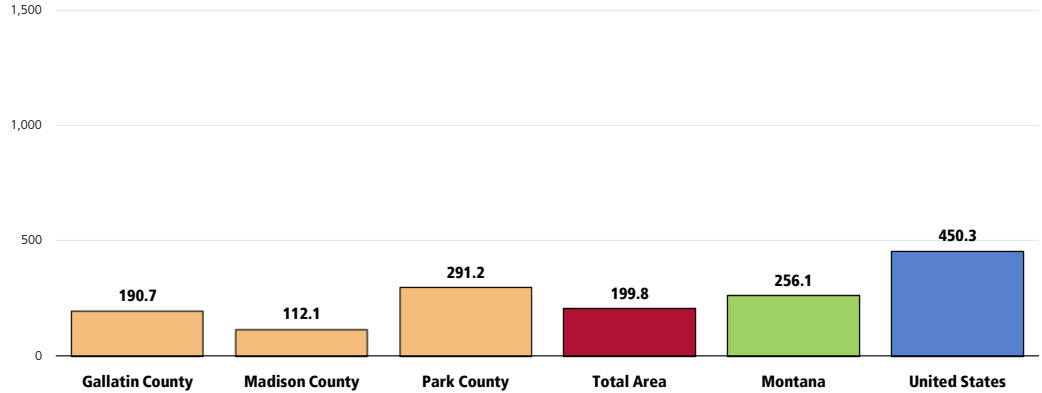
Violent Crime Rates

Between 2007 and 2009, there was an annual average violent crime rate of 199.8 offenses per 100,000 population in the Total Area.

- More favorable than the Montana rate for the same period.
- Much more favorable than the US violent crime rate.
- Lowest in Madison County; highest in Park County.

Violent Crime Rates

(2007-2009 Annual Average Offenses per 100,000 Population)

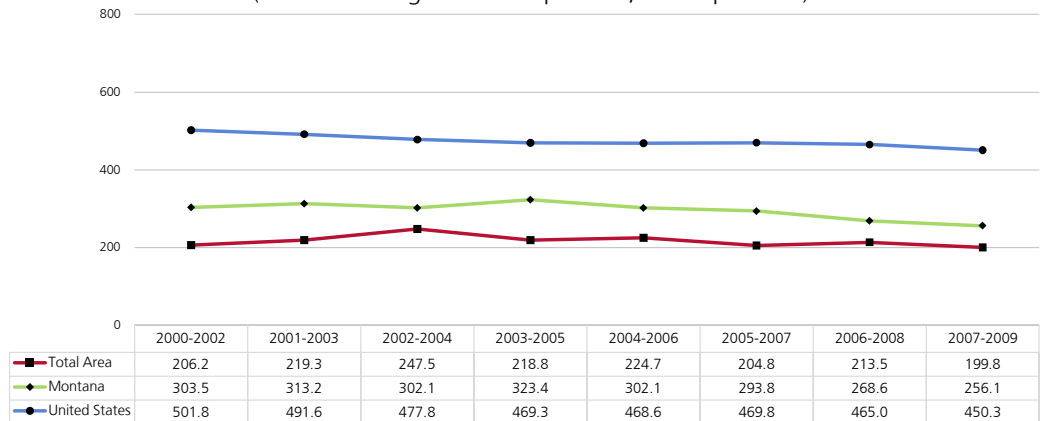


Sources: • Montana Board of Crime Control
 • US Department of Justice, Federal Bureau of Investigation, Crime in the US
 Notes: • Rates are offenses per 100,000 population among agencies reporting.

☒ Crime rates have not changed dramatically in the region over the past several years.

Violent Crime Rates

(Annual Average Offenses per 100,000 Population)



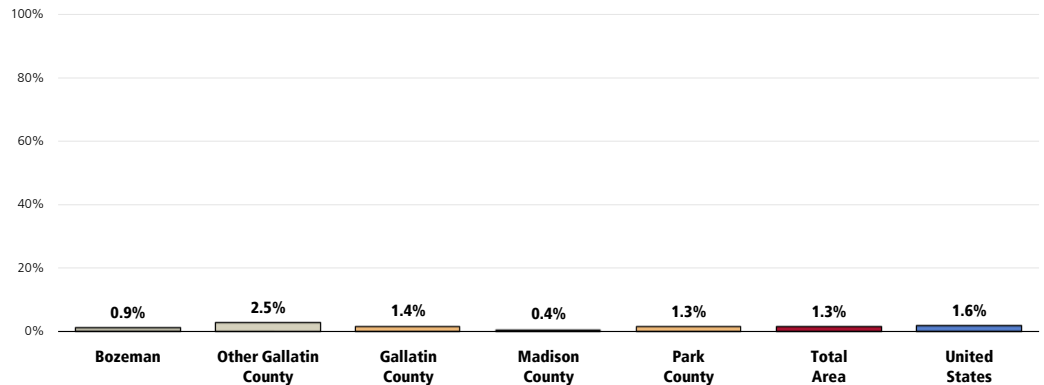
Sources: • Montana Board of Crime Control
 • US Department of Justice, Federal Bureau of Investigation, Crime in the US
 Notes: • Rates are offenses per 100,000 population among agencies reporting.

Self-Reported Violence

A total of 1.3% of Total Area adults acknowledge being the victim of a violent crime in the past five years.

- Statistically similar to national findings.
- No statistically significant difference between Bozeman and Other Gallatin County.
- Statistically similar among the three counties.

Have Been the Victim of a Violent Crime in the Past 5 Years



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 54]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.
Notes: • Asked of all respondents.

Self-Reported Family Violence

Respondents were told:

“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.”

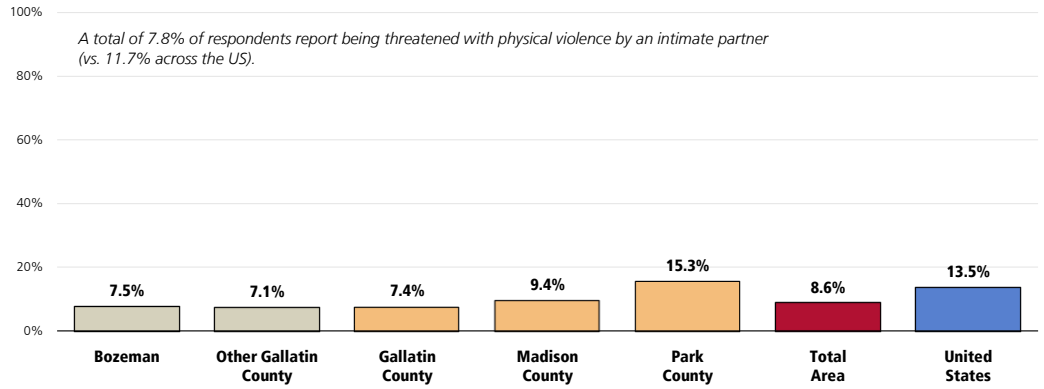
A total of 7.8% of Total Area adults report that they have ever been threatened with physical violence by an intimate partner.

- More favorable than that reported nationally.
- In Gallatin County, no difference by area.
- No significant difference among counties.

Another 8.6% of respondents acknowledges that they have ever been hit, slapped, pushed, kicked, or otherwise hurt by an intimate partner.

- Lower than national findings.
- Similar by area within Gallatin County.
- Lowest in Gallatin County; particularly high in Park County.

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



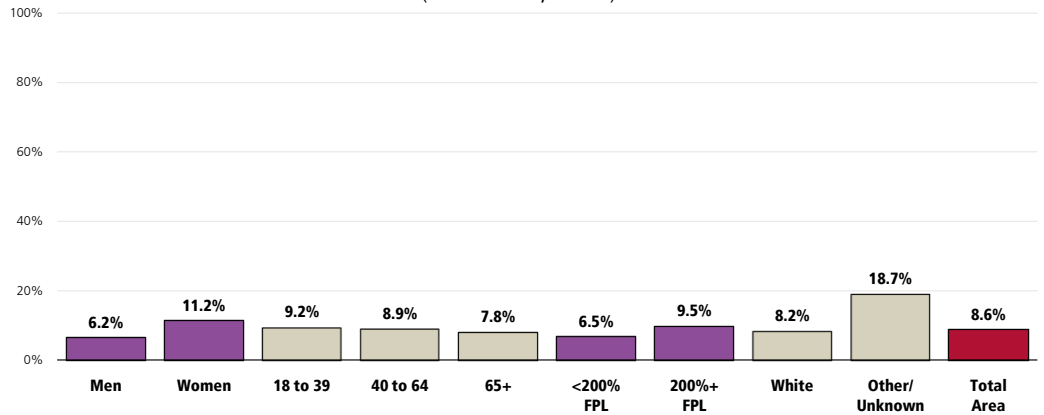
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Items 55-56]
 • Professional Research Consultants, Inc. PRC National Health Survey. 2011.

Notes: • Asked of all respondents.

Reports of domestic violence are notably high among Total Area women.

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

(Total Area, 2011)



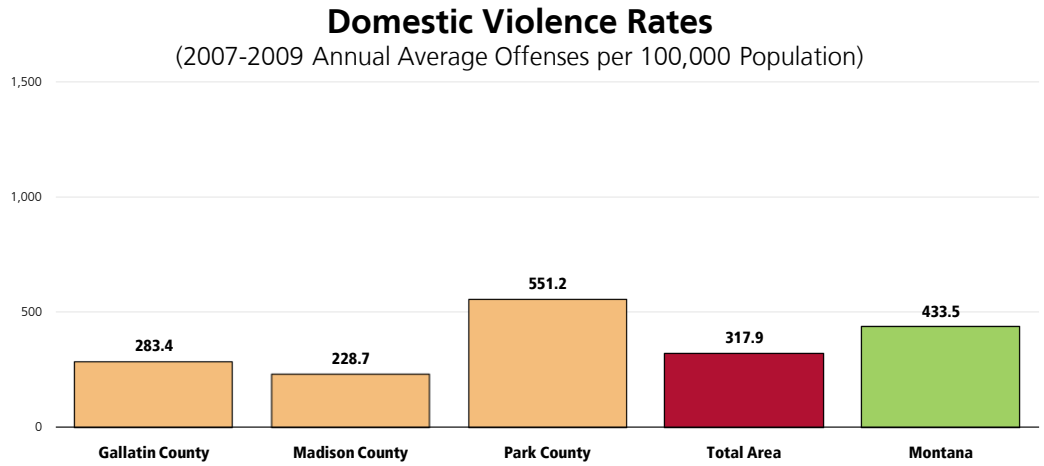
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 56]

Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Domestic Violence

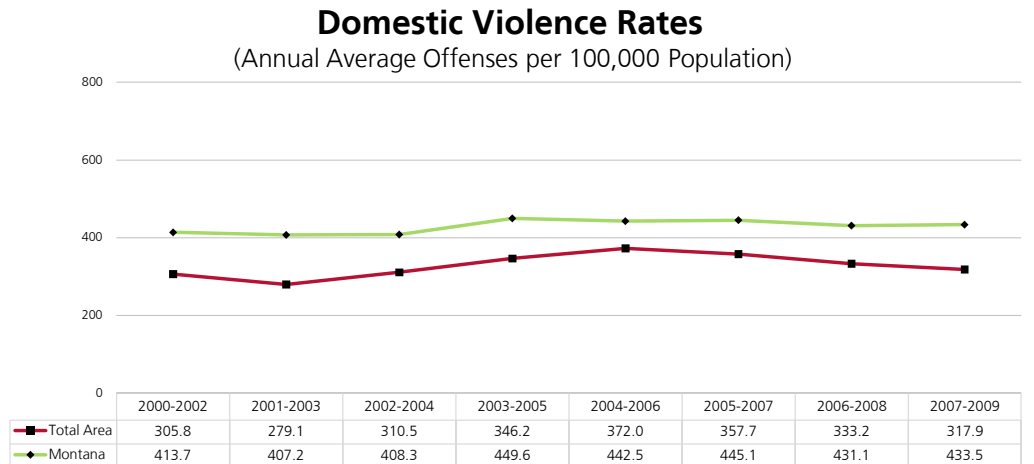
Between 2007 and 2009, the Total Area experienced a domestic violence rate of 317.9 annual average (reported) offenses per 100,000 population.

- Notably high in Park County.



Sources: ● Montana Board of Crime Control
 Notes: ● Rates are offenses per 100,000 population among agencies reporting.

- ☒ The Total Area domestic violence rate has overall trended upward over the past decade.



Sources: ● Montana Board of Crime Control
 Notes: ● Rates are offenses per 100,000 population among agencies reporting.

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. However, almost 25% of Americans with diabetes mellitus are undiagnosed, and another 57 million Americans have blood glucose levels that greatly increase their risk of developing diabetes mellitus in the next several years. Few people receive effective preventative care, which makes diabetes mellitus an immense and complex public health challenge.

Diabetes mellitus affects an estimated 23.6 million people in the United States and is the 7th leading cause of death. 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.

In addition to these human costs, the estimated total financial cost of diabetes mellitus in the US in 2007 was \$174 billion, which includes the costs of medical care, disability, and premature death.

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

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

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

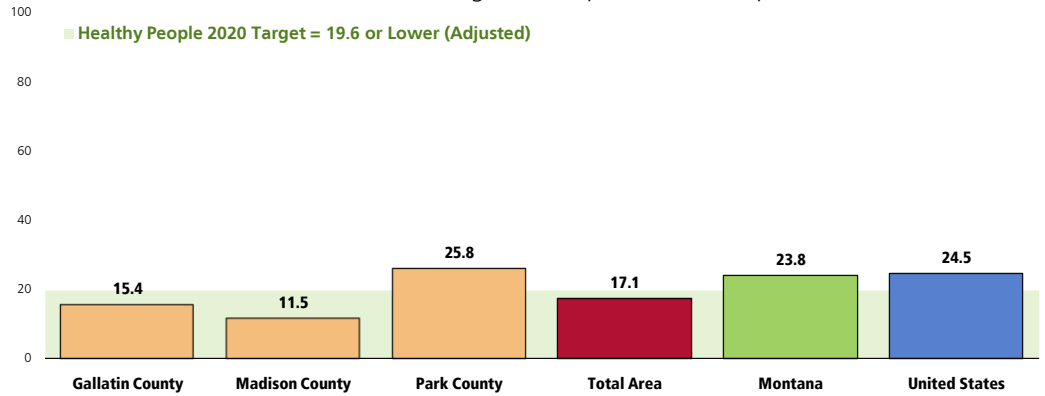
– Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Diabetes Deaths

Between 1999 and 2007, there was an annual average age-adjusted diabetes mortality rate of 17.1 deaths per 100,000 population in the Total Area.

- More favorable than that found statewide.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target (19.6 or lower).
- Lowest in Madison County; highest in Park County.

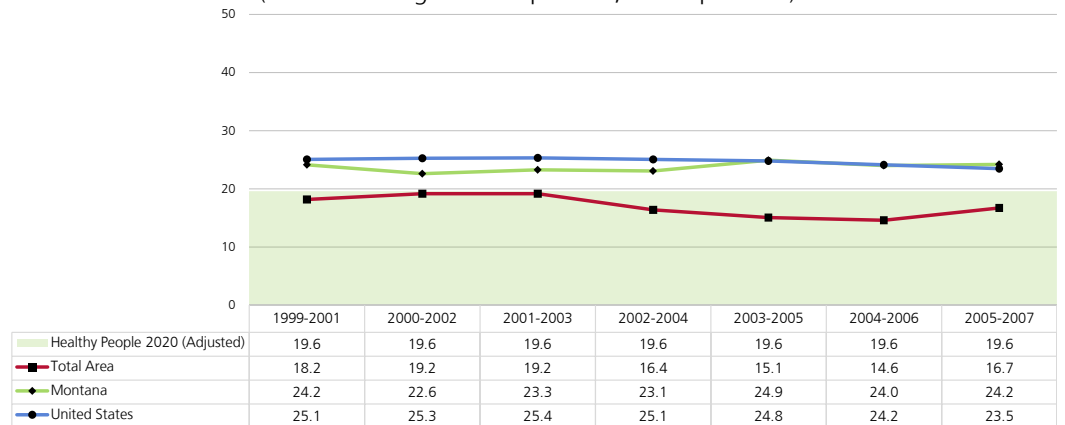
Diabetes: Age-Adjusted Mortality (1999-2007 Annual Average Deaths per 100,000 Population)



- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective D-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - The Healthy People 2010 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

Overall, diabetes death rates have declined in the Total Area over the past decade. During this time, Montana rates remained stable, while US diabetes deaths decreased.

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



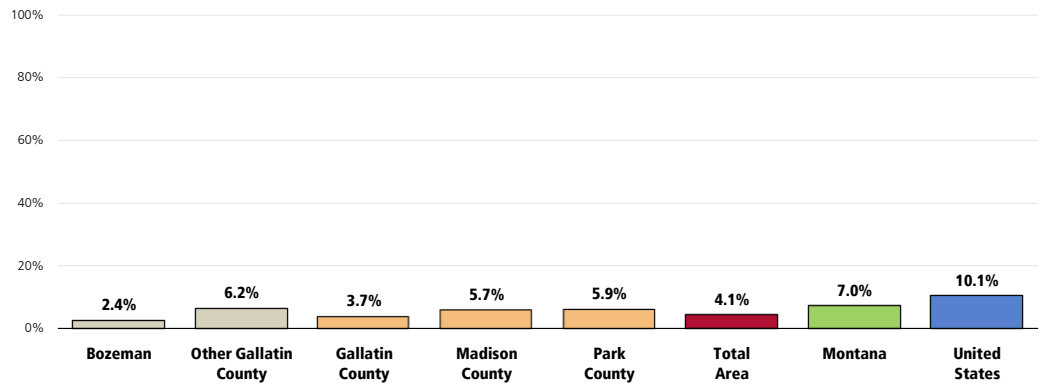
- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective D-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - State and national data are simple three-year averages.
 - The Healthy People 2010 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

Prevalence of Diabetes

A total of 4.1% of Total Area adults report having been diagnosed with diabetes.

- Well below the proportion statewide.
- Well below the national percentage.
- In Gallatin County, no statistically significant difference between Bozeman and the rest of the county.
- No significant difference among the three counties.

Prevalence of Diabetes



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 44]
- Professional Research Consultants, Inc. PRC National Health Survey. 2011.
- Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010. Montana Data.

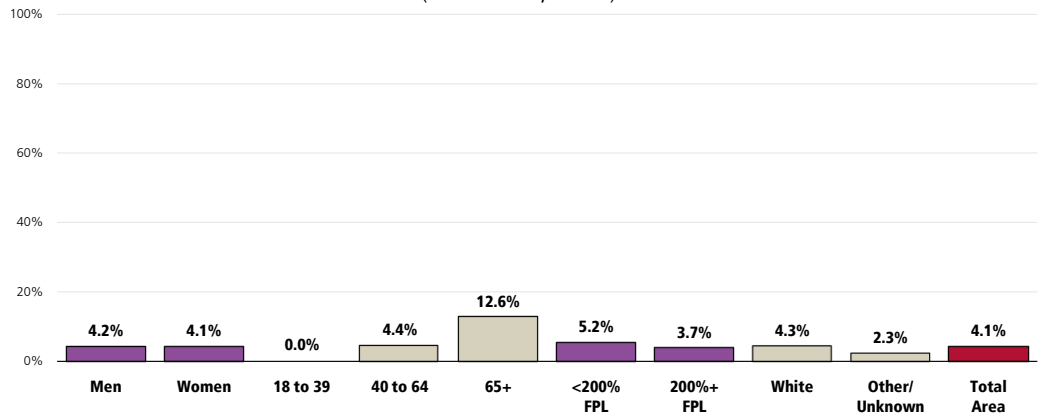
 Notes:

- Asked of all respondents.

👤 Note the positive correlation between diabetes and age (with 12.6% of adults 65+ with diabetes).

Prevalence of Diabetes

(Total Area, 2011)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 44]

 Notes:

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

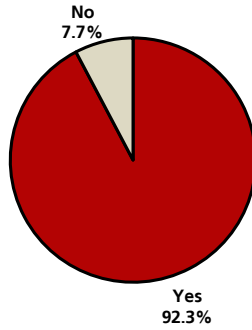
Diabetes Treatment

Among adults with diabetes, most (92.3%) are currently taking insulin or some type of medication to manage their condition.

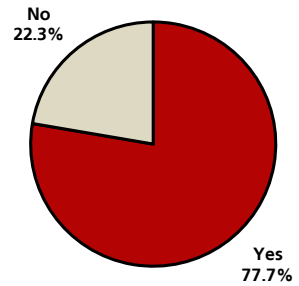
- Much higher than the national figure.

Taking Insulin or Other Medication for Diabetes

(Among Diabetics; Total Area, 2011)



Total Area Diabetics



US Diabetics

Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 45]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.

Notes: • Asked of all diabetic respondents.

Alzheimer's Disease

Dementia is the loss of cognitive functioning—thinking, remembering, and reasoning—to such an extent that it interferes with a person's daily life. Dementia is not a disease itself, but rather a set of symptoms. Memory loss is a common symptom of dementia, although memory loss by itself does not mean a person has dementia. Alzheimer's disease is the most common cause of dementia, accounting for the majority of all diagnosed cases.

Alzheimer's disease is the 6th leading cause of death among adults age 18 years and older. Estimates vary, but experts suggest that up to 5.1 million Americans age 65 years and older have Alzheimer's disease. These numbers are predicted to more than double by 2050 unless more effective ways to treat and prevent Alzheimer's disease are found.

– Healthy People 2020 (www.healthypeople.gov)

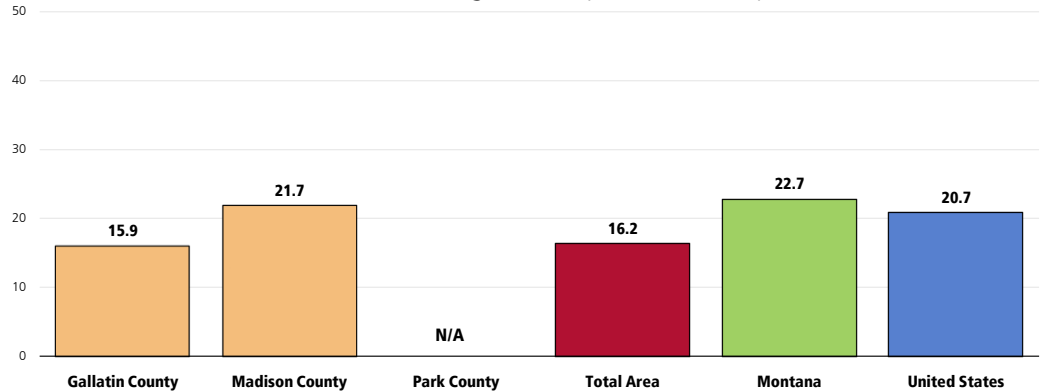
Age-Adjusted Alzheimer's Disease Deaths

Between 1999 and 2007, there was an annual average age-adjusted Alzheimer's disease mortality rate of 16.2 deaths per 100,000 population in the Total Area.

- More favorable than the statewide rate.
- More favorable than the national rate.
- Lower in Gallatin County, higher in Madison County (data not available in Park County).

Alzheimer's Disease: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)

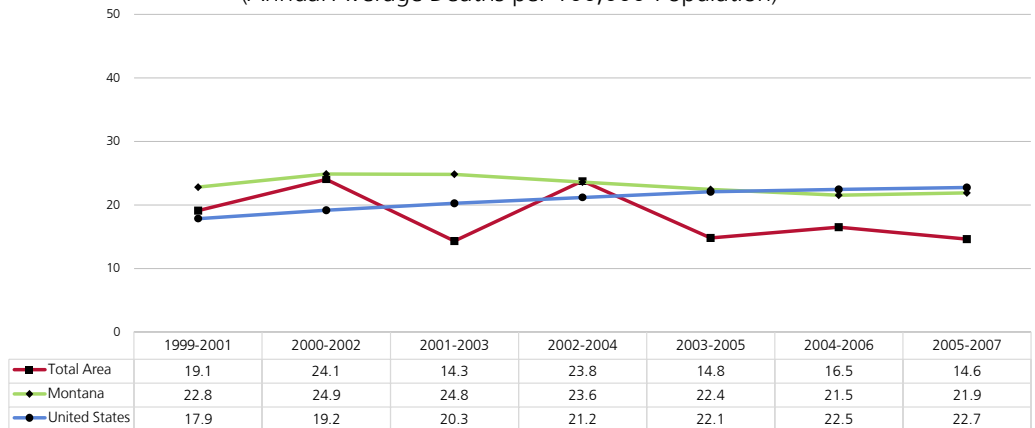


Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.

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

Alzheimer's disease mortality has varied across the Total Area in recent years, ultimately decreasing over time. Across Montana, rates have decreased, while US rates increased steadily.

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



Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Kidney Disease

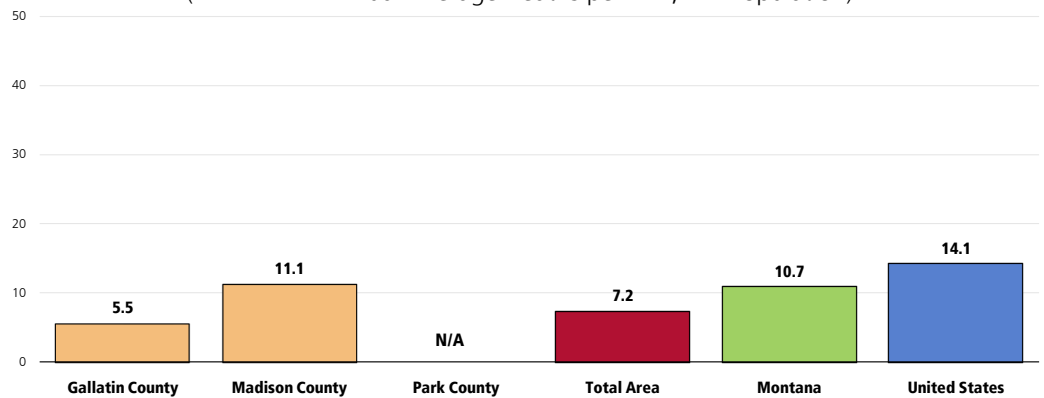
Age-Adjusted Kidney Disease Deaths

Between 1999 and 2007, there was an annual average age-adjusted kidney disease mortality rate of 7.2 deaths per 100,000 population in the Total Area.

- More favorable than the statewide rate.
- More favorable than the national rate.
- More favorable in Gallatin County, less favorable in Madison County (data not available for Park County).

Kidney Disease: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)



Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
• Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Environmental Health

Ambient Air Quality

"Particulate matter," also known as particle pollution or PM, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles.

Exposure to such particles can affect both your lungs and your heart. Small particles of concern include "inhalable coarse particles" (such as those found near roadways and dusty industries), which are larger than 2.5 micrometers and smaller than 10 micrometers in diameter; and "fine particles" (such as those found in smoke and haze), which are 2.5 micrometers in diameter and smaller (measured as PM_{2.5}).

The size of particles is directly linked to their potential for causing health problems. "Fine particles" (2.5 micrometers in diameter and smaller) such as those found in smoke and haze, can be directly emitted from sources such as forest fires, or they can form when gases emitted from power plants, industries and automobiles react in the air.

Numerous scientific studies have linked particle pollution exposure to a variety of problems, including: increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing, for example; decreased lung function; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease.

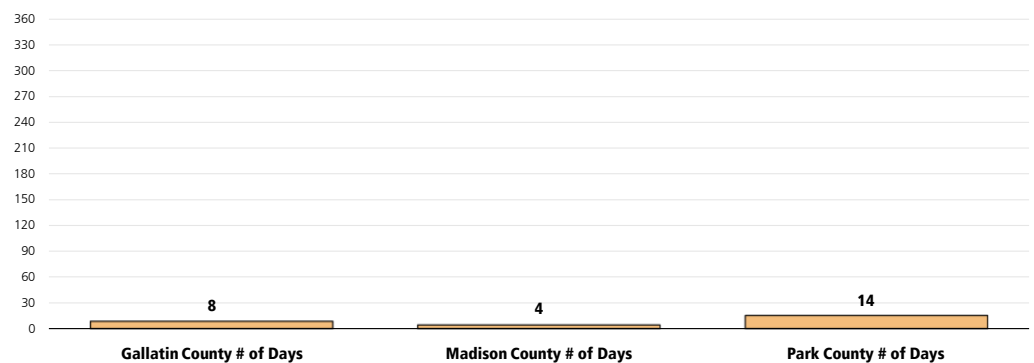
People with heart or lung diseases, children and older adults are the most likely to be affected by particle pollution exposure. However, even if you are healthy, you may experience temporary symptoms from exposure to elevated levels of particle pollution. For more information about asthma, visit www.epa.gov/asthma.

– US Environmental Protection Agency (www.epa.gov)

In 2006, Park County experienced 14 days on which the PM_{2.5} levels were above the national ambient air quality standard (PM_{2.5} refers to particulate matter less than 2.5 micrometers in diameter, referred to as "fine" particles and considered to pose the greatest health risk).

- Gallatin County reported 8 "above-standard" days during 2006, while Madison County experienced 4 days.

Number of Days in 2006 With PM_{2.5} Levels Over the National Ambient Air Quality Standard



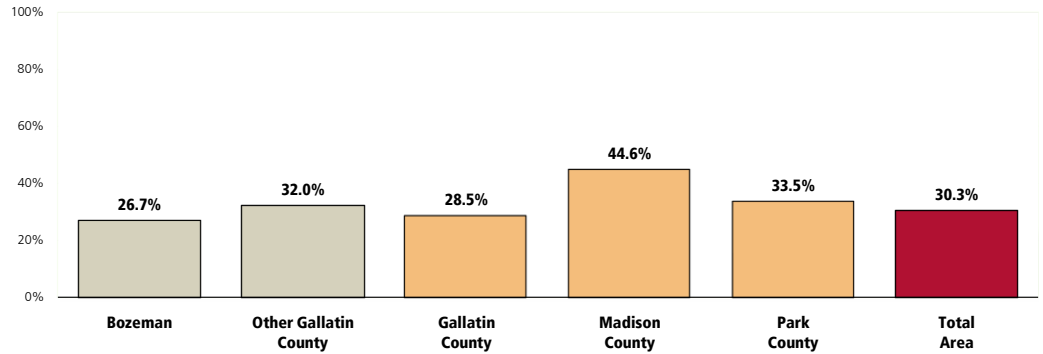
Sources: ● Public Health Air Surveillance Evaluation
Notes: ● Numbers reflect 2006 data.

Wood-Burning Stoves

A total of 30.3% of Total Area residents currently use a wood-burning stove to heat their homes.

- Statistically similar by area within Gallatin County.
- Highest in Madison County, lowest in Gallatin County.

Use a Wood-Burning Stove to Heat the Home



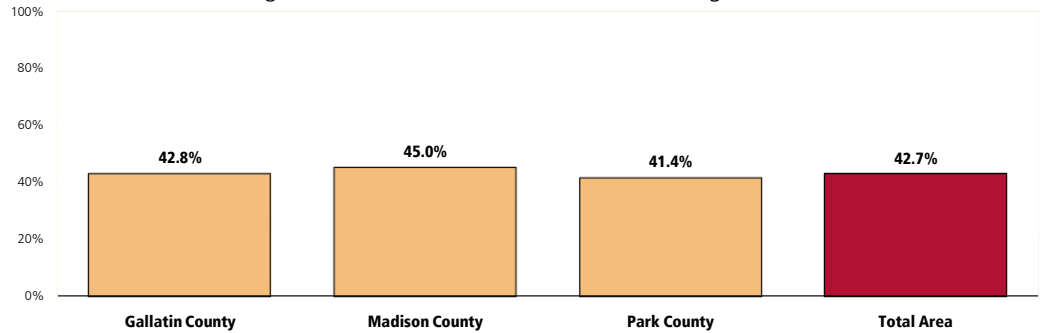
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 60]
Notes: • Asked of all respondents.

Among residents with wood-burning stoves, 42.7% report that their stove has a catalytic convertor (a device which enables the stove to work more cleanly and efficiently).

- Similar by county.

Wood-Burning Stove Has a Catalytic Convertor

(Among Total Area Adults With a Wood-Burning Stove, 2011)



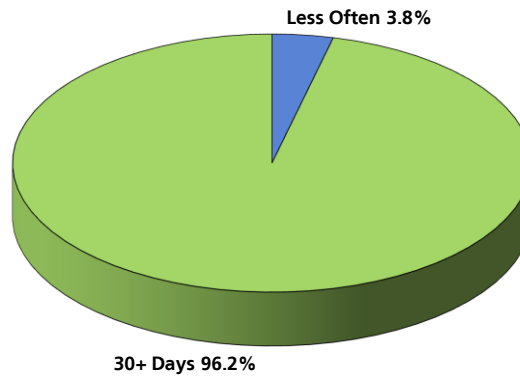
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 61]
Notes: • Asked of all respondents.
• The Bozeman and Other Gallatin County segments were not large enough to be consider reliable.

Among residents with wood-burning stoves, nearly all (96.2%) report using them on 30 or more days per year.

- Just 3.8% report using their wood-burning stove less often.

Frequency of Using Wood-Burning Stove Per Year

(Among Total Area Adults With a Wood-Burning Stove, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 62]
Notes: • Asked of Total Area residents with wood-burning stoves.

Potentially Disabling Conditions

There are more than 100 types of arthritis. Arthritis commonly occurs with other chronic conditions, such as diabetes, heart disease, and obesity. Interventions to treat the pain and reduce the functional limitations from arthritis are important, and may also enable people with these other chronic conditions to be more physically active. Arthritis affects 1 in 5 adults and continues to be the most common cause of disability. It costs more than \$128 billion per year. All of the human and economic costs are projected to increase over time as the population ages. There are interventions that can reduce arthritis pain and functional limitations, but they remain underused. These include: increased physical activity; self-management education; and weight loss among overweight/obese adults.

Osteoporosis is a disease marked by reduced bone strength leading to an increased risk of fractures (broken bones). In the United States, an estimated 5.3 million people age 50 years and older have osteoporosis. Most of these people are women, but about 0.8 million are men. Just over 34 million more people, including 12 million men, have low bone mass, which puts them at increased risk for developing osteoporosis. Half of all women and as many as 1 in 4 men age 50 years and older will have an osteoporosis-related fracture in their lifetime.

Chronic back pain is common, costly, and potentially disabling. About 80% of Americans experience low back pain in their lifetime. It is estimated that each year:

- 15%-20% of the population develop protracted back pain.
- 2-8% have chronic back pain (pain that lasts more than 3 months).
- 3-4% of the population is temporarily disabled due to back pain.
- 1% of the working-age population is disabled completely and permanently as a result of low back pain.

Americans spend at least \$50 billion each year on low back pain. Low back pain is the:

- 2nd leading cause of lost work time (after the common cold).
- 3rd most common reason to undergo a surgical procedure.
- 5th most frequent cause of hospitalization.

Arthritis, osteoporosis, and chronic back conditions all have major effects on quality of life, the ability to work, and basic activities of daily living.

– Healthy People 2020 (www.healthypeople.gov)

Arthritis, Osteoporosis, & Chronic Pain

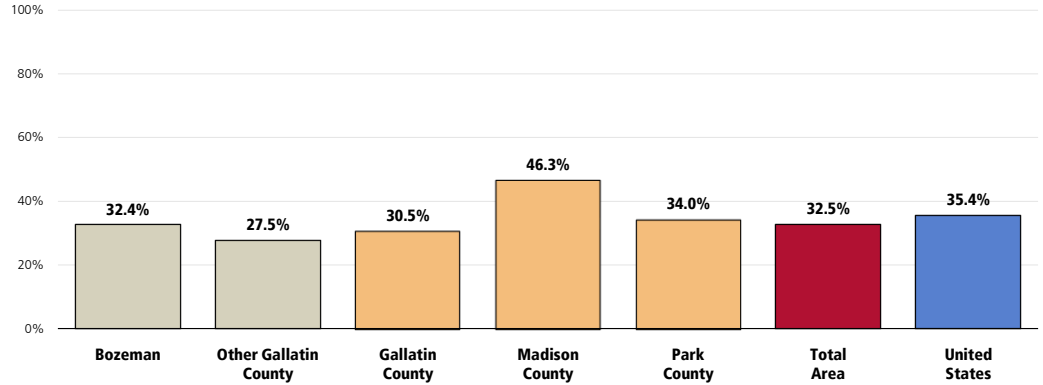
Prevalence of Arthritis/Rheumatism

A total of 32.5% of Total Area adults aged 50+ report suffering from arthritis or rheumatism.

- Similar to that found nationwide.
- Statistically similar within Gallatin County.
- Highest (least favorable) in Madison County.

RELATED ISSUE:
See also *Activity Limitations*
in the **General Health**
Status section of this report.

Prevalence of Arthritis/Rheumatism (50+)



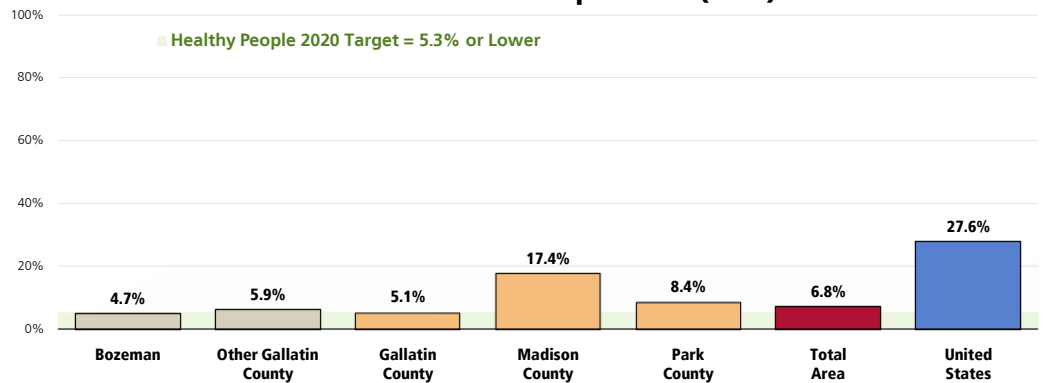
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 170]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents aged 50 and older.

Prevalence of Osteoporosis

A total of 6.8% of survey respondents age 50 and older have osteoporosis.

- Much lower than that found nationwide.
- Similar to the Healthy People 2020 objective of 5.3% or lower.
- Similar within Gallatin County.
- Lowest in Gallatin County; much higher in Madison County.

Prevalence of Osteoporosis (50+)



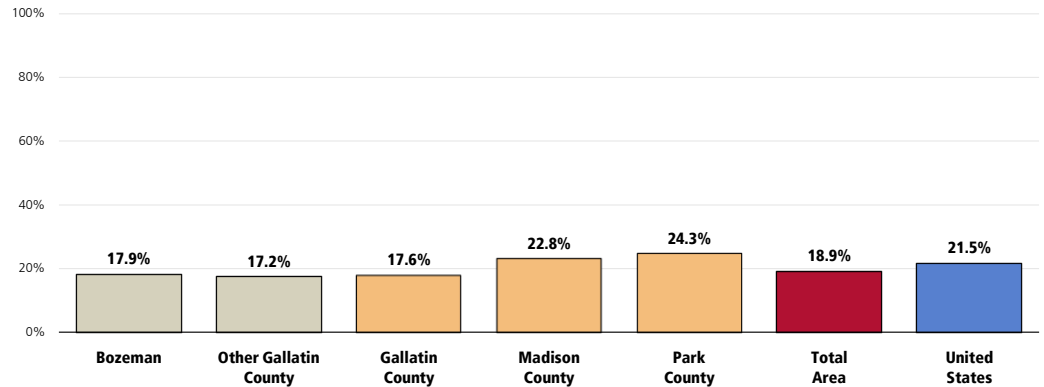
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 171]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective AOCBC-10]
 Notes: • Asked of all respondents aged 50 and older.

Prevalence of Sciatica/Chronic Back Pain

A total of 18.9% of survey respondents suffer from chronic back pain or sciatica.

- Similar to that found nationwide.
- No significant difference within Gallatin County.
- Among the three counties, lowest (most favorable) in Gallatin County.

Prevalence of Sciatica/Chronic Back Pain



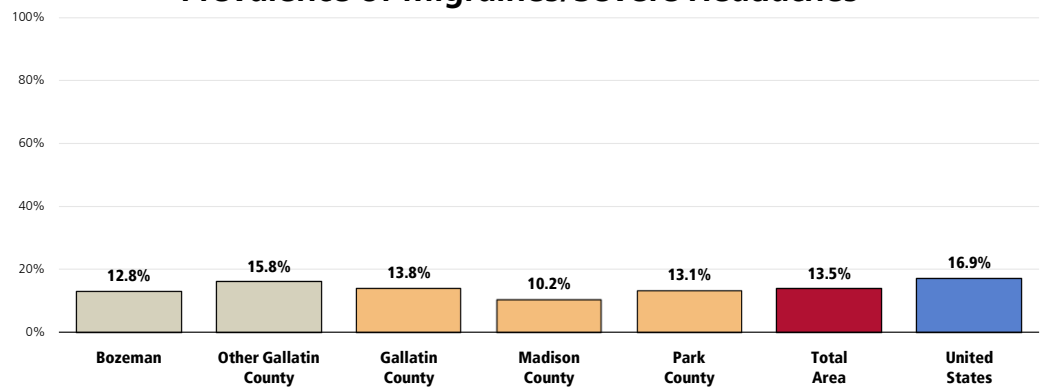
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 29]
• Professional Research Consultants. PRC National Health Survey. 2011.
Notes: • Asked of all respondents.

Prevalence of Migraines/Severe Headaches

A total of 13.5% of survey respondents report suffering from migraines or severe headaches.

- Similar to that found nationwide.
- Similar within Gallatin County.
- Similar by county.

Prevalence of Migraines/Severe Headaches

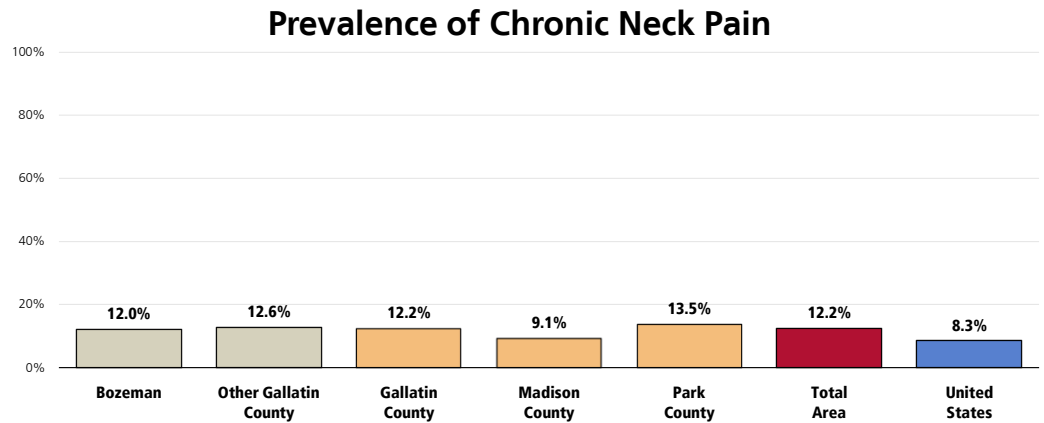


Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 36]
• Professional Research Consultants. PRC National Health Survey. 2011.
Notes: • Asked of all respondents.

Prevalence of Chronic Neck Pain

A total of 12.2% of survey respondents currently suffers from chronic neck pain.

- Less favorable than that found nationwide.
- Similar within Gallatin County.
- No significant difference by county.



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 37]
- Professional Research Consultants. PRC National Health Survey. 2011.

Notes:

- Asked of all respondents.

Vision & Hearing Impairment

Vision Trouble

Vision is an essential part of everyday life, influencing how Americans of all ages learn, communicate, work, play, and interact with the world. Yet millions of Americans live with visual impairment, and many more remain at risk for eye disease and preventable eye injury.

The eyes are an important, but often overlooked, part of overall health. Despite the preventable nature of some vision impairments, many people do not receive recommended screenings and exams. A visit to an eye care professional for a comprehensive dilated eye exam can help to detect common vision problems and eye diseases, including diabetic retinopathy, glaucoma, cataract, and age-related macular degeneration.


These common vision problems often have no early warning signs. If a problem is detected, an eye care professional can prescribe corrective eyewear, medicine, or surgery to minimize vision loss and help a person see his or her best.

Healthy vision can help to ensure a healthy and active lifestyle well into a person's later years. Educating and engaging families, communities, and the nation is critical to ensuring that people have the information, resources, and tools needed for good eye health.

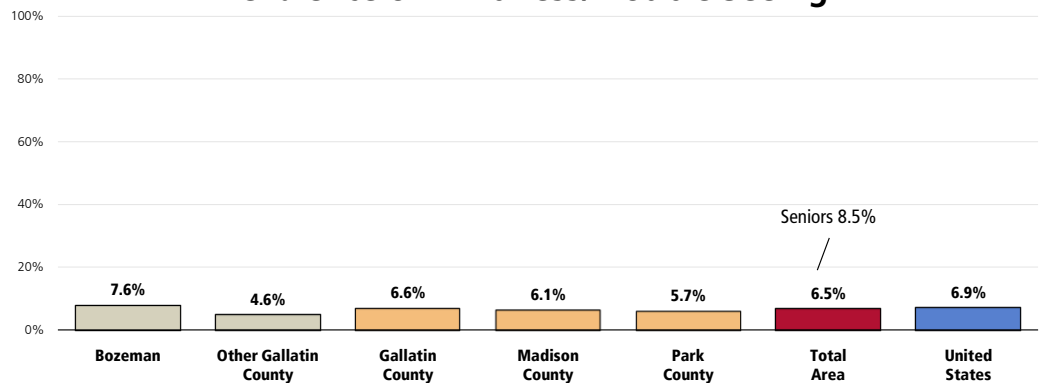
– Healthy People 2020 (www.healthypeople.gov)

RELATED ISSUE:
See also *Vision Care*
in the **Access to Health Services**
section of this report.

A total of 6.5% of Total Area adults are blind, or have trouble seeing even when wearing corrective lenses.

- Similar to that found nationwide.
 - Similar by area in Gallatin County.
 - No significant difference among the three counties.
-  Among Total Area adults age 65 and older, 8.5% have vision trouble.

Prevalence of Blindness/Trouble Seeing



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 26]
• Professional Research Consultants. PRC National Health Survey. 2011.
Notes: • Asked of all respondents.

Hearing Trouble


An impaired ability to communicate with others or maintain good balance can lead many people to feel socially isolated, have unmet health needs, have limited success in school or on the job. Communication and other sensory processes contribute to our overall health and well-being. Protecting these processes is critical, particularly for people whose age, race, ethnicity, gender, occupation, genetic background, or health status places them at increased risk.

Many factors influence the numbers of Americans who are diagnosed and treated for hearing and other sensory or communication disorders, such as social determinants (social and economic standings, age of diagnosis, cost and stigma of wearing a hearing aid, and unhealthy lifestyle choices). In addition, biological causes of hearing loss and other sensory or communication disorders include: genetics; viral or bacterial infections; sensitivity to certain drugs or medications; injury; and aging.

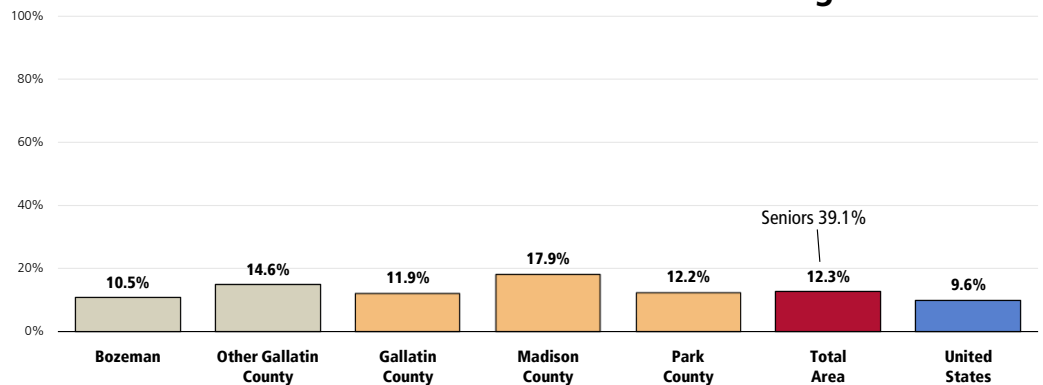
As the nation's population ages and survival rates for medically fragile infants and for people with severe injuries and acquired diseases improve, the prevalence of sensory and communication disorders is expected to rise.

– Healthy People 2020 (www.healthypeople.gov)

In all, 12.3% of Total Area adults report being deaf or having difficulty hearing.

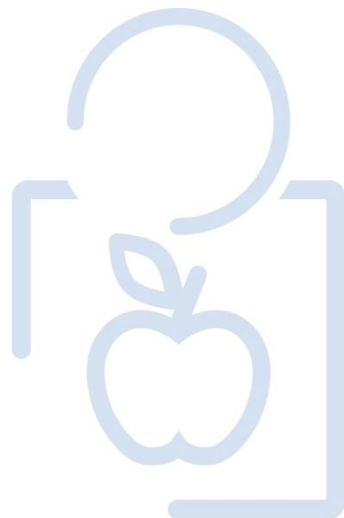
- Similar to that found nationwide.
 - Within Gallatin County, no significant difference.
 - Statistically similar among the three counties.
-  Among Total Area adults age 65 and older, a full 39.1% have partial or complete hearing loss.

Prevalence of Deafness/Trouble Hearing



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 27]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.
Notes: • Asked of all respondents.

INFECTIOUS DISEASE



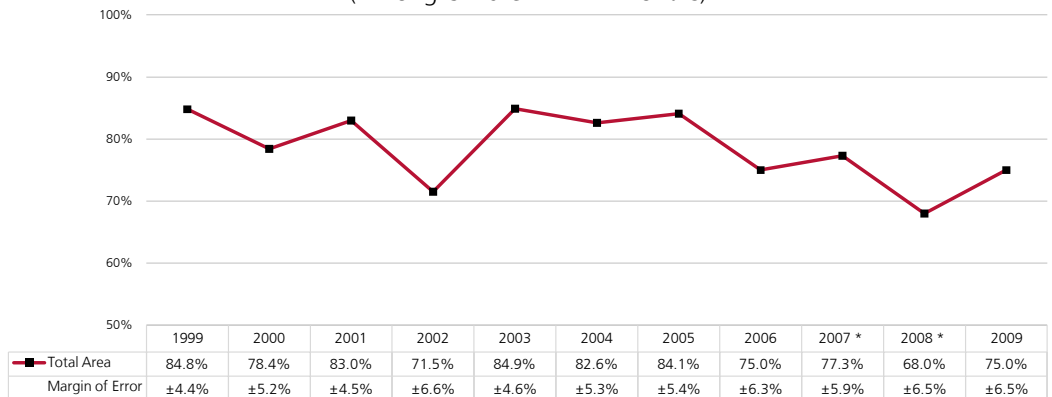
Childhood Vaccinations

Childhood Immunization Coverage

Three-fourths (75.0%) of Total Area children aged 19-35 months were appropriately vaccinated (the 4:3:1 series) in 2009.

- The percentage has trended downward from the 84.8% reported in 1999.

Childhood Immunization — 4:3:1 Series (Among Children 19-35 Months)



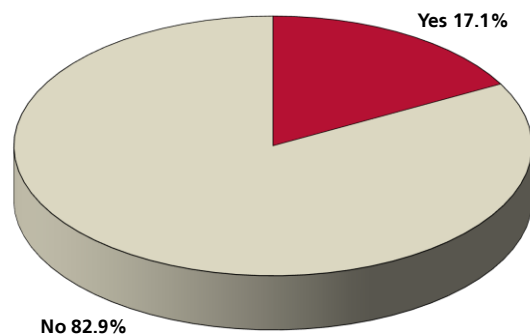
Sources: • Estimated Vaccine Coverage w/ 4:3:1 series, Among Children 19-35 Months. US, National Immunization Survey 1999-2009.
 Notes: • The 4:3:1 series includes four doses of combined diphtheria/tetanus/pertussis vaccine (DTP), three doses of poliovirus vaccine (polio), and one dose of combined measles/mumps/rubella vaccine (MMR).
 * 2007 and 2008 data reflect a 4:3:1:3 immunization series, which also includes three or more doses of the Haemophilus influenzae type b (Hib) vaccine, the hepatitis B vaccine, and the varicella (chickenpox) vaccine.

Vaccination of Area Children

Parents Not Getting a Recommended Vaccine

A total of 17.1% of parents with children under the age of 7 report that they ever refused or decided not to get a recommended vaccine for their child.

Have Ever Refused or Decided Not to Get a Recommended Vaccine for Their Child (Respondents With Children 0-6, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 146]
 Notes: • Asked of all respondents with children aged 6 and under at home.

The 14 surveyed parents who refused or decided against a recommended vaccine, were further asked for the main reason for this, as well as who or what most influenced their decision.

Reasons for not getting a recommended vaccine for their child:

- Questions about the **effectiveness of vaccines** (mentioned by 5 parents);
- Perceptions that they are **not necessary/not required** (3 parents)
- Concerns about **safety or potential side effects** (3 parents); and
- Perceptions that child is **too young to get too many vaccines at once** (2 parents);
- That their **healthcare provider was against vaccination** (1 parent).

This decision was mostly influenced by:

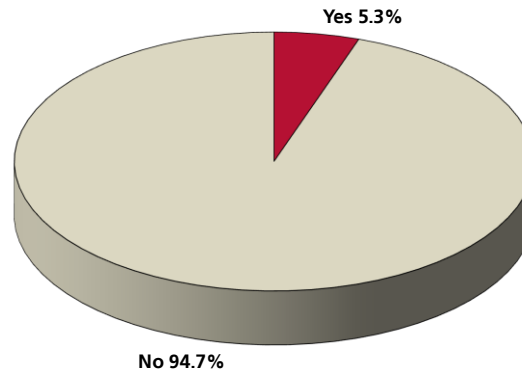
- The **parents themselves** (mentioned by 12 parents);
- What they've heard from **other people** (1 parent); and
- A **doctor or nurse** (1 parent).

Parents Getting Vaccination Only Because Required

Also, 5.3% of Total Area parents of children under the age of 7 report that there has been a vaccine that they did not want for their child, but got it because it was required by law.

Had a Child Vaccinated Only Because of the Law

(Respondents With Children 0-6, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 149]
Notes: • Asked of all respondents with children aged 6 and under at home.

Perceptions of Childhood Vaccines

Importance of Vaccinations

Among Total Area parents of children 6 and under, most (79.9%) consider childhood vaccinations to be a "9" or "10" on a scale of importance (where 10 is "extremely important").

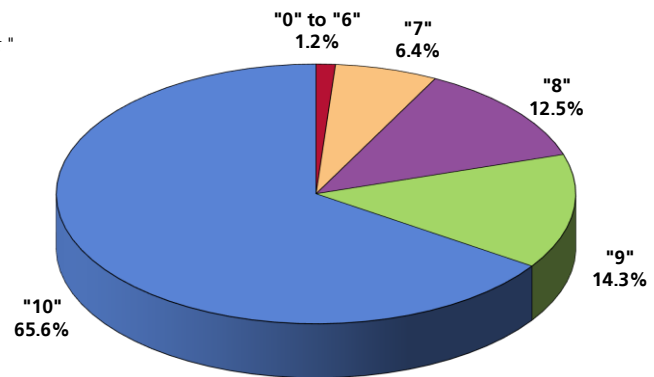
- In contrast, just 1.2% of these parents gave ratings lower than a "7" (specifically, one "5" rating and one "1" rating).
- The median response was "10."

Rating of the Importance of Childhood Vaccinations

(Respondents With Children 0-6, 2011)

Using a scale from "0" to "10," where "0" is "Not At All Important" and "10" is "Extremely Important."

Median Rating = 10



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 145]
Notes: • Asked of all respondents with children aged 6 and under at home.

Vaccination Safety

Parents of children under the age of 7 appear less sure about the safety of childhood vaccinations, with less than one-half rating safety as a "9" or "10" (on a scale where "0" is "extremely dangerous" and 10 is "extremely safe").

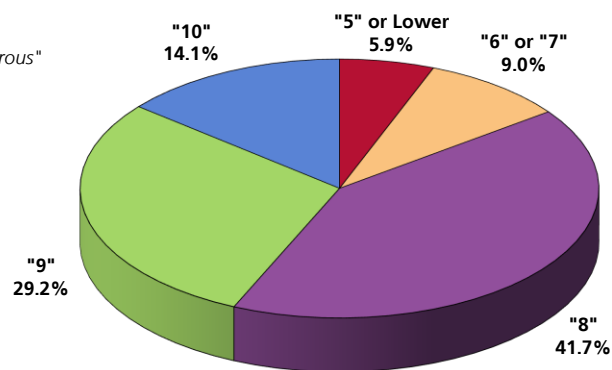
- Note that 5.9% of these parents rate the safety of childhood vaccines as "5" or lower (specifically, seven "5" ratings and one "3" rating).
- The median response was "8."

Perceived Safety of Childhood Vaccinations

(Respondents With Children 0-6, 2011)

Using a scale from "0" to "10," where "0" is "Extremely Dangerous" and "10" is "Extremely Safe."

Median Rating = 8



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 151]
Notes: • Asked of all respondents with children aged 6 and under at home.

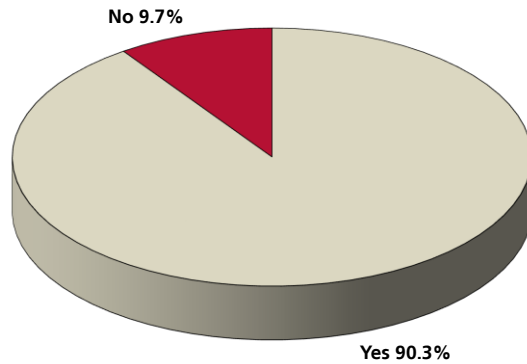
Vaccinations for Newborns

Nine out of 10 parents of children under the age of 7 report that, if they had a new baby, they would want to get all of the recommended vaccines for this newborn.

- However, 9.7% would not.

Would Want All Recommended Vaccinations for a Newborn

(Respondents With Children 0-6, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 150]
Notes: • Asked of all respondents with children aged 6 and under at home.

Vaccine-Preventable Conditions

The increase in life expectancy during the 20th century is largely due to improvements in child survival; this increase is associated with reductions in infectious disease mortality, due largely to immunization. However, infectious diseases remain a major cause of illness, disability, and death. Immunization recommendations in the United States currently target 17 vaccine-preventable diseases across the lifespan.

People in the US continue to get diseases that are vaccine-preventable. Viral hepatitis, influenza, and tuberculosis (TB) remain among the leading causes of illness and death across the nation and account for substantial spending on the related consequences of infection.

The infectious disease public health infrastructure, which carries out disease surveillance at the national, state, and local levels, is an essential tool in the fight against newly emerging and re-emerging infectious diseases. Other important defenses against infectious diseases include:

- Proper use of vaccines
- Antibiotics
- Screening and testing guidelines
- Scientific improvements in the diagnosis of infectious disease-related health concerns

Vaccines are among the most cost-effective clinical preventive services and are a core component of any preventive services package. Childhood immunization programs provide a very high return on investment. For example, for each birth cohort vaccinated with the routine immunization schedule, society:

- Saves 33,000 lives.
- Prevents 14 million cases of disease.
- Reduces direct healthcare costs by \$9.9 billion.
- Saves \$33.4 billion in indirect costs.

– Healthy People 2020 (www.healthypeople.gov)

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

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

Measles, Mumps, Rubella

Among data provided (note that some years were missing for some counties), there have been no reported cases of measles, mumps, or rubella in recent years throughout the Total Area.

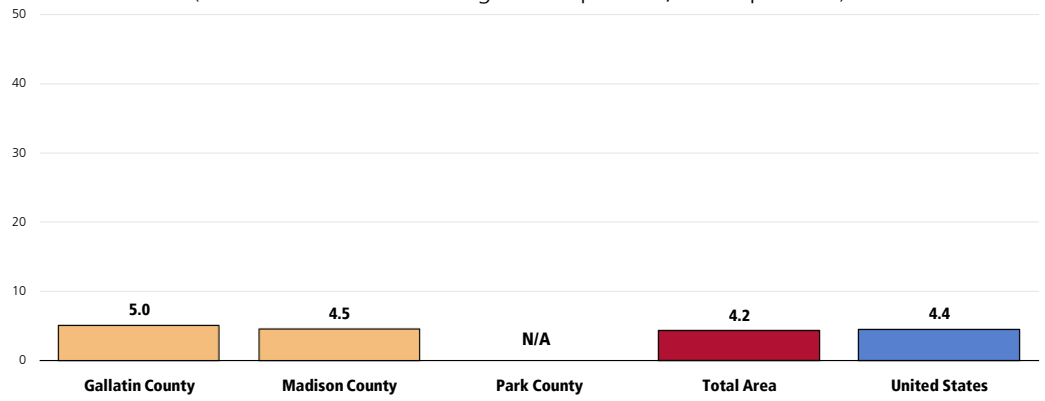
Pertussis

Between 2006 and 2008, the annual average pertussis incidence rate (new cases per year) was 4.2 cases per 100,000 population in the Total Area.

- Similar to the national incidence rate.
- Note that data were not available for Park County.

Pertussis Incidence

(2006-2008 Annual Average Cases per 100,000 Population)

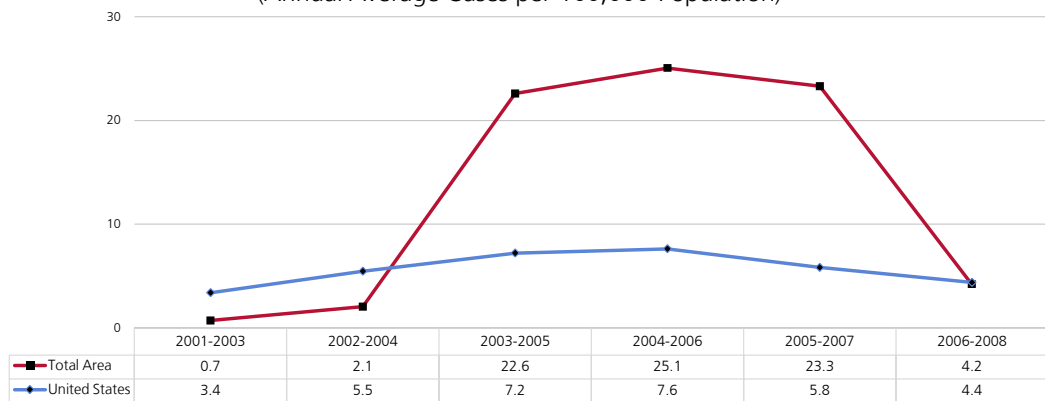


Sources: • Montana Department of Public Health and Human Services Communicable Disease Program
 Notes: • Rates are per 100,000 population.

☒ The following trend data demonstrate a pertussis outbreak in the region in the mid-2000s.

Pertussis Incidence

(Annual Average Cases per 100,000 Population)



Sources: • Montana Department of Public Health and Human Services Communicable Disease Program
 Notes: • Rates are annual average new cases per 100,000 population.

Tuberculosis

Viral hepatitis and tuberculosis (TB) can be prevented, yet healthcare systems often do not make the best use of their available resources to support prevention efforts. Because the US healthcare system focuses on treatment of illnesses, rather than health promotion, patients do not always receive information about prevention and healthy lifestyles. This includes advancing effective and evidence-based viral hepatitis and TB prevention priorities and interventions.

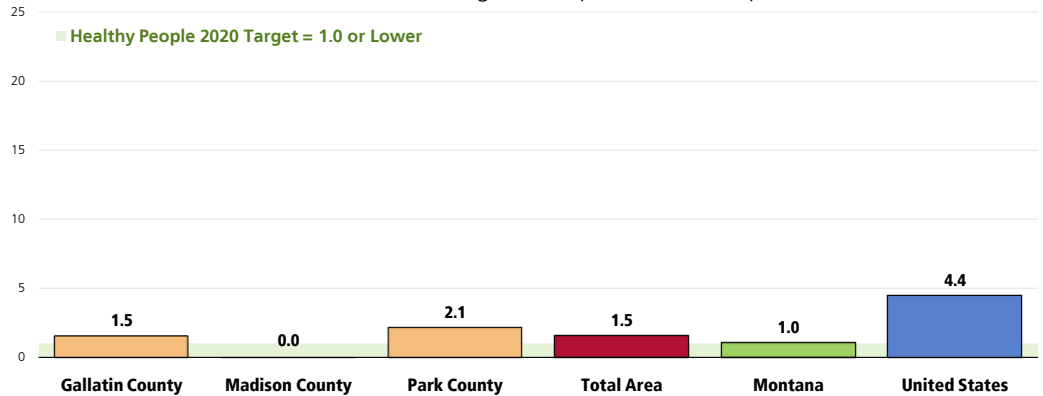
– Healthy People 2020 (www.healthypeople.gov)

Between 2007 and 2009, the annual average tuberculosis incidence rate (new cases per year) was 1.5 cases per 100,000 population in the Total Area.

- Just above the Montana incidence rate; well below the national rate.
- Fails to satisfy the Healthy People 2020 target (1.0 or lower).
- Higher in Park County.

Tuberculosis Incidence

(2007-2009 Annual Average Cases per 100,000 Population)

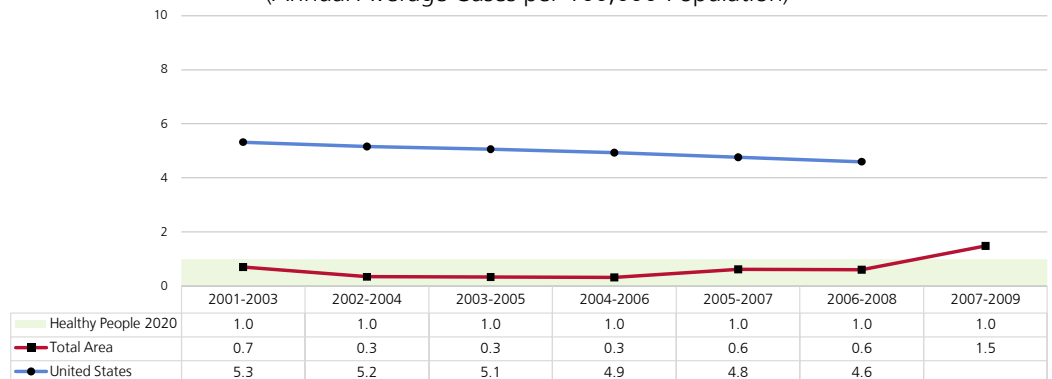


Sources: • Montana Department of Public Health and Human Services Communicable Disease Program
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective IID-29]
 Notes: • Rates are annual average new cases per 100,000 population.

☒ Tuberculosis incidence had remained fairly steady until an upsurge in 2009 (the most recent reporting year available).

Tuberculosis Incidence

(Annual Average Cases per 100,000 Population)



Sources: • Montana Department of Public Health and Human Services Communicable Disease Program
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective IID-29]
 Notes: • Rates are annual average new cases per 100,000 population.

The HIV epidemic in the United States continues to be a major public health crisis. An estimated 1.1 million Americans are living with HIV, and 1 in 5 people with HIV do not know they have it. HIV continues to spread, leading to about 56,000 new HIV infections each year.

HIV is a preventable disease, and effective HIV prevention interventions have been proven to reduce HIV transmission. People who get tested for HIV and learn that they are infected can make significant behavior changes to improve their health and reduce the risk of transmitting HIV to their sex or drug-using partners. More than 50% of new HIV infections occur as a result of the 21% of people who have HIV but do not know it.

In the era of increasingly effective treatments for HIV, people with HIV are living longer, healthier, and more productive lives. Deaths from HIV infection have greatly declined in the United States since the 1990s. As the number of people living with HIV grows, it will be more important than ever to increase national HIV prevention and healthcare programs.

There are gender, race, and ethnicity disparities in new HIV infections:

- Nearly 75% of new HIV infections occur in men.
- More than half occur in gay and bisexual men, regardless of race or ethnicity.
- 45% of new HIV infections occur in African Americans, 35% in whites, and 17% in Hispanics.

Improving access to quality healthcare for populations disproportionately affected by HIV, such as persons of color and gay and bisexual men, is a fundamental public health strategy for HIV prevention. People getting care for HIV can receive:

- Antiretroviral therapy
- Screening and treatment for other diseases (such as sexually transmitted infections)
- HIV prevention interventions
- Mental health services
- Other health services

As the number of people living with HIV increases and more people become aware of their HIV status, prevention strategies that are targeted specifically for HIV-infected people are becoming more important. Prevention work with people living with HIV focuses on:

- Linking to and staying in treatment.
- Increasing the availability of ongoing HIV prevention interventions.
- Providing prevention services for their partners.

Public perception in the US about the seriousness of the HIV epidemic has declined in recent years. There is evidence that risky behaviors may be increasing among uninfected people, especially gay and bisexual men. Ongoing media and social campaigns for the general public and HIV prevention interventions for uninfected persons who engage in risky behaviors are critical.

– Healthy People 2020 (www.healthypeople.gov)

HIV Testing

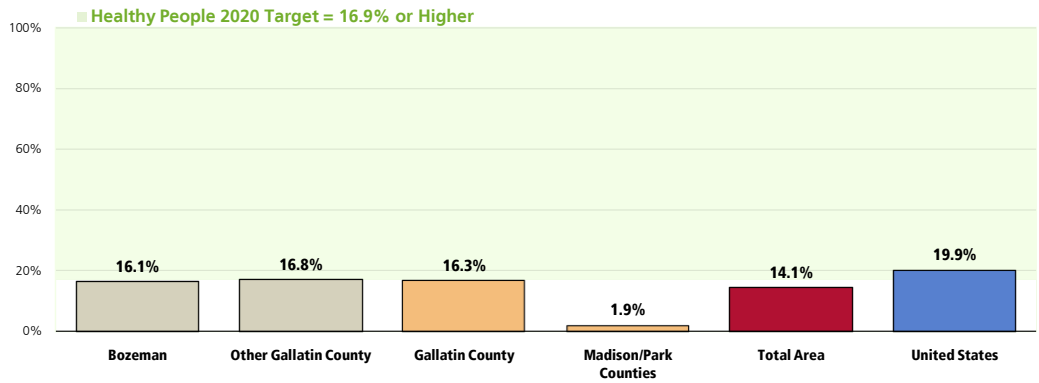
Among Total Area adults under 65, a total of 45.1% report that they have been tested for human immunodeficiency virus (HIV).

- Lower than found nationally.
- In Gallatin County, similar by area.
- No significant difference among the three counties.

Further, among area adults aged 18-44, 14.1% report that they have been tested for human immunodeficiency virus (HIV) within the past year.

- Statistically similar to the proportion found nationwide.
- Close to the Healthy People 2020 target of 16.9% or higher.
- Similar within Gallatin County.
- Much higher in Gallatin County when compared with Madison and Park Counties combined.

Tested for HIV in the Past Year
(Among Respondents Aged 18 to 44, 2011)

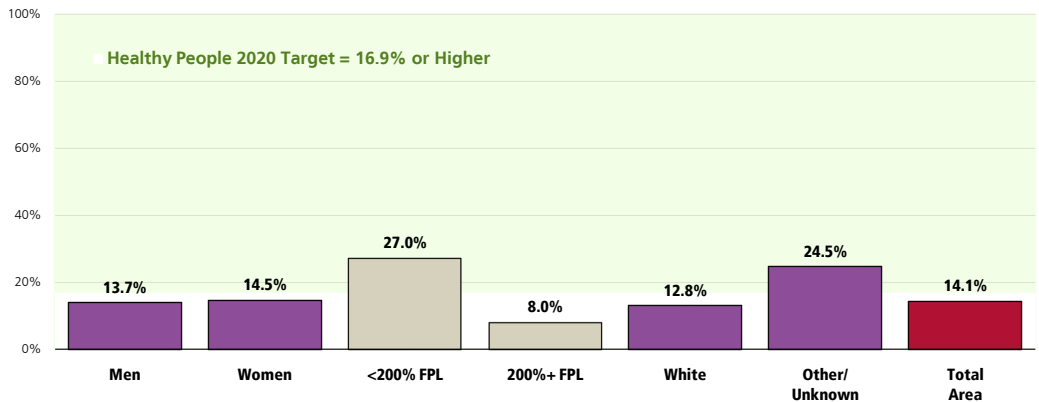


Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 178]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HIV-14.1]
 Notes: • Asked of all respondents aged 18 to 44.
 • Note that the Healthy People 2020 objective is for those aged 15 through 44.
 • The Madison and Park County segments were combined for reliability.

By demographic characteristics, the following population segments (aged 18-44) are more likely to have been tested in the past year:

- Lower-income adults.
- Non-Whites.

Have Been Tested for HIV in the Past Year
(Total Area Adults Aged 18-44, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 178]
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective HIV-14.1]
 Notes: • Asked of all respondents aged 18 through 44.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

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.

The Centers for Disease Control and Prevention (CDC) estimates that there are approximately 19 million new STD infections each year—almost half of them among young people ages 15 to 24. 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. CDC estimates that undiagnosed and untreated STDs cause at least 24,000 women in the United States each year to become infertile. Several factors contribute to the spread of STDs.

Biological Factors. STDs are acquired during unprotected sex with an infected partner. Biological factors that affect the spread of STDs include:

- **Asymptomatic nature of STDs.** The majority of STDs either do not produce any symptoms or signs, or they produce symptoms so mild that they are unnoticed; consequently, many infected persons do not know that they need medical care.
- **Gender disparities.** Women suffer more frequent and more serious STD complications than men do. Among the most serious STD complications are pelvic inflammatory disease, ectopic pregnancy (pregnancy outside of the uterus), infertility, and chronic pelvic pain.
- **Age disparities.** Compared to older adults, sexually active adolescents ages 15 to 19 and young adults ages 20 to 24 are at higher risk for getting STDs.
- **Lag time between infection and complications.** Often, a long interval, sometimes years, occurs between acquiring an STD and recognizing a clinically significant health problem.

Social, Economic and Behavioral Factors. The spread of STDs is directly affected by social, economic, and behavioral factors. Such factors may cause serious obstacles to STD prevention due to their influence on social and sexual networks, access to and provision of care, willingness to seek care, and social norms regarding sex and sexuality. Among certain vulnerable populations, historical experience with segregation and discrimination exacerbates the influence of these factors. Social, economic, and behavioral factors that affect the spread of STDs include:

- **Racial and ethnic disparities.** Certain racial and ethnic groups (mainly African American, Hispanic, and American Indian/Alaska Native populations) have high rates of STDs, compared with rates for whites.
- **Poverty and marginalization.** STDs disproportionately affect disenfranchised people and people in social networks where high-risk sexual behavior is common, and either access to care or health-seeking behavior is compromised.
- **Access to health care.** Access to high-quality health care is essential for early detection, treatment, and behavior-change counseling for STDs. Groups with the highest rates of STDs are often the same groups for whom access to or use of health services is most limited.
- **Substance abuse.** Many studies document the association of substance abuse with STDs. The introduction of new illicit substances into communities often can alter sexual behavior drastically in high-risk sexual networks, leading to the epidemic spread of STDs.
- **Sexuality and secrecy.** Perhaps the most important social factors contributing to the spread of STDs in the United States are the stigma associated with STDs and the general discomfort of discussing intimate aspects of life, especially those related to sex. These social factors separate the United States from industrialized countries with low rates of STDs.
- **Sexual networks.** Sexual networks refer to groups of people who can be considered “linked” by sequential or concurrent sexual partners. A person may have only 1 sex partner, but if that partner is a member of a risky sexual network, then the person is at higher risk for STDs than a similar individual from a nonrisky network.

– Healthy People 2020 (www.healthypeople.gov)

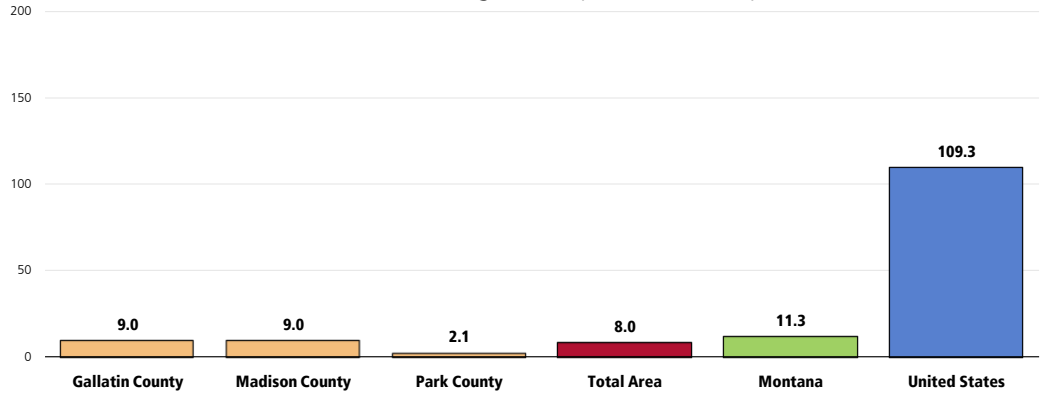
Gonorrhea

Between 2007 and 2009, the annual average gonorrhea incidence rate was 8.0 cases per 100,000 population in the Total Area.

- Lower the Montana incidence rate.
- Notably lower than the national incidence rate.
- Particularly low in Park County.

Gonorrhea Incidence

(2007-2009 Annual Average Cases per 100,000 Population)

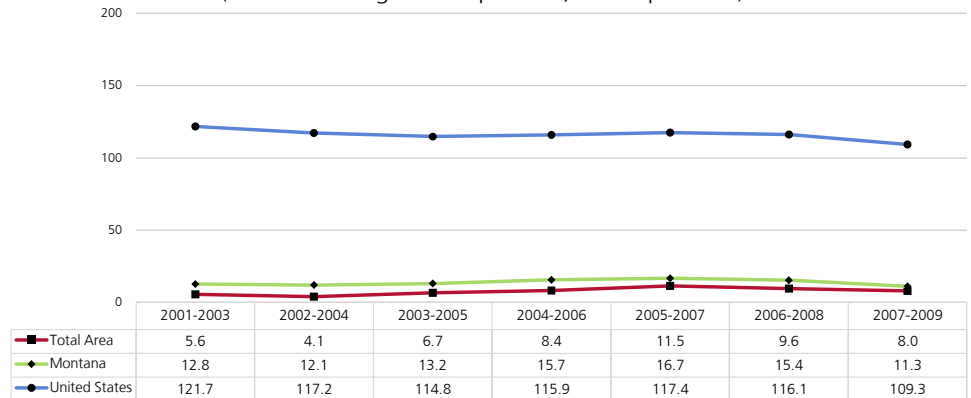


Sources: • Montana Department of Public Health and Human Services Communicable Disease Program
 • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics.
 Notes: • Rates are annual average new cases per 100,000 population. US data is 2006-2008.

- ☒ Gonorrhea rates have increased slightly in recent years across the Total Area, but remain in line with Montana rates and well below national rates.

Gonorrhea Incidence

(Annual Average Cases per 100,000 Population)



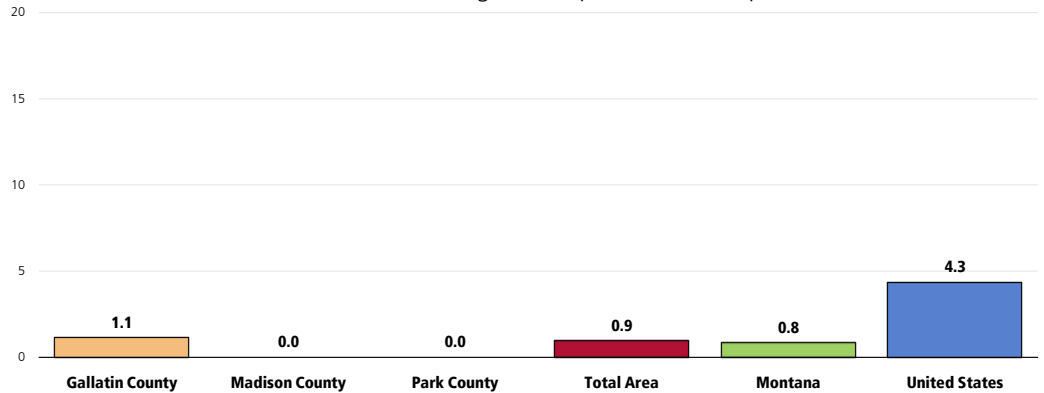
Sources: • Montana Department of Public Health and Human Services Communicable Disease Program
 • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics.
 Notes: • Rates are annual average new cases per 100,000 population.

Syphilis

Between 2007 and 2009, the annual average primary/secondary syphilis incidence rate was 0.9 per 100,000 population in the Total Area.

- Similar to the Montana incidence rate.
- Much lower than the national incidence rate.
- Reported only in Gallatin County during this time.

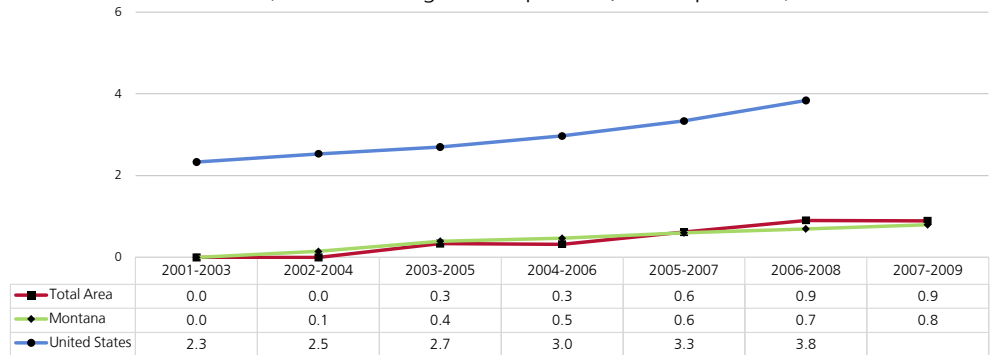
Primary/Secondary Syphilis Incidence
(2007-2009 Annual Average Cases per 100,000 Population)



Sources: • Montana Department of Public Health and Human Services Communicable Disease Program
• Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics.
Notes: • Rates are annual average new cases per 100,000 population. US data is 2006-2008.

☒ Syphilis incidence has increased in the Total Area in recent years, but remains in line with Montana rates and well below national rates.

Primary/Secondary Syphilis Incidence
(Annual Average Cases per 100,000 Population)



Sources: • Montana Department of Public Health and Human Services Communicable Disease Program
• Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics.
Notes: • Rates are annual average new cases per 100,000 population.

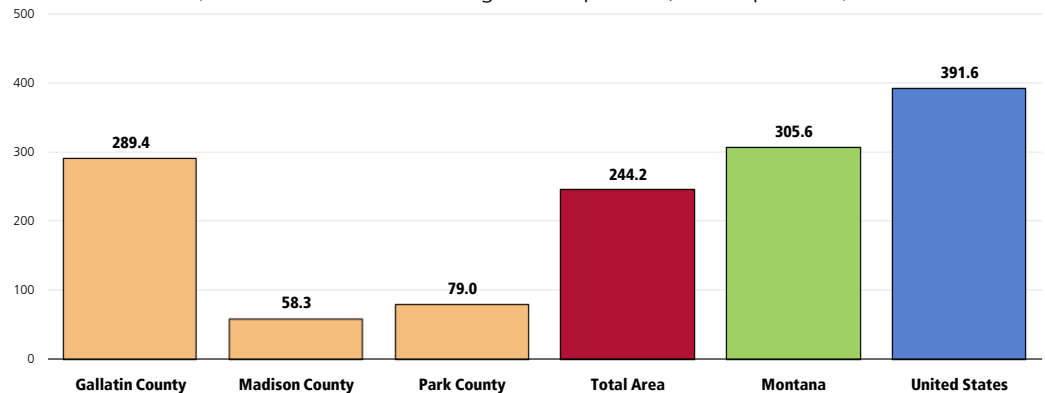
Chlamydia

Between 2007 and 2009, the annual average chlamydia incidence rate was 244.2 cases per 100,000 population in the Total Area.

- More favorable than the Montana incidence rate.
- Much more favorable than the national incidence rate.
- Highest in Gallatin County.

Chlamydia Incidence

(2007-2009 Annual Average Cases per 100,000 Population)

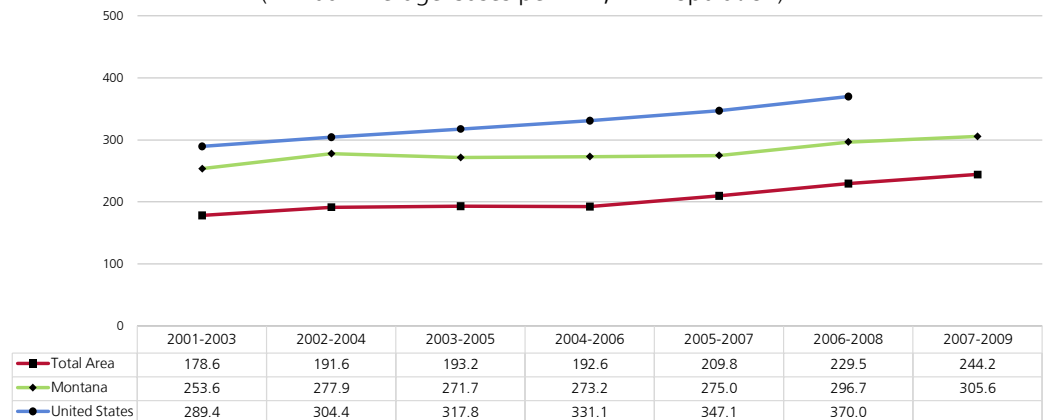


Sources: • Montana Department of Public Health and Human Services Communicable Disease Program
 • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics.
 Notes: • Rates are annual average new cases per 100,000 population. US data is 2006-2008.

☒ Chlamydia incidence increased steadily in recent years across the Total Area, as did the state and national incidence rates.

Chlamydia Incidence

(Annual Average Cases per 100,000 Population)



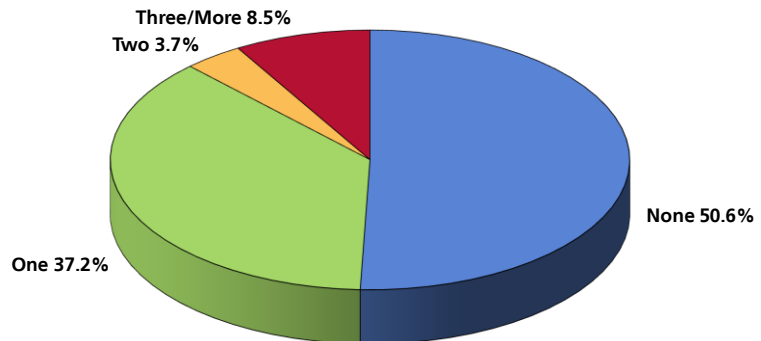
Sources: • Montana Department of Public Health and Human Services Communicable Disease Program
 • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics.
 Notes: • Rates are annual average new cases per 100,000 population.

Safe Sexual Practices

Sexual Partners

Among unmarried Total Area adults under age 65, nearly 9 in 10 cite having one (37.2%) or no (50.6%) sexual partners in the past 12 months.

Number of Sexual Partners in Past 12 Months (Unmarried Respondents Aged 18-64, 2011)

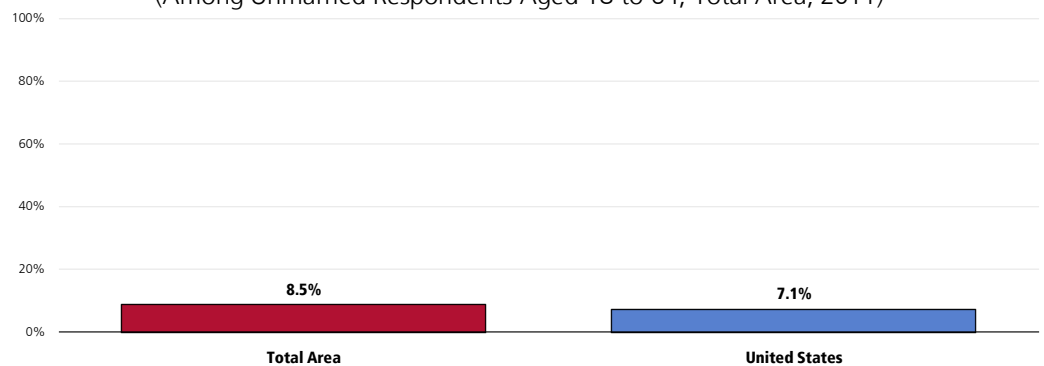


Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 96]
Notes: • Asked of all unmarried respondents under the age of 65.

However, 8.5% report three or more sexual partners in the past year.

- Comparable to what is reported nationally.

Had Three or More Sexual Partners in the Past Year (Among Unmarried Respondents Aged 18 to 64; Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 96]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.
Notes: • Asked of all unmarried respondents under the age of 65.

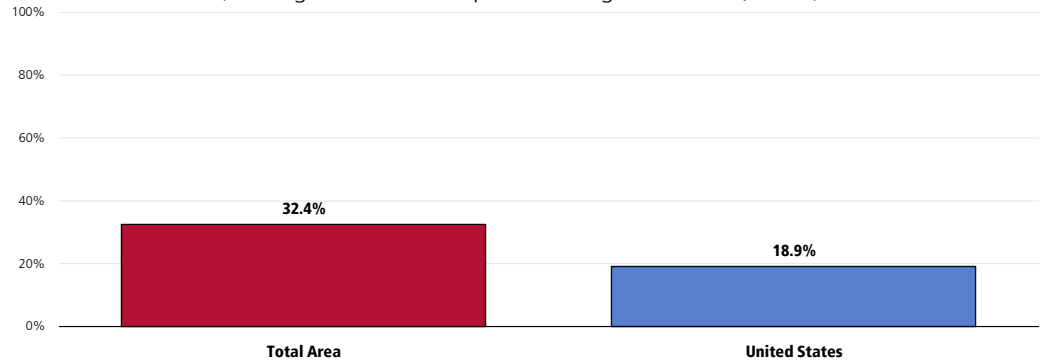
Condom Use

Among unmarried Total Area adults under age 65, 32.4% report using a condom during their most recent sexual intercourse.

- Higher than national findings.

Used Condom During Last Sexual Intercourse

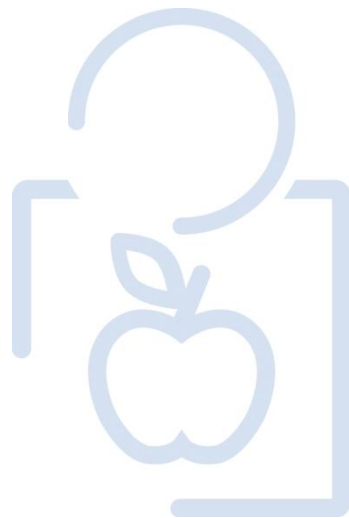
(Among Unmarried Respondents Aged 18 to 64, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 97]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.

Notes: • Asked of all unmarried respondents under the age of 65.

BIRTHS



Prenatal Care

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 healthcare 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 healthcare, 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).

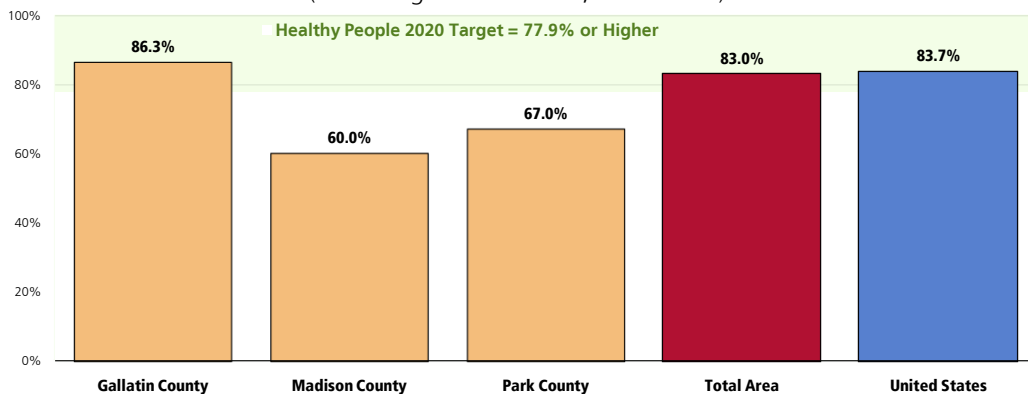
– Healthy People 2020 (www.healthypeople.gov)

Early and continuous prenatal care is the best assurance of infant health.

Between 2004 and 2008, 83.0% of all Total Area births received prenatal care in the first trimester of pregnancy.

- Nearly identical to the US proportion.
- Satisfies the Healthy People 2020 target (77.9% or higher).
- Highest in Gallatin County; much lower in Madison and Park Counties.

Mothers Receiving Prenatal Care in the First Trimester (Percentage of Live Births, 2004-2008)



Sources: ● Montana Department of Public Health and Human Services
● US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective MICH-10.1]
Note: ● Numbers are a percentage of all live births within each population.
● The US percentage is 2004-2006 data.

Birth Outcomes & Risks

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.

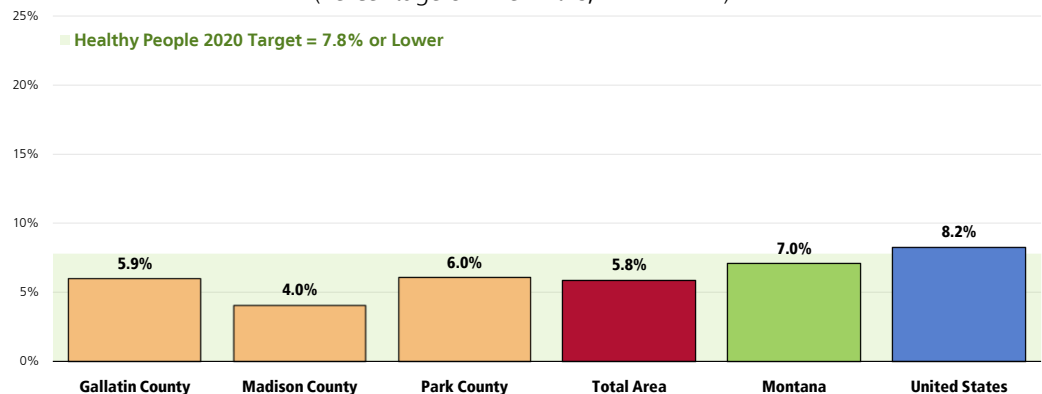
Low-Weight Births

A total of 5.8% of 2004-2008 Total Area births were low-weight.

- More favorable than the Montana proportion.
- More favorable than the national proportion.
- Satisfies the Healthy People 2020 target (7.8% or lower).
- Highest in Park County; lowest in Madison County.

Low-Weight Births

(Percentage of Live Births, 2004-2008)

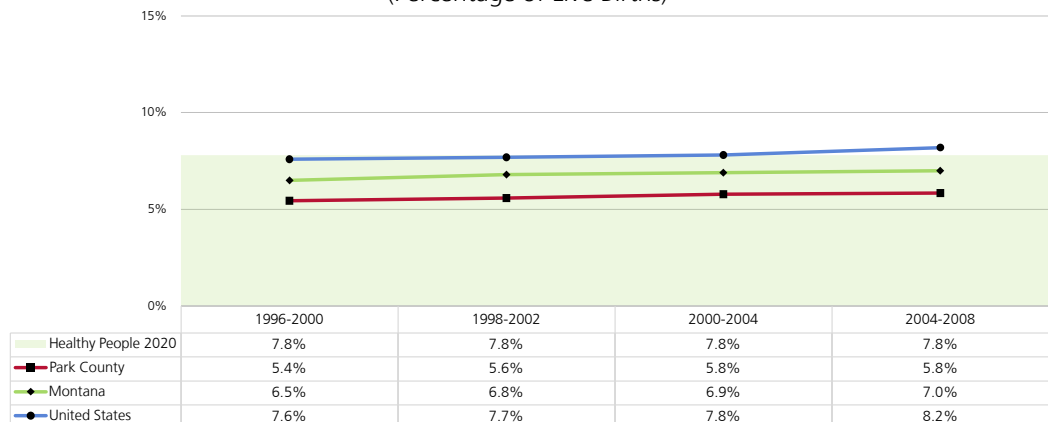


Sources: • Montana Department of Public Health and Human Services
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective MICH-8.1]
 Note: • Numbers are a percentage of all live births within each population.
 • Gallatin County percentage reflects 2004-2007 data.

☒ The proportion of low-weight births has increased slightly in recent years across the Total Area; the proportion increased across Montana and the US during the same time.

Low-Weight Births

(Percentage of Live Births)



Sources: • Montana Department of Public Health and Human Services
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective MICH-8.1]
 Note: • Numbers are a percentage of all live births within each population.

Infant Mortality

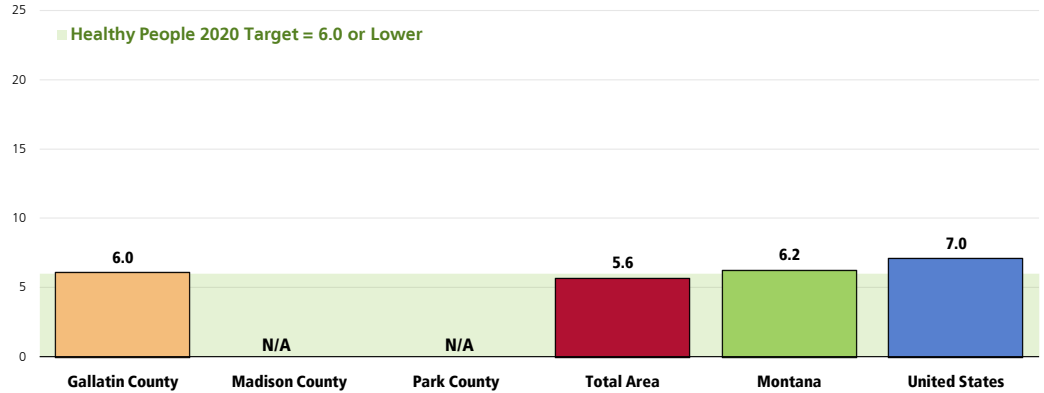
Infant mortality rates reflect deaths of children less than one year old per 1,000 live births.

Between 1999 and 2007, there was an annual average of 5.6 infant deaths per 1,000 live births.

- More favorable than the Montana rate.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target of 6.0 per 1,000 live births.
- Individualized data not available for Madison and Park Counties.

Infant Mortality Rate

(1999-2007 Annual Average Infant Deaths per 1,000 Live Births)



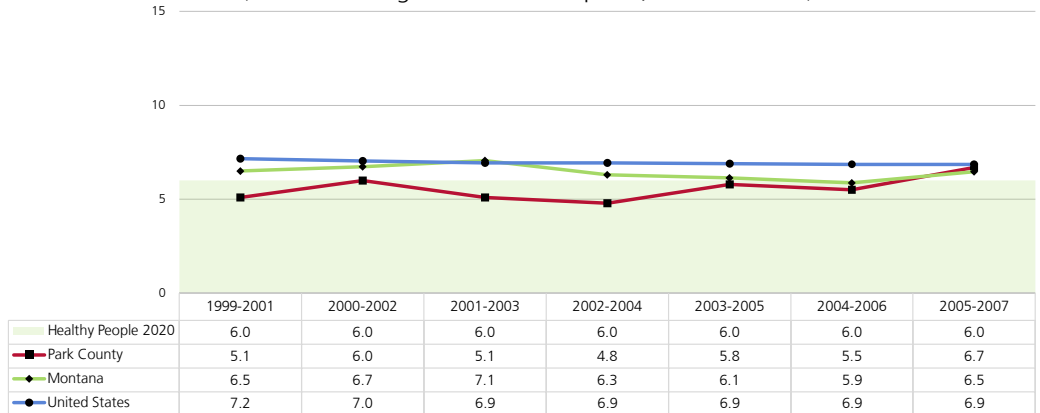
Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective MICH-1.3]

Notes: • Rates represent deaths of children under 1 year old per 1,000 live births.

☒ Infant mortality rates have increased slightly overall across the Total Area; in contrast, state and national rates have trended downward slightly.

Infant Mortality Rate

(Annual Average Infant Deaths per 1,000 Live Births)



Sources: • Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 • 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

Family planning is one of the 10 great public health achievements of the 20th century. The availability of family planning services allows individuals to achieve desired birth spacing and family size and contributes to improved health outcomes for infants, children, and women. Family planning services include contraceptive and broader reproductive health services (patient education and counseling), breast and pelvic examinations, breast and cervical cancer screening, sexually transmitted infection (STI) and HIV prevention education/counseling/testing/referral, and pregnancy diagnosis and counseling. For many women, a family planning clinic is their entry point into the healthcare system and is considered to be their usual source of care. This is especially true for women with incomes below the poverty level, women who are uninsured, Hispanic women, and Black women.

Unintended pregnancies (those reported by women as being mistimed or unwanted) are associated with many negative health and economic outcomes. In 2001, almost one-half of all pregnancies in the US were unintended. For women, negative outcomes associated with unintended pregnancy include:

- Delays in initiating prenatal care
- Reduced likelihood of breastfeeding
- Poor maternal mental health
- Lower mother-child relationship quality
- Increased risk of physical violence during pregnancy

Children born as a result of an unintended pregnancy are more likely to experience poor mental and physical health during childhood and poor educational and behavioral outcomes.

– Healthy People 2020 (www.healthypeople.gov)

Births to Teen Mothers

The negative outcomes associated with unintended pregnancies are compounded for adolescents. Teen mothers:

- Are less likely to graduate from high school or attain a GED by the time they reach age 30.
- Earn an average of approximately \$3,500 less per year, when compared with those who delay childbearing.
- Receive nearly twice as much Federal aid for nearly twice as long.

Similarly, early fatherhood is associated with lower educational attainment and lower income. Children of teen parents are more likely to have lower cognitive attainment and exhibit more behavior problems. Sons of teen mothers are more likely to be incarcerated, and daughters are more likely to become adolescent mothers.

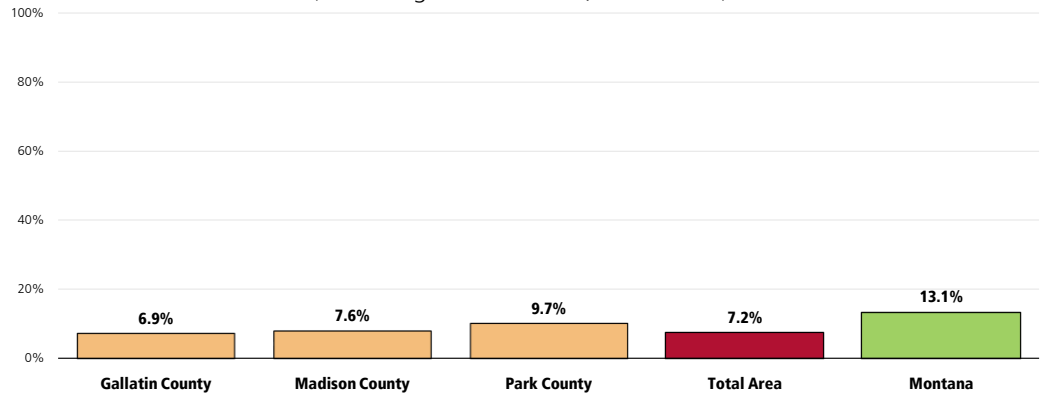
– Healthy People 2020 (www.healthypeople.gov)

A total of 7.2% of 2007-2009 Total Area births were to mothers age 15 to 19.

- Lower than the Montana proportion.
- Lowest in Gallatin County; highest in Park County.

Births to Teen Mothers (15-19)

(Percentage of Live Births, 2007-2009)



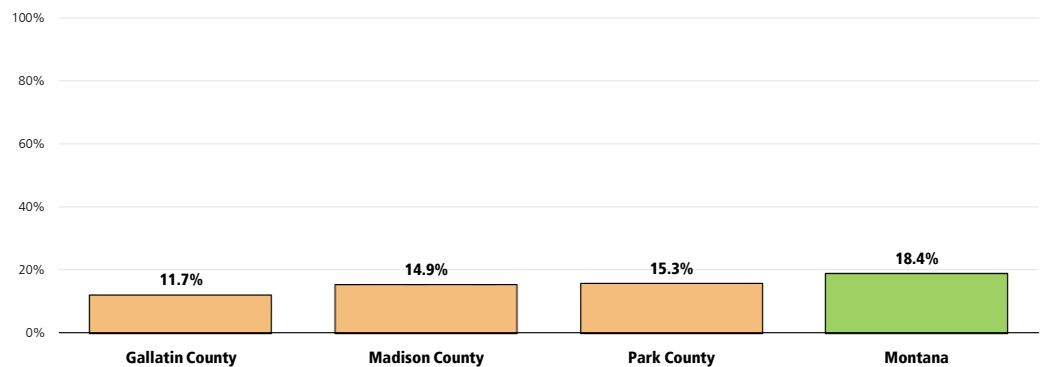
Sources: • Montana Department of Public Health and Human Services
• Centers for Disease Control and Prevention, National Vital Statistics System.
Note: • Numbers are a percentage of all live births within each population.

Children in Poverty

In 2009, an estimated 11%-17% of Total Area children age 5 to 17 lived in households with total incomes below the federal poverty level.

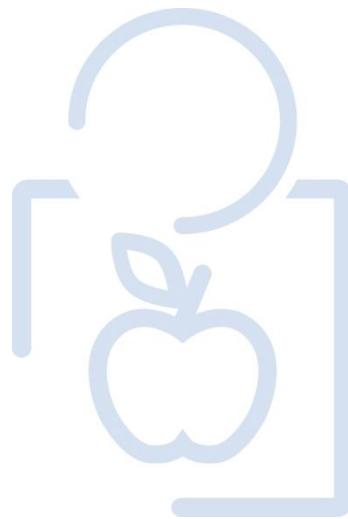
- Lower than estimated statewide (18.4%).
- Lower (11.7%) in Gallatin County; higher in Madison County (14.9%) and Park County (15.3%).

2009 Percentage of Children Age 5-17 Living in Poverty



Sources: • US Census.
Notes: • Percentages represent 2009 data.

MODIFIABLE HEALTH RISKS



Actual Causes Of Death

A 1999 study (an update to a landmark 1993 study), estimated that as many as 40% of premature deaths in the United States are attributed to behavioral factors. This study found that behavior patterns represent the single-most prominent domain of influence over health prospects in the United States. The daily choices we make with respect to diet, physical activity, and sex; the substance abuse and addictions to which we fall prey; our approach to safety; and our coping strategies in confronting stress are all important determinants of health.

The most prominent contributors to mortality in the United States in 2000 were tobacco (an estimated 435,000 deaths), diet and activity patterns (400,000), alcohol (85,000), microbial agents (75,000), toxic agents (55,000), motor vehicles (43,000), firearms (29,000), sexual behavior (20,000), and illicit use of drugs (17,000). Socioeconomic status and access to medical care are also important contributors, but difficult to quantify independent of the other factors cited. Because the studies reviewed used different approaches to derive estimates, the stated numbers should be viewed as first approximations.

These analyses show that smoking remains the leading cause of mortality. However, poor diet and physical inactivity may soon overtake tobacco as the leading cause of death. These findings, along with escalating healthcare costs and aging population, argue persuasively that the need to establish a more preventive orientation in the US healthcare and public health systems has become more urgent.

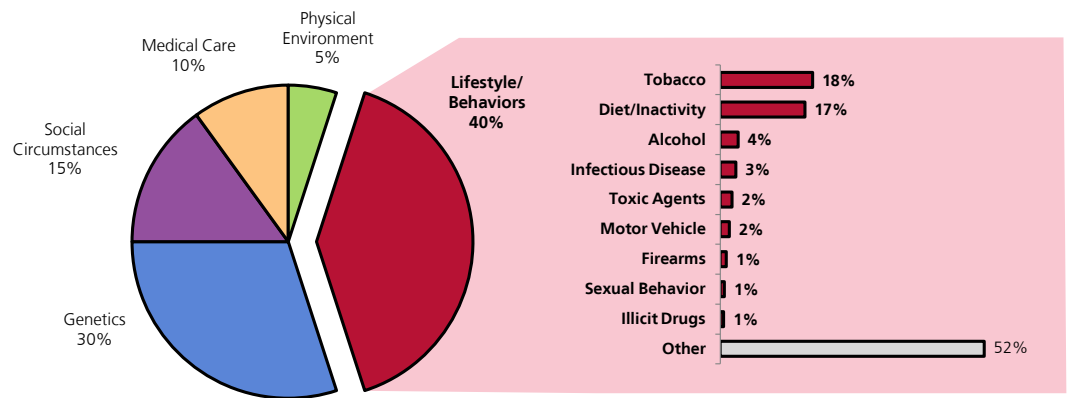
– Ali H. Mokdad, PhD; James S. Marks, MD, MPH; Donna F. Stroup, PhD, MSc; Julie L. Gerberding, MD, MPH. "Actual Causes of Death in the United States." JAMA, 291(2004):1238-1245.

While causes of death are typically described as the diseases or injuries immediately precipitating the end of life, a few important studies have shown that the actual causes of premature death (reflecting underlying risk factors) are often preventable.

Leading Causes of Death	Underlying Risk Factors (Actual Causes of Death)	
Cardiovascular disease	Tobacco use Elevated serum cholesterol High blood pressure	Obesity Diabetes Sedentary lifestyle
Cancer	Tobacco use Improper diet	Alcohol Occupational/environmental exposures
Cerebrovascular disease	High blood pressure Tobacco use	Elevated serum cholesterol
Accidental injuries	Safety belt noncompliance Alcohol/substance abuse Reckless driving	Occupational hazards Stress/fatigue
Chronic lung disease	Tobacco use	Occupational/environmental exposures

Source: National Center for Health Statistics/US Department of Health and Human Services, Health United States: 1987. DHHS Pub. No. (PHS) 88-1232.

Factors Contributing to Premature Deaths in the United States



Sources: "The Case For More Active Policy Attention to Health Promotion"; (McGinnis, Williams-Russo, Knickman) Health Affairs, Vol. 21, No. 2, March/April 2002. "Actual Causes of Death in the United States"; (Ali H. Mokdad, PhD; James S. Marks, MD, MPH; Donna F. Stroup, PhD, MSc; Julie L. Gerberding, MD, MPH) JAMA, 291(2000):1238-1245.

Nutrition

Strong science exists supporting the health benefits of eating a healthful diet and maintaining a healthy body weight. Efforts to change diet and weight should address individual behaviors, as well as the policies and environments that support these behaviors in settings such as schools, worksites, healthcare organizations, and communities.

The goal of promoting healthful diets and healthy weight encompasses increasing household food security and eliminating hunger.

Americans with a healthful diet:

- Consume a variety of nutrient-dense foods within and across the food groups, especially whole grains, fruits, vegetables, low-fat or fat-free milk or milk products, and lean meats and other protein sources.
- Limit the intake of saturated and trans fats, cholesterol, added sugars, sodium (salt), and alcohol.
- Limit caloric intake to meet caloric needs.

Diet and body weight are related to health status. Good nutrition is important to the growth and development of children. A healthful diet also helps Americans reduce their risks for many health conditions, including: overweight and obesity; malnutrition; iron-deficiency anemia; heart disease; high blood pressure; dyslipidemia (poor lipid profiles); type 2 diabetes; osteoporosis; oral disease; constipation; diverticular disease; and some cancers.

Diet reflects the variety of foods and beverages consumed over time and in settings such as worksites, schools, restaurants, and the home. Interventions to support a healthier diet can help ensure that:

- Individuals have the knowledge and skills to make healthier choices.
- Healthier options are available and affordable.

Social Determinants of Diet. Demographic characteristics of those with a more healthful diet vary with the nutrient or food studied. However, most Americans need to improve some aspect of their diet.

Social factors thought to influence diet include:

- Knowledge and attitudes
- Skills
- Social support
- Societal and cultural norms
- Food and agricultural policies
- Food assistance programs
- Economic price systems

Physical Determinants of Diet. Access to and availability of healthier foods can help people follow healthful diets. For example, better access to retail venues that sell healthier options may have a positive impact on a person's diet; these venues may be less available in low-income or rural neighborhoods.

The places where people eat appear to influence their diet. For example, foods eaten away from home often have more calories and are of lower nutritional quality than foods prepared at home.

Marketing also influences people's—particularly children's—food choices.

– Healthy People 2020 (www.healthypeople.gov)

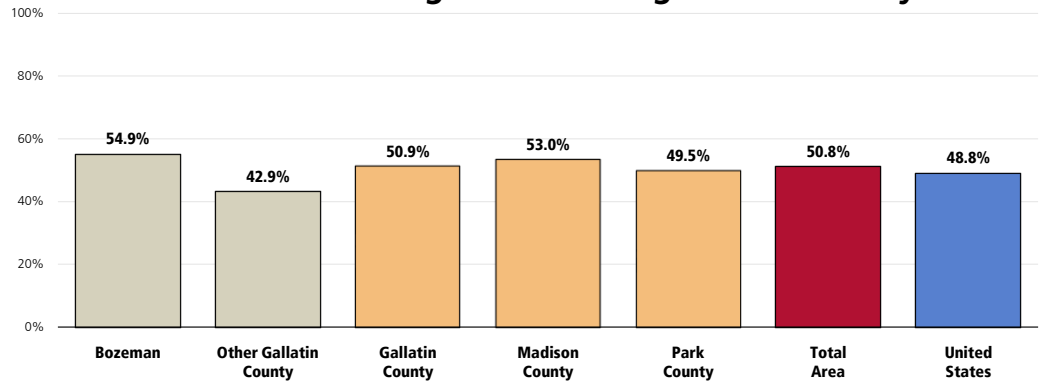
Daily Recommended Servings of Fruits/Vegetables

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.

One-half (50.8%) of Total Area adults reports eating five or more servings of fruits and/or vegetables per day.

- Comparable to national findings.
- Within Gallatin County, more favorable in the city of Bozeman.
- No significant difference among the three counties.

Consume 5+ Servings of Fruits/Vegetables Per Day



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 180]
- Professional Research Consultants. PRC National Health Survey. 2011.

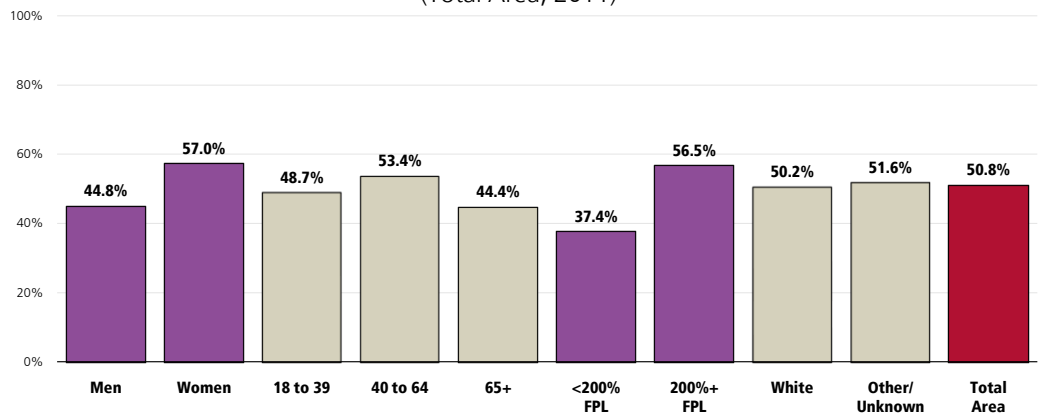
 Notes:

- Asked of all respondents.
- For this issue, respondents were asked to recall their food intake on the previous day.

Men and lower-income residents are less likely to report eating five or more servings of fruits and/or vegetables per day.

Consume 5+ Servings of Fruits/Vegetables Per Day

(Total Area, 2011)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 180]
- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.
- For this issue, respondents were asked to recall their food intake on the previous day.

Fruits

Nearly two in three (65.5%) Total Area adults report eating at least two servings of fruit per day.

- More favorable than the US prevalence.
- Within Gallatin County, no significant difference (not shown).
- Similar findings among the three counties (not shown).

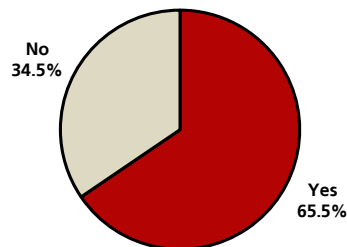
Vegetables

A total of 45.6% of survey respondents report eating three or more servings of vegetables per day, at least one-third of which are dark green or orange vegetables.

- More favorable than national findings.
- Similar within Gallatin County (not shown).
- No significant difference by county (not shown).

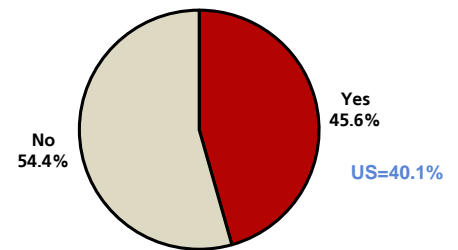
Fruits/Vegetable Consumption

(Total Area, 2011)



Consume 2+ Servings of Fruits/Fruit Juices Per Day

US=60.5%



Consume 3+ Servings of Vegetables Per Day, One-Third of Which Are Dark Green or Orange

Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Items 181-182]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.

Notes: • Asked of all respondents.

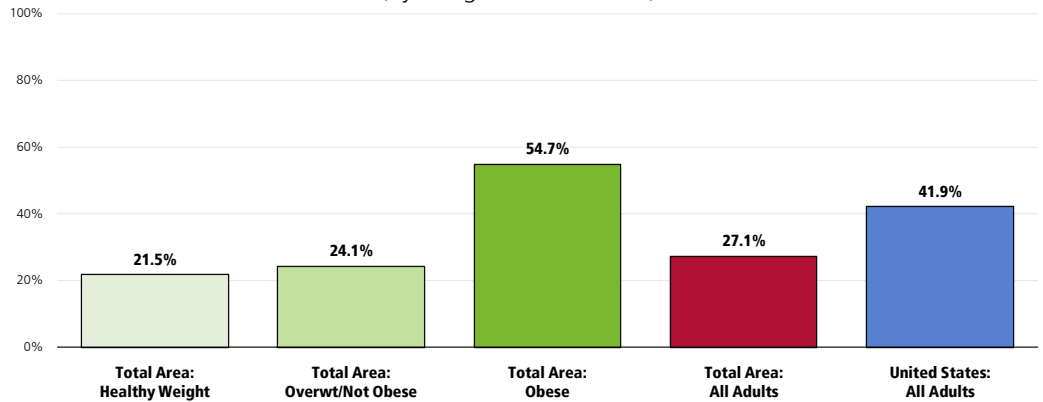
Health Advice About Diet & Nutrition

A total of 27.1% of survey respondents acknowledge that a physician counseled them about diet and nutrition in the past year.

- Lower than national findings.
- Within Gallatin County, higher outside Bozeman.
- No significant difference by county.

👤 Note: Among obese respondents, 54.7% report receiving diet/nutrition advice (meaning that nearly one-half did not).

Have Received Advice About Diet and Nutrition in the Past Year From a Physician, Nurse, or Other Health Professional (By Weight Classification)



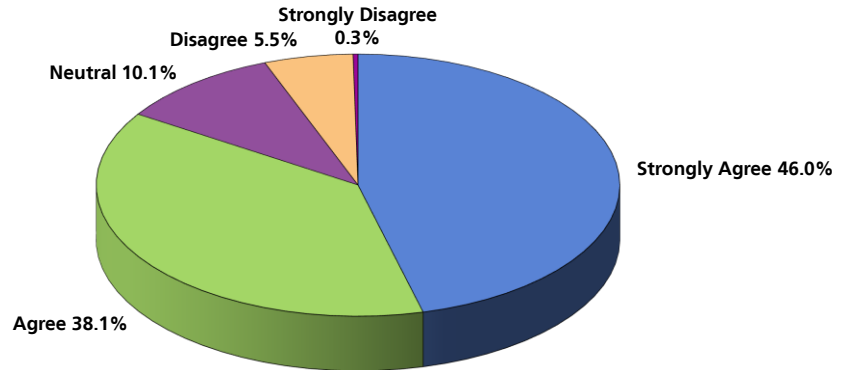
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 18]
• Professional Research Consultants. PRC National Health Survey. 2011.
Notes: • Asked of all respondents.

Access to Healthful Foods

Ease of Purchasing Healthful Foods in the Neighborhood

More than four out of five Total Area residents either “strongly agree” (46.0%) or “agree” (38.1%) that “it is easy to purchase healthy foods in my neighborhood, such as whole grain foods, low-fat foods, and fruits and vegetables.”

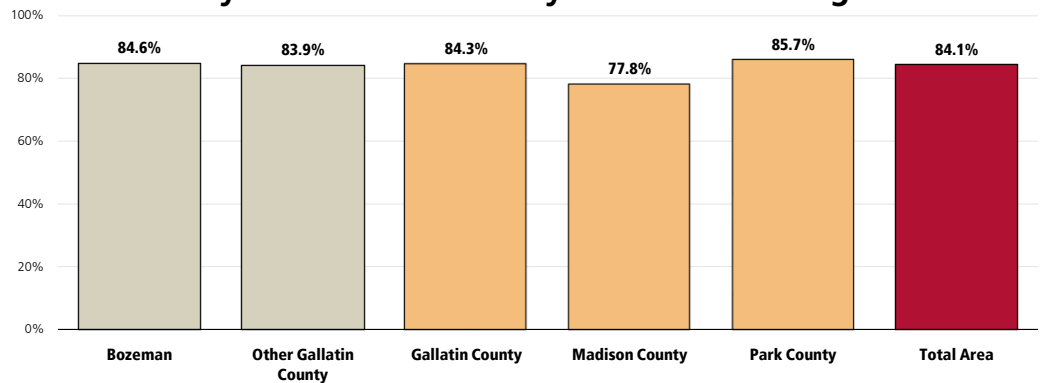
Perceived Ease of Purchasing Healthy Foods in the Neighborhood (Total Area, 2011)



Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 102]
Notes: Asked of all respondents.

- There is no significant difference in response between Bozeman residents and those in other parts of Gallatin County.
- No significant difference in response among the three counties.

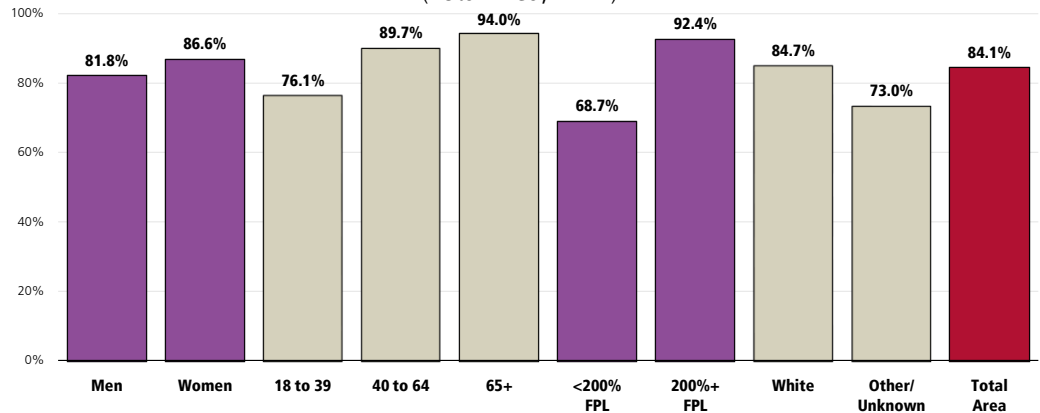
Feel it is Easy to Purchase Healthy Foods in the Neighborhood



Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 102]
Notes: Asked of all respondents.
Percentages represent combined “strongly agree” and “agree” responses.

👤 Adults less likely to feel it is easy to purchase healthy foods in the neighborhood are those under age 40 and lower-income residents.

Feel it is Easy to Purchase Healthy Foods in the Neighborhood (Total Area, 2011)



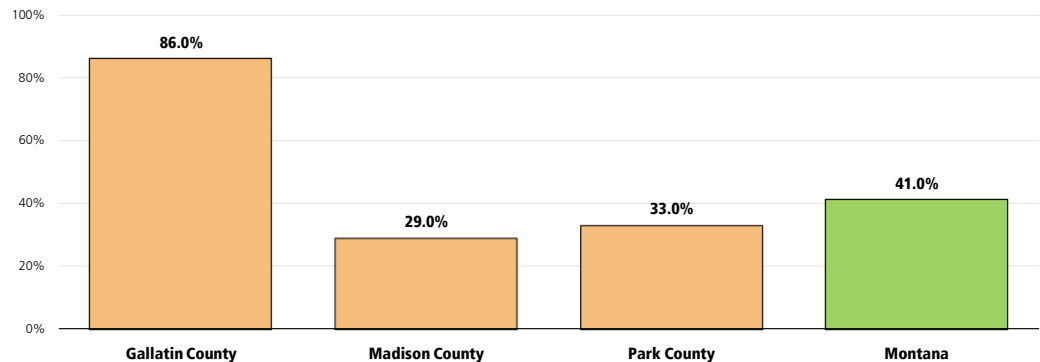
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 102]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.
 • Percentages represent combined "strongly agree" and "agree" responses.

Healthy Food Outlets

Gallatin County has a relatively high coverage of ZIP Codes with healthy food outlets (defined as grocery stores with five or more employees, and/or produce stands or farmers' markets); **Madison and Park Counties do not.**

- In Gallatin County, 86.0% of ZIP Codes have healthy food outlets.
- In Madison County, 29.0% of ZIP Codes have healthy food outlets.
- In Park County, 33.0% have healthy food outlets.
- Statewide, 41.0% of ZIP Codes have healthy food outlets.

2008 Percentage of County ZIP Codes With Healthy Food Outlets



Sources: • County Health Rankings. University of Wisconsin Population Health Institute & Robert Wood Johnson Foundation. www.countyhealthrankings.org.
 Notes: • Percentages represent 2008 data.
 • In this case, the term "healthy food outlets" includes grocery stores with >4 employees, and produce stands or farmers' markets.

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 and older adults, physical activity can lower the risk of: early death; coronary heart disease; stroke; high blood pressure; type 2 diabetes; breast and colon cancer; falls; and depression. Among children and adolescents, physical activity can: improve bone health; improve cardiorespiratory and muscular fitness; decrease levels of body fat; and reduce symptoms of depression. For people who are inactive, even small increases in physical activity are associated with health benefits.

Personal, social, economic, and environmental factors all play a role in physical activity levels among youth, adults, and older adults. Understanding the barriers to and facilitators of physical activity is important to ensure the effectiveness of interventions and other actions to improve levels of physical activity.

Factors **positively** associated with adult physical activity include: postsecondary education; higher income; enjoyment of exercise; expectation of benefits; belief in ability to exercise (self-efficacy); history of activity in adulthood; social support from peers, family, or spouse; access to and satisfaction with facilities; enjoyable scenery; and safe neighborhoods.

Factors **negatively** associated with adult physical activity include: advancing age; low income; lack of time; low motivation; rural residency; perception of great effort needed for exercise; overweight or obesity; perception of poor health; and being disabled. Older adults may have additional factors that keep them from being physically active, including lack of social support, lack of transportation to facilities, fear of injury, and cost of programs.

Among children ages 4 to 12, the following factors have a positive association with physical activity:

- Gender (boys)
- Belief in ability to be active (self-efficacy)
- Parental support

Among adolescents ages 13 to 18, the following factors have a positive association with physical activity:

- Parental education
- Gender (boys)
- Personal goals
- Physical education/school sports
- Belief in ability to be active (self-efficacy)
- Support of friends and family

Environmental influences positively associated with physical activity among children and adolescents include:

- Presence of sidewalks
- Having a destination/walking to a particular place
- Access to public transportation
- Low traffic density
- Access to neighborhood or school play area and/or recreational equipment

People with disabilities may be less likely to participate in physical activity due to physical, emotional, and psychological barriers. Barriers may include the inaccessibility of facilities and the lack of staff trained in working with people with disabilities.

– Healthy People 2020 (www.healthypeople.gov)

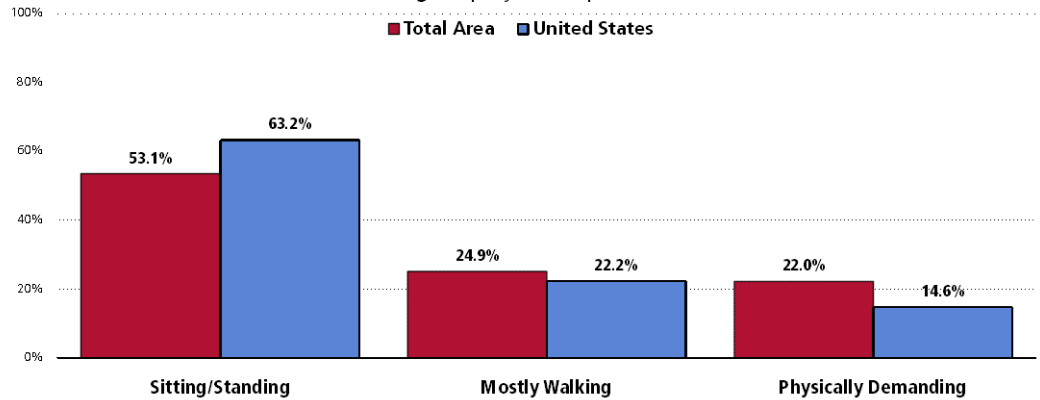
Level of Activity at Work

While the majority of employed respondents reports low levels of physical activity at work, findings are more favorable than they are nationally.

- (53.1% of employed respondents report that their job entails mostly sitting or standing, lower than the US figure).
- 24.9% report that their job entails mostly walking (comparable to that reported nationally).
- 22.0% report that their work is physically demanding (higher than that reported nationally).

Primary Level of Physical Activity At Work

(Among Employed Respondents)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 103]
• Professional Research Consultants. PRC National Health Survey. 2011.

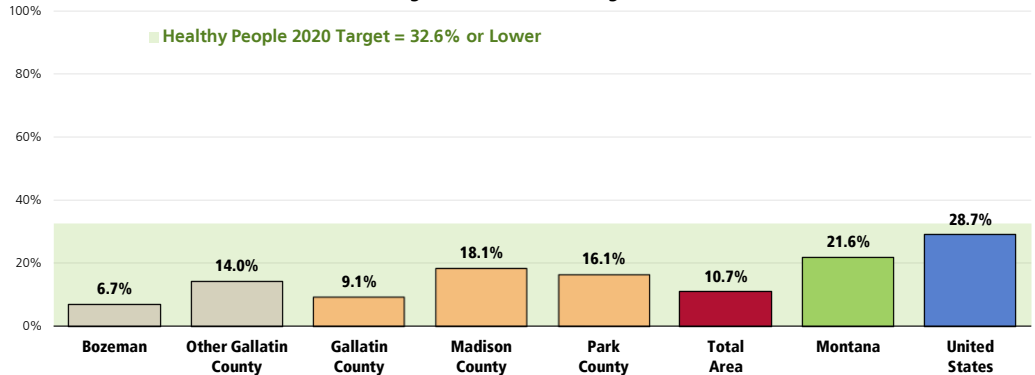
Notes: • Asked of those respondents who are employed for wages.

Leisure-Time Physical Activity

A total of 10.7% of Total Area adults report no leisure-time physical activity in the past month.

- Much lower than statewide findings.
- Much lower than national findings.
- Satisfies the Healthy People 2020 objective (32.6% or lower).
- Within Gallatin County, twice as high outside Bozeman.
- By county, lowest in Gallatin County and highest in Madison County.

No Leisure-Time Physical Activity in the Past Month



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 104]
- Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.
- Professional Research Consultants. PRC National Health Survey. 2011.
- US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective PA-1]

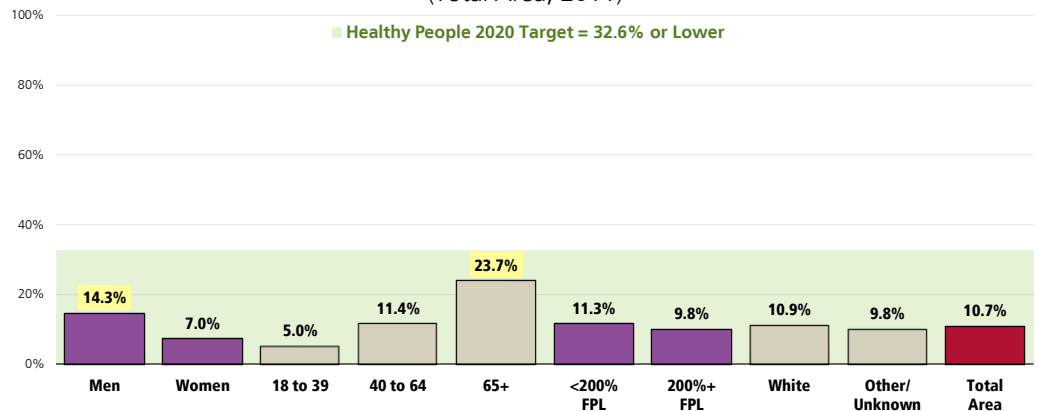
 Notes:

- Asked of all respondents.

Lack of leisure-time physical activity in the area is higher among:

- Men.
- Adults aged 65 and older.

No Leisure-Time Physical Activity in the Past Month (Total Area, 2011)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 104]
- US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective PA-1]

 Notes:

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Activity Levels

Adults (age 18–64) should do 2 hours and 30 minutes a week of moderate-intensity, or 1 hour and 15 minutes (75 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity. Aerobic activity should be performed in episodes of at least 10 minutes, preferably spread throughout the week.

Additional health benefits are provided by increasing to 5 hours (300 minutes) a week of moderate-intensity aerobic physical activity, or 2 hours and 30 minutes a week of vigorous-intensity physical activity, or an equivalent combination of both.

Older adults (age 65 and older) should follow the adult guidelines. If this is not possible due to limiting chronic conditions, older adults should be as physically active as their abilities allow. They should avoid inactivity. Older adults should do exercises that maintain or improve balance if they are at risk of falling.

For all individuals, some activity is better than none. Physical activity is safe for almost everyone, and the health benefits of physical activity far outweigh the risks.

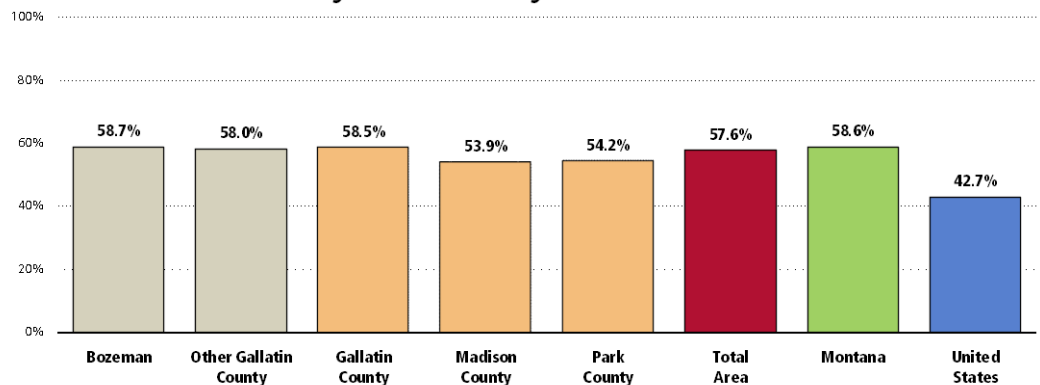
– 2008 Physical Activity Guidelines for Americans, U.S. Department of Health and Human Services. www.health.gov/PAGuidelines

Recommended Levels of Physical Activity

A total of 57.6% of Total Area adults participate in regular, sustained moderate or vigorous physical activity (meeting physical activity recommendations).

- Similar to statewide findings.
- More favorable than national findings.
- Within Gallatin County, no significant difference.
- Statistically similar when viewed by county.

Meets Physical Activity Recommendations



Sources:


- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 183]
- Professional Research Consultants. PRC National Health Survey. 2011.
- Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2009 Montana Data.

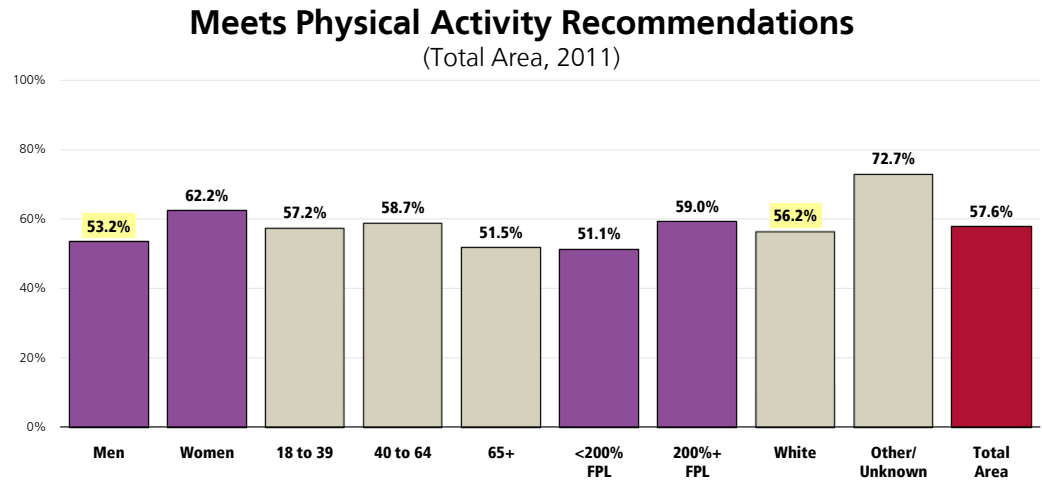
Notes:

- Asked of all respondents.
- In this case the term "meets physical activity recommendations" refers to participation in moderate physical activity (exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate) at least 5 times a week for 30 minutes at a time, and/or vigorous physical activity (activities that cause heavy sweating or large increases in breathing or heart rate) at least 3 times a week for 20 minutes at a time.

Those less likely to meet physical activity requirements include:

 Men.

 White respondents.



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 183]

Notes:

- Asked of all respondents.
- FPL = Federal Poverty Level based on household income and number of household members [US Department of Health & Human Services poverty guidelines].
- In this case the term "meets physical activity recommendations" refers to participation in moderate physical activity (exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate) at least 5 times a week for 30 minutes at a time, and/or vigorous physical activity (activities that cause heavy sweating or large increases in breathing or heart rate) at least 3 times a week for 20 minutes at a time.

Moderate & Vigorous Physical Activity

The individual indicators of moderate physical activity, vigorous physical activity, and strengthening activities are shown here.

In the past month:

A total of 38.4% of adults participated in moderate physical activity (5 times a week, 30 minutes at a time).

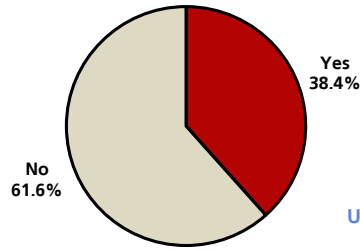
- More favorable than the national level.
- No significant difference within Gallatin County.
- Most favorable in Gallatin County; least favorable in Park County.

A total of 42.9% participated in vigorous physical activity (3 times a week, 20 minutes at a time).

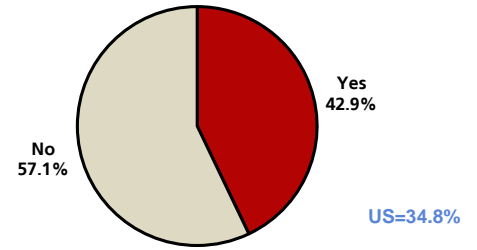
- More favorable than the prevalence reported statewide.
- More favorable than the national norm.
- Within Gallatin County, no significant difference.
- Similar findings among the three counties.

Moderate & Vigorous Physical Activity

(Total Area, 2011)



Moderate Physical Activity



Vigorous Physical Activity

Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Items 185-186]
 • Professional Research Consultants. PRC National Health Survey. 2011.

Notes: • Asked of all respondents.
 • Moderate Physical Activity: Takes part in exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate at least 5 times per week for at least 30 minutes per time.
 • Vigorous Physical Activity: Takes part in activities that cause heavy sweating or large increases in breathing or heart rate at least 3 times per week for at least 20 minutes per time.

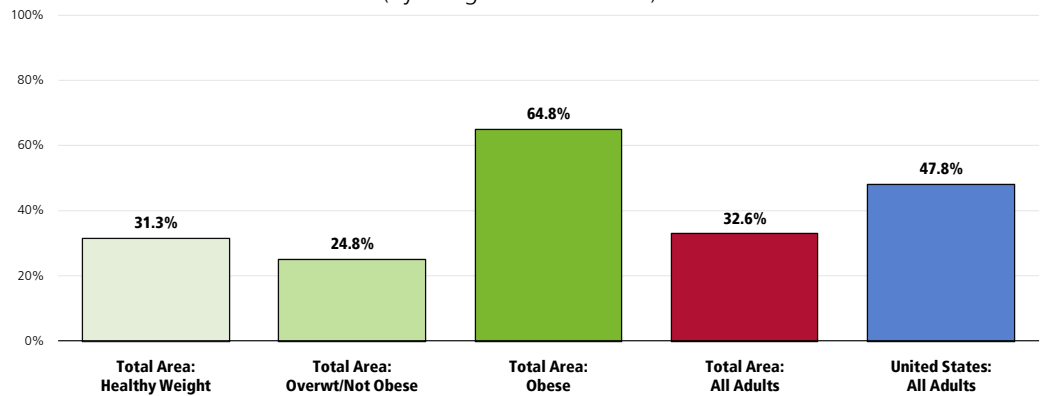
Health Advice About Physical Activity & Exercise

A total of 32.6% of Total Area adults reports that their physician has asked about or given advice to them about physical activity in the past year.

- Less favorable than the national average.

Note: 64.8% of obese Total Area respondents say that they have talked with their doctor about physical activity/exercise in the past year.

Have Received Advice About Exercise in the Past Year From a Physician, Nurse, or Other Health Professional (By Weight Classification)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 19]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents.

Physical Activity & the Built Environment

Safe Places to Walk, Run or Bike

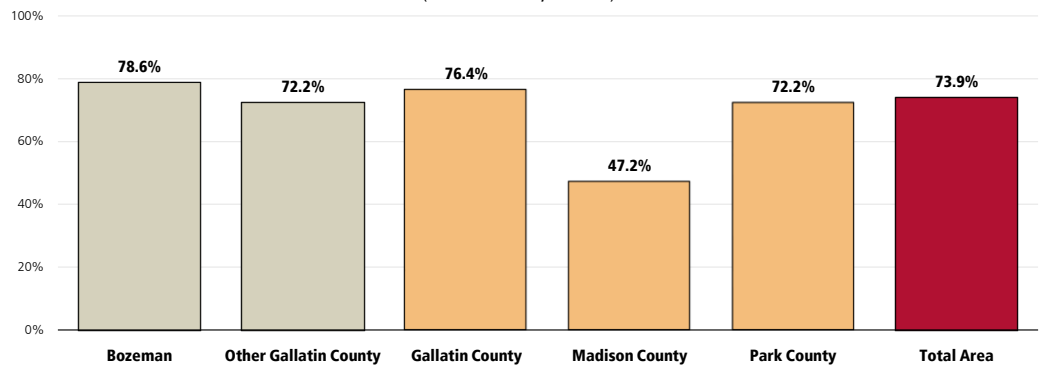
For the following questions, "neighborhood" is defined as the area within one-half mile or a ten-minute walk from respondents' homes.

Nearly three-fourths of survey respondents (73.9%) report that their neighborhood has sidewalks, shoulders of the road, trails or parks where they can safely walk, run or bike.

- Similar between Bozeman and other parts of Gallatin County.
- Particularly low in Madison County.

Neighborhood Has Sidewalks, Road Shoulders, Trails or Parks for Safe Walking, Running and Biking

(Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 107]
Notes: • Asked of all respondents.

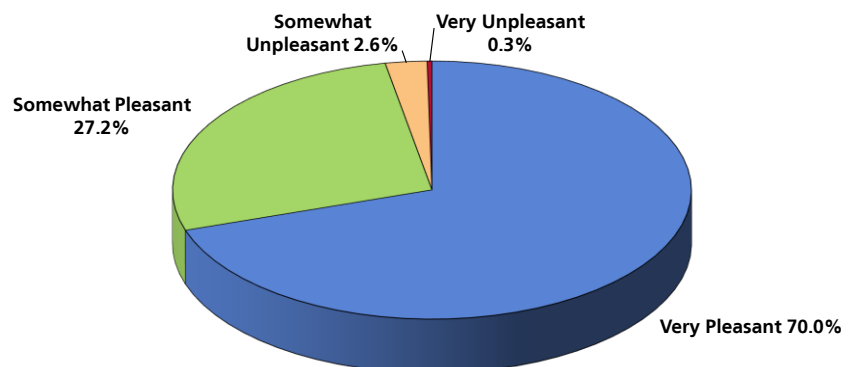
Pleasant Surroundings

"How pleasant are the sidewalks, shoulders of the road, trails, or parks in your neighborhood? For example, are there trees, is there proper lighting, and is it clean?"

The vast majority of Total Area residents feel that the sidewalks, shoulders of the road, trails, or parks in your neighborhood are either "very pleasant" (70.0%) or "somewhat pleasant" (27.2%).

Pleasantness of Neighborhood Places for Walking, Running or Biking

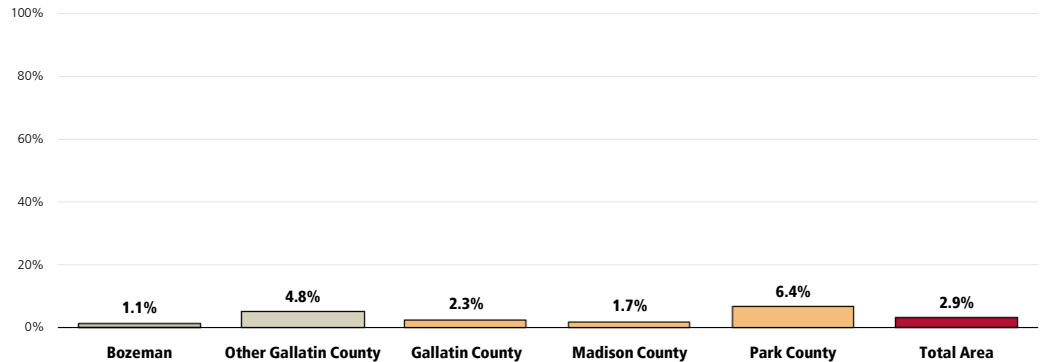
(Total Area Parents of Children Under 18, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 108]
Notes: • Asked of all respondents.
• Respondents were asked to consider whether there are trees, proper lighting, clean environments for exercising.

- In Gallatin County, adults outside of Bozeman are more likely to rate these things as “unpleasant.”
- Park County adults are more likely to rate these things as “unpleasant.”.

Neighborhood Is “Somewhat/Very Unpleasant” for Exercising (Total Area, 2011)



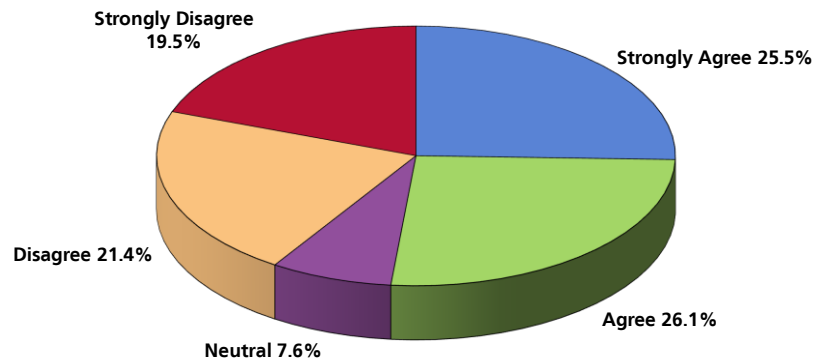
Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 108]
Notes: ● Asked of all respondents.

Walkability & Bikeability

Just over one-half of Total Area residents “strongly agree” (25.5%) or “agree” (26.1%) that “it is easy to walk or bike to important destinations in my neighborhood such as work, school, the grocery store, retail shops and entertainment.”

- 7.6% were neutral (neither agreeing nor disagreeing).

“It Is Easy to Walk or Bike to Important Destinations in My Neighborhood (Work, School, Grocery, Retail, Entertainment)” (Total Area, 2011)

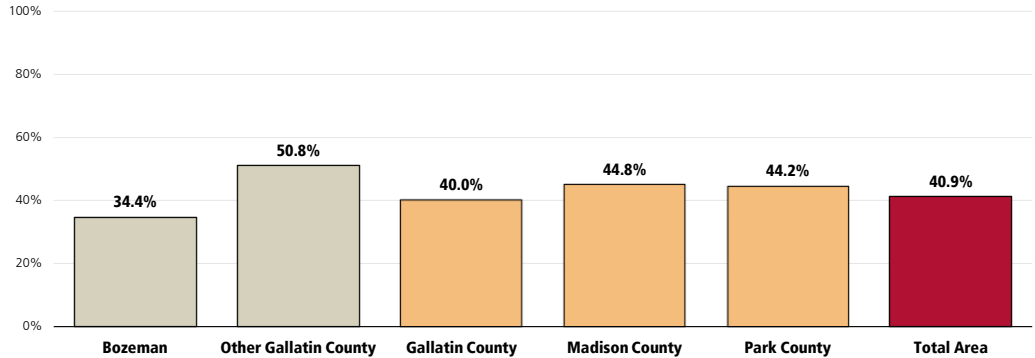


Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 109]
Notes: ● Asked of all respondents.

On the other hand, 40.9% of survey respondents do not feel that their neighborhood is very walkable/bikeable.

- In Gallatin County, more favorable in the city of Bozeman.
- Similar findings among the three counties.

Do Not Feel it is Easy to Walk or Bike to Important Destinations (Total Area, 2011)



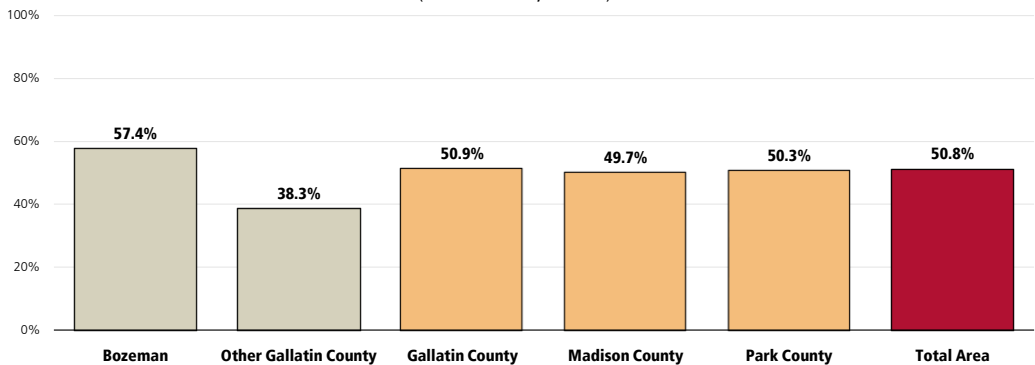
Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 109]
Notes: ● Asked of all respondents.
● Percentages represent combined "disagree" and "strongly disagree" responses.

Access to Public Exercise Facilities

One-half (50.8%) of Total Area residents report having access to public exercise facilities in their own neighborhoods.

- In Gallatin County, much higher in the Bozeman community.
- No significant difference among the three counties.

Have Access to Public Exercise Facilities in the Neighborhood (Total Area, 2011)



Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 110]
Notes: ● Asked of all respondents.
● Public exercise facilities include free or low-cost "parks and recreation" facilities, YMCA, or a local community center.

"Public exercise facilities" were described to respondents as facilities that are generally free or low-cost (such as a "parks and recreation" facility, the YMCA, or a local community center) and may include things like walking or running tracks, basketball or tennis courts, swimming pools, sports fields, and so on.

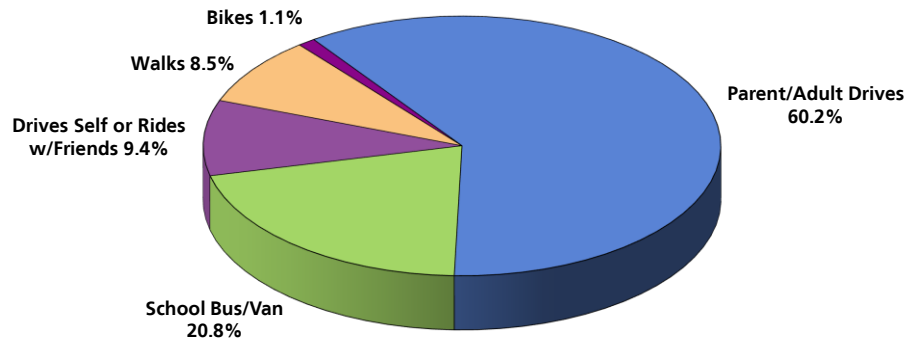
Child's Mode of Transportation to School

Only 9.6% of school-aged children walk or bike to school.

- The majority are driven by a parent/adult (60.2%); others ride a school bus or van (20.8%) or drive themselves/ride with friends (9.4%).

Mode of Transporting Child to School

(Total Area Parents of Children Aged 7-17, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 142]
Notes: • Asked of all respondents.
• Excludes children who are homeschooled or who are not in school.

When parents of children who do not walk or bike to school were asked to give a reason why the child does not do so, more than one-half mentioned that **school is too far away**. The distribution of reasons was as follows:

- Too far (56.6%)
- Time (10.0%)
- Not Convenient/Just as Easy to Drop Them Off (9.1%)
- Weather (8.4%)
- Too Much Traffic/No Safe Route (8.4%)
- Don't Know (2.5%)
- Age (2.5%)
- Fear of Child Being Abducted (0.8%)
- Child Does Not Want to Walk/Bike (0.8%)
- Rides a Bus (0.8%)

Weight Status

Because weight is influenced by energy (calories) consumed and expended, interventions to improve weight can support changes in diet or physical activity. They can help change individuals' knowledge and skills, reduce exposure to foods low in nutritional value and high in calories, or increase opportunities for physical activity. Interventions can help prevent unhealthy weight gain or facilitate weight loss among obese people. They can be delivered in multiple settings, including healthcare settings, worksites, or schools.

The social and physical factors affecting diet and physical activity (see Physical Activity topic area) may also have an impact on weight. Obesity is a problem throughout the population. However, among adults, the prevalence is highest for middle-aged people and for non-Hispanic black and Mexican American women. Among children and adolescents, the prevalence of obesity is highest among older and Mexican American children and non-Hispanic black girls. The association of income with obesity varies by age, gender, and race/ethnicity.

– Healthy People 2020 (www.healthypeople.gov)

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: $[\text{weight (pounds)}/\text{height squared (inches}^2)] \times 703$.

In this report, overweight is defined as a BMI of 25.0 to 29.9 kg/m^2 and obesity as a BMI of ≥ 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 of ≥ 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.

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	≥ 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.

Adult Weight Status

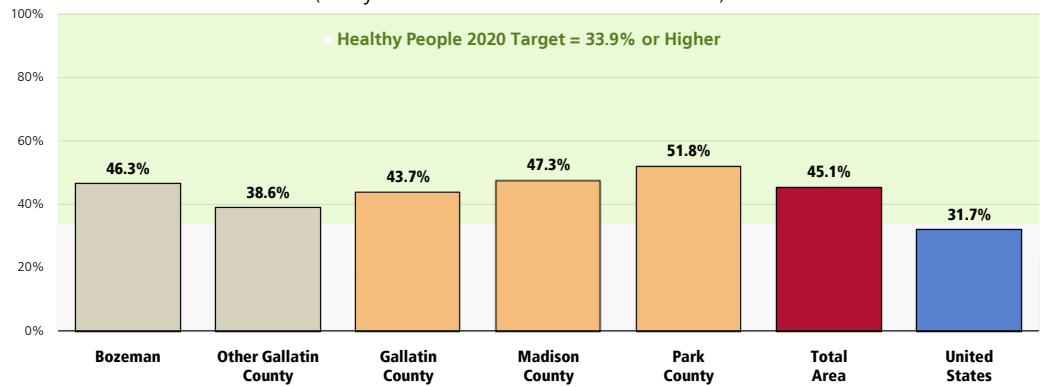
Healthy Weight

Based on self-reported heights and weights, 45.1% of Total Area adults are at a healthy weight.

- More favorable than national findings.
- Satisfies the Healthy People 2020 target (33.9% or higher).
- Within Gallatin County, no significant difference.
- Statistically similar among the three counties.

“Healthy weight” means neither underweight, nor overweight (BMI = 18.5-24.9).

Healthy Weight (Body Mass Index Between 18.5-24.9)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 191]
- Professional Research Consultants. PRC National Health Survey. 2011.
- US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective NWS-8]

 Notes:

- Based on reported heights and weights, asked of all respondents.
- The definition of healthy weight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), between 18.5 and 24.9.

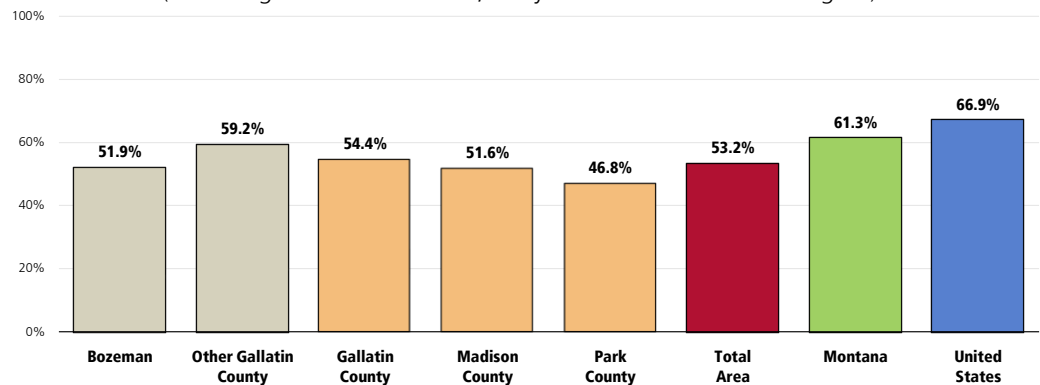
Here, "overweight" includes those respondents with a BMI value ≥ 25 .

Overweight Status

A total of 53.2% of Total Area residents are overweight.

- More favorable than the Montana prevalence.
- More favorable than the US overweight prevalence.
- In Gallatin County, no difference by area.
- Similar findings among the three counties.

Prevalence of Total Overweight (Overweight or/Obese Adults; Body Mass Index of 25.0 or Higher)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 191]
- Professional Research Consultants. PRC National Health Survey. 2011.
- Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.

 Notes:

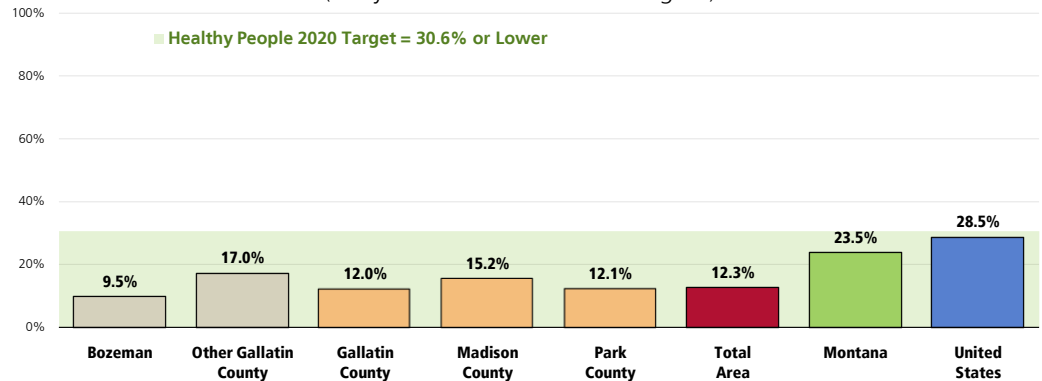
- Based on reported heights and weights, asked of all respondents.
- The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.

“Obese” (also included in overweight prevalence discussed previously) includes respondents with a BMI value ≥ 30 .

Further, 12.3% of Total Area adults are obese.

- More favorable than Montana findings.
- More favorable than US findings.
- Satisfies the Healthy People 2020 target (30.6% or lower).
- In Gallatin County, more favorable in the Bozeman community.
- No significant difference by county.

Prevalence of Obesity (Body Mass Index of 30.0 or Higher)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 191]
- Professional Research Consultants. PRC National Health Survey. 2011.
- US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective NWS-9]
- Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.

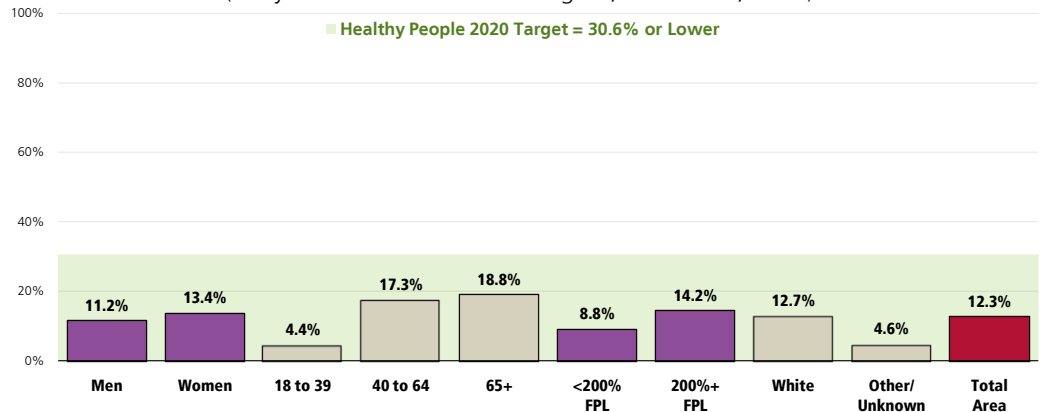
 Notes:

- 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.

Adults more likely to be obese include the following populations:

- Adults aged 40 and older.
- Whites.
- Note that all of the displayed population segments satisfy the Health People 2020 target.

Prevalence of Obesity (Body Mass Index of 30.0 or Higher; Total Area, 2011)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 191]
- US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective NWS-9]

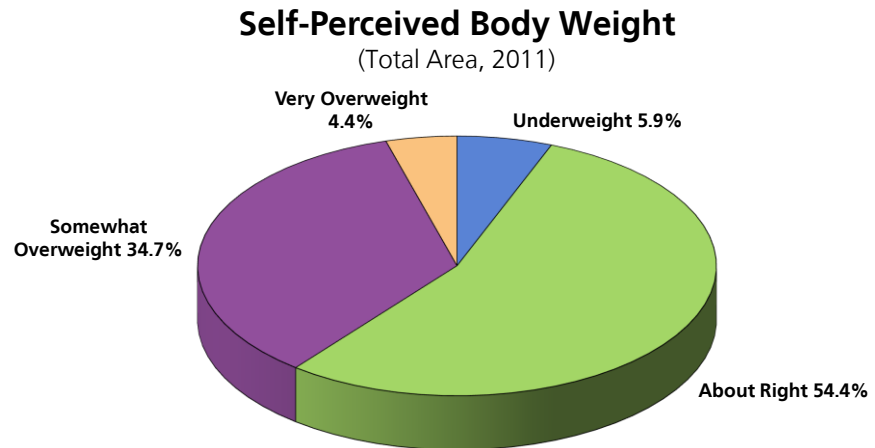
 Notes:

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.
- 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.

Self-Perceived Weight

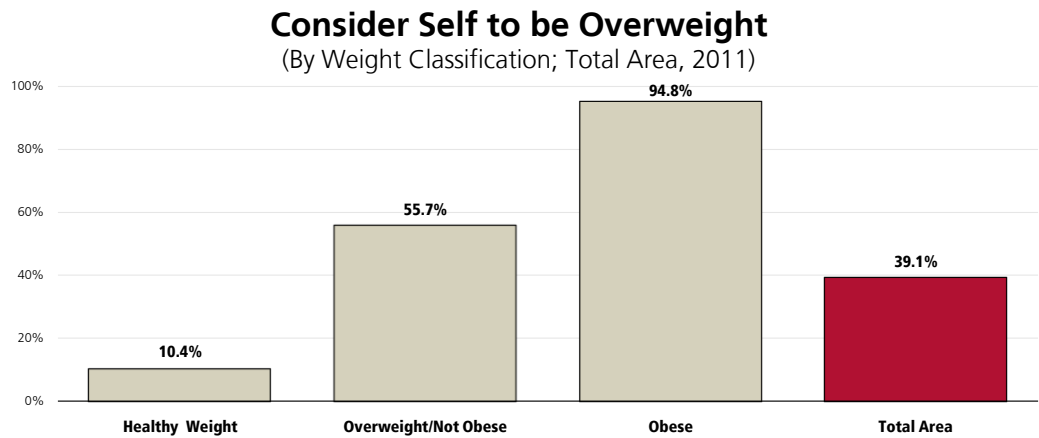
When asked to evaluate their own body weight, 54.4% of Total Area adults consider themselves to be “about right.”

- While 5.9% consider themselves to be underweight, 34.7% feel they are “somewhat overweight” and 4.4% consider themselves to be “very overweight.”



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 115]
Notes: • Asked of all respondents.

- The prevalence of adults who considers him/herself to be overweight is 55.7% among overweight adults (based on self-reported BMI) and 94.8% among obese residents.



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 115]
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.

Relationship of Overweight With Other Health Issues

The correlation between overweight and various health issues cannot be disputed.

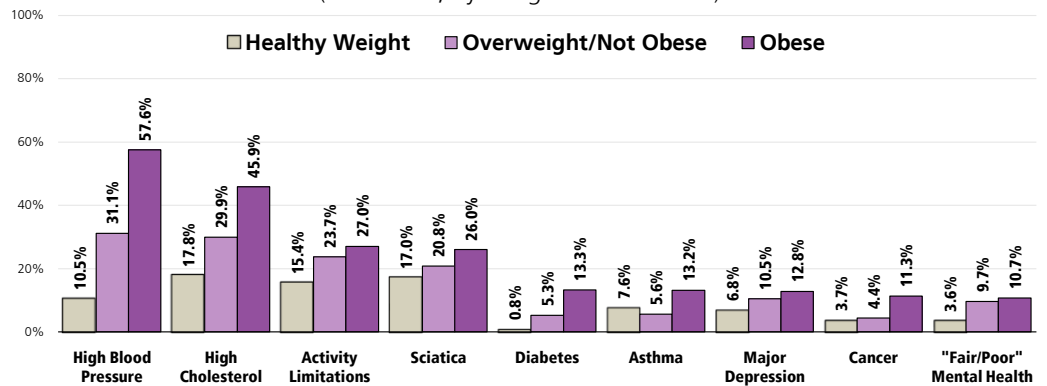
Overweight and obese adults are more likely to report a number of adverse health conditions.

Among these are:

- Hypertension (high blood pressure).
- High cholesterol.
- Activity limitations.
- Sciatica/chronic back pain.
- Diabetes.
- Asthma.
- Major depression.
- Cancer.
- "Fair/poor" mental health.

Relationship of Overweight With Other Health Issues

(Total Area; By Weight Classification)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. (Items 29, 30, 33, 44, 116, 120, 154, 155, 164)
 Notes: • Based on reported heights and weights, asked of all respondents.

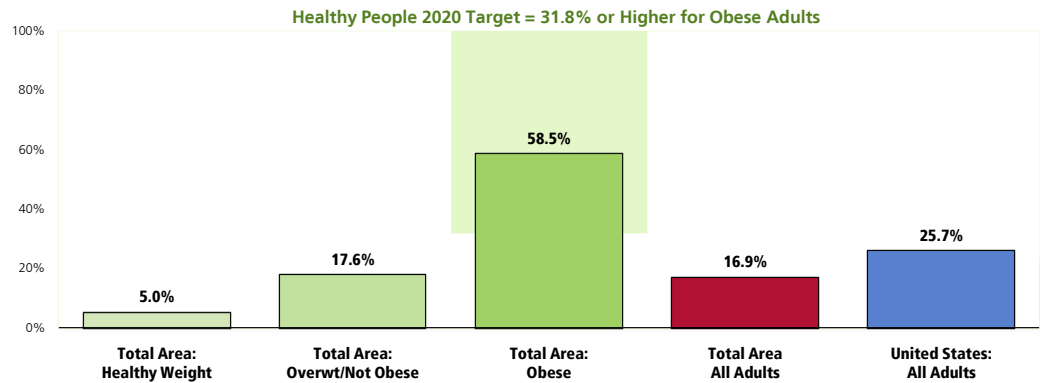
Weight Management

Health Advice

A total of 16.9% of adults have been given advice about their weight by a doctor, nurse or other health professional in the past year.

- Lower than the national findings.
- 👤 Note that 58.5% of obese adults have been given advice about their weight by a health professional in the past year.
 - Satisfies the Healthy People 2020 target of 31.8% or higher.

Have Received Advice About Weight in the Past Year From a Physician, Nurse, or Other Health Professional (By Weight Classification)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Items 114, 193-194]
- Professional Research Consultants. PRC National Health Survey. 2011.
- US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective NWS-6.2]

Notes:

- Asked of all respondents.

Weight Control

Individuals who are at a healthy weight are less likely to:

- Develop chronic disease risk factors, such as high blood pressure and dyslipidemia.
- Develop chronic diseases, such as type 2 diabetes, heart disease, osteoarthritis, and some cancers.
- Experience complications during pregnancy.
- Die at an earlier age.

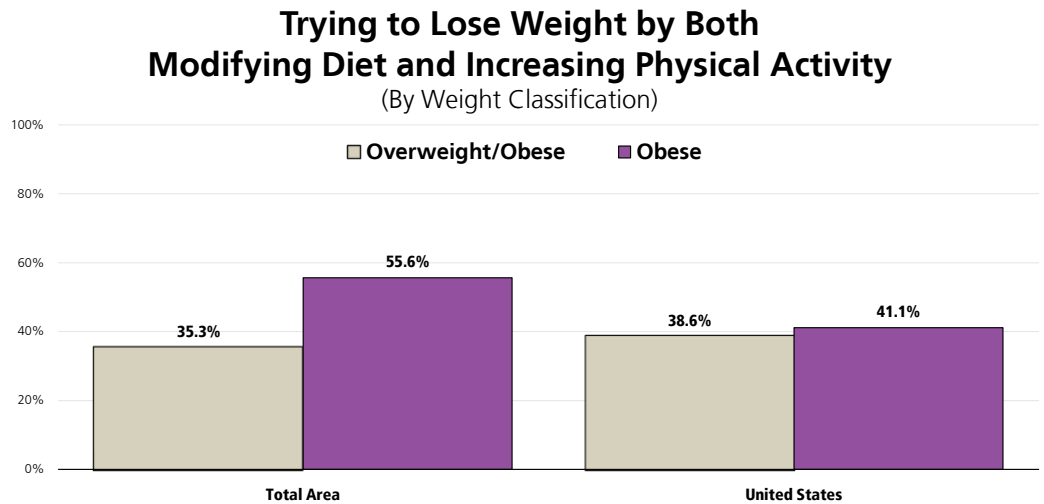
All Americans should avoid unhealthy weight gain, and those whose weight is too high may also need to lose weight.

– Healthy People 2020 (www.healthypeople.gov)

A total of 35.3% of Total Area adults who are overweight say that they are both modifying their diet and increasing their physical activity to try to lose weight.

- Similar to national findings.

👤 Note: 55.6% of obese Total Area adults report that they are trying to lose weight through a combination of diet and exercise, higher than what is found nationally.



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 192]
- Professional Research Consultants. PRC National Health Survey. 2011.

Notes:

- Based on reported heights and weights, asked of all respondents.

Childhood Overweight & Obesity

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 <5th percentile
- Healthy Weight ≥5th and <85th percentile
- Overweight ≥85th and <95th percentile
- Obese ≥95th percentile

– Centers for Disease Control and Prevention.

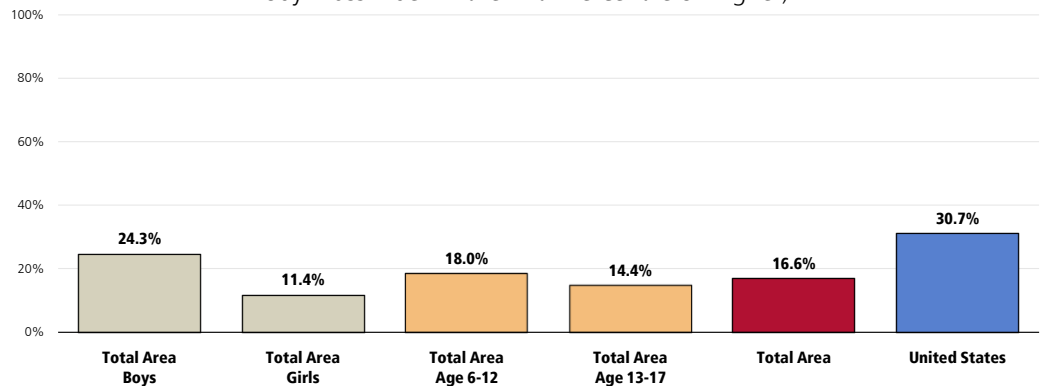
Child's Weight Status

Based on the heights/weights reported by surveyed parents, 16.6% of Total Area children age 6 to 17 are overweight or obese (≥85th percentile).

- Much lower than that found nationally.
- 👤 Differences by gender and age groupings are not statistically significant.

Child Total Overweight Prevalence

(Percent of Children 6-17 Who Are Overweight/Obese; Body Mass Index in the 85th Percentile or Higher)



Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 195]
● Professional Research Consultants. PRC National Health Survey. 2011.

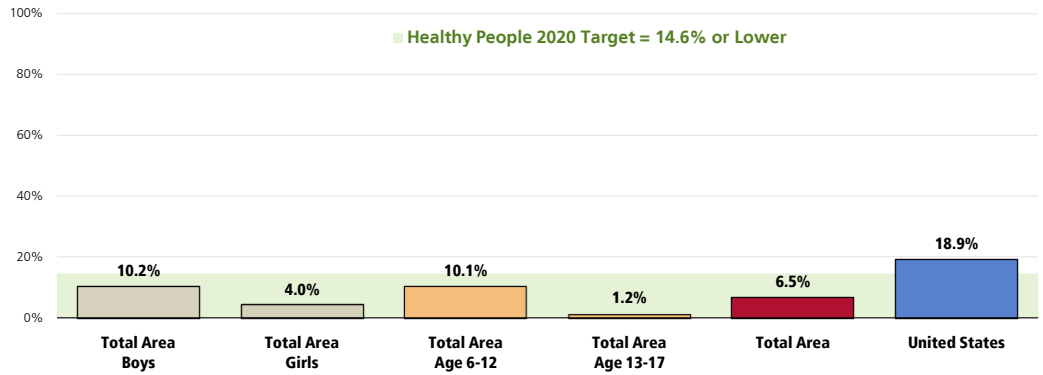
Notes: ● Asked of all respondents with children aged 6-17 at home.
● Overweight among children is estimated based on children's Body Mass Index status at or above the 85th percentile of US growth charts by gender and age.

A total of 6.5% of Total Area children age 6 to 17 are obese (≥95th percentile).

- Much lower than the national percentage.
- Satisfies the Healthy People 2020 target (14.6% or lower for children 2-19).
- 👤 Note the significant difference in childhood obesity by age (the difference by gender is not statistically significant).

Child Obesity Prevalence

(Percent of Children 6-17 Who Are Obese; Body Mass Index in the 95th Percentile or Higher)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 195]
- Professional Research Consultants, Inc. PRC National Health Survey. 2011.
- US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective NWS-10.4]

 Notes:

- Asked of all respondents with children aged 6-17 at home.
- Obesity among children is estimated based on children's Body Mass Index status equal to or above the 95th percentile of US growth charts by gender and age.

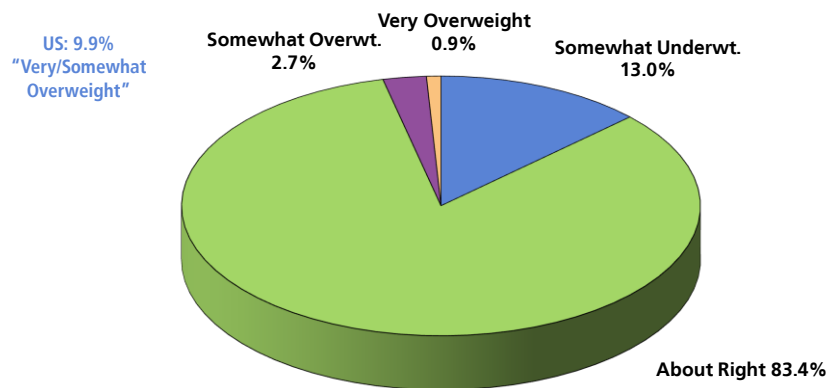
Perception of Child's Weight

When asked to describe their child's weight, only 3.6% of parents describe their child as "somewhat" or "very overweight."

- 83.4% of parents with children age 2-17 consider their child's weight to be "about right."
- 13.0% of parents consider their child to be underweight.

Child's Weight as Described by Parent

(Total Area Parents of Children 2-17, 2011)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 139]
- Professional Research Consultants, Inc. PRC National Health Survey.

 Notes:

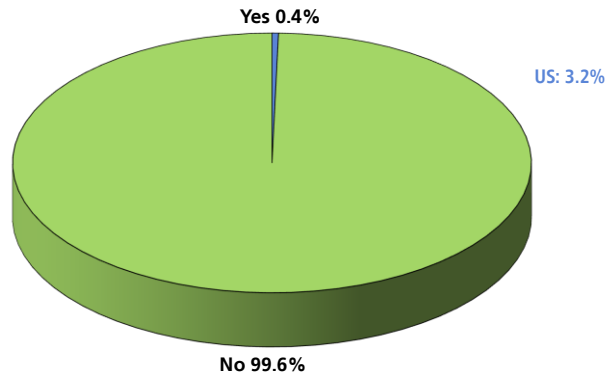
- Asked of all respondents with children aged 2-17.

Less than one percent (0.4%) of parents with children aged 2-17 has been told by a health professional in the past year that their child is overweight.

- A fraction of the US prevalence among parents with children 2-17.

Have Been Told That Child is Overweight in the Past Year

(Total Area Parents of Children 2-17, 2011)



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. (Item 140)
- Professional Research Consultants, Inc. PRC National Health Survey.

Notes:

- Asked of all respondents with children aged 2-17.

Substance Abuse

In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95% of people with substance use problems are considered unaware of their problem. Of those who recognize their problem, 273,000 have made an unsuccessful effort to obtain treatment. These estimates highlight the importance of increasing prevention efforts and improving access to treatment for substance abuse and co-occurring disorders.

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

The field has made progress in addressing substance abuse, particularly among youth. According to data from the national Institute of Drug Abuse (NIDA) Monitoring the Future (MTF) survey, which is an ongoing study of the behaviors and values of America's youth between 2004 and 2009, a drop in drug use (including amphetamines, methamphetamine, cocaine, hallucinogens, and LSD) was reported among students in 8th, 10th, and 12th grades. Note that, despite a decreasing trend in marijuana use which began in the mid-1990s, the trend has stalled in recent years among these youth. Use of alcohol among students in these three grades also decreased during this time.

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)

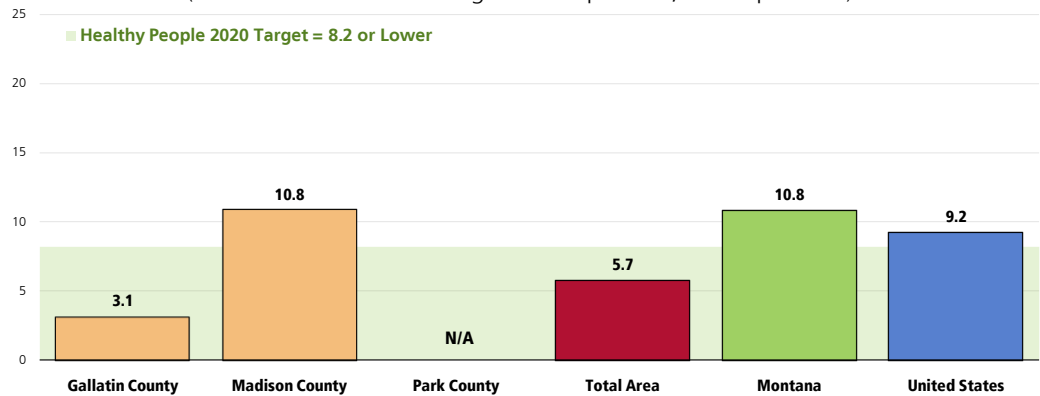
Age-Adjusted Cirrhosis/Liver Disease Deaths

Between 1999 and 2007, there was an annual average age-adjusted cirrhosis/liver disease mortality rate of 5.7 deaths per 100,000 population in the Total Area.

- Lower than the statewide rate.
- Lower than the national rate.
- Satisfies the Healthy People 2020 target (8.2 or lower).
- Much higher in Madison County, lower in Gallatin County (data not available for Park County).

Cirrhosis/Liver Disease: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)



- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective SA-11]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

High-Risk Alcohol Use

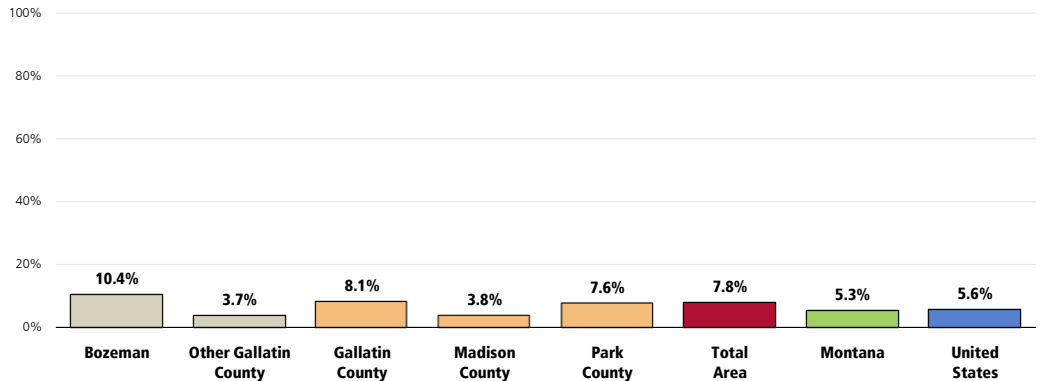
Chronic Drinking

Chronic drinkers include survey respondents reporting 60 or more drinks of alcohol in the month preceding the interview. For the purposes of this study, a "drink" is considered one can or bottle of beer, one glass of wine, one can or bottle of wine cooler, one cocktail, or one shot of liquor.

A total of 7.8% of area adults averaged two or more drinks of alcohol per day in the past month (chronic drinkers).

- Higher than the statewide proportion.
- Comparable to the national proportion.
- In Gallatin County, higher among Bozeman adults.
- Lowest in Madison County.

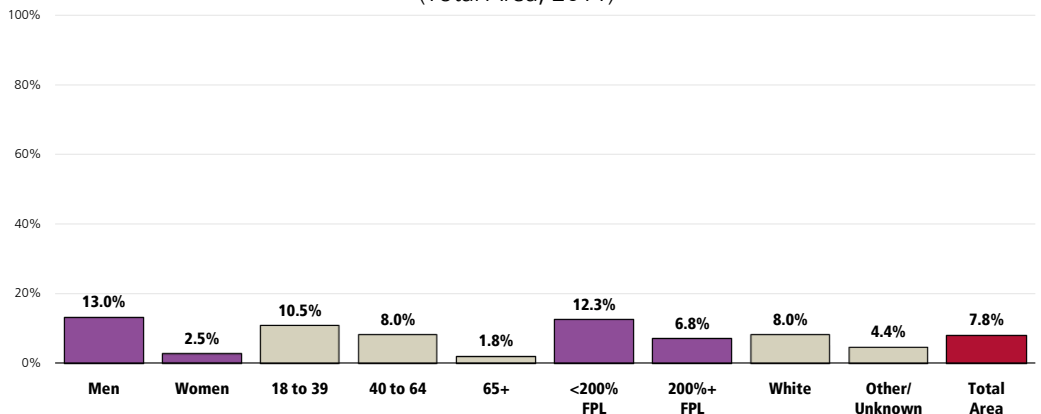
Chronic Drinkers



- Sources:
- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 201]
 - Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.
 - Professional Research Consultants. PRC National Health Survey. 2011.
- Notes:
- Asked of all respondents.
 - Chronic drinkers are defined as having 60+ alcoholic drinks in the past month.
 - *The state definition for chronic drinkers is males consuming 2+ drinks per day and females consuming 1+ drink per day.

Chronic drinking is more prevalent among men and adults under age 40.

Chronic Drinkers (Total Area, 2011)



- Sources:
- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 201]
- Notes:
- Asked of all respondents.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.
 - Chronic drinkers are defined as those having 60+ alcoholic drinks in the past month.

RELATED ISSUE:
See also *Stress in the Mental Health & Mental Disorders* section of this report.

Binge Drinking

Binge drinkers include:

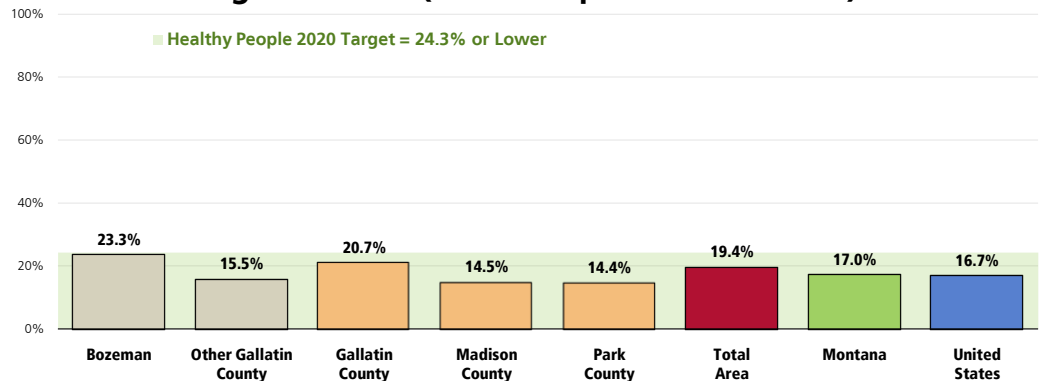
1) MEN who report drinking 5 or more alcoholic drinks on any single occasion during the past month; and

2) WOMEN who report drinking 4 or more alcoholic drinks on any single occasion during the past month.

A total of 19.4% of Total Area adults are binge drinkers.

- Comparable to Montana findings.
- Comparable to national findings.
- Satisfies the Healthy People 2020 target (24.3% or lower).
- Within Gallatin County, much higher in Bozeman.
- Highest in Gallatin County.

Binge Drinkers (Gender-Specific Definition)



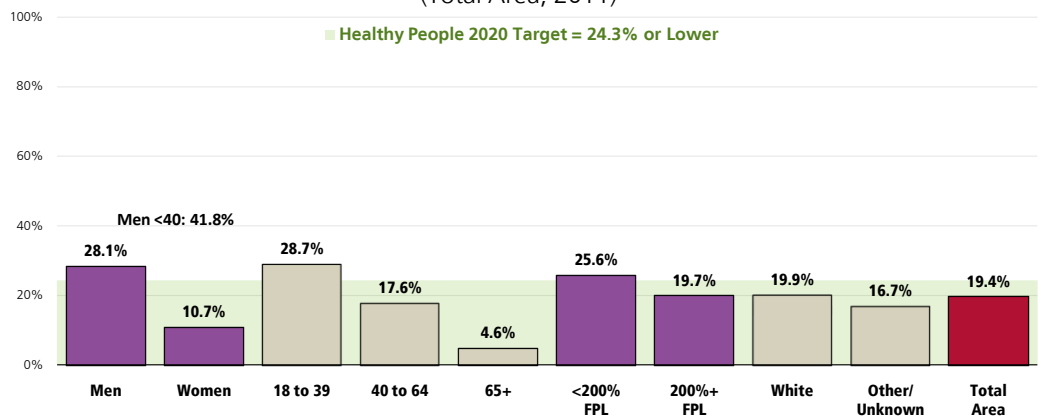
- Sources:
- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 202]
 - Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010 Montana Data.
 - Professional Research Consultants. PRC National Health Survey. 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective SA-14.3]
- Notes:
- Asked of all respondents.
 - Binge drinkers are defined as men having 5+ alcoholic drinks on any one occasion or women consuming 4+ drinks on any one occasion. In 2006, this definition did not distinguish by gender and represents the percentage of men and women consuming 5+ alcoholic drinks on one occasion.

Binge drinking is more prevalent among:

👤 Men (especially those under age 40).

👤 Adults under age 40.

Binge Drinkers (Total Area, 2011)



- Sources:
- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 202]
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective SA-14.3]
- Notes:
- Asked of all respondents.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.
 - Binge drinkers are defined as men having 5+ alcoholic drinks on any one occasion or women consuming 4+ drinks on any one occasion.

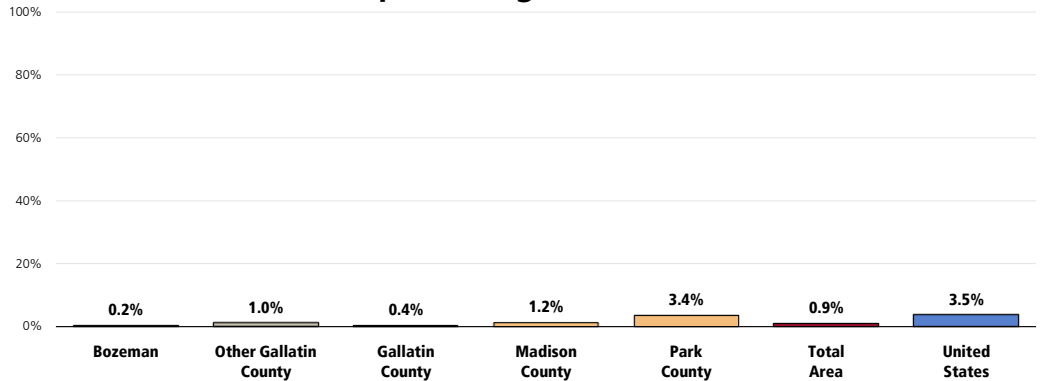
Drinking & Driving

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 drinking and driving in the community is likely higher.

Just 0.9% of Total Area adults acknowledge having driven a vehicle in the past month after they had perhaps too much to drink.

- Much lower than national findings.
- Similar by area within Gallatin County.
- Most favorable in Gallatin County.

Have Driven in the Past Month After Perhaps Having Too Much to Drink

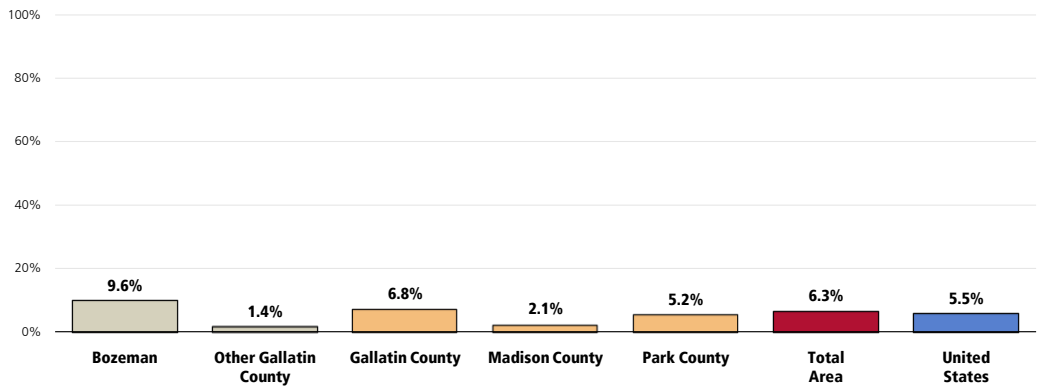


Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 66]
 ● Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: ● Asked of all respondents.

On the other hand, 6.3% of Total Area adults acknowledge either drinking and driving or riding with a drunk driver in the past month.

- Similar to national findings.
- Within Gallatin County, much higher in Bozeman.
- By county, lowest in Madison County.

Have Driven Drunk OR Ridden With a Driver in the Past Month Who Had Too Much to Drink



Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 203]
 ● Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: ● Asked of all respondents.

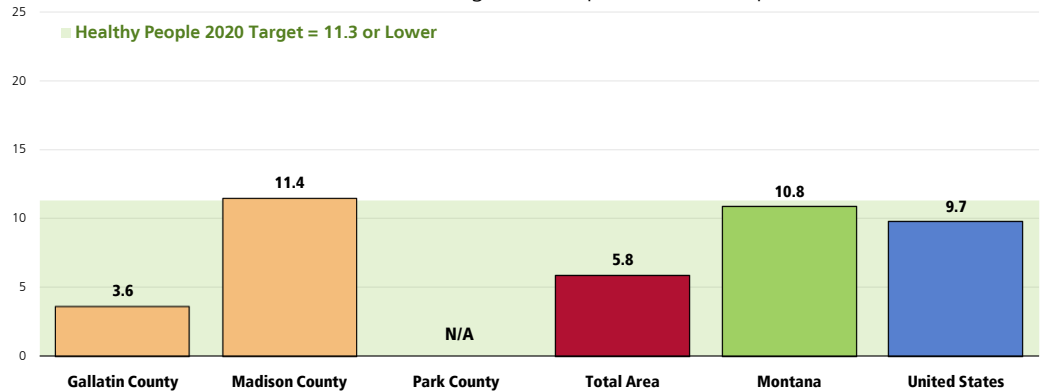
Age-Adjusted Drug-Induced Deaths

Between 1999 and 2007, there was an annual average age-adjusted drug-induced mortality rate of 5.8 deaths per 100,000 population in the Total Area.

- More favorable than the statewide rate.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target (11.3 or lower).
- Much higher in Madison County; lower in Gallatin County.

Drug-Induced Deaths: Age-Adjusted Mortality

(1999-2007 Annual Average Deaths per 100,000 Population)



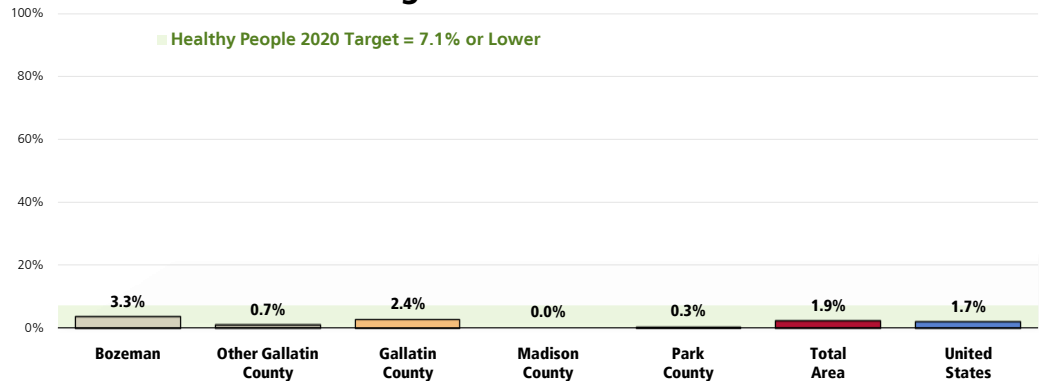
- Sources:
- Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. CDC WONDER Online Query System. Data extracted August 2011.
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective SA-12]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

Illicit Drug Use

A total of 1.9% of Total Area adults acknowledge using an illicit drug in the past month.

- Similar to the proportion found nationally.
- Below the Healthy People 2020 objective of 7.1% or lower.
- No significant difference within Gallatin County.
- Highest in Gallatin County; more favorable in Madison and Park Counties.

Illicit Drug Use in the Past Month



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 68]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 • 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

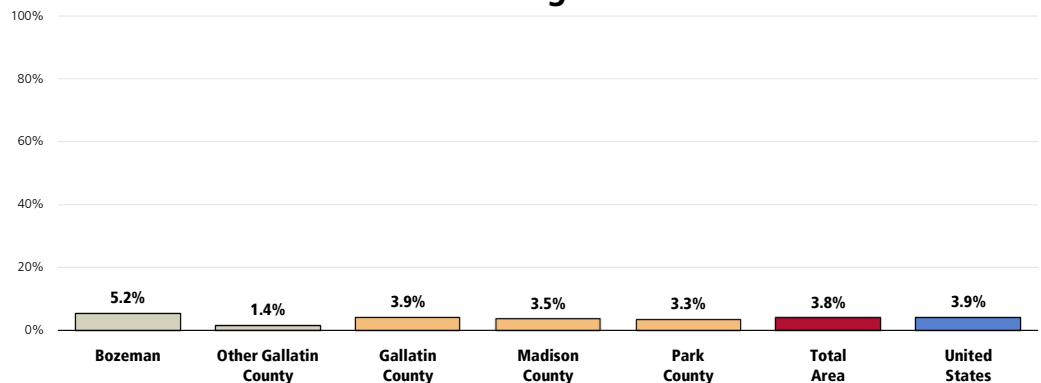
For the purposes of this survey, "illicit drug use" includes use of illegal substances or of prescription drugs taken without a physician's order.

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 3.8% of Total Area adults report that they have sought professional help for an alcohol or drug problem at some point in their lives.

- Nearly identical to national findings.
- Much higher in Bozeman when compared with the remainder of Gallatin County.
- Statistically similar findings among the three counties.

Have Ever Sought Professional Help for an Alcohol- or Drug-Related Problem



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 69]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents.

Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. Each year, approximately 443,000 Americans die from tobacco-related illnesses. For every person who dies from tobacco use, 20 more people suffer with at least one serious tobacco-related illness. In addition, tobacco use costs the US \$193 billion annually in direct medical expenses and lost productivity.

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).

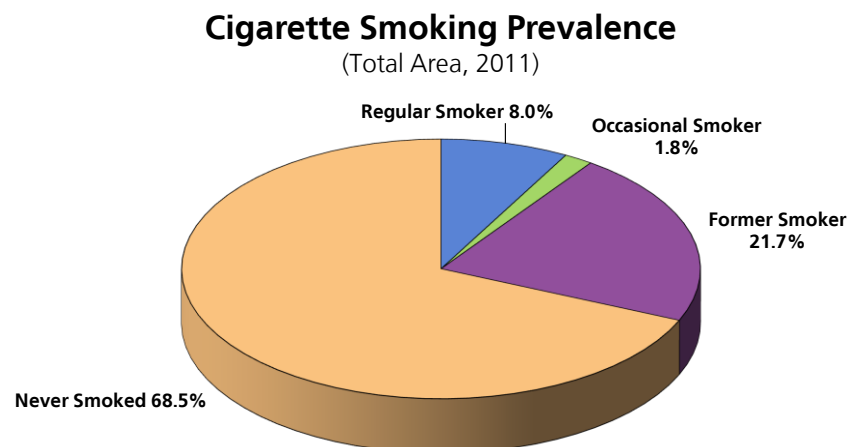
Smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth and gums, periodontitis, and tooth loss. Cigar use causes cancer of the larynx, mouth, esophagus, and lung.

– Healthy People 2020 (www.healthypeople.gov)

Cigarette Smoking

Cigarette Smoking Prevalence

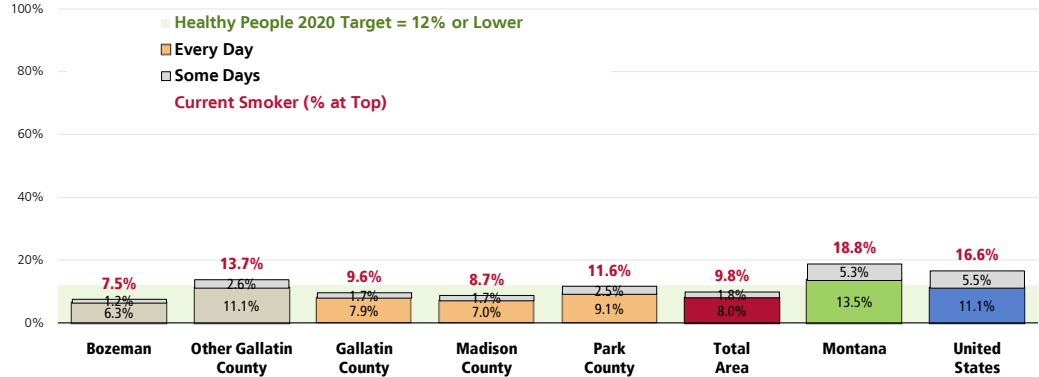
A total of 9.8% of Total Area adults currently smoke cigarettes, either regularly (8.0% every day) or occasionally (1.8% on some days).



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

- More favorable than statewide findings.
- More favorable than national findings.
- Similar to the Healthy People 2020 target (12% or lower).
- Much higher outside the Bozeman community.
- Statistically similar by county.

Current Smokers



- Sources:
- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 196]
 - Professional Research Consultants. PRC National Health Survey. 2011.
 - Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2009 Montana Data.
 - 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 (everyday and some days).

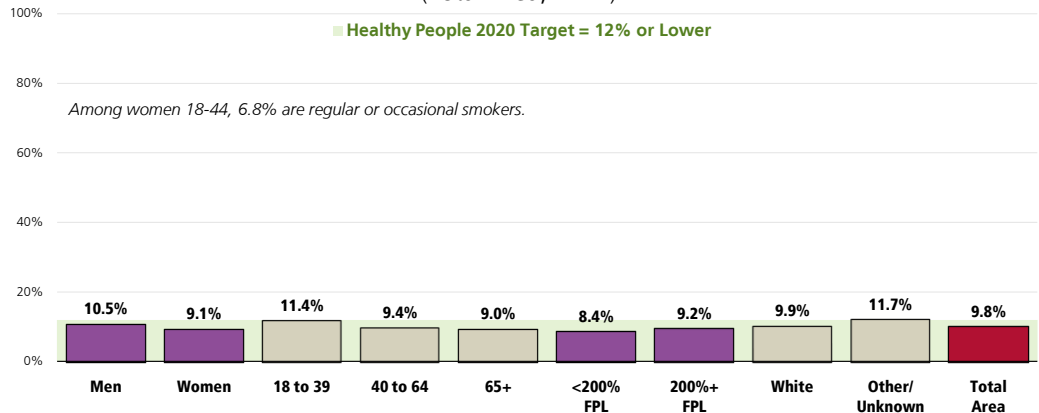
👤 No statistical difference when viewed by demographic characteristics.

Note also:

👤 Just 6.8% of women of child-bearing age (ages 18 to 44) currently smoke. This is a positive finding given that tobacco use increases the risk of infertility, as well as the risks for miscarriage, stillbirth and low birthweight for women who smoke during pregnancy.

Current Smokers


(Total Area, 2011)



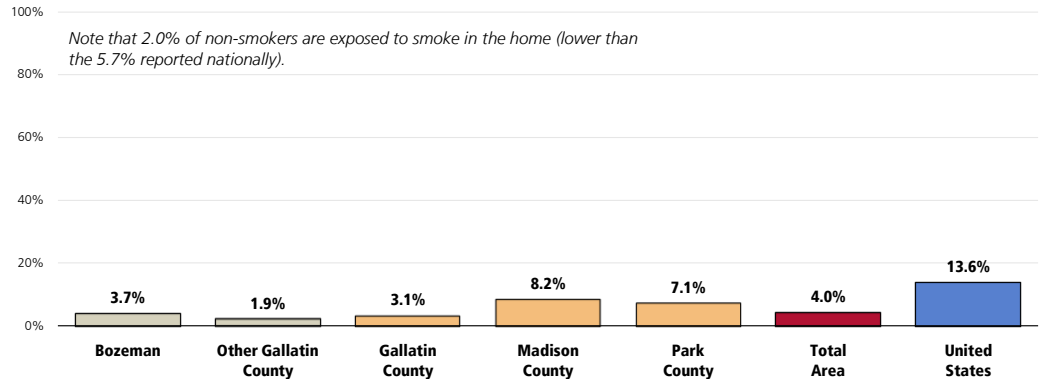
- Sources:
- Professional Research Consultants, Inc. PRC Community Health Survey. [Items 196-197]
 - US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective TU-1.1]
- Notes:
- Asked of all respondents.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Environmental Tobacco Smoke


A total of 4.0% of Total Area adults (including smokers and non-smokers) report that a member of their household has smoked cigarettes in the home in the past month an average of four or more times per week.

- Much lower than national findings.
 - In Gallatin County, no significant difference to report.
 - Viewed by county, lowest in Gallatin.
-  Note that 2.0% of Total Area non-smokers are exposed to cigarette smoke at home, lower than the percentage reported nationwide.

Member of Household Smokes at Home

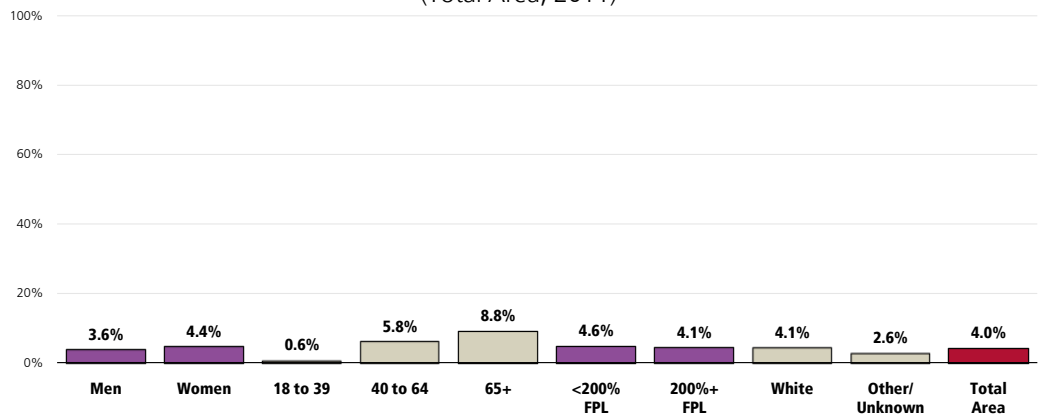


- Sources:
- Professional Research Consultants, Inc. PRC Community Health Survey. [Items 74, 198]
 - Professional Research Consultants, Inc. PRC National Health Survey. 2011.
 - Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 27-5]
- 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.

-  Notably higher among residents aged 65 and older.

Member of Household Smokes At Home

(Total Area, 2011)

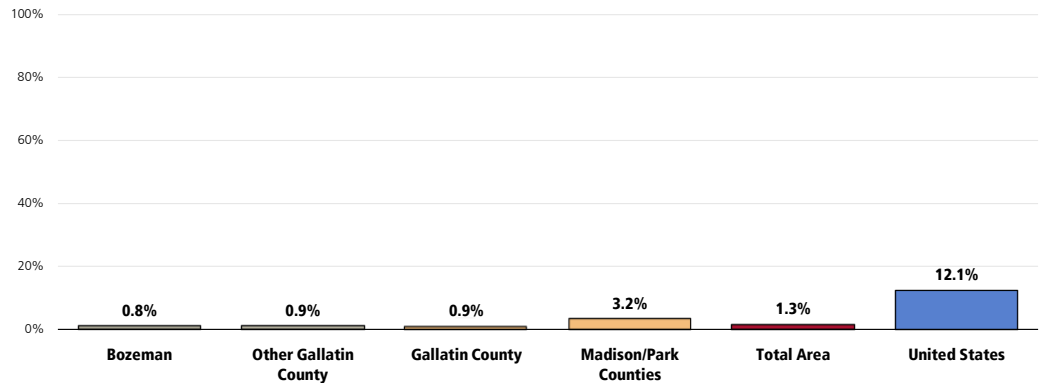


- Sources:
- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 74]
- Notes:
- Asked of all respondents.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.
 - "Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month.

Among households with children, just 1.3% have someone who smokes cigarettes in the home.

- Much lower than national findings.
- Within Gallatin County, no difference by area.
- No statistical difference between Gallatin County and the combined Madison/Park County area.

Percentage of Households With Children In Which Someone Smokes in the Home



Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 199]
● Professional Research Consultants. PRC National Health Survey. 2011.

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.
- Madison and Park County data were combined for reliability.

Smoking Cessation

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.

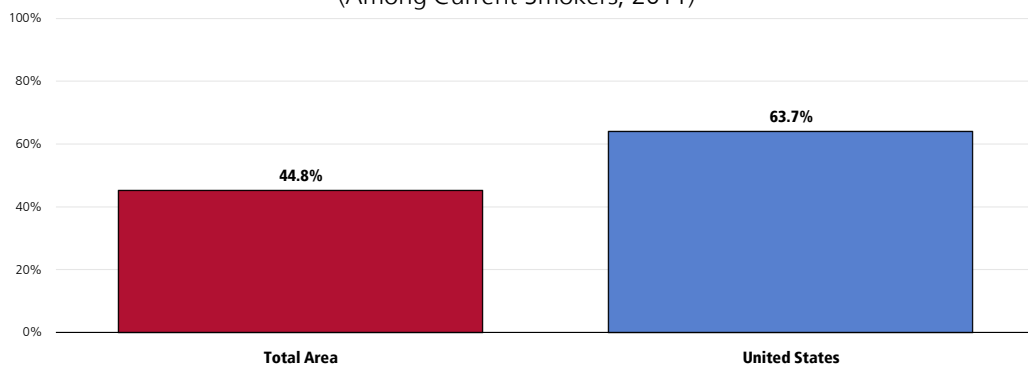
– Healthy People 2020 (www.healthypeople.gov)

Health Advice About Smoking Cessation

A total of 44.8% of smokers say that a doctor, nurse or other health professional has recommended in the past year that they quit smoking.

- Much lower than the national percentage.

Advised by a Healthcare Professional in the Past Year to Quit Smoking (Among Current Smokers, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 73]
 • Professional Research Consultants, Inc. PRC National Health Survey. 2011.

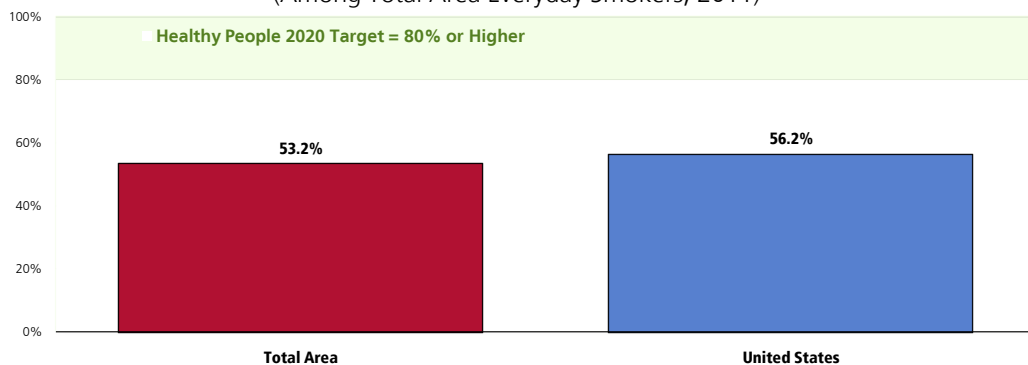
Notes: • Asked of all current smokers.

Smoking Cessation Attempts

Over one-half (53.2%) of regular smokers went without smoking for one day or longer in the past year because they were trying to quit smoking.

- Similar to the national percentage.
- Fails to satisfy the Healthy People 2020 target (80% or higher).

Have Stopped Smoking for 1 Day or Longer in the Past Year in an Attempt to Quit Smoking (Among Total Area Everyday Smokers, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 72]
 • Professional Research Consultants, Inc. PRC National Health Survey. 2011.

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.

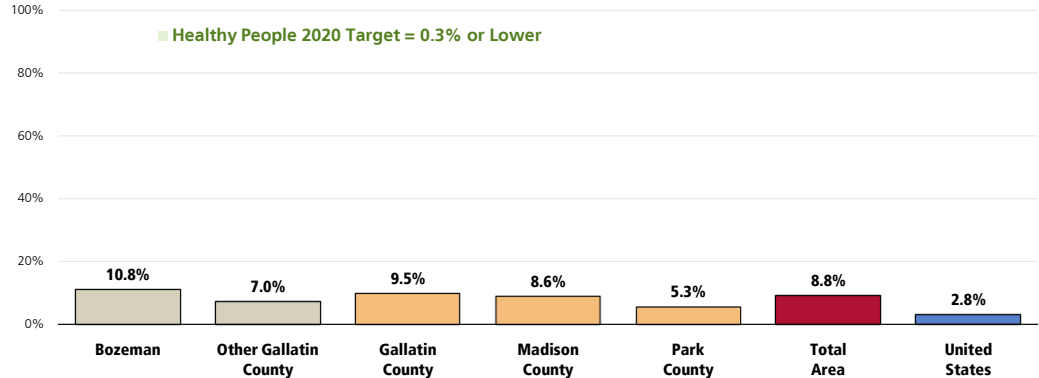
Other Tobacco Use

Smokeless Tobacco

A total of 8.8% of Total Area adults use some type of smokeless tobacco every day or on some days.

- Much higher than the national percentage.
- Far from satisfying the Healthy People 2020 target (0.3% or lower).
- No significant difference within Gallatin County.
- No significant difference among the three counties.

Use of Smokeless Tobacco



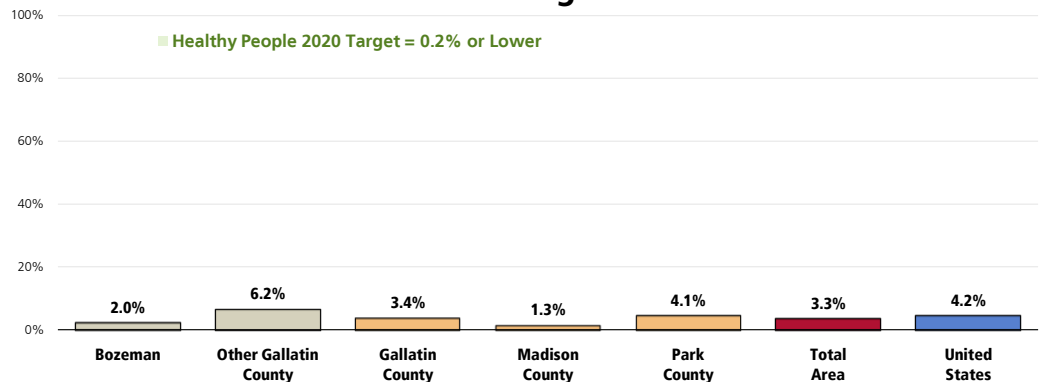
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 75]
• Professional Research Consultants. PRC National Health Survey. 2011.
• US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective TU-1.2]
Notes: • Asked of all respondents.
• Smokeless tobacco includes chewing tobacco or snuff.

Cigars

A total of 3.3% of Total Area adults use cigars every day or on some days.

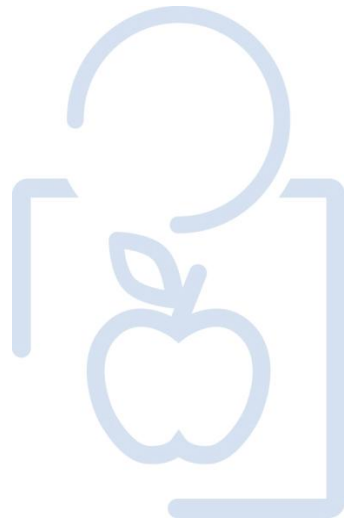
- Similar to the national percentage.
- Fails to satisfy the Healthy People 2020 target (0.2% or lower).
- In Gallatin County, lower among Bozeman adults.
- No significant difference by county.

Use of Cigars



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 76]
• Professional Research Consultants. PRC National Health Survey. 2011.
• US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective TU-1.3]
Notes: • Asked of all respondents.

ACCESS TO HEALTH SERVICES

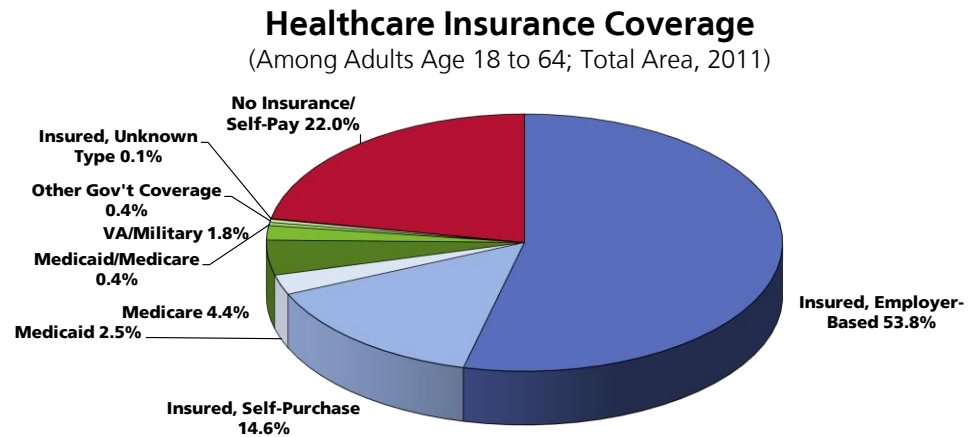


Health Insurance Coverage

Survey respondents were asked a series of questions to determine their healthcare insurance coverage, if any, from either private or government-sponsored sources.

Type of Healthcare Coverage

A total of 68.4% of Total Area adults age 18 to 64 report having healthcare coverage through private insurance. Another 9.5% report coverage through a government-sponsored program (e.g., MediCal, Medicaid, Medicare, military benefits).

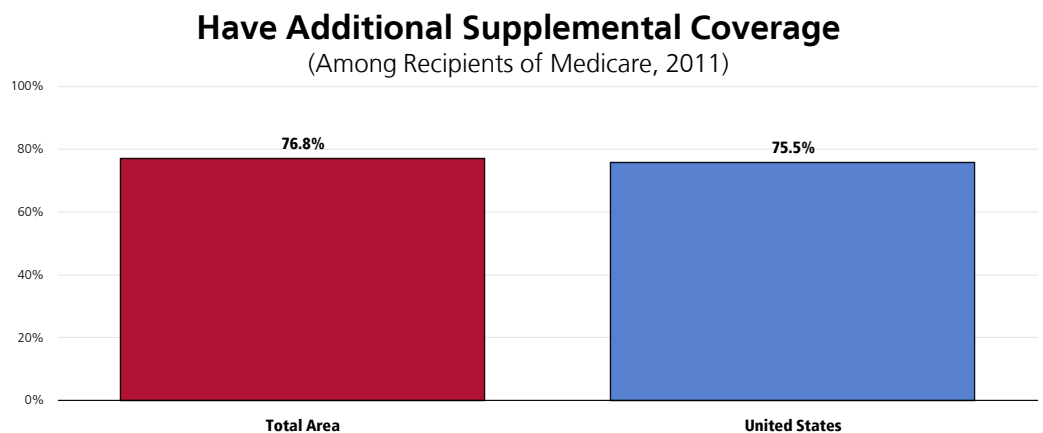


Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 204]
Notes: Reflects respondents aged 18 to 64.

Supplemental Coverage

Among Medicare recipients, the majority (76.8%) has additional, supplemental healthcare coverage.

- Similar to that reported among Medicare recipients nationwide.



Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 85]
Professional Research Consultants, Inc. PRC National Health Survey, 2011.
Notes: Asked of all respondents with Medicare coverage.

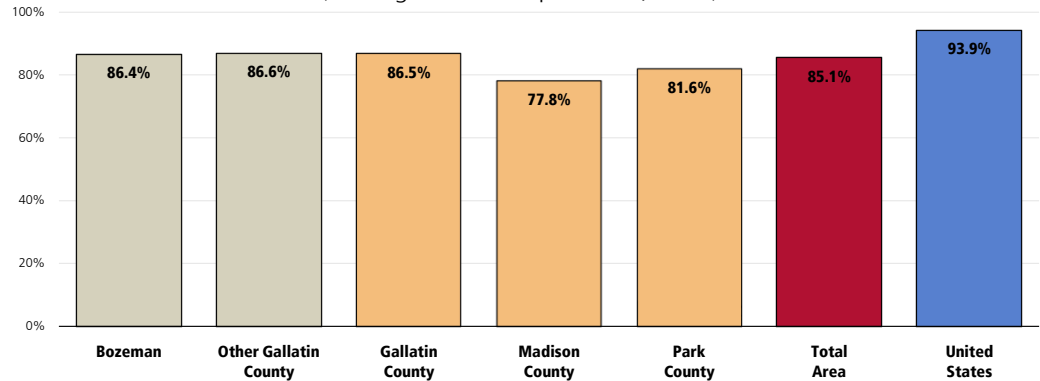
Prescription Drug Coverage

Among insured adults, 85.1% report having prescription coverage as part of their insurance plan.

- Lower than the national prevalence.
- In Gallatin County, no difference by area.
- No significant difference by county.

Insurance Covers At Least Partial Prescriptions

(Among Insured Respondents, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 86]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.

Notes: • Asked of all respondents with healthcare insurance coverage.

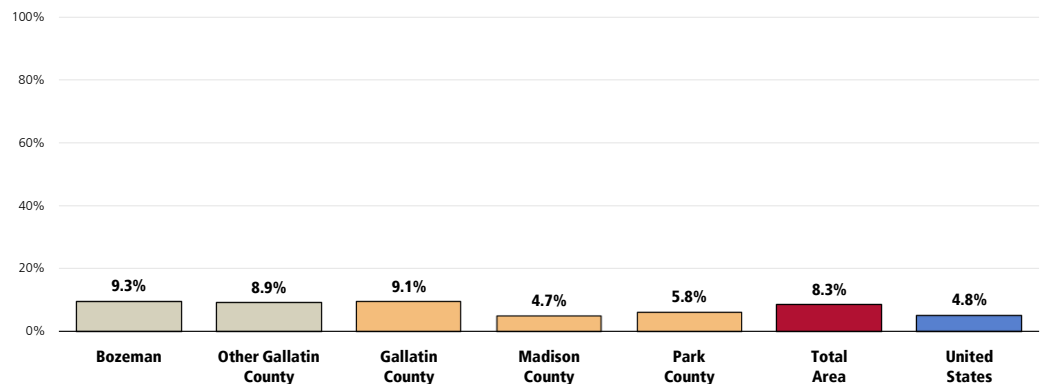
Recent Lack of Coverage (Insurance Instability)

Among currently insured adults in the Total Area, 8.3% report that they were without healthcare coverage at some point in the past year.

- Higher than the US prevalence.
- No significant difference within Gallatin County.
- Viewed by county, no significant difference.

Went Without Coverage at Some Point in the Past Year

(Insured Adults, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 87]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.

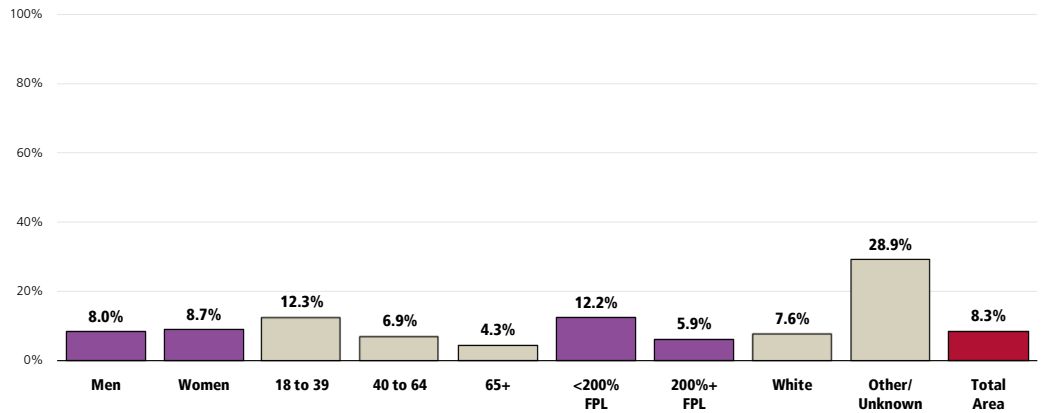
Notes: • Asked of all respondents.

Among insured adults, the following segments are more likely to have gone without healthcare insurance coverage at some point in the past year:

- 👤 Adults under age 40.
- 👤 Lower-income residents.
- 👤 Non-Whites.

Went Without Coverage at Some Point in the Past Year

(Insured Adults, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 87]
Notes: • Asked of insured respondents.
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Lack of Health Insurance Coverage

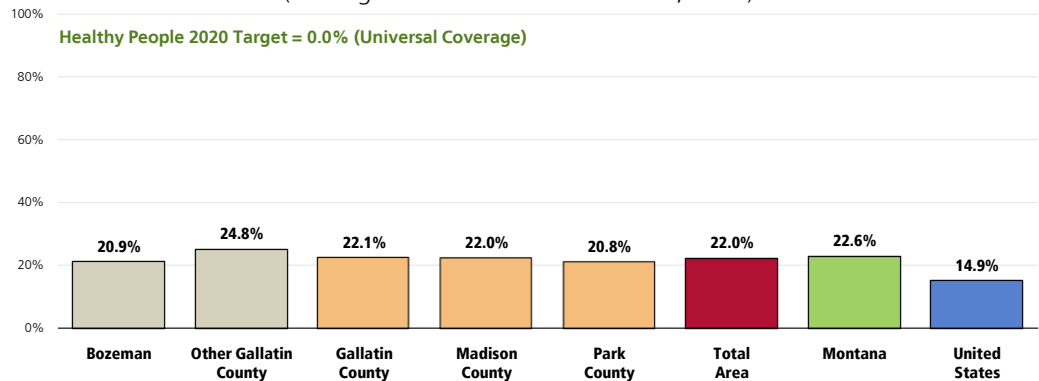
Here, lack of health insurance coverage reflects respondents age 18 to 64 (thus, excluding the Medicare population) who have no type of insurance coverage for healthcare services – neither private insurance nor government-sponsored plans (e.g., Medicaid).

Among adults age 18 to 64, 22.0% report having no insurance coverage for healthcare expenses.

- Nearly identical to the statewide figure.
- Less favorable than the national finding.
- The Healthy People 2020 target is universal coverage (0% uninsured).
- Within Gallatin County, no difference by area.
- Statistically similar by county.

Lack of Healthcare Insurance Coverage

(Among Total Area Adults Under 65, 2011)



Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 204]
● Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2010. Montana Data.
● Professional Research Consultants. PRC National Health Survey. 2011.
● US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective AHS-1]

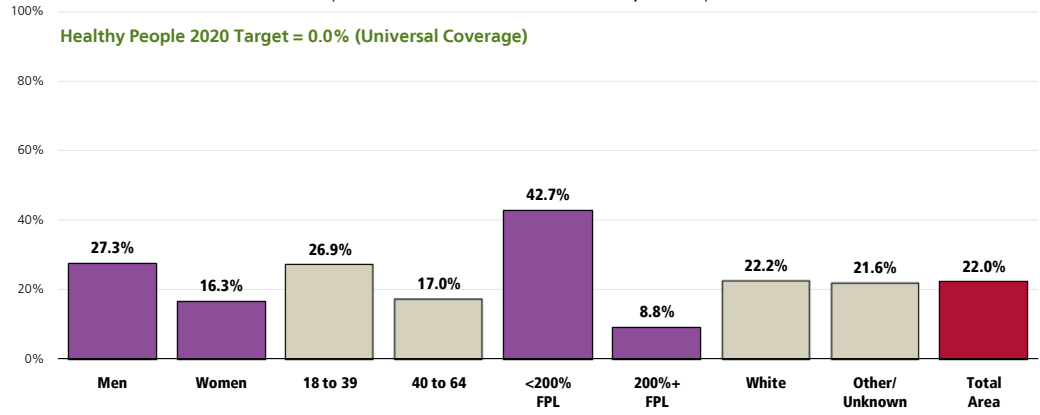
Notes: ● Asked of all respondents under the age of 65.

The following population segments are more likely to be without healthcare insurance coverage:

- 👤 Men.
- 👤 Young adults (18-39).
- 👤 Residents living at lower incomes (note the 42.7% uninsured prevalence among adults living below the 200% poverty threshold).

Lack of Healthcare Insurance Coverage

(Total Area Adults Under 65, 2011)



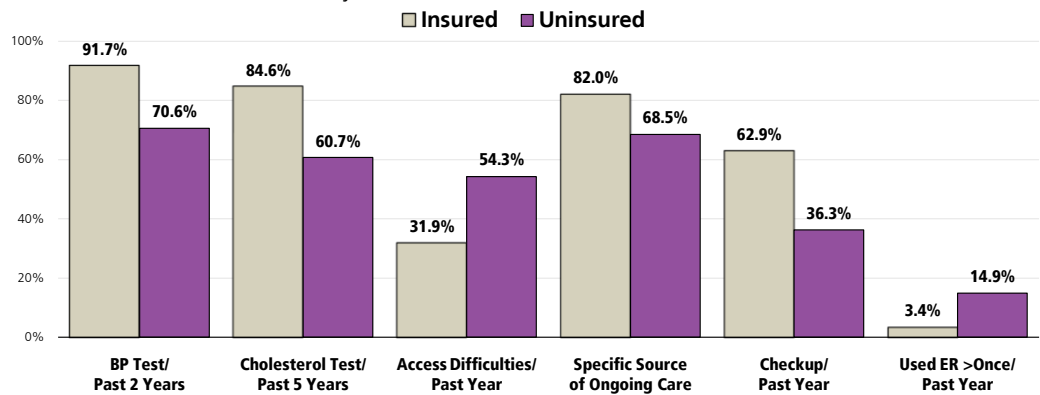
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 204]
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective AHS-1]
 Notes: • Asked of all respondents under the age of 65.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

👤 As might be expected, uninsured adults in the Total Area are less likely to receive routine care and preventive health screenings, and are more likely to have experienced difficulties accessing healthcare.

👤 Further, those without healthcare coverage are four times as likely as the insured population to have used the ER for medical care more than once in the past year.

Preventive Healthcare

(By Insured Status; Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Items 17, 23, 49, 52, 205, 208]
 Notes: • Asked of all respondents.

Difficulties Accessing Healthcare

Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. It impacts: overall physical, social, and mental health status; prevention of disease and disability; detection and treatment of health conditions; quality of life; preventable death; and life expectancy.

Access to health services means the timely use of personal health services to achieve the best health outcomes. It requires three distinct steps: 1) Gaining entry into the health care system; 2) Accessing a health care location where needed services are provided; and 3) Finding a health care provider with whom the patient can communicate and trust.

– Healthy People 2020 (www.healthypeople.gov)

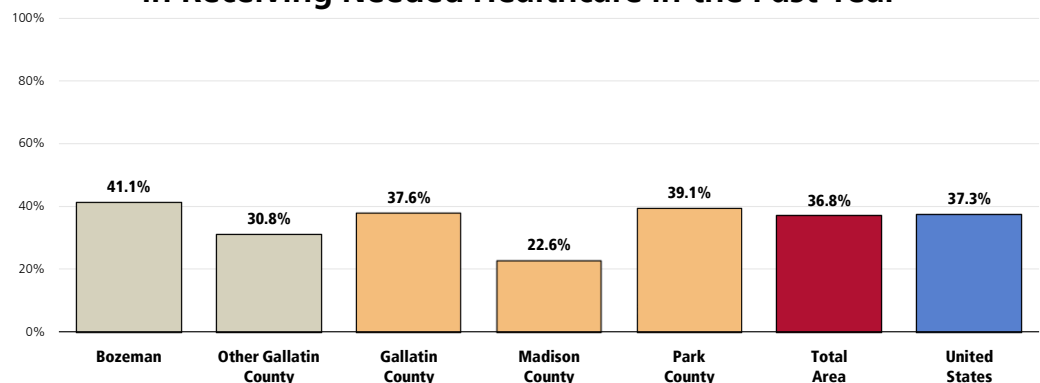
Difficulties Accessing Services

More than one-third (36.8%) of Total Area adults report some type of difficulty or delay in obtaining healthcare services in the past year.

- Similar to national findings.
- Within Gallatin County, Bozeman adults more often report difficulties accessing healthcare.
- By county, Madison County adults less often report difficulties.

This indicator reflects the percentage of the total population experiencing problems accessing healthcare in the past year, regardless of whether they needed or sought care.



Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 208]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.

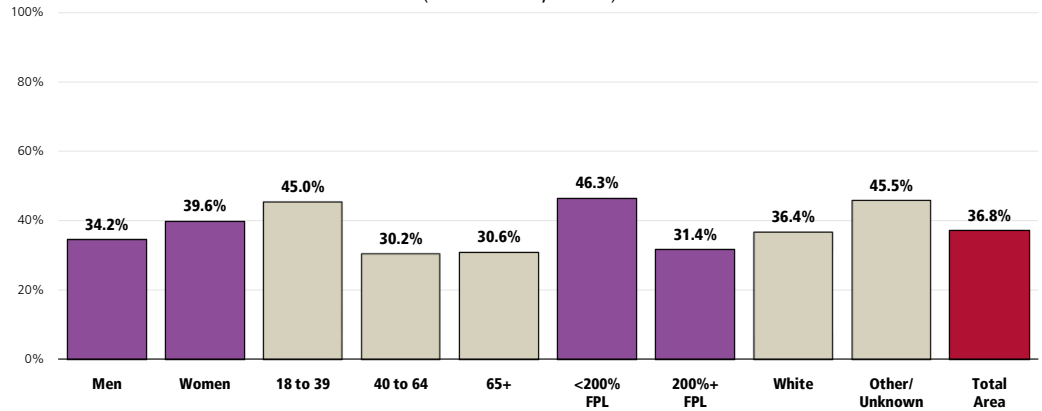
Notes: • Asked of all respondents.

Note that the following demographic groups more often report difficulties accessing healthcare services:

-  Adults under the age of 40.
-  Lower-income residents.

Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year

(Total Area, 2011)



Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 208]
 Notes: Asked of all respondents.
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Barriers to Healthcare Access

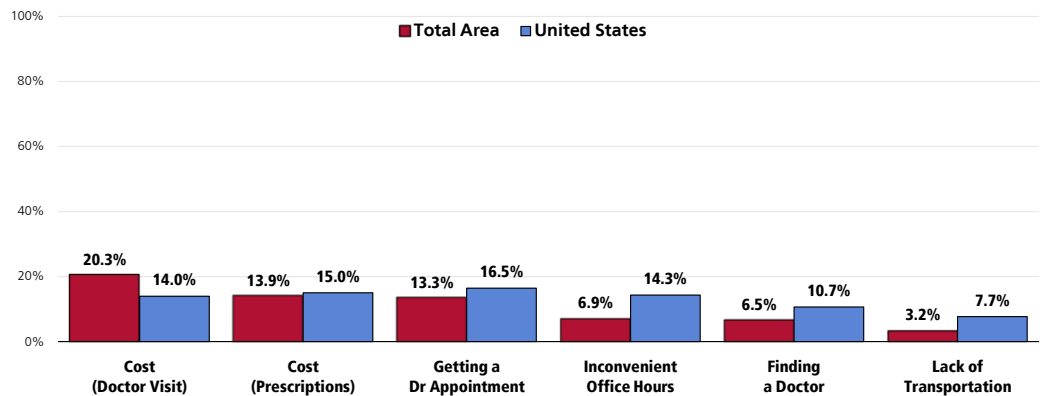
To better understand healthcare access barriers, survey participants were asked whether any of six types of barriers to access prevented them from seeing a physician or obtaining a needed prescription in the past year.

Again, these percentages reflect the total population, regardless of whether medical care was needed or sought.

Of the tested barriers, cost of a physician visit impacted the greatest share of Total Area adults (20.3% say that they experienced difficulty getting an appointment in the past year).

- The proportion of Total Area adults impacted was statistically less favorable than that found nationwide for **cost of a physician visit** and **inconvenient office hours**.
- On the other hand, the proportion of residents impacted was statistically more favorable than that found nationally for difficulty finding a physician and transportation as a barrier to access.

Barriers to Access Have Prevented Medical Care in the Past Year



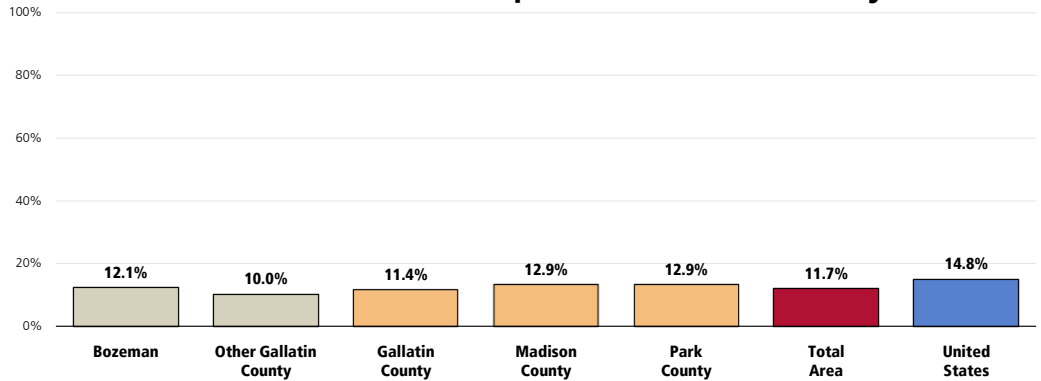
Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Items 7-12]
 Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: Asked of all respondents.

Prescriptions

Among all Total Area adults, 11.7% skipped or reduced medication doses in the past year in order to stretch a prescription and save money.


- Statistically similar to national findings.
- In Gallatin County, no difference by area.
- No significant difference among the three counties.

Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money



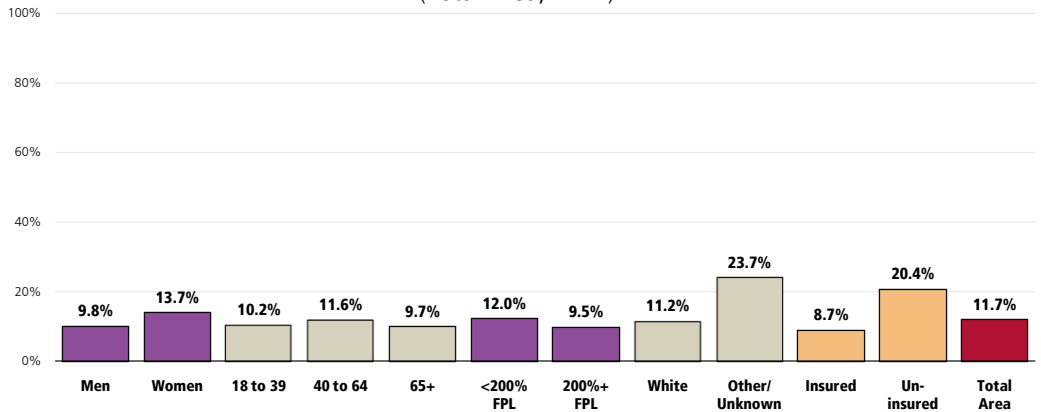
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey [Item 13]
 • Professional Research Consultants, Inc. PRC National Health Survey, 2011.

Notes: • Asked of all respondents.

 Uninsured adults are more likely to have skipped or reduced their prescription doses.

Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money

(Total Area, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 13]

Notes: • Asked of all respondents.

• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Accessing Healthcare for Children

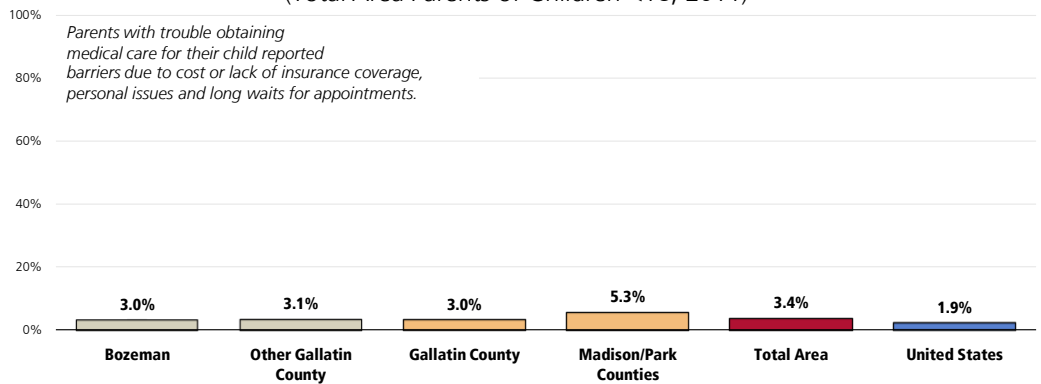
Surveyed parents were also asked if, within the past year, they experienced any trouble receiving medical care for a randomly-selected child in their household.

A total of 3.4% of parents say there was a time in the past year when they needed medical care for their child, but were unable to get it.

- Comparable to that reported nationwide.
- In Gallatin County, no difference by area.
- No significant difference between Gallatin County and the combined Madison/Park Counties.

Had Trouble Obtaining Medical Care for Child in the Past Year

(Total Area Parents of Children <18, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Items 129-130]
• Professional Research Consultants. PRC National Health Survey. 2011.
Notes: • Asked of all respondents with children under 18 at home.
• Madison and Park County data were combined for reliability.

Among the relatively few parents experiencing difficulties, most cited **cost or a lack of insurance** as the primary reason; others cited personal issues and long waits for appointments.

Primary Care Services

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)

Primary Care Providers

Gallatin and Park Counties have a much more favorable primary care provider-to-population ratio than does Madison County.

- The ratio of county population to primary care provider is highest in Madison County (829:1), compared with 696:1 in Gallatin County and 597:1 in Park County.
- Across Montana, the ratio is 813:1.

Primary Care Providers

(County Population Per Primary Care Provider; 2008 Data)

	Population	Providers	PCP Ratio
Gallatin County	89,812	129	696:1
Madison County	7,465	9	829:1
Park County	16,109	27	597:1
Montana	968,035	1,191	813:1

Sources: ● County Health Rankings. University of Wisconsin Population Health Institute & Robert Wood Johnson Foundation. www.countyhealthrankings.org.
Notes: ● Ratios represent the proportion of each population per provider; 2008 data.

Specific Source of Ongoing Care

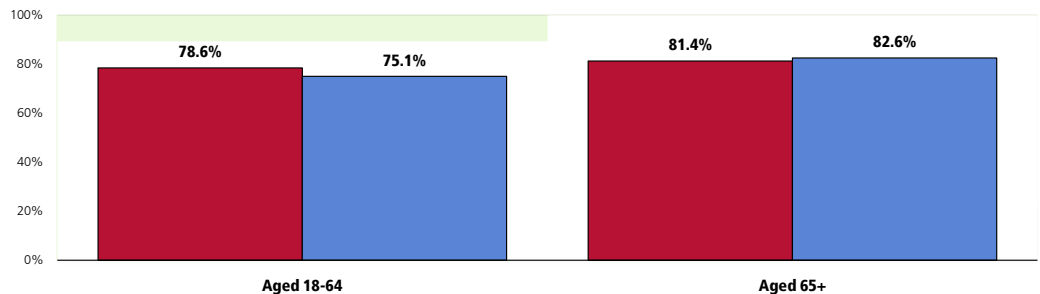
Having a specific source of ongoing care includes having a doctor's office, clinic, urgent care center, walk-in clinic, health center facility, hospital outpatient clinic, HMO or prepaid group, military/VA clinic, or some other kind of place to go if one is sick or needs advice about his or her health. A hospital emergency room is not considered a source of ongoing care in this instance.

A total of 79.7% of Total Area adults were determined to have a specific source of ongoing medical care.

- Similar to national findings.
- Within Gallatin County, no significant difference.
- Statistically similar by county.
- 👤 Among adults age 18-64, 78.6% have a specific source for ongoing medical care, more favorable than national findings.
 - Similar to the US prevalence.
 - Fails to satisfy the Healthy People 2020 target for this age group (89.4% or higher).
- 👤 Among adults 65+, 81.4% have a specific source for care.
 - Statistically similar to the US figure.
 - Fails to satisfy the Healthy People 2020 target of 100% for adults 65+.

Have a Specific Source of Ongoing Medical Care

Healthy People 2020 Targets = 89.4% or Higher (18-64), 100% (65+) ■ Total Area ■ United States



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Items 206-207]
• Professional Research Consultants. PRC National Health Survey. 2011.
• US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objectives AH5-5.3, 5.4]
Notes: • Asked of all respondents.

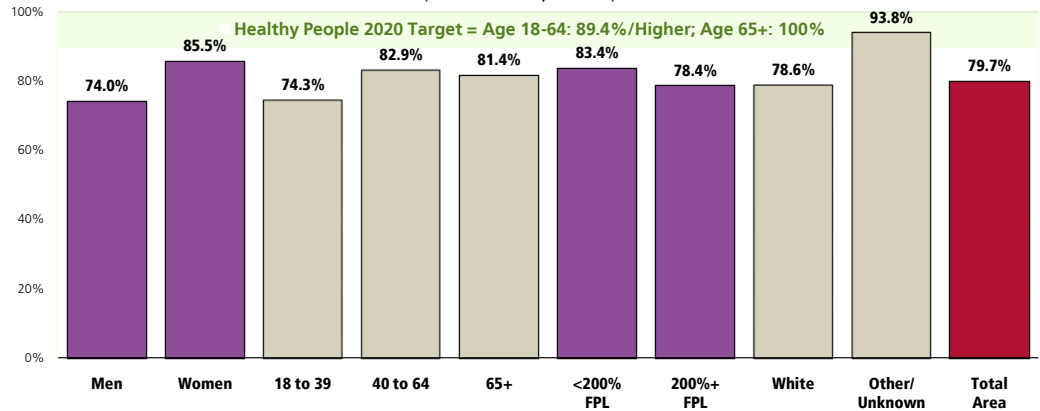
When viewed by demographic characteristics, the following population segments are less likely to have a specific source of care:

 Men.

 Whites.

Have a Specific Source of Ongoing Medical Care

(Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 205]
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objectives AHS-5.3, 5.4]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Type of Place Used for Medical Care

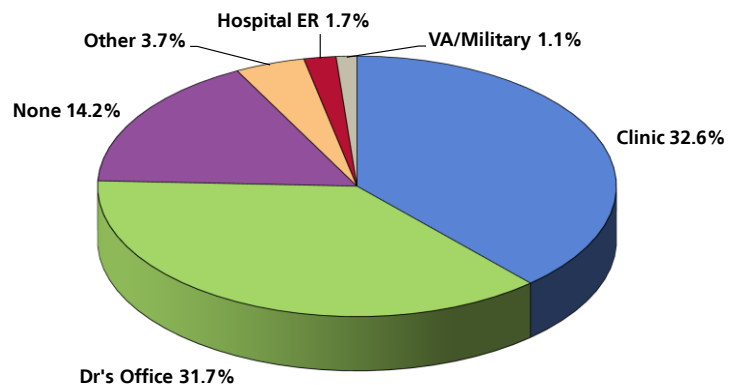
When asked where they usually go if they are sick or need advice about their health, the greatest share of respondents (32.6%) identified a particular clinic.

Another 31.7% say they usually go to a physician's office, while 1.7% rely on a hospital emergency room.

Note that 14.2% do not have a usual place for medical care.

Particular Place Utilized for Medical Care

(Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Items 15-16]
 Notes: • Asked of all respondents.

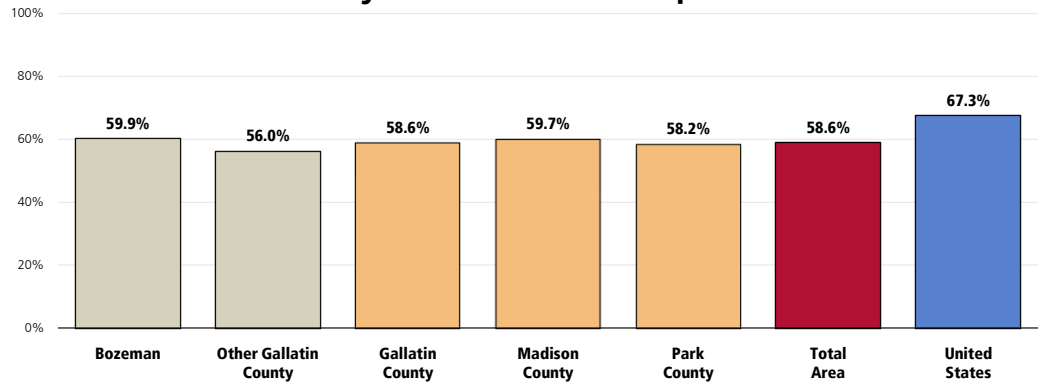
Utilization of Primary Care Services

Adults

Nearly 6 in 10 adults (58.6%) visited a physician for a routine checkup in the past year.

- Lower than national findings.
- In Gallatin County, no difference by area.
- Statistically similar by county.

Have Visited a Physician for a Checkup in the Past Year



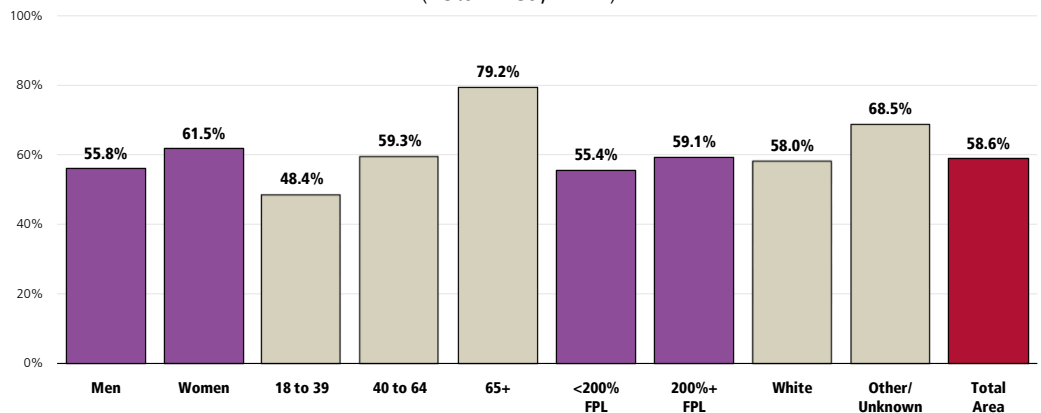
Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 17]
 • Professional Research Consultants, Inc. PRC National Health Survey. 2011.

Notes: • Asked of all respondents.

👤 Adults under age 40 are less likely to have received routine care in the past year (note the positive correlation with age).

Have Visited a Physician for a Checkup in the Past Year

(Total Area, 2011)




Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 17]

Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

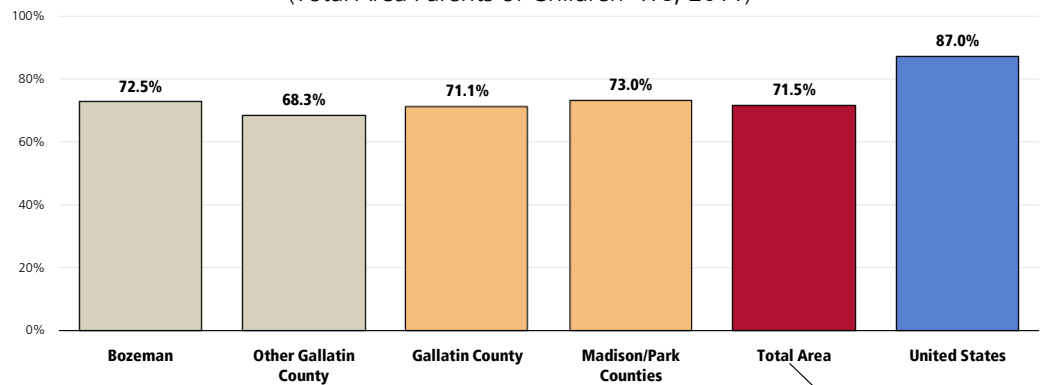
Children

Among surveyed parents, 71.5% report that their child has had a routine checkup in the past year.

- Lower than national findings.
 - No significant difference within Gallatin County.
 - No significant difference between Gallatin County and the combined Madison/Park Counties.
-  Highest among children under the age of 6.

Child Has Visited a Physician for a Routine Checkup in the Past Year

(Total Area Parents of Children <18, 2011)



Sources: ● Professional Research Consultants, Inc. PRC Community Health Survey. [Item 131]
● Professional Research Consultants. PRC National Health Survey. 2011.
Notes: ● Asked of all respondents with children under 18 at home.
● Madison and Park County data were combined for reliability.

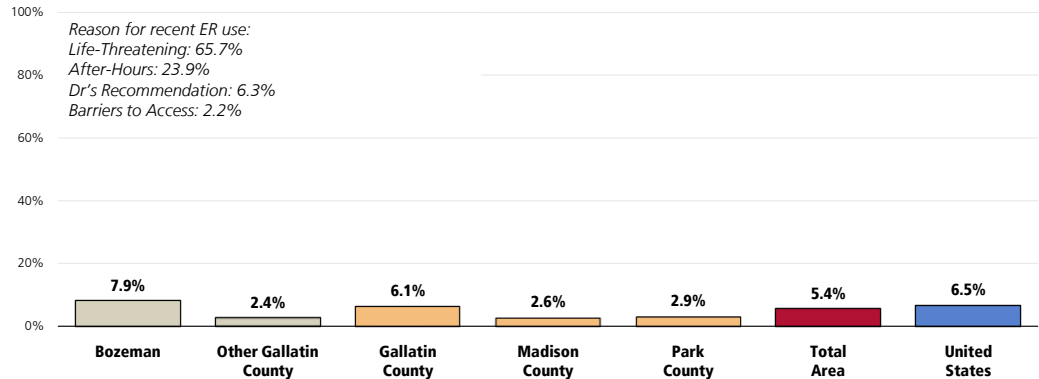
5/Under: 86.5%
6 to 12: 54.5%
Teens: 73.9%

Emergency Room Utilization

A total of 5.4% of Total Area adults have gone to a hospital emergency room more than once in the past year about their own health.

- Similar to national findings.
- In Gallatin County, much higher in the Bozeman community.
- By county, highest in Gallatin.

Have Used a Hospital Emergency Room More Than Once in the Past Year



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Items 23-24]
• Professional Research Consultants, Inc. PRC National Health Survey, 2011.
Notes: • Asked of all respondents.

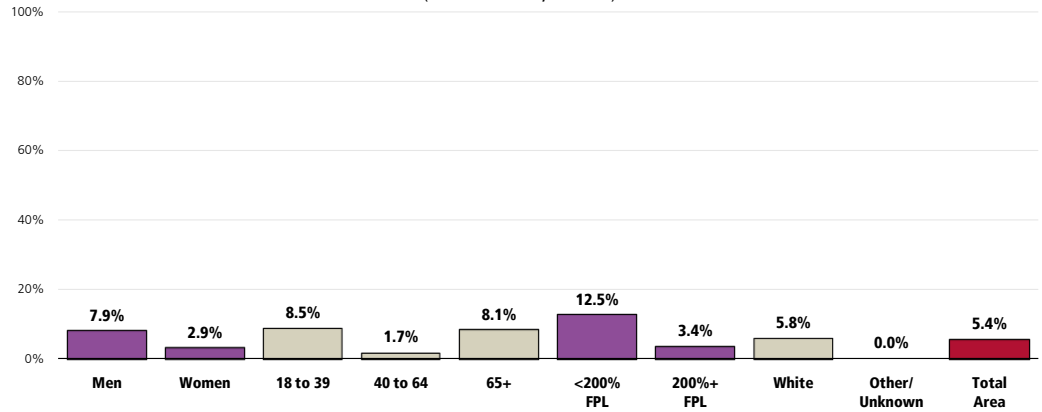
Of those using a hospital ER, 65.7% say this was due to an **emergency or life-threatening situation**, while 23.9% indicated that the visit was during **after-hours or on the weekend**. Another 6.3% cited a **physician's recommendation** and 2.2% mentioned various **barriers to access**.

The following population segments are more likely to report using an ER for medical care more than once in the past year:

- Men.
- Adults under the age of 40 and those aged 65+.
- Lower-income residents.
- Whites.

Have Used a Hospital Emergency Room More Than Once in the Past Year

(Total Area, 2011)



Sources: Professional Research Consultants, Inc. PRC Community Health Survey. [Item 23]
Notes: Asked of all respondents.
Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Oral Health

The health of the mouth and surrounding craniofacial (skull and face) structures is central to a person's overall health and well-being. Oral and craniofacial diseases and conditions include: dental caries (tooth decay); periodontal (gum) diseases; cleft lip and palate; oral and facial pain; and oral and pharyngeal (mouth and throat) cancers.

The significant improvement in the oral health of Americans over the past 50 years is a public health success story. Most of the gains are a result of effective prevention and treatment efforts. One major success is community water fluoridation, which now benefits about 7 out of 10 Americans who get water through public water systems. However, some Americans do not have access to preventive programs. People who have the least access to preventive services and dental treatment have greater rates of oral diseases. A person's ability to access oral healthcare is associated with factors such as education level, income, race, and ethnicity.

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
- 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
- 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.

Community water fluoridation and school-based dental sealant programs are 2 leading evidence-based interventions to prevent tooth decay.

Major improvements have occurred in the nation's oral health, but some challenges remain and new concerns have emerged. One important emerging oral health issue is the increase of tooth decay in preschool children. A recent CDC publication reported that, over the past decade, dental caries (tooth decay) in children ages 2 to 5 have increased.

Lack of access to dental care for all ages remains a public health challenge. This issue was highlighted in a 2008 Government Accountability Office (GAO) report that described difficulties in accessing dental care for low-income children. In addition, the Institute of Medicine (IOM) has convened an expert panel to evaluate factors that influence access to dental care.

Potential strategies to address these issues include:

- Implementing and evaluating activities that have an impact on health behavior.
- Promoting interventions to reduce tooth decay, such as dental sealants and fluoride use.
- Evaluating and improving methods of monitoring oral diseases and conditions.
- Increasing the capacity of State dental health programs to provide preventive oral health services.
- Increasing the number of community health centers with an oral health component.

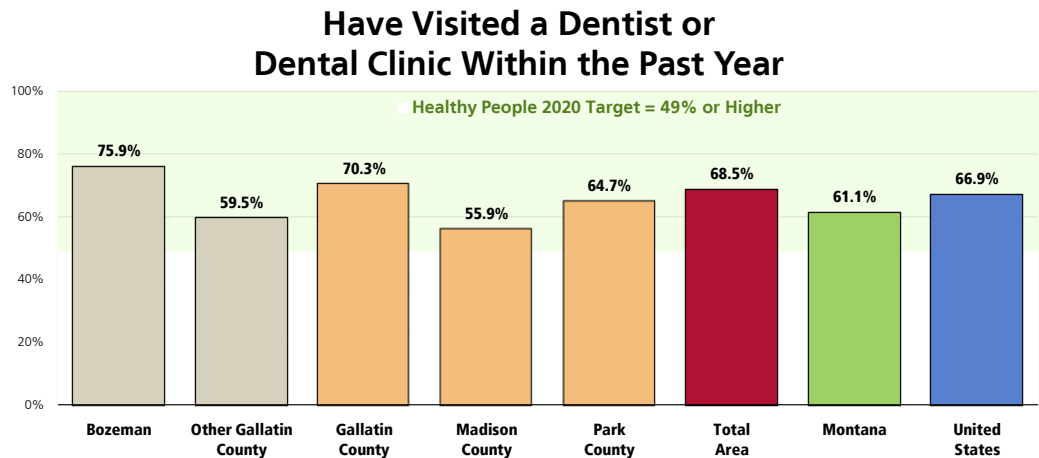
– Healthy People 2020 (www.healthypeople.gov)

Dental Care

Adults

Just over 2 in 3 Total Area adults (68.5%) visited a dentist or dental clinic (for any reason) in the past year.

- More favorable than statewide findings.
- Similar to national findings.
- Satisfies the Healthy People 2020 target (49% or higher).
- Within Gallatin County, more favorable in the Bozeman community.
- By county, highest in Gallatin and lowest in Madison.



Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 21]
- Professional Research Consultants. PRC National Health Survey. 2011.
- US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective OH-7]
- Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2008 Montana Data.

Notes:

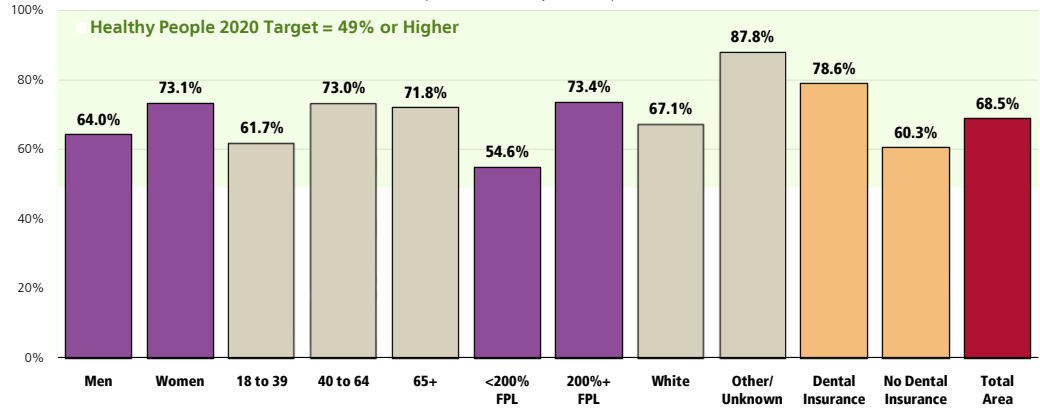
- Asked of all respondents.

The following population segments are less likely to report recent dental care:

- 👤 Men.
- 👤 Young adults.
- 👤 Those living on less than the 200% poverty threshold.
- 👤 Whites.
- 👤 Those without dental insurance coverage.

Have Visited a Dentist or Dental Clinic Within the Past Year

(Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 21]
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective OH-7]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

Children

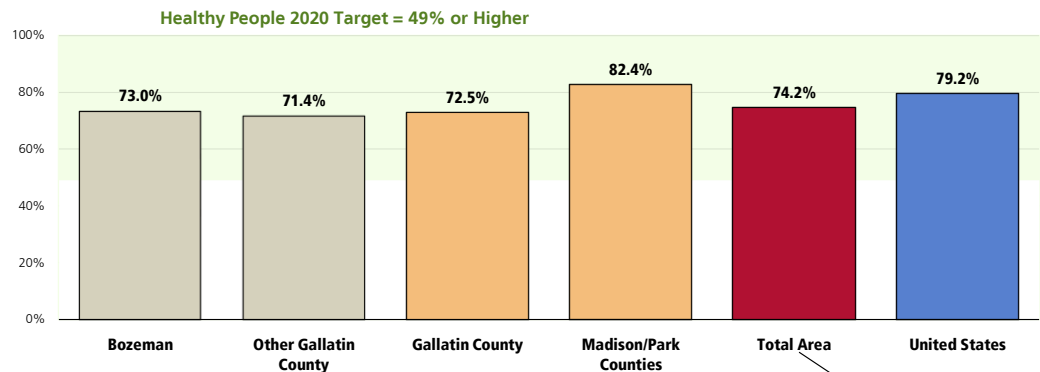
A total of 74.2% of parents report that their child (age 2 to 17) has been to a dentist or dental clinic within the past year.

- Similar to national findings.
- Satisfies the Healthy People 2020 target (49% or higher).
- Similar by area in Gallatin County.
- No significant difference between Gallatin County and the combined Madison/Park area.

👨👩👧 As might be expected, regular dental care is notably lower among children under age 6.

Child Has Visited a Dentist or Dental Clinic Within the Past Year

(Asked of Adults With Children Aged 2-17; Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 132]
 • Professional Research Consultants, Inc. PRC National Health Survey. 2011.
 • US Department of Health and Human Services. Healthy People 2020. December 2010 <http://www.healthypeople.gov>. [Objective OH-7]
 Notes: • Asked of all respondents with children aged 2 through 17.
 • Madison and Park County data were combined for reliability.

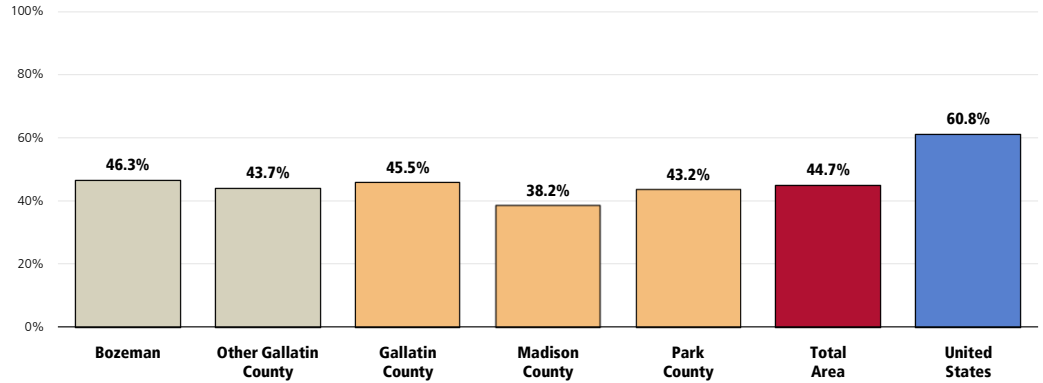
2 to 5: 43.2%
 6 to 12: 94.3%
 Teens: 82.2%

Dental Insurance

A total of 44.7% of Total Area adults have dental insurance that covers all or part of their dental care costs.

- Lower than the national finding.
- No significant difference by area within Gallatin County.
- Similar findings among the three counties.

Have Insurance Coverage That Pays All or Part of Dental Care Costs



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 22]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.

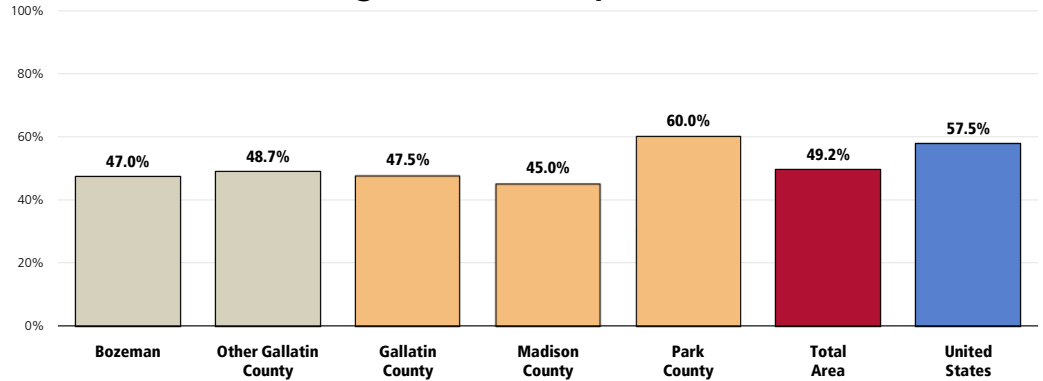
Notes: • Asked of all respondents.

Vision Care


A total of 49.2% of residents had an eye exam in the past two years during which their pupils were dilated.

- Statistically less favorable than national findings.
- No significant difference by area within Gallatin County.
- By county, lowest in Gallatin and highest in Park.

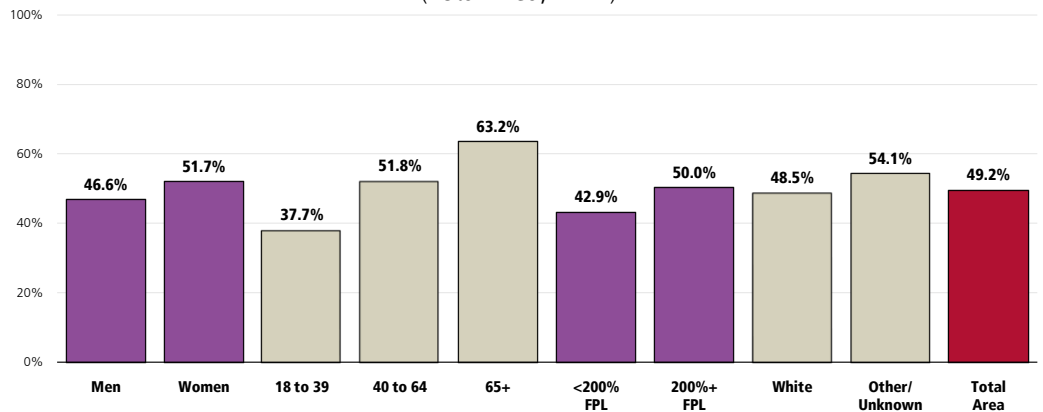
Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 20]
 • Professional Research Consultants. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents.

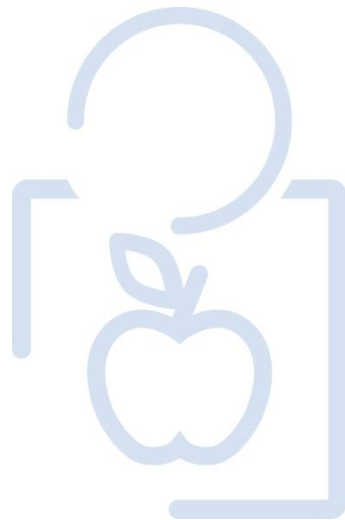
 Recent eye exams are much less often noted among young adults.

Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated (Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 20]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

HEALTH EDUCATION & OUTREACH



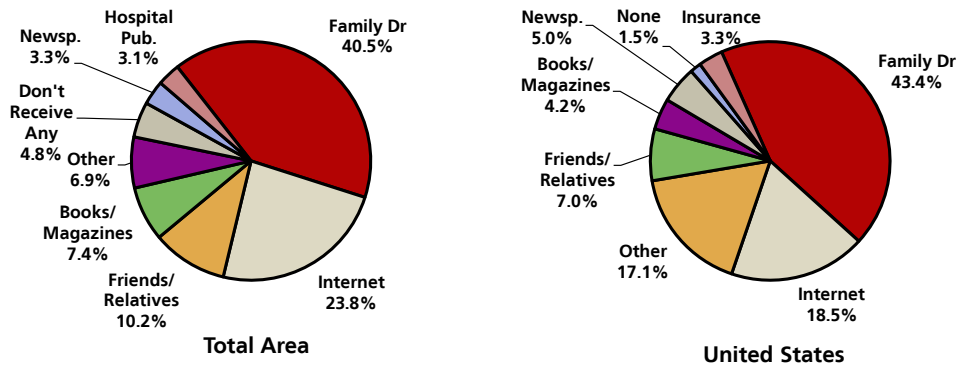
Healthcare Information Sources

Family physicians and the Internet are residents' primary sources of healthcare information.

- 40.5% of Total Area adults cited their **family physician** as their primary source of healthcare information (similar to national findings).
- The **Internet** received the second-highest response, with 23.8% (higher than found nationally).
 - Other sources mentioned include friends and relatives (mentioned by 10.2%), books and magazines (7.4%), newspapers (3.3%), and hospital publications (3.1%).
- A total of 4.8% of survey respondents say that they do not receive any healthcare information.

Primary Source of Healthcare Information

(Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 122]
 • Professional Research Consultants, Inc. PRC National Health Survey. 2011.

Notes: • Asked of all respondents.

Participation in Health Promotion Events

Educational and community-based programs play a key role in preventing disease and injury, improving health, and enhancing quality of life.

Health status and related-health behaviors are determined by influences at multiple levels: personal, organizational/institutional, environmental, and policy. Because significant and dynamic interrelationships exist among these different levels of health determinants, educational and community-based programs are most likely to succeed in improving health and wellness when they address influences at all levels and in a variety of environments/settings.

Education and community-based programs and strategies are designed to reach people outside of traditional healthcare settings. These settings may include schools, worksites, healthcare facilities, and/or communities.

Using nontraditional settings can help encourage informal information sharing within communities through peer social interaction. Reaching out to people in different settings also allows for greater tailoring of health information and education.

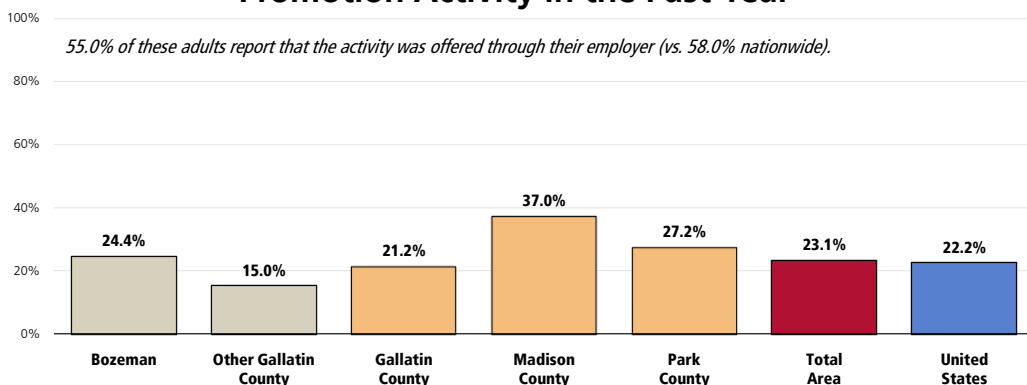
Educational and community-based programs encourage and enhance health and wellness by educating communities on topics such as: chronic diseases; injury and violence prevention; mental illness/behavioral health; unintended pregnancy; oral health; tobacco use; substance abuse; nutrition; and obesity prevention.

– Healthy People 2020 (www.healthypeople.gov)

A total of 23.1% of Total Area adults participated in some type of organized health promotion activity in the past year, such as health fairs, health screenings, or seminars.




- Similar to the national prevalence.
- In Gallatin County, higher in the Bozeman community.
- Viewed by county: much higher in Madison, lower in Gallatin.
- 👤 Of these adults, 55.0% indicate that the event was sponsored by their employer (similar to the 58.0% nationwide).

Participated in a Health Promotion Activity in the Past Year

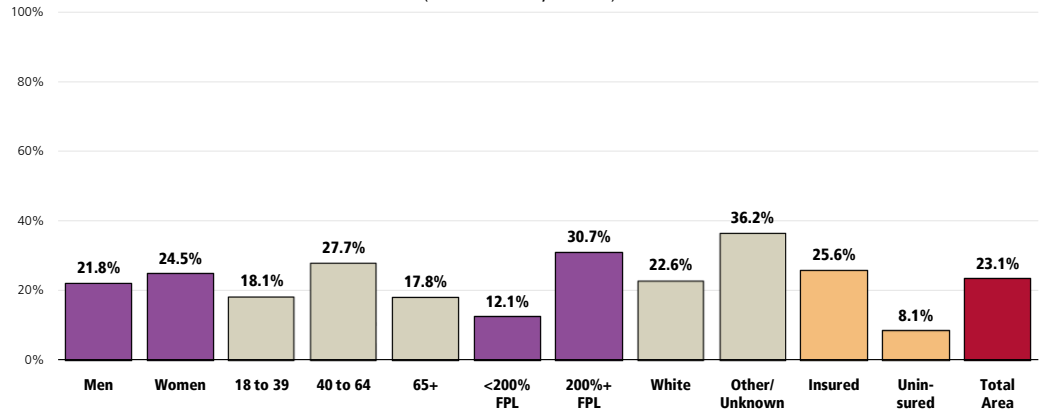


Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Items 123-124]
 • Professional Research Consultants, Inc. PRC National Health Survey. 2011.
 Notes: • Asked of all respondents.

The following chart outlines participation by various demographic characteristics. Note that these population segments are least likely to report attendance at a health promotion event:

-  Young adults as well as those age 65+.
-  Lower-income residents.
-  The uninsured population.

Participated in a Health Promotion Activity in the Past Year (Total Area, 2011)



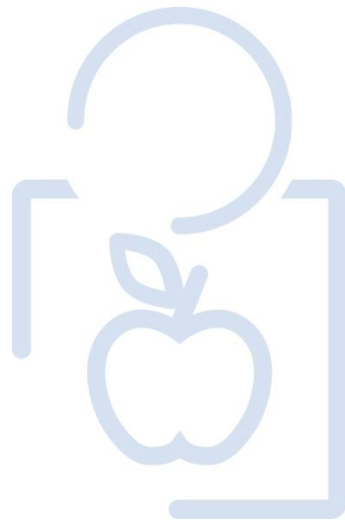
Sources:

- Professional Research Consultants, Inc. PRC Community Health Survey. [Item 123]

 Notes:

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.

PERCEPTIONS OF HEALTHCARE

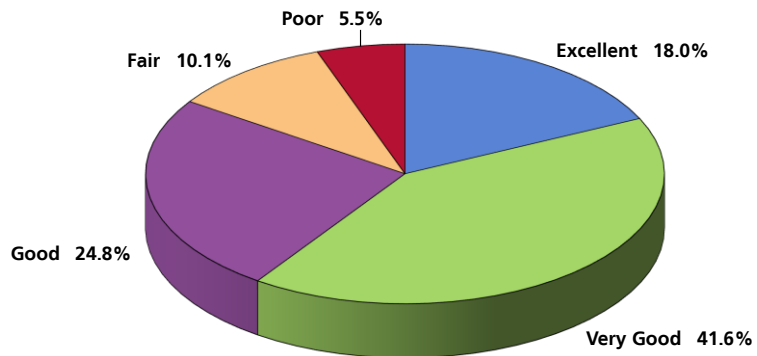


Ratings of Local Healthcare Services

A total of 6 in 10 Total Area adults (59.6%) rate the overall healthcare services available in their community as “excellent” or “very good.”

- Another 24.8% gave “good” ratings.

Rating of Overall Healthcare Services Available in the Community
(Total Area, 2011)

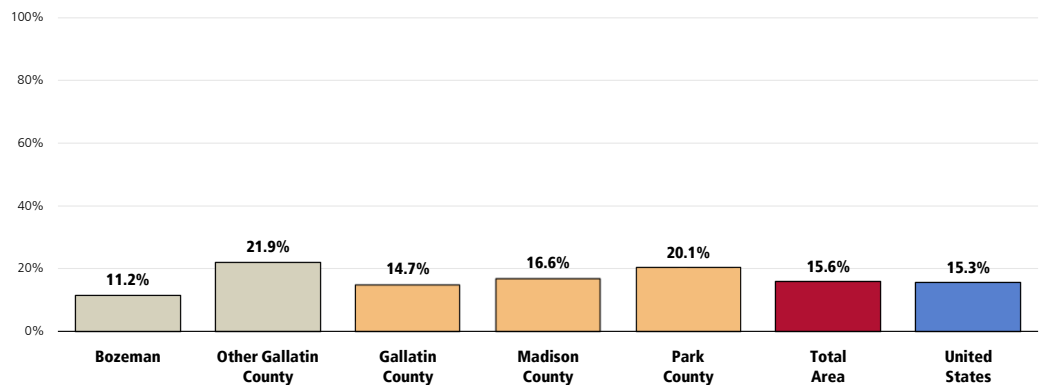


Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 6]
Notes: • Asked of all respondents.

However, 15.6% of residents characterize local healthcare services as “fair” or “poor.”

- Nearly identical to the nationwide figure.
- In Gallatin County, much higher outside the Bozeman community.
- By county, no significant differences to report.

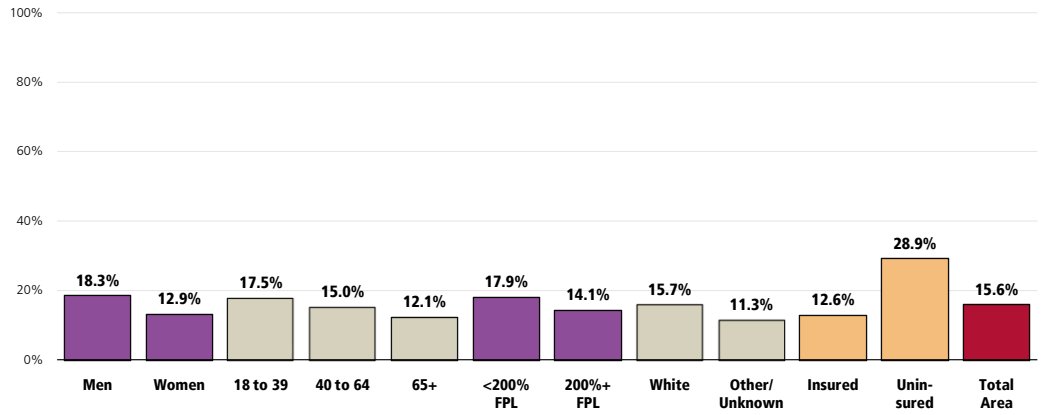
Perceive Local Healthcare Services as “Fair” or “Poor”



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 6]
• Professional Research Consultants, Inc. PRC National Health Survey. 2011.
Notes: • Asked of all respondents.

👤 Adults without healthcare insurance coverage are more critical of local healthcare services.

Perceive Local Healthcare Services as "Fair" or "Poor" (Total Area, 2011)



Sources: • Professional Research Consultants, Inc. PRC Community Health Survey. [Item 6]
Notes: • Asked of all respondents.
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size.