Executive Report

2014 Community Health Needs Assessment

Gallatin, Madison, & Park Counties, Montana

Prepared for:

Bozeman Deaconess Hospital Community Health Partners (CHP) Gallatin City–County Health Department

By:

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Introduction



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Project Overview

Project Goals

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

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

- To improve residents' health status, increase their life spans, and elevate their overall quality of life. A healthy community is not only one where its residents suffer little from physical and mental illness, but also one where its residents enjoy a high quality of life.
- To reduce the health disparities among residents. By gathering demographic
 information along with health status and behavior data, it will be possible to identify
 population segments that are most at-risk for various diseases and injuries.
 Intervention plans aimed at targeting these individuals may then be developed to
 combat some of the socio-economic factors 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.

This assessment was conducted on behalf of Bozeman Deaconess Hospital, Community Health Partners (CHP), and the Gallatin City-County Health Department by Professional Research Consultants, Inc. (PRC). PRC is a nationally-recognized healthcare consulting firm with extensive experience conducting Community Health Needs Assessments such as this in hundreds of communities across the United States since 1994.

Methodology

This assessment incorporates quantitative data input from primary research (the PRC Community Health Survey) and secondary research (vital statistics and other existing health-related data); these quantitative components allow for trending and comparison to benchmark data at the state and national levels

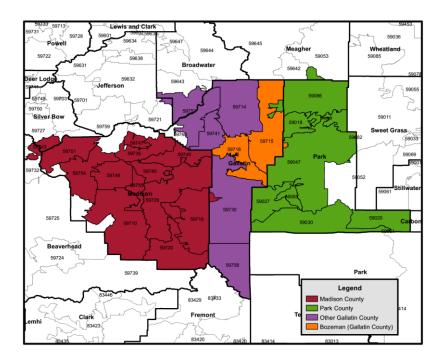
PRC Community Health Survey

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 PRC, and is similar to the previous survey used in the region, allowing for data trending.

Community Defined for This Assessment

The study area for the survey effort (referred to as the "Total Area" in this report) is made up of three Montana counties (Gallatin, Madison, and Park counties); for survey indicators, the city of Bozeman is examined separately from the remainder of Gallatin County. This community definition is illustrated in the following map.



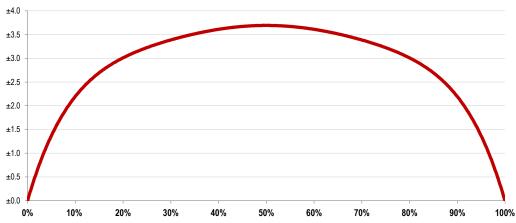
Sample Approach & Design

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

The sample design used for this effort consisted of a stratified random sample of 700 individuals age 18 and older in the Total Area, including 199 interviews in Bozeman, 201 in Other Gallatin County (400 total in Gallatin County), and 150 each in Madison and Park counties. Once the interviews were completed, these were weighted in proportion to the actual population distribution so as to appropriately represent the Total Area as a whole. All administration of the surveys, data collection and data analysis was conducted by Professional Research Consultants, Inc. (PRC).

For statistical purposes, the maximum rate of error associated with a sample size of 700 respondents is ±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



- 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% ± 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% ± 3.7%)
 of the total population would respond "yes" if asked this question.

Sample Characteristics

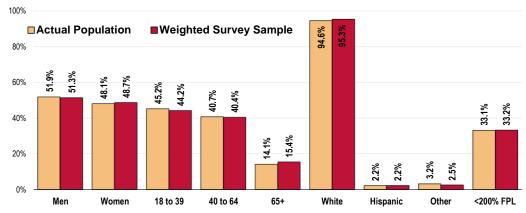
To accurately represent the population studied, PRC strives to minimize bias through application of a proven telephone methodology and random-selection techniques. And, while this random sampling of the population produces a highly representative sample, it is a common and preferred practice to "weight" 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 chart outlines the characteristics of the Total Area sample for key demographic variables, compared to actual population characteristics revealed in census data. [Note that the sample consisted solely of area residents age 18 and older; data on children were given by proxy by the person most responsible for that child's healthcare needs, and these children are not represented demographically in this chart.]

Population & Survey Sample Characteristics

(Total Area, 2014)



- Sources: Census 2010, Summary File 3 (SF 3). U.S. Census Bureau.
 - 2014 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 2014 guidelines place the poverty threshold for a family of four at \$23,850 annual household income or lower). In sample segmentation: "Iow income" refers to community members living in a household with defined poverty status or living just above the poverty level, earning up to twice the poverty threshold; "mid/high income" 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 Needs Assessment. The Gallatin City-County Health Department assisted in the collection/compilation of existing data. Data for the Total Area were obtained from the following sources (specific citations are included with the graphs throughout this report):

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

Note that secondary data reflect county-level data.

Benchmark Data

Trending

A similar survey was administered in the Total Area in 2011 by PRC on behalf of Bozeman Deaconess Hospital, Community Health Partners (CHP), and the Gallatin City-County Health Department. Trending data, as revealed by comparison to prior survey results, are provided throughout this report whenever available. Historical data for secondary data indicators are also included for the purposes of trending.

Montana Risk Factor Data

Statewide risk factor data are provided where available as an additional benchmark against which to compare local survey findings; these data 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 2013 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.

Community Stakeholder Input

This Community Health Needs Assessment takes into account input from persons who represent the broad interests of the community. As a co-sponsor of the study, the Gallatin City-County Health Department lent its special knowledge of and expertise in public health to the project design. Community Health Partners (CHP) health center also co-sponsored the study, and further represented the interests of medically underserved, low-income, and minority populations in the community.

Determining Significance

Differences noted in this report represent those determined to be significant. For surveyderived indicators (which are subject to sampling error), statistical significance is determined based on confidence intervals (at the 95 percent confidence level) using question-specific samples and response rates. For secondary data indicators (which do not carry sampling error, but might be subject to reporting error), "significance," for the purpose of this report, is determined by a 5% variation from the comparative measure.

Information Gaps

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

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

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

Summary of Findings

Significant Health Needs of the Community

The following "areas of opportunity" represent the significant health needs of the community, based on the information gathered through this Community Health Needs Assessment and the guidelines set forth in Healthy People 2020. From these data, opportunities for health improvement exist in the area with regard to the following health issues (see also the summary tables presented in the following section).

Areas of O	pportunity Identified Through This Assessment
Access to Healthcare Services	 Lack of Health Insurance [Park County] Lack of Transportation [especially Park County] Appointment Availability [Bozeman] Skipping/Stretching Prescriptions Primary Care Physician Ratio [Madison County] Health Professional Shortage Area [Madison County] Specific Source of Care [Other Gallatin & Madison County] Routine Medical Care (Adults) ER Utilization [Bozeman]
Cancer	 #1 Leading Cause of Death Prostate Cancer Deaths Female Breast Cancer Incidence Female Breast Cancer Screening Cervical Cancer Screening Colorectal Cancer Incidence [Gallatin County] Colorectal Cancer Screening Skin Cancer Prevalence [Bozeman]
Diabetes	Blood Sugar Testing (Non-Diabetics)
Heart Disease & Stroke	 #2 Leading Cause of Death High Blood Pressure Prevalence [Park County] High Blood Cholesterol Prevalence [Other Gallatin] Overall Cardiovascular Risk
Infant Health & Family Planning	Prenatal Care [Madison County]
Injury & Violence	 Unintentional Injury Deaths Motor Vehicle Crash Deaths Distracted Driving (Cell Phone) [Gallatin County] Seat Belt Usage (Adults) Firearm-Related Deaths Firearm Prevalence Firearms in Homes With Children Firearm Storage [Park County] Domestic Violence Experience Domestic Violence Rate [Park County]

	Areas of Opportunity (continued)
Mental Health	 "Fair/Poor" Mental Health Symptoms of Chronic Depression Diagnosed Depression [Bozeman] Stress [Bozeman] Suicide Deaths
Nutrition, Physical Activity & Weight	 Fruit/Vegetable Consumption Low Food Access Medical Advice on Nutrition Overweight & Obesity (Adults) Medical Advice on Weight Trying to Lose Weight (Overweight Adults) Overweight & Obesity (Children) Leisure-Time Physical Activity Meeting Physical Activity Guidelines Medical Advice on Physical Activity Children's Physical Activity [Bozeman]
Oral Health	Dental Insurance CoverageRegular Dental Care [Other Gallatin]
Potentially Disabling Conditions	 Arthritis (50+) [Gallatin County] Osteoporosis Prevalence (50+) Sciatica/Chronic Back Pain [Bozeman]
Respiratory Diseases	 Asthma Prevalence [Adults] Use of Wood-Burning Stoves [Madison & Park Counties] Flu Vaccination [High-Risk 18-64] Pneumonia Vaccination [65+ and High-Risk 18-64]
Substance Abuse	 Overall Alcohol Use Heavy Drinking Drinking & Driving Drug-Induced Deaths Illegal Drug Use [Park County]
Tobacco Use	 Cigarette Smoking Prevalence Secondhand Smoke in the Home Cigarette Smoke in Households w/Children [Madison/Park Counties] Smoking Cessation Cigar Smoking Prevalence Smokeless Tobacco Prevalence
Vision	Regular Eye Exams

Summary Tables: Comparisons With Benchmark Data

The following tables provide an overview of indicators in the Total Area, including comparisons among the individual areas and trend data. 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 the 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 as "better than" (♠), "worse than" (♠), or "similar to" (♠) the combined opposing areas/counties.
- The columns to the right of the Total Area column provide trending, as well as comparisons between local data and any available state and national findings, and Healthy People 2020 targets. Again, symbols indicate whether the Total Area compares favorably (\$\sigma\$), unfavorably (\$\sigma\$), or comparably (\$\sigma\$) to these external data.

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

TREND SUMMARY (Current vs. Baseline Data)

Survey Data Indicators: Trends for survey-derived indicators represent significant changes since 2011.

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

vs. MT vs. US

Total Area

3.5

4.3

better

Total Area vs. Benchmarks

TREND

HP2020

Each Sub-Area vs. Others

Social Determinants	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Linguistically Isolated Population (Percent)					
			0.7	0.2	0.3
Population in Poverty (Percent)				ớ	ớ
			13.3	10.7	11.0
Population Below 200% FPL (Percent)					
			30.6	32.5	39.0
Children Below 200% FPL (Percent)				***	ớ
			12.3	19.9	13.7
No High School Diploma (Age 25+, Percent)					
			3.9	4.5	7.9
Unemployment Rate (Age 16+, Percent)					
	Natar In the array				
	Note: In the green section, each subarea is compared against all other areas combined.				

Note: In the green section, each subarea is compared against all other areas 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.

0.6 0.4 4.9 12.8 14.8 14.9 31.9 35.7 33.6 12.9 * 19.9 20.8 4.6 8.1 14.3

5.4

£

similar

988

worse

Each Sub-Area vs. Others

Overall Health	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% "Fair/Poor" Physical Health			(X)		
	11.3	10.6	11.1	9.8	6.3
% Activity Limitations			给		
	25.1	18.9	23.1	15.6	23.1

Note: In the green section, each subarea is compared against all other areas 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.

Total Area vs. Benchmarks						
Area	vs. MT	vs. US	vs. HP2020	TREND		
10.3						
	15.4	15.3		14.1		
22.6						
	22.6	21.5		20.2		
	better	similar	worse			

Fach	Sub.	Area v	rs O	thers
Lacii	Oub-	AI Ea V	3. U	เมษาอ

Access to Health Services	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% [Age 18-64] Lack Health Insurance					
	11.8	11.5	11.7	17.9	21.9
% [Insured] Went Without Coverage in Past Year	会				
	10.1	6.3	8.9	10.6	11.1
% [<65] "Fair/Poor" Understanding of Insurance Exchanges			会		
	56.8	52.3	55.4	55.5	53.5
% [<65] "Very/Somewhat Likely" to Get Insurance Through Exchange					
	42.3	50.8	45.0	53.5	48.8
% Difficulty Accessing Healthcare in Past Year (Composite)	会		会	Ê	会
	34.5	31.3	33.5	34.0	31.9
% Inconvenient Hrs Prevented Dr Visit in Past Year	会				
	6.5	8.2	7.0	8.2	6.9
% Cost Prevented Getting Prescription in Past Year	会		给		
	8.3	9.4	8.6	5.2	13.4
% Cost Prevented Physician Visit in Past Year	会		会		
	13.3	12.3	12.9	9.4	16.2
% Difficulty Getting Appointment in Past Year					
	16.3	9.9	14.3	8.9	19.4
% Difficulty Finding Physician in Past Year			会	给	
	6.2	7.2	6.5	3.6	8.2
% Transportation Hindered Dr Visit in Past Year	会		Ê	Ê	\$400
	5.4	3.7	4.9	3.1	11.1

Total	Total Area vs. Benchmarks					
Area	vs. MT	vs. US	vs. HP2020	TREND		
13.5						
	21.5	15.1	0.0	22.0		
9.4						
		8.1		8.3		
55.1						
46.1						
33.3				给		
		39.9		36.8		
7.1						
		15.4		6.9		
9.0						
		15.8		13.9		
13.1						
	13.8	18.2		20.3		
14.6						
		17.0		13.3		
6.5						
		11.0		6.5		
5.6						
		9.4		3.2		

% Skipped Prescription Doses to Save Costs	£				给
	17.3	14.8	16.5	10.3	12.6
% Difficulty Getting Child's Healthcare in Past Year	£			É	3
	2.3	1.4	2.0	8.	6
Primary Care Doctors per 100,000					
			81.0	65.3	103.4
% [Age 18+] Have a Specific Source of Ongoing Care					
	79.7	71.1	77.0	62.0	74.2
% [Age 18-64] Have a Specific Source of Ongoing Care					
% [Age 65+] Have a Specific Source of Ongoing Care					
% Have Had Routine Checkup in Past Year	£				
	59.5	56.2	58.4	56.2	52.2
% Child Has Had Checkup in Past Year				É	3
	90.7	83.9	88.6	91	.4
% Two or More ER Visits in Past Year					
	10.7	2.6	8.2	7.7	2.2
% Rate Local Healthcare "Fair/Poor"	会		会	会	
	11.1	15.6	12.5	12.6	20.2
Live in a Health Professional Shortage Area (Percent)					给
			10.0	63.5	46.1
	Note: In the green section, each subarea is compared against all other areas 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.				

15.5		给		
		15.3		11.7
2.8				
		6.0		3.4
83.0		给		
	76.5	85.8		
75.4				
		76.3	95.0	79.7
74.0				
		75.6	89.4	78.6
82.5				
		80.0	100.0	81.4
57.4				
	61.8	65.0		58.6
89.0				
		84.1		71.5
7.4				
		8.9		5.4
13.6				
		16.5		15.6
38.8				
	46.3	37.6		
		Ê		
	better	similar	worse	

Arthritis, Osteoporosis & Chronic Back Conditions	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% [50+] Arthritis/Rheumatism					
	40.7	32.3	37.4	29.4	28.3
% [50+] Osteoporosis					
	20.3	4.1	14.0	10.3	5.8
% Sciatica/Chronic Back Pain					
	24.4	17.2	22.1	17.6	16.9

Note: In the green section, each subarea is compared against all other areas 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.

Total	Total Area vs. Benchmarks					
Area	vs. MT	vs. MT vs. US		TREND		
34.8						
		37.3		32.5		
12.0						
		13.5	5.3	6.8		
21.1				给		
		18.4		18.9		
		Ê				
	better	similar	worse			

Cancer	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Cancer (Age-Adjusted Death Rate)					
			137.6	136.7	143.5
Lung Cancer (Age-Adjusted Death Rate)					
Prostate Cancer (Age-Adjusted Death Rate)					
Female Breast Cancer (Age-Adjusted Death Rate)					
Colorectal Cancer (Age-Adjusted Death Rate)					
Prostate Cancer Incidence per 100,000					
			145.5	107.3	144.1

Total	Total Area vs. Benchmarks				
Area	vs. MT	vs. US	vs. HP2020	TREND	
138.6		Ö			
	158.0	166.2	161.4		
26.2					
	41.4	44.7	45.5		
23.3					
	19.8	19.8	21.8		
17.7					
	20.4	21.3	20.7		
8.9					
	13.2	14.9	14.5		
140.2					
	147.2	142.3			

Female Breast Cancer Incidence per 100,000			£ 143.2	108.2	£
Lung Cancer Incidence per 100,000			Ê	<u> </u>	
			42.4	44.6	43.9
Colorectal Cancer Incidence per 100,000					
			36.6	30.3	30.2
% Skin Cancer			给		
	10.0	4.6	8.3	10.5	5.9
% Cancer (Other Than Skin)	给	会	给		
	6.9	7.9	7.2	7.2	6.2
% [Women 50-74] Mammogram in Past 2 Years			给		
	83.8	68.9	77.4	62.2	78.2
% [Women 21-65] Pap Smear in Past 3 Years					
	90.0	76.9	85.6	60.6	77.9
% [Age 50-75] Colorectal Cancer Screening					
	72.7	72.6	72.7	56.6	56.7

Note: In the green section, each subarea is compared against all other areas 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.

Each Sub-Area vs. Others

Chronic Kidney Disease	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Kidney Disease (Age-Adjusted Death Rate)					
% Kidney Disease			给		
	4.2	1.5	3.3	0.6	2.0

Note: In the green section, each subarea is compared against all other areas 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.

140.4				
	125.8	122.7		
42.3				
	60.9	64.9		
34.6				
	43.4	43.3		
8.2				
	7.1	6.7		6.3
7.1				
	7.9	6.1		5.0
76.0				
	68.9	83.6	81.1	74.2
82.7				
	76.1	83.9	93.0	88.7
67.7			给	
		75.1	70.5	61.8
		岩		
	better	similar	worse	

Total	Total Area vs. Benchmarks						
Area	vs. MT	vs. US	vs. HP2020	TREND			
5.9							
	9.0	13.2					
2.9							
	2.5	3.0					
		Ê					
	better	similar	worse				

Diabetes	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Diabetes Mellitus (Age-Adjusted Death Rate)					
% Diabetes/High Blood Sugar					
	3.9	7.0	4.9	5.2	4.4
% Borderline/Pre-Diabetes			会		
	3.2	3.0	3.1	4.8	6.5
% [Non-Diabetes] Blood Sugar Tested in Past 3 Years					
	44.3	40.0	42.9	47.0	48.6

Note: In the green section, each subarea is compared against all other areas 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.

Total Area vs. Benchmarks Total vs. US **TREND** vs. MT Area HP2020 10.1 21.3 19.9 20.5 23 4.8 7.7 11.7 4.1 3.7 5.1 44.1 49.2 * ớ worse better similar

Each Sub-Area vs. Others

Dementias, Including Alzheimer's Disease	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Alzheimer's Disease (Age-Adjusted Death Rate)					
			12.6		37.6

Note: In the green section, each subarea is compared against all other areas 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.

Total	Total Ar	Total Area vs. Benchmarks			
Area	vs. MT vs. US		vs. US vs. HP2020		
17.2					
	20.7	24.0			
		岩			
	better	similar	worse		

Each Sub-Area vs. Others

Educational & Community-Based Programs	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% Attended Health Event in Past Year			(X)		
	27.2	17.6	24.2	21.1	25.0

Note: In the green section, each subarea is compared against all other areas 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.

Total	Total Ar	ea vs. Bei	nchmarks			
Area	vs. MT	vs. MT vs. US vs. HP2020				
24.1		给		给		
		23.8		23.1		
		Ê				
	better	similar	worse			

Family Planning	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Teen Births per 1,000 (Age 15-19)					
			15.3		23.8

Note: In the green section, each subarea is compared against all other areas 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.

Total	Total Ar	ea vs. Ber	nchmarks				
Area	vs. MT	MT vs. US vs. HP2020 TRENE					
15.3							
	34.8	36.6					
		岩					
	better	similar	worse				

Each Sub-Area vs. Others

Hearing & Other Sensory or Communication Disorders	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% Deafness/Trouble Hearing			(X)		
	7.4	7.9	7.6	12.2	9.9

Note: In the green section, each subarea is compared against all other areas 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.

Total	Total Ar	Total Area vs. Benchmarks				
Total Area	vs. MT	TREND				
8.3						
		10.3		12.3		
		Ê				
	better	similar	worse			

Heart Disease & Stroke	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Diseases of the Heart (Age-Adjusted Death Rate)					
			132.6	118.4	119.6
Stroke (Age-Adjusted Death Rate)					
			33.8		
% Heart Disease (Heart Attack, Angina, Coronary Disease)					
	3.1	1.6	2.6	5.1	3.9
% Stroke					
	3.5	1.4	2.8	3.2	5.9

Total	Total Ar	nchmarks		
Area	vs. MT	vs. US	vs. HP2020	TREND
128.3				
	154.1	171.3	156.9	
32.2				
	36.2	37.0	34.8	
3.0				
		6.1		4.9
3.3				
	3.2	3.9		1.9

% Blood Pressure Checked in Past 2 Years	会		岩		
	91.0	92.4	91.4	91.7	90.6
% Told Have High Blood Pressure (Ever)					
	21.3	23.2	21.9	31.8	39.2
% [HBP] Taking Action to Control High Blood Pressure					
% Cholesterol Checked in Past 5 Years	会	É	给	£	
	84.7	87.2	85.5	82.7	81.9
% Told Have High Cholesterol (Ever)					
	20.6	31.3	24.0	24.7	28.4
% [HBC] Taking Action to Control High Blood Cholesterol					
% 1+ Cardiovascular Risk Factor					
	64.6	82.8	70.2	82.1	81.5

Note: In the green section, each subarea is compared against all other areas 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.

91.3			£	
		91.0	92.6	88.2
25.1				
	29.3	34.1	26.9	24.4
95.8				
		89.2		93.9
84.8				
	73.8	86.6	82.1	80.4
24.6		**	***	
	35.7	29.9	13.5	25.6
89.5				
		81.4		85.7
72.8				
		82.3		66.8
		岩		
	better	similar	worse	

Each Sub-Area vs. Others

HIV	Bozeman	Other Gallatin	Gallatin County	Madison Park County County
HIV Prevalence per 100,000			给	
			21.6	
% [Age 18-44] HIV Test in the Past Year	会			会
	14.2	13.4	14.0	16.2
	N. 1. 11			

Note: In the green section, each subarea is compared against all other areas 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.

Total	Total Area vs. Benchmarks					
Area	vs. MT vs. US vs. HP2020		TREND			
21.1						
	45.2	340.4				
14.3						
		19.3		14.1		
		Ê				
	better	similar	worse			

	Each Sub-Area vs. Others				
Immunization & Infectious Diseases	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% [Age 65+] Flu Vaccine in Past Year					
% [High-Risk 18-64] Flu Vaccine in Past Year					
% [Age 65+] Pneumonia Vaccine Ever					
% [High-Risk 18-64] Pneumonia Vaccine Ever					
% Have Completed Hepatitis B Vaccination Series	49.0	33.1	44.1	28.0	<i>≨</i> 35.6
% [Parents of Children 0-6] Vaccinations "Important" (9-10 Rating)					
% [Parents of Child 0-6] Ever Refused Vaccine for Child					
% [Parents of Child 0-6] Child Vaccinated Only Because of Law					
% [Parents of Child 0-6] Vaccinations "Safe" (9-10 Rating)					
% [Parents of Child 0-6] Would Want All Vaccinations for Newborn					
	Note: In the green section, each subarea is compared against all other areas 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.				available for

Total	Total Area vs. Benchmarks				
Area	vs. MT	vs. US	vs. HP2020	TREND	
54.7	É				
	61.1	57.5	70.0		
34.8					
		45.9	70.0		
57.8		•	•		
	69.9	68.4	90.0		
24.4	00.0	00.4	30.0		
24.4		41.9	60.0		
44.0			60.0		
41.6		ớ			
		44.7			
79.6					
				79.9	
18.6				会	
				17.1	
4.8					
				5.3	
43.7					
				43.3	
91.1				£	
				90.3	
	***	Ê			
	better	similar	worse		

	Each Sub-Area vs. Others				
Injury & Violence Prevention	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Unintentional Injury (Age-Adjusted Death Rate)			42.0		46.8
Motor Vehicle Crashes (Age-Adjusted Death Rate)			<i>≅</i> 12.8		
% "Always" Wear Seat Belt	86.6	75.3	83.1	66.7	70.6
% Used a Cell Phone While Driving in the Past Month	61.8	69.9	64.3	44.6	<i>≦</i> 55.1
% Child [Age 0-17] "Always" Uses Seat Belt/Car Seat	<i>≨</i> ≒ 95.9	<i>≨</i> 3 91.4	94.7 92.6		
% Child [Age 5-17] "Always" Wears Bicycle Helmet					
Firearm-Related Deaths (Age-Adjusted Death Rate)			£ 15.0		
% Firearm in Home	60.0	69.4	<i>€</i> 3 62.9	83.4	60.5
% [Homes With Children] Firearm in Home	<i>€</i> ≃ 64.8	<i>₹</i> 3.6	67.4	<u>ج</u> 71.	
% [Homes With Firearms] Weapon(s) Unlocked & Loaded	13.0	73.0 £3	14.9	17.9	26.4
Violent Crime per 100,000	13.0	10.0	157.9	95.0	222.3

	Total Area vs. Benchmarks				
Total Area	vs. MT	vs. US	vs. HP2020	TREND	
45.4	*				
	55.8	39.2	36.4		
14.5		*** *********************************			
	19.9	10.7	12.4		
80.1		84.8	92.0	<i>∽</i> 3 79.1	
61.5					
94.4		É		£	
		92.2		93.3	
58.1		£			
		48.7		32.4	
15.1					
	16.6	10.4	9.3		
64.2					
		34.7		71.5	
67.9					
		37.4		73.6	
16.7				£	
		16.8		15.8	
162.4					
	241.6	380.9			

% Victim of Violent Crime in Past 5 Years			会		
	0.1	3.2	1.0	1.1	0.7
% Victim of Domestic Violence (Ever)	***	€S		£	
	10.0	15.6	11.7	10.9	22.4
Domestic Violence Offenses per 100,000				会	*** *********************************
			100.5	207.3	307.8

		300		
		2.8		1.3
13.1				
		15.0		8.6
135.4				
	401.4			
	better	similar	worse	

Note: In the green section, each subarea is compared against all other areas 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.

Maternal, Infant & Child Health	Bozeman Other Gallatin	Gallatin County	Madison County	Park County
Prenatal Care in First Trimester (Percent)				
		94.0	83.0	91.0
Low Birthweight Births (Percent)				
		6.2	0.0	5.9
Infant Death Rate				
	Note: In the green section, each subarea is compared against all other areas 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.			

Total	Total Area vs. Benchmarks				
Area	vs. MT	vs. US	vs. HP2020	TREND	
	78.0		77.9		
5.9	***	*	*		
	7.1	8.1	7.8		
4.8	*	*	*		
	5.9	6.0	6.0		
		含			
	better	similar	worse		

Mental Health & Mental Disorders	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% "Fair/Poor" Mental Health					D3
	15.5	6.9	12.8	5.7	12.0
% Diagnosed Depression					
	27.0	19.7	24.8	10.2	23.9
% Symptoms of Chronic Depression (2+ Years)			给		
	29.5	23.2	27.5	24.9	30.1
Suicide (Age-Adjusted Death Rate)			给		
			17.1		
% [Those With Diagnosed Depression] Seeking Help					
% Typical Day Is "Extremely/Very" Stressful			É		
	12.7	7.0	11.0	9.0	7.9

Note: In the green section, each subarea is compared against all other areas 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.

Total Area vs. Benchmarks Total Area vs. MT vs. US **TREND** HP2020 12.1 含 ******* 11.9 6.7 23.5 £ 20.4 £ 27.7 **\$100** 30.4 22.3 *** 20.2 ******* \$100 22.9 12.5 10.2 86.4 76.6 10.4 £ 23 11.9 8.6 23 * 1 better similar worse

Nutrition & Weight Status	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% Eat 5+ Servings of Fruit or Vegetables per Day					
	42.9	32.7	39.7	24.8	40.4
% "Very/Somewhat" Difficult to Buy Fresh Produce					
	20.4	17.8	19.6	23.7	17.3
Population With Low Food Access (Percent)					
			23.5	36.9	41.6

Total	Total Area vs. Benchmarks				
Total Area	vs. MT	vs. US	vs. HP2020	TREND	
38.6					
		39.5		50.8	
19.6					
		24.4			
27.0				_	
	26.9	23.6			

% Medical Advice on Nutrition in Past Year	岩		Ä		
	26.6	31.7	28.2	16.2	36.2
% Healthy Weight (BMI 18.5-24.9)					
	48.9	36.9	45.2	39.3	37.6
% Overweight (BMI 25+)		•	£	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	£
,	49.0	61.7	52.9	58.9	59.4
% Obese (BMI 30+)	£		£		<u> </u>
70 02000 (2.111 00)	17.4	21.4	18.6	29.3	20.7
% Medical Advice on Weight in Past Year	£	~~	£	20.0	<u> </u>
70 Medical Advice on Weight in Fast Teal				900	
	18.3	17.1	17.9	10.7	18.3
% [Overweights] Counseled About Weight in Past Year	ớ		给		
	22.0	19.6	21.1	10.8	22.8
% [Obese Adults] Counseled About Weight in Past Year					
% [Overweights] Trying to Lose Weight Both	8	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
Diet/Exercise			95.0	- 7/11	
	23.7	28.2	25.3	43.3	37.8
% Child [Age 5-17] Healthy Weight					
% Children [Age 5-17] Overweight (85th Percentile)					
% Children [Age 5-17] Obese (95th Percentile)					
	Note: In the green section, each subarea is compared against all other areas 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.				

28.3		***		
		39.2		27.1
43.6	37.0	34.4	33.9	<i>≦</i> 45.1
54.3	61.4	63.1		<i>≦</i> 3.2
19.8	24.6	29.0	30.5	12.3
17.4		23.7		<i>≦</i> 16.9
20.5		31.8		
27.7		48.3		
28.8		39.5		<i>≦</i> 35.3
58.3		<i>≦</i> 56.7		
33.4				16.6
16.9		<i>₹</i> 3 14.8	£ 14.5	6.5
	*	£	•	0.0
	-7/11	similar	worse	

Oral Health	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% [Age 18+] Dental Visit in Past Year				会	
	77.0	62.2	72.4	65.2	65.4
% Child [Age 2-17] Dental Visit in Past Year	给				
	87.3	91.8	88.5	81.0	
% Have Dental Insurance					
	67.6	58.7	64.9	47.4	37.0

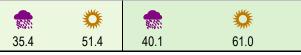
Note: In the green section, each subarea is compared against all other areas combined. Throughout these tables, a blank or empty cell indicates that data are not available for this indicator or that sample sizes are too small to provide meaningful results.

Total	Total Ar	Total Area vs. Benchmarks						
Total Area	vs. MT	vs. US	vs. HP2020	TREND				
70.9								
	61.0	65.9	49.0	68.5				
87.5								
		81.5	49.0	74.2				
59.7								
		65.6		44.7				
		给						
	better	similar	worse					

Physical Activity	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% No Leisure-Time Physical Activity					D3
	13.6	30.8	19.0	28.3	23.4
% Meeting Physical Activity Guidelines			岩	给	给
	56.0	45.4	52.7	45.4	49.7
% Moderate Physical Activity			岩		ớ
	41.6	29.8	38.0	28.2	39.6
% Vigorous Physical Activity	岩		给		
	41.1	33.6	38.8	40.4	33.7
Recreation/Fitness Facilities per 100,000			给		
			20.1	39.0	12.8
% Medical Advice on Physical Activity in Past Year	会		会		
	37.0	36.8	36.9	24.2	37.8

Total	Total Ar	Total Area vs. Benchmarks				
Area	vs. MT	vs. US	vs. HP2020	TREND		
20.3						
	22.5	20.7	32.6	10.7		
51.7						
		50.3		57.6		
37.4				给		
		30.6		38.4		
38.3						
		38.0		42.9		
20.4						
	12.8	9.4				
36.1						
		44.0		32.6		

% Child [Age 2-17] Physically Active 1+ Hours per Day



Note: In the green section, each subarea is compared against all other areas 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.

42.9				
		48.6		
		会		
	better	similar	worse	

Total Area vs. Benchmarks

TREND

HP2020

vs. MT vs. US

Total Area

Respiratory Diseases	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
CLRD (Age-Adjusted Death Rate)			31.3		40.2
Pneumonia/Influenza (Age-Adjusted Death Rate)			<i>€</i> 3 13.1		
% COPD (Lung Disease)	4.8	3.9	<i>€</i> 3 4.5	<i>€</i> 6.5	<i>₹</i> 3 7.0
% [Adult] Currently Has Asthma	16.9	3.3	12.7	6.4	7.0
% [Child 0-17] Currently Has Asthma	<i>€</i> ≒ 6.5	<i>€</i> ≏ 9.5	<i>₹</i> 3	<u>څ</u>	
Average Daily Measure of Particulate Matter			<i>€</i> 3 10.8	2 2 2 10.6 10.8	
% Use a Wood-Burning Stove for Heat	<i>≦</i> ≤ 18.7	<u>21.9</u>	19.7	49.4	32.8
% [Those Who Heat w/Wood Stove] Use a Catalytic Converter			<i>₹</i> 3 47.4	<i>≨</i> ≘ 32.3	<i>≦</i> ≒ 35.6
		section, each suba			

32.5				
	50.7	42.0		
11.7				
	13.8	15.3		
5.0	£			给
	6.5	8.6		5.0
11.4				
	8.6	9.4		7.3
6.9				给
		7.1		5.7
	10.9			
23.8				
				30.3
42.3				给
				42.7
		给		
	better	similar	worse	

Sexually Transmitted Diseases	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Gonorrhea Incidence per 100,000					
			3.9	0.0	4.3
Chlamydia Incidence per 100,000			\$000		
			353.0	103.7	113.3
Primary & Secondary Syphilis Incidence per 100,000					
			0.7	0.0	0.0
% [Unmarried 18-64] 3+ Sexual Partners in Past Year					
% [Unmarried 18-64] Using Condoms					
		Note: In the green section, each subarea is compared against all other areas combined.			

Note: In the green section, each subarea is compared against all other areas 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.

Total	Total Area vs. Benchmarks				
Area	vs. MT	vs. US	vs. HP2020	TREND	
3.7		Ö			
	13.8	105.4			
304.3					
	366.3	451.1			
0.6					
	0.7	5.0			
13.7		É		É	
		11.7		8.5	
27.0					
		33.6		32.4	
	*	给		-	
	better	similar	worse		

Substance Abuse	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)					
% Current Drinker	给		É		
	69.6	66.0	68.5	68.0	63.9
% Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women)	给		给		
,	24.1	20.8	23.1	16.0	26.6
% Heavy Drinkers (2+ Daily Drinks for Men/1+ Daily Drink for Women)	给		Ê		
,	15.5	11.5	14.2	15.5	13.6

Total	Total Area vs. Benchmarks					
Area	vs. MT	vs. US	vs. HP2020	TREND		
5.2						
	12.3	9.9	8.2			
67.8		***		给		
	58.8	56.5		69.9		
23.0	给	给	给	给		
	20.8	19.5	24.4	19.4		
14.2	8335	***		给		
	7.7	10.3		12.5		

% Excessive Drinker (Heavy or Binge Drinking)	会		绘	给	
	27.3	22.9	25.9	24.4	28.0
% Drinking & Driving in Past Month					
	2.5	6.1	5.6	4.9	8.9
Drug-Induced Deaths (Age-Adjusted Death Rate)					
			8.1		
% Illicit Drug Use in Past Month					
	0.9	0.6	0.8	4.1	6.9
% Ever Sought Help for Alcohol or Drug Problem					
	4.2	3.5	4.0	1.8	2.2
	4.2	3.5	4.0	1.8	2.2

Note: In the green section, each subarea is compared against all other areas 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.

26.1			É	
		23.2	25.4	23.8
4.4				
		5.0		0.9
10.9				
	14.9	14.1	11.3	7.6
1.9				给
		4.0	7.1	1.9
3.5				
		4.9		3.8
	*	岩		
	better	similar	worse	

	Each Sub-Area vs. Others				
Tobacco Use	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% Current Smoker	会	会		会	
	11.5	13.7	12.2	14.7	19.8
% Someone Smokes at Home					
	6.5	8.0	7.0	9.0	16.9
% [Non-Smokers] Someone Smokes in the Home					
	5.9	2.5	4.8	3.0	0.4
% [Household With Children] Someone Smokes in the Home					A.
	2.8	3.0	2.8	14	.1
% [Smokers] Received Advice to Quit Smoking					

Total	Total Ar	Total Area vs. Benchmarks					
Area	vs. MT	vs. MT vs. US vs. HP2020		TREND			
13.4							
	19.0	14.9	12.0	9.8			
8.5							
		12.7		4.0			
4.1							
		6.3		2.0			
4.2							
		9.7		1.3			
79.3							
		67.8		44.8			

% [Smokers] Have Quit Smoking 1+ Days in Past Year					
% Smoke Cigars	5.4	1.6	<i>€</i> ≳ 4.2	<i>∕</i> ≘ 7.2	<i>≨</i> ≘ 3.6
% Use Smokeless Tobacco	5.7	7.2	6.2	11.5	3.4
% Currently Use an Electronic Nicotine Delivery Device (E-Cigarettes)	<i>€</i> ≳ 3.8	<i>₹</i> 3.1	3.5	<i>€</i> 3.9	<i>€</i> 3 7.7

Note: In the green section, each subarea is compared against all other areas 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.

48.8				会
		55.9	80.0	53.2
4.4		会		
		4.1	0.2	3.3
6.2				
	8.0	4.0	0.3	8.8
4.2				
		Ê		
	better	similar	worse	

Each Sub-Area vs. Others

Vision	Bozeman	Other Gallatin	Gallatin County	Madison County	Park County
% Blindness/Trouble Seeing			(X)		
	4.9	5.1	5.0	5.3	9.0
% Eye Exam in Past 2 Years	给			给	
	48.2	41.7	46.2	50.5	54.7

Note: In the green section, each subarea is compared against all other areas 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.

Total	Total Area vs. Benchmarks					
Area	vs. MT	vs. MT vs. US vs. HP2020				
5.6						
		8.5		6.5		
47.8		***				
		56.8		49.2		
		会				
	better	similar	worse			

Community Description



Professional Research Consultants, Inc.

Population Characteristics

Total Population

The three-county Total Area, the focus of this Community Health Needs Assessment, encompasses 8,990.78 square miles and houses a total population of 113,682 residents, according to latest census estimates.

Total Population

(Estimated Population, 2008-2012)

	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Gallatin County	90,339	2,602.00	34.72
Madison County	7,688	3,586.45	2.14
Park County	15,655	2,802.33	5.59
Total Area	113,682	8,990.78	12.64
Montana	990,785	145,507.56	6.81
United States	309,138,709	3,530,997.6	87.55

- Sources:

 US Census Bureau American Community Survey 5-year estimates (2008-2012).

 Retrieved January 2015 from Community Commons at http://www.chna.org.

Population Change 2000-2010

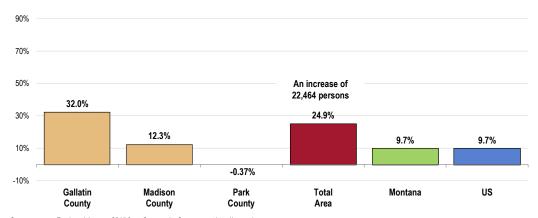
A significant positive or negative shift in total population over time impacts healthcare providers and the utilization of community resources.

Between the 2000 and 2010 US Censuses, the population of the Total Area increased by 22,464 persons, or 24.9%.

- A much greater proportional increase than seen across the state.
- A much greater proportional increase than seen nationwide.
- By county, note the 32.0% percent increase in Gallatin County population, compared with a 12.3% increase in Madison County, and a population decrease of 0.37% in Park County.

Change in Total Population

(Percentage Change Between 2000 and 2010)

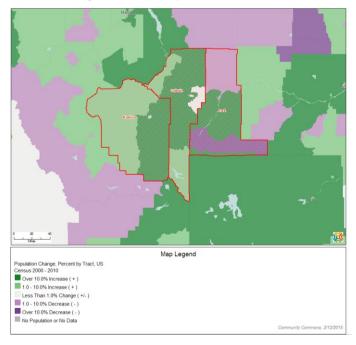


- Retrieved January 2015 from Community Commons at http://www.chna.org.
 US Census Bureau Decennial Census (2000-2010). Sources:

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

The following map portrays the 2000-2010 population change in the three-county area by census tract.

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



Urban/Rural Population

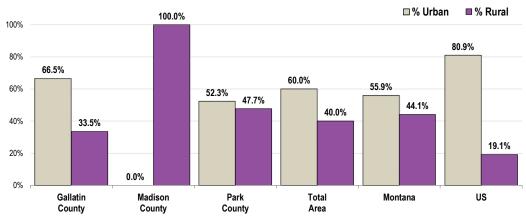
Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban.

More than half of the Total Area is urban, with 60.0% of the population living in areas designated as urban.

- Slightly more urban than the state overall, but much less so than the US overall.
- Note that Madison County is 100% rural.

Urban and Rural Population

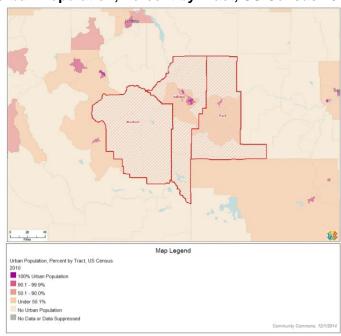
(2010)



- US Census Bureau Decennial Census (2010).

Notes:

- Retrieved January 2015 from Community Commons at http://www.chna.org.
 This indicator reports the percentage of population living in urban and rural areas. Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban
- Note the following map outlining the urban population in the Total Area census tracts as of 2010.



Urban Population, Percent by Tract, US Census 2010

Age

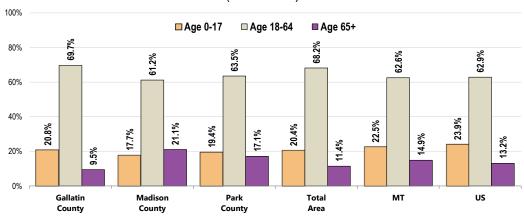
It is important to understand the age distribution of the population as different age groups have unique health needs which should be considered separately from others along the age spectrum.

In the Total Area, 20.4% of the population are infants, children or adolescents (age 0-17); another 68.2% are age 18 to 64, while 11.4% are age 65 and older.

- The percentage of older adults (65+) is lower than that found statewide.
- The percentage of older adults (65+) is lower than the US figure.
- By county, Gallatin County is younger than Madison and Park counties.

Total Population by Age Groups, Percent

(2008-2012)



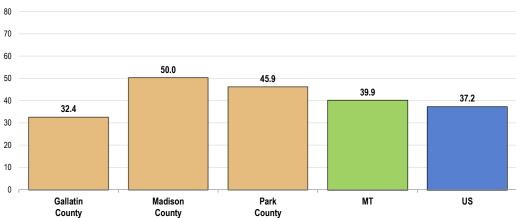
- US Census Bureau American Community Survey 5-year estimates (2008-2012).
- Retrieved January 2015 from Community Commons at http://www.chna.org.

Median Age

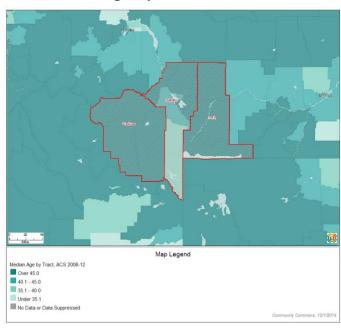
While Gallatin County is "younger" than the state and the nation (in that the median age is lower); Madison and Park counties, on the other hand, are older than both.

Median Age

(2008-2012)



- US Census Bureau American Community Survey 5-year estimates (2008-2012).
 Retrieved January 2015 from Community Commons at http://www.chna.org.
 - - The following map provides an illustration of the median age in the Total Area, segmented by census tract.



Median Age, by Tract, ACS 2008-2012

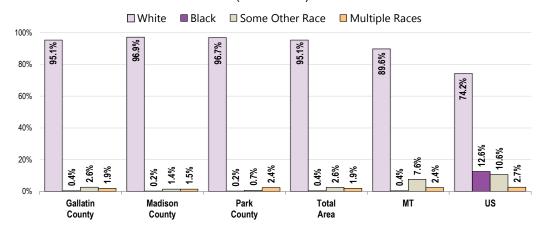
Race & Ethnicity

Race

In looking at race independent of ethnicity (Hispanic or Latino origin), 95% of residents in the Total Area are White.

• This is less diverse than the state racial distribution, and much less diverse than the national population.

Total Population by Race Alone, Percent (2008-2012)



US Census Bureau American Community Survey 5-year estimates (2008-2012). Retrieved January 2015 from Community Commons at http://www.chna.org. Sources:

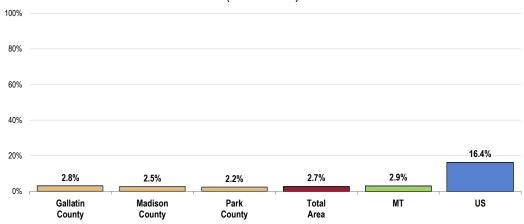
Ethnicity

A total of 2.7% of Total Area residents are Hispanic or Latino.

- Comparable to that found statewide.
- Much lower than found nationally.

Percent Population Hispanic or Latino

(2008-2012)



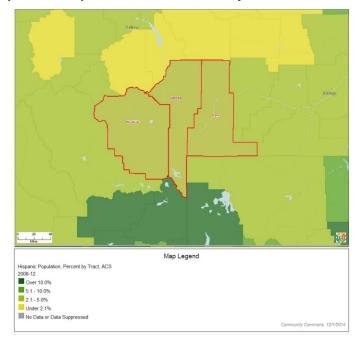
Sources:

- US Census Bureau American Community Survey 5-year estimates (2008-2012).
- Retrieved January 2015 from Community Commons at http://www.chna.org.

Notes:

- Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.
- The Hispanic population appears most concentrated in southern Gallatin County.

Population Hispanic or Latino, Percent by Tract, ACS 2008-2012

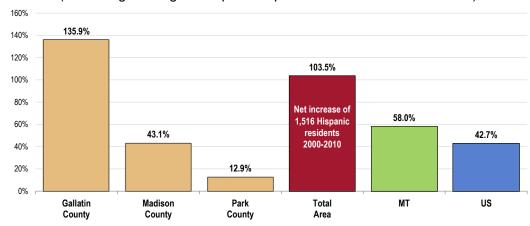


Between 2000 and 2010, the Hispanic population in the Total Area increased by 1,516 residents or 103.5%.

- Much higher (in terms of percentage growth) than found statewide or nationally.
- By county, this growth is predominantly in Gallatin County.

Hispanic Population Change

(Percentage Change in Hispanic Population Between 2000 and 2010)



- Sources: US Census Bureau Decennial Census (2000-2010).
 - Retrieved January 2015 from Community Commons at http://www.chna.org.

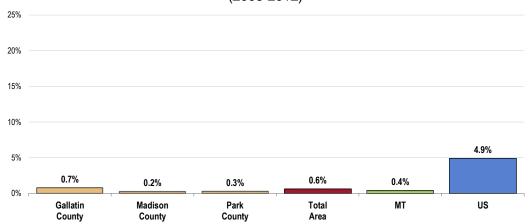
Linguistic Isolation

Just 0.6% of the Total Area population age 5 and older lives in a home in which <u>no</u> persons age 14 or older is proficient in English (speaking only English, or speaking English "very well").

- Just above that found statewide, but much lower than found nationally.
- By county, the prevalence is slightly higher in the Gallatin County population.

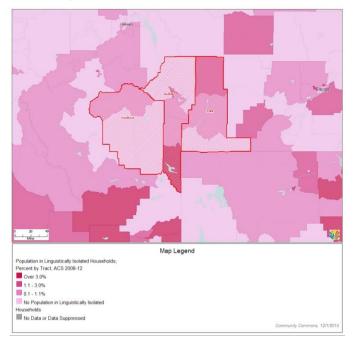
Linguistically Isolated Population

(2008-2012)



- Sources:
- Notes:
- US Census Bureau American Community Survey 5-year estimates (2008-2012).
 Retrieved January 2015 from Community Commons at http://www.chna.org.
 This indicator reports the percentage of the population aged 5 and older who live in a home in which no person 14 years old and over speaks only English, or in which no person 14 years old and over speak a non-English language and speak English "very well."
 - Note the following map illustrating linguistic isolation in the Total Area.

Population in Linguistically Isolated Households, Percent by Tract, ACS 2008-2012



Social Determinants of Health

About Social Determinants

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

• Healthy People 2020 (www.healthypeople.gov)

Poverty

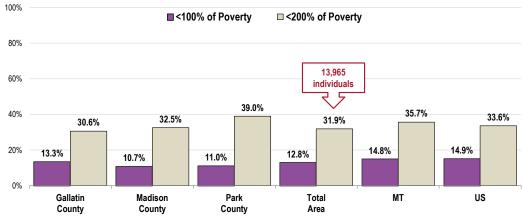
The latest census estimate shows 12.8% of the Total Area population living below the federal poverty level.

In all, 31.9% of Total Area residents (an estimated 13,965 individuals) live below 200% of the federal poverty level.

- Lower than the proportion reported statewide.
- Lower than found nationally.
- By county, the prevalence of those living below 100% of the poverty level is highest in Gallatin County; the prevalence of those living below 200% is highest in Park County.

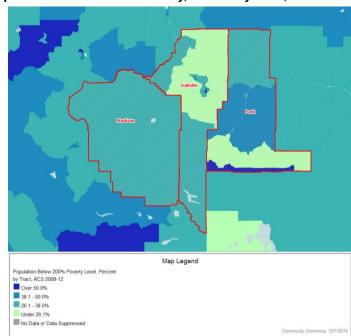
Population in Poverty

(Populations Living Below 100% and Below 200% of the Poverty Level; 2008-2012)



- Sources: US Census Bureau American Community Survey 5-year estimates (2008-2012).
- Retrieved January 2015 from Community Commons at http://www.chna.org.
 Poverty is considered a key driver of health status. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

 A higher concentration of persons living below the 200% poverty threshold is found in central Park County, and particularly along its southern border.



Population Below 200% of Poverty, Percent by Tract, ACS 2008-2012

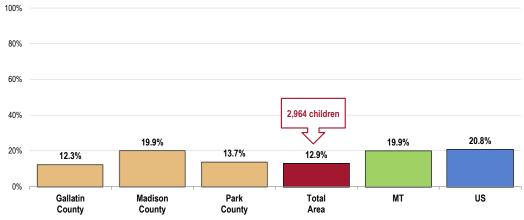
Children in Low-Income Households

Additionally, 12.9% of Total Area children age 0-17 (representing an estimated 2,964 children) live below the 200% poverty threshold.

- Below the proportion found statewide and nationally.
- By county, the prevalence is lowest in Gallatin County, highest in Madison County.

Percent of Children in Low-Income Households

(Children 0-17 Living Below 200% of the Poverty Level, 2008-2012)



Sources: • US Census Bureau American Community Survey 5-year estimates (2008-2012).

Retrieved January 2015 from Community Commons at http://www.chna.org.

This indicator reports the percentage of children aged 0-17 living in households with income below 200% of the Federal Poverty Level (FPL). This indicator is
relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

 Geographically, a notably higher concentration of children in lower-income households is found in southwest Madison County and northeast Gallatin County.

Map Legend

Population Below the Poverty Level, Children
(Age 0-17), Percent by Tract, ACS 2008-12

Over 30.0%

22 8 - 30.0%

15.1 - 22.5%

Under 15.1%

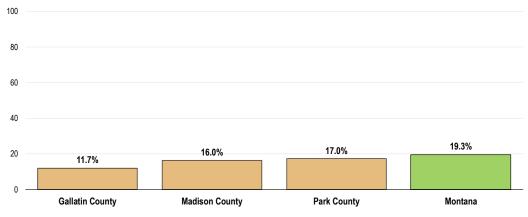
No Data or Data Suppressed

Community Commons, 12/1/2014

Children (0-17) Living Below 200% of Poverty, Percent by Tract, ACS 2008-2012

In addition, the following chart provides an illustration of 2013 census estimates of area children age 5-17 living <u>below</u> the poverty threshold.





Sources: • US Census: small area income and poverty estimates.

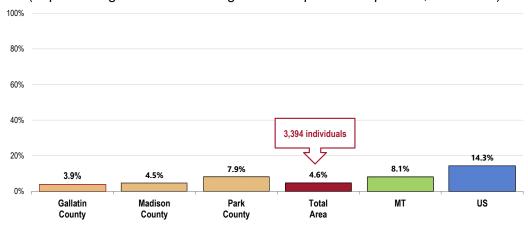
Education

Among the Total Area population age 25 and older, an estimated 4.6% (nearly 3,400 people) do not have a high school education.

- More favorable than found statewide.
- More favorable than found nationally.
- By county: highest in Park County.

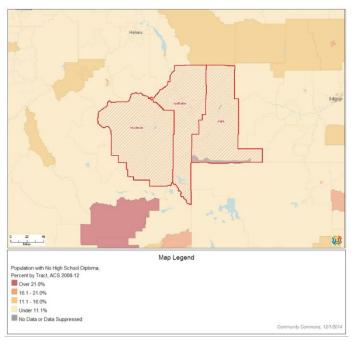
Population With No High School Diploma

(Population Age 25+ Without a High School Diploma or Equivalent, 2008-2012)



- US Census Bureau American Community Survey 5-year estimates (2008-2012).
 Retrieved January 2015 from Community Commons at http://www.chna.org.
 This indicator is relevant because educational attainment is linked to positive health outcomes.

Population With No High School Diploma, Percent by Tract, ACS 2008-2012



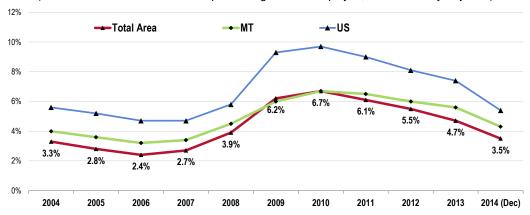
Employment

According to data derived from the US Department of Labor, the December 2014 unemployment rate in the Total Area was 3.5%.

- More favorable than the statewide unemployment rate.
- More favorable than the national unemployment rate.
- TREND: Unemployment for Total Area echoed the state and national trends over the past decade, increasing considerably in 2009 and 2010, and gradually decreasing thereafter.

Unemployment Rate

(Percent of Non-Institutionalized Population Age 16+ Unemployed, Not Seasonally-Adjusted)



Sources:

- US Department of Labor, Bureau of Labor Statistics.
- Retrieved January 2015 from Community Commons at http://www.chna.org.

Notes:

This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

General Health Status



Professional Research Consultants, Inc.

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

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

Overall Health Status

Self-Reported Health Status

A total of 62.7% of Total Area adults rate their overall health as "excellent" or "very good.

• Another 26.9% gave "good" ratings of their overall health.

Self-Reported Health Status

(Total Area, 2014)



Sources: Notes:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]
- Asked of all respondents.

However, 10.3% of Total Area adults believe that their overall health is "fair" or "poor."

- Better than statewide findings.
 - Better than the national percentage.
 - In Gallatin County: similar findings between Bozeman and the rest of the county.
 - By county: favorably low in Park County.
 - TREND: Note the statistically significant <u>decrease</u> (improvement) that occurred when comparing "fair/poor" overall health reports to previous (2011) survey results.

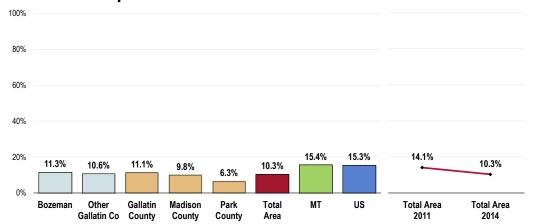
NOTE:

Differences noted in the text represent significant differences determined through statistical testing.

Where sample sizes permit, community-level data are provided.

Trends are measured against baseline data – i.e., the earliest year that data are available or that is presented in this report.

Experience "Fair" or "Poor" Overall Health



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 5]
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
 and Prevention (CDC): 2013 Montana data.
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
• Asked of all respondents.

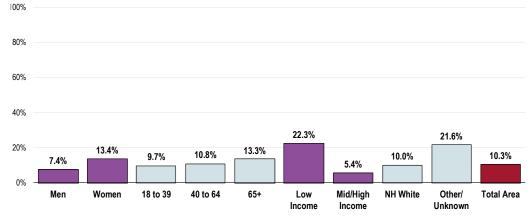
Adults more likely to report experiencing "fair" or "poor" overall health include:

- Women.
- Residents living at lower incomes (especially).
- Residents of "Other" races/ethnicity (not Non-Hispanic Whites) and unknown origins.
- Differences by age 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" Overall Health

(Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Activity Limitations

About Disability & Health

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

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

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

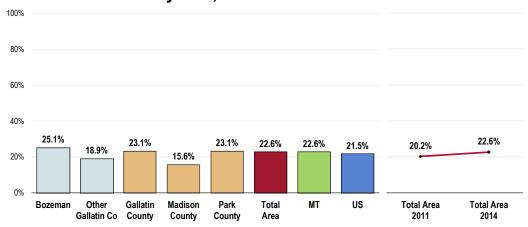
- Improve the conditions of daily life by: encouraging communities to be accessible so all can live in, move through, and interact with their environment; encouraging community living; and removing barriers in the environment using both physical universal design concepts and operational policy shifts.
- Address the inequitable distribution of resources among people with disabilities and those without disabilities by increasing: appropriate health care for people with disabilities; education and work opportunities; social participation; and access to needed technologies and assistive supports.
- Expand the knowledge base and raise awareness about determinants of health for people
 with disabilities by increasing: the inclusion of people with disabilities in public health data
 collection efforts across the lifespan; the inclusion of people with disabilities in health promotion
 activities; and the expansion of disability and health training opportunities for public health and
 health care professionals.
- Healthy People 2020 (www.healthypeople.gov)

A total of 22.6% of Total Area adults are limited in some way in some activities due to a physical, mental or emotional problem.

- Identical to the prevalence statewide.
- Similar to the national prevalence.
- In Gallatin County: statistically similar between Bozeman and the rest of the county.
- By county: lower in Madison County.
- TREND: Statistically unchanged since 2011.

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

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



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 105]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.

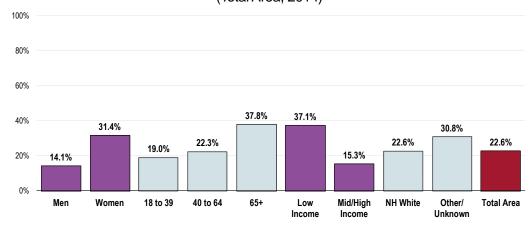
Asked of all respondents.

In looking at responses by key demographic characteristics, these adults are more likely to report some type of activity limitation:

• Women, seniors (age 65+), and adults in low-income households.

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

(Total Area, 2014)



Sources: Notes:

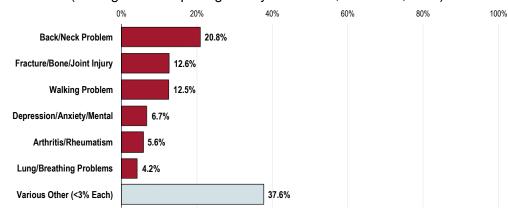
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 105]
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

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

Other limitations noted with some frequency include references to depression, anxiety, or other mental health issues, and lung/breathing problems.

Type of Problem That Limits Activities

(Among Those Reporting Activity Limitations; Total Area, 2014)



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 106]
- Asked of those respondents reporting activity limitations.

Mental Health

RELATED ISSUE:

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

About Mental Health & Mental Disorders

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

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

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

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

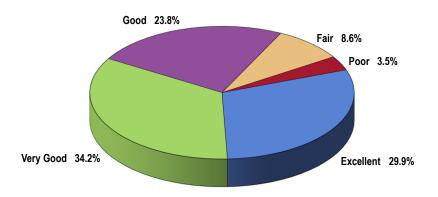
Self-Reported Mental Health Status

A total of 64.1% of Total Area adults rate their overall mental health as "excellent" or "very good."

• Another 23.8% gave "good" ratings of their own mental health status.

Self-Reported Mental Health Status

(Total Area, 2014)



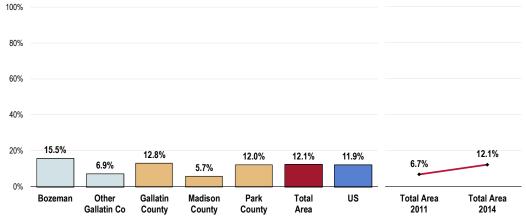
Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 100]
- Asked of all respondents.

A total of 12.1% of Total Area adults, however, believe that their overall mental health is "fair" or "poor."

- Similar to the "fair/poor" response reported nationally.
- In Gallatin County: much higher in Bozeman than the rest of the county.
- By county: favorably lower in Madison County.
- TREND: Note the statistically significant <u>increase</u> in "fair/poor" responses since 2011.

Experience "Fair" or "Poor" Mental Health



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 100]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

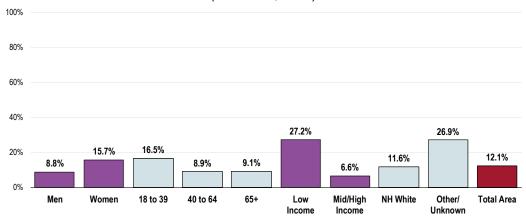
Notes:

 Asked of all respondents.

 Women, young adults, low-income residents, and Other/Unknown races are <u>much</u> <u>more likely</u> to report experiencing "fair/poor" mental health than their demographic counterparts.

Experience "Fair" or "Poor" Mental Health

(Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 100]
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

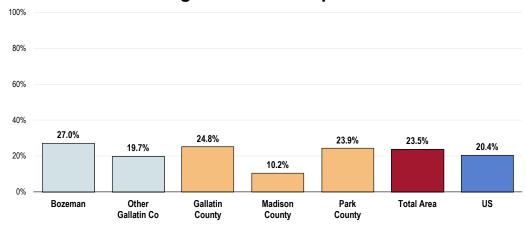
Depression

Diagnosed Depression

A total of 23.5% of Total Area adults have been diagnosed by a physician as having a depressive disorder (such as depression, major depression, dysthymia, or minor depression).

- · Similar to the national finding.
- In Gallatin County: much higher among Bozeman respondents.
- By county: favorably low in Madison County.
- TREND: This inquiry was not addressed in 2011.

Have Been Diagnosed With a Depressive Disorder



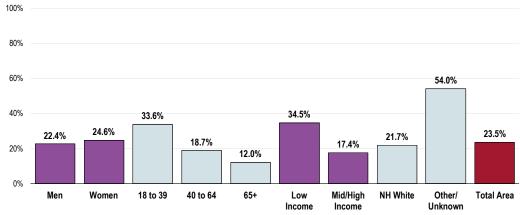
- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 103]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - Asked of all respondents.
 - · Depressive disorders include depression, major depression, dysthymia, or minor depression

The prevalence of diagnosed depression is notably higher among:

- · Younger adults.
- Community members living at lower incomes.
- Other/Unknown races.

Have Been Diagnosed With a Depressive Disorder

(Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 103]
- Asked of all respondents.

 Depressive disorders include depression, major depression, dysthymia, or minor depression.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).

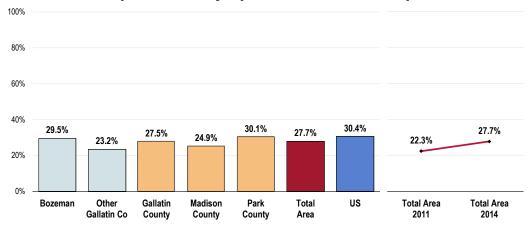
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty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

Symptoms of Chronic Depression

A total of 27.7% 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).

- Comparable to national findings.
- In Gallatin County: similar findings between Bozeman and the rest of the county.
- By county: similar findings among the three counties.
- TREND: Marks a statistically significant increase since 2011.

Have Experienced Symptoms of Chronic Depression



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 101]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- otes:

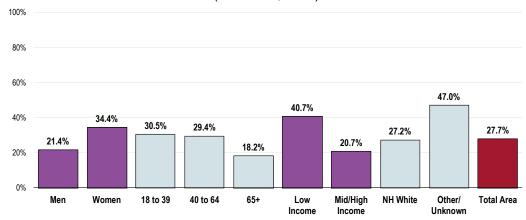
 Asked of all respondents.
 - Chronic depression includes periods of two or more years during which the respondent felt depressed or sad on most days, even if (s)he felt okay sometimes.

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

- Women.
- Adults under age 65.
- · Adults with lower incomes.
- Other/Unknown races.

Have Experienced Symptoms of Chronic Depression

(Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 101]
- Asked of all respondents.

 - Chronic depression includes periods of two or more years during which the respondent felt depressed or sad on most days, even if (s)he felt okay sometimes.

 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).

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

Stress

Over 40% of Total Area adults consider their typical day to be "not very stressful" (35.2%) or "not at all stressful" (8.0%).

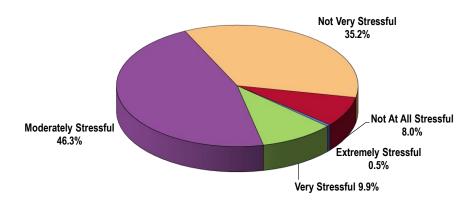
RELATED ISSUE:

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

 Another 46.3% of survey respondents characterize their typical day as "moderately stressful."

Perceived Level of Stress On a Typical Day

(Total Area, 2014)

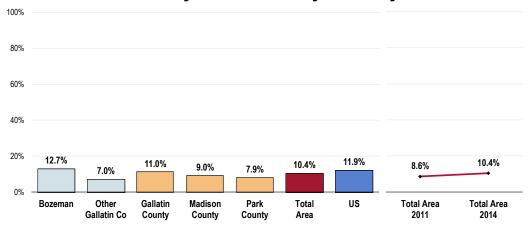


- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]
 - Asked of all respondents.

In contrast, 10.4% of Total Area adults experience "very" or "extremely" stressful days on a regular basis.

- · Comparable to the national findings.
- In Gallatin County: more favorable outside Bozeman.
- By county: no statistically significant differences by county.
- TREND: Statistically similar to the 2011 findings.

Perceive Most Days As "Extremely" or "Very" Stressful



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 102]

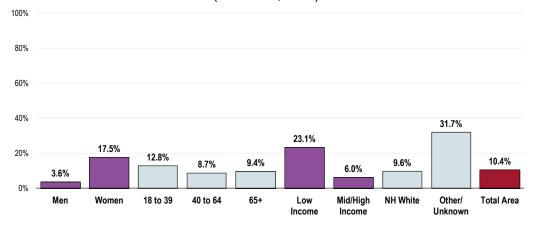
2013 PRC National Health Survey, Professional Research Consultants, Inc.

otes:

 Asked of all respondents.

 Note that high stress levels are much more prevalent among women, low-income residents, and Other/Unknown races.

Perceive Most Days as "Extremely" or "Very" Stressful (Total Area, 2014)



Sources: Notes:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]
- Asked of all respondents
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

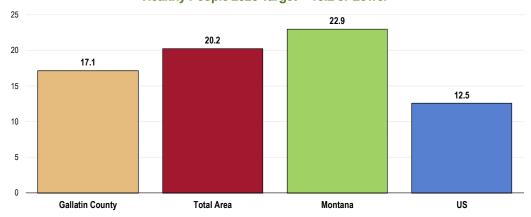
Suicide

Between 2011 and 2013, there was an annual average age-adjusted suicide rate of 20.2 deaths per 100,000 population in the Total Area.

- Lower than the statewide rate.
- Much higher than the national rate.
- Fails to satisfy the Healthy People 2020 target of 10.2 or lower.
- The Gallatin County rate was 17.1 per 100,000 population (raw counts were too small for rates to be calculated with any reliability for Madison and Park counties).

Suicide: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 10.2 or Lower



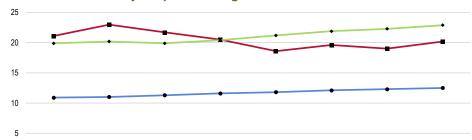
- Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MHMD-1]

 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.

- Local, state and national data are simple three-year averages; raw counts for Madison and Park counties were too small to be calculated.
 - TREND: The area suicide rate declined in the late 2000s, but has since increased, with no significant difference between baseline 2004-2006 data and the most recent rate.

Suicide: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 10.2 or Lower



U	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2010	2010-2012	2011-2013
Total Area	21.1	23.0	21.7	20.5	18.6	19.6	19.0	20.2
→ Montana	19.9	20.2	19.9	20.4	21.2	21.9	22.3	22.9
- US	10.9	11.0	11.3	11.6	11.8	12.1	12.3	12.5

Sources:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MHMD-1]
 Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

Notes:

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- · Local, state and national data are simple three-year averages

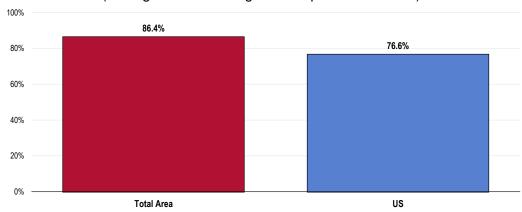
Mental Health Treatment

Among adults with a diagnosed depressive disorder, 86.4% acknowledge that they have sought professional help for a mental or emotional problem.

• More favorable than found nationally.

Adults With Diagnosed Depression Who Have Ever Sought Professional Help for a Mental or Emotional Problem

(Among Adults With Diagnosed Depressive Disorder)



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 123]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc. • Reflects those respondents with a depressive disorder diagnosed by a physician (such as depression, major depression, dysthymia, or minor depression).

"Diagnosed depressive disorder" includes respondents reporting a past diagnosis of a depressive disorder by a physician (such as depression, major depression, dysthymia, or minor depression).

Death, Disease & Chronic Conditions



Professional Research Consultants, Inc.

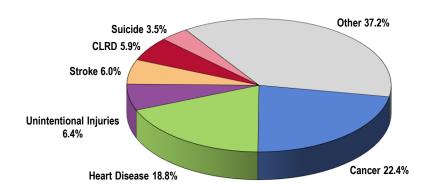
Leading Causes of Death

Distribution of Deaths by Cause

Together, cancers and cardiovascular disease (heart disease and stroke) accounted for nearly one-half of deaths in the Total Area in 2013.

Leading Causes of Death

(Total Area, 2013)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, Data extracted January 2015.

- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

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 2011-2013 annual average age-adjusted death rates per 100,000 population for selected causes of death in the Total Area.

Note that age-adjusted mortality rates in the Total Area are worse than national rates for suicide, unintentional injuries (including motor vehicle accidents), and firearmrelated deaths.

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

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

Age-Adjusted Death Rates for Selected Causes

(2011-2013 Deaths per 100,000 Population)

	Total Area	Montana	US	HP2020
Malignant Neoplasms (Cancers)	138.6	158.0	166.2	161.4
Diseases of the Heart	128.3	154.1	171.3	156.9*
Unintentional Injuries	45.4	55.8	39.2	36.4
Chronic Lower Respiratory Disease (CLRD)	32.5	50.7	42.0	n/a
Cerebrovascular Disease (Stroke)	32.2	36.2	37.0	34.8
Intentional Self-Harm (Suicide)	20.2	22.9	12.5	10.2
Alzheimer's Disease	17.2	20.7	24.0	n/a
Firearm-Related	15.1	16.6	10.4	9.3
Motor Vehicle Deaths	14.5	19.9	10.7	12.4
Pneumonia/Influenza	11.7	13.8	15.3	n/a
Drug-Induced	10.9	14.9	14.1	11.3
Diabetes Mellitus	10.1	19.9	21.3	20.5*
Kidney Diseases	5.9	9.0	13.2	n/a
Cirrhosis/Liver Disease	5.2	12.3	9.9	8.2

Sources:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov.
 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.
 Local, state and national data are simple three-year averages.

Cardiovascular Disease

About Heart Disease & Stroke

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

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

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

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

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

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

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

• Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Heart Disease & Stroke Deaths

Heart Disease Deaths

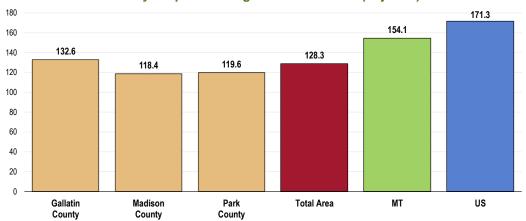
Between 2011 and 2013 there was an annual average age-adjusted heart disease mortality rate of 128.3 deaths per 100,000 population in the Total Area.

- Lower than the statewide rate.
- Lower than the national rate.
- Satisfies the Healthy People 2020 target of 156.9 or lower (as adjusted to account for all diseases of the heart).
- Higher in Gallatin County than in the other counties.

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

Heart Disease: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 156.9 or Lower (Adjusted)



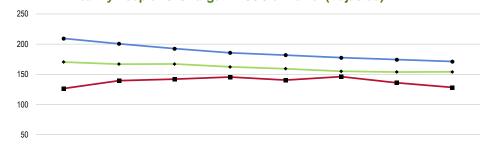
Sources: Notes:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.

 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-2]
- 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.
 - Local, 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
 - TREND: The local heart disease mortality rate has not shown the clear decline seen. statewide and nationally.

Heart Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 156.9 or Lower (Adjusted)



0								
U	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
■ Total Area	126.6	139.6	142.0	145.6	140.5	146.3	136.2	128.3
→ Montana	170.5	167.0	167.1	162.3	159.3	155.0	154.0	154.1
→ US	209.4	200.7	192.5	185.8	181.9	177.6	174.4	171.3

 CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.

Notes:

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

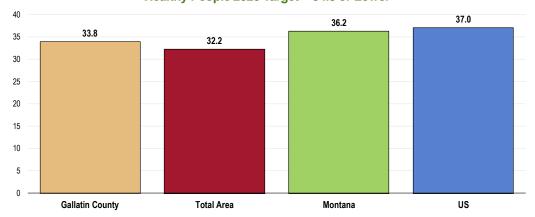
Between 2011 and 2013, there was an annual average age-adjusted stroke mortality rate of 32.2 deaths per 100,000 population in the Total Area.

- More favorable than the Montana rate.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target of 34.8 or lower.
- The Gallatin County mortality rate was 33.8 per 100,000 population.

Stroke: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 34.8 or Lower



Sources:

Notes:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-3]

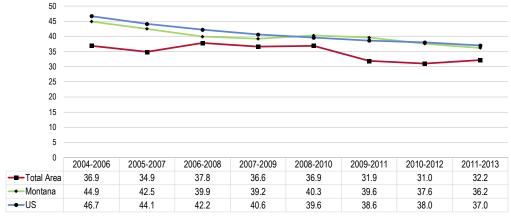
Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

- Local, state and national data are simple three-year averages; raw counts for Madison and Park counties were too small to be calculated.
- TREND: The stroke rate has <u>declined</u> in recent years, echoing the trends reported across Montana and the US overall.

Stroke: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 34.8 or Lower



Sources:

Notes:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-3]
 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.
- Local, state and national data are simple three-year averages.

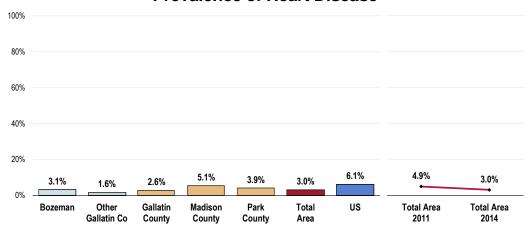
Prevalence of Heart Disease & Stroke

Prevalence of Heart Disease

A total of 3.0% of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina or heart attack.

- More favorable than the national prevalence.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: similar findings among the three counties.
- TREND: Statistically unchanged since 2011.

Prevalence of Heart Disease



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 124]

2013 PRC National Health Survey, Professional Research Consultants, Inc.

lotes:

 Asked of all respondents.

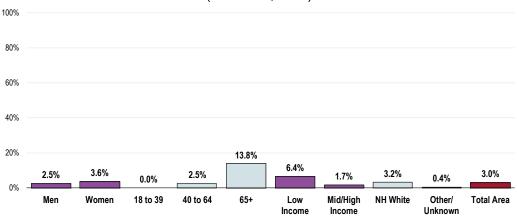
Includes diagnoses of heart attack, angina or coronary heart disease.

Adults more likely to have been diagnosed with chronic heart disease include:

- Seniors (note the positive correlation with age).
- Those in low-income households.
- Non-Hispanic Whites.

Prevalence of Heart Disease

(Total Area, 2014)



- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 124]
- Asked of all respondents

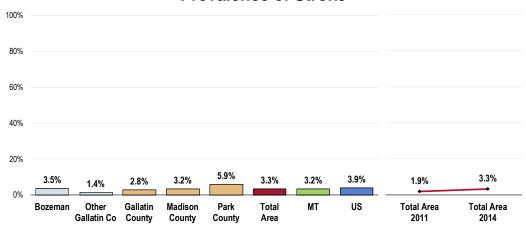
- Asked of all respondents.
 Includes diagnoses of heart attack, angina or coronary heart disease.
 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Prevalence of Stroke

A total of 3.3% of surveyed adults report that they suffer from or have been diagnosed with cerebrovascular disease (a stroke).

- Similar to statewide findings.
- Similar to national findings.
- In Gallatin County: statistically similar between Bozeman and Other Gallatin.
- By county: the findings by county are statistically similar.
- TREND: Statistically unchanged since 2011.

Prevalence of Stroke



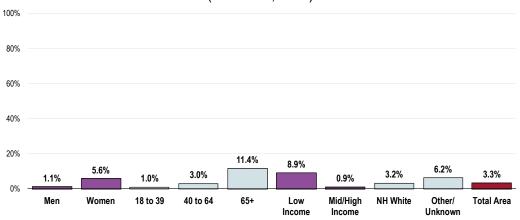
- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 36]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data

Notes: Asked of all respondents. Adults more likely to have been diagnosed with stroke include:

- Women.
- Seniors (positive correlation with age).
- · Low-income respondents.

Prevalence of Stroke

(Total Area, 2014)



Sources Notes:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 36]
- · Asked of all respondents
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Cardiovascular Risk Factors

About Cardiovascular Risk

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

• Healthy People 2020 (www.healthypeople.gov)

Hypertension (High Blood Pressure)

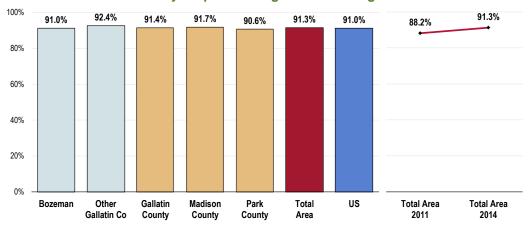
High Blood Pressure Testing

A total of 91.3% of Total Area adults have had their blood pressure tested within the past two years.

- Similar to national findings.
- Similar to the Healthy People 2020 target (94.9% or higher).
- Similar findings within Gallatin County as well as when comparing the three counties.
- TREND: Statistically unchanged since 2011.

Have Had Blood Pressure Checked in the Past Two Years

Healthy People 2020 Target = 92.6% or Higher



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 45]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - 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

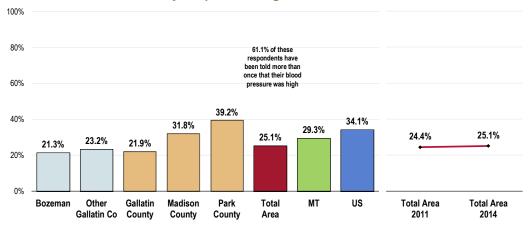
One in four Total Area adults (25.1%) has been told at some point that his or her blood pressure was high.

- More favorable than the Montana prevalence and the national prevalence.
- Similar to the Healthy People 2020 target (26.9% or lower).
- In Gallatin County: no difference between Bozeman and the rest of the county.
- By county: lowest in Gallatin County, unfavorably high in Park County.
- TREND: Statistically unchanged since 2011.

Among hypertensive adults, 61.1% have been diagnosed with high blood pressure more than once.

Prevalence of High Blood Pressure

Healthy People 2020 Target = 26.9% or Lower



- Sources: PRC Community Health Surveys. Professional Research Consultants. Inc. [Items 43, 125]
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.

 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-5.1]

Asked of all respondents.

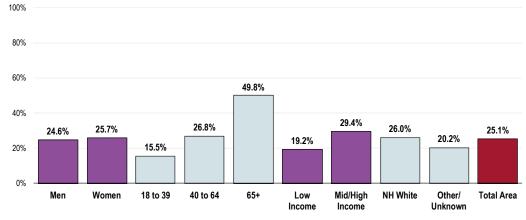
Hypertension diagnoses are higher among:

- Adults age 40 and older, and especially those age 65+.
- Higher-income residents.

Prevalence of High Blood Pressure

(Total Area, 2014)

Healthy People 2020 Target = 26.9% or Lower



- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 125] US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-5.1]
- - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents). Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Hypertension Management

Respondents reporting high blood

asked:

pressure were further

help control your high

blood pressure, such

as taking medication,

changing your diet, or

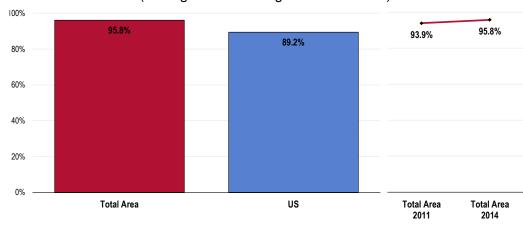
exercising?"

"Are you currently taking any action to Among respondents who have been told that their blood pressure was high, 95.8% report that they are currently taking actions to control their condition.

- · Better than national findings.
- TREND: Statistically unchanged since 2011.

Taking Action to Control Hypertension

(Among Adults With High Blood Pressure)



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 44]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - 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

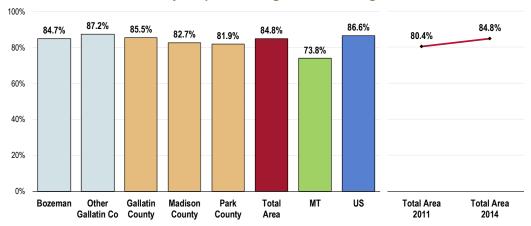
Blood Cholesterol Testing

A total of 84.8% of Total Area adults have had their blood cholesterol checked within the past five years.

- More favorable than Montana findings.
- Comparable to the national findings.
- Satisfies the Healthy People 2020 target (82.1% or higher).
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: similar findings among the three counties.
- TREND: Denotes a statistically significant increase since 2011.

Have Had Blood Cholesterol Levels Checked in the Past Five Years

Healthy People 2020 Target = 82.1% or Higher



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 48]
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-6]

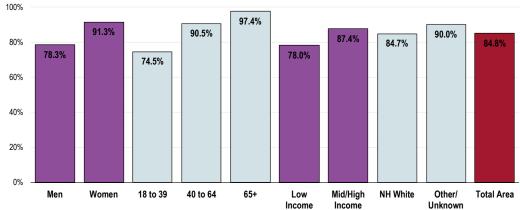
The following demographic segments report <u>lower</u> screening levels:

- Young adults (note the positive correlation with age).
- · Residents with lower incomes.

Have Had Blood Cholesterol Levels Checked in the Past Five Years

(Total Area, 2014)

Healthy People 2020 Target = 82.1% or Higher



- Sources:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 48] US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-6]
- - Aspect or an respondent's an early interest.
 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level, "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

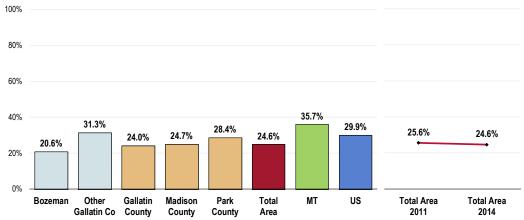
Self-Reported High Blood Cholesterol

A total of 24.6% of adults have been told by a health professional that their cholesterol level was high.

- More favorable than the Montana findings.
- More favorable than the national prevalence.
- Well above the Healthy People 2020 target (13.5% or lower).
- In Gallatin County: much higher outside of Bozeman.
- By county: similar findings among the three counties.
- TREND: Statistically unchanged since 2011.

Prevalence of High Blood Cholesterol

Healthy People 2020 Target = 13.5% or Lower



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 126]
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
 and Prevention (CDC): 2013 Montana data.
 - 2013 PRC National Health Survey. Professional Research Consultants. Inc.
 - 2013 PRC National reality Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-7]
- US Department of Health
 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 20.1% of Total Area adults report not having high blood cholesterol, <u>but</u>: 1) have never had their blood cholesterol levels 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.

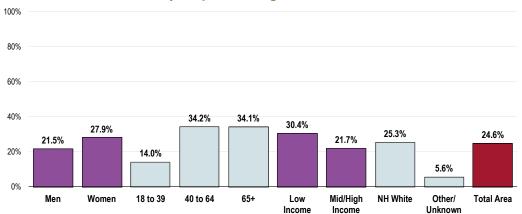
Further note the following:

- Respondents age 40+ are much more likely than younger adults to have high blood cholesterol levels.
- There is a higher prevalence among lower-income adults.
- Non-Hispanic Whites report a higher prevalence than those of Other/Unknown race.
- Keep in mind that "unknowns" are relatively high in men, young adults, and lower-income residents.

Prevalence of High Blood Cholesterol

(Total Area, 2014)

Healthy People 2020 Target = 13.5% or Lower



- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 126]
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HDS-7]
- Asked of all respondents.

 - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

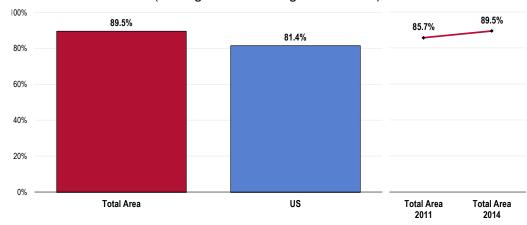
High Cholesterol Management

Among adults who have been told that their blood cholesterol was high, 89.5% report that they are currently taking actions to control their cholesterol levels.

- More favorable than found nationwide.
- TREND: Statistically unchanged since 2011.

Taking Action to Control High Blood Cholesterol Levels

(Among Adults With High Cholesterol)



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 47]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - 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?"

About Cardiovascular Risk

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

- High Blood Pressure
- · High Blood Cholesterol
- Tobacco Use
- · Physical Inactivity
- Poor Nutrition
- Overweight/Obesity
- Diabetes
- National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

Three health-related behaviors contribute markedly to cardiovascular disease:

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

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

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

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

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

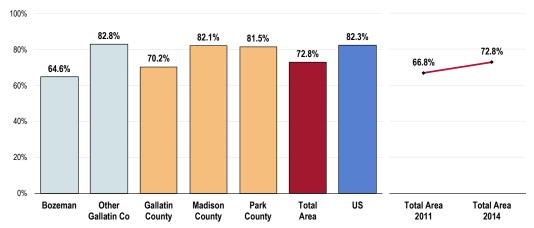
Total Cardiovascular Risk

A total of 72.8% of Total Area adults report one or more cardiovascular risk factors, such as being overweight, smoking cigarettes, being physically inactive, or having high blood pressure or cholesterol.

- Notably lower than national findings.
- In Gallatin County: much higher outside of Bozeman.
- By county: much lower in Gallatin County when compared with Madison and Park counties.
- TREND: Marks a statistically significant <u>increase</u> from the 2011 findings.

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

Present One or More Cardiovascular Risks or Behaviors



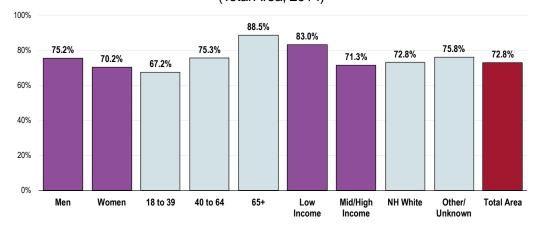
- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 127] 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- - Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) hypertension; 4) high blood cholesterol; and/or 5) being overweight/obese.

Adults more likely to exhibit cardiovascular risk factors include:

- Adults age 40 and older, and especially seniors.
- Those in lower-income households.

Present One or More Cardiovascular Risks or Behaviors

(Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 127]
- Asked of all respondents.
 Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) hypertension;
- A high blood cholesterol; and/or 5) being overweight/obese.

 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Cancer

About Cancer

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

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

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

- Breast cancer (using mammography)
- Cervical cancer (using Pap tests)
- Colorectal cancer (using fecal occult blood testing, sigmoidoscopy, or colonoscopy)
- Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Cancer Deaths

All Cancer Deaths

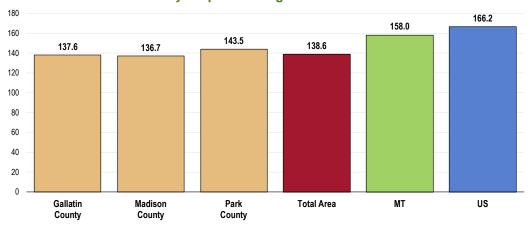
Between 2011 and 2013, there was an annual average age-adjusted cancer mortality rate of 138.6 deaths per 100,000 population in the Total Area.

- More favorable than the statewide rate.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target of 161.4 or lower.
- Similar rates by county in the Total Area.

Cancer: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 161.4 or Lower



Notes:

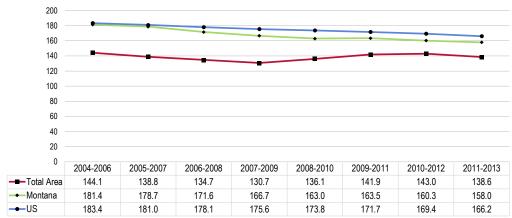
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-1]
 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.

- · Local, state and national data are simple three-year averages
- TREND: Cancer mortality has fallen and risen over the past decade, with no clear trend in the Total Area; note the decreasing trends across Montana and the US overall.

Cancer: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 161.4 or Lower



Notes:

- Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-1]
 - 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 the leading cause of cancer deaths in the Total Area.

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

As can be seen in the following chart (referencing 2011-2013 annual average age-adjusted death rates):

- The Total Area lung, female breast, and colorectal cancer death rates are each better than the related state and national rates.
- In contrast, the Total Area prostate cancer death rate is worse than both the state and national rates.

Note that while the Total Area prostate cancer death rate detailed below fails to satisfy the related Healthy People 2020 target, the remaining rates (for lung, female breast, and colorectal cancer) satisfy their related objectives.

Age-Adjusted Cancer Death Rates by Site

(2011-2013 Annual Average Deaths per 100,000 Population)

	Total Area	Montana	US	HP2020
Lung Cancer	26.2	41.4	44.7	45.5
Prostate Cancer	23.3	19.8	19.8	21.8
Female Breast Cancer	17.7	20.4	21.3	20.7
Colorectal Cancer	8.9	13.2	14.9	14.5

- Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public
 - Health Surveillance and Informatics. Data extracted January 2015.

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

Cancer Incidence

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

Between 2007 and 2011, Total Area had an annual average age-adjusted incidence rate for prostate cancer of 140.2 cases per 100,000 population.

• Favorably lower in Madison County.

There was an annual average age-adjusted incidence rate of 140.4 <u>female breast cancer</u> cases per 100,000 in the Total Area.

• Favorably lower in Madison County.

There was an annual average age-adjusted incidence rate of 42.3 <u>lung cancer</u> cases per 100,000 in the Total Area.

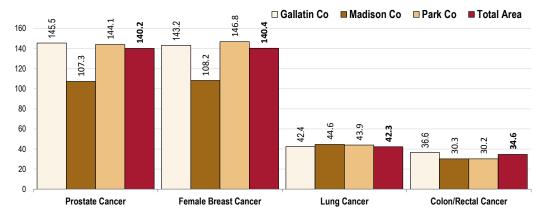
• Similar by county.

There was an annual average age-adjusted incidence rate of <u>colorectal cancer</u> of 34.6 cases per 100,000 in the Total Area.

• Unfavorably higher in Gallatin County.

Cancer Incidence Rates by Site

(Annual Average Age-Adjusted Incidence per 100,000 Population, 2007-2011)



Sources: • State Cancer Profiles: 2007-11.

Notes:

Retrieved January 2015 from Community Commons at http://www.chna.org.

 This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of cancers, adjusted to 2000 US standard population age groups (under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

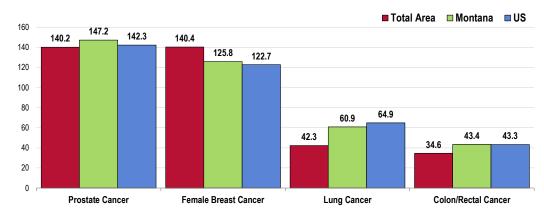
"Incidence rate" or "case rate" is the number of new cases of a disease occurring during a given period of time.

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

• While Total Area cancer incidence is similar to or better than state and US rates for prostate, lung, and colorectal cancers, note that the area's incidence rate for female breast cancer is higher than the Montana and US rates.

Cancer Incidence Rates by Site

(Annual Average Age-Adjusted Incidence per 100,000 Population, 2007-2011)



- Sources: State Cancer Profiles: 2007-11

Retrieved January 2015 from Community Commons at http://www.chna.org.

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of cancers, adjusted to 2000 US standard population age groups (under age 1, 1.4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

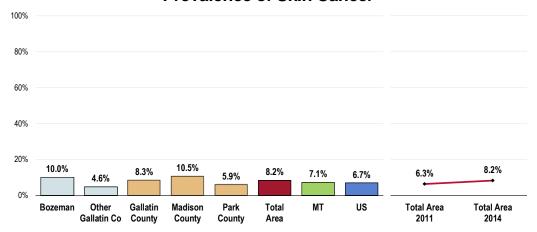
Prevalence of Cancer

Skin Cancer

A total of 8.2% of surveyed Total Area adults report having been diagnosed with skin cancer.

- · Similar to what is found statewide.
- Similar to the national prevalence.
- In Gallatin County: particularly high in Bozeman.
- By county: no statistically significant difference by county.
- TREND: The prevalence of skin cancer has remained statistically unchanged since 2011.

Prevalence of Skin Cancer



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 31]
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
 and Prevention (CDC): 2013 Montana data.
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:

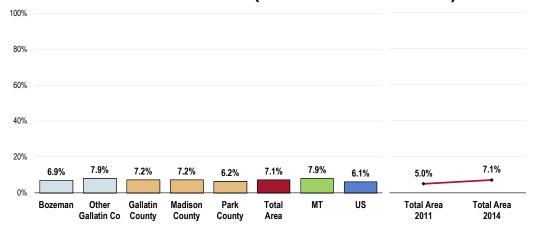
 Asked of all respondents.

Other Cancer

A total of 7.1% of respondents have been diagnosed with some type of (non-skin) cancer.

- Similar to the statewide and national prevalence.
- Similar findings within Gallatin County as well as among the three counties.
- The prevalence of cancer has remained statistically unchanged since 2011.

Prevalence of Cancer (Other Than Skin Cancer)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 30]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:
• Asked of all respondents.

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

Cancer Risk

About Cancer Risk

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

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

Cancer Screenings

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

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

Female Breast Cancer Screening

About Screening for Breast Cancer

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

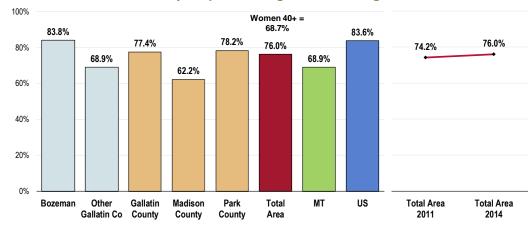
Among women age 50-74, 76.0% have had a mammogram within the past two years.

- More favorable than statewide findings (which represent all women 50+).
- Less favorable than national findings.
- Similar to the Healthy People 2020 target (81.1% or higher).
- In Gallatin County: much higher in Bozeman than the rest of the county.
- By county: unfavorably low in Madison County.
- Among women 40+, 68.7% have had a mammogram in the past two years.
- TREND: Statistically unchanged since 2011.

Have Had a Mammogram in the Past Two Years

(Among Women Age 50-74)

Healthy People 2020 Target = 81.1% or Higher



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 128-129]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2012 Montana data.

Reflects female respondents 50-74.

2013 PRC National Health Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-17]

Notes:

*Note that state data reflects all women 50 and older (vs. women 50-74 in local, US and Healthy People data).

Cervical Cancer Screenings

About Screening for Cervical Cancer

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

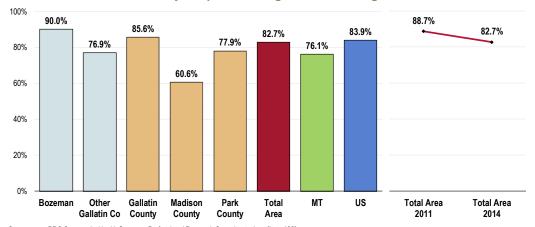
Among women age 21 to 65, 82.7% have had a Pap smear within the past three years.

- Better than Montana findings (which represents all women 18+).
- Comparable to national findings.
- Fails to satisfy the Healthy People 2020 target (93% or higher).
- In Gallatin County: much higher in Bozeman than the rest of the county.
- By county: highest in Gallatin County, lowest in Madison County.
- TREND: Marks a statistically significant decrease since 2011.

Have Had a Pap Smear in the Past Three Years

(Among Women Age 21-65)

Healthy People 2020 Target = 93.0% or Higher



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 130]

- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2012 Montana data.
 2013 PRC National Health Survey, Professional Research Consultants, Inc.

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-15]

Notes: Reflects female respondents age 21 to 65.

*Note that the Montana percentage represents all women age 18 and older.

Colorectal Cancer Screenings

About Screening for Colorectal Cancer

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

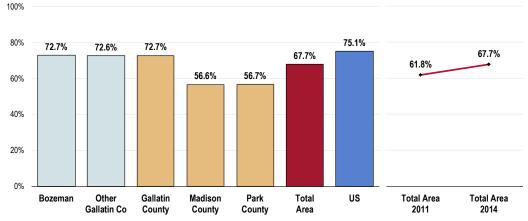
Colorectal Cancer Screening

Among adults age 50-75, two in three (67.7%) have had an appropriate colorectal cancer screening (fecal occult blood testing within the past year and/or sigmoidoscopy/colonoscopy [lower endoscopy] within the past 10 years).

- · Lower than national findings.
- Similar to the Healthy People 2020 target (70.5% or higher).
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: much higher in Gallatin County than in Madison or Park counties.

Have Had a Colorectal Cancer Screening

(Among Adults Age 50-75) **Healthy People 2020 Target = 70.5% or Higher**



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 133]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective C-16]

Notes: • Asked of all respondents age 50 through 75.

 In this case, the term "colorectal screening" refers to adults age 50-75 receiving a FOBT (fecal occult blood test) in the past year and/or a lower endoscopy (sigmoidoscopy/colonoscopy) in the past 10 years.

Lower Endoscopy

Among adults age 50 and older, over two-thirds (68.1%) have had lower endoscopy (sigmoidoscopy or colonoscopy) at some point in their lives.

- · Better than Montana findings.
- · Worse than national findings.

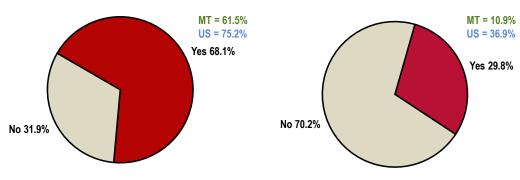
Blood Stool Testing

Among adults age 50 and older, 29.8% have had a blood stool test (aka "fecal occult blood test") within the past two years.

- Better than Montana findings.
- Worse than national findings.

Colorectal Cancer Screenings

(Among Total Area Adults Age 50 and Older, 2014)



Ever Had Lower Endoscopy

Blood Stool Test in Past 2 Years

Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 131-132]

 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): Montana 2013 data.

Notes:

Asked of respondents age 50 and older.

Lower endoscopy includes either sigmoidoscopy or colonoscopy.

Respiratory Disease

About Asthma & COPD

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

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

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

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

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

Risk factors for asthma currently being investigated include:

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

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

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

Healthy People 2020 (www.healthypeople.gov)

[NOTE: COPD was changed to chronic lower respiratory disease (CLRD) with the introduction of ICD-10 codes. CLRD is used in vital statistics reporting, but COPD is still widely used and commonly found in surveillance reports.]

Age-Adjusted Respiratory Disease Deaths

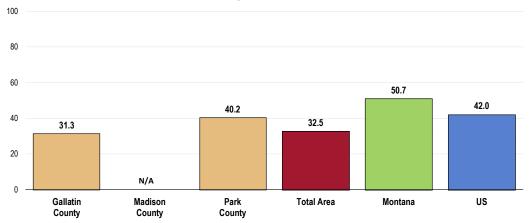
Chronic Lower Respiratory Disease Deaths (CLRD)

Between 2011 and 2013, there was an annual average age-adjusted CLRD mortality rate of 32.5 deaths per 100,000 population in the Total Area.

- Lower than found statewide.
- Lower than the national rate.
- Higher in Park County than in Gallatin County (Madison County counts were too low for a rate to be calculated reliably).

CLRD: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population)



Note: COPD was changed to chronic

lower respiratory disease (CLRD) in 1999 with the

introduction of ICD-10

codes. CLRD is used in vital statistics

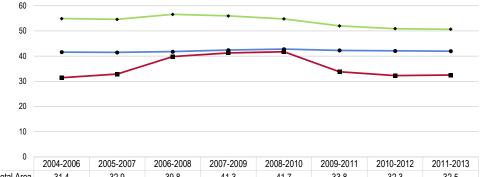
reporting, but COPD is still widely used and

commonly found in surveillance reports.

- Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
- 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.
- Local, state and national data are simple three-year averages.
- CLRD is chronic lower respiratory disease.
- TREND: Despite fluctuations, CLRD mortality in the Total Area has not changed significantly from baseline 2004-2006 data.

CLRD: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



V	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
■ Total Area	31.4	32.9	39.8	41.3	41.7	33.8	32.3	32.5
→ Montana	54.9	54.6	56.6	56.0	54.8	52.0	50.9	50.7
- US	41.6	41.5	41.8	42.4	42.8	42.3	42.1	42.0

Sources:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Notes:
 Deaths are coded using the Tenth Revision of the International Statistical Classification
 Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - State and national data are simple three-year averages.
 - CLRD is chronic lower respiratory disease.

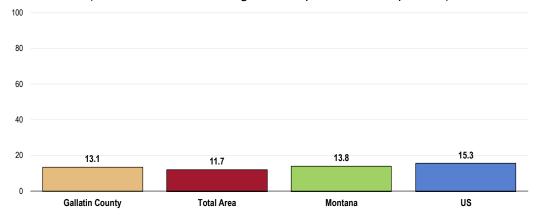
Pneumonia/Influenza Deaths

Between 2011 and 2013, there was an annual average age-adjusted pneumonia influenza mortality rate of 11.7 deaths per 100,000 population in the Total Area.

- Lower than found statewide.
- Lower than the national rate.
- The Gallatin County rate was 13.1 per 100,000 population.

Pneumonia/Influenza: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population)



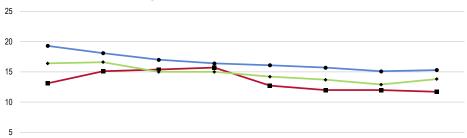
- Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 - Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - Local, state and national data are simple three-year averages.

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

• TREND: Note the decreasing trend in Total Area pneumonia/influenza mortality in recent years. Nationally, pneumonia/influenza death rates have decreased as well.

Pneumonia/Influenza: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



0	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
Total Area	13.1	15.1	15.4	15.7	12.7	12.0	12.0	11.7
→ Montana	16.4	16.6	15.0	15.0	14.2	13.7	12.9	13.8
- US	19.3	18.1	17.0	16.4	16.1	15.7	15.1	15.3

Sources:

CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 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.

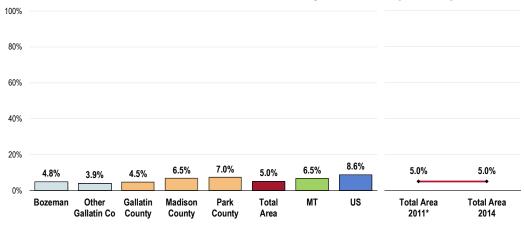
Chronic Obstructive Pulmonary Disease (COPD)

A total of 5.0% of Total Area adults suffer from chronic obstructive pulmonary disease (COPD, including emphysema and bronchitis).

- Similar to the state prevalence.
- Lower than the US prevalence.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: similar findings among the three counties.
- TREND: Statistically similar to 2011 findings.

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

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



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

Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
and Prevention (CDC): 2013 Montana data.

2013 PRC National Health Survey, Professional Research Consultants, Inc.

- Includes those having ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema.
 In prior data, the term "chronic lung disease" was used, which also included bronchitis or emphysema.

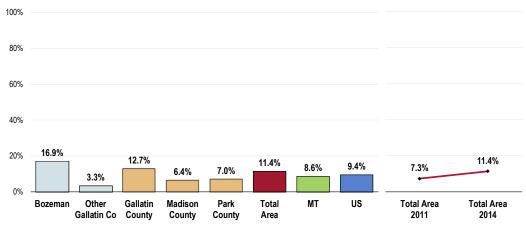
Asthma

Adults

A total of 11.4% of Total Area adults currently suffer from asthma.

- Higher than the statewide prevalence.
- Statistically similar to the national prevalence.
- In Gallatin County: considerably higher in Bozeman.
- By county: much higher in Gallatin County than in Madison or Park counties.
- TREND: The prevalence of adults with asthma has increased significantly since 2011.

Adult Asthma: Current Prevalence



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 134]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data

Asked of all respondents.

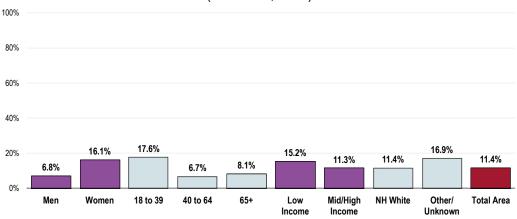
Includes those who have ever been diagnosed with asthma, and who report that they still have asthma

The following adults are more likely to suffer from asthma:

- Women.
- Young adults (under age 40).

Currently Have Asthma

(Total Area, 2014)



Sources: Notes:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 134]
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

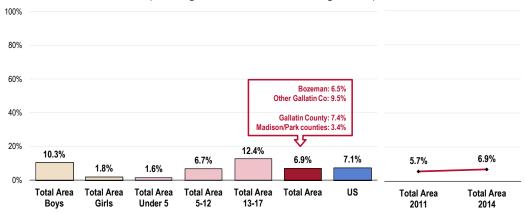
Children

Among Total Area children under age 18, 6.9% currently have asthma.

- Similar to the US prevalence.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: similar findings between Gallatin County and the combined Madison/Park area (numbers were too small to be shown separately).
- TREND: The prevalence of children with asthma has not changed significantly since 2011.
- Viewed by age and gender, asthma is much higher among Total Area boys than girls;
 note also the positive correlation between asthma and the child's age.

Childhood Asthma: Current Prevalence

(Among Parents of Children Age 0-17)



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 135]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents with children 0 to 17 in the household.

. Includes children who have ever been diagnosed with asthma, and whom are reported to still have asthma.

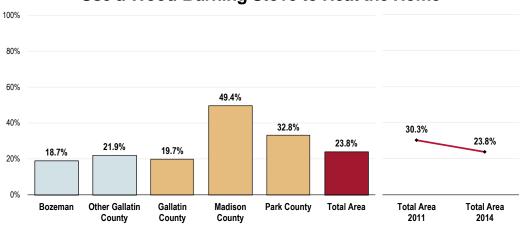
Air Quality

Residential Wood Burning

A total of 23.8% of Total Area residents currently use a wood-burning stove to heat their homes.

- Statistically similar within Gallatin County.
- By county: highest in Madison County, lowest in Gallatin County.
- TREND: Denotes a statistically significant <u>decrease</u> in the use of wood-burning stoves since 2011.

Use a Wood-Burning Stove to Heat the Home



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 303]

tes: • Asked of all respondents

Wood smoke can affect everyone, but children, teenagers, older adults, people with lung disease, including asthma and COPD or people with heart diseases are the most vulnerable.

A major health threat from smoke comes from fine particles (also called particle pollution, particulate matter, or PM). These microscopic particles can get into your eyes and respiratory system, where they can cause health problems such as burning eyes, runny nose, and illnesses such as bronchitis. In addition to particle pollution, wood smoke contains several toxic harmful air pollutants including: benzene, formaldehyde, acrolein and methane (EPA).

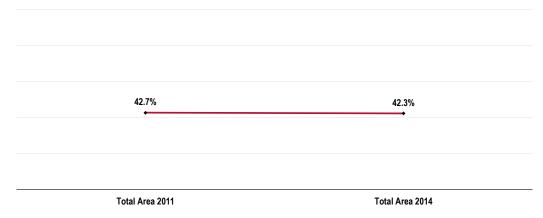
A catalytic convertor is a device that enables a stove to work more cleanly and efficiently.

Among residents with wood-burning stoves, 42.3% report that their stove has a catalytic convertor.

• TREND: Nearly identical to 2011 survey findings.

Use a Catalytic Converter in Wood Stove

(Total Area Respondents Who Use a Wood Stove for Heat)



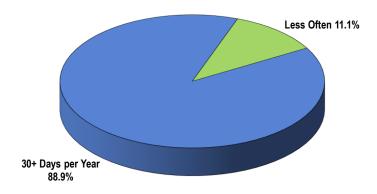
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 304]

- Asked of those respondents who use a wood-burning stove to heat their home. A catalytic converter is a device which enables the stove to work more cleanly and efficiently.
- The Bozeman and Other Gallatin County segments were not large enough to be considered reliable.

Among residents with wood-burning stoves, nearly all (88.9%) report using them on 30 or more days per year.

Frequency of Using Wood-Burning Stove per Year

(Total Area Adults with a Wood-Burning Stove, 2014)



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 305]
 - . Asked of those respondents who use a wood-burning stove to heat their home

Particulate matter, or PM. is the term for particles found in the air, including dust, dirt, soot, smoke, and liquid droplets. Particles can be suspended in the air for long periods of time.

Particles less than 2.5 micrometers in diameter (PM_{2.5}) are referred to as "fine" particles and are believed to pose the greatest health risks. Because of their small size (approximately 1/30th the average width of a human hair), fine particles can lodge deeply into the lungs (EPA).

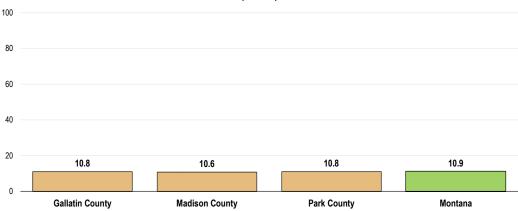
Air Pollution: Particulate Matter

The average daily measure of fine particulate matter in micrograms per cubic meter ranges from 10.6 to 10.8 among the three counties.

• The statewide daily average is 10.9 micrograms per cubic meter.

Average Daily Measure of Fine Particulate Matter in Micrograms Per Cubic Meter (PM2.5)

(2014)



Sources: Notes:

www.countyhealthrankings.org.
 Represents the average daily measure of fine particulate matter in micrograms per cubic meter (PM2.5) in a county.

Injury & Violence

About Injury & Violence

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

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

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

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

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

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

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

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

Efforts to prevent violence may focus on:

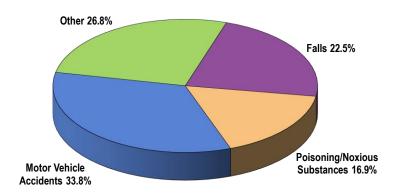
- Changing social norms about the acceptability of violence
- Improving problem-solving skills (for example, parenting, conflict resolution, coping)
- Changing policies to address the social and economic conditions that often give rise to violence
- Healthy People 2020 (www.healthypeople.gov)

Leading Causes of Accidental Death

Motor vehicle accidents, poisoning (including accidental drug overdose), and falls accounted for 73.2% of accidental deaths in the Total Area between 2011 and 2013.

Leading Causes of Accidental Death

(Total Area, 2011-2013)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.

Notes:

Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

Unintentional Injury

Age-Adjusted Unintentional Injury Deaths

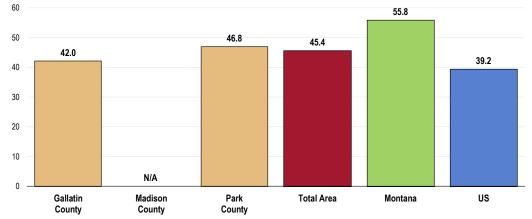
Between 2011 and 2013, there was an annual average age-adjusted unintentional injury mortality rate of 45.4 deaths per 100,000 population in the Total Area.

- More favorable than the Montana rate.
- Less favorable than the national rate.
- Far from satisfying the Healthy People 2020 target (36.4 or lower).
- Lower in Gallatin County than in Park County.

Unintentional Injuries: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 36.4 or Lower



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-11]
 Deaths are coded using the Touth Revision of the Integrational Statistical Classification of Discasses and Polated Health Problems (ICD 10).

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- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- Local, state and national data are simple three-year averages.

Notes:

• TREND: Local, state, and US rates are largely unchanged from baseline data.

Unintentional Injuries: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



0	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
—Total Area	43.2	41.8	44.6	44.3	43.8	46.6	47.1	45.4
→ Montana	54.3	56.1	58.3	59.9	57.6	56.8	54.3	55.8
→ US	38.9	39.6	39.5	38.7	38.0	38.1	38.7	39.2

Sources:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-11]
- 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.
 Local, state and national data are simple three-year averages. Notes

Motor Vehicle Safety

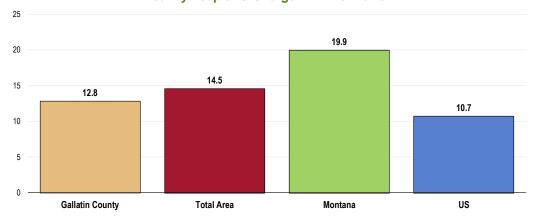
Age-Adjusted Motor-Vehicle Related Deaths

Between 2011 and 2013, there was an annual average age-adjusted motor vehicle crash mortality rate of 14.5 deaths per 100,000 population in the Total Area.

- Well below that found statewide, but higher than that found nationally.
- Fails to satisfy the Healthy People 2020 target (12.4 or lower).
- The Gallatin County rate was 12.8.

Motor Vehicle Crashes: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 12.4 or Lower



- Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-13.1]

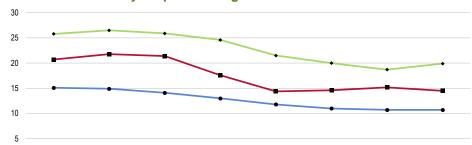
Notes: Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population. Local, state and national data are simple three-year averages; raw counts for Madison and Park counties were too small to be calculated.
- TREND: The mortality rate in the Total Area decreased over the past decade, in keeping with state and national trends.

Motor Vehicle Crashes: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 12.4 or Lower



Λ								
U	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
■ Total Area	20.7	21.8	21.4	17.6	14.4	14.6	15.2	14.5
→ Montana	25.8	26.5	25.9	24.6	21.5	20.0	18.7	19.9
- US	15.1	14.9	14.1	13.0	11.8	11.0	10.7	10.7

Notes:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-13.1]
- 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.
- Local, state and national data are simple three-year averages.

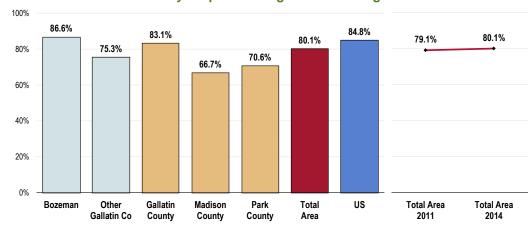
Seat Belt Usage - Adults

Most Total Area adults (80.1%) report "always" wearing a seat belt when driving or riding in a vehicle.

- Lower than the percentage found nationally.
- Fails to satisfy the Healthy People 2020 target of 92.4% or higher.
- In Gallatin County: much higher in Bozeman than the rest of the county.
- By county: much higher in Gallatin County.
- TREND: Statistically unchanged since 2011.

"Always" Wear a Seat Belt When Driving or Riding in a Vehicle

Healthy People 2020 Target = 92.0% or Higher



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 49]

 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-15]

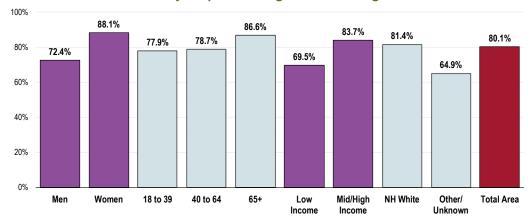
These population segments are <u>less</u> likely to report consistent seat belt usage:

• Men, adults under age 65, those living on lower incomes, and residents of Other/Unknown races.

"Always" Wear a Seat Belt When Driving or Riding in a Vehicle

(Total Area, 2014)

Healthy People 2020 Target = 92.0% or Higher



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 49]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-15]

Notes:
• Asked of all respondents.

- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

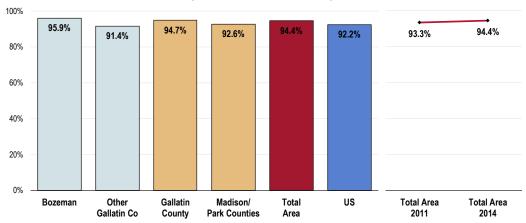
Seat Belt Usage - Children

A full 94.4% 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.
- In Gallatin County: similar between Bozeman and the remainder of the county.
- By county: similar findings in Gallatin County when compared with Madison and Park counties combined.
- TREND: Statistically unchanged since 2011.

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

(Among Parents of Children Age 0-17)



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 122]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Asked of all respondents with children 0 to 17 in the household.

Cell Phone Use While Driving

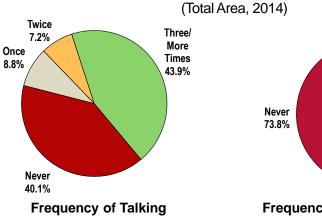
Over the past 30 days, approximately 6 in 10 survey respondents (59.9%) talked on the phone at least once while driving (and the car was in motion).

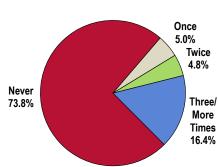
• The prevalence includes 43.9% of residents who did so three or more times.

A much smaller prevalence of survey respondents (26.2%) report either sending or reading text messages or email while driving (and the car was in motion).

 Note the 16.4% of respondents who sent or read emails or texts while driving three or more times in the past month.

Use of the Cell Phone While Driving in the Past Month





Frequency of Emailing or Texting on the Phone While Driving

Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 301-302]

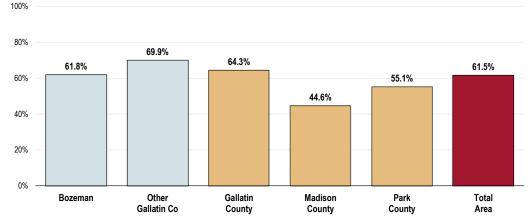
on the Phone While Driving

Notes:
• Asked of all respondents.

When combined, 61.5% of Total Area adults used a cell phone while driving in the past month (whether talking, texting, or emailing) and the car was in motion.

- Within Gallatin County: much lower in Bozeman than the remainder of the county.
- By county: favorably lower in Madison County; highest in Gallatin County.

Used a Cell Phone (Talking, Texting, Emailing) While Driving at Least Once in the Past Month



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 323]

Asked of all respondents

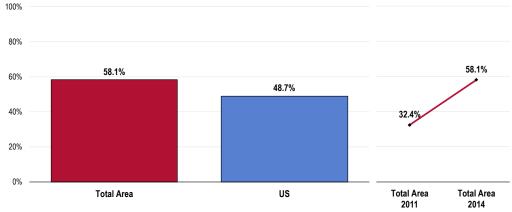
Bicycle Safety

Nearly 6 in 10 Total Area children age 5 to 17 (58.1%) are reported to "always" wear a helmet when riding a bicycle.

- Statistically similar to the national prevalence.
- TREND: Marks a statistically significant increase since 2011.

Child "Always" Wears a Helmet When Riding a Bicycle

(Among Parents of Children Age 5-17)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 121]

2013 PRC National Health Survey, Professional Research Consultants, Inc.

Asked of all respondents with children age 5 to 17 at home

Firearm Safety

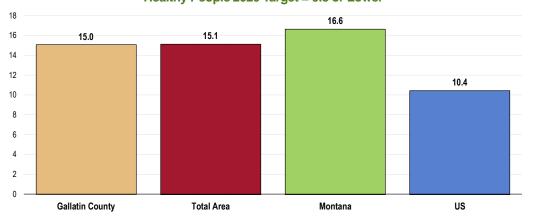
Age-Adjusted Firearm-Related Deaths

Between 2011 and 2013, there was an annual average age-adjusted rate of 15.1 deaths per 100,000 population due to firearms in the Total Area.

- Better than found statewide.
- Worse than found nationally.
- Fails to satisfy the Healthy People 2020 objective (9.3 or lower).
- The Gallatin County rate was 15.0 per 100,000 population.

Firearms-Related Deaths: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 9.3 or Lower

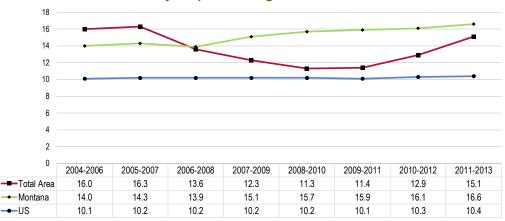


Sources:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, Data extracted January 2015.
- 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.
 - Local, state and national data are simple three-year averages; raw counts for Madison and Park counties were too small to be calculated.
 - TREND: After a considerable decrease, the Total Area mortality rate has increased in recent years.

Firearms-Related Deaths: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 9.3 or Lower



- Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, Data extracted January 2015.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IVP-30] Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10)

Notes:

- Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
- Local, state and national data are simple three-year averages

Presence of Firearms in Homes

Overall, more than 6 in 10 Total Area adults (64.2%) have a firearm kept in or around their home.

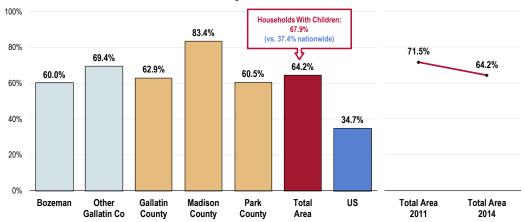
- Much higher than the national prevalence.
- In Gallatin County: lower in Bozeman than the rest of the county.
- By county: much higher in Madison County.
- TREND: Denotes a statistically significant decrease since 2011.

Among Total Area households with children, 67.9% have a firearm kept in or around the house (nearly twice the prevalence reported nationally).

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."

Have a Firearm Kept in or Around the Home



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 52, 137]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Asked of all respondents.

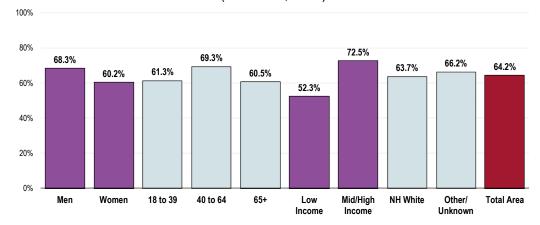
In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.

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

- Men.
- Higher-income households.

Have a Firearm Kept in or Around the House

(Total Area, 2014)



- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 52]
- Asked of all respondents.
- In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.

 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).

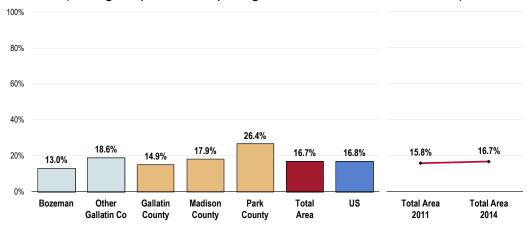
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level, "Mid/High Income" includes households with incomes at 200% or more of the federal poverty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

Among Total Area households with firearms, 16.7% report that there is at least one weapon that is kept unlocked and loaded.

- Almost identical to that found nationally.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: lowest in Gallatin County, highest in Park County.
- TREND: Statistically similar to that reported in 2011.

Household Has An Unlocked, Loaded Firearm

(Among Respondents Reporting a Firearm in or Around the Home)



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 52, 137]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents

• In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.

Intentional Injury (Violence)

Violent Crime

Violent Crime Rates

Between 2011 and 2013, there were 162.4 violent crimes reported per 100,000 population in the Total Area.

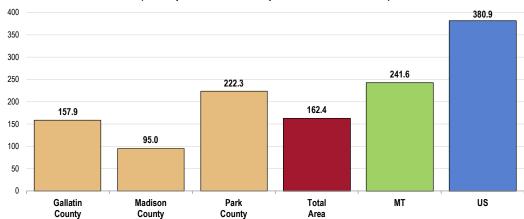
- Below the Montana rate for the same period.
- Well below the national rate.
- Highest in Park County, lowest in Madison County.

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

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

Violent Crime

(Rate per 100,000 Population, 2011-2013)

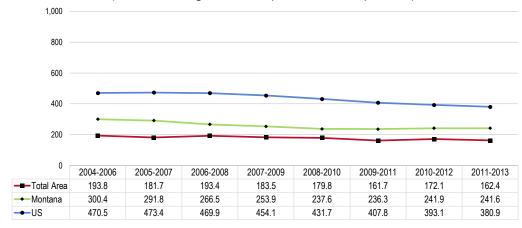


- Sources:
 Montana Board of Crime Control
 - US Department of Justice, Federal Bureau of Investigation

- This indicator reports the rate of violent crime offenses reported by the sheriff's office or county police department per 100,000 residents. Violent crime includes homicide, rape, robbery, and aggravated assault. This indicator is relevant because it assesses community safety.
- Rates are offenses per 100,000 population among agencies reporting.
- TREND: The Total Area violent crime rate has decreased over the past decade, echoing the state and national trends.

Violent Crime Rates

(Annual Average Offenses per 100,000 Population)



- Montana Board of Crime Control.

Notes:

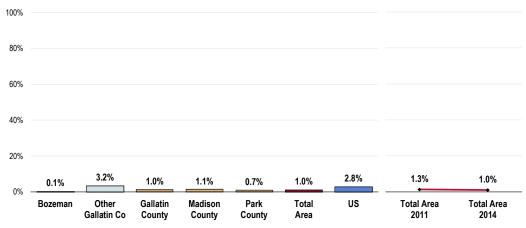
US Department of Justice, Federal Bureau of Investigation
 Rates are offenses per 100,000 population among agencies reporting.

Self-Reported Violence

Just 1.0% of Total Area adults acknowledged being the victim of a violent crime in the past five years.

- · More favorable than national findings.
- In Gallatin County: much higher outside of Bozeman.
- · Similar findings among counties.
- TREND: Statistically unchanged since 2011.

Victim of a Violent Crime in the Past Five Years



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 50]

2013 PRC National Health Survey, Professional Research Consultants, Inc.

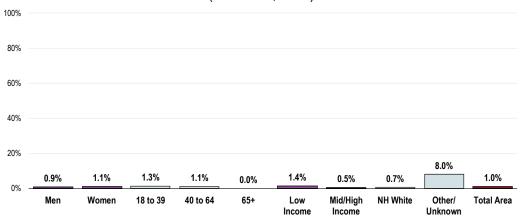
lotes:

 Asked of all respondents.

 Reports of violence are notably higher among residents below the age of 65 and those of Other/Unknown race.

Victim of a Violent Crime in the Past Five Years

(Total Area, 2014)



Notes:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 50]
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Rates are domestic violence-related incidents (per 100,000 population) reported to law enforcement.

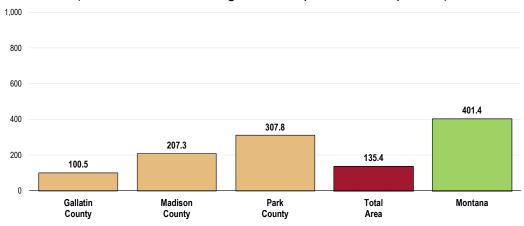
Domestic Violence Rates

Between 2011 and 2013, there were 135.4 domestic violence offenses reported per 100,000 population in the Total Area.

- Less than half the Montana rate for the same period.
- Highest in Park County, lowest in Gallatin County.

Domestic Violence Rates

(2011-2013 Annual Average Offenses per 100,000 Population)

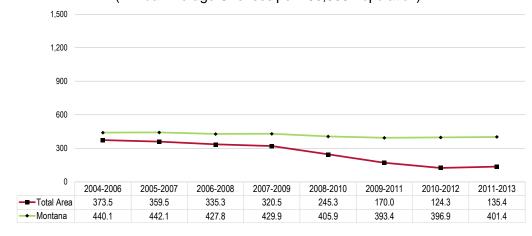


Sources:

- Montana Board of Crime Control
- Offenses include domestic violence-related incidents reported to law enforcement.
- TREND: Note the downward trend over time in Total Area domestic violence rates.

Domestic Violence Rates

(Annual Average Offenses per 100,000 Population)



Sources:

- Montana Board of Crime Control
- Offenses include domestic violence-related incidents reported to law enforcement.

Respondents were told:

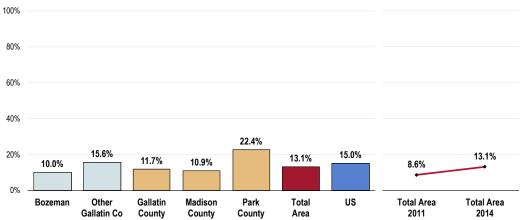
"By an intimate partner, I mean any current or former spouse, boyfriend, or girlfriend. Someone you were dating, or romantically or sexually intimate with would also be considered an intimate partner."

Self-Reported Family Violence

A total of 13.1% of respondents acknowledge that they have ever been hit, slapped, pushed, kicked, or otherwise hurt by an intimate partner.

- · Comparable to national findings.
- In Gallatin County: lower in Bozeman than the rest of the county.
- By county: unfavorably high in Park County.
- TREND: Denotes a statistically significant increase since 2011.

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



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 51]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

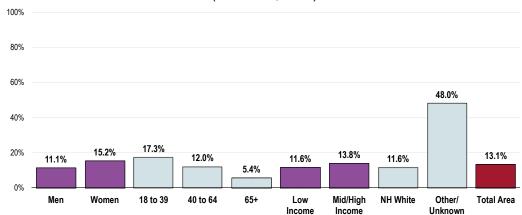
Notes: • Asked of all respondents.

Reports of domestic violence are also notably higher among:

- Adults of Other/Unknown races (especially).
- Adults under age 65 (note the negative correlation with age).

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

(Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 51]

- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).

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

Diabetes

About Diabetes

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

Diabetes mellitus:

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

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

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

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

Healthy People 2020 (www.healthypeople.gov)

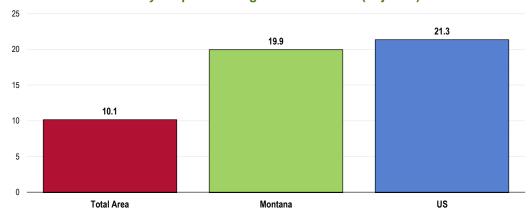
Age-Adjusted Diabetes Deaths

Between 2011 and 2013, there was an annual average age-adjusted diabetes mortality rate of 10.1 deaths per 100,000 population in the Total Area.

- More favorable than that found statewide.
- More favorable than the national rate.
- Easily satisfies the Healthy People 2020 target (20.5 or lower, adjusted to account for diabetes mellitus-coded deaths).

Diabetes: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 20.5 or Lower (Adjusted)



Sources

Notes:

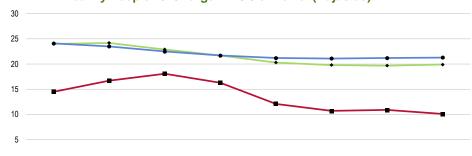
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Workstracted January 2016
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective D-3]
 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.

- Local, state and national data are simple three-year averages.

 The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.
- TREND: Diabetes mortality has decreased from baseline data in the Total Area. Statewide and nationally, note the downward trend.

Diabetes: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 20.5 or Lower (Adjusted)



0										
	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013		
Total Area	14.5	16.7	18.1	16.3	12.1	10.7	10.9	10.1		
→ Montana	24.0	24.2	22.9	21.7	20.3	19.8	19.7	19.9		
- →US	24.1	23.5	22.5	21.7	21.2	21.1	21.2	21.3		

Notes:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective D-3]
- 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.

- Local, state and national data are simple three-year averages
- The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

Prevalence of Diabetes

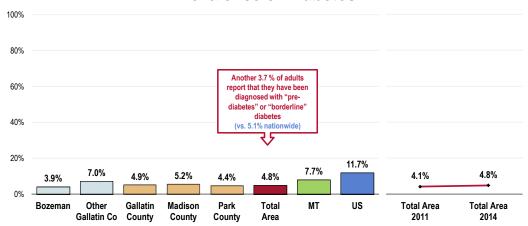
A total of 4.8% of Total Area adults report having been diagnosed with diabetes.

- Better than the statewide proportion.
- Better than the national proportion.
- In Gallatin County: statistically similar by area.
- By county: statistically similar by county.
- TREND: Statistically unchanged since 2011.

In addition to the prevalence of diagnosed diabetes referenced above, another 3.7% of Total Area adults report that they have "pre-diabetes" or "borderline diabetes."

• Similar to the US prevalence.

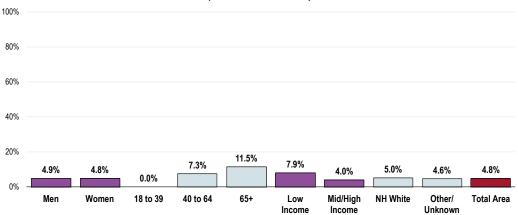
Prevalence of Diabetes



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 136]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
 and Prevention (CDC): 2013 Montana data.
- Notes: Asked of all respondents
 - Local and national data exclude gestation diabetes (occurring only during pregnancy)
 - Note the strong positive correlation between diabetes and age, with 11.5% of seniors with diabetes.

Prevalence of Diabetes

(Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 136]

- Asked of all respondents.
 Asked of all respondents.
 Income categories are non-Hispanic Auroration (e.g., "NH White" reflects non-Hispanic White respondents).
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "MidHigh Income" includes households with incomes at 200% or more of the federal poverty level.
- Excludes gestation diabetes (occurring only during pregnancy).

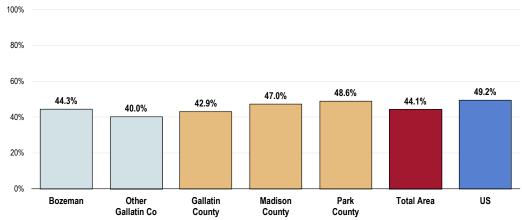
Diabetes Testing

Of Total Area adults who have not been diagnosed with diabetes, 44.1% report having had their blood sugar level tested within the past three years.

- Lower than the national proportion.
- · Statistically similar findings within Gallatin County.
- By county: similar findings among the three counties.

Have Had Blood Sugar Tested in the Past Three Years

(Among Non-Diabetics)



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 40]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Asked of respondents who have not been diagnosed with diabetes.

Alzheimer's Disease

About Dementia

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

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

• Healthy People 2020 (www.healthypeople.gov)

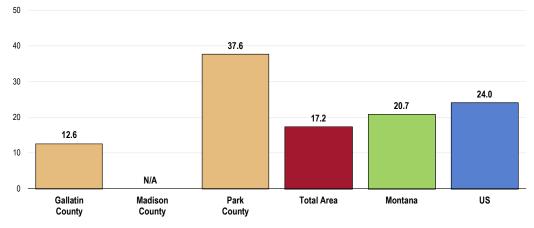
Age-Adjusted Alzheimer's Disease Deaths

Between 2011 and 2013, there was an annual average age-adjusted Alzheimer's disease mortality rate of 17.2 deaths per 100,000 population in the Total Area.

- More favorable than the statewide rate.
- More favorable than the national rate.
- Three times as high in Park County as in Gallatin County (Madison County counts were too low to calculate a reliable rate).

Alzheimer's Disease: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, Data extracted January 2015. Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

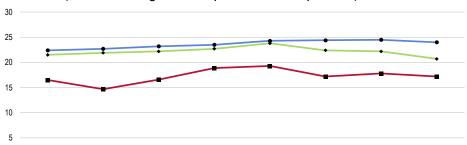
Notes: Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

· Local, state and national data are simple three-year averages

• TREND: No clear trend is evident with regard to the Alzheimer's disease mortality rate in the Total Area.

Alzheimer's Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



0	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
■ Total Area	16.5	14.7	16.6	18.9	19.3	17.2	17.8	17.2
→ Montana	21.5	21.9	22.2	22.7	23.8	22.4	22.2	20.7
- US	22.4	22.7	23.2	23.5	24.3	24.4	24.5	24.0

Notes:

- Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 - 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

About Chronic Kidney Disease

Chronic kidney disease and end-stage renal disease are significant public health problems in the United States and a major source of suffering and poor quality of life for those afflicted. They are responsible for premature death and exact a high economic price from both the private and public sectors. Nearly 25% of the Medicare budget is used to treat people with chronic kidney disease and end-stage renal disease.

Genetic determinants have a large influence on the development and progression of chronic kidney disease. It is not possible to alter a person's biology and genetic determinants; however, environmental influences and individual behaviors also have a significant influence on the development and progression of chronic kidney disease. As a result, some populations are disproportionately affected. Successful behavior modification is expected to have a positive influence on the disease.

Diabetes is the most common cause of kidney failure. The results of the Diabetes Prevention Program (DPP) funded by the national Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) show that moderate exercise, a healthier diet, and weight reduction can prevent development of type 2 diabetes in persons at risk.

• Healthy People 2020 (www.healthypeople.gov)

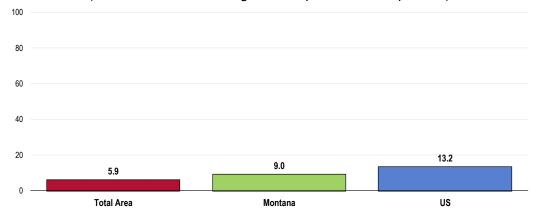
Age-Adjusted Kidney Disease Deaths

Between 2011 and 2013 there was an annual average age-adjusted kidney disease mortality rate of 5.9 deaths per 100,000 population in the Total Area.

- More favorable than the rate found statewide.
- More favorable than the national rate.
- County-level rates not available.

Kidney Disease: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population)



 CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.

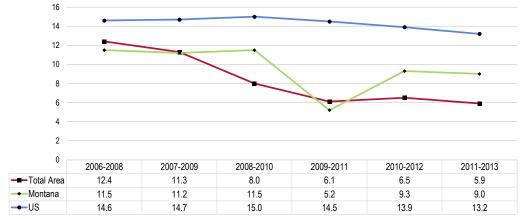
 Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10). Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

· Local, state and national data are simple three-year averages

• TREND: The death rate has decreased over the past decade in the Total Area.

Kidney Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



Sources:

 CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.

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.

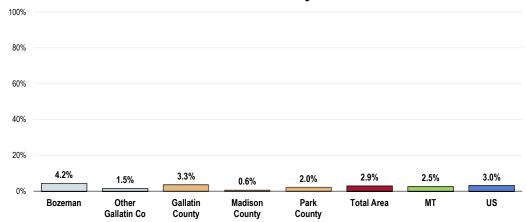
· State and national data are simple three-year averages

Prevalence of Kidney Disease

A total of 2.9% of Total Area adults report having been diagnosed with kidney disease.

- Similar to the state proportion.
- Similar to the US proportion.
- In Gallatin County: favorably lower outside of Bozeman.
- By county: favorably lower in Madison County.

Prevalence of Kidney Disease



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 33]

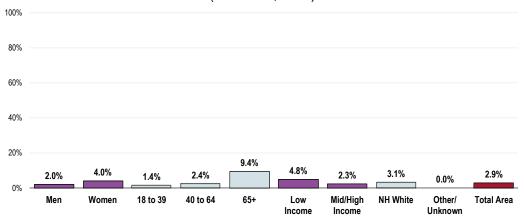
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
 and Prevention (CDC): 2013 Montana data.

Notes: • Asked of all respondents.

• A higher prevalence of kidney disease is reported among seniors and non-Hispanic White respondents in the Total Area.

Prevalence of Kidney Disease

(Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 33]
 Asked of all respondents

- Asked of all respondents.
 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Potentially Disabling Conditions

About Arthritis, Osteoporosis & Chronic Back Conditions

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

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

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

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

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

- 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 Back Conditions

Prevalence of Arthritis/Rheumatism

Over one-third (34.8%) of Total Area adults age 50 and older report suffering from arthritis or rheumatism.

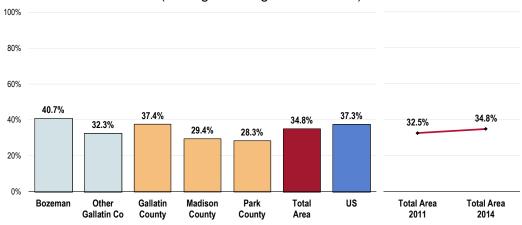
- Comparable to that found nationwide.
- In Gallatin County: comparable findings between Bozeman and the rest of the county.
- By county: unfavorably higher in Gallatin County.
- TREND: The prevalence of arthritis/rheumatism is similar to that reported in 2011.

RELATED ISSUE:

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

Prevalence of Arthritis/Rheumatism

(Among Adults Age 50 and Older)



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 139] 2013 PRC National Health Survey, Professional Research Consultants, Inc.

 Notes: Reflects respondents age 50 and older.

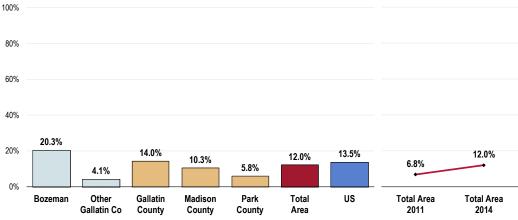
Prevalence of Osteoporosis

A total of 12.0% of survey respondents age 50 and older have osteoporosis.

- · Similar to what is found nationwide.
- Fails to satisfy the Healthy People 2020 target of 5.3% or lower.
- In Gallatin County: five times higher in Bozeman than in the rest of the county.
- By county: highest in Gallatin County, lowest in Park County.
- TREND: Marks a statistically significant increase since 2011.

Prevalence of Osteoporosis

(Among Adults Age 50 and Older) Healthy People 2020 Target = 5.3% or Lower



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 140]

 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AOCBC-10]

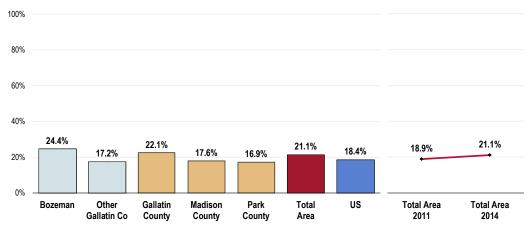
Reflects respondents age 50 and older.

Prevalence of Sciatica/Chronic Back Pain

A total of 21.1% of survey respondents suffer from chronic back pain or sciatica.

- Similar to the US percentage.
- In Gallatin County: higher in Bozeman.
- By county: statistically similar findings by county.
- TREND: Statistically unchanged since 2011.

Prevalence of Sciatica/Chronic Back Pain



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 29]

2013 PRC National Health Survey, Professional Research Consultants, Inc.

lotes:
• Asked of all respondents.

Vision & Hearing Impairment

About Vision

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)

Vision Trouble

A total of 5.6% of Total Area adults are blind, or have trouble seeing even when wearing

RELATED ISSUE:

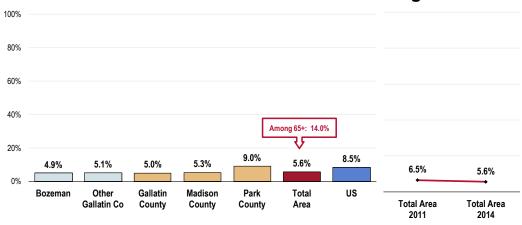
See also *Vision Care* in the **Access to Health Services**section of this report.

corrective lenses.

- More favorable than found nationwide.
- Comparable findings within Gallatin County as well as among the three counties.
- TREND: Statistically unchanged since 2011.

Among Total Area adults age 65 and older, 14.0% have vision trouble.

Prevalence of Blindness/Trouble Seeing



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 26]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:

 Asked of all respondents.

Hearing Trouble

About Hearing & Other Sensory or Communication Disorders

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 a 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.

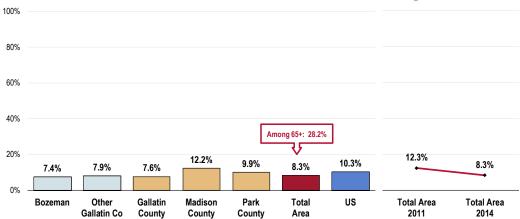
• Healthy People 2020 (www.healthypeople.gov)

In all, 8.3% of Total Area adults report being deaf or having difficulty hearing.

- Similar to what is found nationwide.
- In Gallatin County: Bozeman is similar to the rest of the county.
- By county: similar findings among the three counties.
- TREND: Denotes a statistically significant decrease since 2011.

Among Total Area adults age 65 and older, 28.2% have partial or complete hearing loss.

Prevalence of Deafness/Trouble Hearing



- $Sources: \bullet \quad \mathsf{PRC} \ \mathsf{Community} \ \mathsf{Health} \ \mathsf{Surveys}, \ \ \mathsf{Professional} \ \mathsf{Research} \ \mathsf{Consultants}, \mathsf{Inc.} \ \ [\mathsf{Item} \ \mathsf{27}]$
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- tes:

 Asked of all respondents.

Infectious Disease



Professional Research Consultants, Inc.

Childhood Vaccinations

Vaccinations of Area Children

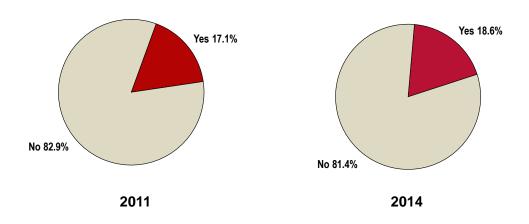
Parents Not Getting a Recommended Vaccine

A total of 18.6% of parents with children under the age of 7 report that they have ever refused or decided not to get a recommended vaccine for their child.

• TREND: Statistically similar to the 2011 response.

Have Ever Refused or Decided Not to Get a Recommended Vaccine for Child

(Total Area Respondents with Children Age 0-6)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 317]
Notes: • Asked of all parents with children under 7 at home.

The 13 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 not to vaccinate. Reasons for not getting a recommended vaccine for their child:

- Concerns about safety or potential side effects, including autism (mentioned by 5 parents);
- Perceptions that they are **not necessary/not required** (3 parents);
- Religious beliefs (1 parent);
- Child was ill at the time (1 parent);
- Questions about the effectiveness of vaccines (mentioned by 1 parent); and
- Perception that the child is too young to get too many vaccines at once (1 parent).
- Note that one parent was uncertain and could not give an answer.

This decision was mostly influenced by:

- The parents themselves (mentioned by 7 parents);
- What they've learned from other people/parents (2 parents);
- An alternative health provider [naturopath, chiropractor, etc.] (1 parent);
- Books or magazines (1 parent);
- A doctor or nurse (1 parent); and
- Online research (1 parent).

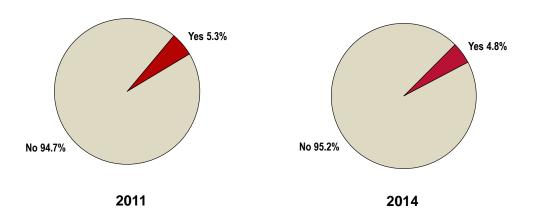
Parents Getting Vaccination Only Because Required

Also, 4.8% of Total Area parents with children under age 7 report that there has been a vaccine that they did not want for their child, but they got it because it was required by law.

• TREND: Comparable to the prevalence reported in 2011 among parents of children under age 7.

Had a Child Vaccinated Only Because of the Law

(Total Area Respondents with Children Age 0-6)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 320] Notes: • Asked of all parents with children under 7 at home.

Perceptions of Childhood Vaccines

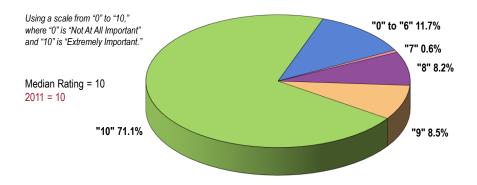
Importance of Vaccinations

Among Total Area parents of children age 6 and under, most (79.6%) consider childhood vaccinations to be a "9" or "10" on a scale of importance (where 10 is "extremely important").

- In contrast, 11.7% of these parents gave ratings between "0" and "6."
- The median response was "10."

Rating of the Importance of Childhood Vaccinations

(Total Area Adults with Children 0-6, 2014)



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 316]
- · Asked of parents with children under 7 at home.

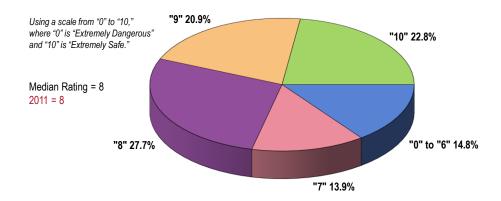
Vaccination Safety

Parents of children under the age of 7 appear less sure about the safety of childhood vaccinations, with less than one-half (43.7%) rating safety as a "9" or "10" (on a scale where "0" is "extremely dangerous" and 10 is "extremely safe").

- Note that 14.8% of these parents rate the safety of childhood vaccines as "6" or lower.
- The median response was "8."

Perceived Safety of Childhood Vaccinations

(Total Area Adults with Children 0-6, 2014)



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 322]
- Asked of parents with children under 7 at home

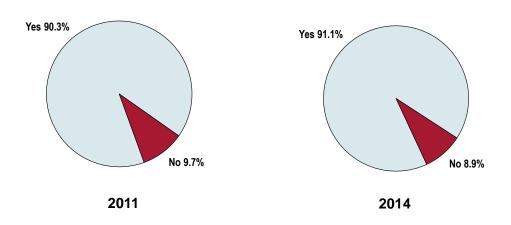
Vaccinations for Newborns

Just over 9 in 10 parents of children under age 7 (91.1%) report that if they had a new baby, they would want to get <u>all</u> recommended vaccines for this newborn.

- However, 8.9% would not.
- TREND: Comparable to the 2011 prevalence.

Would Want All Recommended Vaccinations for a Newborn

(Total Area Respondents with Children Age 0-6)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 321]
Notes: • Asked of all parents with children under 7 at home.

Vaccine-Preventable Disease

Vaccine-preventable diseases include measles, mumps, rubella, pertussis, and hepatitis C.

According to the Montana Department of Public Health and Human Services, there have been 360 cases of vaccine-preventable diseases (113 pertussis and 247 hepatitis C) reported in the three-county area between 2011 and 2013.

Influenza & Pneumonia Vaccination

About Influenza & Pneumonia

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

• Healthy People 2020 (www.healthypeople.gov)

Flu Vaccinations

Older Adults

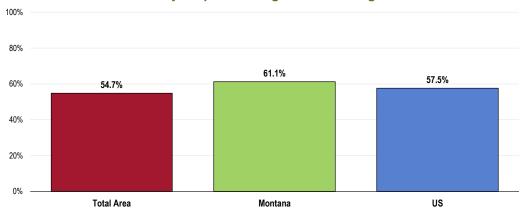
Among Total Area seniors, 54.7% received a flu shot (or FluMist®) within the past year.

- · Statistically comparable to the Montana finding.
- Comparable to the national finding.
- Fails to satisfy the Healthy People 2020 target (70% or higher).

Older Adults: Have Had a Flu Vaccination in the Past Year

(Among Adults Age 65+)

Healthy People 2020 Target = 70.0% or Higher



- Sources:
 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 141]
 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control

 - and Prevention (CDC): 2013 Montana data.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IID-12.12]
- Reflects respondents 65 and older
 - Includes FluMist as a form of vaccination

FluMist® is a vaccine that is sprayed into the nose to help protect against influenza; it is an alternative to traditional flu shots.

"High-risk" includes adults who report having been diagnosed with heart disease, diabetes or respiratory disease.

High-Risk Adults

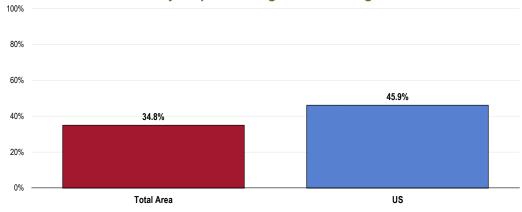
A total of 34.8% of high-risk adults age 18 to 64 received a flu vaccination (flu shot or FluMist®) within the past year.

- · Less favorable than national findings.
- Fails to satisfy the Healthy People 2020 target (70% or higher).

High-Risk Adults: Have Had a Flu Vaccination in the Past Year

(Among High-Risk Adults Age 18-64)

Healthy People 2020 Target = 70.0% or Higher



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 142]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IID-12.12]

Notes: Reflects high-risk respondents age 18-64.

- "High-Risk" includes adults age 18 to 64 who have been diagnosed with heart disease, diabetes or respiratory disease.
- Includes FluMist as a form of vaccination.

Pneumonia Vaccination

Older Adults

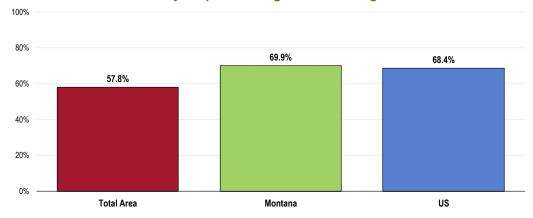
Among adults age 65 and older, 57.8% have received a pneumonia vaccination at some point in their lives.

- Lower than the Montana finding.
- · Lower than to the national finding.
- Fails to satisfy the Healthy People 2020 target of 90% or higher.

Older Adults: Have Ever Had a Pneumonia Vaccine

(Among Adults Age 65+)

Healthy People 2020 Target = 90.0% or Higher



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 143]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control
 and Prevention (CDC): 2013 Montana data.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IID-13.1]

Notes: • Reflects respondents 65 and older.

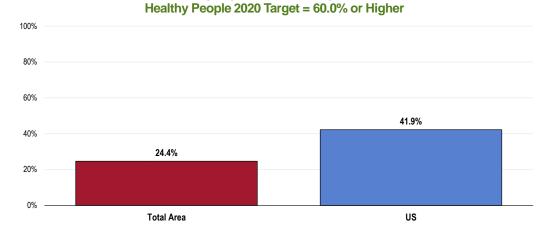
High-Risk Adults

A total of 24.4% of high-risk adults age 18 to 64 have ever received a pneumonia vaccination.

- · Lower than national findings.
- Fails to satisfy the Healthy People 2020 target (60% or higher).

High-Risk Adults: Have Ever Had a Pneumonia Vaccine

(Among High-Risk Adults Age 18-64)



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 144]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective IID-13.2]
- Notes: Asked of all high-risk respondents under 65.
 - "High-Risk" includes adults age 18 to 64 who have been diagnosed with heart disease, diabetes or respiratory disease.

"High-risk" includes adults who report having been diagnosed with heart disease, diabetes or respiratory disease.

HIV

About HIV

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

HIV is a preventable disease, and effective HIV prevention interventions have been proven to reduce HIV transmission. People who get tested for HIV and learn that they are infected can make significant behavior changes to improve their health and reduce the risk of transmitting HIV to their sex or drugusing 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)

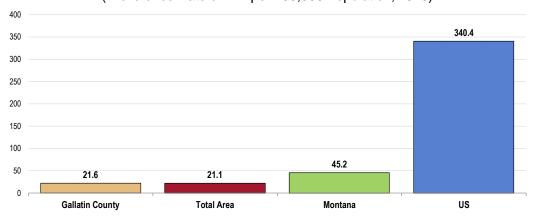
HIV Prevalence

In 2010, there was a prevalence of 21.1 HIV cases per 100,000 population in the Total Area.

- More favorable than the statewide prevalence.
- Much more favorable than the national prevalence.
- The Gallatin County prevalence was 21.6 per 100,000 population.

HIV Prevalence

(Prevalence Rate of HIV per 100,000 Population, 2010)



- Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention: 2010.

Notes:

 Retrieved January 2015 from Community Commons at http://www.chna.org.
 This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

Raw counts for Madison and Park counties were too small to be calculated reliably

According to the Montana Department of Public Health and Human Services, there have been 28 reported HIV/AIDS cases in Gallatin County between 2004 and 2013.

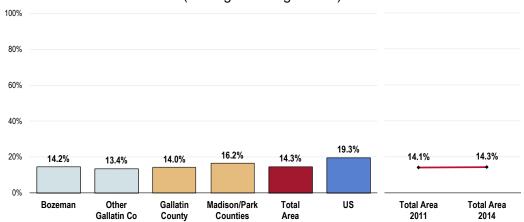
HIV Testing

Among Total Area adults age 18-44, 14.3% report that they have been tested for human immunodeficiency virus (HIV) in the past year.

- Similar to the proportion found nationwide.
- In Gallatin County: similar findings between Bozeman and the remainder of the county.
- By county: similar findings between Gallatin County and the combined Madison/Park
- TREND: Testing has remained stable since 2011.

Tested for HIV in the Past Year

(Among Adults Age 18-44)

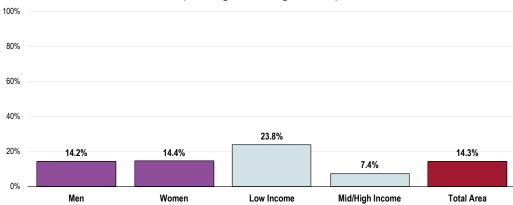


- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 145]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes: Reflects respondents age 18 to 44.

• Those with higher incomes less often report having been tested for HIV.

Tested for HIV in the Past Year

(Among Adults Age 18-44)



- Sources:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 145]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective HIV-14.1]
- Notes: Reflects respondents age 18 to 44.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Sexually Transmitted Diseases

About Sexually Transmitted Diseases

STDs refer to more than 25 infectious organisms that are transmitted primarily through sexual activity. Despite their burdens, costs, and complications, and the fact that they are largely preventable, STDs remain a significant public health problem in the United States. This problem is largely unrecognized by the public, policymakers, and health care professionals. STDs cause many harmful, often irreversible, and costly clinical complications, such as: reproductive health problems; fetal and perinatal health problems; cancer; and facilitation of the sexual transmission of HIV infection.

Because many cases of STDs go undiagnosed—and some common viral infections, such as human papillomavirus (HPV) and genital herpes, are not reported to CDC at all—the reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STDs in the US. Untreated STDs can lead to serious long-term health consequences, especially for adolescent girls and young women. Several factors contribute to the spread of STDs.

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

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

Social, Economic and Behavioral Factors. The spread of STDs is directly affected by social, economic, and behavioral factors. Such factors may cause serious obstacles to STD prevention due to their influence on social and sexual networks, access to and provision of care, willingness to seek care, and social norms regarding sex and sexuality. Among certain vulnerable populations, historical experience with segregation and discrimination exacerbates these factors. Social, economic, and behavioral factors that affect the spread of STDs include: racial and ethnic disparities; poverty and marginalization; access to healthcare; substance abuse; sexuality and secrecy (stigma and discomfort discussing sex); and sexual networks (persons "linked" by sequential or concurrent sexual partners).

Healthy People 2020 (www.healthypeople.gov)

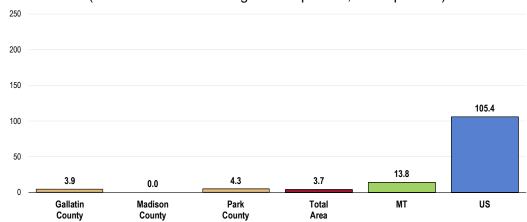
Gonorrhea

Between 2011 and 2013, the gonorrhea incidence rate in the Total Area was 3.7 cases per 100,000 population.

- Lower than the Montana incidence rate.
- Considerably lower than the national incidence rate.
- Highest in Park County, lowest (0.0) in Madison County.

Gonorrhea Incidence

(2011-2013 Annual Average Cases per 100,000 Population)



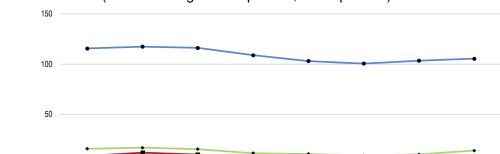
- Sources: Montana Department of Public Health & Human Services.
- Centers for Disease Control and Prevention, National Center for Health Statistics.

Notes: • Rates are annual average new cases per 100,000 population.

• TREND: The most current rate is the lowest of the past decade.

Gonorrhea Incidence

(Annual Average Cases per 100,000 Population)



0								
U	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
Total Area	8.4	11.6	9.7	8.1	8.3	7.6	7.0	3.7
→ MT	15.6	16.6	15.2	11.2	10.4	9.0	9.9	13.8
- US	115.6	117.4	116.1	108.9	103.0	100.5	103.4	105.4

- Sources:
 Montana Department of Public Health & Human Services.
 - Centers for Disease Control and Prevention, National Center for Health Statistics.

Notes: Rates are annual average new cases per 100,000 population.

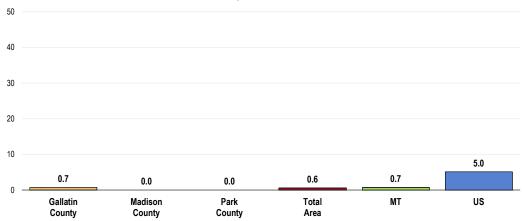
Primary & Secondary Syphilis

Between 2011 and 2013, the primary/secondary syphilis incidence rate in the Total Area was 0.6 cases per 100,000 population.

- Just below the Montana incidence rate.
- Notably lower than the national incidence rate.
- · Reported in Gallatin County only, as shown below.

Primary/Secondary Syphilis Incidence

(2011-2013 Annual Average Cases per 100,000 Population)



Sources:

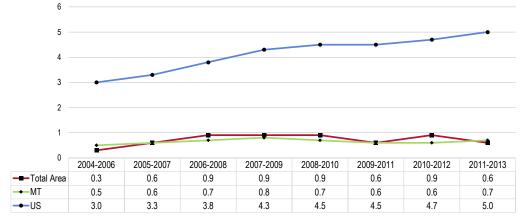
- Montana Department of Public Health & Human Services.
- Centers for Disease Control and Prevention, National Center for Health Statistics.

Notes: • Rates are annual average new cases per 100,000 population.

 TREND: Primary/secondary syphilis incidence has remained consistently below national rates.

Primary/Secondary Syphilis Incidence

(Annual Average Cases per 100,000 Population)



Sources:

- Montana Department of Public Health & Human Services.
- Centers for Disease Control and Prevention, National Center for Health Statistics

Rates are annual average new cases per 100,000 population.

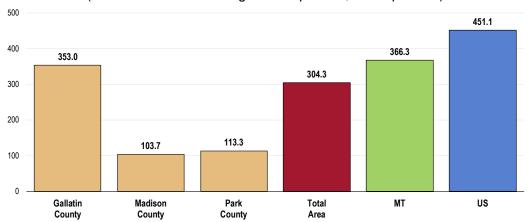
Chlamydia

Between 2011 and 2013, the chlamydia incidence rate in the Total Area was 304.3 cases per 100,000 population.

- Below the Montana incidence rate.
- Notably lower than the national incidence rate.
- Highest in Gallatin County.

Chlamydia Incidence

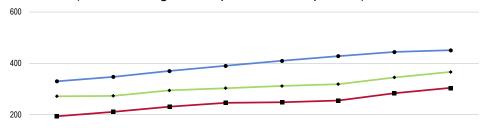
(2011-2013 Annual Average Cases per 100,000 Population)



- Sources:
- Montana Department of Public Health & Human Services.
- Centers for Disease Control and Prevention, National Center for Health Statistics.
- Notes: Rates are annual average new cases per 100,000 population.
 - TREND: Chlamydia incidence has increased over time in the Total Area, echoing the state and national trends.

Chlamydia Incidence

(Annual Average Cases per 100,000 Population)



0	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
■ Total Area	193.4	210.8	230.9	246.2	248.0	254.7	283.1	304.3
→ MT	271.7	273.1	294.4	303.0	311.5	318.9	344.8	366.3
→ US	330.1	347.1	370.0	390.3	409.8	428.2	444.2	451.1

Sources:

- Montana Department of Public Health & Human Services.
- Centers for Disease Control and Prevention, National Center for Health Statistics.

Notes: • Rates are annual average new cases per 100,000 population.

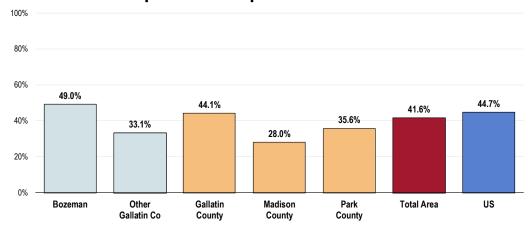
Respondents were told that, to be vaccinated against hepatitis B, a series of three shots must be administered, usually at least one month between shots. They were then asked if they had completed this vaccination series.

Hepatitis B Vaccination

Based on survey data, just over 4 in 10 Total Area adults (41.6%) report having received the hepatitis B vaccination series.

- Similar to what is reported nationwide.
- In Gallatin County: much higher in Bozeman than the rest of the county.
- By county: highest in Gallatin County, lowest in Madison County.

Have Completed the Hepatitis B Vaccination Series

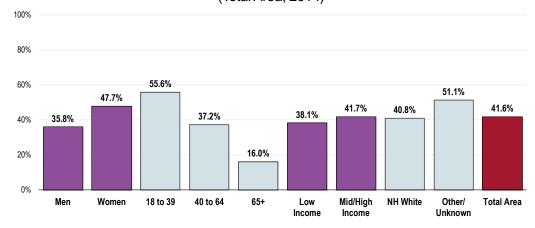


- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 70]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- lotes:

 Asked of all respondents.
 - Includes a series of three shots, usually administered at least one month between shots
 - Note the negative correlation between age and hepatitis B vaccination.
 - In addition, women are much more likely to have received the hepatitis B vaccine.

Have Completed the Hepatitis B Vaccination Series

(Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 70]
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

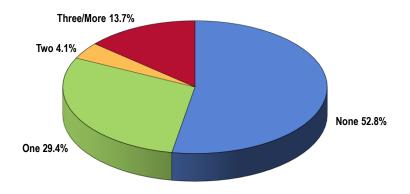
Safe Sexual Practices

Sexual Partners

Among unmarried Total Area adults under 65, the vast majority cites having one (29.4%) or no (52.8%) sexual partners in the past 12 months.

Number of Sexual Partners in Past 12 Months

(Among Unmarried Adults Age 18-64; Total Area, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 86]

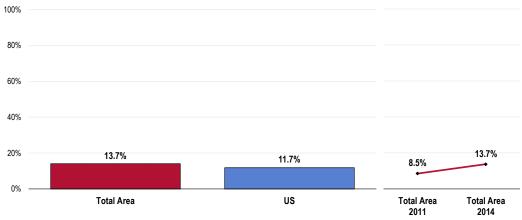
Notes: • Asked of all unmarried respondents under the age of 65.

However, 13.7% report three or more sexual partners in the past year.

- Comparable to that reported nationally.
- TREND: Statistically similar to findings in 2011.

Had Three or More Sexual Partners in the Past Year

(Among Unmarried Adults Age 18-64)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 86]

2013 PRC National Health Survey, Professional Research Consultants, Inc.

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

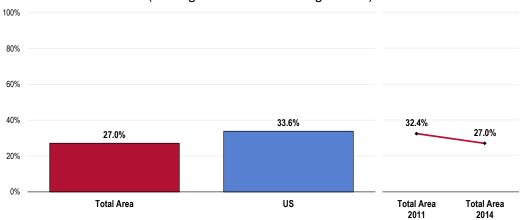
Condom Use

Among Total Area adults who are under age 65 and unmarried, 27.0% report that a condom was used during their last sexual intercourse.

- · Statistically similar to national findings.
- TREND: Statistically similar to 2011 findings.

Condom Was Used During Last Sexual Intercourse

(Among Unmarried Adults Age 18-64)



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 87]
 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Asked of all unmarried respondents under the age of 65.

Births



Professional Research Consultants, Inc.

Prenatal Care

About Infant & Child Health

Improving the well-being of mothers, infants, and children is an important public health goal for the US. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the 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)

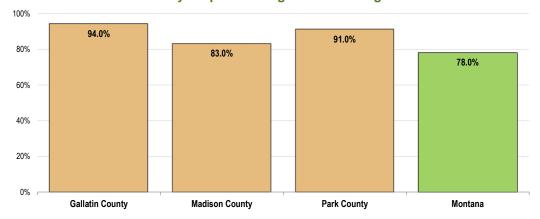
In 2009, 83%-94% of area births received prenatal care in the first trimester of pregnancy.

• Lowest in Madison County.

- The state proportion was less favorable (78.0%).
- Each of the counties fails to satisfy the Healthy People 2020 target (77.9% or higher).

Prenatal Care Initiated in the First Trimester

(Percentage of Live Births, 2009) **Healthy People 2020 Target = 77.9% or Higher**



Sources:

- Montana Department of Public Health & Human Services, Office of Vital Statistics. Data retrieved January 2015 from www.aecf.org/work/kids-count
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-10.1]

Note:

This indicator reports the percentage of women who obtain prenatal care during their first trimester of pregnancy. This indicator is relevant because engaging in prenatal care decreases the likelihood of maternal and infant health risks. This indicator can also highlight a lack of access to preventive care, a lack of health, knowledge insufficient provider outreach, and/or social barriers preventing utilization of services.

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

Birth Outcomes & Risks

Low-Weight Births

A total of 5.9% of 2011-2013 Total Area births were low-weight.

- Better than the Montana proportion.
- Better than the national proportion.
- Satisfies the Healthy People 2020 target (7.8% or lower).
- Favorably low (0.0%) in Madison County.

Low-Weight Births

(Percentage of Live Births, 2011-2013)

Healthy People 2020 Target = 7.8% or Lower



Low birthweight babies,

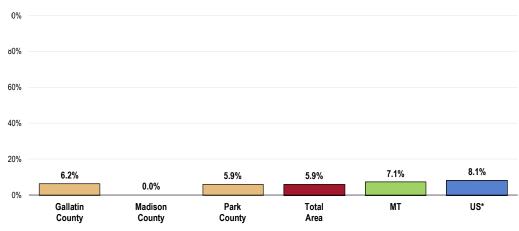
those who weigh less than 2,500 grams (5

pounds, 8 ounces) at birth, are much more

prone to illness and

birthweight.

neonatal death than are babies of normal



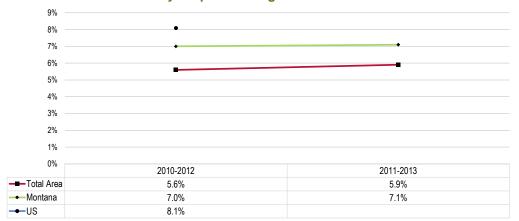
Sources:

- Montana Department of Public Health and Human Services, Office of Vital Statistics.
- Centers for Disease Control and Prevention, National Vital Statistics System.
- 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.
 - Defined as an infant born weighing less than 5.5 pounds (2,500 grams) regardless of gestational age.
 - *US percentage represents 2010-2012 data.
 - TREND: The proportion of low-weight births trended upward slightly in the Total Area between the 2010-2012 and 2011-2013 reporting periods.

Low-Weight Births

(Percentage of Live Births)

Healthy People 2020 Target = 7.8% or Lower



Sources:

- Montana Department of Public Health and Human Services, Office of Vital Statistics.
- Centers for Disease Control and Prevention, National Vital Statistics System.
- 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.
 - Defined as an infant born weighing less than 5.5 pounds (2,500 grams) regardless of gestational age.

Infant Mortality

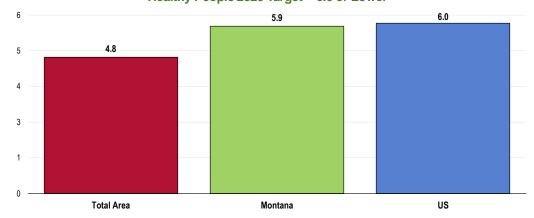
Between 2011 and 2013, there was an annual average of 4.8 infant deaths per 1,000 live births.

- 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.

Infant Mortality Rate

(Annual Average Infant Deaths per 1,000 Live Births, 2011-2013)

Healthy People 2020 Target = 6.0 or Lower



- Sources
- Centers for Disease Control and Prevention, National Vital Statistics System: 2003-09. Accessed using CDC WONDER.
- Retrieved January 2015 from Community Commons at http://www.chna.org.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-1.3]
 Infant deaths include deaths of children under 1 year old.

Notes:

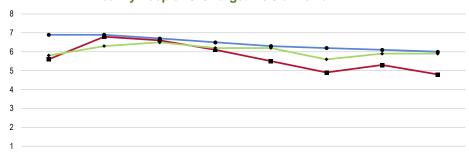
This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

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

• TREND: The infant mortality rate overall decreased over the past decade.

Infant Mortality Rate

(Annual Average Infant Deaths per 1,000 Live Births) Healthy People 2020 Target = 6.0 or Lower



· ·	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
■ Total Area	5.6	6.8	6.6	6.1	5.5	4.9	5.3	4.8
→ Montana	5.8	6.3	6.5	6.2	6.2	5.6	5.9	5.9
→ US	6.9	6.9	6.7	6.5	6.3	6.2	6.1	6.0

- Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 - Centers for Disease Control and Prevention, National Center for Health Statistics.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective MICH-1.3]
 Rates are three-year averages of deaths of children under 1 year old per 1,000 live births.
- Notes:

Family Planning

Births to Teen Mothers

About Teen Births

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

- 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.

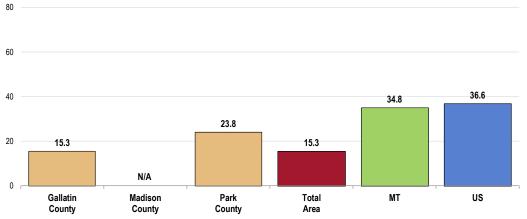
• Healthy People 2020 (www.healthypeople.gov)

Between 2006 and 2012, there was an annual average of 15.3 births to women age 15-19 per 1,000 population in that age group.

- Well below the Montana proportion.
- Well below the national proportion.
- Higher in Park County than in Gallatin County.

Teen Birth Rate

(Births to Women Age 15-19 Per 1,000 Female Population Age 15-19, 2006-2012)



- Notes:
- Centers for Disease Control and Prevention, National Vital Statistics System: 2006-2012. Accessed using CDC WONDER.
- Retrieved January 2015 from Community Commons at http://www.chna.org.

 This indicator reports the rate of total births to women under the age of 15 19 per 1,000 female population age 15 19. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.

Modifiable Health Risks



Professional Research Consultants, Inc.

Actual Causes Of Death

About Contributors to Mortality

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.

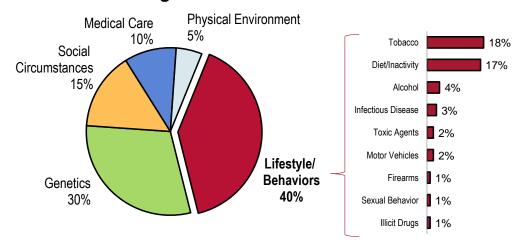
The most prominent contributors to mortality in the United States in 2000 were **tobacco** (an estimated 435,000 deaths), **diet and activity** patterns (400,000), **alcohol** (85,000), **microbial agents** (75,000), **toxic agents** (55,000), **motor vehicles** (43,000), **firearms** (29,000), **sexual 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.

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. 32. 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.

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.

Nutrition

About Healthful Diet & Healthy Weight

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

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

Americans with a healthful diet:

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

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

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

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

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

Social factors thought to influence diet include:

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

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

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

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

• Healthy People 2020 (www.healthypeople.gov)

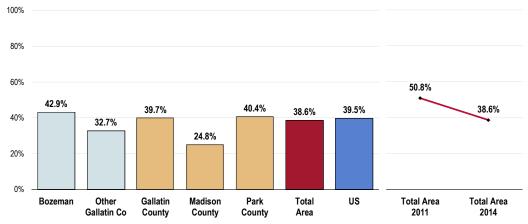
To measure fruit and vegetable consumption, survey respondents were asked multiple questions, specifically about the foods and drinks they consumed on the day prior to the interview.

Daily Recommendation of Fruits/Vegetables

A total of 38.6% of Total Area adults report eating five or more servings of fruits and/or vegetables per day.

- · Comparable to national findings.
- In Gallatin County: much higher in Bozeman than the remainder of the county.
- By county: unfavorably low in Madison County.
- TREND: Fruit/vegetable consumption has decreased significantly since 2011. Note, however, that there was a slight difference in the structure of questions regarding fruit/vegetable consumption between the 2011 and 2014 surveys; this, perhaps, contributes to some degree to the change in prevalence.

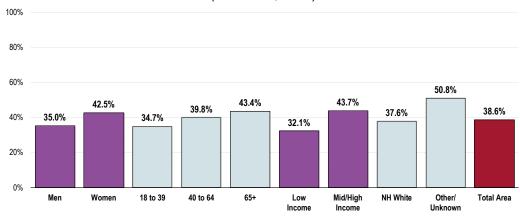
Consume Five or More Servings of Fruits/Vegetables Per Day



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 146]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Asked of all respondents
 - · For this issue, respondents were asked to recall their food intake on the previous day.
 - Area men are less likely to get the recommended servings of daily fruits/vegetables, as are low-income adults.

Consume Five or More Servings of Fruits/Vegetables Per Day

(Total Area, 2014)



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 146]
 - Asked of all respondents.
 - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 - For this issue, respondents were asked to recall their food intake on the previous day.

Access to Fresh Produce

Difficulty Accessing Fresh Produce

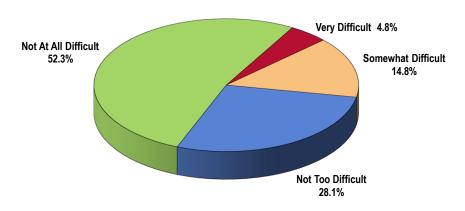
While most report little or no difficulty, 19.6% of Total Area adults report that it is "very" or "somewhat" difficult for them to access affordable, fresh fruits and vegetables.

Level of Difficulty Finding Fresh Produce at an Affordable Price

(Total Area, 2014)



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

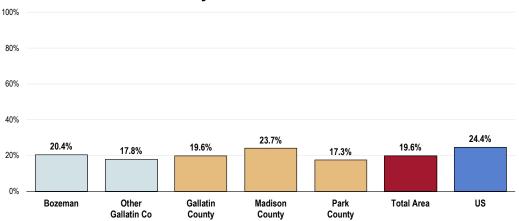


Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 91]

· Asked of all respondents

- · More favorable than national findings.
- In Gallatin County: similar between Bozeman and the rest of the county.
- · By county: similar findings among the three counties.

Find It "Very" or "Somewhat" **Difficult to Buy Affordable Fresh Produce**



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 91]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

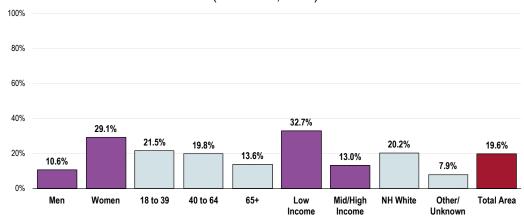
· Asked of all respondents.

Those more likely to report difficulty getting fresh fruits and vegetables include:

- Women.
- Lower-income residents.
- · Whites.

Find It "Very" or "Somewhat" **Difficult to Buy Affordable Fresh Produce**

(Total Area, 2014)



Notes:

- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 91]
 - Asked of all respondents.
 - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level, "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

A food desert is defined as a low-income area where a significant number or share of residents is far from a supermarket, where "far" is more than 1 mile in urban areas and more than 10 miles in rural areas.

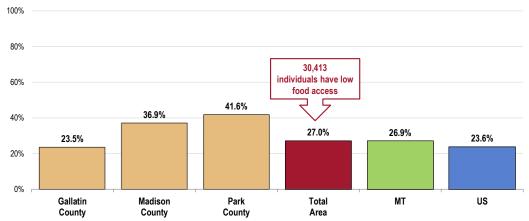
Low Food Access (Food Deserts)

US Department of Agriculture data show that 27.0% of Total Area population (representing over 30,400 residents) have low food access or live in a "food desert," meaning that they do not live near a supermarket or large grocery store.

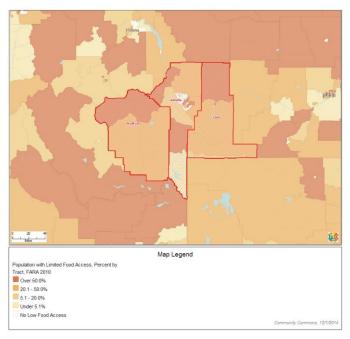
- · Nearly identical to statewide findings.
- · Less favorable than national findings.
- By county: lowest in Gallatin County, highest in Park County.

Population With Low Food Access

(Percent of Population Who Are Far From a Supermarket or Large Grocery Store, 2010)



- Sources: US Department of Agriculture, Economic Research Service, USDA Food Access Research Atlas (FARA): 2010.
 - Retrieved January 2015 from Community Commons at http://www.chna.org.
 - This indicator reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as low-income areas where a
 significant number or share of residents is far from a supermarket, where "far" is more than 1 mile in urban areas and more than 10 miles in rural areas. This
 indicator is relevant because it highlights populations and geographies facing food insecurity.
 - The following map provides an illustration of food deserts by census tract. Note the large share of residents with limited food access in northern Madison and Park counties, as well as in several portions of Gallatin County.



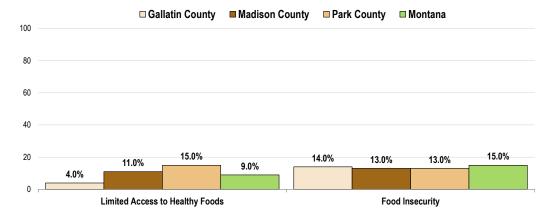
Population With Limited Food Access, Percent by Tract, FARA 2010

Note also the following chart on food insecurity and limited access to healthy foods:

- Madison and Park counties show higher percentages of adults with limited access to healthy foods when compared with the state percentage.
- Food insecurity affects a lower proportion of residents in the three-county area than across the state.

Food Environment Index

(Food Insecurity & Limited Access to Healthy Foods; 2014)



Sources: • www.countyhealthrankings.org.

Limited access to healthy foods estimates the proportion of the population who are low income and do not live close to a grocery store. Food insecurity estimates
the percentage of the population who did not have access to a reliable source of food during the past year.

Health Advice About Diet & Nutrition

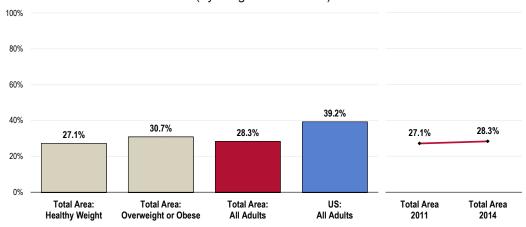
A total of 28.3% of survey respondents acknowledge that a physician counseled them about diet and nutrition in the past year.

- Below the national response.
- Lowest in Madison County (not shown).
- TREND: Statistically unchanged since 2011.

Note: Among overweight/obese respondents, 30.7% report receiving diet/nutrition advice (meaning that about 7 in 10 did not).

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

(By Weight Classification)



- $Sources: \bullet \quad \mathsf{PRC} \ \mathsf{Community} \ \mathsf{Health} \ \mathsf{Surveys}, \ \mathsf{Professional} \ \mathsf{Research} \ \mathsf{Consultants}, \mathsf{Inc.} \ \ [\mathsf{Item} \ \mathsf{18}]$
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes: Asked of all respondents.

Physical Activity

About Physical Activity

Regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. Among adults 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); and parental support.

Among adolescents ages 13 to 18, the following factors have a positive association with physical activity: parental education; gender (boys); personal goals; physical education/school sports; belief in ability to be active (self-efficacy); and support of friends and family.

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

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

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

Healthy People 2020 (www.healthypeople.gov)

Leisure-time physical activity includes any physical activities or exercises (such as running, calisthenics, golf, gardening, walking, etc.) which take place outside of one's line of work.

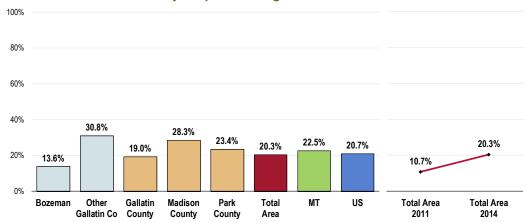
Leisure-Time Physical Activity

A total of 20.3% of Total Area adults report no leisure-time physical activity in the past month.

- · Comparable to statewide findings.
- Comparable to national findings.
- Satisfies the Healthy People 2020 target (32.6% or lower).
- In Gallatin County: much higher outside of Bozeman.
- By county: unfavorably high in Madison County.
- TREND: Denotes a statistically significant increase since 2011.

No Leisure-Time Physical Activity in the Past Month

Healthy People 2020 Target = 32.6% or Lower



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 92]
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.

 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-1]

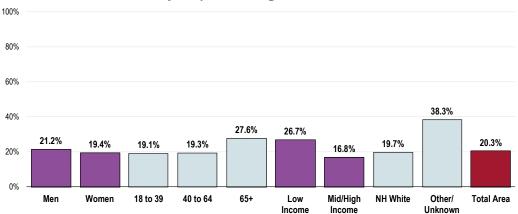
Lack of leisure-time physical activity in the area is higher among:

- Seniors (age 65+).
- · Lower-income residents.
- Other/Unknown races.

No Leisure-Time Physical Activity in the Past Month

(Total Area, 2014)

Healthy People 2020 Target = 32.6% or Lower



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 92]
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective PA-1]

Notes:
• Asked of all respondents.

- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Activity Levels

Recommended Levels of Physical Activity

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.

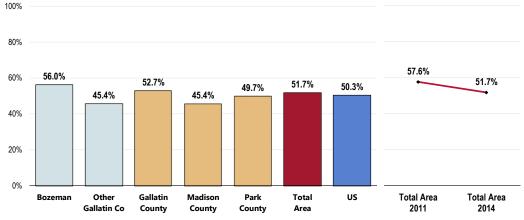
• 2008 Physical Activity Guidelines for Americans, U.S. Department of Health and Human Services. www.health.gov/PAGuidelines

Recommended Levels of Physical Activity

A total of 51.7% of Total Area adults participate in regular, sustained moderate or vigorous physical activity (meeting physical activity recommendations).

- · Comparable to national findings.
- In Gallatin County: much higher in Bozeman than the rest of the county.
- · Similar findings by county.
- TREND: Denotes a statistically significant decrease since 2011.

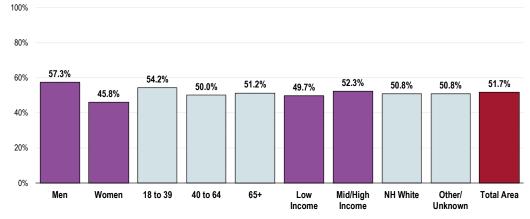
Meets Physical Activity Recommendations



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 147]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- · 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.
 - Women in the Total Area are less likely to meet physical activity requirements.

Meets Physical Activity Recommendations

(Total Area, 2014)



- Sources:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 147]

- Asked of all respondents. Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents). Income categories reflect respondent's household income as a ratio to the federal powerty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level, In this case the 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

In the past month:

The individual indicators of moderate and vigorous physical activity are shown here. A total of 37.4% of adults participated in moderate physical activity (5 times a week, 30 minutes at a time).

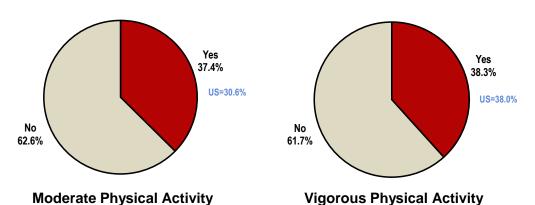
- More favorable than the national level.
- TREND: Statistically unchanged since 2011 (not shown).

A total of 38.3% participated in vigorous physical activity (3 times a week, 20 minutes at a time).

- Similar to the nationwide figure.
- TREND: Statistically similar to 2011 findings (not shown).

Moderate & Vigorous Physical Activity

(Total Area, 2014)



Sources:
PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 148-149]
2013 PRC National Health Survey, Professional Research Consultants, Inc.

- 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
- 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.

Here, recreation/fitness facilities include establishments engaged in operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports

Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools.

activities.'

Access to Physical Activity

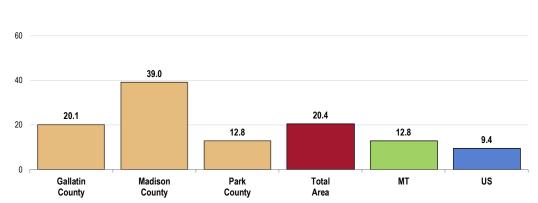
Access to Recreation & Fitness Facilities

In 2012, there were 20.4 recreation/fitness facilities for every 100,000 population in the Total Area.

- Above what is found statewide.
- Above what is found nationally.
- By county: much higher in Madison County than in Gallatin or Park counties.

Population With Recreation & Fitness Facility Access

(Number of Recreation & Fitness Facilities per 100,000 Population, 2012)



Sources:

80

- US Census Bureau, County Business Patterns: 2011. Additional data analysis by CARES.

 Patricipal designs 2015 for a Company to Company to
- Retrieved January 2015 from Community Commons at http://www.chna.org.

Recreation and fitness facilities are defined by North American Industry Classification System (NAICS) Code 713940, which include Establishments engaged in
operating facilities which offer 'exercise and other active physical fitness conditioning or recreational sports activities". Examples include athletic clubs,
gymnasiums, dance centers, tennis clubs, and swimming pools. This indicator is relevant because access to recreation and fitness facilities encourages physical
activity and other healthy behaviors.

Health Advice About Physical Activity & Exercise

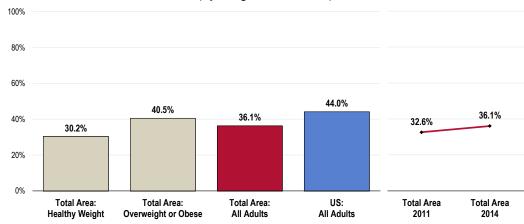
A total of 36.1% of Total Area adults report that their physician has asked about or given advice to them about physical activity in the past year.

- Lower than the national response.
- TREND: Statistically similar to 2011 survey findings.

Note: 40.5% of overweight/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: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 19]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
 Asked of all respondents.

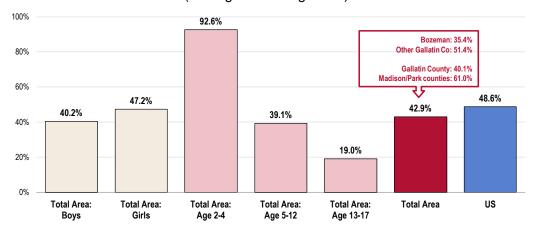
Children's Physical Activity

Among Total Area children age 2 to 17, 42.9% are reported to have had 60 minutes of physical activity on <u>each</u> of the seven days preceding the interview (1+ hours per day).

- · Comparable to that found nationally.
- Highest in Madison and Park counties, and in Gallatin County outside of Bozeman.
- Note the negative correlation between child's age and physical activity level.

Child Is Physically Active for One or More Hours per Day

(Among Children Age 2-17)



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 117]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - e: Asked of all respondents with children age 2-17 at home.
 - Includes children reported to have one or more hours of physical activity on each of the seven days preceding the survey.

Weight Status

About Overweight & Obesity

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

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

• Healthy People 2020 (www.healthypeople.gov)

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 (m²). To estimate BMI using pounds and inches, use: [weight (pounds)/height squared (inches²)] x 703.

In this report, overweight is defined as a BMI of 25.0 to 29.9 kg/m² and obesity as a BMI \geq 30 kg/m². The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25 kg/m². The increase in mortality, however, tends to be modest until a BMI of 30 kg/m² is reached. For persons with a BMI \geq 30 kg/m², 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/m².

 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/m²)
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.

"Healthy weight "means neither underweight, nor

overweight (BMI =

18.5-24.9).

Adult Weight Status

Healthy Weight

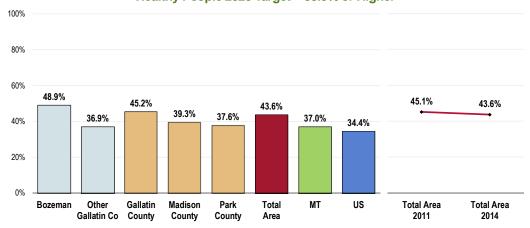
Based on self-reported heights and weights, 43.6% of Total Area adults are at a healthy weight.

- More favorable than state findings.
- More favorable than national findings.
- Satisfies the Healthy People 2020 target (33.9% or higher).
- In Gallatin County: higher in Bozeman than the remainder of the county.
- By county: similar findings among the three counties.
- TREND: Statistically unchanged since 2011.

Healthy Weight

(Percent of Adults With a Body Mass Index Between 18.5 and 24.9)

Healthy People 2020 Target = 33.9% or Higher



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 151]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - 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.

Overweight Status

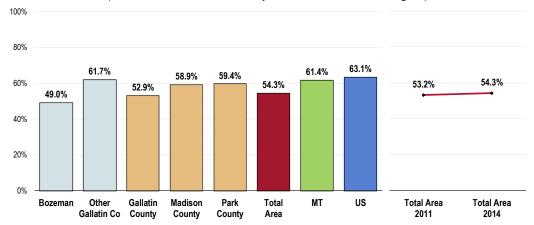
More than one-half of Total Area adults (54.3%) are overweight.

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

- Lower than the Montana prevalence.
- Lower than the US overweight prevalence.
- In Gallatin County: more favorable in Bozeman than the rest of the county.
- By county: similar findings among the three counties.
- TREND: Statistically unchanged since 2011.

Prevalence of Total Overweight

(Percent of Adults With a Body Mass Index of 25.0 or Higher)



- Sources:
 PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 151]

 - Price Continuity relatifishings, Professional Research Consultants, Inc.
 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.

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

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.

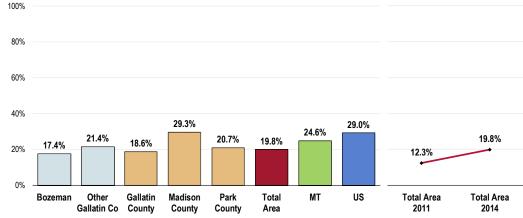
Further, 19.8% of Total Area adults are obese.

- More favorable than Montana and US findings.
- Satisfies the Healthy People 2020 target (30.5% or lower).
- In Gallatin County, similar findings by area; by county, unfavorably high in Madison.
- TREND: Denotes a statistically significant increase in obesity since 2011.

Prevalence of Obesity

(Percent of Adults With a Body Mass Index of 30.0 or Higher)

Healthy People 2020 Target = 30.5% or Lower



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 151]
 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]
 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.

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

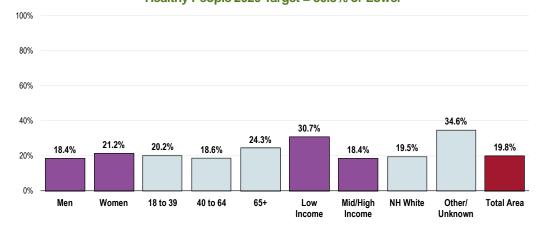
"Obese" (also included in overweight prevalence discussed previously) includes respondents with a BMI value ≥30.

Obesity is notably more prevalent among:

- · Respondents with lower incomes.
- Other/Unknown races.

Prevalence of Obesity

(Percent of Adults With a BMI of 30.0 or Higher; Total Area, 2014) Healthy People 2020 Target = 30.5% or Lower



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 151]
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-9]
 Based on reported heights and weights, asked of all respondents.
 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents.
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income includes households with incomes at 200% or more of the federal poverty level." Midd'High Income" includes households with incomes at 200% or more of the federal poverty level.
 The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, reaardless of oender.

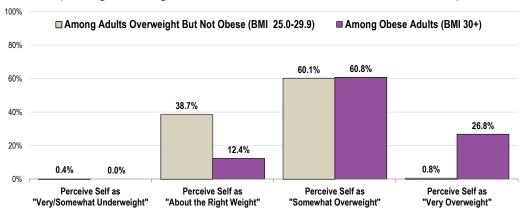
Actual vs. Perceived Body Weight

A total of 12.4% of obese adults and 38.7% of overweight (but not obese) adults feel that their current weight is "about right."

- 60.1% of overweight (but not obese) adults see themselves as "somewhat overweight."
- 26.8% of obese adults see themselves as "very overweight."

Actual vs. Perceived Weight Status

(Among Overweight/Obese Adults Based on BMI; Total Area, 2014)



Sources: Notes:

- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]
 - . BMI is 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

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

Arthritis/rheumatism.

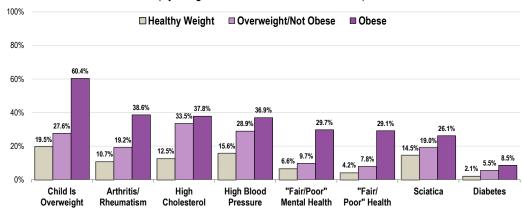
- High cholesterol.
- Hypertension (high blood pressure).
- "Fair" or "poor" mental health.
- "Fair" or "poor" physical health.
- Sciatica/chronic back pain.
- Diabetes.

Overweight/obese residents are also more likely to have overweight children.

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

Relationship of Overweight With Other Health Issues

(By Weight Classification; Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 5, 28-29, 100, 125-126, 136, 155]
- Based on reported heights and weights, asked of all respondents.

Weight Management

Health Advice

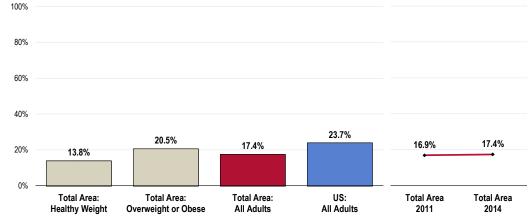
A total of 17.4% of adults have been given advice about their weight by a doctor, nurse or other health professional in the past year.

- · Lower than the national findings.
- TREND: Statistically unchanged from that reported in 2011.

Note that 20.5% of overweight/obese adults have been given advice about their weight by a health professional in the past year (while roughly 80% have not).

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

(By Weight Classification)



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 98]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:

 Asked of all respondents.

Weight Control

About Maintaining a Healthy Weight

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.

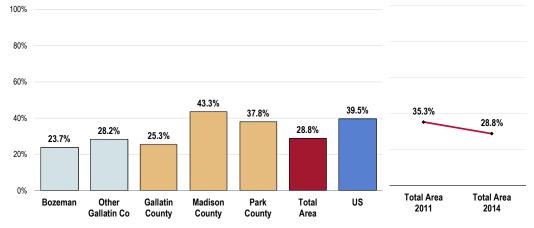
• Healthy People 2020 (www.healthypeople.gov)

A total of 28.8% 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.

- Well below the national prevalence.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: highest in Madison County.
- TREND: Statistically similar to what was reported among overweight adults in 2011.

Trying to Lose Weight by Both Modifying Diet and Increasing Physical Activity

(Among Overweight or Obese Respondents)



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 152]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
 Reflects respondents who are overweight or obese based on reported heights and weights

Childhood Overweight & Obesity

About Weight Status in Children & Teens

In children and teens, body mass index (BMI) is used to assess weight status – underweight, healthy weight, overweight, or obese. After BMI is calculated for children and teens, the BMI number is plotted on the CDC BMI-for-age growth charts (for either girls or boys) to obtain a percentile ranking. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children in the United States. The percentile indicates the relative position of the child's BMI number among children of the same sex and age.

BMI-for-age weight status categories and the corresponding percentiles are shown below:

• Underweight <5th percentile

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

Obese ≥95th percentile

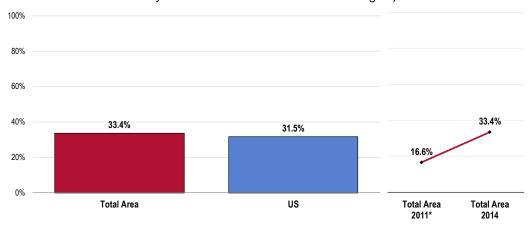
· Centers for Disease Control and Prevention

Based on the heights/weights reported by surveyed parents, 33.4% of Total Area children age 5 to 17 are overweight or obese (≥85th percentile).

- Comparable to that found nationally.
- TREND: Marks a statistically significant increase since 2011.

Child Total Overweight Prevalence

(Percent of Children Age 5-17 Who Are Overweight/Obese; Body Mass Index in the 85th Percentile or Higher)



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 155]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

lotes: • Asked of all respondents with children age 5-17 at home.

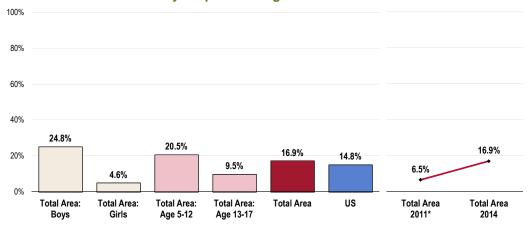
- Overweight among children is determined by children's Body Mass Index status at or above the 85th percentile of US growth charts by gender and age.
- *2011 percentage reflects children age 6-17.

Further, 16.9% of Total Area children age 5 to 17 are obese (≥95th percentile).

- Comparable to the national percentage.
- Comparable to the Healthy People 2020 target (14.5% or lower for children age 2-19).
- TREND: Marks a statistically significant increase in childhood obesity since 2011.
- Statistically higher among Total Area boys (age 5-17) and children age 5-12.

Child Obesity Prevalence

(Percent of Children Age 5-17 Who Are Obese; BMI in the 95th Percentile or Higher) Healthy People 2020 Target = 14.5% or Lower



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 155]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective NWS-10.4]
- Asked of all respondents with children age 5-17 at home
 - *2011 percentage reflects children age 6-17.
 - Obesity among children is determined by children's Body Mass Index status equal to or above the 95th percentile of US growth charts by gender and age.

Substance Abuse

About Substance Abuse

Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. These problems include:

- Teenage pregnancy
- Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)
- Other sexually transmitted diseases (STDs)
- · Domestic violence
- Child abuse
- · Motor vehicle crashes
- Physical fights
- Crime
- Homicide
- Suicide

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Social attitudes and political and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues. In addition to the considerable health implications, substance abuse has been a flash-point in the criminal justice system and a major focal point in discussions about social values: people argue over whether substance abuse is a disease with genetic and biological foundations or a matter of personal choice.

Advances in research have led to the development of evidence-based strategies to effectively address substance abuse. Improvements in brain-imaging technologies and the development of medications that assist in treatment have gradually shifted the research community's perspective on substance abuse. There is now a deeper understanding of substance abuse as a disorder that develops in adolescence and, for some individuals, will develop into a chronic illness that will require lifelong monitoring and care.

Improved evaluation of community-level prevention has enhanced researchers' understanding of environmental and social factors that contribute to the initiation and abuse of alcohol and illicit drugs, leading to a more sophisticated understanding of how to implement evidence-based strategies in specific social and cultural settings.

A stronger emphasis on evaluation has expanded evidence-based practices for drug and alcohol treatment. Improvements have focused on the development of better clinical interventions through research and increasing the skills and qualifications of treatment providers.

Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Cirrhosis/Liver Disease Deaths

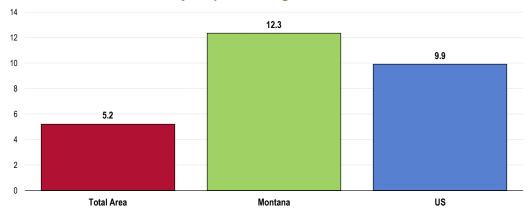
Between 2011 and 2013, there was an annual average age-adjusted cirrhosis/liver disease mortality rate of 5.2 deaths per 100,000 population in the Total Area.

- More favorable than the statewide rate.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target (8.2 or lower).

Cirrhosis/Liver Disease: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 8.2 or Lower



Sources:

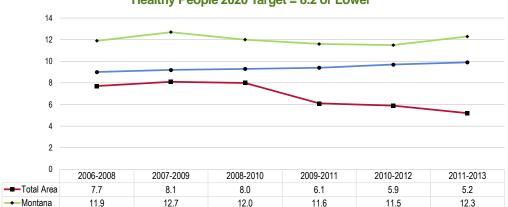
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
- US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [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.
 - · Local, state and national data are simple three-year averages.
 - TREND: The mortality rate has decreased over time in the region, while state and national mortality rates have increased.

Cirrhosis/Liver Disease: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)
Healthy People 2020 Target = 8.2 or Lower



Sources:

→US

 CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.

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US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-11]

Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10)

Problems (ICD-10)

Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10)

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Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.

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State and national data are simple three-year averages.

9.0

"Current drinkers" include survey respondents who had at least one drink 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.

100%

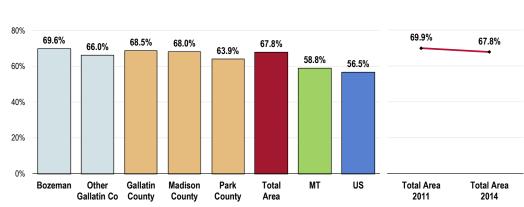
High-Risk Alcohol Use

Current Drinking

A total of 67.8% of area adults had at least one drink of alcohol in the past month (current drinkers).

- Much higher than the statewide proportion.
- Much higher than the national proportion.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: similar findings among the three counties.
- TREND: Statistically unchanged since 2011.

Current Drinkers

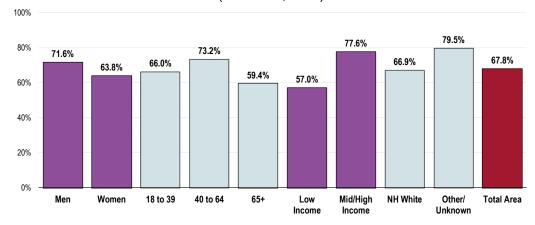


- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 160]

 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes: Asked of all respondents.
 - Current drinkers had at least one alcoholic drink in the past month.
 - Current drinking is more prevalent among men, adults age 40 to 64, higher-income residents, and Other/Unknown races.

Current Drinkers

(Total Area, 2014)



Sources: Notes:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 160]
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- Current drinkers had at least one alcoholic drink in the past month

Heavy & Binge Drinking

A total of 14.2% of area adults are heavy drinkers (averaging 2+ drinks of alcohol per day for men and 1+ drink of alcohol per day for women in the past month).

- Higher than the statewide proportion.
- Higher than the national proportion.

A total of 23.0% of area adults are binge drinkers (single-occasion 5+ drinks for men and 4+ drinks for women in the past month).

- Similar to the statewide proportion.
- Similar to the national proportion.
- Similar to the Healthy People 2020 target (24.4% or lower).

"Heavy drinkers" include men reporting 2+ alcoholic drinks per day or women reporting 1+ alcoholic drinks per day in the month preceding the interview.

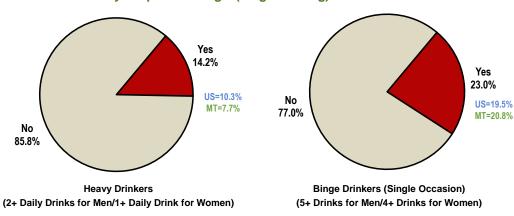
"Binge drinkers" include:
1) MEN who report drinking 5+ alcoholic drinks on any single occasion during the past month; and

2) WOMEN who report drinking 4+ alcoholic drinks on any single occasion during the past month.

Heavy & Binge Drinkers

(Total Area, 2014)

Healthy People 2020 Target (Binge Drinking) = 24.4% or Lower



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 161-162]
 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Asked of all respondents.

- . Heavy drinking reflects the number of adults who drank 2+ drinks per day on average (for men) or 1+ drinks per day on average (for women) during the past 30 days.
- Binge drinking reflects the number of adults who drank 5+ drinks during a single occasion (for men) or 4+ drinks during a single occasion (for women) during the past 30 days.

Excessive Drinking

A total of 26.1% of Total Area adults are excessive drinkers (heavy and/or binge drinkers).

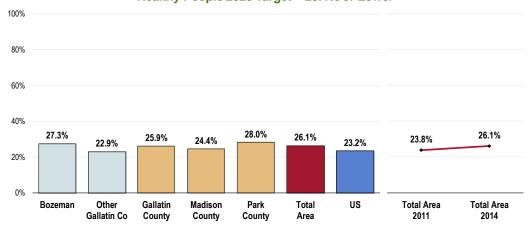
- Similar to national findings.
- Satisfies the Healthy People 2020 target (25.4% or lower).
- In Gallatin County: statistically similar by area.
- By county: similar findings among the three counties.
- TREND: Statistically unchanged since 2011.

"Excessive drinking" includes heavy and/or binge drinkers.

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

Excessive Drinkers

Healthy People 2020 Target = 25.4% or Lower



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

- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-15]

• Excessive drinking reflects the number of persons aged 18 years and over who drank 2+ drinks per day on average (for men) or 1+ drinks per day on average (for women) OR who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.

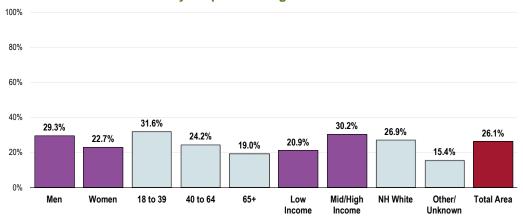
Excessive drinking is more prevalent among:

- Men.
- Higher-income residents.
- Whites.

Excessive Drinkers

(Total Area, 2014)

Healthy People 2020 Target = 25.4% or Lower



Notes:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 164]
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-15]
 Asked of all respondents.

- Asked of all respondents.
 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level.
 Excessive dink for persons aged 18 years and over who drank more than two drinks per day on average (for men) or more than too drinks per day on average (for women) OR who drank 5 or more drinks during a single occasion (for men) or 4 or more drinks during a single occasion (for women) during the past 30 days.

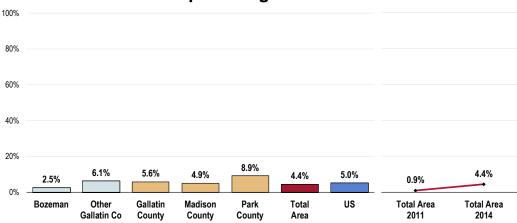
Note: As a self-reported measure – and because this indicator reflects potentially illegal behavior – it is reasonable to expect that it might be underreported, and that the actual incidence of drinking and driving in the community is likely higher.

Drinking & Driving

A total of 4.4% of Total Area adults acknowledge having driven a vehicle in the past month after they had perhaps too much to drink.

- · Similar to the national findings.
- In Gallatin County: much higher outside of Bozeman.
- By county: unfavorably high in Park County.
- TREND: The drinking and driving prevalence has increased significantly since 2011.

Have Driven in the Past Month After Perhaps Having Too Much to Drink



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 65]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:

Asked of all respondents.

Age-Adjusted Drug-Induced Deaths

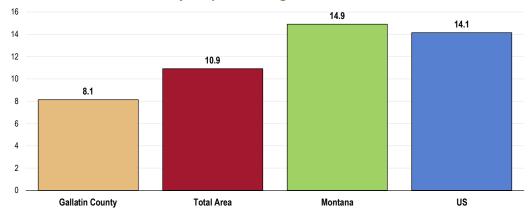
Between 2011 and 2013, there was an annual average age-adjusted drug-induced mortality rate of 10.9 deaths per 100,000 population in the Total Area.

- Below the statewide rate.
- · Below the national rate.
- Similar to the Healthy People 2020 target (11.3 or lower).
- The Gallatin County rate is 8.1 per 100,000 population.

Drug-Induced Deaths: Age-Adjusted Mortality

(2011-2013 Annual Average Deaths per 100,000 Population)

Healthy People 2020 Target = 11.3 or Lower



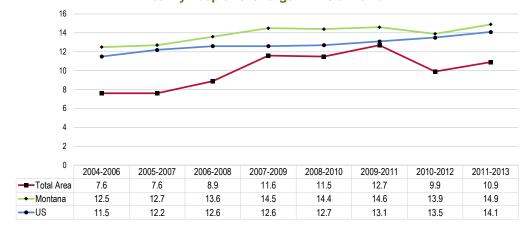
- Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [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. · Local, state and national data are simple three-year averages; raw counts for Madison and Park counties were too small to be calculated.
 - TREND: Despite fluctuations, the mortality rate has increased from baseline data, echoing the state and national trends.

Drug-Induced Deaths: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population) Healthy People 2020 Target = 11.3 or Lower



Notes:

- Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted January 2015.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-12]

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.

County, state and national data are simple three-year averages.

Illicit Drug Use

A total of 1.9% of Total Area adults acknowledge using an illicit drug in the past month.

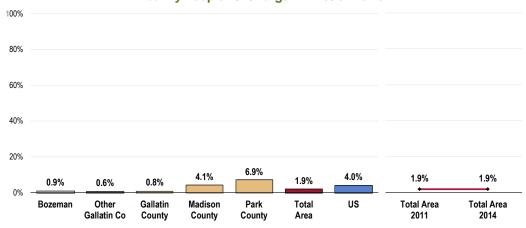
For the purposes of this survey, "illicit drug use" includes use of illegal substances or of prescription drugs taken without a physician's order.

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.

- Below the proportion found nationally.
- Well below the Healthy People 2020 target of 7.1% or lower.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: lowest in Gallatin County, highest in Park County.
- TREND: Unchanged since 2011.

Illicit Drug Use in the Past Month

Healthy People 2020 Target = 7.1% or Lower



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 66]

• 2013 PRC National Health Survey, Professional Research Consultants, Inc.

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective SA-13.3]

Asked of all respondents.

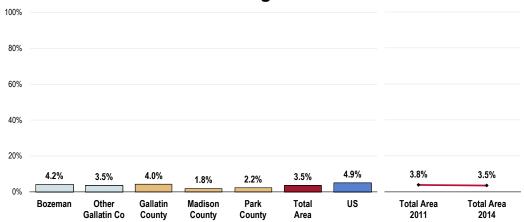
Notes:

Alcohol & Drug Treatment

A total of 3.5% of Total Area adults report that they have sought professional help for an alcohol or drug problem at some point in their lives.

- · Similar to national findings.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: statistically similar by county.
- TREND: Statistically unchanged since 2011.

Have Ever Sought Professional Help for an Alcohol/Drug-Related Problem



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 67]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

Tobacco Use

About Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. Scientific knowledge about the health effects of tobacco use has increased greatly since the first Surgeon General's report on tobacco was released in 1964.

Tobacco use causes:

- Cancer
- Heart disease
- Lung diseases (including emphysema, bronchitis, and chronic airway obstruction)
- · Premature birth, low birth weight, stillbirth, and infant death

There is no risk-free level of exposure to secondhand smoke. Secondhand smoke causes heart disease and lung cancer in adults and a number of health problems in infants and children, including: severe asthma attacks; respiratory infections; ear infections; and sudden infant death syndrome (SIDS).

Smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth and gums, periodontitis, and tooth loss. Cigar use causes cancer of the larynx, mouth, esophagus, and lung.

• Healthy People 2020 (www.healthypeople.gov)

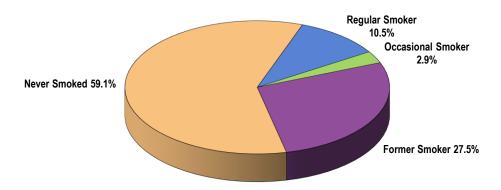
Cigarette Smoking

Cigarette Smoking Prevalence

A total of 13.4% of Total Area adults currently smoke cigarettes, either regularly (10.5% every day) or occasionally (2.9% on some days).

Cigarette Smoking Prevalence

(Total Area, 2014)

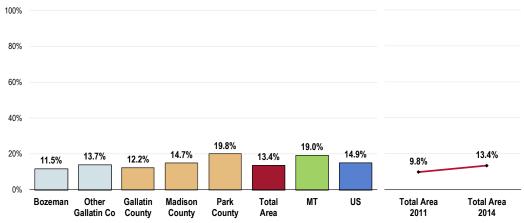


- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 156]
 - · Asked of all respondents.
 - · Below statewide findings.
 - Comparable to national findings.
 - Similar to the Healthy People 2020 target (12% or lower).
 - In Gallatin County: similar between Bozeman and the rest of the county.
 - By county: lowest in Gallatin County, highest in Park County.

• TREND: The current smoking percentage marks a statistically significant increase since 2011.

Current Smokers

Healthy People 2020 Target = 12.0% or Lower



Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 156]
2013 PRC National Health Survey, Professional Research Consultants, Inc.
Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.

US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.1]

Asked of all respondents.
 Includes regular and occasional smokers (those who smoke cigarettes everyday or on some days).

Cigarette smoking is more prevalent among:

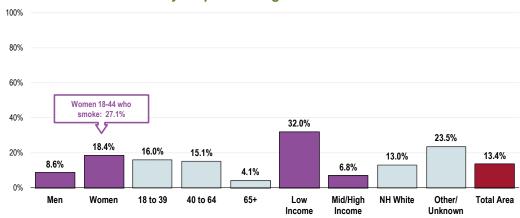
- · Women.
- Adults under 65.
- Lower-income residents (especially).

Note also that 27.1% of women of child-bearing age (ages 18 to 44) currently smoke. This is notable 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, 2014)

Healthy People 2020 Target = 12.0% or Lower



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 156-157]
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.1]
 Asked of all respondents.
 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes at 200% or more of the federal poverty level.
 Includes regular and occasion smokers (everyday and some days).

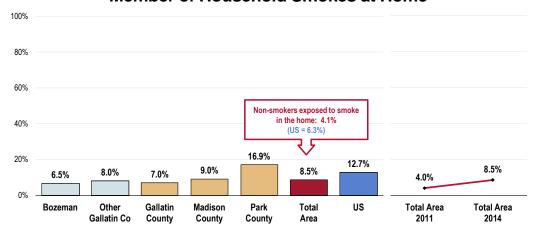
Environmental Tobacco Smoke

A total of 8.5% of Total Area adults (including smokers and non-smokers) report that a member of their household has smoked cigarettes in the home an average of 4+ times per week over the past month.

- More favorable than national findings.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: lowest in Gallatin County, highest in Park County.
- TREND: Marks a statistically significant increase since 2011.

Note that 4.1% of Total Area non-smokers are exposed to cigarette smoke at home, more favorable than what is found nationally.

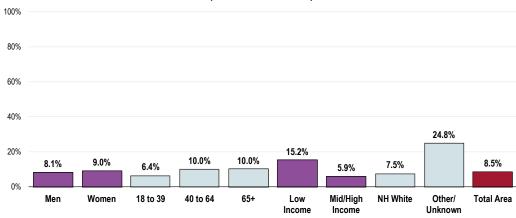
Member of Household Smokes at Home



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 59, 158]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc. Notes: Asked of all respondents.
 - "Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month.
 - Notably higher among residents with lower incomes and those of Other/Unknown race.

Member of Household Smokes At Home

(Total Area, 2014)



Notes:

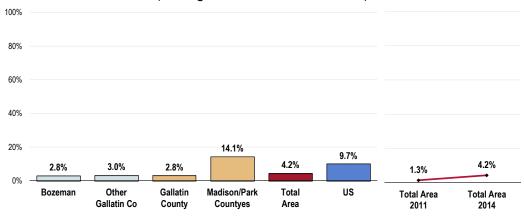
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 59]
- Asked of all respondents.
- Assect of all respondents.
 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% or more of the federal poverty level.
 "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, 4.2% have someone who smokes cigarettes in the home.

- · More favorable than national findings.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: much higher in the combined Madison/Park County area.
- Statistically unchanged since 2011.

Percentage of Households With Children In Which Someone Smokes in the Home

(Among Households With Children)



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 159]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Reflects respondents with children 0 to 17 in the household

"Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month

Smoking Cessation

About Reducing Tobacco Use

Preventing tobacco use and helping tobacco users quit can improve the health and quality of life for Americans of all ages. People who stop smoking greatly reduce their risk of disease and premature death. Benefits are greater for people who stop at earlier ages, but quitting tobacco use is beneficial at any age.

Many factors influence tobacco use, disease, and mortality. Risk factors include race/ethnicity, age, education, and socioeconomic status. Significant disparities in tobacco use exist geographically; such disparities typically result from differences among states in smoke-free protections, tobacco prices, and program funding for tobacco prevention.

• Healthy People 2020 (www.healthypeople.gov)

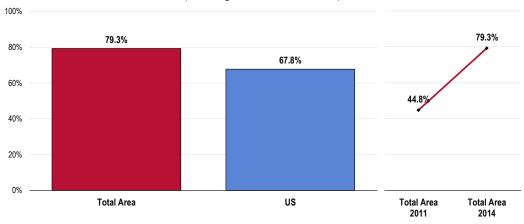
Health Advice About Smoking Cessation

A total of 79.3% of smokers say that a doctor, nurse or other health professional has recommended in the past year that they quit smoking.

- Much higher than the national percentage.
- TREND: Denotes a statistically significant increase since 2011.

Advised by a Healthcare Professional in the Past Year to Quit Smoking

(Among Current Smokers)



- $Sources: \bullet \quad \mathsf{PRC} \ \mathsf{Community} \ \mathsf{Health} \ \mathsf{Surveys}, \ \ \mathsf{Professional} \ \mathsf{Research} \ \mathsf{Consultants}, \mathsf{Inc.} \ \ [\mathsf{Item} \ \mathsf{58}]$
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all current smokers.

Smoking Cessation Attempts

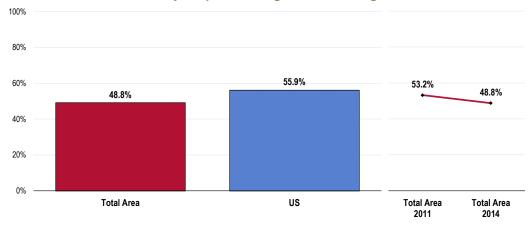
Just less than one-half (48.8%) of regular smokers went without smoking for one day or longer in the past year because they were trying to quit smoking.

- Similar to the national percentage.
- Fails to satisfy the Healthy People 2020 target (80% or higher).
- TREND: No statistically significant change since 2011.

Have Stopped Smoking for One Day or Longer in the Past Year in an Attempt to Quit Smoking

(Among Everyday Smokers)

Healthy People 2020 Target = 80.0% or Higher



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 57]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - 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

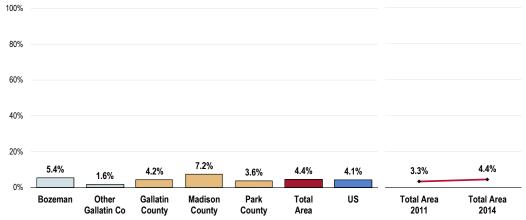
Cigars

A total of 4.4% 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: much higher in Bozeman than the rest of the county.
- By county: similar findings among the three counties.
- TREND: No statistically significant change since 2011.

Use of Cigars

Healthy People 2020 Target = 0.2% or Lower



- $Sources: \bullet \quad PRC \ Community \ Health \ Surveys, \ \ Professional \ Research \ Consultants, Inc. \ \ [Item 61]$
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - 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.

Examples of smokeless tobacco include chewing tobacco, snuff, or "snus."

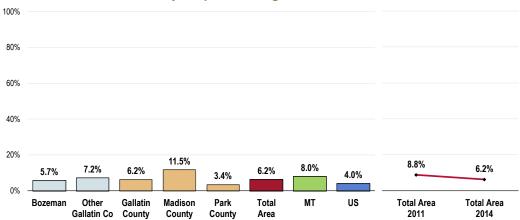
Smokeless Tobacco

A total of 6.2% of Total Area adults use some type of smokeless tobacco every day or on some days.

- Comparable to the state percentage.
- Less favorable than the national percentage.
- Fails to satisfy the Healthy People 2020 target (0.3% or lower).
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: unfavorably high in Madison County.
- TREND: Similar to 2011 findings.

Use of Smokeless Tobacco

Healthy People 2020 Target = 0.3% or Lower



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 60]
 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective TU-1.2]
- Notes: Asked of all respondents.
 - Smokeless tobacco includes chewing tobacco or snuff.

This section of the report covers electronic nicotine delivery devices, also known as e-cigarettes, e-cigs, e-hookahs, hookah pens, or vape pens. These are batteryoperated devices that simulate traditional cigarette smoking but do not involve the burning of tobacco. The cartridge or liquid ("e-juice") used in these devices often contains nicotine and comes in a variety of flavors.

Electronic Nicotine Delivery Devices

Use of E-Cigarettes, Etc.

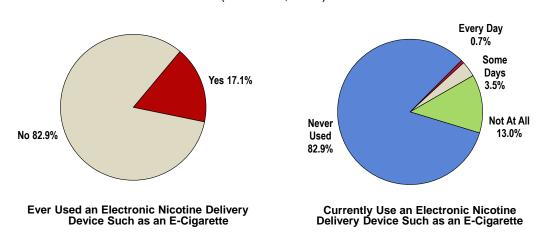
A total of 17.1% of Total Area adults have ever used an electronic nicotine delivery device such as an e-cigarette.

Currently, 0.7% of survey respondents use this type of device daily, and 3.5% report using it on some days.

When asked why they started using electronic nicotine delivery devices, the majority did so to quit or reduce smoking (61.6%), while 19.3% did so in order to be able to smoke indoors or wherever cigarette smoke is banned.

Other reasons given for taking up electronic nicotine delivery devices include, "I had a baby," "I believe they are less harmful than cigarettes," "Saw an advertisement," "To quit chewing nicotine gum," "To not disturb other people with smoke," and "To try something new/curiosity."

Use of an Electronic Nicotine Delivery Device (E-Cigarettes, etc.) (Total Area, 2014)

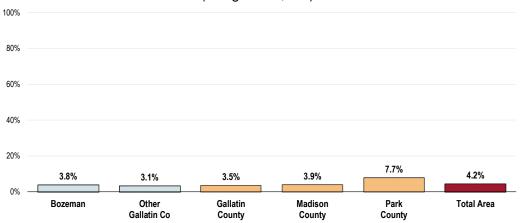


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 306-307]
Notes: • Asked of all respondents.

 The prevalence of Total Area adults who currently use an electronic nicotine delivery device (every day or on some days) does not vary significantly within Gallatin County or among the three counties.

Currently Use an Electronic Nicotine Delivery Device

(E-Cigarettes, etc.)

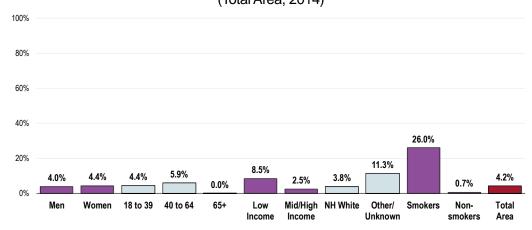


Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 307]

Respondents more likely to use e-cigarettes or other types of electronic nicotine delivery devices include:

- Smokers (especially).
- Residents under age 65.
- Low-income adults.

Currently Use an Electronic Nicotine Delivery Device (E-Cigarettes, etc.) (Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 307]
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Access to Health Services



Professional Research Consultants, Inc.

Health Insurance Coverage

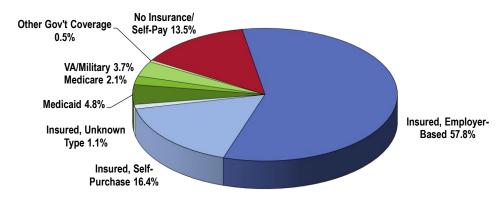
Type of Healthcare Coverage

A total of 75.3% of Total Area adults age 18 to 64 report having healthcare coverage through private insurance. Another 11.1% report coverage through a governmentsponsored program (e.g., Medicaid, Medicare, military benefits).

Survey respondents were asked a series of questions to determine their healthcare insurance coverage, if any, from either private or governmentsponsored sources.

Healthcare Insurance Coverage

(Among Adults Age 18-64; Total Area, 2014)



Notes:

- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 165]
 - Reflects respondents age 18 to 64.

Lack of Health Insurance Coverage

Among adults age 18 to 64, 13.5% report having no insurance coverage for healthcare expenses.

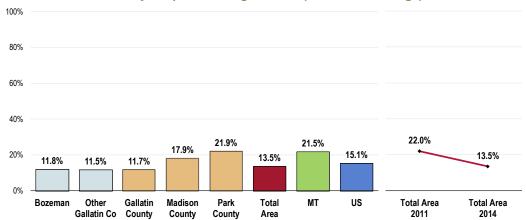
- More favorable than the state finding.
- Similar to the national finding.
- The Healthy People 2020 target is universal coverage (0% uninsured).
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: lowest in Gallatin County, highest in Park County.
- TREND: Marks a statistically significant decrease since 2011.

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 governmentsponsored plans (e.g., Medicaid).

Lack of Healthcare Insurance Coverage

(Among Adults Age 18-64)

Healthy People 2020 Target = 0.0% (Universal Coverage)

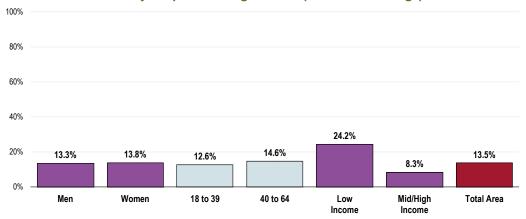


- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 165]
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1]
- Asked of all respondents under the age of 65.
 - Residents living at lower incomes are more likely to be without healthcare insurance coverage (note the 24.2% uninsured prevalence among low-income adults).

Lack of Healthcare Insurance Coverage

(Among Adults Age 18-64; Total Area, 2014)

Healthy People 2020 Target = 0.0% (Universal Coverage)

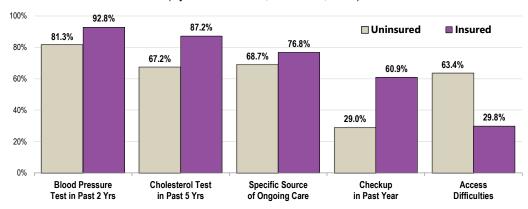


- Sources:
- Notes:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 165]
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-1]
- Asked of all respondents under the age of 65.
 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 Income categories reflect respondents household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

 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.

Preventive Healthcare

(By Insured Status; Total Area, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 17, 45, 48, 166, 169]
• Asked of all respondents.

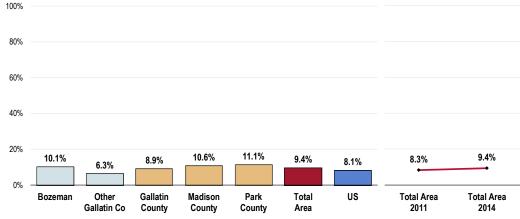
Recent Lack of Coverage

Among currently insured adults in the Total Area, 9.4% report that they were without healthcare coverage at some point in the past year.

- Similar to US findings.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: similar findings among the three counties.
- TREND: Statistically unchanged since 2011.

Went Without Healthcare Insurance Coverage At Some Point in the Past Year

(Among Insured Adults)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 79]

2013 PRC National Health Survey, Professional Research Consultants, Inc.

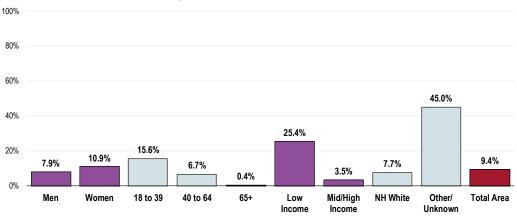
Notes:
• Asked of all insured respondents

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 (note the negative correlation with age).
- · Lower-income residents.
- Adults of Other/Unknown races.

Went Without Healthcare Insurance Coverage At Some Point in the Past Year

(Among Insured Adults; Total Area, 2014)



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 79]

 - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents)
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Six out of the 9 survey respondents age 18-64 who now purchase their own insurance coverage but who went without coverage at some point in the past year report that they bought their current coverage through the Montana Health Insurance Exchange.

The Montana Health Insurance Exchange, or Health Insurance Marketplace, is offered as part of the Affordable Care Act and can be accessed through the Healthcare.gov website, as well as through call centers or in-person

assistance.

It is a resource where individuals, families, and small businesses can: learn about their health coverage options; compare health insurance plans based on costs. benefits, and other important features; choose a plan, and enroll in coverage.

The Marketplace also provides information on programs that help people with low to moderate income and resources pay for coverage.

Montana Health Insurance Exchange

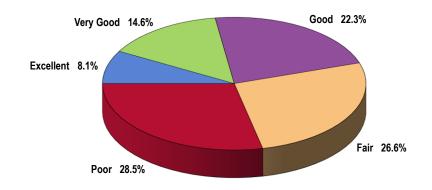
Understanding of Health Insurance Exchange

Just over one in five survey respondents under the age of 65 (22.7%) gave "excellent" or "very good" ratings of their understanding of the state health insurance exchange.

• Another 22.3% of respondents under 65 have a "good" understanding of the exchange.

Rating of Understanding of Health Insurance Exchange

(Total Area Adults <65, 2014)



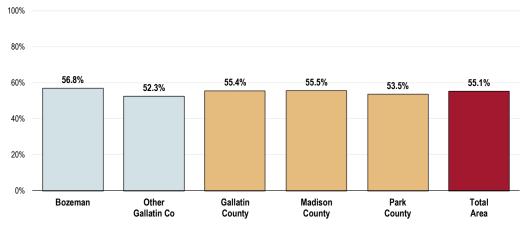
• 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 311] Sources:

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

However, 55.1% of Total Area adults have a "fair" or "poor" understanding of the health insurance exchange.

- Within Gallatin County: similar between Bozeman and the rest of the county.
- By county: no statistically significant difference by county.

"Fair" or "Poor" Understanding of Health Insurance Exchange (Total Area Adults <65, 2014)



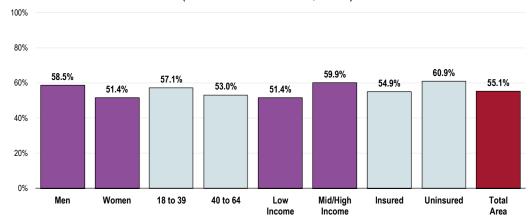
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 311]

Asked of all respondents under the age of 65.

• No statistically significant difference by basic demographic characteristics.

"Fair" or "Poor" Understanding of Health Insurance Exchange

(Total Area Adults <65, 2014)



Notes:

- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 311]
 - Asked of all respondents under the age of 65.
 - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

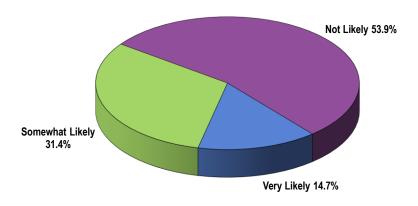
Likelihood of Ever Getting Insurance Through a Health Insurance Exchange

Among survey respondents under age 65, 14.7% are "very likely" to get their insurance through Montana's health insurance exchange in the future, and 31.4% are "somewhat likely."

• On the other hand, 53.9% are "not likely" to use the exchange for their coverage.

Likelihood of Getting Insurance Through Montana's Health Insurance Exchange in the Future

(Total Area Adults <65, 2014)



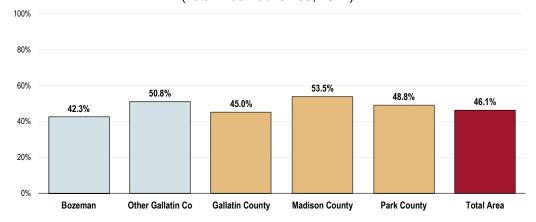
Notes:

- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 312]
 - · Asked of all respondents under the age of 65.

- Within Gallatin County: "very/somewhat likely" responses in Bozeman are lower than the rest of the county.
- By county: similar findings among the three counties.

"Very/Somewhat Likely" to Get Insurance Through Montana Health Insurance Exchange in the Future

(Total Area Adults <65, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 312]

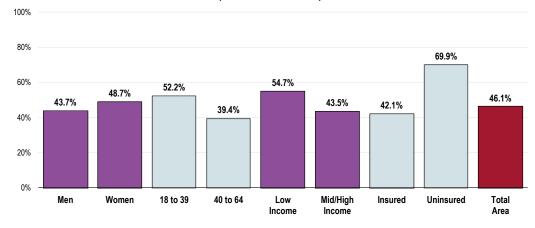
Notes: • Asked of all respondents under the age of 65.

"Very/somewhat likely" responses were <u>less</u> often reported among these populations:

- Adults age 40 to 64.
- · Higher-income residents.
- Those with healthcare coverage.

"Very/Somewhat Likely" to Get Insurance Through Montana Health Insurance Exchange in the Future

(Total Area, 2014)



Sources: Notes:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 312]
- Asked of all respondents under the age of 65.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Difficulties Accessing Healthcare

About Access to Healthcare

Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. It impacts: overall physical, social, and mental health status; prevention of disease and disability; detection and treatment of health conditions; quality of life; preventable death; and life expectancy.

Access to health services means the timely use of personal health services to achieve the best health outcomes. It requires three distinct steps: 1) Gaining entry into the health care system; 2) Accessing a health care location where needed services are provided; and 3) Finding a health care provider with whom the patient can communicate and trust.

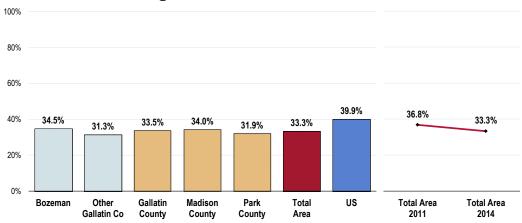
• Healthy People 2020 (www.healthypeople.gov)

Difficulties Accessing Services

A total of 33.3% of Total Area adults report some type of difficulty or delay in obtaining healthcare services in the past year.

- More favorable than national findings.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: statistically similar by county.
- TREND: Statistically unchanged since 2011.

Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 169]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - Asked of all respondents.
 - Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.

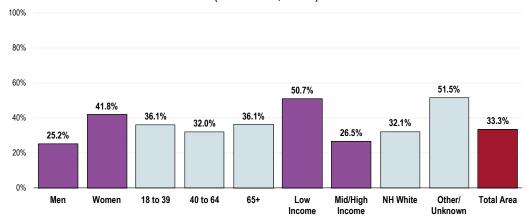
This indicator reflects the percentage of the total population experiencing problems accessing healthcare in the past year, regardless of whether they needed or sought care.

Note that the following demographic groups more often report difficulties accessing healthcare services:

- · Women.
- Lower-income residents.
- Other/Unknown races.

Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year

(Total Area, 2014)



- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 169]
- Asked of all respondents.

- Asked of an respondents.

 Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.

 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).

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

Barriers to Healthcare Access

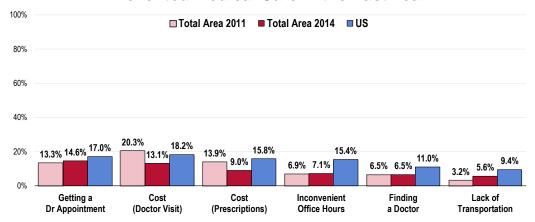
Of the tested barriers, getting a doctor's appointment impacted the greatest share of Total Area adults (14.6% say they had difficulty getting an appointment to see a physician in the past year).

- The proportion of Total Area adults impacted was statistically comparable to or better than that found nationwide for each of the tested barriers.
- TREND: Compared to baseline 2011 data, the Total Area has seen a significant decrease with regard to the barrier of cost (to both physician visits and prescription medications); in contrast, note the statistically significant increase for the barrier of transportation.

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.

Barriers to Access Have Prevented Medical Care in the Past Year

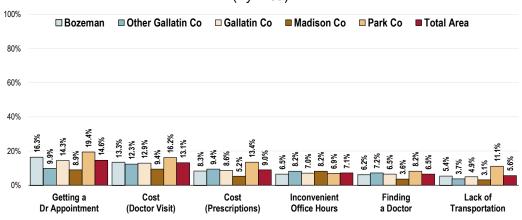


Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 7-12]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
 Asked of all respondents.
 - By area: while most barriers affected each area similarly, note that the barrier of getting medical appointments was much higher in Bozeman than in the rest of the county, and was favorably low in Madison County when compared with Gallatin and Park counties.
 - Note also the high prevalence noted for **transportation** as a barrier in Park County.

Barriers to Access Have Prevented Medical Care in the Past Year

(By Area)

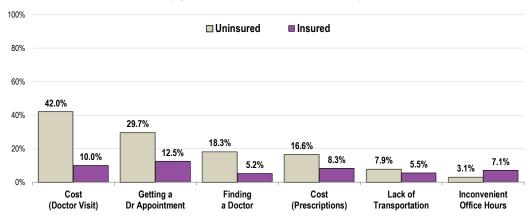


Sources: Notes:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7-12]
- Asked of all respondents.
- As might be expected, Total Area adults without health insurance are much more likely to report access barriers when compared to the insured population, especially those related to cost.

Barriers to Healthcare Access

(By Insured Status; Total Area, 2014)



Sources: • 2014 PRC

• 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7-12]

Notes:

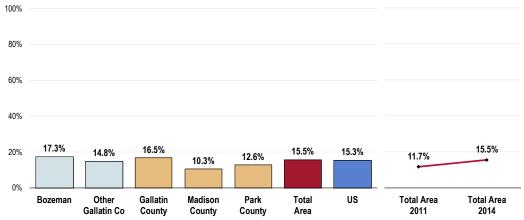
• Asked of all respondents

Prescriptions

Among all Total Area adults, 15.5% skipped or reduced medication doses in the past year in order to stretch a prescription and save money.

- · Nearly identical to national findings.
- In Gallatin County: no statistical difference by area.
- By county: statistically similar by county.
- TREND: Represents a statistically significant increase since 2011.

Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 13]

2013 PRC National Health Survey, Professional Research Consultants, Inc.

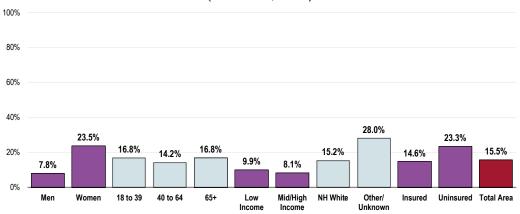
Notes:

 Asked of all respondents.

• Women are much 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, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 13]
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Accessing Healthcare for Children

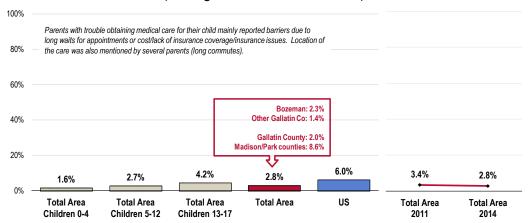
A total of 2.8% of parents say there was a time in the past year when they needed medical care for their child, but were unable to get it.

- Better than what is reported nationwide.
- Statistically similar within Gallatin County as well as between Gallatin and the combined Madison/Park County area.
- TREND: Statistically unchanged since 2011.
- The prevalence increases by child's age, as shown.

Surveyed parents were also asked if, within the past year, they experienced any trouble receiving medical care for a randomly-selected child in their household.

Had Trouble Obtaining Medical Care for Child in the Past Year

(Among Parents of Children 0-17)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 111-112]

2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Asked of all respondents with children 0 to 17 in the household.

Among the parents experiencing difficulties, the majority cited long waits for appointments and cost or a lack of insurance as the primary reason; others cited location of the care (long commutes for appointments).

Primary Care Services

About Primary Care

Improving health care services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes and fewer disparities and costs. Having a primary care provider (PCP) as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community. Having a usual PCP is associated with:

- · Greater patient trust in the provider
- · Good patient-provider communication
- · Increased likelihood that patients will receive appropriate care

Improving health care services includes increasing access to and use of evidence-based preventive services. Clinical preventive services are services that: **prevent** illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention); or **detect** a disease at an earlier, and often more treatable, stage (secondary prevention).

Healthy People 2020 (www.healthypeople.gov)

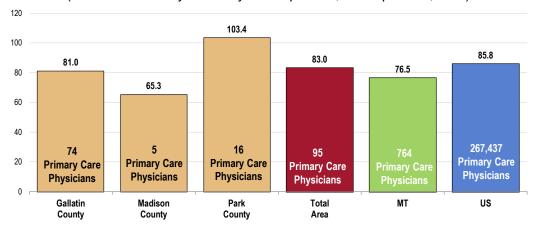
Access to Primary Care

In the Total Area in 2011, there were 95 primary care physicians, translating to a rate of 83.0 primary care physicians per 100,000 population.

- Above the primary care physician-to-population ratio found statewide.
- Comparable to the ratio found nationally.
- The ratio is most favorable in Park County and least favorable in Madison County.

Access to Primary Care

(Number of Primary Care Physicians per 100,000 Population, 2011)



Sources:

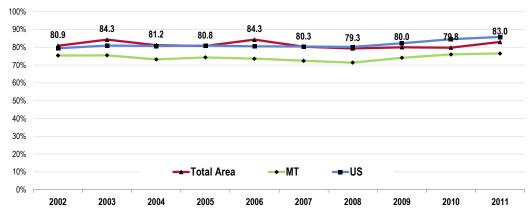
- US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File: 2011.
- Retrieved January 2015 from Community Commons at http://www.chna.org.

This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

 TREND: Access to primary care (in terms of the ratio of primary care physicians to population) has not changed greatly over the past decade in the Total Area.

Trends in Access to Primary Care

(Number of Primary Care Physicians per 100,000 Population)



Sources:

- US Department of Labor, Bureau of Labor Statistics: 2013.
- Retrieved January 2015 from Community Commons at http://www.chna.org.

Notes:

 This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

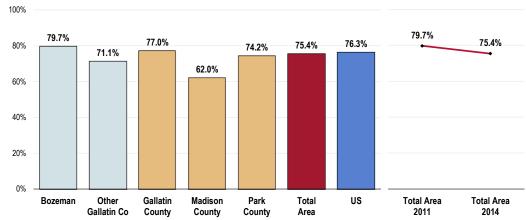
Specific Source of Ongoing Care

A total of 75.4% of Total Area adults were determined to have a specific source of ongoing medical care.

- · Similar to national findings.
- Fails to satisfy the Healthy People 2020 objective (95% or higher).
- In Gallatin County: much higher in Bozeman than the rest of the county.
- By county: lowest in Madison County, highest in Gallatin County.
- TREND: Statistically similar to 2011 findings.

Have a Specific Source of Ongoing Medical Care

Healthy People 2020 Target = 95.0% or Higher [All Ages]



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 166]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective AHS-5.1]

Notes: • Asked of all respondents.

Having a specific source of ongoing care includes having a doctor's office, clinic, urgent care center, walk-in clinic, health center facility, hospital outpatient clinic, HMO or prepaid group, military/VA clinic, or some other kind of place to go if one is sick or needs advice about his or her health. This resource is crucial to the concept of "patient-centered medical homes" (PCMH).

A hospital emergency room is not considered a specific source of ongoing care in this instance. When viewed by demographic characteristics, the following population segments are <u>less</u> <u>likely</u> to have a specific source of care:

- Women.
- Adults under age 65 (positive correlation with age).

Among adults age 18-64, 74.0% have a specific source for ongoing medical care, similar to national findings.

• Fails to satisfy the Healthy People 2020 target for this age group (89.4% or higher).

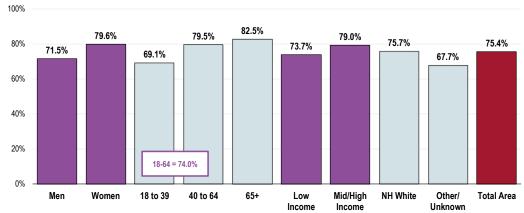
Among adults 65+, 82.5% have a specific source for care, similar to the percentage reported among seniors nationally.

• Fails to satisfy the Healthy People 2020 target of 100% for seniors.

Have a Specific Source of Ongoing Medical Care

(Total Area, 2014)

Healthy People 2020 Target = 95.0% or Higher [All Ages]; ≥89.4% [18-64]; 100% [65+]



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 166-168]
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov/[Objectives AHS-5.1, 5.3, 5.4]
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents)
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

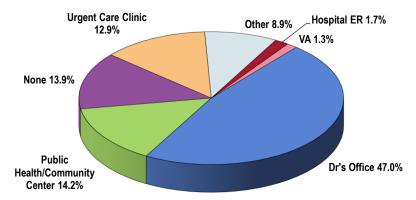
Type of Place Used for Medical Care

When asked where they usually go if they are sick or need advice about their health, the greatest share of respondents (47.0%) identified a particular doctor's office.

A total of 14.2% say they usually go to some type of public health or community center, while 12.9% use an urgent care clinic and 1.7% rely on a hospital emergency room. Just 1.3% of survey respondents use a VA/military facility for their care.

Particular Place Utilized for Medical Care

(Total Area, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 15-16]

• Asked of all respondents.

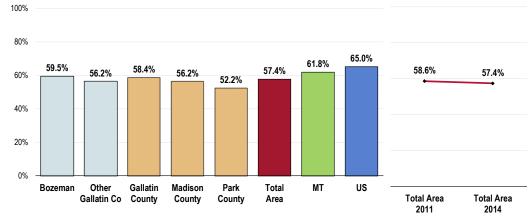
Utilization of Primary Care Services

Adults

More than one-half of adults (57.4%) visited a physician for a routine checkup in the past year.

- · Below the state findings.
- . Below the national findings.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: similar findings among the three counties.
- TREND: Statistically similar to 2011 findings.

Have Visited a Physician for a Checkup in the Past Year



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 17]

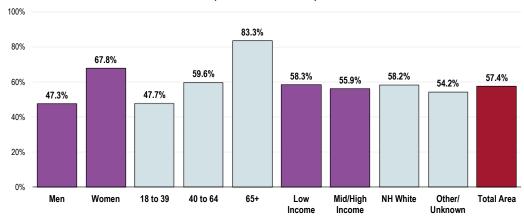
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2013 Montana data.
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

• Men and adults under age 65 are <u>less likely</u> 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, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item xx]
- Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

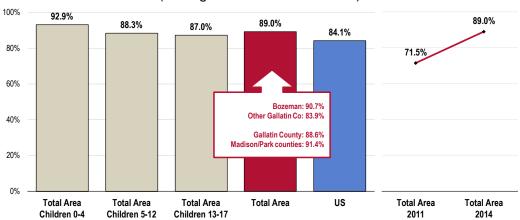
Children

89.0% of parents report that their child has had a routine checkup in the past year.

- · Statistically similar to national findings.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: similar findings between Gallatin and the combined Madison/Park counties.
- TREND: Marks a statistically significant increase since 2011.
- Note that routine checkups are highest in the Total Area among children under age 5.

Child Has Visited a Physician for a Routine Checkup in the Past Year

(Among Parents of Children 0-17)



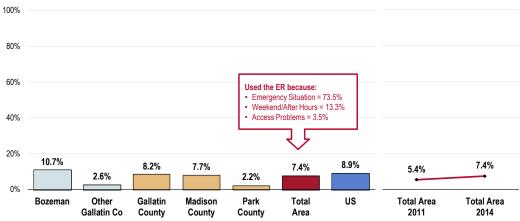
- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 113]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Asked of all respondents with children 0 to 17 in the household.

Emergency Room Utilization

A total of 7.4% of Total Area adults have gone to a hospital emergency room more than once in the past year about their own health.

- · Comparable to national findings.
- In Gallatin County: much higher in Bozeman than the rest of the county.
- By county: unfavorably high in Gallatin County, lowest in Park County.
- TREND: Statistically unchanged since 2011.

Have Used a Hospital Emergency Room More Than Once in the Past Year



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 23-24]

2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:

 Asked of all respondents.

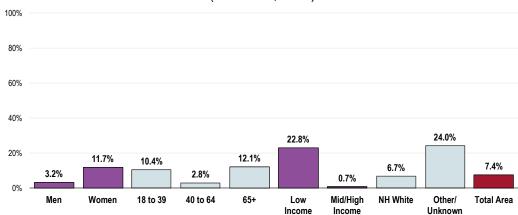
Of those using a hospital ER, 73.5% say this was due to an **emergency or life-threatening situation**, while 13.3% indicated that the visit was during **after-hours or on the weekend**. A total of 3.5% cited **difficulties accessing primary care** for various reasons.

Viewed by demographic characteristics, these adults were more likely to have used an ER for medical care more than once in the past year:

- Women.
- · Young adults and seniors.
- · Low-income residents.
- Other/Unknown races.

Have Used a Hospital Emergency Room More Than Once in the Past Year

(Total Area, 2014)



Notes:

- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 23]
 - · Asked of all respondents.
 - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Oral Health

About Oral Health

Oral health is essential to overall health. Good oral health improves a person's ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions. However, oral diseases, from cavities to oral cancer, cause pain and disability for many Americans. Good self-care, such as brushing with fluoride toothpaste, daily flossing, and professional treatment, is key to good oral health. Health behaviors that can lead to poor oral health include: **tobacco use**; **excessive alcohol use**; and **poor dietary choices**.

The significant improvement in the oral health of Americans over the past 50 years is a public health success story. Most of the gains are a result of effective prevention and treatment efforts. One major success is community water fluoridation, which now benefits about 7 out of 10 Americans who get water through public water systems. However, some Americans do not have access to preventive programs. People who have the least access to preventive services and dental treatment have greater rates of oral diseases. A person's ability to access oral healthcare is associated with factors such as education level, income, race, and ethnicity.

Barriers that can limit a person's use of preventive interventions and treatments include: limited access to and availability of dental services; lack of awareness of the need for care; cost; and fear of dental procedures.

There are also social determinants that affect oral health. In general, people with lower levels of education and income, and people from specific racial/ethnic groups, have higher rates of disease. People with disabilities and other health conditions, like diabetes, are more likely to have poor oral health.

Potential strategies to address these issues include:

- Implementing and evaluating activities that have an impact on health behavior.
- Promoting interventions to reduce tooth decay, such as dental sealants and fluoride use.
- Evaluating and improving methods of monitoring oral diseases and conditions.
- Increasing the capacity of State dental health programs to provide preventive oral health services.
- Increasing the number of community health centers with an oral health component.
- Healthy People 2020 (www.healthypeople.gov)

Dental Care

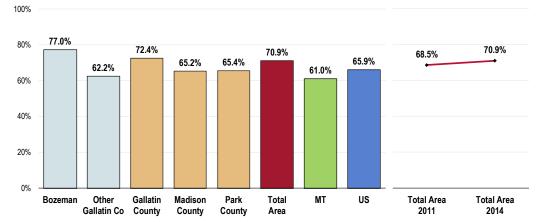
Adults

A total of 70.9% of Total Area adults have visited a dentist or dental clinic (for any reason) in the past year.

- · Much higher than statewide findings.
- Much higher than national findings.
- Satisfies the Healthy People 2020 target (49% or higher).
- In Gallatin County: much higher in Bozeman than the rest of the county.
- By county: highest in Gallatin County.
- TREND: Statistically unchanged since 2011.

Have Visited a Dentist or **Dental Clinic Within the Past Year**

Healthy People 2020 Target = 49.0% or Higher



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 21]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2012 Montana data.

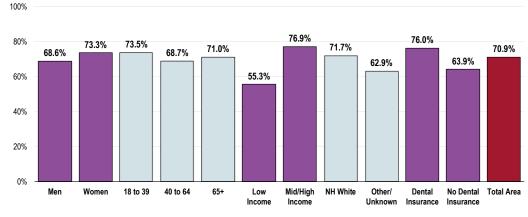
Notes: Asked of all respondents.

Note the following:

- Persons living in the higher income category report much higher utilization of oral health services.
- As might be expected, persons without dental insurance report much lower utilization of oral health services than those with dental coverage.

Have Visited a Dentist or **Dental Clinic Within the Past Year**

(Total Area, 2014) Healthy People 2020 Target = 49.0% or Higher



- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 21] US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

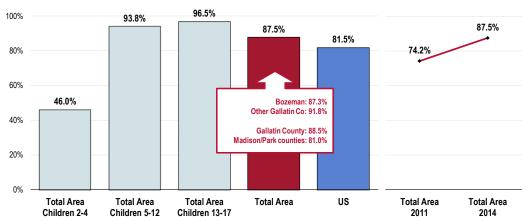
Children

A total of 87.5% of parents report that their child (age 2 to 17) has been to a dentist or dental clinic within the past year.

- Statistically similar to national findings.
- Satisfies the Healthy People 2020 target (49% or higher).
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: similar percentage between Gallatin and Madison/Park counties.
- TREND: Marks a statistically significant increase in children's dental care since 2011.
- Regular dental care is notably lower among children age 2 to 4.

Child Has Visited a Dentist or **Dental Clinic Within the Past Year**

(Among Parents of Children Age 2-17) Healthy People 2020 Target = 49.0% or Higher



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 116]

- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. http://www.healthypeople.gov [Objective OH-7]

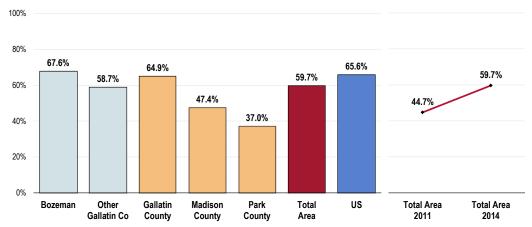
Asked of all respondents with children age 2 through 17.

Dental Insurance

Over one-half (59.7%) of Total Area adults have dental insurance that covers all or part of their dental care costs.

- Lower than the national finding.
- In Gallatin County: much higher in Bozeman than the rest of the county.
- By county: favorably high in Gallatin County.
- TREND: Marks a statistically significant increase since 2011.

Have Insurance Coverage That Pays All or Part of Dental Care Costs



- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 22]
 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
 Asked of all respondents.

Vision Care

RELATED ISSUE:
See also <u>Vision &</u>

Hearing in the Death,

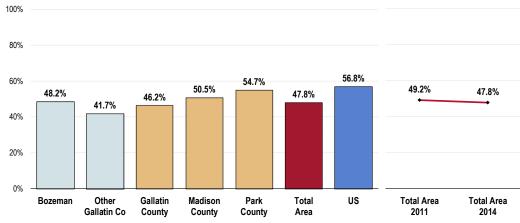
Disease & Chronic Conditions section of

this report.

A total of 47.8% of residents had an eye exam in the past two years during which their pupils were dilated.

- Lower than national findings.
- Statistically similar findings within Gallatin County as well as among the three counties.
- TREND: Statistically unchanged from 2011 survey findings.

Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 20]

2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Asked of all respondents.

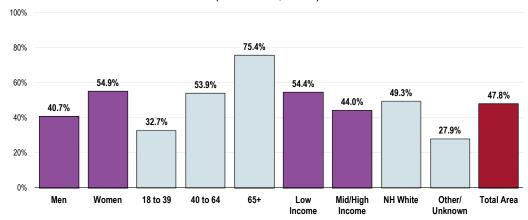
.....

Recent vision care in the Total Area is less often reported among:

- Men.
- Adults under age 65 (positive correlation with age).
- Higher-income residents.
- Adults of Other/Unknown races.

Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated

(Total Area, 2014)



Sources: Notes:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]
- · Asked of all respondents.
- Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households
 with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Health Education & Outreach



Professional Research Consultants, Inc.

Participation in Health Promotion Events

About Educational & Community-Based Programs

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.

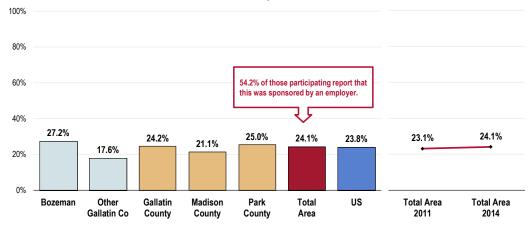
• Healthy People 2020 (www.healthypeople.gov)

A total of 24.1% 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.

- Comparable to the national prevalence.
- In Gallatin County: much higher in Bozeman than the rest of the county.
- By county: statistically similar findings by county.
- TREND: Statistically unchanged since the 2011 survey was conducted.

Note that 54.2% of adults who participated in a health promotion activity in the past year indicate that it was sponsored by their employer.

Participated in a Health **Promotion Activity in the Past Year**



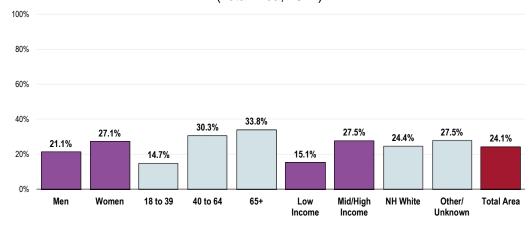
- Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 313-314]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: Asked of all respondents.

> • Note that adults age 40 and older and residents with higher incomes more often report participation in health promotion activities.

Participated in a Health **Promotion Activity in the Past Year**

(Total Area, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 313]
 Asked of all respondents.

- Asked of an respondents.

 Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).

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

Local Resources



Professional Research Consultants, Inc.

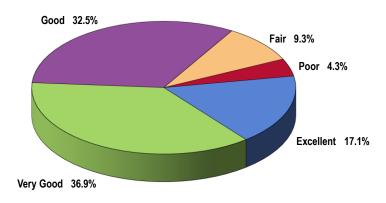
Perceptions of Local Healthcare Services

Just over one-half of Total Area adults (54.0%) rate the overall healthcare services available in their community as "excellent" or "very good."

• Another 32.5% give "good" ratings.

Rating of Overall Healthcare Services Available in the Community

(Total Area, 2014)



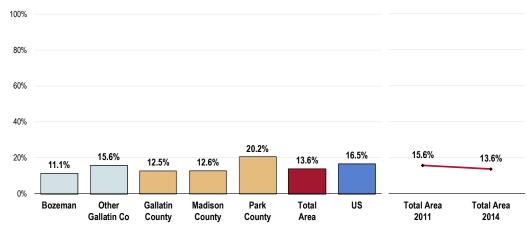
Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]
- es: Asked of all respondents.

However, 13.6% of residents characterize local healthcare services as "fair" or "poor."

- Comparable to what is reported nationally.
- In Gallatin County: similar between Bozeman and the rest of the county.
- By county: unfavorably high in Park County.
- TREND: Statistically unchanged since 2011.

Perceive Local Healthcare Services as "Fair/Poor"



 $Sources: \bullet \quad \mathsf{PRC} \ \mathsf{Community} \ \mathsf{Health} \ \mathsf{Surveys}, \ \mathsf{Professional} \ \mathsf{Research} \ \mathsf{Consultants}, \mathsf{Inc.} \ \ [\mathsf{Item} \ \mathsf{6}]$

2013 PRC National Health Survey, Professional Research Consultants, Inc.

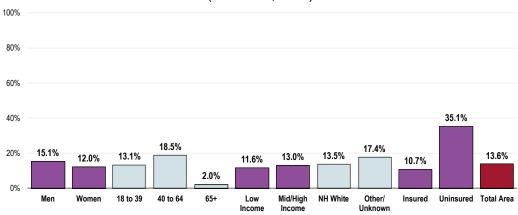
Notes:
• Asked of all respondents.

The following residents are more critical of local healthcare services:

- Adults under age 65.
- Uninsured adults.

Perceive Local Healthcare Services as "Fair/Poor"

(Total Area, 2014)



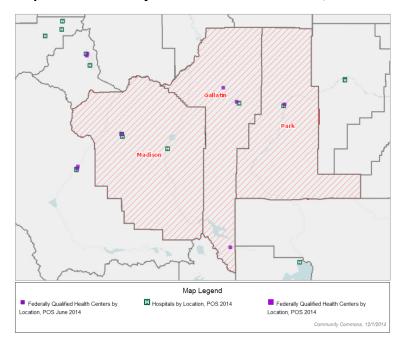
- Sources: 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]
 - Asked of all respondents.
 - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "NH White" reflects non-Hispanic White respondents).
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Healthcare Resources & Facilities

Hospitals & Federally Qualified Health Centers (FQHCs)

As of late 2014, there were 5 hospitals and 5 Federally Qualified Health Centers (FQHCs) within the Total Area.

Hospitals & Federally Qualified Health Centers, POS 2014



Health Professional Shortage Areas (HPSAs)

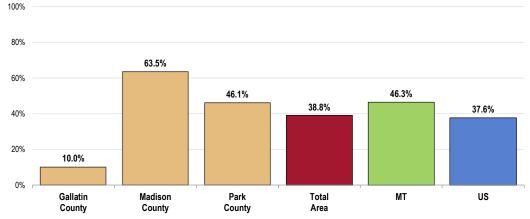
As shown in the following chart, 38.8% of Total Area residents live in a geographic area designated by the US Department of Health and Human Services as a health professional shortage area (HPSA).

- Below the state proportion.
- Comparable to the US proportion.
- Unfavorably high in Madison County; lowest in Gallatin County.

A "health professional shortage area" (HPSA) is defined as having a shortage of primary medical care, dental or mental health professionals.

Population Living in a Health Professional Shortage Area (HPSA)

(Percent of Total Population Living in a Geographic Area Designated as Having a Shortage of Primary Medical Care, Dental or Mental Health Professionals, 2014)



Sources: • US Department of Health & Human Services, Health Resources and Services Administration, Health Professional Shortage Areas: Oct. 2013.

Retrieved January 2015 from Community Commons at http://www.chna.org.

Notes:

This indicator reports the percentage of the population that is living in a geographic area designated as a "Health Professional Shortage Area" (HPSA), defined as
having a shortage of primary medical care, dental or mental health professionals. This indicator is relevant because a shortage of health professionals contributes
to access and health status issues.

The following map further illustrates this measure.

Population Living in a HPSA, Percent, HRSA HPSA Database April 2014

