

# 2010 PRC Community Health Report

Yellowstone County, Montana

Sponsored by

## The Alliance

- Billings Clinic
- RiverStone Health
- St. Vincent Healthcare



**Professional Research Consultants, Inc.**

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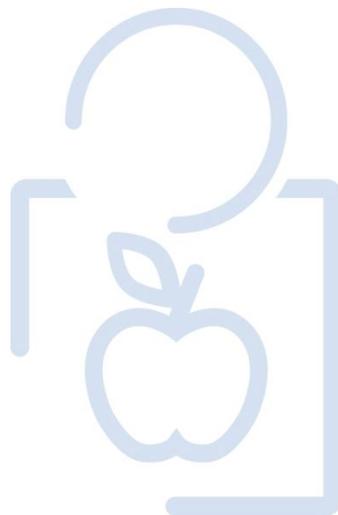
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# INTRODUCTION

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



# Project Overview

## Project Goals

This Community Health Assessment – a follow-up to a similar study conducted in Yellowstone County in 2005 – is a systematic, data-driven approach to determining the health status, behaviors and needs of residents in Yellowstone County, Montana. Subsequently, this information may be used to inform decisions and guide efforts to improve community health and wellness.

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

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

## Methodology

This assessment incorporates **quantitative data** from primary research (the 2010 PRC Community Health Survey) and secondary research (vital statistics and other existing health-related data), as well as **qualitative data** collected through a series of key informant focus groups. The quantitative data also allow for trending and comparison to benchmark data at the state and national levels.

### 2010 PRC Community Health Survey

#### Survey Instrument

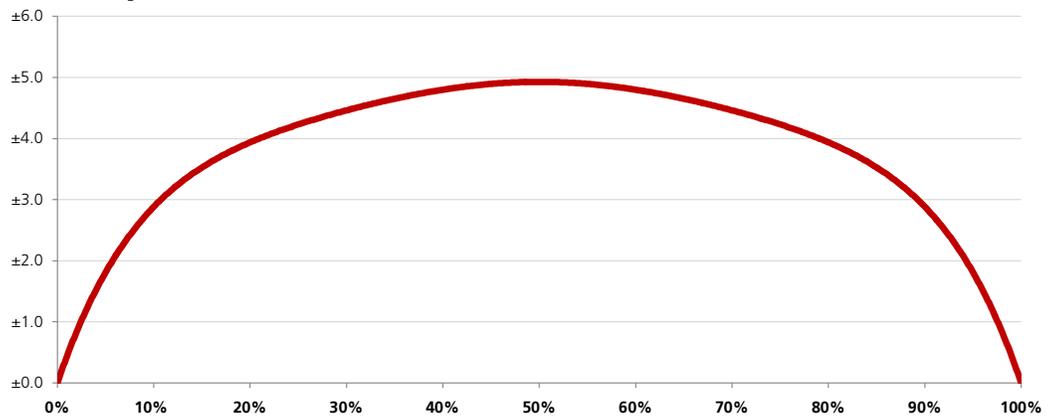
The survey instrument used for this study is based largely on the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS), as well as various other public health surveys and customized questions addressing gaps in indicator data relative to health promotion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



## Sampling Error

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

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



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

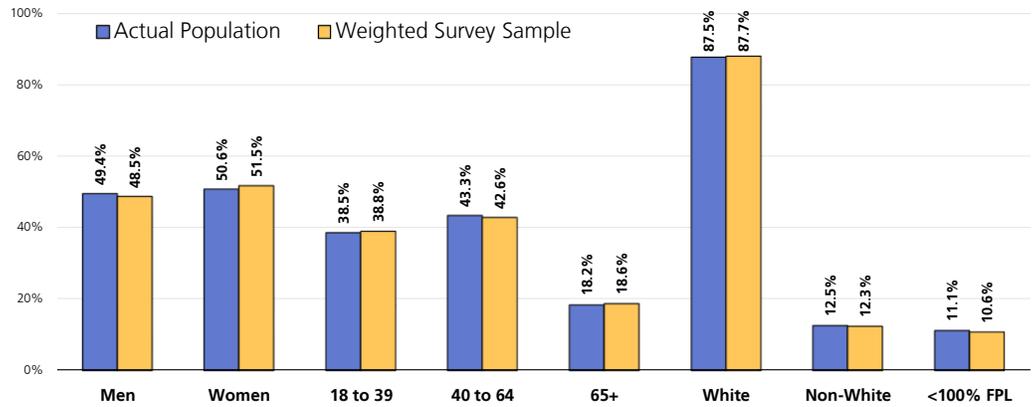
## Sample Characteristics

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

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

## Population & Sample Characteristics

(Yellowstone County, 2010)



Sources: 

- Census 2000, Summary File 3 (SF 3). U.S. Census Bureau.
- 2010 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 2009 guidelines – the most current available – place the poverty threshold for a family of four at \$22,050 annual household income or lower). In sample segmentation: “Low Income” refers to community members living in a household with defined poverty status, along with those households living just above the poverty level, earning up to twice the poverty threshold; “Middle/High Income” refers to households with incomes of at least twice the poverty threshold defined for the household size.

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

### Public Health, Vital Statistics & Other Data

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

- Centers for Disease Control & Prevention
- ESRI BIS Demographic Portfolio (Estimates Based on the US Census)
- Montana Board of Crime Control
- Montana Department of Public Health and Human Services
- National Center for Health Statistics

## Key Informant Focus Groups

As part of the community health assessment, there were five community focus groups held in the defined community. These focus groups included discussions with five key informants in the area, including physicians and other health professionals, legislators, employers, educators and social services providers.

A list of recommended participants for the focus groups was provided to PRC by The Alliance. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, as well as of the community overall.

Community key informant focus group candidates were first contacted by letter to request their participation. Follow-up phone calls were then made to ascertain whether or not they would be able to attend. Confirmation calls were placed the day before the groups were scheduled to ensure reasonable turnout. Final participation levels are outlined below.

DATE	TIME	GROUP	PARTICIPANTS
Sept. 28, 2010	12:30 pm	Social Services Providers	10
Sept. 28, 2010	5:30 pm	Legislators	8
Sept. 29, 2010	7:00 am	Physicians & Other Health Professionals	12
Sept. 29, 2010	12:00 pm	Employers	5
Sept. 29, 2010	5:30 pm	Educators	8

The focus group sessions were recorded on audio tapes from which the verbatim comments in this report are taken. After each quote, the speaker's group is denoted; however, aside from this group affiliation, there are no names connected with the comments, as participants were asked to speak candidly and assured of confidentiality.

*NOTE: These findings represent qualitative rather than quantitative data. The groups were designed to gather input from participants regarding their opinions and perceptions of the health of the residents in the area. Thus, these findings are based on perceptions, not facts.*

## Benchmark Data

### Trending

A similar survey was administered in Yellowstone County in 2005 by PRC on behalf of The Alliance. 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 *2008 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 2010

*Healthy People 2010: Understanding and Improving Health* is part of the Healthy People 2010 initiative that is sponsored by the U. S. Department of Health & Human Services. Healthy People 2010 outlines a comprehensive, nationwide health promotion and disease prevention agenda. It is designed to serve as a roadmap for improving the health of all people in the United States during the first decade of the 21st century. Like the preceding Healthy People 2000 initiative—which was driven by an ambitious, yet achievable, 10-year strategy for improving the nation’s health by the end of the 20th century—Healthy People 2010 is committed to a single, overarching purpose: promoting health and preventing illness, disability and premature death.



# Summary of Findings

## Areas of Opportunity for Community Health Improvement

The following “health priorities” represent recommended areas of intervention, based on the information gathered through this Community Health Assessment and the guidelines set forth in *Healthy People 2010*. From these data, opportunities for health improvement exist in the region with regard to the following health areas (see also the summary tables presented in the following section). These areas of concern are subject to the discretion of area providers, the steering committee, or other local organizations and community leaders as to actionability and priority.

Areas of Opportunity Identified Through This Assessment	
<b>Access to Healthcare Services</b>	<ul style="list-style-type: none"> <li>• Lack of Healthcare Coverage (18-64)</li> <li>• Routine Medical Checkups (Children 0-17)</li> <li>• Access to Dental Care (Especially for Low-Income)</li> </ul>
<b>Cancer</b>	<ul style="list-style-type: none"> <li>• Lung Cancer Deaths</li> <li>• Skin Cancer Prevalence</li> <li>• Mammography (Women 40+)</li> <li>• Pap Smears (Women 18+)</li> </ul>
<b>Heart Disease &amp; Stroke</b>	<ul style="list-style-type: none"> <li>• Stroke Deaths</li> <li>• Hypertension</li> </ul>
<b>Injury &amp; Violence</b>	<ul style="list-style-type: none"> <li>• Motor Vehicle Crash Deaths</li> <li>• Seat Belt Usage</li> <li>• Firearms in the Home (Firearm Safety)</li> <li>• Domestic Violence</li> </ul>
<b>Mental Health</b>	<ul style="list-style-type: none"> <li>• Suicides</li> <li>• Mental Health Treatment – Facilities, Resources &amp; Access</li> </ul>
<b>Nutrition &amp; Overweight</b>	<ul style="list-style-type: none"> <li>• Overweight Prevalence</li> <li>• Weight Advice by Healthcare Professionals</li> </ul>
<b>Respiratory Disease</b>	<ul style="list-style-type: none"> <li>• Respiratory Disease Deaths</li> </ul>
<b>Substance Abuse</b>	<ul style="list-style-type: none"> <li>• Current Drinking Levels</li> <li>• Cirrhosis/Liver Disease Deaths</li> <li>• Availability of Substance Abuse Treatment</li> </ul>

## Significant Trends

The following table highlights significant trends (both positive and negative) observed in health indicators in comparison with baseline/historical data.

	 <b>FAVORABLE TRENDS</b>	 <b>UNFAVORABLE TRENDS</b>
<b>Access to Healthcare</b>	<ul style="list-style-type: none"> <li>• Routine Checkups (Children)</li> </ul>	
<b>Cancer</b>	<ul style="list-style-type: none"> <li>• Sigmoidoscopy/Colonoscopy</li> </ul>	<ul style="list-style-type: none"> <li>• Mammography (40+)</li> </ul>
<b>Diabetes</b>	<ul style="list-style-type: none"> <li>• Diabetes Deaths</li> </ul>	
<b>Environmental Health</b>	<ul style="list-style-type: none"> <li>• Indoor Air Quality</li> </ul>	
<b>Family Planning</b>	<ul style="list-style-type: none"> <li>• Teen Births</li> </ul>	<ul style="list-style-type: none"> <li>• Unwed Mothers</li> </ul>
<b>Heart Disease</b>	<ul style="list-style-type: none"> <li>• Heart Disease Deaths</li> <li>• Stroke AADR</li> <li>• Cholesterol Screening</li> </ul>	<ul style="list-style-type: none"> <li>• Hypertension</li> </ul>
<b>Immunization &amp; Infectious Disease</b>	<ul style="list-style-type: none"> <li>• Hepatitis C Incidence</li> </ul>	
<b>Infant Health</b>	<ul style="list-style-type: none"> <li>• Infant Death Rate</li> </ul>	
<b>Injury &amp; Violence</b>	<ul style="list-style-type: none"> <li>• Violent Crime Rate</li> </ul>	<ul style="list-style-type: none"> <li>• Suicides</li> </ul>
<b>Mental Health</b>	<ul style="list-style-type: none"> <li>• Alzheimer's Disease Deaths</li> </ul>	
<b>Nutrition &amp; Overweight</b>	<ul style="list-style-type: none"> <li>• Fruit &amp; Vegetable Consumption</li> </ul>	<ul style="list-style-type: none"> <li>• Overweight Prevalence</li> </ul>
<b>Physical Health</b>		<ul style="list-style-type: none"> <li>• "Fair/Poor" Physical Health</li> </ul>
<b>Respiratory Disease</b>	<ul style="list-style-type: none"> <li>• Pneumonia/Influenza Deaths</li> </ul>	
<b>STDs</b>	<ul style="list-style-type: none"> <li>• Hepatitis B Incidence</li> </ul>	<ul style="list-style-type: none"> <li>• Gonorrhea Incidence</li> <li>• Chlamydia Incidence</li> <li>• Syphilis Incidence</li> </ul>
<b>Tobacco Use</b>	<ul style="list-style-type: none"> <li>• Smoke in the Home</li> </ul>	

## Summary Tables: Comparisons With Benchmark Data

### TREND SUMMARY (Current vs. Baseline Data)

#### Survey Data Indicators:

Trends for survey-derived indicators represent significant changes since 2005.

#### 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 (1999 for most indicators).

The following tables provide an overview of indicators in Yellowstone County, including comparisons among the individual communities, as well as trend data. These data are grouped to correspond with the Focus Areas presented in Healthy People 2010.

### Reading the Summary Tables

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

■ The columns to the right of Yellowstone County column provide trending, as well as comparisons between Yellowstone County and any available state and national findings, and Healthy People 2010 targets. Symbols indicate whether Yellowstone County compares favorably (☀️), unfavorably (☁️), or comparably (☁️) to these external data.

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

Access to Healthcare Services	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% Lack Health Insurance (Aged 18-64)	18.6	☁️ 13.1	☁️ 21.3	☁️ 17.7	☔️ 0.0
% Difficulty Finding Physician in Past Year	6.2	☁️ 4.3		☀️ 12.9	
% Difficulty Getting Appointment in Past Year	12.7	☁️ 14.2		☀️ 18.9	
% Inconvenient Hrs Prevented Dr Visit in Past Year	8.3	☁️ 10.7		☀️ 18.8	
% Transportation Prevented Dr Visit in Past Year	5.6	☁️ 3.8		☀️ 8.5	
% Cost Prevented Physician Visit in Past Year	13.7	☁️ 13.4		☀️ 18.2	
% Cost Prevented Getting Rx in Past Year	12.6	☁️ 13.5		☀️ 19.7	
% Skipped Rx Doses to Save Costs	17.3	☁️ 14.3		☁️ 17.5	
% Difficulty Getting Child's Healthcare in Past Year	2.0	☁️ 3.2		☀️ 7.7	
% Have a Specific Source of Ongoing Care	82.0	☁️ 84.0		☀️ 76.8	☔️ 96.0
% Have Had Routine Checkup in Past Year	62.9	☁️ 57.2		☁️ 65.2	
% Child Has Had Checkup in Past Year	84.3	☀️ 72.6		☔️ 91.3	
% Gone to ER More Than Once in Past Year	8.6	☁️ 7.3		☁️ 10.6	
% Rate Local Healthcare "Fair/Poor"	8.3	☁️ 6.7		☀️ 22.2	
		-blank- no data	☀️ favorable	☔️ unfavorable	☁️ similar

Arthritis, Osteoporosis & Chronic Pain	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% Arthritis/Rheumatism	22.7	21.8	27.5	24.2	
% Osteoporosis	5.6	5.8		6.7	8.0
% Sciatica/Chronic Back Pain	20.0	22.3		22.2	
		-blank- no data	favorable	unfavorable	similar

Cancer	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
Cancer (Age-Adjusted Death Rate)	181.3	187.4	181.1	183.6	159.9
Lung Cancer (Age-Adjusted Death Rate)	56.8		49.9	52.5	44.8
Female Breast Cancer (Age-Adjusted Death Rate)	23.6		29.5	24.5	22.3
% Skin Cancer	8.4	5.5		4.6	
% Cancer (Other Than Skin)	5.7	6.4		5.8	
% Sigmoid/Colonoscopy Ever (Aged 50+)	76.0	62.6	56.5	64.8	50.0
% Blood Stool Test in Past 2 Yrs (Aged 50+)	23.7	35.6	21.2	36.5	50.0
% Mammogram in Past 2 Years (Women 40+)	70.5	81.3	71.8	74.6	70.0
% Pap Smear in Past 3 Years (Women)	74.0	76.4	81.5	81.3	90.0
% Prostate Exam in Past 2 Years (Men 50+)	75.0	84.2		73.7	
		-blank- no data	favorable	unfavorable	similar

Diabetes	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
Diabetes Mellitus (Age-Adjusted Death Rate)	19.5	21.0	24.0	24.2	15.1
% Diabetes/High Blood Sugar	12.1	8.7	6.8	11.1	
% (Diabetics) Taking Insulin/Medication	74.1	68.1		84.2	
		-blank- no data	favorable	unfavorable	similar

Disability	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% Activity Limitations	25.7	24.3	20.7	21.8	
		-blank- no data	favorable	unfavorable	similar

Environmental Health	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% Attribute Illness in Past Year to Indoor Air Quality	11.0	15.9		19.0	
% Attribute Illness in Past Year to Outdoor Air Quality	5.3	8.0		12.0	
		-blank-no data	favorable	unfavorable	similar

Family Planning	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% of Births to Unwed Mothers	38.8	33.8	45.7	39.6	
% Births to Teenagers	9.0	10.1	13.2	10.4	
		-blank-no data	favorable	unfavorable	similar

Heart Disease & Stroke	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
Diseases of the Heart (Age-Adjusted Death Rate)	174.3	190.2	170.4	209.6	213.7
Stroke (Age-Adjusted Death Rate)	50.4	67.3	44.8	46.7	48.0
% Chronic Heart Disease	8.1	5.1		6.7	
% Stroke	2.3	3.3	2.4	4.9	
% Blood Pressure Checked in Past 2 Years	97.2	94.6		94.5	95.0
% Told Have High Blood Pressure	32.4	26.1	27.7	34.0	16.0
% Taking Action to Control High Blood Pressure	94.4	88.9		90.9	95.0
% Cholesterol Checked in Past 5 Years	86.5	77.7	72.0	87.0	80.0
% Told Have High Cholesterol	28.6	28.5	36.5	30.5	17.0
% Taking Action to Control High Blood Cholesterol	91.3	83.6		90.4	
% 1+ Cardiovascular Risk Factor	87.4	89.1		85.1	
		-blank-no data	favorable	unfavorable	similar

HIV	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
HIV (Age-Adjusted Death Rate)	0.6		0.6	4.7	0.7
% Ever Tested for HIV (Ages 18-64)	39.1	31.9		52.9	
		-blank- no data	favorable	unfavorable	similar

Immunization & Infectious Disease	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
Hepatitis C, non-A non-B Incidence/100,000	0.0	0.3	0.2	0.3	
% Flu Shot in Past Yr (Aged 65+)	70.6	73.7	68.7	73.2	90.0
% Flu Shot in Past Yr (High-Risk Aged 18-64)	54.3	46.9		43.7	60.0
% Pneumonia Vaccine Ever (Aged 65+)	73.8	76.5	71.8	69.7	90.0
% Pneumonia Vaccine Ever (High-Risk Aged 18-64)	32.9	29.4		36.1	60.0
		-blank- no data	favorable	unfavorable	similar

Injury & Violence	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
Unintentional Injury (Age-Adjusted Death Rate)	37.7	36.5	54.5	39.0	17.5
Motor Vehicle Crashes (Age-Adjusted Death Rate)	16.9	16.6	25.9	15.1	9.2
Homicide (Age-Adjusted Death Rate)	4.1	3.7	3.3	6.1	3.0
Suicide (Age-Adjusted Death Rate)	18.6	15.9	20.1	10.9	5.0
% "Always" Wear Seat Belt	78.3	76.8		83.5	92.0
% Child (Aged 0-4) "Always" Uses Auto Child Restraint	100.0	100.0		97.4	100.0
% Child (Aged 5-17) "Always" Uses Seat Belt	87.4	84.5		93.0	92.0
% Child (Aged 0-17) "Always" Uses Seat Belt/Car Seat	91.5	89.3		94.3	
% Adult Always Wears Helmet When Riding an ATV	24.8				
% Child Always Wears Helmet When Riding an ATV	30.3				
% Adult Always Wears Helmet When Riding a Motorcycle	47.5				
% Child Always Wears Helmet When Riding a Motorcycle	82.3				
% Adult Always Wears Helmet When Participating in Winter Sports	20.2				
% Child Always Wears Helmet When Participating in Winter Sports	40.5				
% Adult Always Wears Helmet When Riding a Bicycle	27.0				
% Child Always Wears Helmet When Riding a Bicycle	45.1	36.2		41.7	
% Firearm in Home	59.1	53.5		35.3	
% Homes With Children With a Firearm	65.2	55.0		31.2	
% Homes w/Unlocked Loaded Firearm	14.0	9.9		15.2	16.0
Violent Crime/100,000	212.2	256.7	289.3	465.0	
Domestic Violence/100,000	487.1	470.3	441.0		
% Victim of Violent Crime in Past 5 Years	2.3	4.0		2.4	
% Hit, Slapped, or Hurt by Intimate Partner	14.7			15.0	
		-blank- no data	favorable	unfavorable	similar

Maternal, Child & Infant Health	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% No Prenatal Care in 1st Trimester	13.9	14.2	17.5	16.3	10.0
% of Low Birthweight Births	7.3	7.2	7.3	8.2	5.0
Infant Death Rate	5.0	6.4	5.8	6.9	4.5
		-blank- no data	favorable	unfavorable	similar

Mental Health & Mental Disorders	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% "Fair/Poor" Mental Health	10.1	6.9		12.9	
% Major Depression	13.2	12.4		9.7	
% Chronic Depression (2+ Years)	25.0	25.7		30.3	
% Depressed Persons Seeking Help	62.1	59.5		43.0	50.0
% Have Considered Attempting Suicide	10.2	8.1			
% Typical Day Is "Extremely/Very" Stressful	11.6	9.5		13.4	
% Child Takes Rx for ADD/ADHD	6.4	8.4		6.3	
Alzheimer's Disease (Age-Adjusted Death Rate)	18.8	26.2	21.5	22.5	
		-blank- no data	favorable	unfavorable	similar

Nutrition & Overweight	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% Eat 5+ Servings of Fruit or Vegetables per Day	40.6	34.9	25.7	43.5	
% Eat 2+ Servings of Fruit per Day	56.4	48.7		58.4	75.0
% Eat 3+ Servings of Vegetables per Day	38.1	28.7		38.8	50.0
% Healthy Weight (BMI 18.5-25)	25.4	35.8		32.0	60.0
% Overweight	72.9	62.7	62.1	67.4	
% Obese	26.0	23.9	23.7	29.0	15.0
% Overweights Advised to Lose Weight	20.2	19.0		33.4	
% Overweight Trying to Lose	41.7	33.8		43.0	
% Children (Aged 6-17) Overweight	24.3	33.8		42.7	
% Child is Obese	15.4	17.5		26.1	5.0
		-blank- no data	favorable	unfavorable	similar

Oral Health	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% Have Dental Insurance	58.9	56.2		61.7	
% Have Visited Dentist in Past Yr (18+)	70.0	63.9	66.0	63.5	56.0
% Child (Aged 2-17) Has Visited Dentist in Past Year	83.4	78.1		85.1	56.0
		-blank- no data	favorable	unfavorable	similar

Physical Activity & Fitness	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% No Leisure-Time Physical Activity	22.4	26.3	22.0	28.8	20.0
% Meeting Physical Activity Recommendations	47.2	41.4	58.6	38.5	
% Vigorous Physical Activity	33.5	29.1		28.0	30.0
% Moderate Physical Activity	26.4	23.1		22.6	30.0
% Child Spends 3+ Hours on Non-TV Screen Time Daily	6.7	4.9			
% Child Spends 3+ Hours Watching TV Daily	9.7	17.6			
		-blank- no data	favorable	unfavorable	similar

Physical Health	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% "Fair/Poor" Physical Health	17.1	10.5	14.5	17.4	
		-blank-no data	favorable	unfavorable	similar

Respiratory Disease	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
CLRD (Age-Adjusted Death Rate)	63.2	63.7	54.5	41.6	
Pneumonia/Influenza (Age-Adjusted Death Rate)	11.5	13.3	16.4	19.3	
% Chronic Lung Disease	7.3	6.8		9.9	
% Current Asthma	9.0		8.1	8.3	
% Child Currently Has Asthma	8.5			11.4	
Tuberculosis Incidence/100,000	0.5	1.0	1.1	4.4	1.0
		-blank-no data	favorable	unfavorable	similar

Sexually Transmitted Diseases	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
Gonorrhea Incidence/100,000	37.5	22.8	15.4	116.8	19.0
Primary & Secondary Syphilis Incidence/100,000	1.2	0.0	0.7	3.9	0.2
Chlamydia Incidence/100,000	330.7	263.3	296.7	372.2	
Hepatitis B Incidence/100,000	0.0	2.3	0.3	1.5	
		-blank-no data	favorable	unfavorable	similar

Substance Abuse	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	9.8	8.3	10.6	8.9	3.0
% Current Drinker	58.5	57.4	58.5	52.6	
% Chronic Drinker	3.2	3.2	5.4	4.5	
% Binge Drinker	17.6	15.2	17.3	17.8	6.0
% Drinking & Driving in Past Month	2.6	2.9		3.8	
% Driving Drunk or Riding with Drunk Driver	6.4	6.9		8.6	
% Illicit Drug Use in Past Month	1.0	1.6		2.9	2.0
% Sought Help for Alcohol or Drug Problem	4.8	3.8		5.5	
		-blank- no data	favorable	unfavorable	similar

Tobacco Use	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% Current Smoker	13.8	18.3	16.8	19.2	12.0
% Have Quit Smoking 1+ Days in Past Year (Smokers)	57.4	57.0		57.0	75.0
% Someone Smokes at Home	9.1	15.6		16.3	
% Children <18 Exposed to Smoke at Home	6.9	12.6		13.3	
% Use Smokeless Tobacco	6.6	5.1		3.9	0.4
		-blank- no data	favorable	unfavorable	similar

Vision & Hearing	Yellowstone County	Yellowstone County vs. Benchmarks			
		TREND (vs. 2005)	vs. MT	vs. US	vs. HP2010
% Blindness/Trouble Seeing	8.4	6.5		9.1	
% Deafness/Trouble Hearing	9.7	9.7		11.7	
		-blank- no data	favorable	unfavorable	similar

## Priorities Identified Among Focus Group Participants

All five groups shared opinions about the various health needs of the community, with the dominant topic being **mental health issues** (including substance abuse). Each group voiced concern that, although the Crisis Center is a wonderful addition to the community, it just isn't enough since it does not have an adequate medical staff and has only one nurse practitioner on staff.

According to focus group participants, there are many people in Billings who aren't getting mental healthcare because the treatment centers don't have enough space for the number of people who require therapy. Further, there aren't enough counselors or psychiatrists to treat everyone in the Billings community needing mental health treatment. Additionally, those without insurance or money have very few options for mental health or substance abuse help.

*"Statewide funding for mental health has been depleted. Caseworkers are overworked and there are no prescribing psychiatrists until you get to Rapid City. There is a huge need for additional mental health professionals." – Educator*

*"The community needs a long-term mental health treatment center. There is currently not one available and short-term centers don't work." – Educator*

*"There are substance abuse centers available if you have money. If you have no money, you're out of luck." –Educator*

*"I'd love to see primary care and mental health integrated and there are pockets of it but we just don't do it. Primary care docs will make a referral. About half of those people don't show up once they leave that primary care doctor's office. And if you have co-located social workers, primary care docs, psychologists, I think you could provide a much better level of care, but that's just not the way our system does it." –Physician*

*"I think it's about a two- to three-month wait most places for psychiatry." –Physician*

*"I hear from professionals in the field that it's very tough for new patients to get appointments at the mental health center." –Legislator*

*"They can go to the crisis center, but that's only a 23-hour deal. You've got to go and come back, and they don't have mid-levels, they don't have meds there, so you've got to get referred out to get all of that." –Legislator*

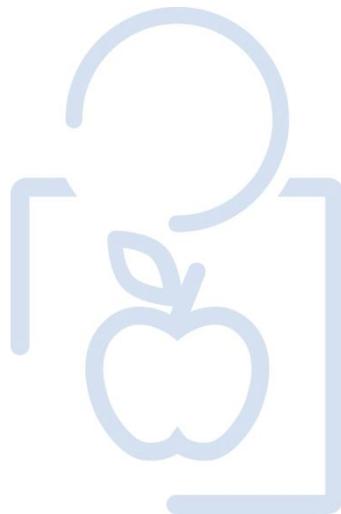
*"If you have Medicaid, you have mental healthcare. If you have Medicaid, you can be admitted and go to a residential treatment center and Medicaid pays the bill. If you have insurance, who knows what your insurance policy is going to pay for if you have a child who needs a residential placement. And if you have no insurance or do not qualify for Medicaid then there's virtually nothing in the area." –Social Services*

*"There have been some wonderful projects in much more inventive states than Montana where they have developed some exciting things around families with a child with mental illness. They redid a motel and these families were trying to get their child stabilized and they could stay at this place that had mini-apartments where all the services were wrapped around them for stabilization. Then they moved them to lesser intensive care without ever having to do the expense of residential treatment which is eating our state budget into oblivion." –Social Services*



Some participants agreed that it would be beneficial for a sort of **“clearinghouse”** in the community. This would be one building where people could go to get primary care, mental healthcare, and specialty care, and would offer a continuum of care which is currently lacking.

# SELF-REPORTED HEALTH STATUS



# Physical Health Status

The initial inquiry of the 2010 PRC Community Health Survey asked respondents the following:

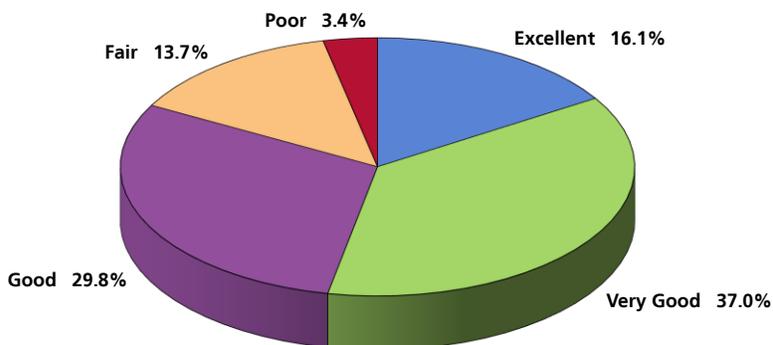
“Would you say that in general your health is: excellent, very good, good, fair or poor?”

## Self-Reported Health Status

**More than one-half (53.1%) of Yellowstone County adults rate their overall health as “excellent” or “very good.”**

- Another 29.8% gave “good” ratings of their overall health.

**Self-Reported Health Status**  
(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]  
Notes: • Asked of all respondents.

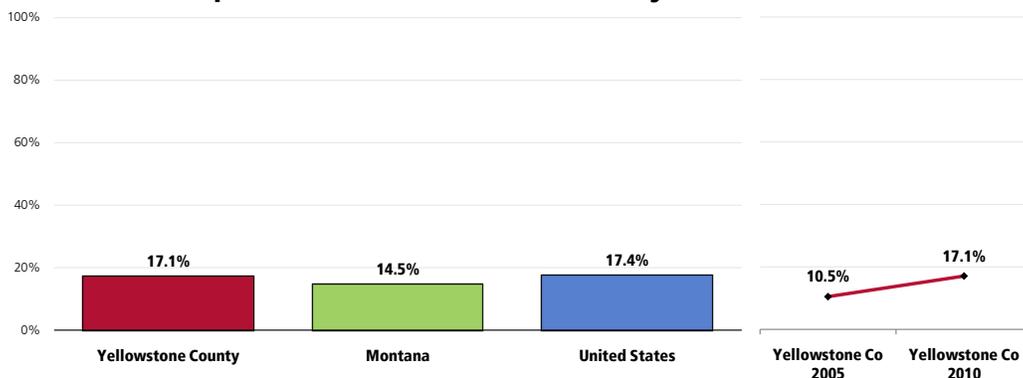
**However, 17.1% of Yellowstone County adults believe that their overall health is “fair” or “poor.”**

- Similar to statewide findings (14.5% “fair/poor”).
- Nearly identical to the national percentage (17.4% “fair/poor”).
- ☒ Note the statistically significant increase which has occurred when comparing “fair/poor” overall health reports to 2005 survey results (an unfavorable change).

### NOTE:

- Differences noted in the text represent significant differences determined through statistical testing.
- ☒ 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” Physical Health



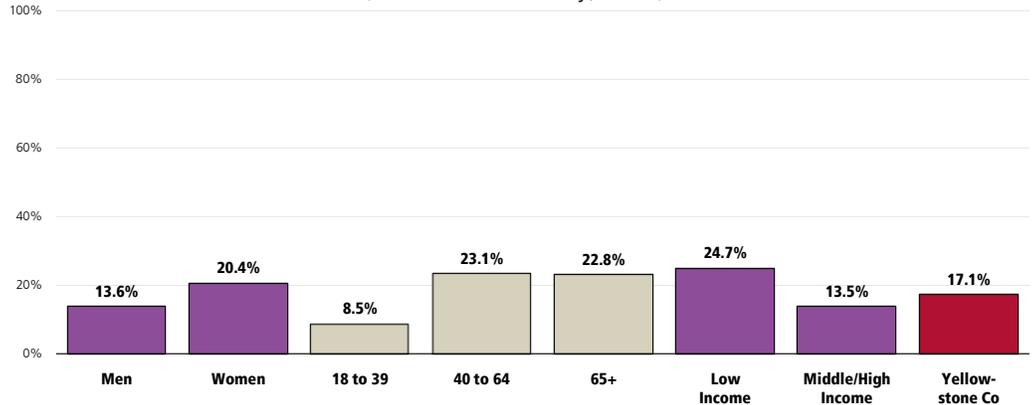
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 5]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 Montana data.  
• 2008 PRC National Health Survey, Professional Research Consultants.  
Notes: • Asked of all respondents.

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

- 👤 Residents aged 40 and older.
- 👤 Residents living at lower incomes.
- 👤 Other differences within demographic groups, such as in the gender breakout illustrated in the following chart, are not statistically significant.

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

(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]  
Notes: • Asked of all respondents.  
• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

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.

## Activity Limitations

An estimated 54 million persons in the United States currently live with disabilities. The increase in disability among all age groups indicates a growing need for public health programs serving people with disabilities.

The direct medical and indirect annual costs associated with disability [in the US] are more than \$300 billion, or 4 percent of the gross domestic product. This total cost includes \$160 billion in medical care expenditures (1994 dollars) and lost productivity costs approaching \$155 billion.

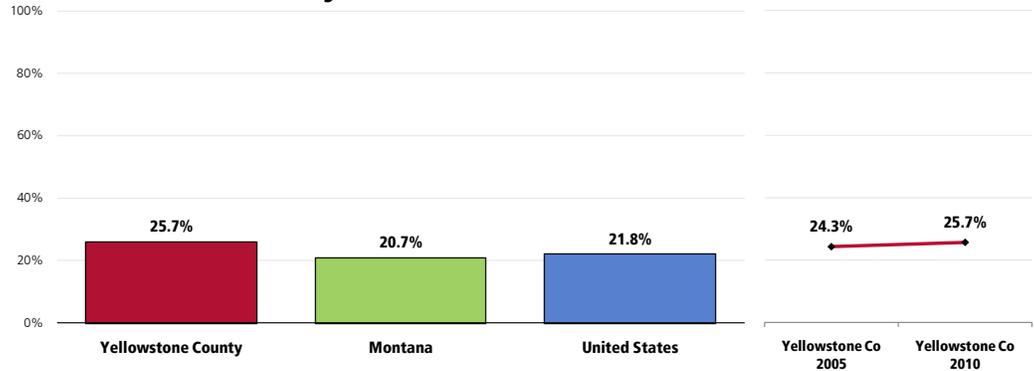
The health promotion and disease prevention needs of people with disabilities are not nullified because they are born with an impairing condition or have experienced a disease or injury that has long-term consequences. People with disabilities have increased health concerns and susceptibility to secondary conditions. Having a long-term condition increases the need for health promotion that can be medical, physical, social, emotional, or societal.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

**One-fourth (25.7%) of Yellowstone County adults are limited in some way in some activities due to a physical, mental or emotional problem.**

- Less favorable than the 20.7% prevalence in Montana.
- Similar to the 21.8% prevalence nationwide.
- 📊 Statistically unchanged since 2005.

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



Sources:
 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 124]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2009 Montana data.
- 2008 PRC National Health Survey, Professional Research Consultants.

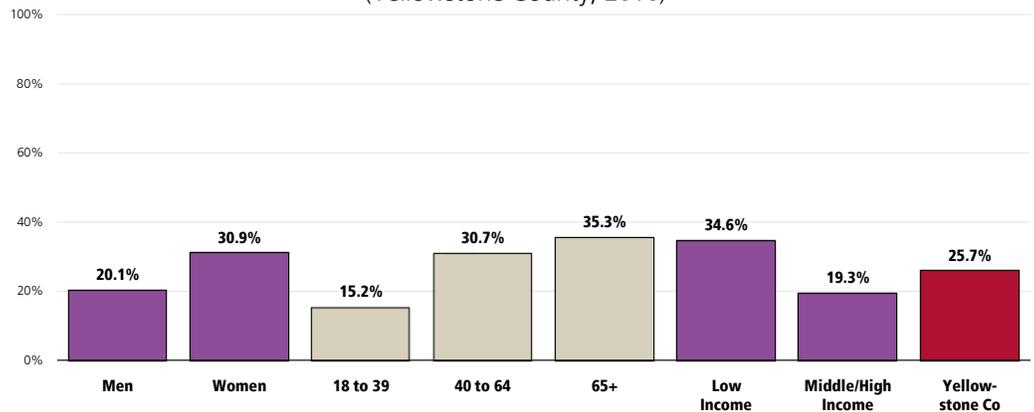
 Notes:
 

- Asked of all respondents.

In looking at responses by key demographic characteristics, note the following:

-  Women in the county are much more often limited in activities than men.
-  Note the positive correlation between age and activity limitations.
-  Residents living on lower incomes are more likely to experience activity limitations than are adults in the higher income category.

## Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem (Yellowstone County, 2010)



Sources:
 

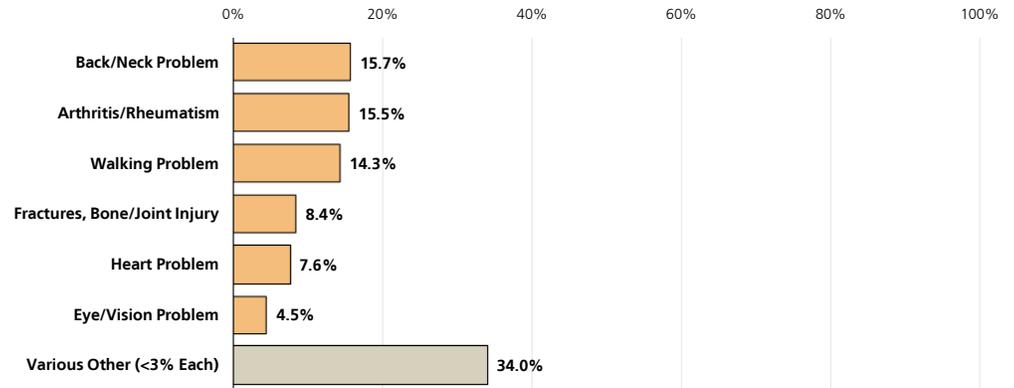
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 124]

 Notes:
 

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

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

### Type of Problem That Limits Activities (Among Those Reporting Activity Limitations; Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 125]  
Notes: • Asked of those respondents reporting activity limitations.

# Mental Health & Mental Disorders

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity. Mental health is indispensable to personal well-being, family and interpersonal relationships, and contribution to community or society. Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof), which are associated with distress and/or impaired functioning and spawn a host of human problems that may include disability, pain, or death. Mental illness is the term that refers collectively to all diagnosable mental disorders.

Mental disorders generate an immense public health burden of disability. The World Health Organization, in collaboration with the World Bank and Harvard University, has determined that the impact of mental illness on overall health and productivity in the United States and throughout the world often is profoundly underrecognized [Global Burden of Disease study]. In established market economies such as the United States, mental illness is on a par with heart disease and cancer as a cause of disability. Suicide—a major public health problem in the US—occurs most frequently as a consequence of a mental disorder.

Mental disorders occur across the lifespan, affecting persons of all racial and ethnic groups, both genders, and all educational and socioeconomic groups.

As the life expectancy of individuals continues to grow longer, the sheer number—although not necessarily the proportion—of persons experiencing mental disorders of late life will expand. This trend will present society with unprecedented challenges in organizing, financing, and delivering effective preventive and treatment services for mental health.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

## Mental Health Status

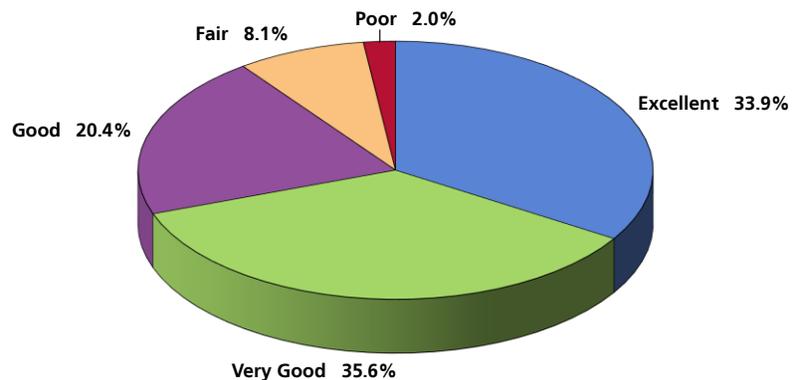
### Self-Reported Mental Health Status

**A total of 69.5% of Yellowstone County adults rate their overall mental health as “excellent” or “very good.”**

- Another 20.4% gave “good” ratings of their own mental health status.

### Self-Reported Mental Health Status

(Yellowstone County, 2010)



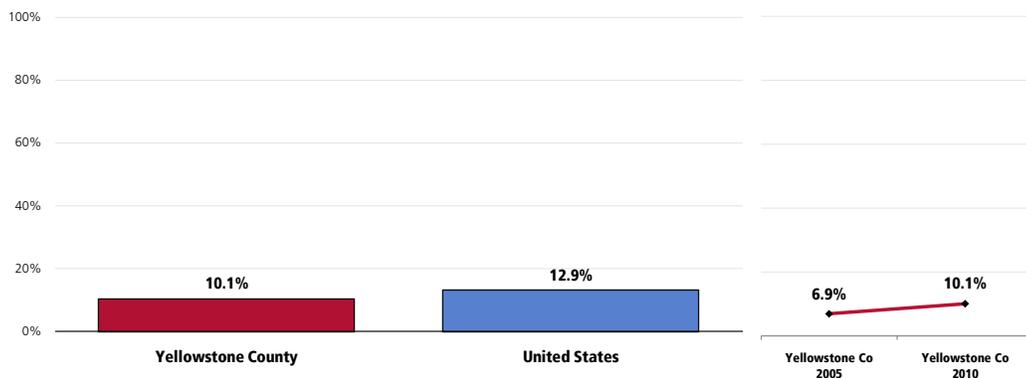
Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 118]  
Notes: • Asked of all respondents.

“Now thinking about your mental health, which includes stress, depression and problems with emotions, would you say that, in general, your mental health is: excellent, very good, good, fair or poor?”

**A total of 10.1% of Yellowstone County adults, however, believe that their overall mental health is “fair” or “poor.”**

- Similar to the 12.9% “fair/poor” reported nationally.
- ☒ Statistically similar to 2005 findings.

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

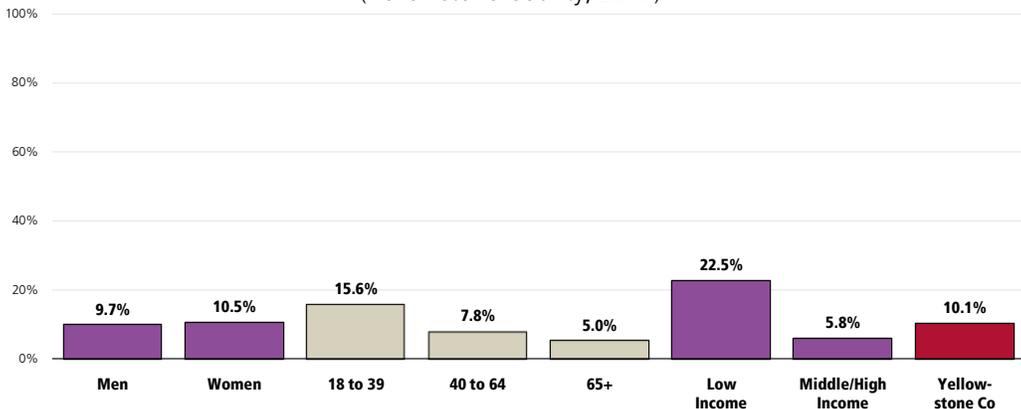


Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 118]  
 ● 2008 PRC National Health Survey, Professional Research Consultants.

Notes: ● Asked of all respondents.

- ☒ Note the negative correlation between fair/poor mental health and age.
- ☒ Adults living on lower incomes are much more likely to report experiencing “fair/poor” mental health than those with higher incomes.

**Experience “Fair” or “Poor” Mental Health**  
 (Yellowstone County, 2010)



Sources: ● 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 118]

Notes: ● Asked of all respondents.  
 ● Income categories reflect respondent’s household income as a ratio to the federal poverty level for their household size: “low income” = below poverty or 100% to 200% of poverty; “middle/high income” = over 200% of poverty.

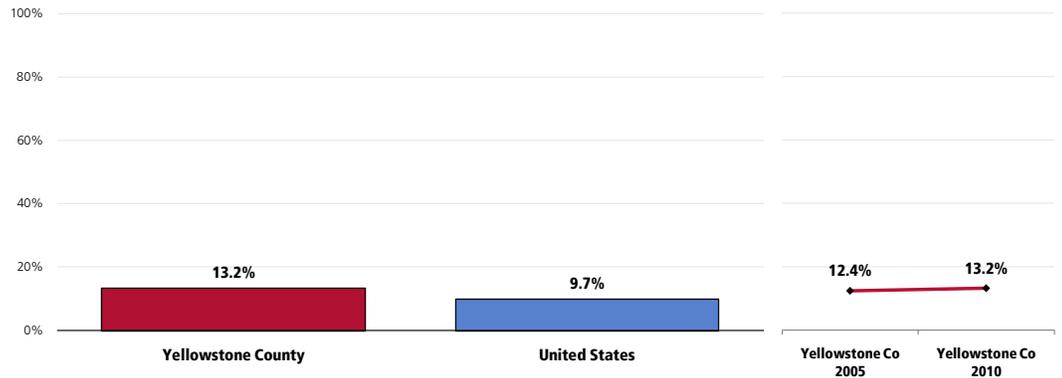
# Depression

## Major Depression

A total of 13.2% of Yellowstone County adults have been diagnosed with major depression by a physician or other healthcare professional.

- Statistically similar to the national figure (9.7%).
- ☒ Statistically similar to 2005 findings.

### Have Been Diagnosed With Major Depression



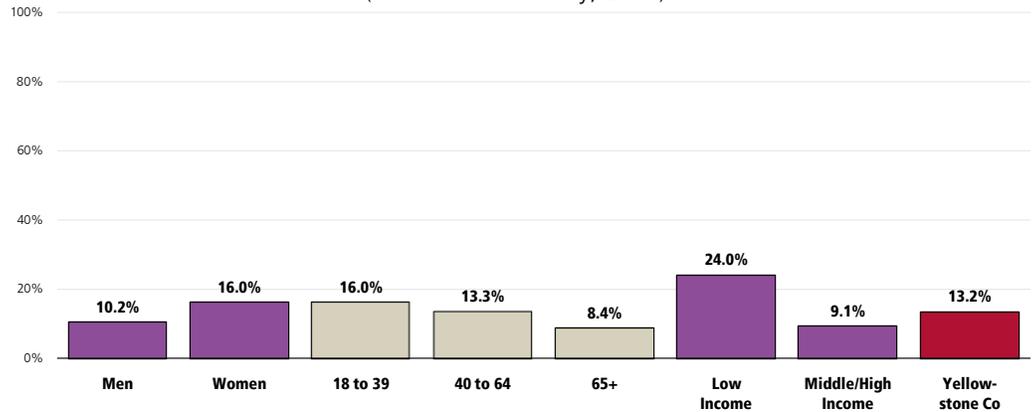
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 30]  
 • 2008 PRC National Health Survey, Professional Research Consultants.

Notes: • Asked of all respondents.

👥 The prevalence of major depression is notably higher among adults living in the lower income category.

### Have Been Diagnosed With Major Depression

(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 30]

Notes: • Asked of all respondents.

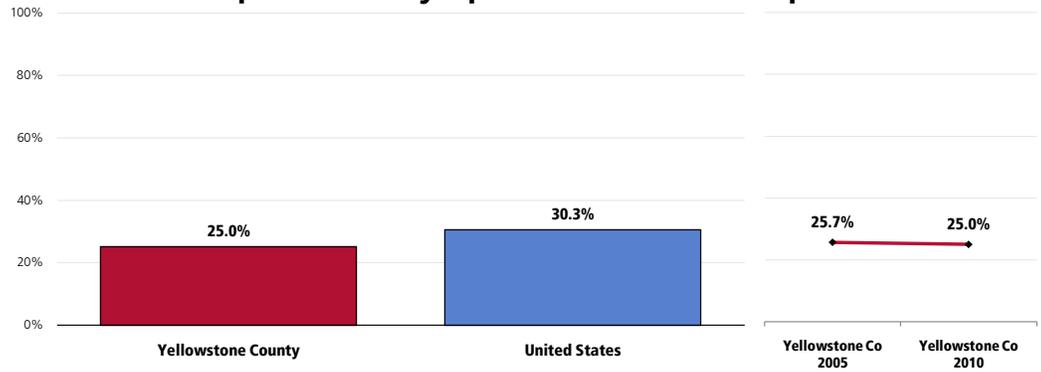
• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## Symptoms of Chronic Depression

**A total of 25.0% of Yellowstone County adults have had 2 or more years in their lives when they felt depressed or sad on most days, although they may have felt okay sometimes (chronic depression).**

- More favorable than the national findings (30.3%).
- ▣ Similar to that reported in Yellowstone County in 2005.

### Have Experienced Symptoms of Chronic Depression



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 119]  
● 2008 PRC National Health Survey, Professional Research Consultants.

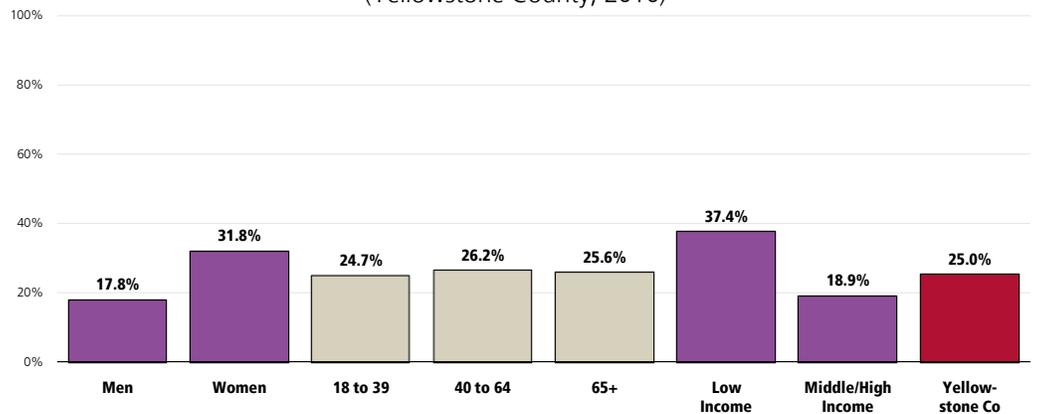
Notes: ● Asked of all respondents.

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

- 👩 Women.
- 👨 Low-income residents.

### Have Experienced Symptoms of Chronic Depression

(Yellowstone County, 2010)



Sources: ● 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 119]

Notes: ● Asked of all respondents.

● Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

# Suicide

RELATED ISSUE:  
For age-adjusted mortality due to suicide, see *Intentional Injury, Suicide* in the **Injury & Violence** section of this report.

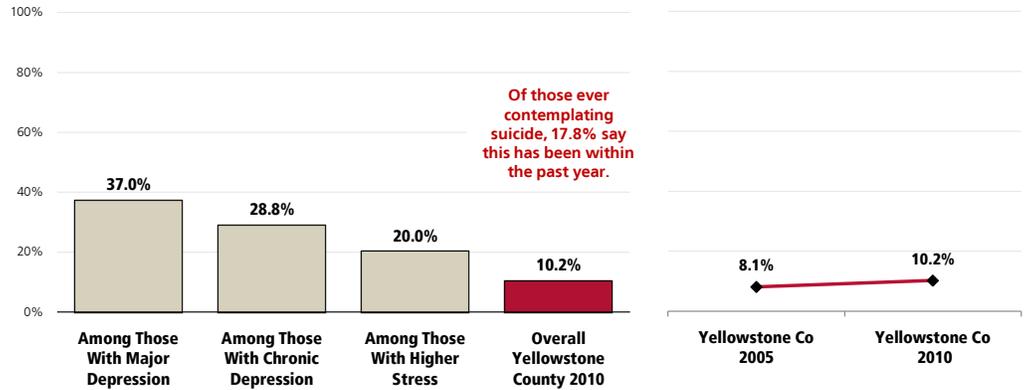
## One in 10 Yellowstone County adults (10.2%) admits that he or she has considered attempting suicide at some point.

- Of these adults, 17.8% indicate that they considered suicide within the past year.

 Among adults who have been diagnosed with major depression, the prevalence of adults who have considered suicide is higher (37.0%).

 Over time, the prevalence has not changed significantly.

### Have Ever Considered Attempting Suicide



Sources: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 122]

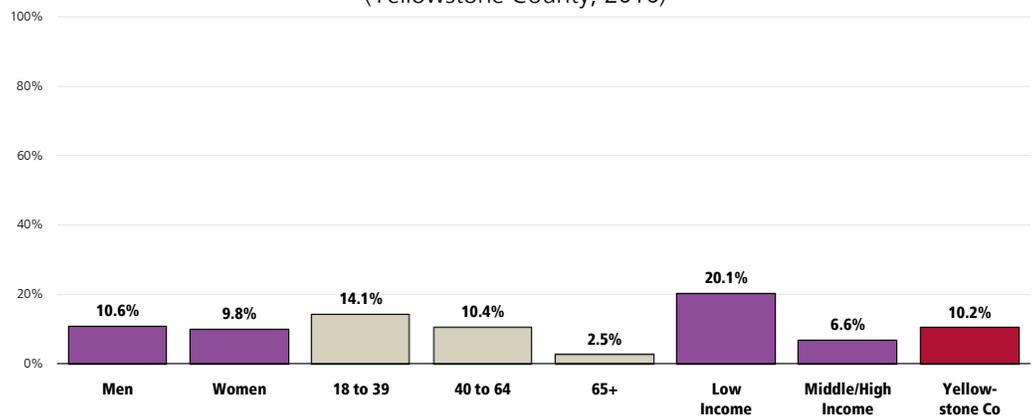
  
Notes: 

- Asked of all respondents.

Note that adults more likely to have considered attempting suicide include:

-  Those under age 65.
-  Those with lower incomes.

### Have Ever Considered Attempting Suicide (Yellowstone County, 2010)



Sources: 

- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 122]

  
Notes: 

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

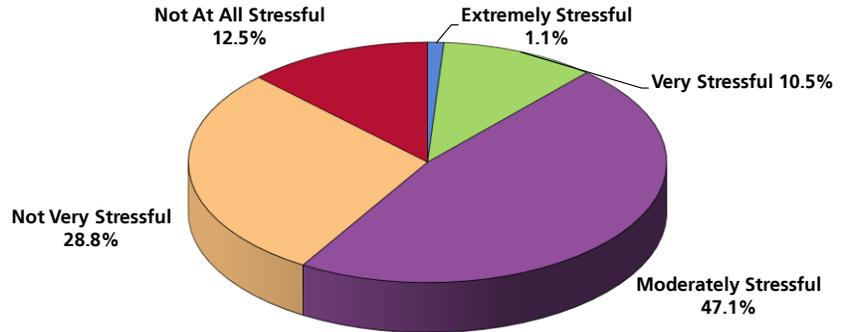
## Stress

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

**Over 40% of Yellowstone County adults consider their typical day to be “not very stressful” (28.8%) or “not at all stressful” (12.5%).**

- Another 47.1% of survey respondents characterize their typical day as “moderately stressful.”

### Perceived Level of Stress On a Typical Day (Yellowstone County, 2010)

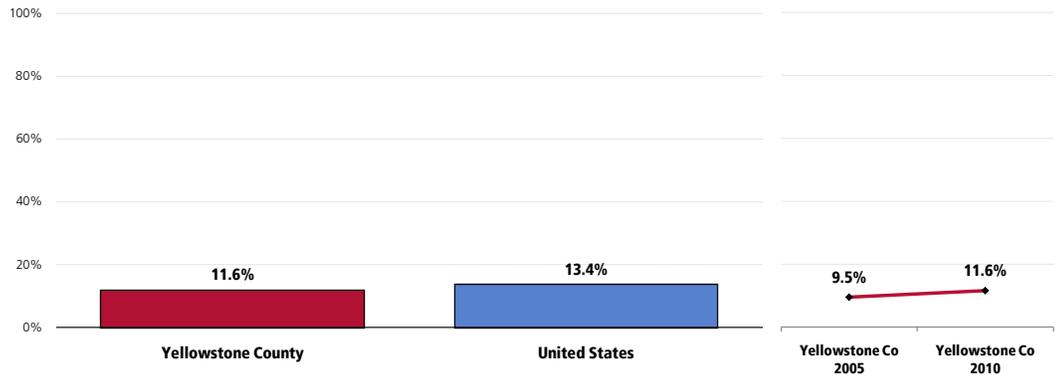


Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 120]  
Notes: • Asked of all respondents.

**In contrast, 11.6% of Yellowstone County adults experience “very” or “extremely” stressful days on a regular basis.**

- Similar to national findings (13.4%).
- ☒ Statistically similar to the 2005 findings.

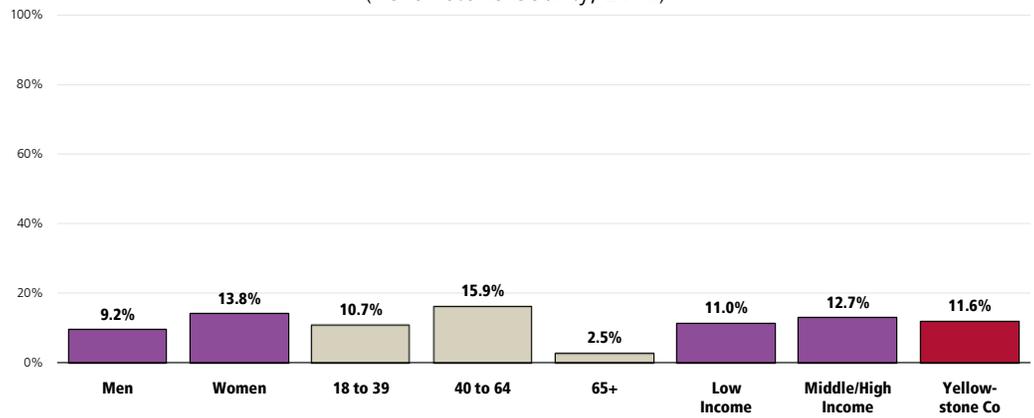
### Perceive Most Days As “Extremely” or “Very” Stressful



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 120]  
• 2008 PRC National Health Survey, Professional Research Consultants.  
Notes: • Asked of all respondents.

👤 Note that high stress levels are more prevalent among adults under age 65.

## Perceive Most Days as “Extremely” or “Very” Stressful (Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 120]

Notes: • Asked of all respondents.

• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## Mental Health Treatment

Modern treatments for mental disorders are highly effective, with a variety of treatment options available for most disorders, [however], the majority of persons with mental disorders do not receive mental health services.

Evidence that mental disorders are legitimate and highly responsive to appropriate treatment promises to be a potent antidote to stigma. Stigma creates barriers to providing and receiving competent and effective mental health treatment and can lead to inappropriate treatment, unemployment, and homelessness.

The co-occurrence of addictive disorders among persons with mental disorders is gaining increasing attention from mental health professionals. Having both mental and addictive disorders is a particularly significant clinical treatment issue, complicating treatment for each disorder.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

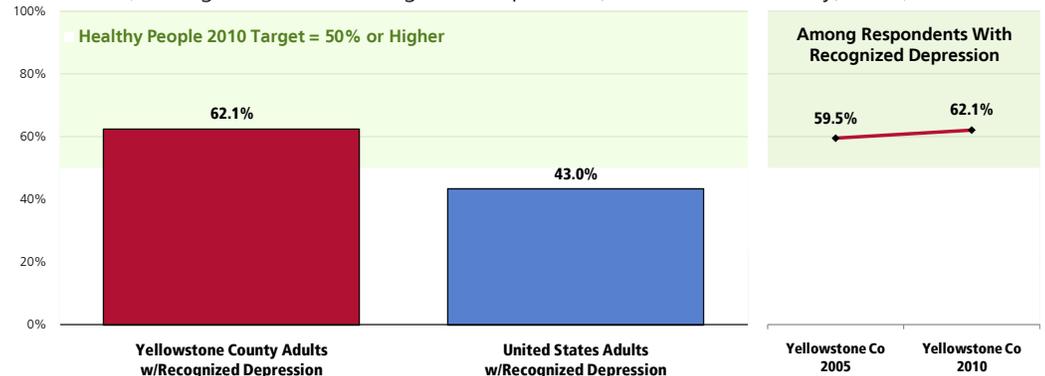
In this case, adults with “recognized depression” includes respondents reporting a diagnosis of major depression and/or reporting symptoms of chronic depression.

### Among adults with recognized depression, 62.1% acknowledge that they have sought professional help for a mental or emotional problem.

- More favorable than national findings (43.0%).
- Satisfies the Healthy People 2010 goal of 50% or higher.
- 📊 There has been no statistically significant change since 2005 among adults with recognized depression in Yellowstone County.

### Have Sought Professional Help for a Mental or Emotional Problem

(Among Those With Recognized Depression; Yellowstone County, 2010)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 183]  
• 2008 PRC National Health Survey, Professional Research Consultants.  
• Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 18-9b]  
Notes: • Asked of those respondents with recognized depression.

### Related Focus Group Findings: Mental Health Treatment

Mental health issues (including substance abuse) were a dominant topic in all five groups. Each group voiced concern that, although the Crisis Center is a wonderful addition to the community, it just isn't enough since it does not have an adequate medical staff and has only one nurse practitioner on staff.

According to focus group participants, there are many people in Billings who aren't getting mental healthcare because the treatment centers don't have enough space for the number of people who require therapy. Further, there aren't enough counselors or psychiatrists to treat everyone in the Billings community needing

mental health treatment. Additionally, those without insurance or money have very few options for mental health or substance abuse help.

*“Statewide funding for mental health has been depleted. Caseworkers are overworked and there are no prescribing psychiatrists until you get to Rapid City. There is a huge need for additional mental health professionals.” – Educator*

*“The community needs a long-term mental health treatment center. There is currently not one available and short-term centers don’t work.” – Educator*

*“There are substance abuse centers available if you have money. If you have no money, you’re out of luck.” –Educator*

*“I’d love to see primary care and mental health integrated and there are pockets of it but we just don’t do it. Primary care docs will make a referral. About half of those people don’t show up once they leave that primary care doctor’s office. And if you have co-located social workers, primary care docs, psychologists, I think you could provide a much better level of care, but that’s just not the way our system does it.” –Physician*

*“I think it’s about a two- to three-month wait most places for psychiatry.” –Physician*

*“I hear from professionals in the field that it’s very tough for new patients to get appointments at the mental health center.” –Legislator*

*“They can go to the crisis center, but that’s only a 23-hour deal. You’ve got to go and come back, and they don’t have mid-levels, they don’t have meds there, so you’ve got to get referred out to get all of that.” –Legislator*

*“If you have Medicaid, you have mental healthcare. If you have Medicaid, you can be admitted and go to a residential treatment center and Medicaid pays the bill. If you have insurance, who knows what your insurance policy is going to pay for if you have a child who needs a residential placement. And if you have no insurance or do not qualify for Medicaid then there’s virtually nothing in the area.” –Social Services*

*“There have been some wonderful projects in much more inventive states than Montana where they have developed some exciting things around families with a child with mental illness. They redid a motel and these families were trying to get their child stabilized and they could stay at this place that had mini-apartments where all the services were wrapped around them for stabilization. Then they moved them to lesser intensive care without ever having to do the expense of residential treatment which is eating our state budget into oblivion.” –Social Services*

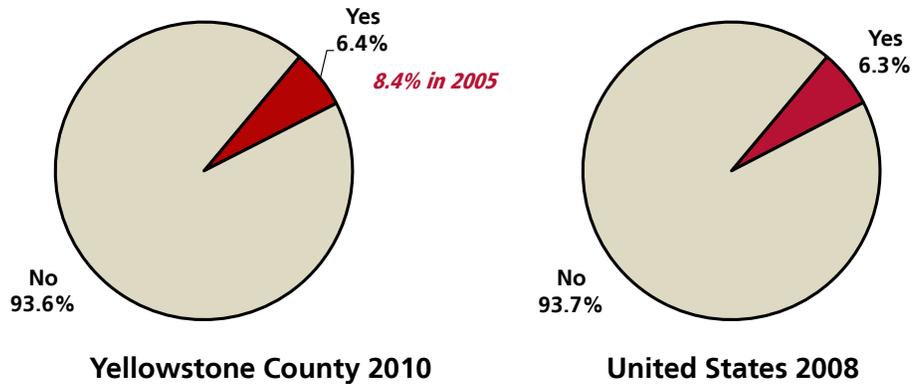
## Children & ADD/ADHD

Among Yellowstone County adults with children aged 5 to 17, 6.4% report that their child takes medication for ADD/ADHD.

- Nearly identical to the 6.3% prevalence reported nationally.
- Statistically unchanged since 2005.
- No statistical difference in ADD/ADHD prevalence by age or gender (not shown).

### Child Takes Medication for ADD/ADHD

(Among Parents of Children Aged 5 to 17)



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 138]
- 2008 PRC National Health Survey, Professional Research Consultants, Inc.

Notes:

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

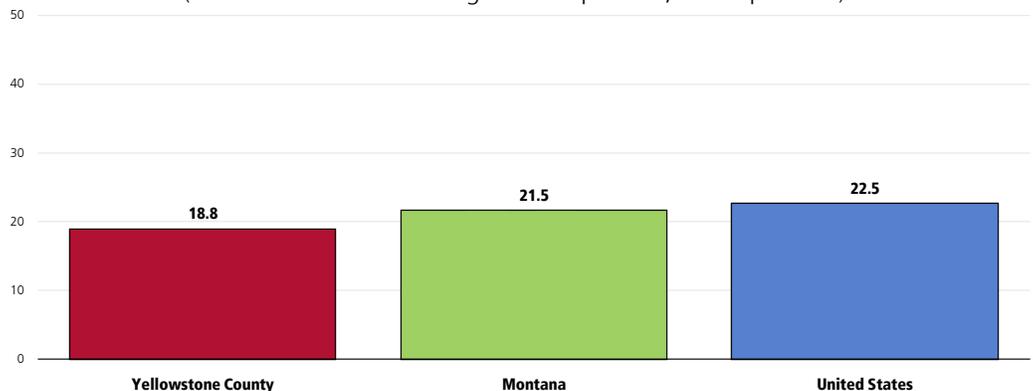
## Age-Adjusted Alzheimer's Disease Deaths

Between 2004 and 2006, there was an annual average age-adjusted Alzheimer's disease mortality rate of 18.8 deaths per 100,000 population in Yellowstone County.

- More favorable than the Montana rate (21.5).
- More favorable than the US rate (22.5).

### Alzheimer's Disease: Age-Adjusted Mortality

(2004-2006 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 November 2010.

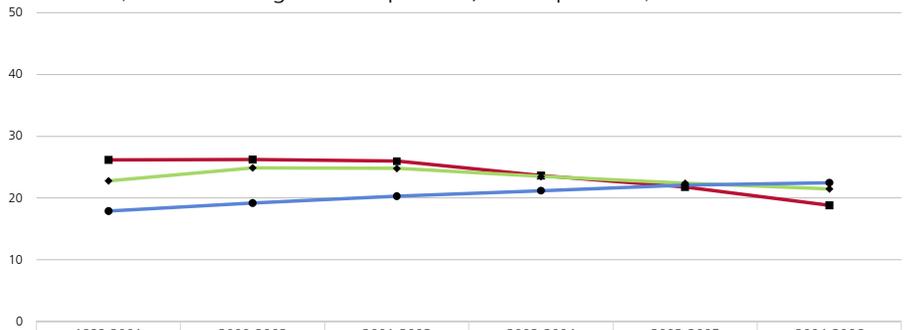
Notes:

- 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 U.S. Standard Population.
- County, state and national data are simple three-year averages.

For more information, see also "Age-Adjusted Death Rates for Selected Causes" in the next section of this report.

☒ A decreasing trend is evident with regard to Alzheimer’s disease mortality rates in Yellowstone County. While rates have fallen somewhat across Montana, US rates have increased steadily in recent years.

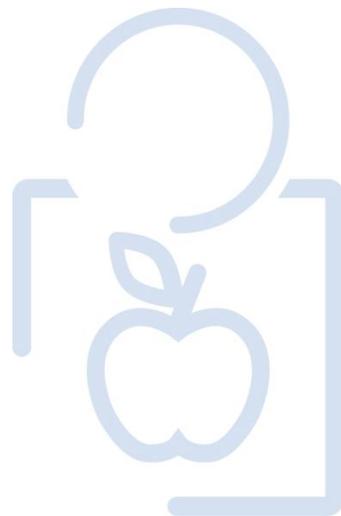
### Alzheimer’s Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006
Yellowstone County	26.2	26.2	26.0	23.7	21.8	18.8
Montana	22.8	24.9	24.8	23.5	22.4	21.5
United States	17.9	19.2	20.3	21.2	22.1	22.5

Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.  
 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 U.S. Standard Population.

# DEATH & DISABILITY



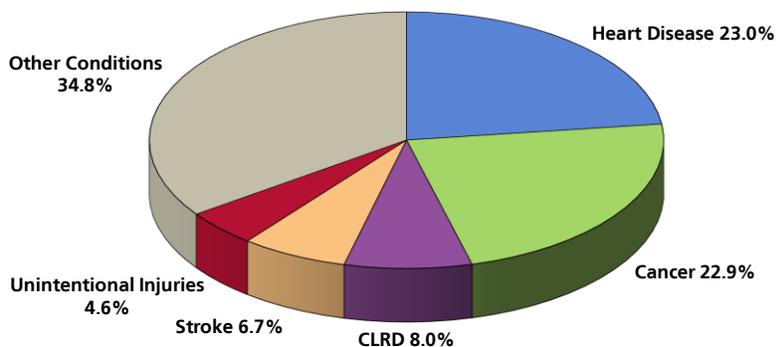
# Leading Causes of Death

## Distribution of Deaths by Cause

Together, heart disease and cancers accounted for nearly one-half of all deaths in Yellowstone County between 2004 and 2006.

### Leading Causes of Death

(Yellowstone County, 2004-2006)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.  
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).  
• CLRD is chronic lower respiratory disease.

## Age-Adjusted Death Rates for Selected Causes

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

Furthermore, in order to compare localities without undue bias toward younger or older populations, the common convention is to adjust the data to some common baseline age distribution. Use of these “age-adjusted” rates provides the most valuable means of gauging mortality against benchmark data, as well as *Healthy People 2010* targets.

The following chart outlines 2004-2006 annual average age-adjusted death rates per 100,000 population for selected causes of death in Yellowstone County.

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

**Age-adjusted mortality rates in Yellowstone County are better than national rates for heart disease, diabetes, pneumonia/influenza, Alzheimer's disease, homicide, and HIV/AIDS.**

On the other hand, of the selected causes below that have associated Healthy People 2010 targets, Yellowstone County only satisfies (or is close to satisfying) those related to heart disease, stroke and HIV.

**Age-Adjusted Death Rates for Selected Causes**

(2004-2006 Deaths per 100,000)

	Yellowstone County	Montana	US	HP2010
<b>Diseases of the Heart</b>	174.3	170.4	209.6	213.7*
<b>Malignant Neoplasms (Cancers)</b>	181.3	181.1	183.6	159.9
<b>Chronic Lower Respiratory Disease (CLRD)</b>	63.2	54.5	41.6	n/a
<b>Cerebrovascular Disease (Stroke)</b>	50.4	44.8	46.7	48.0
<b>Unintentional Injuries</b>	37.7	54.5	39.0	17.5
<b>Intentional Self-Harm (Suicide)</b>	18.6	20.1	10.9	5.0
<b>Diabetes Mellitus</b>	19.5	24.0	24.2	15.1*
<b>Influenza/Pneumonia</b>	11.5	16.4	19.3	n/a
<b>Motor Vehicle Crashes</b>	16.9	25.9	15.1	9.2
<b>Cirrhosis/Liver Disease</b>	9.8	10.6	8.9	3.0
<b>Alzheimer's Disease</b>	18.8	21.5	22.5	n/a
<b>Homicide/Legal Intervention</b>	4.1	3.3	6.1	3.0
<b>HIV/AIDS *</b>	0.6	0.6	4.7	0.7

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.

• Centers for Disease Control and Prevention, National Center for Health Statistics. Health, United States, 2004.

• Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000.

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

• \*The Healthy People 2010 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.

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

• \*HIV/AIDS data is 1999-2006.

# Cardiovascular Disease

Heart disease and stroke—the principal components of cardiovascular disease—are the first and third leading causes of death in the United States, accounting for more than 40% of all deaths.

- About 950,000 adults die of heart disease or stroke each year, which amounts to one death every 33 seconds.
- Although heart disease and stroke are often thought to affect men and older people primarily, it is also a major killer of women and people in the prime of life. More than half of those who die of heart disease or stroke each year are women.
- Each year, about 63 of every 100,000 deaths are due to stroke.

Looking at only deaths due to heart disease or stroke, however, understates the health effects of these two conditions:

- About 61 million adults (almost one-fourth of the population) live with the effects of stroke or heart disease.
- Heart disease is a leading cause of disability among working adults.
- Stroke alone accounts for the disability of more than 1 million adults.
- Almost 6 million hospitalizations each year are due to heart disease or stroke.
- About 4.5 million stroke survivors are alive today.

The economic effects of heart disease and stroke on the US healthcare system grow larger as the population ages. In 2001, for example, the [nationwide] cost for all cardiovascular diseases was \$300 billion: for heart disease the cost was \$105 billion; for stroke, \$28 billion. Lost productivity due to stroke and heart disease cost more than \$129 billion.

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

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

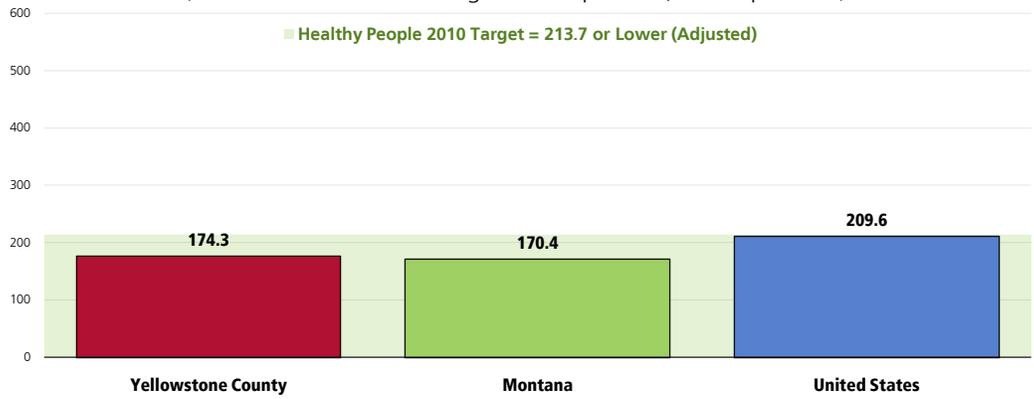
## Age-Adjusted Heart Disease & Stroke Deaths

### Heart Disease Deaths

**Between 2004 and 2006, there was an annual average age-adjusted heart disease mortality rate of 174.3 deaths per 100,000 population in Yellowstone County.**

- Similar to that found statewide (170.4).
- More favorable than the national rate (209.6).
- Satisfies the Healthy People 2010 objective of 213.7 or lower (adjusted to account for all diseases of the heart).

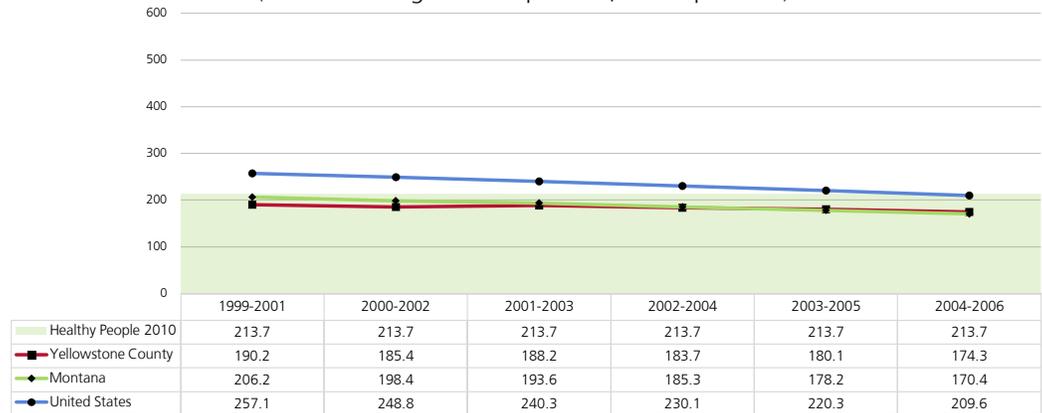
## Heart Disease: Age-Adjusted Mortality (2004-2006 Annual Average Deaths per 100,000 Population)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-1]
- 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 U.S. Standard Population.
  - County, state and national data are simple three-year averages.
  - The Healthy People 2010 Heart Disease target is adjusted to account for all diseases of the heart.

Heart disease mortality rates have decreased in Yellowstone County, echoing the decreasing trends across Montana and the US overall.

## Heart 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 November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-1]
- 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 U.S. Standard Population.
  - State and national data are simple three-year averages.
  - The Healthy People 2010 Heart Disease target is adjusted to account for all diseases of the heart.

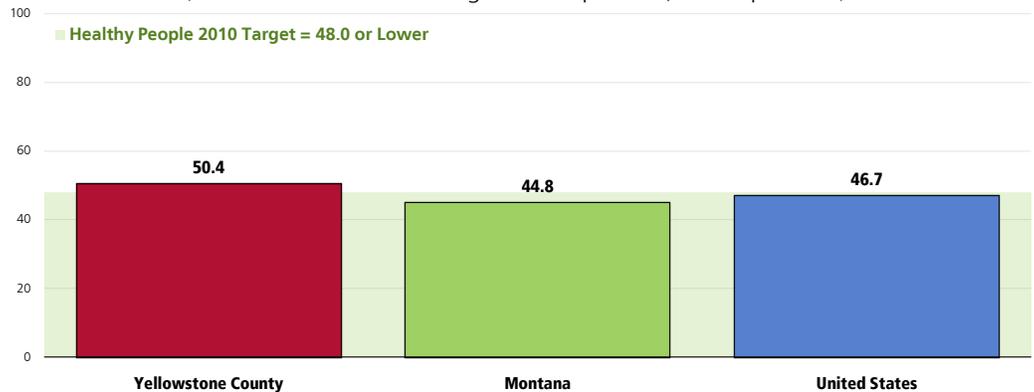
## Stroke Deaths

Between 2004 and 2006, there was an annual average age-adjusted stroke mortality rate of 50.4 deaths per 100,000 population in Yellowstone County.

- Less favorable than the Montana rate (44.8).
- Less favorable than the national rate (46.7).
- Similar to the Healthy People 2010 target of 48.0 or lower.

### Stroke: Age-Adjusted Mortality

(2004-2006 Annual Average Deaths per 100,000 Population)

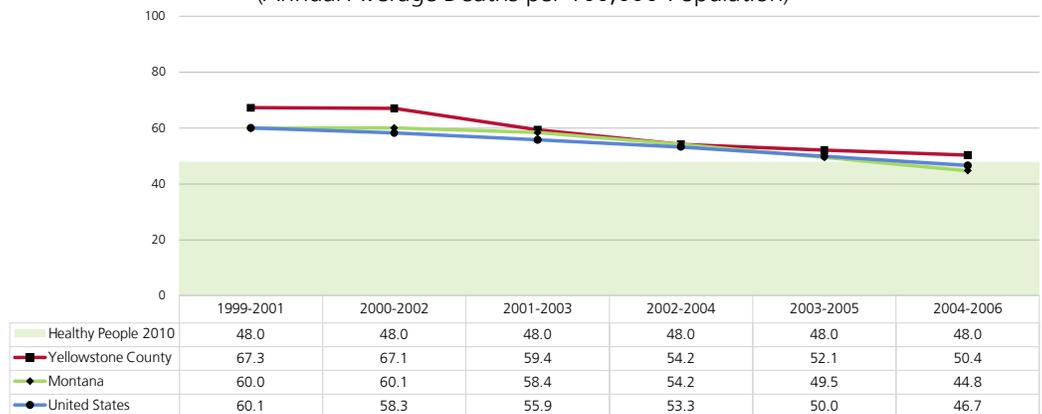


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-7]  
 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 U.S. Standard Population.  
 • County, state and national data are simple three-year averages.

☒ Stroke rates have declined in recent years, echoing state and national trends.

### Stroke: 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 November 2010.  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-7]  
 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 U.S. Standard Population.  
 • State and national data are simple three-year averages.

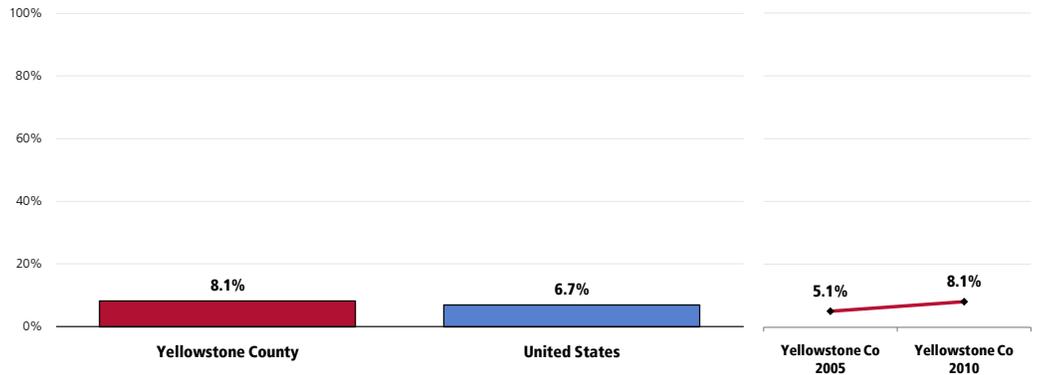
# Prevalence of Heart Disease & Stroke

## Prevalence of Heart Disease

A total of 8.1% of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina or heart attack.

- Similar to the national prevalence (6.7%).
- ▣ Statistically unchanged since 2005.

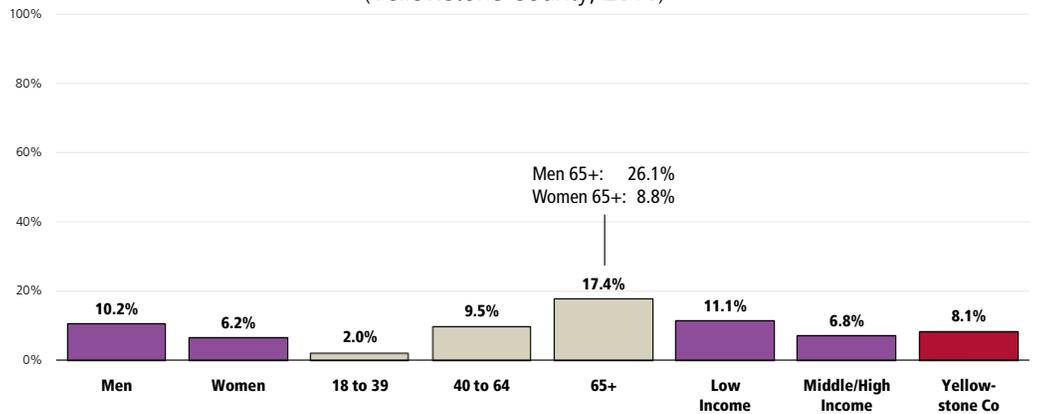
### Prevalence of Heart Disease



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 156]  
 ● 2008 PRC National Health Survey, Professional Research Consultants.  
 Notes: ● Asked of all respondents.

👤 Adults aged 65 and older – and especially males aged 65+ (26.1%) – are more likely to have been diagnosed with chronic heart disease.

### Prevalence of Heart Disease (Yellowstone County, 2010)



Sources: ● 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 156]  
 Notes: ● Asked of all respondents.  
 ● Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

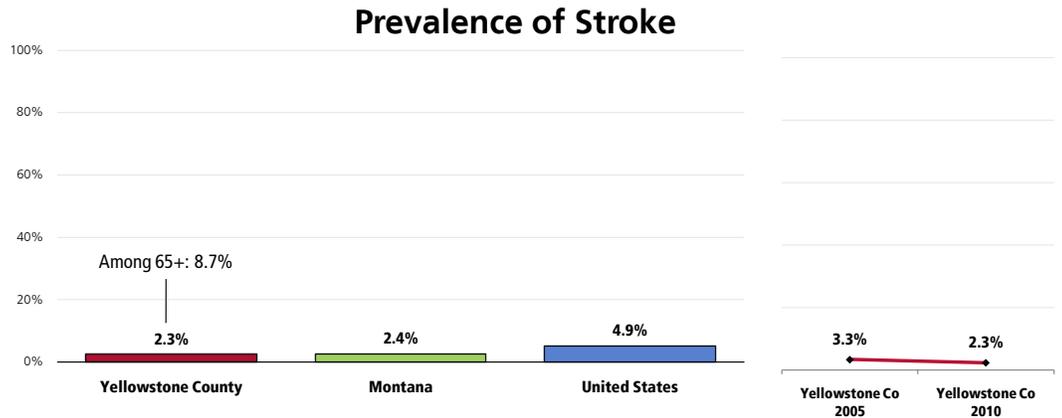
## Prevalence of Stroke

**A total of 2.3% of surveyed adults report that they suffer from or have been diagnosed with cerebrovascular disease (a stroke).**

- Nearly identical to statewide findings (2.4%).
- More favorable than national findings (4.9%).

 Note: Among residents aged 65 and older, 8.7% have had a stroke.

 Statistically unchanged from the 3.3% reported in 2005.



Sources: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 33]
- 2008 PRC National Health Survey, Professional Research Consultants.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2009 STATE data.

Notes: 

- Asked of all respondents.

## Cardiovascular Risk Factors

### Hypertension (High Blood Pressure)

High blood pressure is known as the “silent killer” and remains a major risk factor for coronary heart disease, stroke, and heart failure. About 50 million adults in the United States have high blood pressure.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

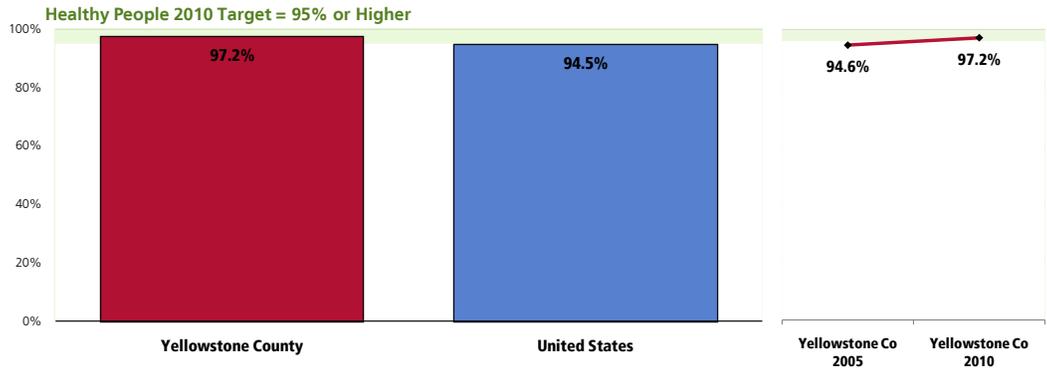
### High Blood Pressure Testing

**A total of 97.2% of Yellowstone County adults have had their blood pressure tested within the past 2 years.**

- Higher than national findings (94.5%).
- Satisfies the Healthy People 2010 target (95% or higher).

 Statistically unchanged since 2005.

## Have Had Blood Pressure Checked in the Past 2 Years



Sources:
 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 40]
- 2008 PRC National Health Survey, Professional Research Consultants.
- Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-12]

 Notes:
 

- Asked of all respondents.

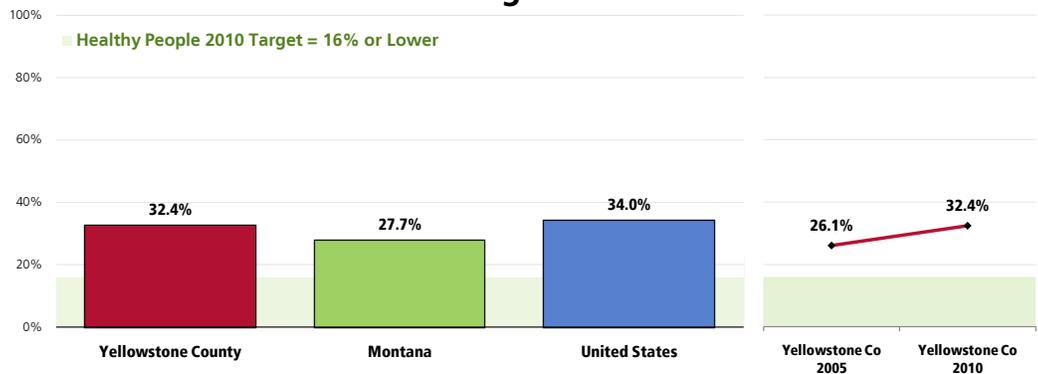
## Prevalence of Hypertension

**A total of 32.4% of adults have been told at some point that their blood pressure was high.**

- Similar to the Montana prevalence (27.7%).
- Similar to the national prevalence (34.0%).
- Twice the Healthy People 2010 target (16% or lower).

 Marks a statistically significant increase over time.

## Prevalence of High Blood Pressure



Sources:
 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 38, 153]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2009 Montana data.
- 2008 PRC National Health Survey, Professional Research Consultants.
- Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-9]

 Notes:
 

- Asked of all respondents.

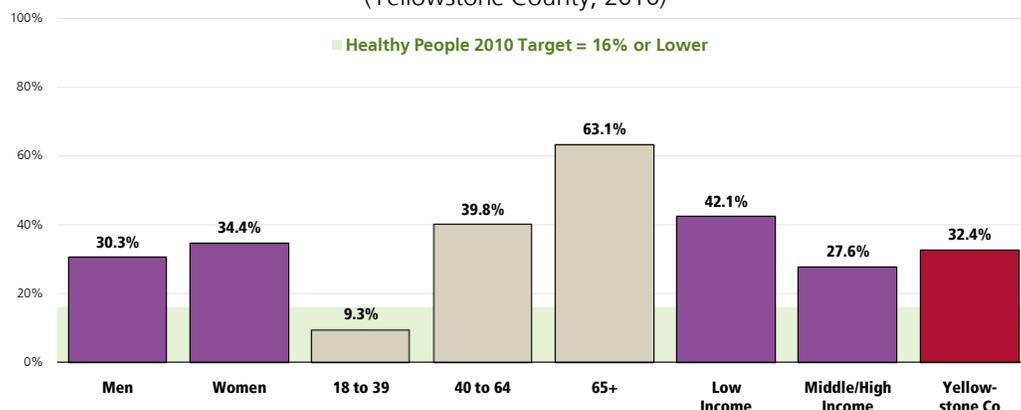
Note that 2.7% of county adults have not had their blood pressure tested in the past 5 years, if ever. For these individuals, prevalence is unknown.

Hypertension diagnoses are higher among:

-  Adults aged 40 and older, and especially those aged 65+.
-  Low-income residents.

## Prevalence of High Blood Pressure

(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 153]  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-9]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty  $\geq$  100% to 200% of poverty; "middle/high income" = over 200% of poverty.

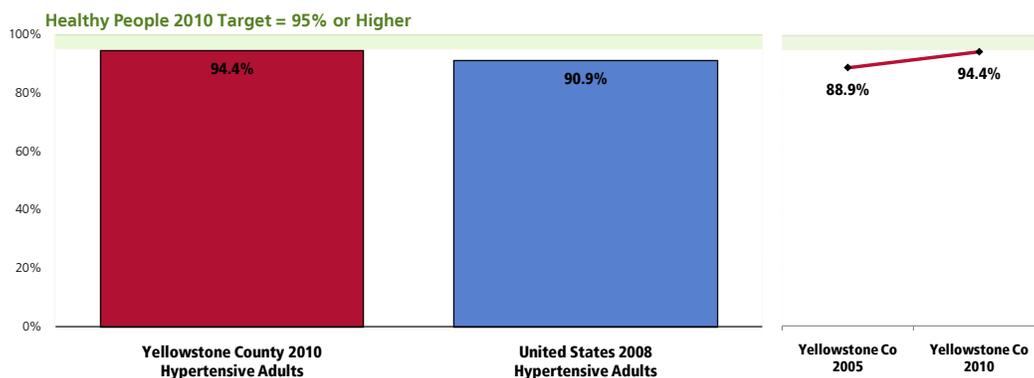
## Hypertension Management

**Among respondents who have been told that their blood pressure was high, 94.4% report that they are currently taking actions to control their condition.**

- Similar to national findings (90.9%).
- Similar to the Healthy People 2010 target of 95% or higher.
-  Statistically unchanged since 2005.

## Taking Action to Control Hypertension

(Among Yellowstone County Adults with High BP, 2010)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 39]  
 • 2008 PRC National Health Survey, Professional Research Consultants.  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-11]  
 Notes: • Asked of all respondents who have been diagnosed with high blood pressure.  
 • In this case, the term "action" refers to medication, change in diet, and/or exercise.

Respondents reporting high blood pressure were further asked:

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

## High Blood Cholesterol

High blood cholesterol is a major risk factor for coronary heart disease that can be modified. More than 50 million US adults have blood cholesterol levels that require medical advice and treatment. More than 90 million adults have cholesterol levels that are higher than desirable. Experts recommend that all adults aged 20 years and older have their cholesterol levels checked at least once every 5 years to help them take action to prevent or lower their risk of coronary heart disease. Lifestyle changes that prevent or lower high blood cholesterol include eating a diet low in saturated fat and cholesterol, increasing physical activity, and reducing excess weight.

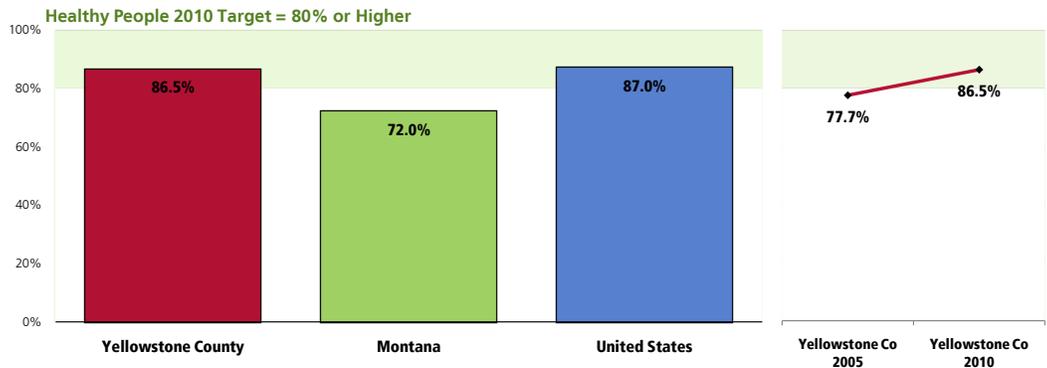
– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

### Blood Cholesterol Testing

**A total of 86.5% of Yellowstone County adults have had their blood cholesterol checked within the past 5 years.**

- More favorable than Montana findings (72.0%).
- Similar to the national findings (87.0%).
- Satisfies the Healthy People 2010 target (80% or higher).
- ☒ Denotes a statistically significant increase since 2005.

### Have Had Blood Cholesterol Levels Checked in the Past 5 Years



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 43]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2009 Montana data.
- 2008 PRC National Health Survey, Professional Research Consultants.
- Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-15]

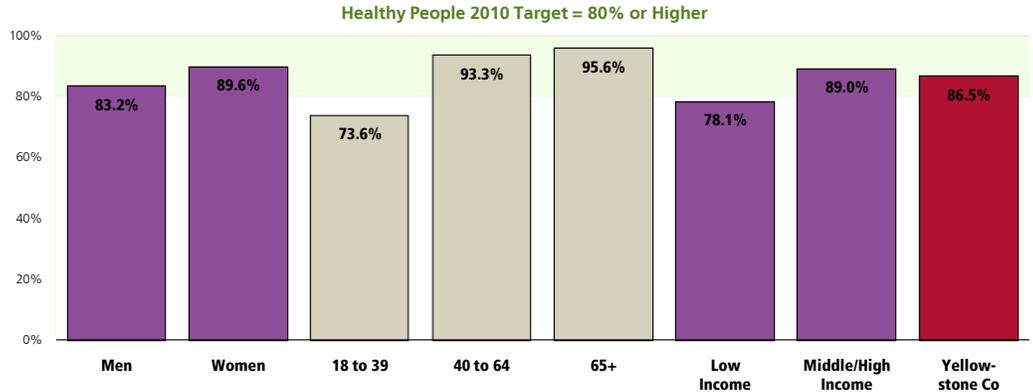
Notes:

- Asked of all respondents.

The following demographic segments report lower screening levels:

-  Adults under age 40.
-  Residents with lower incomes.

## Have Had Blood Cholesterol Levels Checked in the Past 5 Years (Yellowstone County, 2010)



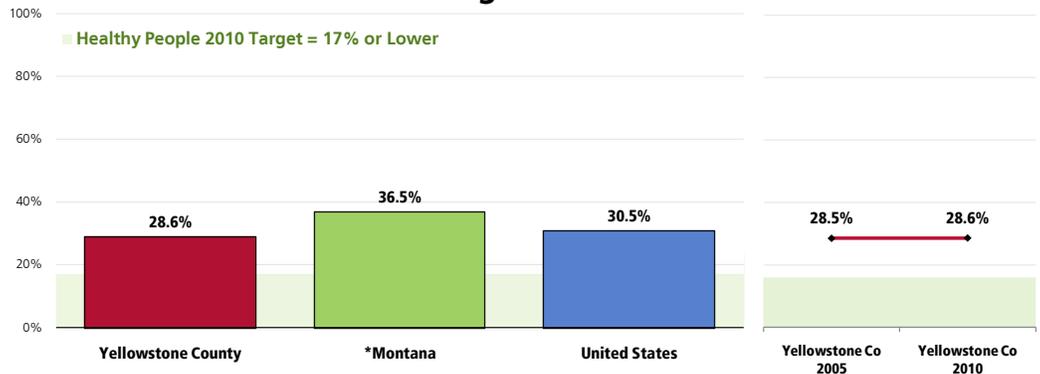
- Sources:
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 43]
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-15]
- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## Self-Reported High Blood Cholesterol

**A total of 28.6% of adults have been told by a health professional that their cholesterol level was high.**

- More favorable than the Montana findings (36.5%).
- Similar to the national prevalence (30.5%).
- Fails to meet the Healthy People 2010 target (17% or lower).
-  Nearly identical to 2005 Yellowstone County findings.

## Prevalence of High Blood Cholesterol



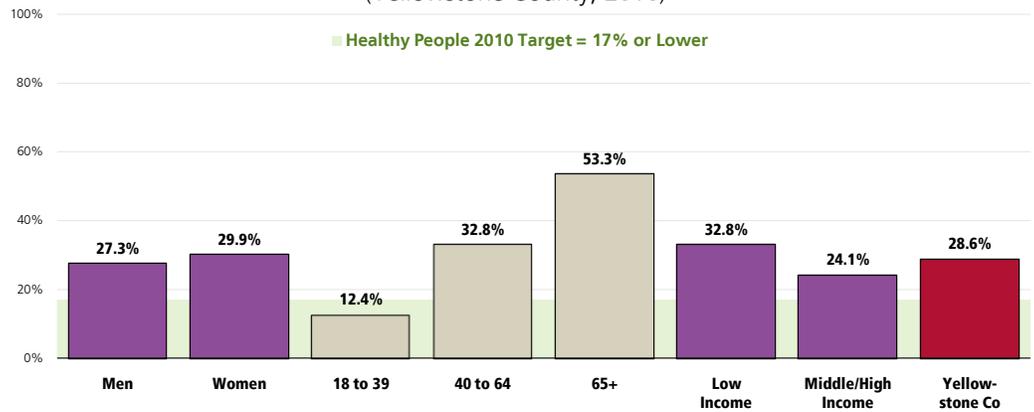
- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 41, 154]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2009 Montana data.
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-14]
- 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 16.4% of county adults have not had their blood cholesterol checked in the past 5 years, if ever. For these individuals, prevalence is unknown.

- 👥 Note the positive correlation between age and high blood cholesterol.
- 👥 Keep in mind that “unknowns” are relatively high in men, young adults, and lower-income residents.

## Prevalence of High Blood Cholesterol

(Yellowstone County, 2010)



- Sources:
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 154]
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 12-14]
- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## High Cholesterol Management

Respondents reporting high cholesterol were further asked:

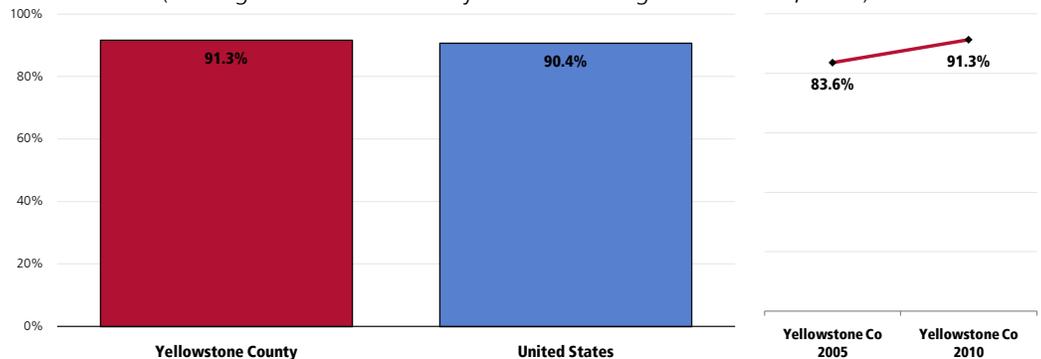
*"Are you currently taking any action to help control your high cholesterol, such as taking medication, changing your diet, or exercising?"*

**Among adults who have been told that their blood cholesterol was high, 91.3% report that they are currently taking actions to control their cholesterol levels.**

- Comparable to the national figure (90.4%).
- 📊 Statistically unchanged since 2005.

## Taking Action to Control High Blood Cholesterol Levels

(Among Yellowstone County Adults with High Cholesterol, 2010)



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 42]
  - 2008 PRC National Health Survey, Professional Research Consultants.
- Notes:
- Asked of all respondents who have been diagnosed with high blood cholesterol levels.
  - In this case, the term "action" refers to medication, change in diet, and/or exercise.

## Total Cardiovascular Risk

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

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

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

Three health-related behaviors contribute markedly to cardiovascular disease:

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

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

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

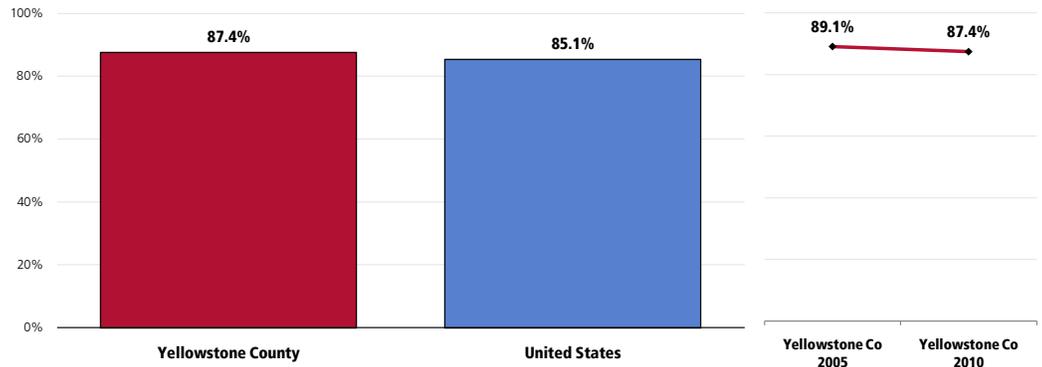
Modifying these behaviors is critical both for preventing and for controlling cardiovascular disease. Other steps that adults who have cardiovascular disease should take to reduce their risk of death and disability include adhering to treatment for high blood pressure and cholesterol, using aspirin as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

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

**A total of 87.4% of Yellowstone County adults report one or more cardiovascular risk factors, such as being overweight, smoking cigarettes, being physically inactive, or having high blood pressure or cholesterol.**

- Similar to national findings (85.1%).
- ☒ Statistically similar to the 2005 findings.

### Present One or More Cardiovascular Risks or Behaviors

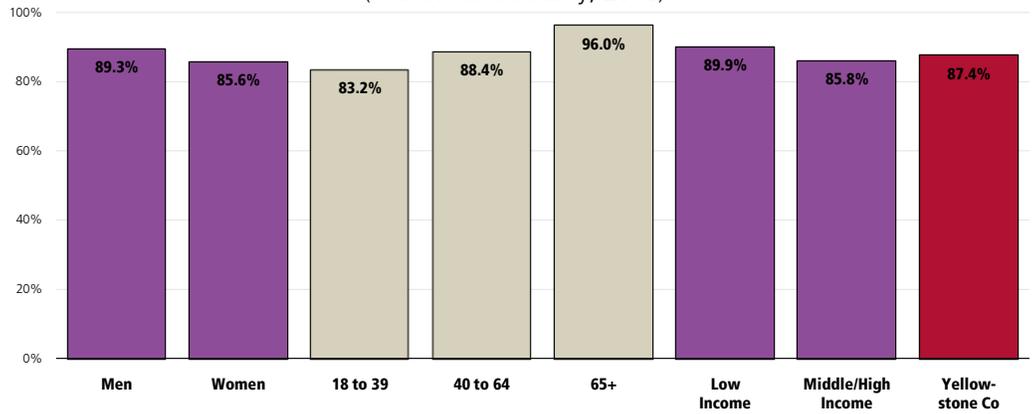


Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 152]  
 ● 2008 PRC National Health Survey, Professional Research Consultants.  
 Notes: ● Asked of all respondents.

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

👥 Seniors are more likely to exhibit cardiovascular risk factors.

### Present One or More Cardiovascular Risks or Behaviors (Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 152]  
Notes: • Asked of all respondents.  
• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

# Cancer

Cancer, the second-leading cause of death among adults, is responsible for one of every four deaths in the United States. In 2003, over half a million adults—or more than 1,500 people a day—will die of cancer. Hispanic adults are more likely to die from cancer than people of any other racial or ethnic group.

The financial costs of cancer are staggering. According to the National Institutes of Health, cancers cost the United States more than \$170 billion in 1999. This includes more than \$110 billion in lost productivity and over \$60 billion in direct medical costs.

The number of new cancer cases can be reduced substantially, and many cancer deaths can be prevented. Healthier lifestyles can significantly reduce a person's risk for cancer—for example, avoiding tobacco use, increasing physical activity, improving nutrition, and avoiding sun exposure. Making cancer screening and information services available and accessible to all adults is also essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths from these diseases by finding them early, when they are most treatable. Screening tests for cervical and colorectal cancers can actually prevent these cancers from developing by detecting treatable precancerous conditions.

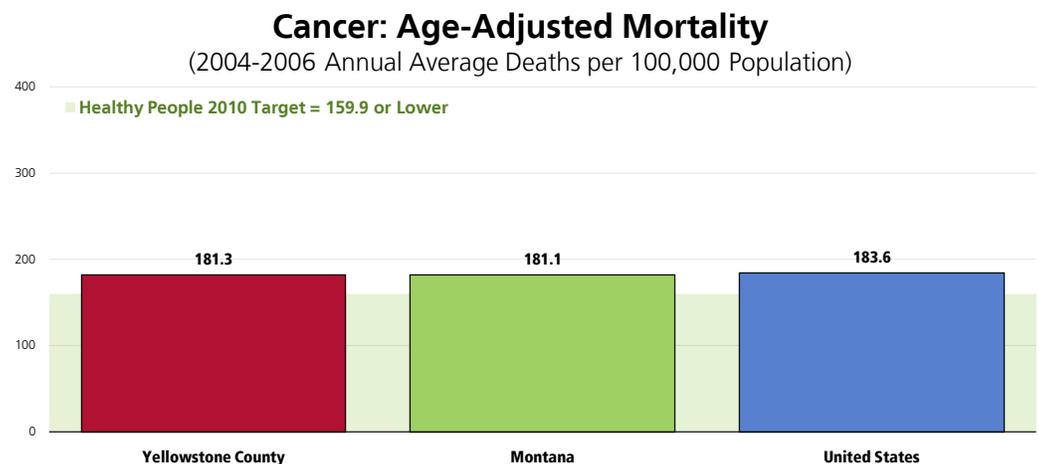
– National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

## Age-Adjusted Cancer Deaths

### All Cancer Deaths

Between 2004 and 2006, there was an annual average age-adjusted cancer mortality rate of 181.3 deaths per 100,000 population in Yellowstone County.

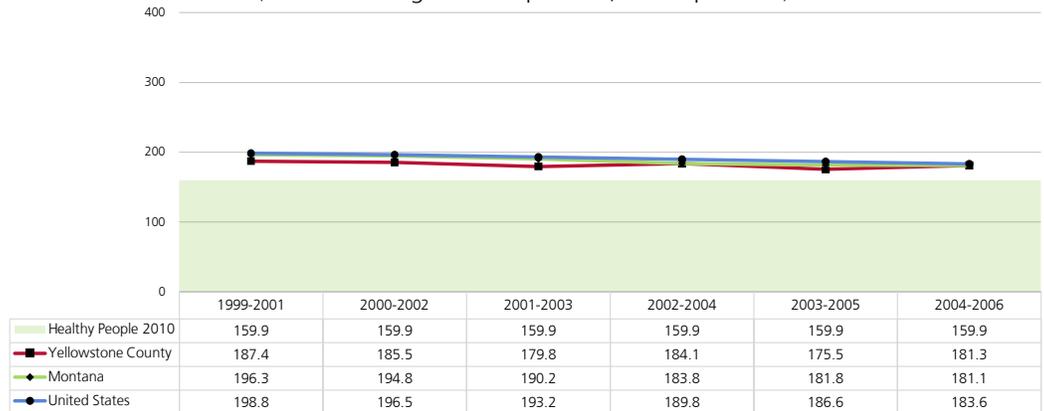
- Nearly identical to the statewide rate (181.1).
- Similar to the national rate (183.6).
- Fails to satisfy the Healthy People 2010 target.



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 3-1]
- 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 U.S. Standard Population.
  - County, state and national data are simple three-year averages.

☒ Cancer mortality rates have overall decreased over the past several years in Yellowstone County; the same trend is apparent both statewide and nationwide.

### Cancer: 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 November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 3-1]
- 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 U.S. Standard Population.
  - State and national data are simple three-year averages.

## Cancer Deaths by Site

### LUNG CANCER

Lung cancer is the most common cause of cancer death among both females and males in the United States. Cigarette smoking is the most important risk factor for lung cancer, accounting for 68 to 78 percent of lung cancer deaths among females and 88 to 91 percent of lung cancer deaths among males. Other risk factors include occupational exposures (radon, asbestos) and indoor and outdoor air pollution (radon, environmental tobacco smoke). One to two percent of lung cancer deaths are attributable to air pollution. After 10 years of abstinence, smoking cessation decreases the risk of lung cancer to 30 to 50 percent of that of continuing smokers.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

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

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

As can be seen in the following chart (referencing 2004-2006 annual average age-adjusted death rates):

- The Yellowstone County **lung cancer** death rate is higher than both the state and national rates.
- The Yellowstone County **prostate cancer** death rate is higher than both the state and national rates.
- The Yellowstone County **female breast cancer** death rate is lower than the Montana rate, but similar to the US rate.
- The Yellowstone County **colorectal cancer** death rate is just below the state and national rates.

Note that each of Yellowstone County cancer death rates detailed below fails to satisfy the related Healthy People 2010 objective.

### Age-Adjusted Cancer Death Rates by Site (2004-2006)

	Yellowstone Co	Montana	US	HP2010
<b>Lung Cancer</b>	56.8	49.9	52.5	44.8
<b>Prostate Cancer</b>	32.3	28.8	25.5	28.8
<b>Female Breast Cancer</b>	23.6	29.5	24.5	22.3
<b>Colorectal Cancer</b>	16.2	17.0	17.6	13.9

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.  
• Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000.

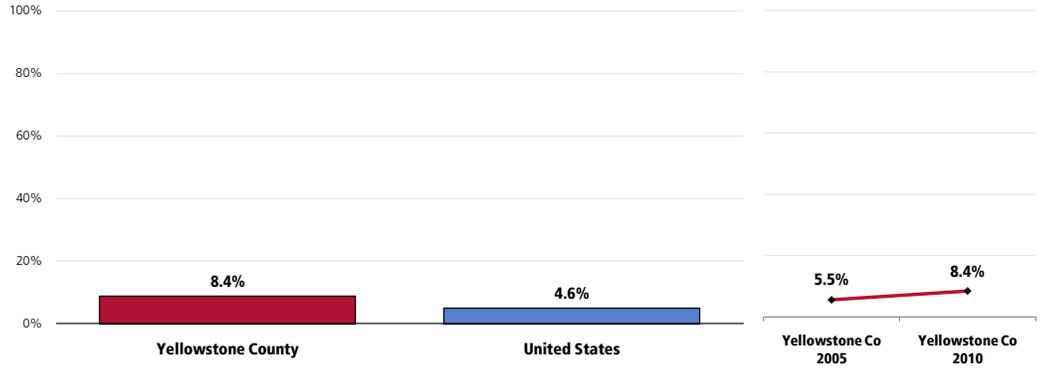
## Prevalence of Cancer

### Skin Cancer

**A total of 8.4% of surveyed Yellowstone County adults report having been diagnosed with skin cancer.**

- Less favorable than the national average (4.6%).
- ☒ Statistically similar to 2005 findings.

### Prevalence of Skin Cancer



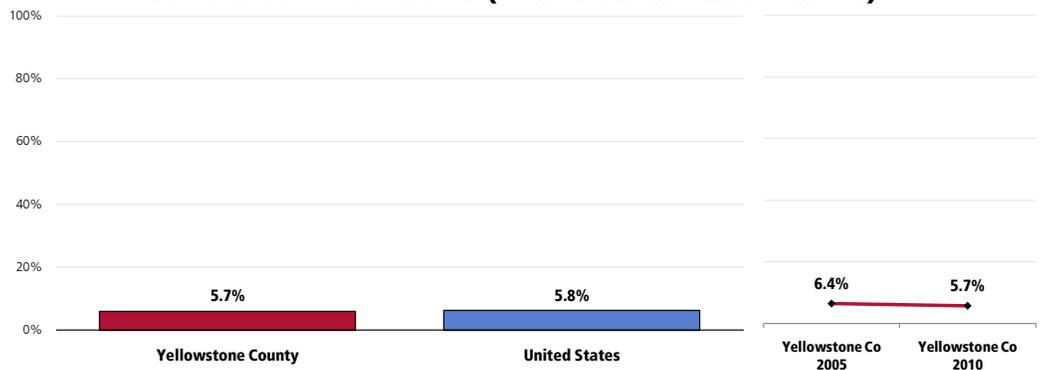
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 28]  
• 2008 PRC National Health Survey, Professional Research Consultants.  
Notes: • Asked of all respondents.

### Other Cancer

**A total of 5.7% of respondents have been diagnosed with some type of (non-skin) cancer.**

- Nearly identical to the 5.8% prevalence reported nationally.
- ☒ Statistically similar to 2005 findings.

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



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 27]  
• 2008 PRC National Health Survey, Professional Research Consultants.  
Notes: • Asked of all respondents.

## Cancer Risk

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

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

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

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

## Cancer Screenings

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

Screening levels in the community were measured in the 2010 Community Health Survey relative to four cancer sites: prostate cancer (prostate-specific antigen testing and digital rectal examination); female breast cancer (mammography); cervical cancer (Pap smear testing); and colorectal cancer (sigmoidoscopy and fecal occult blood testing).

## Prostate Cancer Screenings

### PROSTATE CANCER

Prostate cancer is the most commonly diagnosed form of cancer (other than skin cancer) in males and the second leading cause of cancer death among males in the United States. Prostate cancer is most common in men aged 65 years and older, who account for approximately 80 percent of all cases of prostate cancer.

Digital rectal examination (DRE) and the prostate-specific antigen (PSA) test are two commonly used methods for detecting prostate cancer. Although several treatment alternatives are available for prostate cancer, their impact on reducing death from prostate cancer when compared with no treatment in patients with operable cancer is uncertain. Efforts aimed at reducing deaths through screening and early detection remain controversial because of the uncertain benefits and potential risks of screening, diagnosis, and treatment.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

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

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

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

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

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

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

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

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

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

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

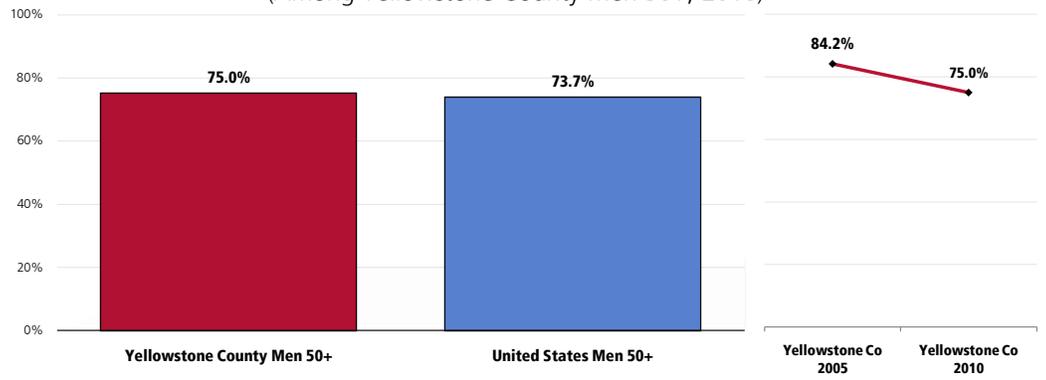
### PSA Testing and/or Digital Rectal Examination

#### **Among men aged 50 and older, three-fourths (75.0%) have had a PSA (prostate-specific antigen) test and/or a digital rectal examination for prostate problems within the past 2 years.**

- Similar to national findings (73.7%).
- ☒ Statistically similar to 2005 findings.

## Have Had a Prostate Screening in the Past 2 Years

(Among Yellowstone County Men 50+, 2010)



Sources: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 186]
- 2008 PRC National Health Survey, Professional Research Consultants.

Notes: 

- Asked of all male respondents aged 50 and older.

## Female Breast Cancer Screening

### FEMALE BREAST CANCER

Breast cancer is the most common cancer [diagnosis] among women in the United States. Death from breast cancer can be reduced substantially if the tumor is discovered at an early stage. Mammography is the most effective method for detecting these early malignancies. Clinical trials have demonstrated that mammography screening can reduce breast cancer deaths by 20 to 39 percent in women aged 50 to 74 years and about 17 percent in women aged 40 to 49 years. Breast cancer deaths can be reduced through increased adherence with recommendations for regular mammography screening.

Many breast cancer risk factors, such as age, family history of breast cancer, reproductive history, mammographic densities, previous breast disease, and race and ethnicity, are not subject to intervention. However, being overweight is a well-established breast cancer risk for postmenopausal women that can be addressed. Avoiding weight gain is one method by which older women may reduce their risk of developing breast cancer.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

### **The US Preventive Services Task Force (USPSTF) recommends screening mammography, with or without clinical breast examination (CBE), every 1-2 years for women aged 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 aged 50-69, the age group generally included in screening trials. For women aged 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 aged 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 increases 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 aged 40-49.

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

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

### Mammography

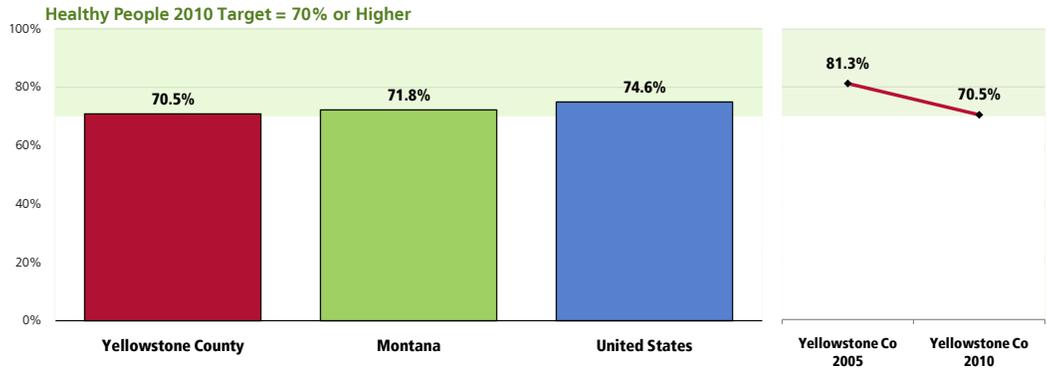
#### **Among women aged 40 and older, 70.5% have had a mammogram within the past 2 years.**

- Similar to statewide findings (71.8%).
- Similar to national findings (74.6%).
- Similar to the Healthy People 2010 target (70% or higher).

📉 Denotes a statistically significant decrease since 2005.

# Have Had a Mammogram in the Past Two Years

(Among Yellowstone County Women 40+, 2010)



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 184]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2008 Montana data.
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 3-13]
- Notes:
- Asked of all female respondents aged 40 and older.

## Cervical Cancer Screenings

### 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.

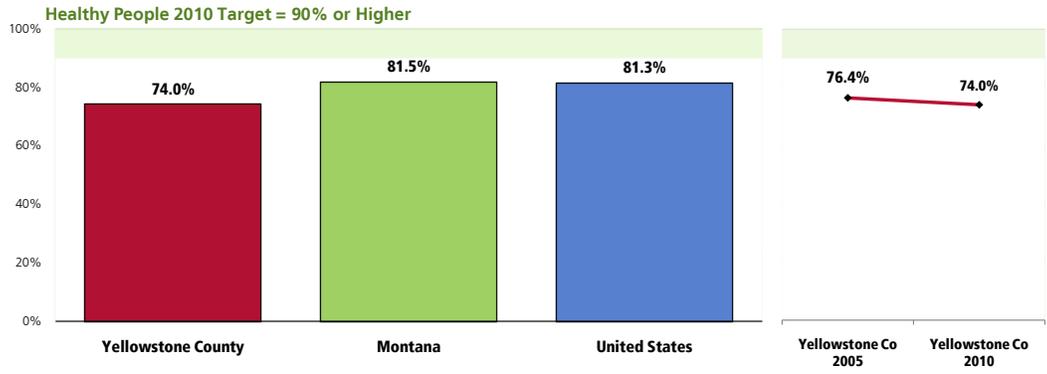
### Pap Smear Testing

**Among women aged 18 and older, 74.0% have had a Pap smear within the past 3 years.**

- Less favorable than Montana findings (81.5%).
- Less favorable than national findings (81.3%).
- Fails to satisfy the Healthy People 2010 target (90% or higher).
- ☒ Statistically unchanged since 2005.

# Have Had a Pap Smear in the Past 3 Years

(Among Yellowstone County Women 18+, 2010)



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 97]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2008 Montana data.
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 3-11]
- Notes:
- Asked of all female respondents.

## Colorectal Cancer Screenings

### COLORECTAL CANCER

Colorectal cancer is the third most common type of cancer and the second leading cause of cancer death in the United States. Current levels of screening in this country lag behind those of other effective cancer screening tests; it has been estimated that attainment of goals for population colorectal cancer screening could save 18,800 lives per year. Colorectal cancer incidence and mortality show health disparities, with a disproportionate burden occurring in certain minority populations, including African American adults and Alaska Natives.

**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.

Risk factors for colorectal cancer may include age, personal and family history of polyps or colorectal cancer, inflammatory bowel disease, inherited syndromes, physical inactivity (colon only), obesity, alcohol use, and a diet high in fat and low in fruits and vegetables. Detecting and removing precancerous colorectal polyps and detecting and treating the disease in its earliest stages will reduce deaths from colorectal cancer.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

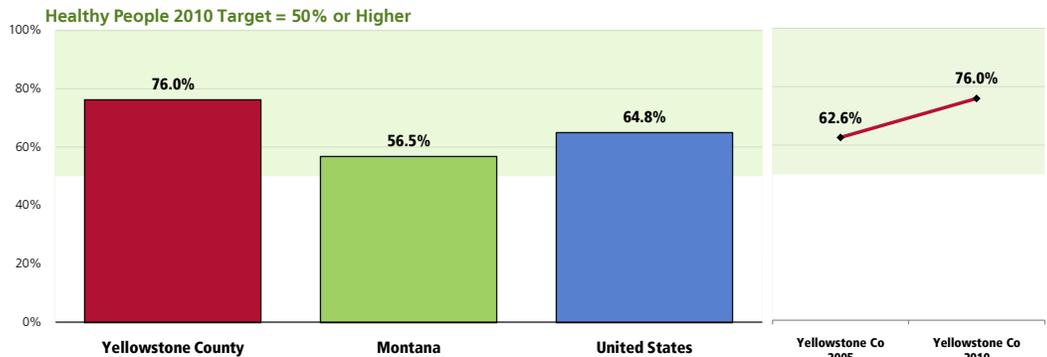
### Sigmoidoscopy/Colonoscopy

**Among adults aged 50 and older, more than three-fourths (76.0%) have had a sigmoidoscopy or colonoscopy at some point in their lives.**

- More favorable than Montana findings (56.5%).
- More favorable than national findings (64.8%).
- Satisfies the Healthy People 2010 target (50% or higher).
- ☒ Marks a statistically significant increase since 2005.

### Have Ever Had a Sigmoidoscopy/Colonoscopy Exam

(Among Yellowstone County Adults 50+, 2010)



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 187]

● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2008 Montana data.

● 2008 PRC National Health Survey, Professional Research Consultants.

● Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 3-12b]

Notes: ● Asked of all respondents 50+.

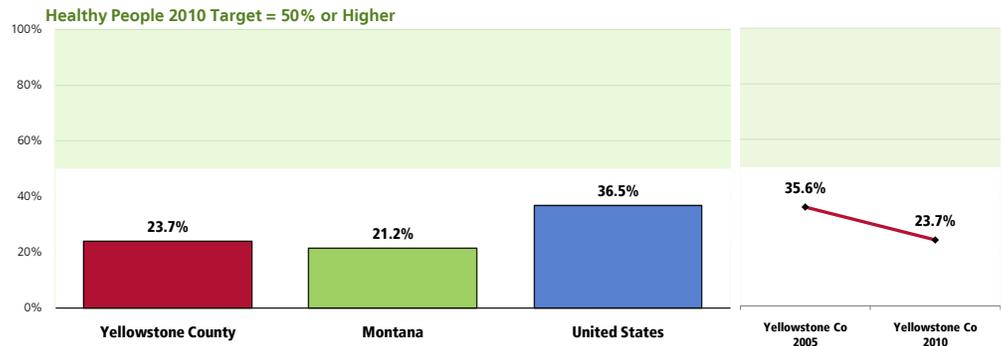
## Blood Stool Testing

**Among adults aged 50 and older, 23.7% have had a blood stool test (aka "fecal occult blood test") within the past 2 years.**

- Comparable to Montana findings (21.2%).
- Lower than national findings (36.5%).
- Fails to satisfy the Healthy People 2010 target (50% or higher).
- ▣ Marks a statistically significant decrease since 2005.

### Have Had a Blood Stool Test in the Past 2 Years

(Among Yellowstone County Adults 50+, 2010)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 188]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2008 Montana data.  
• 2008 PRC National Health Survey, Professional Research Consultants.  
• Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 3-12b]

Notes: • Asked of all respondents 50+.

# Respiratory Disease

Asthma and COPD (chronic obstructive pulmonary disease) are among the 10 leading chronic conditions causing restricted activity [in adults]. After chronic sinusitis, asthma is the most common cause of chronic illness in children. Methods are available to treat these respiratory diseases and promote respiratory health.

Asthma is a serious and growing health problem. An estimated 14.9 million persons in the United States have asthma. Asthma is responsible for about 500,000 hospitalizations, 5,000 deaths, and 134 million days of restricted activity a year. Yet most of the problems caused by asthma could be averted if persons with asthma and their healthcare providers managed the disease according to established guidelines.

COPD includes chronic bronchitis and emphysema—both of which are characterized by irreversible airflow obstruction and often exist together. Similar to asthma, COPD may be accompanied by an airway hyperresponsiveness. Most patients with COPD have a history of cigarette smoking. COPD worsens over time with continued exposure to a causative agent—usually tobacco smoke or sometimes a substance in the workplace or environment. COPD occurs most often in older people.

— Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

## Age-Adjusted Respiratory Disease Deaths

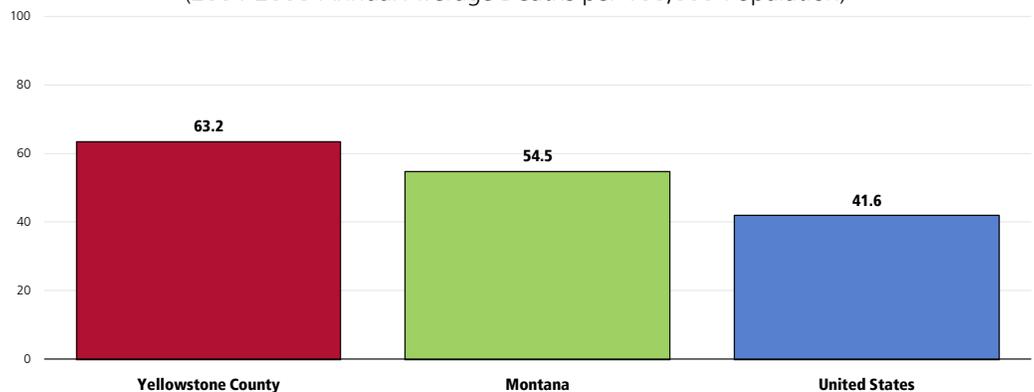
### Chronic Lower Respiratory Disease Deaths (CLRD)

Between 2004 and 2006, there was an annual average age-adjusted CLRD mortality rate of 63.2 deaths per 100,000 population in Yellowstone County.

- Less favorable than found statewide (54.5).
- Less favorable than the national rate (41.6).

### CLRD: Age-Adjusted Mortality

(2004-2006 Annual Average Deaths per 100,000 Population)



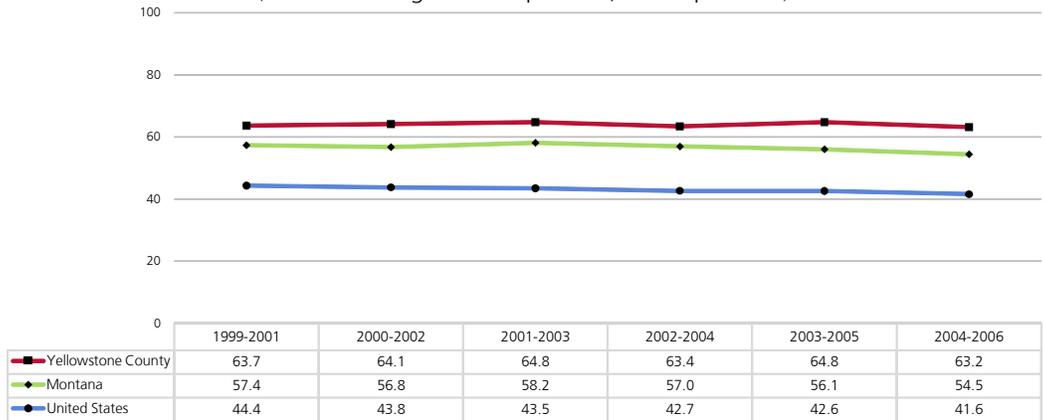
Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.

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 U.S. Standard Population.  
• County, state and national data are simple three-year averages.  
• CLRD is chronic lower respiratory disease.

Note: What was previously termed COPD (chronic obstructive pulmonary disease) has been reclassified as CLRD (chronic lower respiratory disease).

- CLRD mortality in Yellowstone County has remained stable over the past several years; statewide and nationally, rates have declined slightly in recent years.

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



Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.

Notes:
 

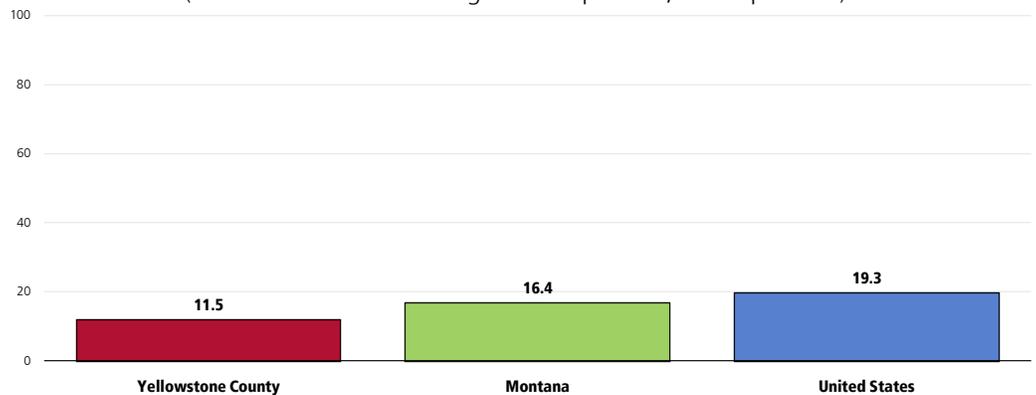
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
- Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
- State and national data are simple three-year averages.
- CLRD is chronic lower respiratory disease.

### Pneumonia/Influenza Deaths

Between 2004 and 2006, there was an annual average age-adjusted pneumonia/influenza mortality rate of 11.5 deaths per 100,000 population in Yellowstone County.

- Lower than found statewide (16.4).
- Lower than the national rate (19.3).

### Pneumonia/Influenza: Age-Adjusted Mortality (2004-2006 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 November 2010.

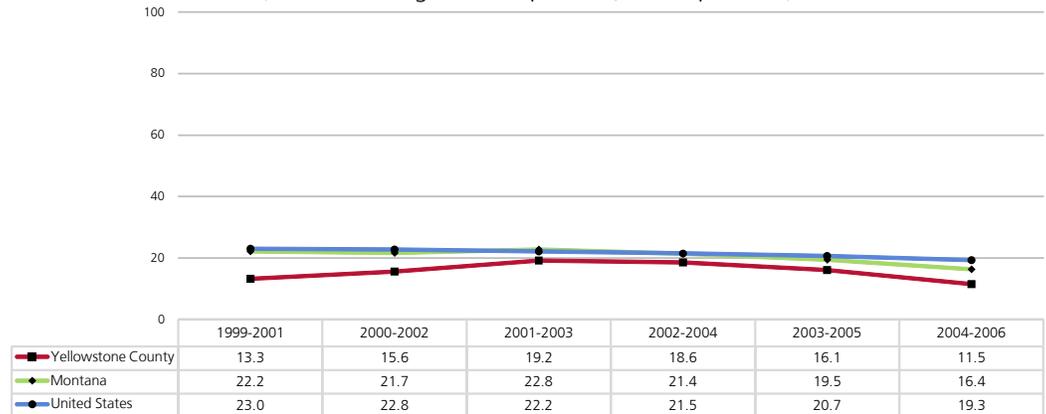
Notes:
 

- 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 U.S. Standard Population.
- County, state and national data are simple three-year averages.
- CLRD is chronic lower respiratory disease.

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

- After increasing in the early 2000s, pneumonia/ influenza mortality has since declined in Yellowstone County, echoing the trends reported across Montana and the US overall.

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



Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.

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 U.S. Standard Population.
- State and national data are simple three-year averages.
- CLRD is chronic lower respiratory disease.

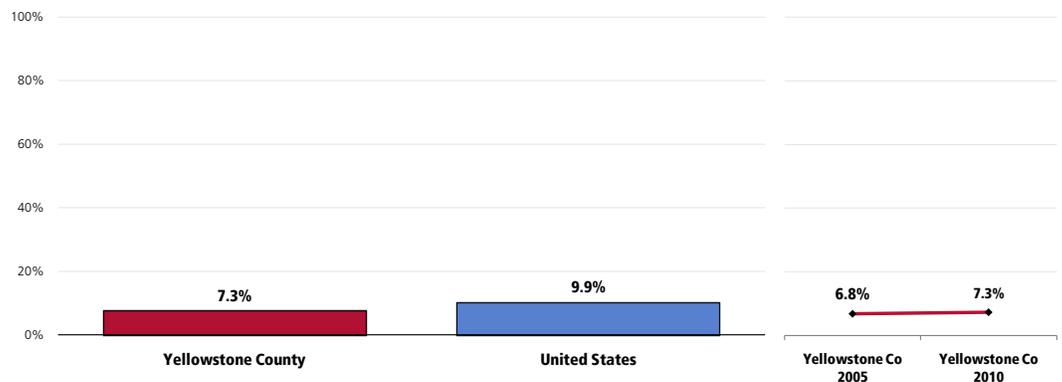
## Prevalence of Respiratory Conditions

### Chronic Lung Disease

**A total of 7.3% of Yellowstone County adults suffer from chronic lung disease.**

- Similar to the national prevalence (9.9%).
- Statistically unchanged from the 6.8% reported in 2005.

### Prevalence of Chronic Lung Disease



Sources:
 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 22]
- 2008 PRC National Health Survey, Professional Research Consultants.

Notes:
 

- Asked of all respondents.

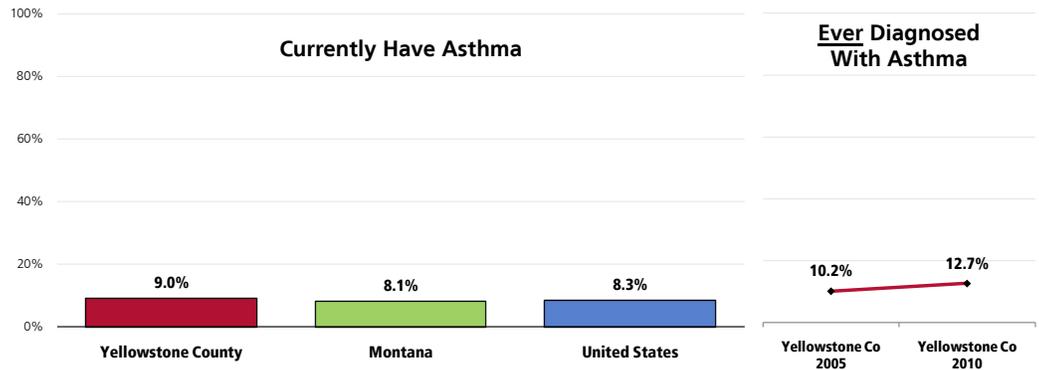
Survey respondents were next asked to indicate whether they suffer from or have been diagnosed with various respiratory conditions, including asthma, nasal/hay fever allergies, sinusitis, and/or chronic lung disease.

## Asthma

### Adults

**A total of 9.0% of Yellowstone County adults currently suffer from asthma.**

- Similar to the statewide prevalence (8.1%).
- Similar to the national prevalence (8.3%).
- ☒ The prevalence of adults who have ever been diagnosed with asthma has not changed significantly since 2005.



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 34, 157]  
• 2008 PRC National Health Survey, Professional Research Consultants.  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 Montana data.

Notes: • Asked of all respondents.

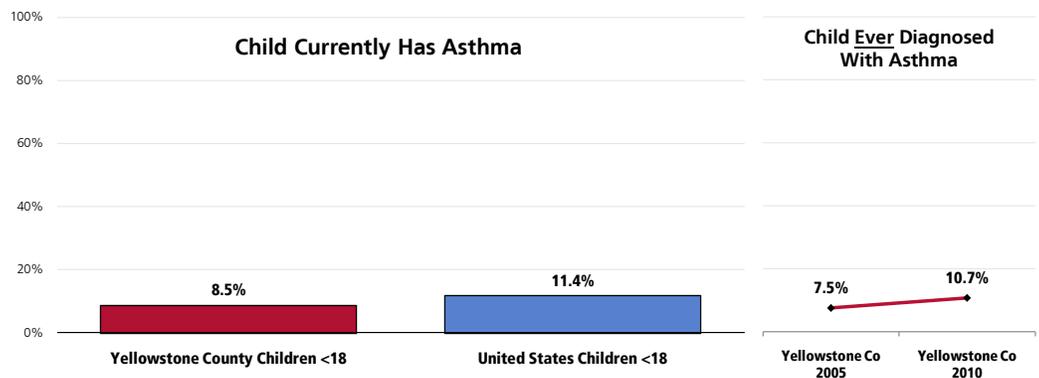
### Children

While the number of adults with asthma is greater than the number of children with asthma, the asthma rate is rising more rapidly in preschool-aged children than in any other group.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

**Among Yellowstone County children under age 18, 8.5% currently have asthma.**

- Statistically similar to national findings (11.4%).
- ☒ The prevalence of children who have ever been diagnosed with asthma has not changed significantly over time.



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 136, 158]  
• 2008 PRC National Health Survey, Professional Research Consultants.

Notes: • Asked of all respondents.

# Injury & Violence

The risk of injury is so great that most persons sustain a significant injury at some time during their lives. Nevertheless, this widespread human damage too often is taken for granted, in the erroneous belief that injuries happen by chance and are the result of unpreventable "accidents." In fact, many injuries are not "accidents," or random, uncontrollable acts of fate; rather, most injuries are predictable and preventable.

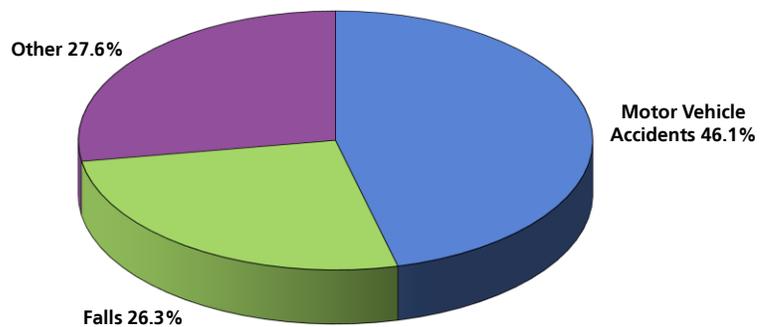
For ages 1 through 44 years, [US] deaths from injuries far surpass those from cancer—the overall leading natural cause of death at these ages—by about three to one. Injuries cause more than two out of five deaths (43 percent) of children aged 1 through 4 years and result in four times the number of deaths due to birth defects, the second leading cause of death for this age group. For ages 15 to 24 years, injury deaths exceed deaths from all other causes combined from ages 5 through 44 years. For ages 15 to 24 years, injuries are the cause of nearly four out of five deaths. After age 44 years, injuries account for fewer deaths than other health problems, such as heart disease, cancer, and stroke. However, despite the decrease in the proportion of deaths due to injury, the death rate from injuries is actually higher among older persons than among younger persons.

— Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

## Leading Causes of Accidental Death

**Motor vehicle accidents and falls accounted for 72.4% of accidental deaths in Yellowstone County between 2004 and 2006.**

**Leading Causes of Accidental Death**  
(Yellowstone County, 2004-2006)



Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2010.  
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

# Unintentional Injury

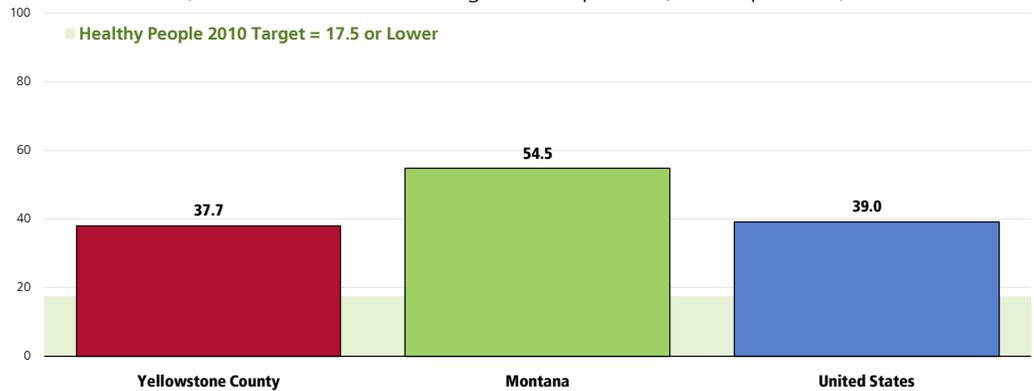
## Age-Adjusted Unintentional Injury Deaths

Between 2004 and 2006, there was an annual average age-adjusted unintentional injury mortality rate of 37.7 deaths per 100,000 population in Yellowstone County.

- More favorable than the Montana rate (54.5).
- Similar to the national rate (39.0).
- More than twice the Healthy People 2010 target.

### Unintentional Injuries: Age-Adjusted Mortality

(2004-2006 Annual Average Deaths per 100,000 Population)

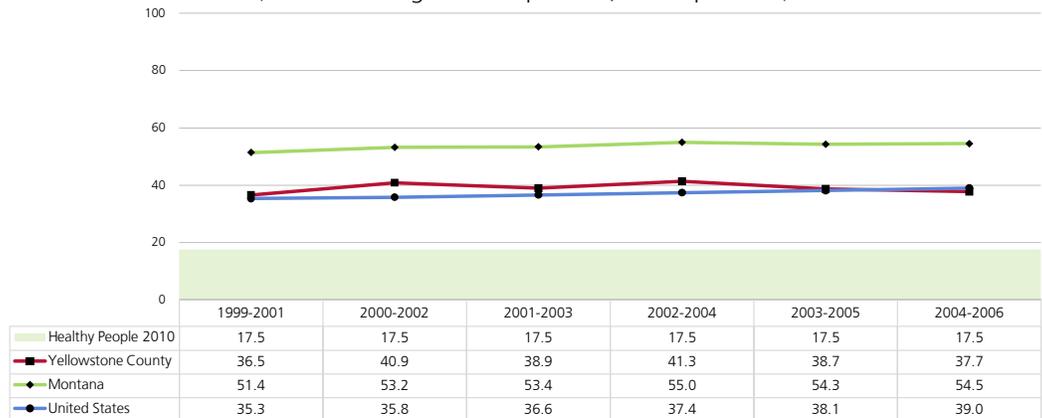


- Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.
- Notes: • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 15-3]
- 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 U.S. Standard Population.
- County, state and national data are simple three-year averages.

Unintentional injury mortality rates in Yellowstone County do not show a clear trend, and the same is true for statewide mortality in recent years; nationally, rates appear to be slowly increasing.

### Unintentional Injuries: 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 November 2010.
- Notes: • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 15-3]
- 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 U.S. Standard Population.
- State and national data are simple three-year averages.

## Motor Vehicle Safety

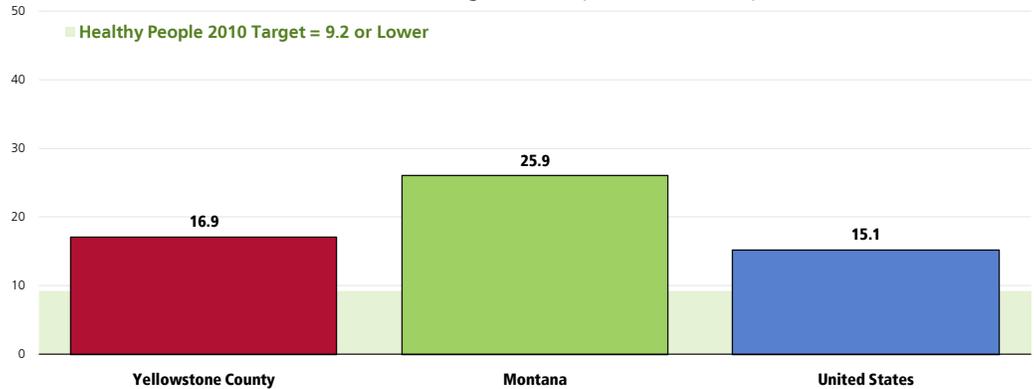
### Age-Adjusted Motor-Vehicle Related Deaths

Between 2004 and 2006, there was an annual average age-adjusted motor vehicle crash mortality rate of 16.9 deaths per 100,000 population in Yellowstone County.

- Lower than that found statewide (25.9).
- Higher than found nationally (15.1).
- Fails to satisfy the Healthy People 2010 target.

### Motor Vehicle Crashes: Age-Adjusted Mortality

(2004-2006 Annual Average Deaths per 100,000 Population)

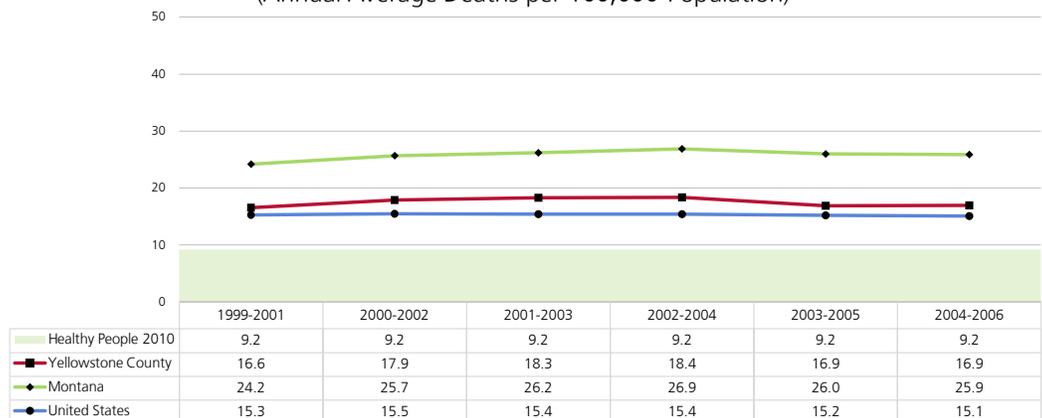


- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 15-15a]
- 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 U.S. Standard Population.
  - County, state and national data are simple three-year averages.

Mortality rates in Yellowstone County did not vary significantly over the past several years. Across Montana rates increased slightly, while remaining steady nationally.

### Motor Vehicle Crashes: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



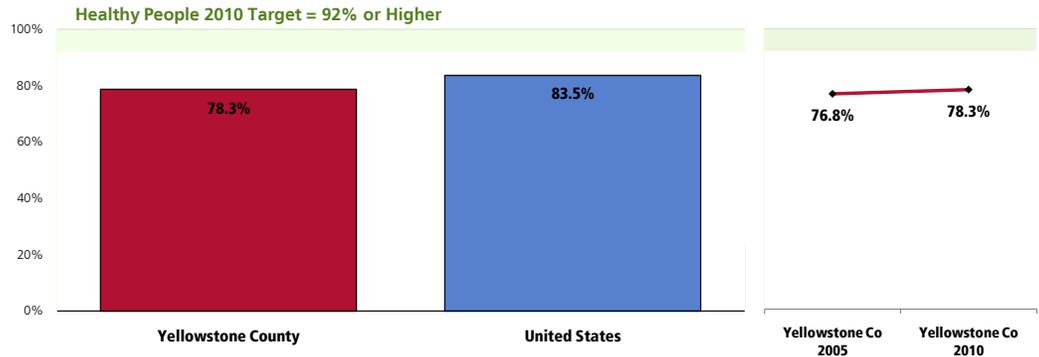
- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 15-15a]
- 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 U.S. Standard Population.
  - State and national data are simple three-year averages.

## Seat Belt Usage - Adults

**Most Yellowstone County adults (78.3%) report “always” wearing a seat belt when driving or riding in a vehicle.**

- Less favorable than the percentage found nationally (83.5%).
- Fails to satisfy the Healthy People 2010 objective of 92% or higher.
- ☒ No significant change since 2005.

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

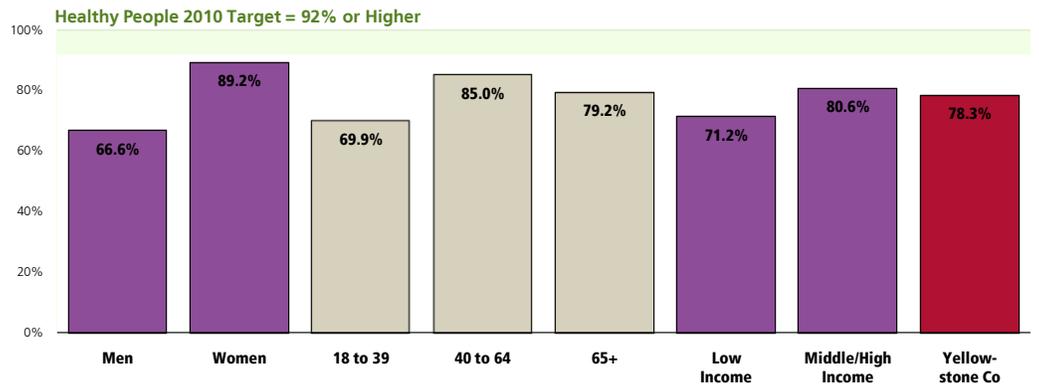


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 51]  
 • 2008 PRC National Health Survey, Professional Research Consultants.  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 15-19]  
 Notes: • Asked of all respondents.

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

- ☒ Men.
- ☒ Adults under age 40.

### “Always” Wear a Seat Belt When Driving or Riding in a Vehicle (Yellowstone County, 2010)

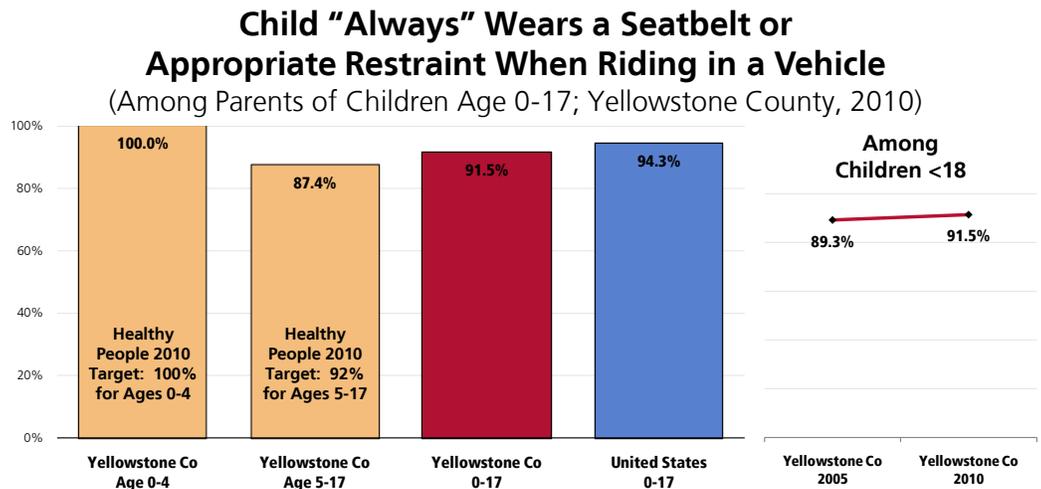


Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 51]  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 15-19]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## Seat Belt Usage - Children

**A total of 91.5% of Yellowstone County parents report that their child (aged 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 (94.3%).
- ☒ Statistically unchanged since 2005 (children age 0-17).
- 👤 For children under age 5, 100% are reported to consistently use appropriate seat belts/safety seats, more favorable than the US prevalence (97.4%) and satisfying the Healthy People 2010 objective (100%).
- 👤 For children aged 5-17, 87.4% are reported to consistently use safety belts, similar to the 93.0% found nationally, as well as to the Healthy People 2010 goal of 92.0%.



Sources:
 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 150, 181-182]
- 2008 PRC National Health Survey, Professional Research Consultants.
- Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objectives 15-19 and 15-20]

Notes:
 

- Asked of all respondents with children under 18 at home.

## Helmet Usage

Helmet usage for things such as motorcycle and bicycle riding, as well as all-terrain vehicle use and winter sports, is covered in the following section for both adults and children aged 5 and older. *Note that percentages exclude those respondents who indicate they never participate in these activities.*

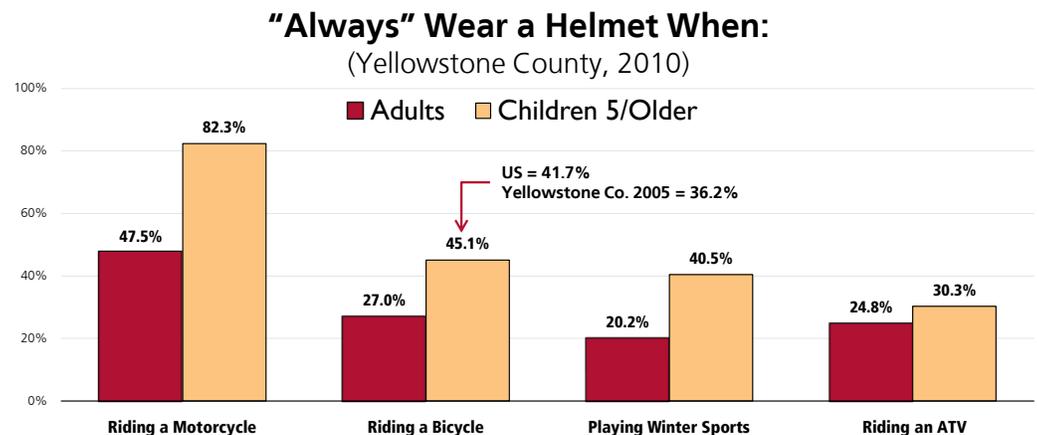
**When riding on motorcycles, 47.5% of adults and 82.3% of children (age 5+) “always” wear a helmet.** (Note that only 29 parents reported that their child ever rides on a motorcycle.)

**When riding bicycles, 27.0% of adults and 45.1% of children (age 5+) “always” wear a helmet.**

- Children: Statistically similar to the national prevalence (41.7%).
- ☒ Children: Statistically similar to 2005 findings.

**When playing winter sports, 20.2% of adults and 40.5% of children (age 5+) “always” wear a helmet.**

**When riding all-terrain vehicles (ATVs), 24.8% of adults and 30.3% of children (age 5+) “always” wear a helmet.**



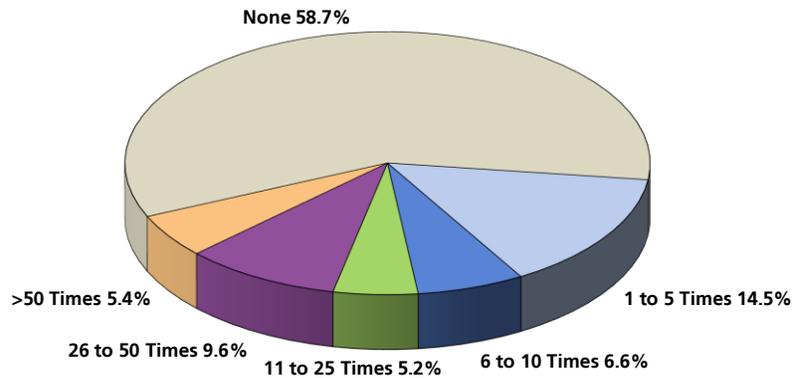
Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 54-57; 146-149]  
Notes: • Asked of all respondents.  
• Percentages exclude respondents who say they never take part in these activities.

## Distracted Driving

While most adults (58.7%) report no cell phone use while driving, 15.0% report doing so more than 25 times in the past month.

### Number of Instances of Talking on a Cell Phone While Driving in the Past Month

(Yellowstone County, 2010)



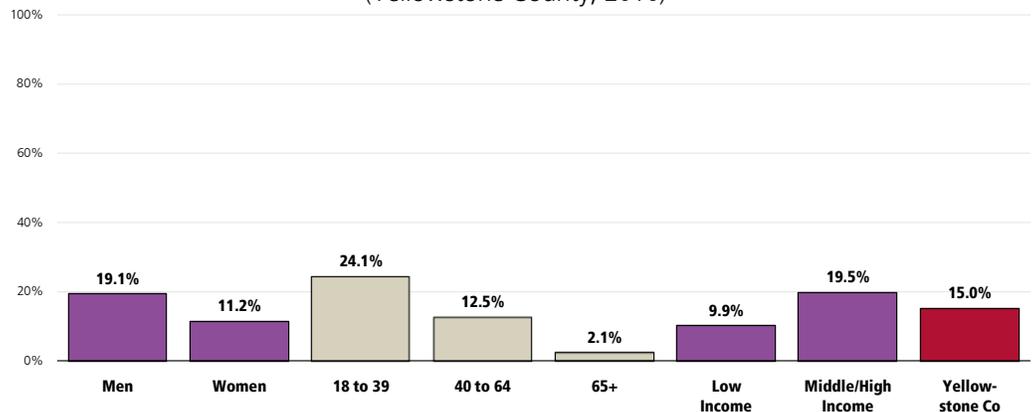
Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 52]  
Notes: • Asked of all respondents.

Adults more likely to have talked on a cell phone while driving more than 25 times in the past month include:

- ☺ Men.
- ☺ Adults under age 40.
- ☺ Adults with higher incomes.

### Talked on a Cell Phone While Driving More Than 25 Times in the Past Month

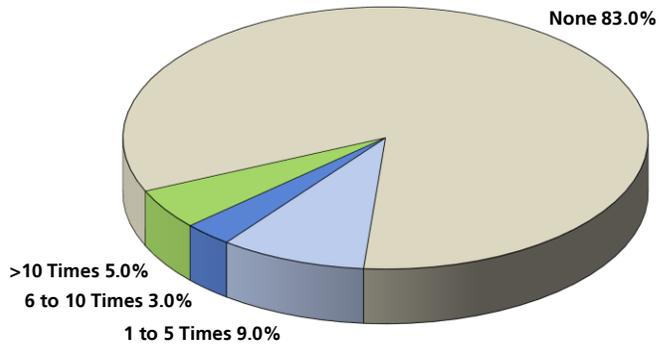
(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 52]  
Notes: • Asked of all respondents.  
• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

The clear majority of respondents (83.0%) report not sending or reading text messages or email on a cell phone while driving in the past month; however, 5.0% report doing so 10 or more times in the past month.

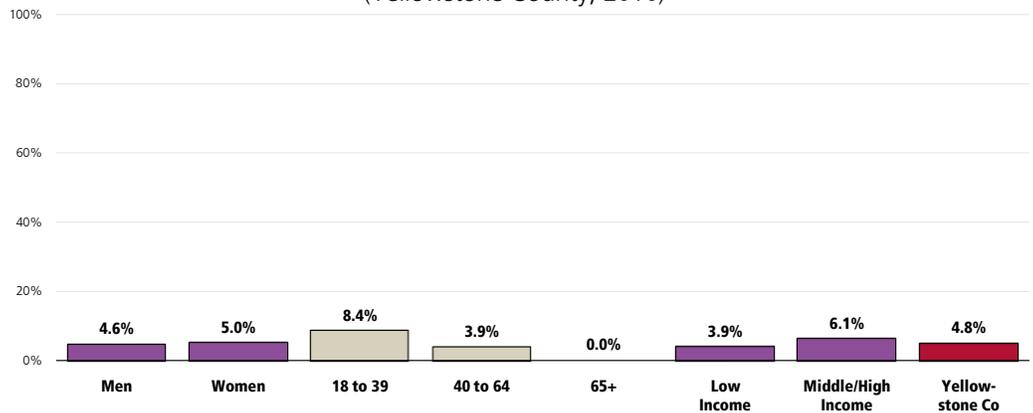
### Number of Instances of Sending/Reading Text or Email on a Cell Phone While Driving in the Past Month (Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 53]  
Notes: • Asked of all respondents.

Demographically, it is younger adults who are more likely to send or read texts/emails while driving.

### Sent/Read Text or Email on a Cell Phone While Driving More Than 10 Times in the Past Month (Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 53]  
Notes: • Asked of all respondents.  
• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## Related Focus Group Findings: Brain Injury & Safety

As described by focus group participants, Montana residents have an attitude of independence. Unfortunately this attitude keeps many from safeguarding themselves and others from the dangers of certain activities. Participants spoke of the lack of a primary seatbelt or helmet law and believe that there are many preventable head trauma cases with the use of seatbelts or helmets. Too many people aren't using these safety devices and are putting themselves and others at risk for traumatic brain injuries. Education regarding traumatic brain injury and seatbelt and helmet usage is necessary to help the community move in the direction of acceptance of these safety devices.

*"We're not big into any injury prevention. We've long to legislate anything about seatbelts, DUIs, child safety. Our independent attitude statistically contributes to the trauma numbers in the state. We don't like to put our kids in car seats. We don't like to wear our seatbelts. We like to drink and drive and drink and ride our ATVs. We don't wear helmets." –Physician*

*"They know better but there's no follow through. The mentality of the culture doesn't support making that tough change to do it differently and do things right in the face of overwhelming data, statistics, intensive education." –Physician*

*"We see so many traumatic brain injuries and I think accessing and care and educating people on where to go and where to start. St. Vincent's has a terrific program but it can't accommodate all of the people, and we just see so many of them. They just fall through the cracks, and sometimes they get diagnosed with mental health disorders because sometimes it's really difficult to discern the difference between those brain injuries until you ask all the right questions and get into the history—we see a lot of people suffering from brain injuries that don't ever get treated."—  
Physician*

*"I'm on call two nights a week for emergency care at Saint Vincent's, but I don't know how many people this summer came in with motorcycle accidents and no helmet wearing; they would have been in pretty good shape, but no helmet on." – Social Services*

## Firearm Safety

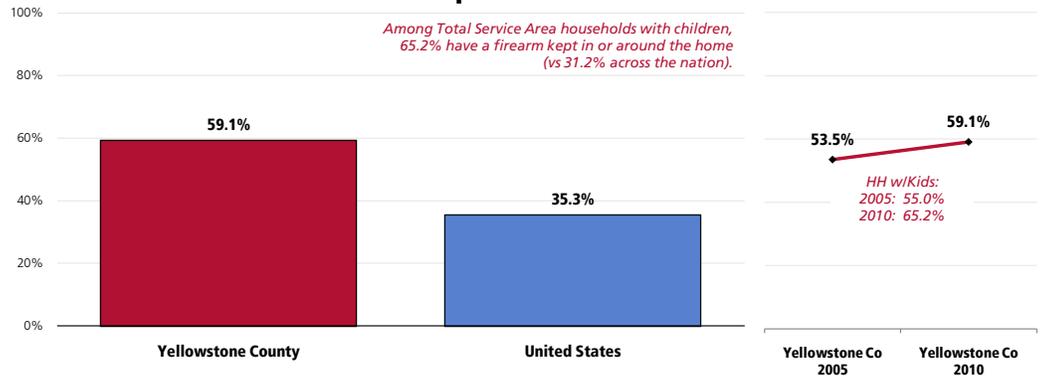
### Overall, 60% of Yellowstone County adults have a firearm kept in or around their home.

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.”*

- Much higher than the national prevalence (35.3%).
- 🏠 Similar to that reported in 2005.
- 👨👩👧👦 Among Yellowstone County households with children, 65.2% have a firearm kept in or around the house (much higher than the 31.2% reported nationally).
- 🏠 The prevalence of firearms in households with children has not changed significantly (from 55.0% in 2005).

### Have a Firearm Kept in or Around the Home



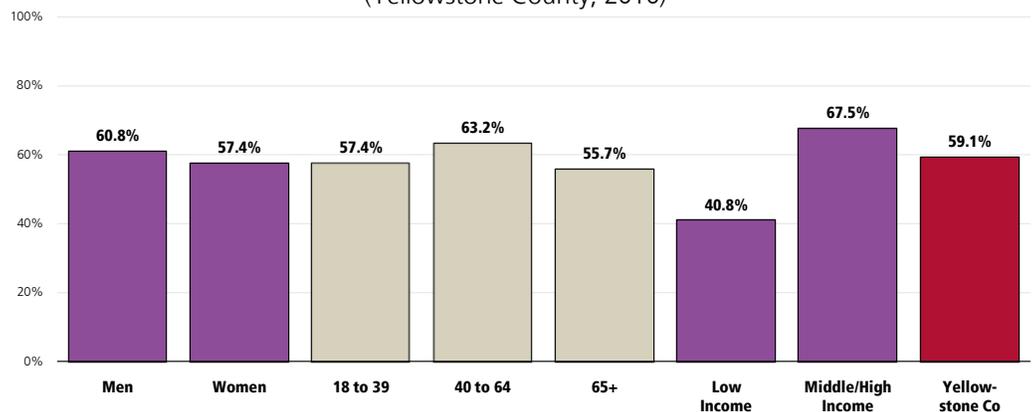
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 60, 179]  
• 2008 PRC National Health Survey, Professional Research Consultants.

Notes: • Asked of all respondents.

- 👨👩👧👦 Higher-income adults are more likely to report having a firearm in or around the home.

### Have a Firearm Kept in or Around the House

(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 60]

Notes: • Asked of all respondents.

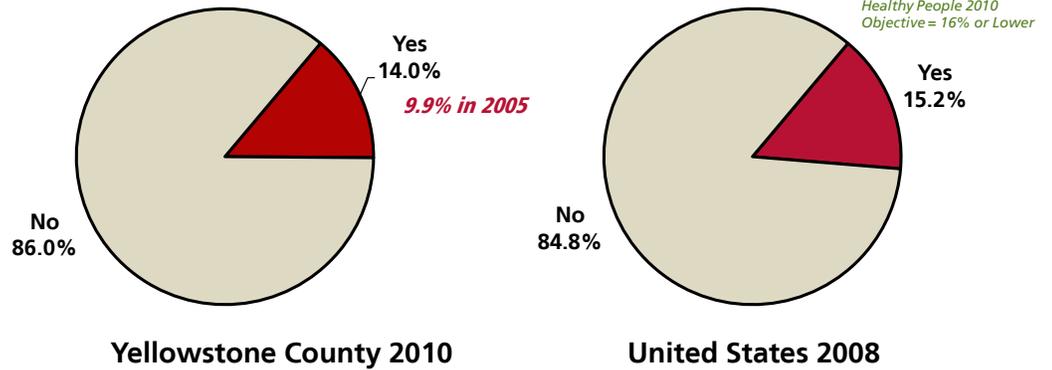
• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

**Among Yellowstone County households with firearms, 14.0% report that there is at least one weapon that is kept unlocked and loaded.**

- Statistically similar to that found nationally (15.2%).
- Similar to the *Healthy People 2010* target (16% or lower).
- ☒ Statistically similar to the 9.9% reported in 2005.

**Household Has An Unlocked, Loaded Firearm**

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



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 180]  
• 2008 PRC National Health Survey, Professional Research Consultants, Inc.  
• Healthy People 2010. 2<sup>nd</sup> Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 15-4]

Notes: • Asked of all respondents with a firearm in or around the home.

# Intentional Injury (Violence)

## Age-Adjusted Intentional Injury Deaths

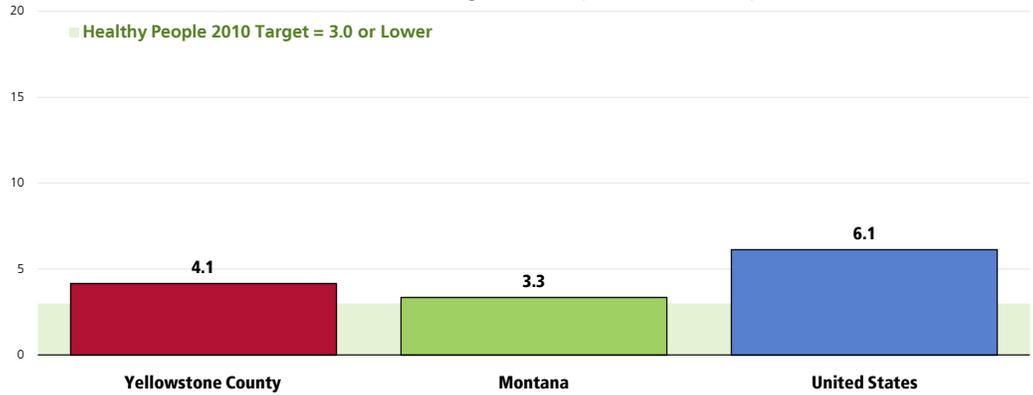
### Homicide

Between 2004 and 2006, there was an annual average age-adjusted homicide rate of 4.1 deaths per 100,000 population in Yellowstone County.

- Just above the rate found statewide (3.3).
- Below the national rate (6.1).
- Fails to satisfy the Healthy People 2010 target or 3.0 or lower.

### Homicide: Age-Adjusted Mortality

(2004-2006 Annual Average Deaths per 100,000 Population)

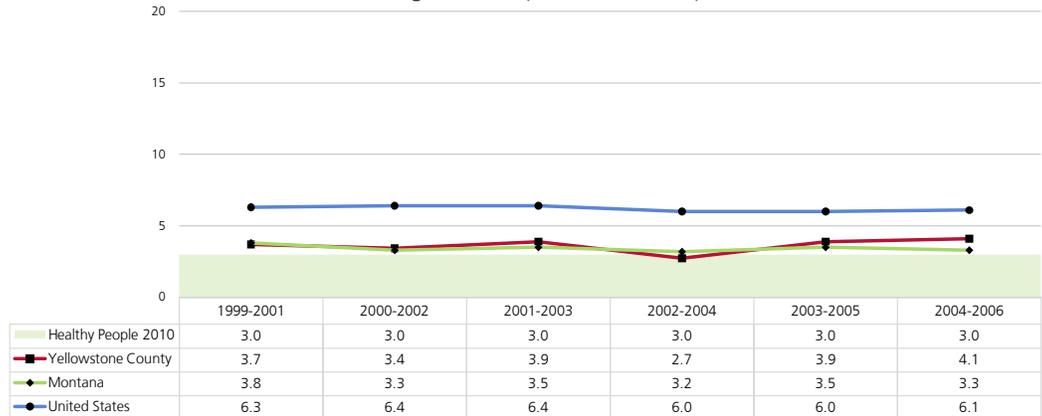


- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 15-32]
- 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 U.S. Standard Population.
  - County, state and national data are simple three-year averages.
  - Note that individual county rates are unreliable due to low number of deaths.

⊠ No clear homicide trend is apparent in Yellowstone County in recent years.

### Homicide: 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 November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 15-32]
- 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 U.S. Standard Population.
  - State and national data are simple three-year averages.

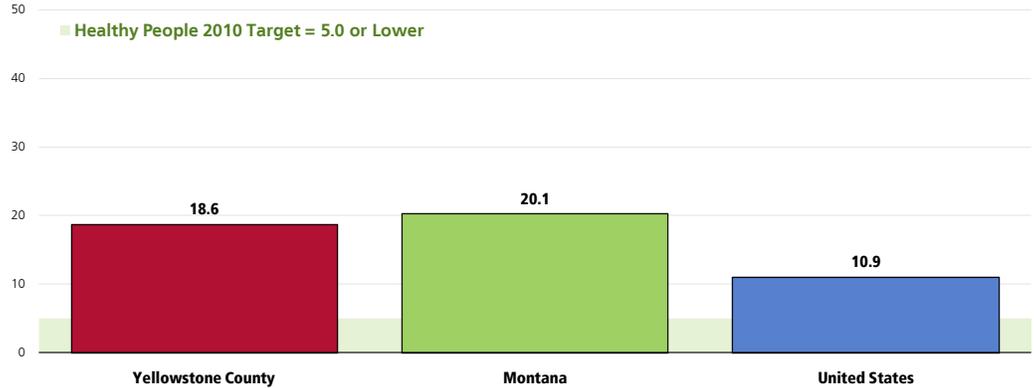
## Suicide

Between 2004 and 2006, there was an annual average age-adjusted suicide rate of 18.6 deaths per 100,000 population in Yellowstone County.

- Lower than the statewide rate (20.1).
- Higher than the national rate (10.9).
- Fails to satisfy the Healthy People 2010 target of 5.0 or lower.

### Suicide: Age-Adjusted Mortality

(2004-2006 Annual Average Deaths per 100,000 Population)

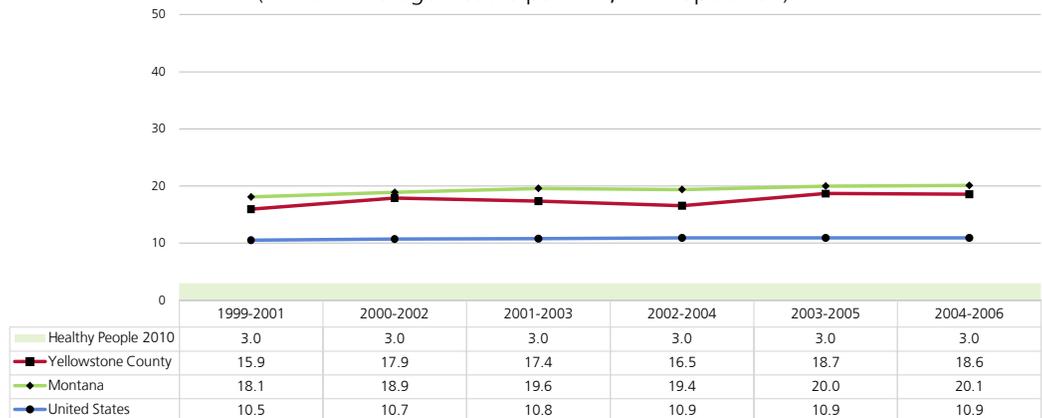


- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 18-1]
- 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 U.S. Standard Population.
  - County, state and national data are simple three-year averages.

☒ Suicide rates have generally trended upward for Yellowstone County and Montana in recent years.

### Suicide: 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 November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 18-1]
- 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 U.S. Standard Population.
  - State and national data are simple three-year averages.

## Violent Crime

### Violent Crime Rates

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

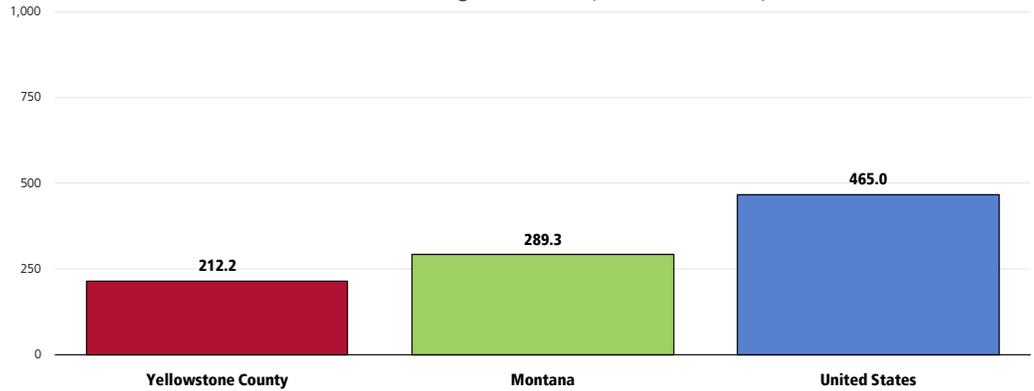
Note that the quality of crime data can vary widely from location to location, depending on the consistency and completeness of reporting among various jurisdictions.

**Between 2007 and 2009, there was an annual average violent crime rate of 212.2 offenses per 100,000 population in Yellowstone County.**

- More favorable than the Montana rate for the same period (289.3).
- Much more favorable than the national rate (465.0).

### Violent Crime Rates

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

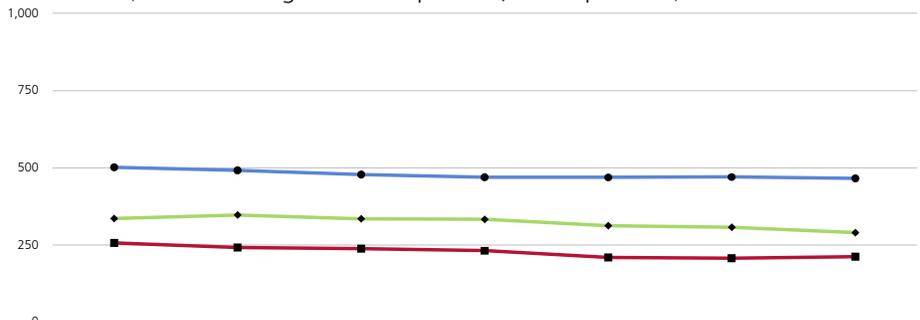


Sources: • Montana Board of Crime Control  
Notes: • Rates are offenses per 100,000 population among agencies reporting.

Violent crime rates have declined in recent years, mirroring the state and national trends.

### Violent Crime Rates

(Annual Average Offenses per 100,000 Population)



	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009
Yellowstone County	256.7	242.0	238.1	231.1	209.4	206.9	212.2
Montana	335.5	346.9	334.5	332.6	312.0	306.8	289.3
United States	501.8	491.6	477.8	469.3	468.6	469.8	465.0

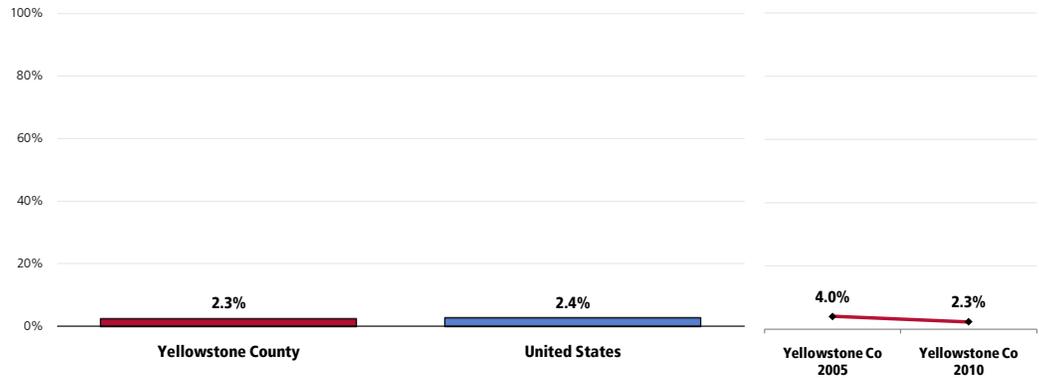
Sources: • Montana Board of Crime Control  
Notes: • Rates are offenses per 100,000 population among agencies reporting.

## Experience With Violent Crime

**A total of 2.3% of Yellowstone County adults acknowledge being the victim of a violent crime in the past 5 years.**

- Nearly identical to national findings (2.4%).
- 📊 Statistically similar to 2005 findings.

### Victim of a Violent Crime in the Past 5 Years

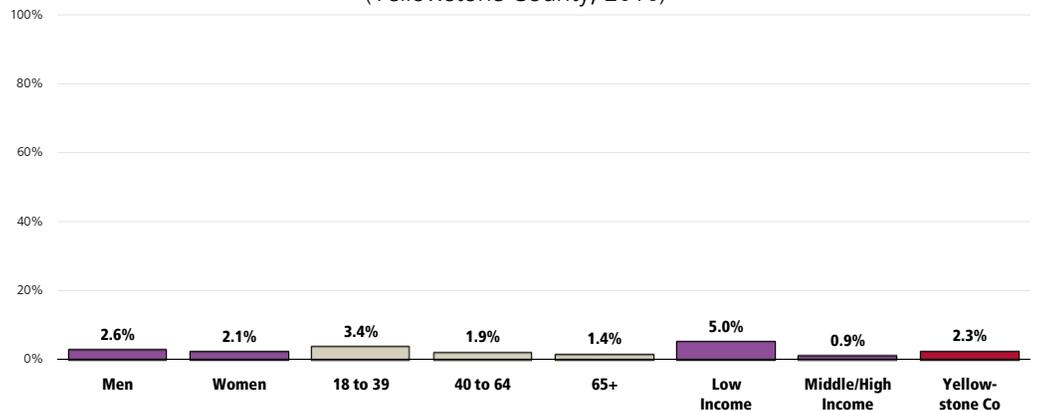


Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 58]  
● 2008 PRC National Health Survey, Professional Research Consultants.

Notes: ● Asked of all respondents.

- 👥 Differences outlined in the following chart do not reveal any statistically significant variation by key demographic groups.

### Victim of a Violent Crime in the Past 5 Years (Yellowstone County, 2010)



Sources: ● 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 58]

Notes: ● Asked of all respondents.

● Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## Family Violence

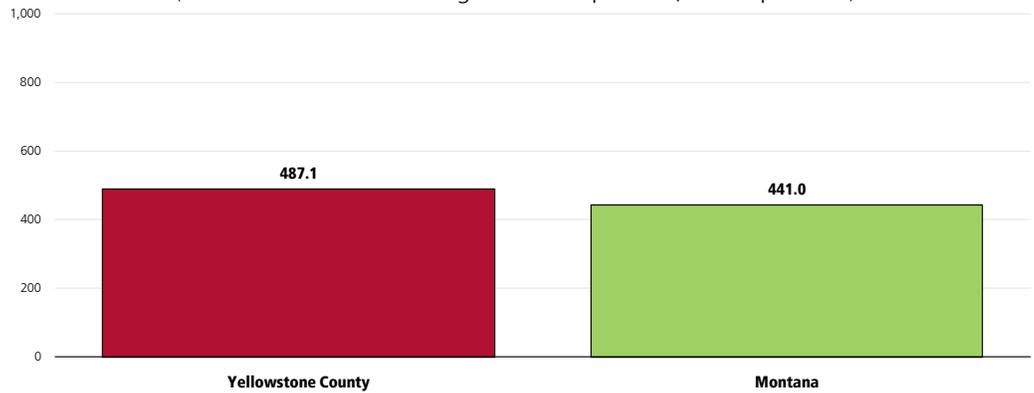
### Domestic Violence

Between 2007 and 2009, there was an annual average domestic violence rate of 487.1 offenses per 100,000 population in Yellowstone County.

- Higher than the Montana rate for the same period (441.0).

### Domestic Violence Rates

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

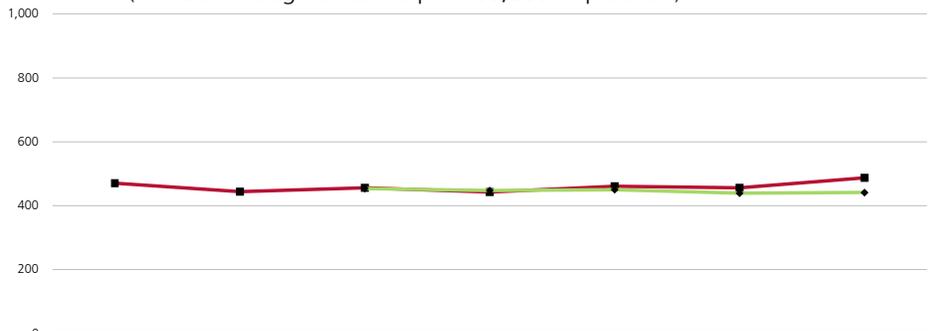


Sources: • Montana Board of Crime Control  
Notes: • Rates are domestic violence offenses per 100,000 population.

- ☒ Domestic violence rates in Yellowstone County have fluctuated in recent years, remaining fairly stable. Statewide, rates have been fairly stable for the past few reporting periods as well.

### Domestic Violence Rates

(Annual Average Offenses per 100,000 Population)



Sources: • Montana Board of Crime Control  
Notes: • Rates are domestic violence offenses per 100,000 population .

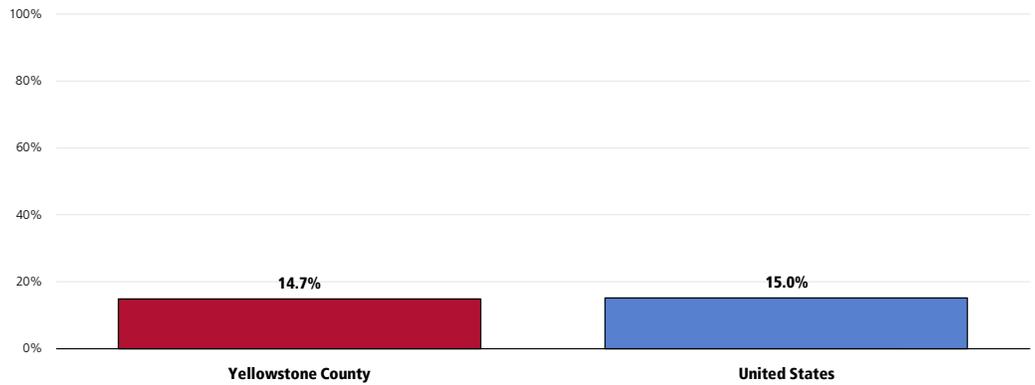
Respondents were told:

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

**A total of 14.7% of surveyed adults acknowledge that they have ever been hit, slapped, pushed, kicked, or otherwise hurt by an intimate partner.**

- Similar to national findings (15.0%).

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

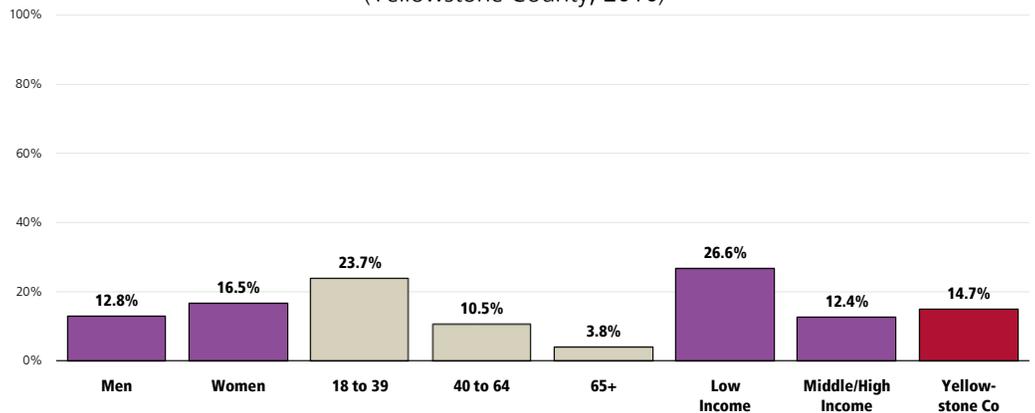


Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 59]  
 • 2008 PRC National Health Survey, Professional Research Consultants.  
 Notes: • Asked of all respondents.

Reports of domestic violence are notably higher among:

- Younger adults.
- Low-income residents.

### Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner (Yellowstone County, 2010)

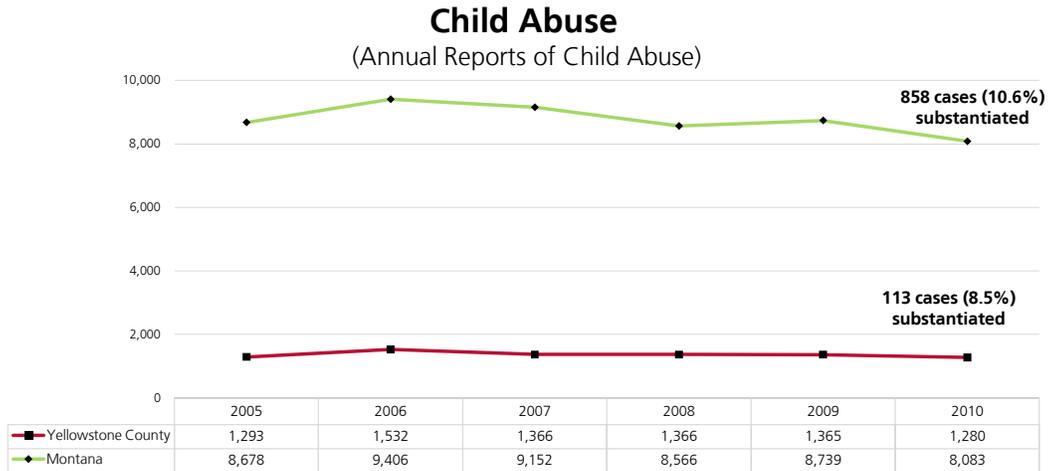


Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 59]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## Child Abuse

**In 2010, there were 1,280 reports of child abuse in Yellowstone County; of these, 8.8% (113 cases) were substantiated** (meaning that a preponderance of evidence showed the child had been harmed or was in immediate danger).

- In 2010 (preliminary data), Yellowstone County accounted for 15.8% of child abuse reports in the state.
- ☒ Annual number of reports of child abuse have declined across Montana in recent years; in Yellowstone County, levels have remained fairly steady. (This pattern is true when looking exclusively at substantiated cases as well.)



Sources: • Montana Board of Crime Control

Notes: • 2010 data is preliminary.

• Note that a preponderance of evidence must show the child has been harmed or in immediate danger for a substantiation.

# Diabetes

Diabetes affects nearly 16 million adults and contributes to about 200,000 deaths a year. Diabetes can cause heart disease, stroke, blindness, kidney failure, leg and foot amputations, pregnancy complications, and deaths related to influenza and pneumonia. About 5.4 million adults are unaware they have the disease.

Among adults, diagnosed diabetes (including gestational diabetes) increased 49% from 1990 to 2000. The largest increase was among people aged 30–39. Type 2 affects 90%–95% of people with diabetes and is linked to obesity and physical inactivity.

The direct and indirect costs of diabetes in America are nearly \$100 billion a year.

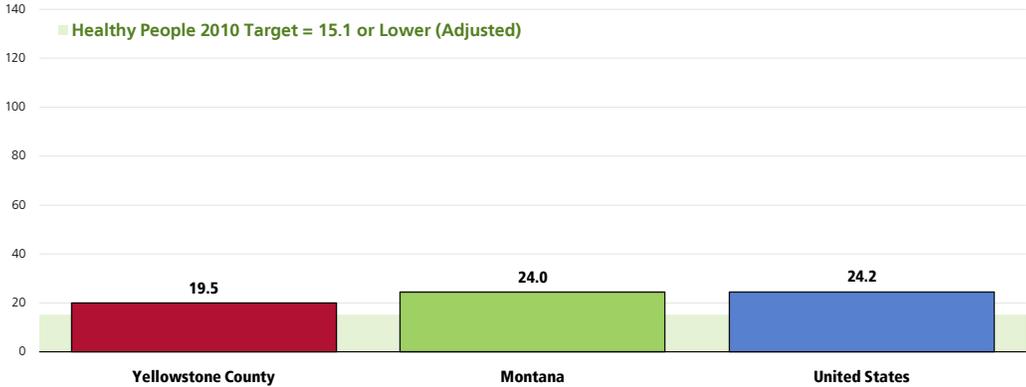
– National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

## Age-Adjusted Diabetes Deaths

**Between 2004 and 2006, there was an annual average age-adjusted diabetes mortality rate of 19.5 deaths per 100,000 population in Yellowstone County.**

- More favorable than that found statewide (24.0).
- More favorable than the national rate (24.2).
- Fails to satisfy the Healthy People 2010 target.

**Diabetes: Age-Adjusted Mortality**  
(2004-2006 Annual Average Deaths per 100,000 Population)



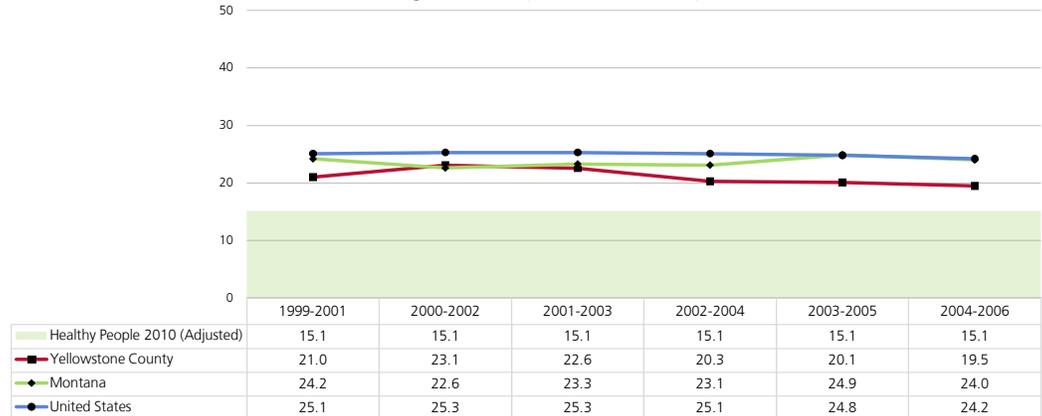
Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.  
• Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 5-5]

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 U.S. Standard Population.  
• County, state and national data are simple three-year averages.  
• The Healthy People 2010 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

Diabetes mortality rates have decreased in Yellowstone County. Statewide, the rate appears to be stable, while decreasing slightly in the US.

## Diabetes: 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 November 2010.
- Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 5-5]

 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 U.S. Standard Population.
- State and national data are simple three-year averages.
- The Healthy People 2010 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

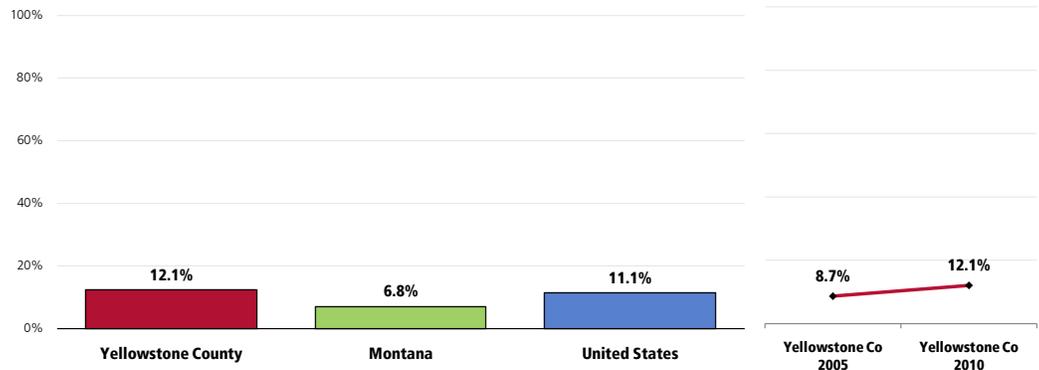
## Prevalence of Diabetes

**A total of 12.1% of Yellowstone County adults report having been diagnosed with diabetes.**

- Less favorable than the proportion statewide (6.8%).
- Similar to the national proportion (11.1%).

The change noted from 2005 is not large enough to be determined as statistically significant.

## Prevalence of Diabetes



Sources:
 

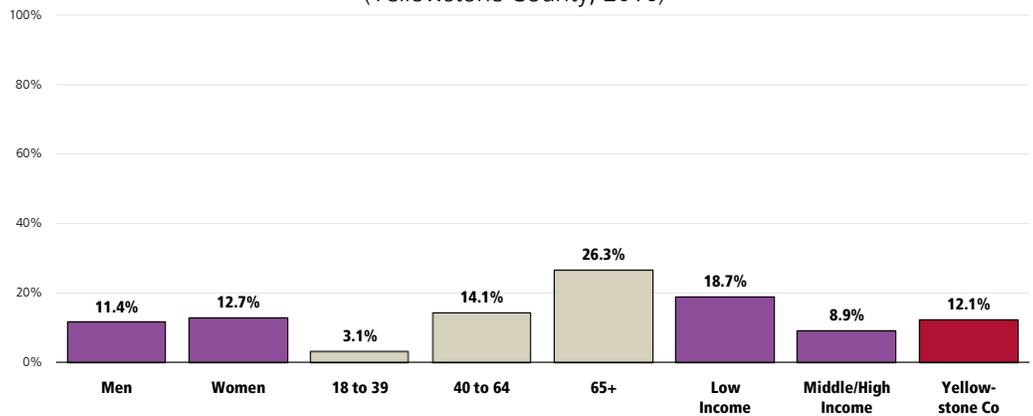
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 36]
- 2008 PRC National Health Survey, Professional Research Consultants.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2009 Montana data.

 Notes:
 

- Asked of all respondents.

- 👥 Note the positive correlation between diabetes and age (with 26.3% of seniors having been diagnosed with diabetes).
- 👥 Diabetes is higher among low-income adults, as well.

### Prevalence of Diabetes (Yellowstone County, 2010)



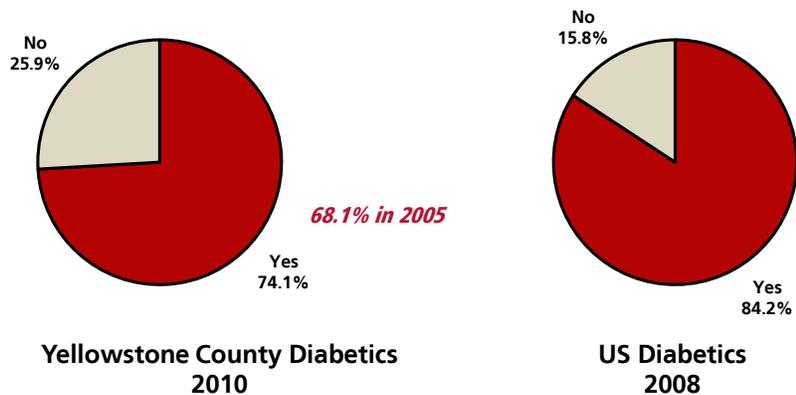
Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 36]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

### Diabetes Treatment

**Among adults with diabetes, most (74.1%) are currently taking insulin or some type of medication to manage their condition.**

- Statistically similar to the 84.2% reported among diabetics nationally.
- 📅 Statistically similar to the 68.1% reported among diabetics in 2005.

### Taking Insulin or Other Medication for Diabetes (Among Diabetics; Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 37]  
 • 2008 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all diabetic respondents.

# Arthritis, Osteoporosis, & Chronic Pain

The current and projected growth in the number of people aged 65 years and older in the United States has focused attention on preserving quality of life, as well as length of life. Chief among the factors involving preserving quality of life are the prevention and treatment of musculoskeletal conditions—the major causes of disability in the United States. Among musculoskeletal conditions, arthritis and other rheumatic conditions, osteoporosis, and chronic back conditions have the greatest impact on public health and quality of life.

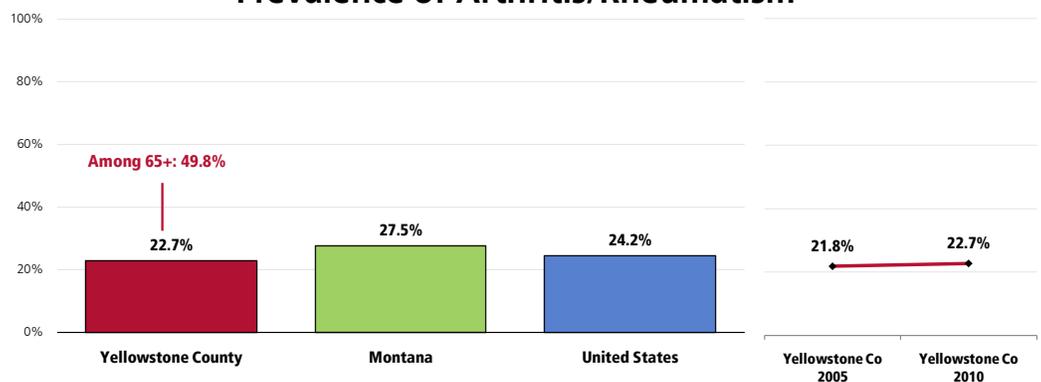
– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

## Prevalence of Arthritis/Rheumatism

**More than one-fifth (22.7%) of Yellowstone County adults report suffering from arthritis or rheumatism.**

- More favorable than the statewide prevalence (27.5%).
- Similar to that found nationwide (24.2%).
- 🏠 The prevalence of arthritis/rheumatism is similar to that reported in 2005.
- 👥 Arthritis/rheumatism affects one-half (49.8%) of county seniors.

### Prevalence of Arthritis/Rheumatism



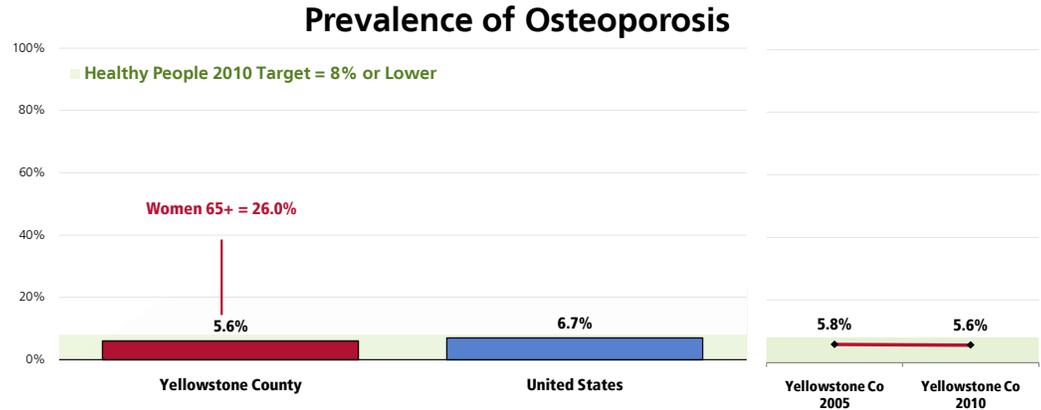
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 25]  
• 2008 PRC National Health Survey, Professional Research Consultants.  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 Montana data.

Notes: • Asked of all respondents.

## Prevalence of Osteoporosis

**A total of 5.6% of survey respondents have osteoporosis.**

- Similar to that found nationwide (6.7%).
- Satisfies the Healthy People 2010 objective of 8% or lower.
- ☒ Statistically similar to 2005 findings.
- 👥 Among Yellowstone County women aged 65 and older, the prevalence of osteoporosis is 26.0%.



Sources:
 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 29]
- 2008 PRC National Health Survey, Professional Research Consultants.
- Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 2-9]

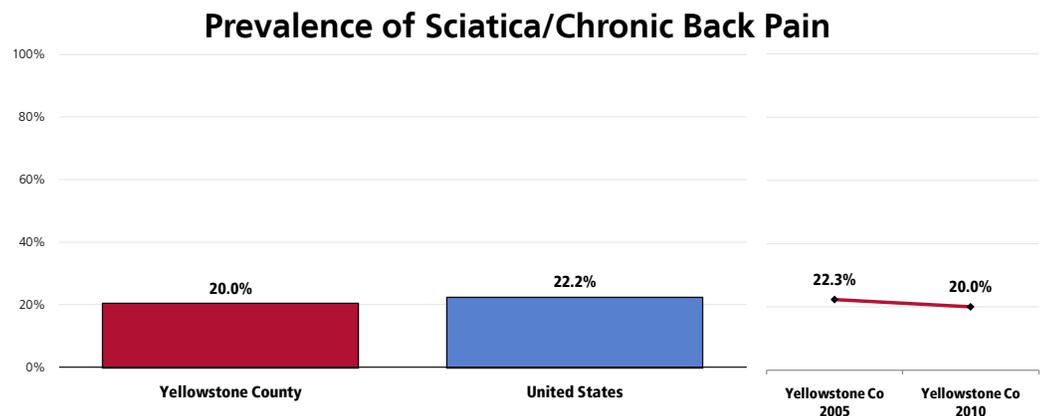
 Notes:
 

- Asked of all respondents.

## Prevalence of Sciatica/Chronic Back Pain

**One-fifth (20.0%) of surveyed adults suffer from chronic back pain or sciatica.**

- Similar to that found nationwide (22.2%).
- ☒ Statistically unchanged since 2005.



Sources:
 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 26]
- 2008 PRC National Health Survey, Professional Research Consultants.

 Notes:
 

- Asked of all respondents.

## Other Ongoing Pain

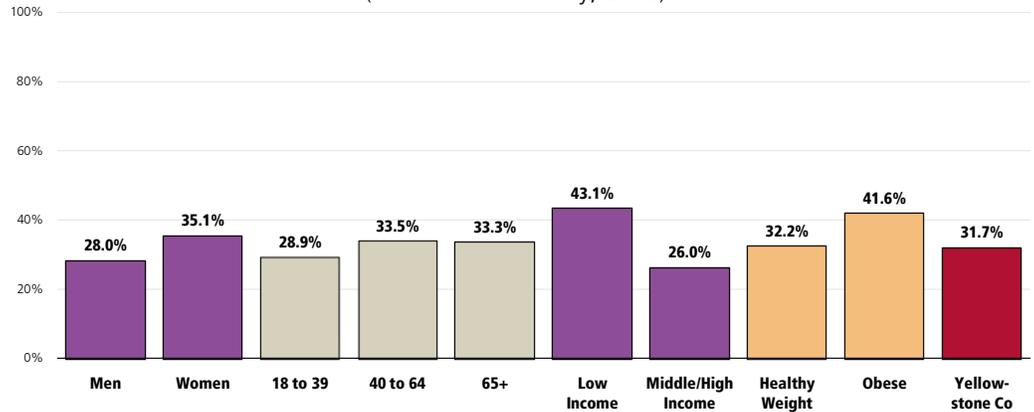
In all, nearly one-third of surveyed adults (31.7%) report suffering from some type of pain on an ongoing basis.

This prevalence is higher among:

-  Women.
-  Low-income adults.
-  Obese residents.

### Experience Some Type of Pain on an Ongoing Basis

(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 44]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

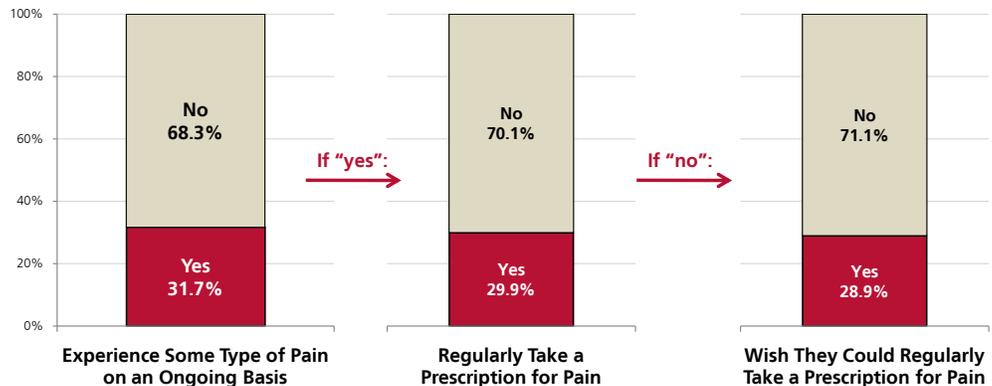
## Use of Pain Medications

Among the adults who experience ongoing pain, 29.9% regularly take a prescription for pain medication.

- Among those adults who experience ongoing pain, but who do not take prescription pain medication, 28.9% report wishing that they could.

### Use of Prescription Pain Medications

(Among Adults With Ongoing Pain)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 44-46]  
 Notes: • Asked of those respondents who experience some type of ongoing pain.

# Vision & Hearing

Among the five senses, people depend on vision and hearing to provide the primary cues for conducting the basic activities of daily life. At the most basic level, vision and hearing permit people to navigate and to stay oriented within their environment. These senses provide the portals for language, whether spoken, signed, or read. They are critical to most work and recreation and allow people to interact more fully. For these reasons, vision and hearing are defining elements of the quality of life. Either, or both, of these senses may be diminished or lost because of heredity, aging, injury, or disease. Such loss may occur gradually, over the course of a lifetime, or traumatically in an instant.

Conditions of vision or hearing loss that are linked with chronic and disabling diseases pose additional challenges for patients and their families. From the public health perspective, the prevention of either the initial impairment or additional impairment from these environmentally orienting and socially connecting senses requires significant resources. Prevention of vision or hearing loss or their resulting disabling conditions through the development of improved disease prevention, detection, or treatment methods or more effective rehabilitative strategies must remain a priority.

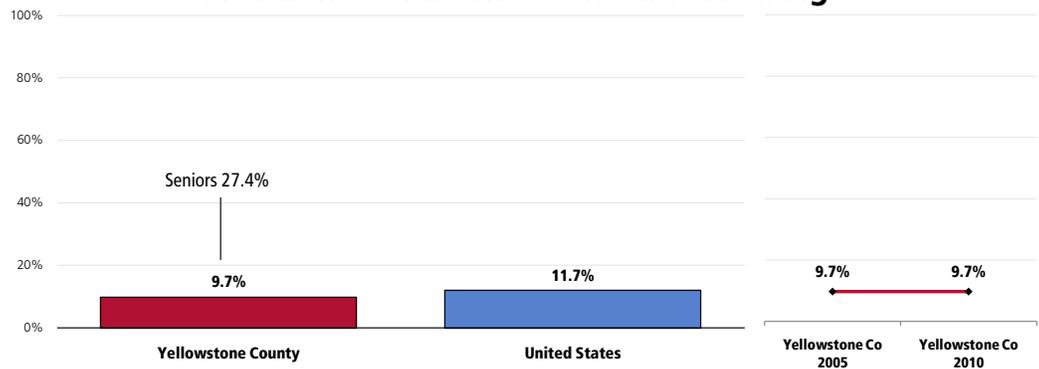
– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

## Hearing Trouble

**In all, 9.7% of Yellowstone County adults report being deaf or having difficulty hearing.**

- Similar to that found nationwide (11.7%).
- 📊 Identical to 2005 findings.
- 👥 Among county adults aged 65 and older, 27.4% have partial or complete hearing loss.

### Prevalence of Deafness/Trouble Hearing



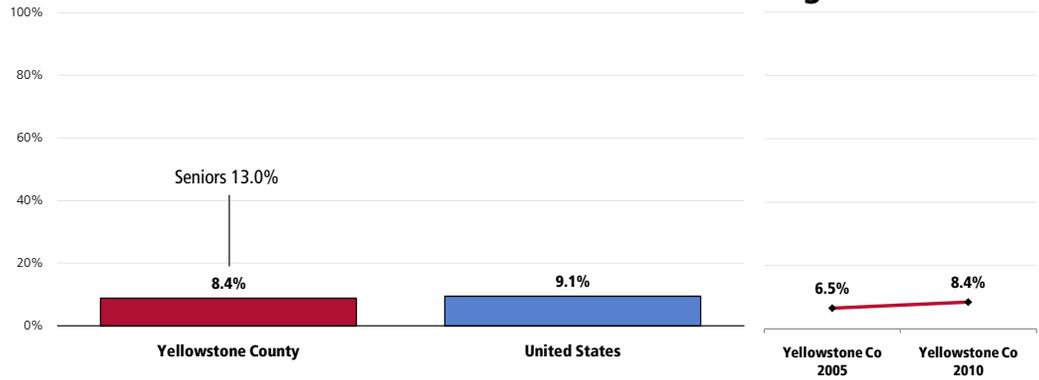
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 24]  
• 2008 PRC National Health Survey, Professional Research Consultants.  
Notes: • Asked of all respondents.

## Vision Trouble

**A total of 8.4% of Yellowstone County adults are blind, or have trouble seeing even when wearing corrective lenses.**

- Similar to that found nationwide (9.1%).
- ☒ Statistically similar to 2005 findings.
- 👥 Among county adults aged 65 and older, 13.0% have vision trouble.

### Prevalence of Blindness/Trouble Seeing



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 23]  
• 2008 PRC National Health Survey, Professional Research Consultants.  
Notes: • Asked of all respondents.

# Environmental Health

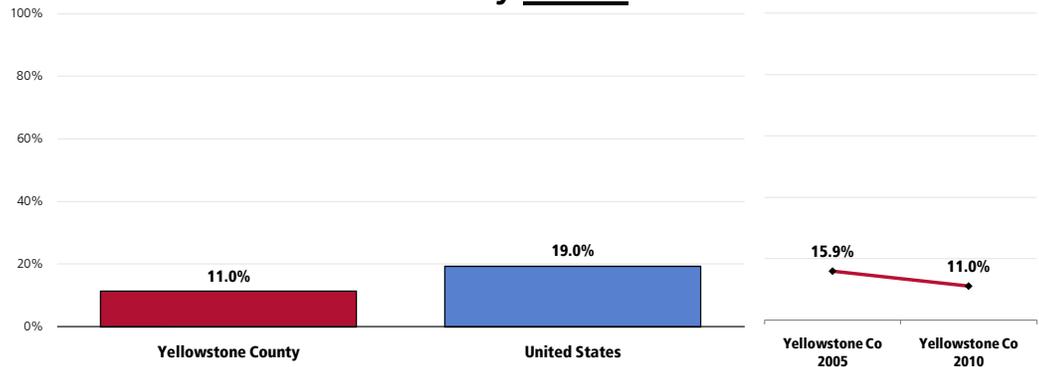
## Air Contaminants

### Indoor Contaminants

A total of **11.0%** of Yellowstone County adults have had an illness or symptom in the past year that they believe to be caused by **indoor air contaminants** (such as dust, mold, smoke or chemicals inside the home or office).

- More favorable than national findings (19.0%).
- ▣ Marks a statistically significant decrease since 2005.

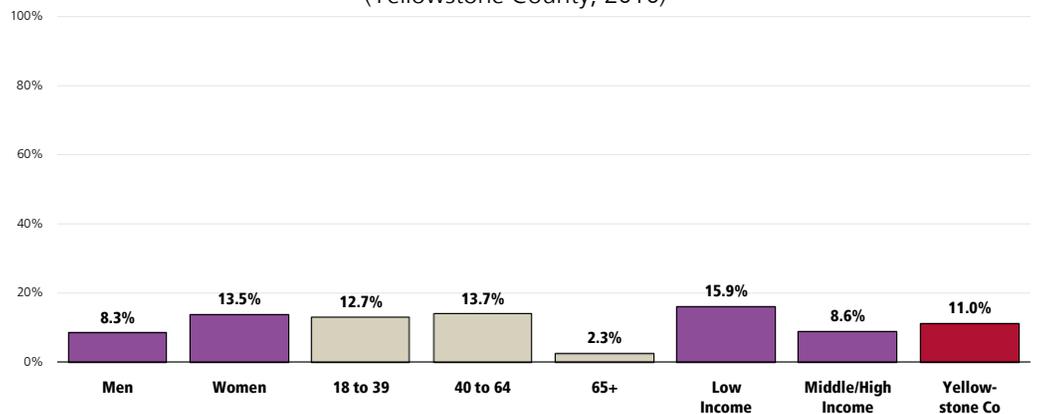
### Had an Illness or Symptoms in the Past Year Believed to be Caused by Indoor Air Contaminants



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 47]  
 • 2008 PRC National Health Survey, Professional Research Consultants.  
 Notes: • Asked of all respondents.  
 • Examples of indoor air contaminants include dust, mold, smoke, and chemicals.

👤 Women, adults <65, and low-income residents are more likely to have had an illness or symptom they believe was caused by indoor air contaminants.

### Had an Illness or Symptoms in the Past Year Believed to be Caused by Indoor Air Contaminants (Yellowstone County, 2010)



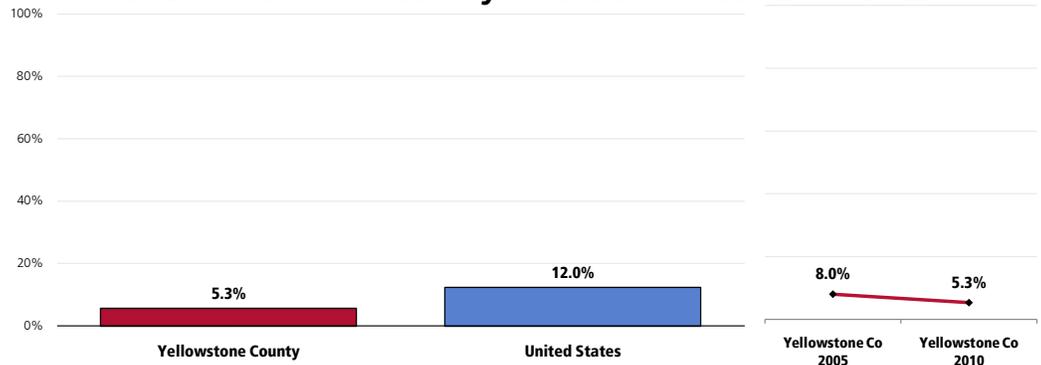
Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 47]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.  
 • Examples of indoor air contaminants include dust, mold, smoke, and chemicals.

## Outdoor Contaminants

**A total of 5.3% of Yellowstone County adults have had an illness or symptom in the past year that they believe to be caused by outdoor contaminants** (such as smog, automobile exhaust or chemicals).

- More favorable than that found nationwide (12.0%).
- ☒ Statistically similar to 2005 findings.

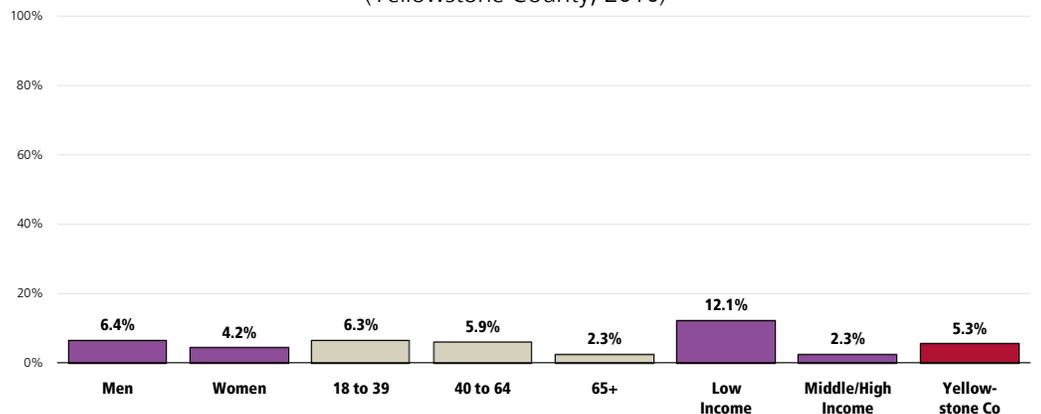
### Had an Illness or Symptoms in the Past Year Believed to be Caused by Outdoor Air Contaminants



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 48]
  - 2008 PRC National Health Survey, Professional Research Consultants.
- Notes:
- Asked of all respondents.
  - Examples of outdoor air contaminants include smog, automobile exhaust, and chemicals.

- ☒ Adults under 65 and low-income residents are more likely to have had an illness or symptoms in the past year believed to be caused by outdoor air contaminants.

### Had an Illness or Symptoms in the Past Year Believed to be Caused by Outdoor Air Contaminants (Yellowstone County, 2010)



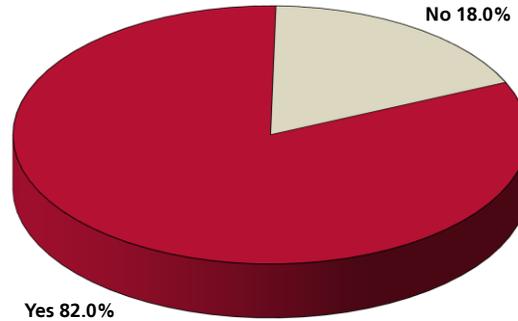
- Sources:
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 48]
- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.
  - Examples of indoor air contaminants include smog, automobile exhaust, and chemicals.

## City Water Supply

More than 8 out of 10 Yellowstone County residents' homes are connected to a city water supply.

### Home is Connected to City Water Supply

(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 49]  
Notes: • Asked of all respondents.

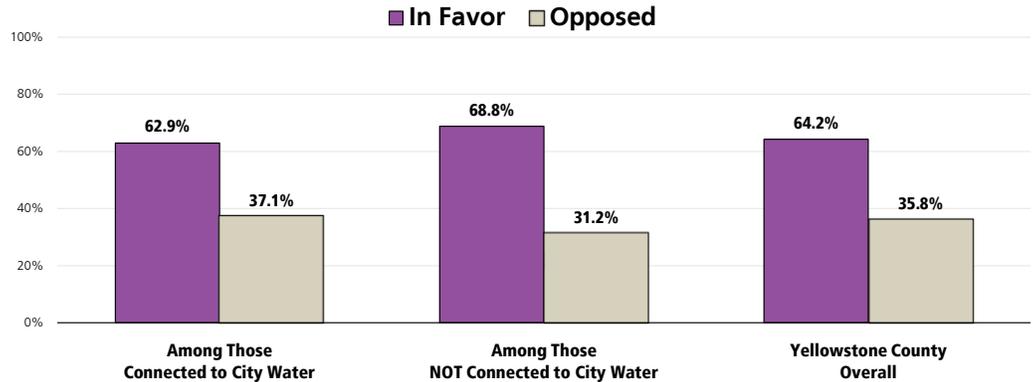
Among those residents with city water, most (62.9%) are in favor of adding fluoride to the water supply.

- In contrast, 37.1% are opposed to fluoridation.

Results are fairly similar among adults not connected to city water.

### Opinion of Adding Fluoride to City's Water Supply

(Yellowstone County, 2010)

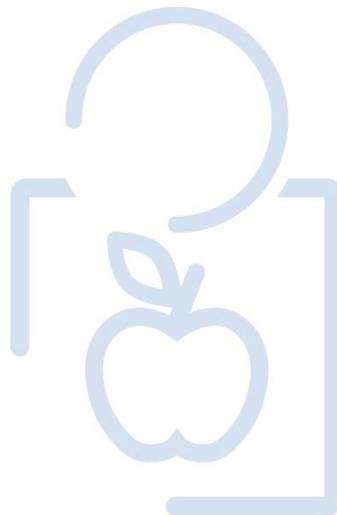


Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 50]  
Notes: • Asked of all respondents.

# INFECTIOUS DISEASE

*Infectious diseases remain major causes of illness, disability, and death. Moreover, new infectious agents and diseases are being detected, and some diseases considered under control have reemerged in recent years. In addition, antimicrobial resistance is evolving rapidly in a variety of hospital- and community-acquired infections. These trends suggest that many challenges still exist in the prevention and control of infectious diseases.*

*– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.*



# Vaccine-Preventable Conditions

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

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

## Measles, Mumps, Rubella & Pertussis

Between 2006 and 2008, there were no reported cases of measles, mumps, or rubella in Yellowstone County.

Between 2006 and 2008, the annual average pertussis incidence rate (new cases per year) was 4.5 cases per 100,000 population in Yellowstone County.

- Well below the Montana incidence rate (8.8).
- Similar to the national incidence rate (4.4) for the 2006-2008 reporting period.

### Reported Case Rates for Vaccine-Preventable Diseases (2006-2008)

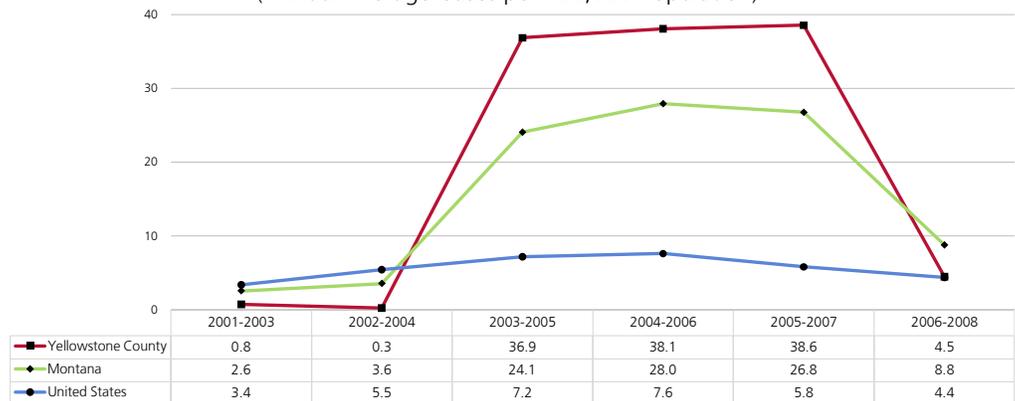
	Yellowstone County	Montana	US	HP2010
<b>Measles</b>	0.0	0.0	0.0	0.0
<b>Mumps</b>	0.0	0.1	0.9	0.0
<b>Rubella</b>	0.0	0.0	0.0	0.0
<b>Pertussis</b>	4.5	8.8	4.4	n/a

Sources: • Montana Department of Public Health and Human Services.  
 • Centers for Disease Control and Prevention, Division of Public Health Surveillance and Informatics. Epidemiology Program Office.  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 27-9]  
 Notes: • US measles cases include only those infected while in the United States.

⚠ Pertussis incidence has fluctuated broadly, with an outbreak in 2005.

### Pertussis Incidence

(Annual Average Cases per 100,000 Population)



Sources: • Montana Department of Public Health and Human Services.  
 • Centers for Disease Control and Prevention, National Center for Health Statistics.  
 Notes: • Rates are annual average new cases per 100,000 population.

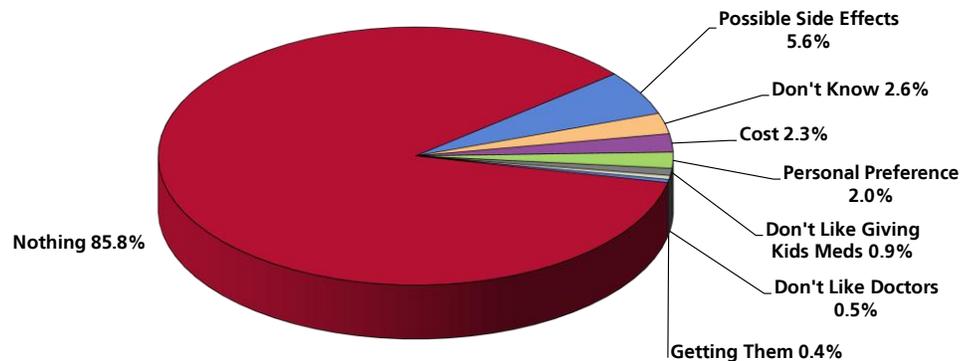
## Childhood Vaccinations

When parents of children under 18 were asked to name any factors which might prevent them from obtaining the recommended vaccinations for their children, the majority (85.8%) could not name any.

- Among those parents who were able to name a factor which would prevent them from obtaining recommended vaccinations for their children, "possible side effects" was most often cited.

### Factors Which Would Prevent Parent From Obtaining the Recommended Immunizations for Their Child

(Yellowstone County Parents of Children <18, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 134]  
Notes: • Asked of all respondents with children under 18 at home.

## Acute Hepatitis C

Yellowstone County has experienced a 0.0 incidence rate for hepatitis C since the 2004-2006 reporting period.

- More favorable than the rates reported across Montana.
- More favorable than the national rates.

# Influenza & Pneumonia Vaccination

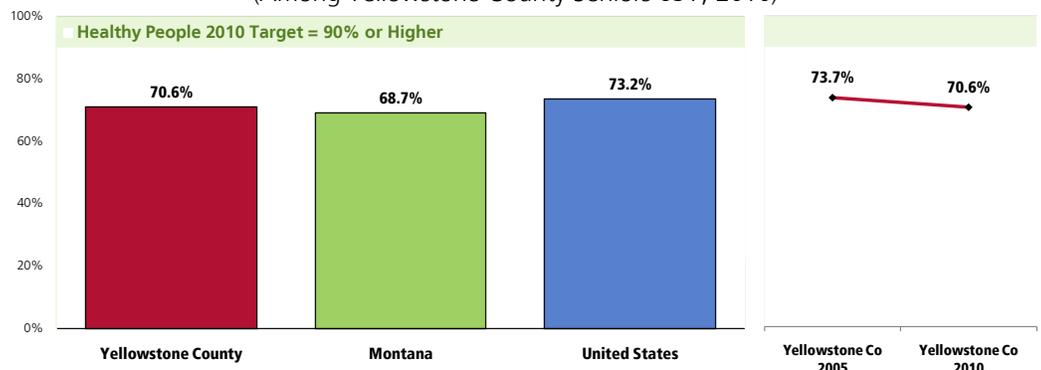
## Flu Vaccinations

**Among Yellowstone County seniors, 70.6% received a flu shot (or FluMist) within the past year.**

- Statistically comparable to the Montana finding (68.7%).
- Comparable to the national finding (73.2%).
- Fails to satisfy the Healthy People 2010 target (90% or higher).
- ☒ Statistically unchanged since 2005.

### Have Had a Flu Vaccination in the Past Year

(Among Yellowstone County Seniors 65+, 2010)



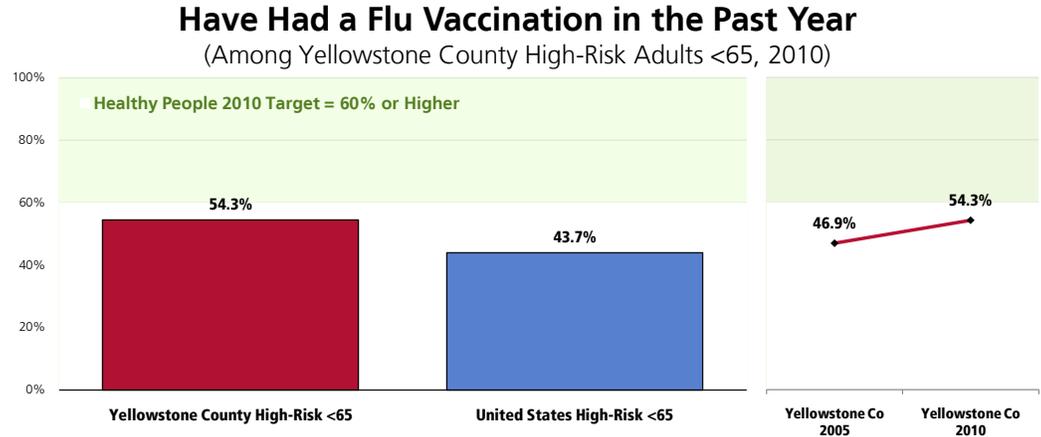
- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 190]
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2009 Montana data.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 14-29a]
- Notes:
- Asked of all respondents aged 65 and older.
  - Includes FluMist as a form of vaccination.

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

## High-Risk Adults

**A total of 54.3% of high-risk adults aged 18 to 64 received a flu vaccination (flu shot or FluMist) within the past year.**

- Similar to national findings (43.7%).
- Similar to the Healthy People 2010 target (60% or higher).
- 📊 Statistically unchanged since 2005.



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 191]
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 14-29c]
- Notes:
- Asked of all high-risk respondents under 65.
  - “High-Risk” includes adults aged 18 to 64 who have been diagnosed with heart disease, diabetes or respiratory disease.
  - Includes FluMist as a form of vaccination.

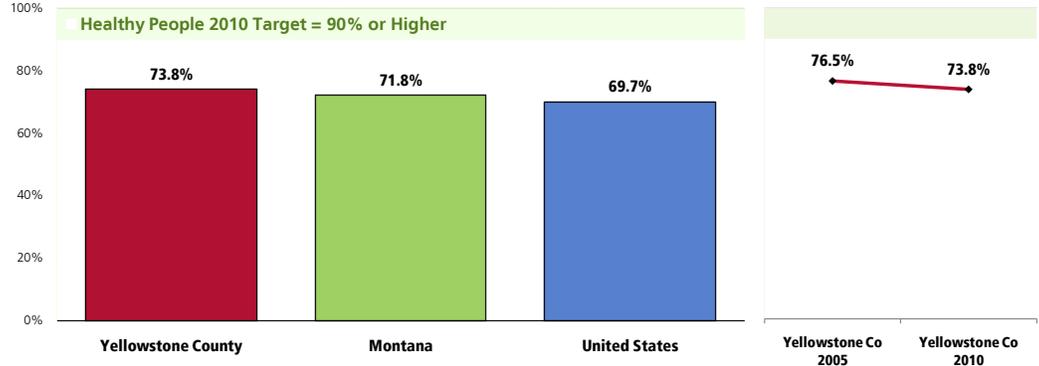
## Pneumonia Vaccination

Among adults aged 65 and older, 73.8% have received a pneumonia vaccination at some point in their lives.

- Similar to the Montana finding (71.8%).
- Similar to the national finding (69.7%).
- Fails to satisfy the Healthy People 2010 objective of 90% or higher.
- ☒ Statistically similar to 2005 findings.

### Have Ever Had a Pneumonia Vaccine

(Among Yellowstone County Seniors 65+, 2010)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 192]  
 • 2008 PRC National Health Survey, Professional Research Consultants.  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2009 Montana data.  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 14-29b]

Notes: • Asked of all respondents aged 65 and older.

## High-Risk Adults

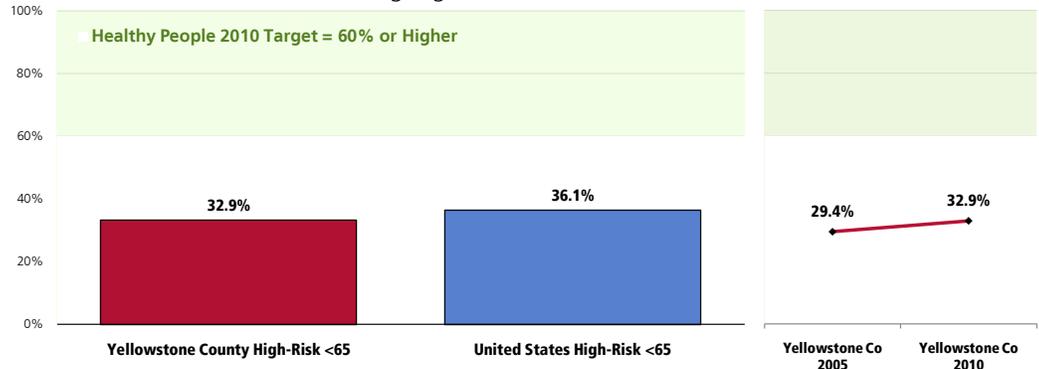
“High-risk” includes adults who report having been diagnosed with heart disease, diabetes or respiratory disease.

A total of 32.9% of high-risk adults aged 18 to 64 have ever received a pneumonia vaccination.

- Similar to national findings (36.1%).
- Fails to satisfy the Healthy People 2010 target (60% or higher).
- ☒ Statistically unchanged since 2005.

### Have Ever Had a Pneumonia Vaccine

(Among High-Risk Adults <65, 2010)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 193]  
 • 2008 PRC National Health Survey, Professional Research Consultants.  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 14-29d]

Notes: • Asked of all high-risk respondents under 65.  
 • “High-Risk” includes adults aged 18 to 64 who have been diagnosed with heart disease, diabetes or respiratory disease.

# Tuberculosis

Tuberculosis (TB) is an infectious disease caused by a type of bacteria called *Mycobacterium tuberculosis*. TB is spread from person to person through the air, as someone with active tuberculosis of the respiratory tract coughs, sneezes, yells, or otherwise expels bacteria-laden droplets.

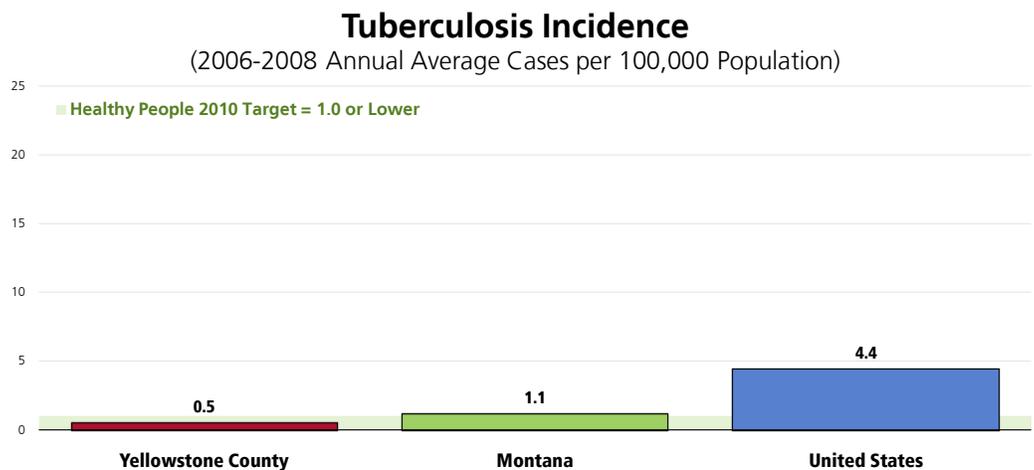
The Institute of Medicine (IOM), an arm of the National Academy of Sciences, released a report in May 2000 that lays out an action plan for eliminating tuberculosis in the United States ... As a key part of the plan, new TB treatment and prevention strategies must be developed that are tailored to the current environment. Among today's hallmarks:

- Tuberculosis now occurs in ever-smaller numbers in most regions of the country.
- Foreign-born people (both legal and undocumented immigrants) coming to the United States from countries with high rates of TB now account for nearly half of all TB cases.
- Higher numbers of cases are concentrated in pockets located in major metropolitan areas, and this increased prevalence is due, in large part, to the increased number of people with or at risk for HIV/AIDS infection.
- Other groups, such as HIV-infected people and the growing population of prison inmates, the homeless, and intravenous drug abusers, are emerging as being at high risk.

– Ending Neglect: The Elimination Of Tuberculosis In The United States. National Academy of Sciences, Institute of Medicine. Funded by the Centers for Disease Control and Prevention. 2000.

**Between 2006 and 2008, the annual average tuberculosis incidence rate (new cases per year) was 0.5 cases per 100,000 population in Yellowstone County.**

- Below the Montana incidence rate (1.1).
- Below the national incidence rate (4.4).
- Satisfies the Healthy People 2010 target.

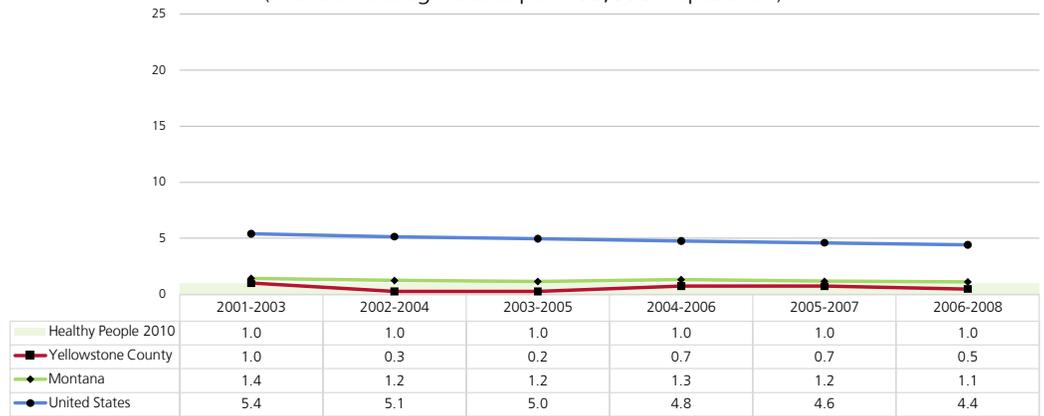


Sources: • Montana Department of Public Health and Human Services.  
• Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 13-1]  
Notes: • Rates are annual average new cases per 100,000 population.

- Tuberculosis incidence has remained low for the past several years. Nationally, TB incidence is slowly declining.

### Tuberculosis Incidence

(Annual Average Cases per 100,000 Population)



Sources:
 

- Montana Department of Public Health and Human Services.
- Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 13-1]

Notes:
 

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

In the United States, HIV/AIDS remains a significant cause of illness, disability, and death, despite declines in 1999 and 2001.

Principal health determinants. Behaviors (sexual practices, substance abuse, and accessing prenatal care) and biomedical status (having other STDs) are major determinants of HIV transmission. Unprotected sexual contact, whether homosexual or heterosexual, with a person infected with HIV and sharing drug-injection equipment with an HIV-infected individual account for most HIV transmission in the United States. Increasing the number of people who know their HIV serostatus is an important component of a national program to slow or halt the transmission of HIV in the United States.

For persons infected with HIV, behavioral determinants also play an important role in health maintenance. Although drugs are available specifically to prevent and treat a number of opportunistic infections, HIV-infected individuals also need to make lifestyle-related behavioral changes to avoid many of these infections. The new HIV antiretroviral drug therapies for HIV infection bring with them difficulties in adhering to complex, expensive, and demanding medication schedules, posing a significant challenge for many persons infected with HIV.

Because HIV infection weakens the immune system, people with tuberculosis (TB) infection and HIV infection are at very high risk of developing active TB disease.

The true extent of the epidemic remains difficult to assess for several reasons, including because of a lack of awareness of HIV serostatus as well as delays in accessing counseling, testing, and care services by individuals who may be infected or are at risk of infection, some populations do not perceive themselves to be at risk. As a result, some HIV-infected persons are not identified and provided care until late in the course of their infection.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

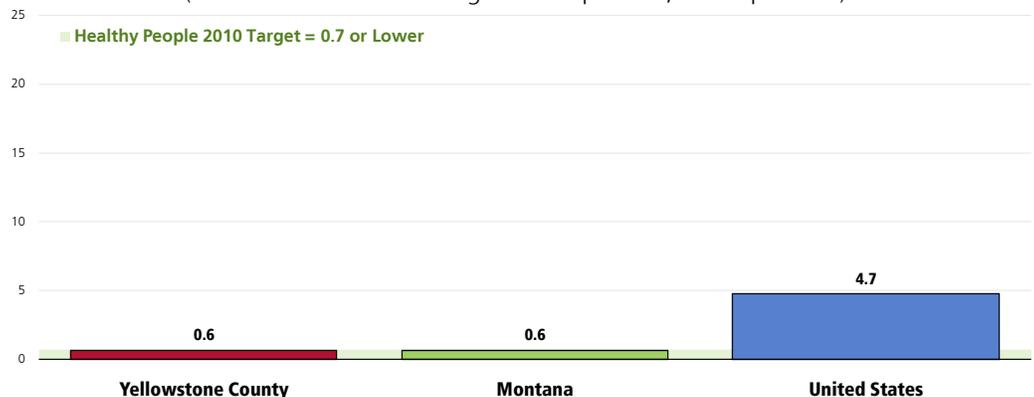
## Age-Adjusted HIV/AIDS Deaths

**Between 1999 and 2006, there was an annual average age-adjusted HIV/AIDS mortality rate of 0.6 deaths per 100,000 population in Yellowstone County.**

- Identical to that found statewide (0.6).
- Much lower than the rate reported nationally (4.7).
- Satisfies the Healthy People 2010 target.

### HIV/AIDS: Age-Adjusted Mortality

(1999-2006 Annual Average Deaths per 100,000 Population)

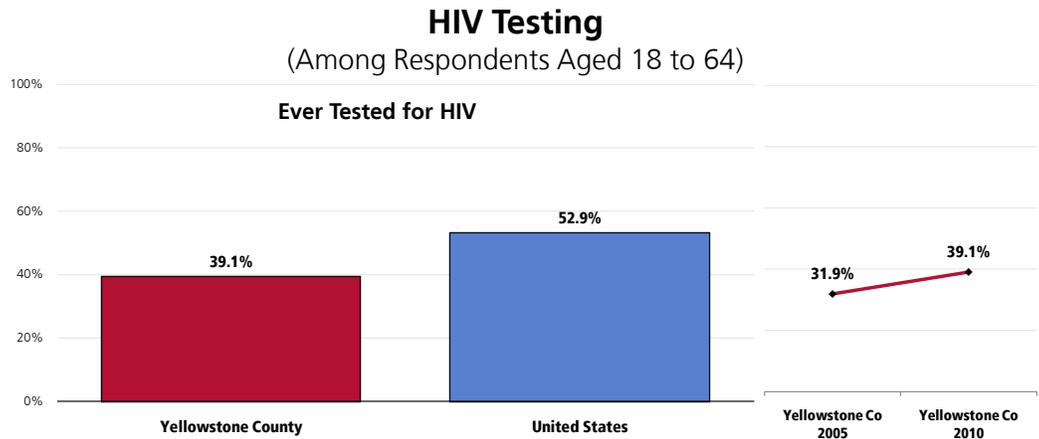


Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.  
 ● Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 13-14]  
 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 U.S. Standard Population.  
 ● County, state and national data are simple three-year averages.  
 ● Note that individual county rates are unreliable due to low number of deaths.

## HIV Testing

Among Yellowstone County adults aged 18 to 64 years, 39.1% report that they have been tested for human immunodeficiency virus (HIV).

- Much lower than the proportion found nationwide (52.9%).
- ☒ Testing levels have not changed to a statistically significant degree since 2005.

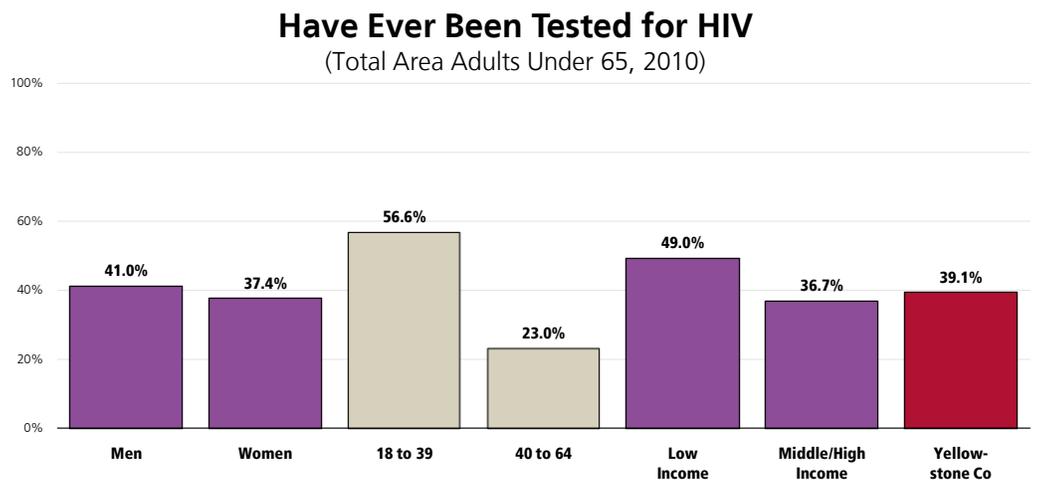


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 194]  
 • 2008 PRC National Health Survey, Professional Research Consultants.

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

By demographic characteristics:

- ☒ A greater proportion of young adults (aged 18 to 39) reports being tested for HIV.
- ☒ Persons living in the lower income category more often report having been tested for HIV.



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 194]

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

• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

# Sexually Transmitted Diseases

Sexually transmitted diseases (STDs) refer to the more than 25 infectious organisms transmitted primarily through sexual activity. STDs are among many related factors that affect the broad continuum of reproductive health agreed on in 1994 by 180 governments at the International Conference on Population and Development (ICPD). At ICPD, all governments were challenged to strengthen their STD programs. STD prevention as an essential primary care strategy is integral to improving reproductive health.

Despite the burdens, costs, complications, and preventable nature of STDs, they remain a significant public health problem, largely unrecognized by the public, policymakers, and public health and healthcare professionals in the United States. STDs cause many harmful, often irreversible, and costly clinical complications, such as reproductive health problems, fetal and perinatal health problems, and cancer. In addition, studies of the worldwide human immunodeficiency virus (HIV) pandemic link other STDs to a causal chain of events in the sexual transmission of HIV infection.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

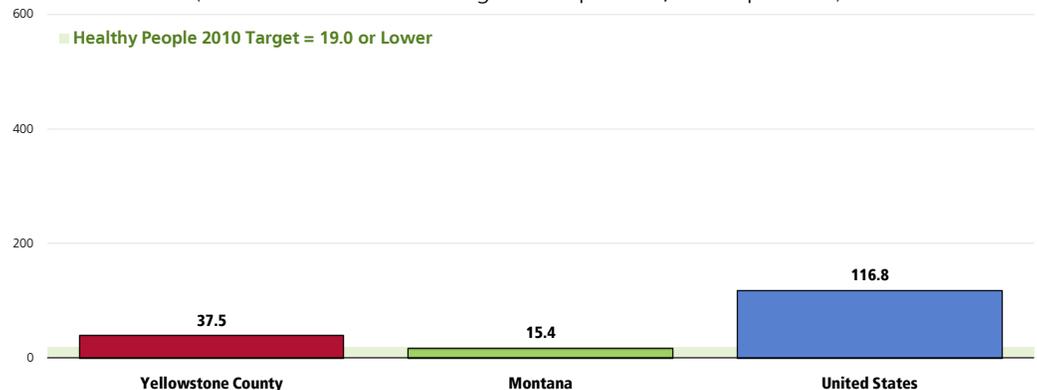
## Gonorrhea

**Between 2006 and 2008, the annual average gonorrhea incidence rate was 37.5 cases per 100,000 population in Yellowstone County.**

- Higher than the Montana incidence rate (15.4).
- Much lower than the national incidence rate (116.8).
- Fails to satisfy the Healthy People 2010 target.

### Gonorrhea Incidence

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



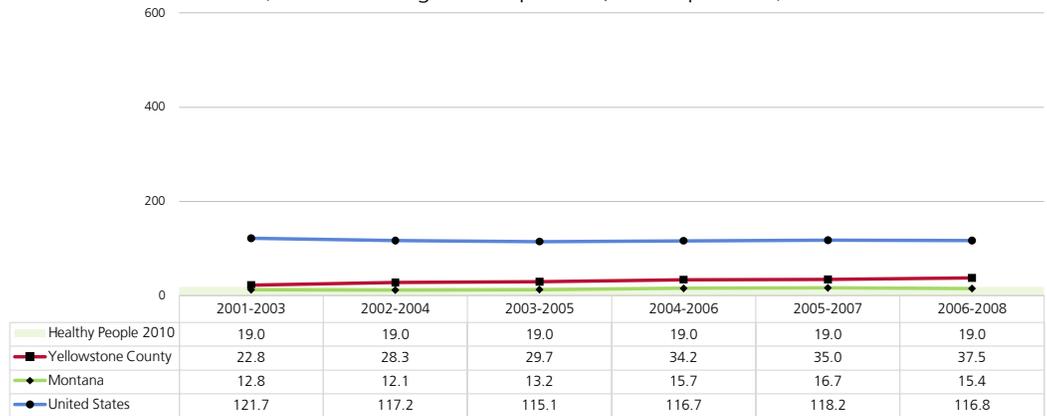
Sources: • Montana Department of Public Health and Human Services.  
• Centers for Disease Control and Prevention, National Center for Health Statistics.  
• Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 25-2]

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

- ☒ Gonorrhea rates increased between the 2001-2003 and 2006-2008 reporting periods in Yellowstone County, similar to the statewide trend. Nationally, gonorrhea incidence has decreased, but remains much higher.

### Gonorrhea Incidence

(Annual Average Cases per 100,000 Population)



Sources:
 

- Montana Department of Public Health and Human Services.
- Centers for Disease Control and Prevention, National Center for Health Statistics.
- Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 25-2]

Notes:
 

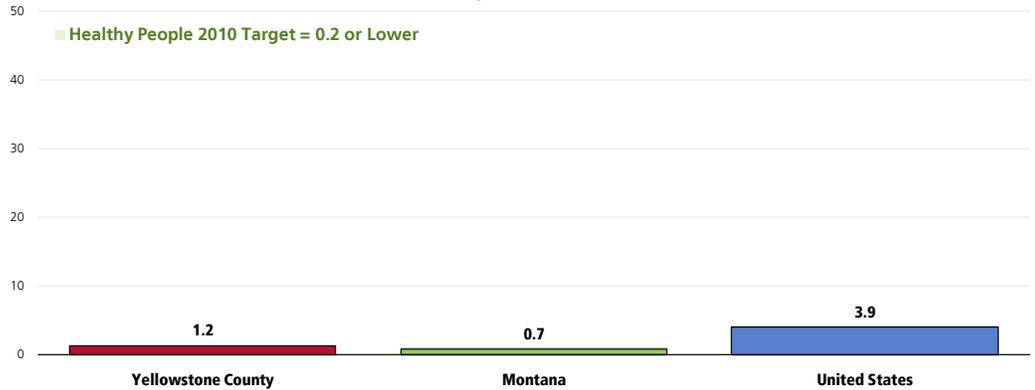
- Rates are annual average new cases per 100,000 population.

# Syphilis

Between 2006 and 2008, the annual average primary/secondary syphilis incidence rate was 1.2 cases per 100,000 population in Yellowstone County.

- Higher than the Montana incidence rate (0.7).
- Much lower than the national incidence rate (3.9).
- Fails to satisfy the Healthy People 2010 target.

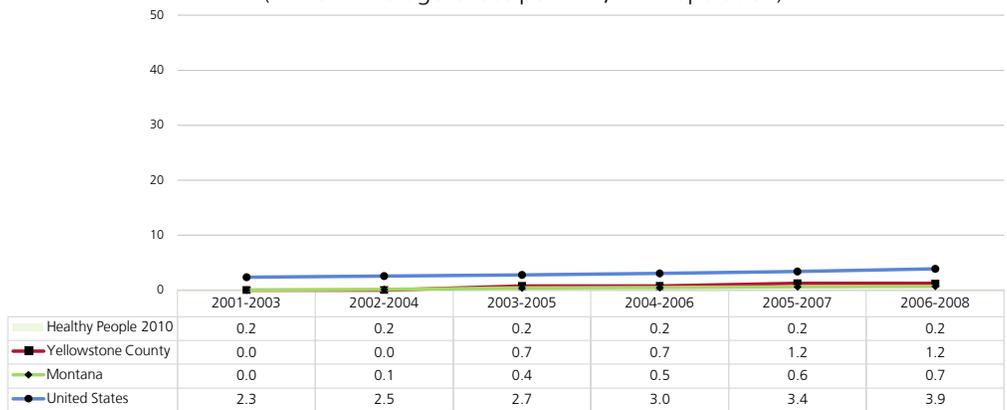
**Primary/Secondary Syphilis Incidence**  
(2006-2008 Annual Average Cases per 100,000 Population)



Sources: • Montana Department of Public Health and Human Services.  
 • Centers for Disease Control and Prevention, National Center for Health Statistics.  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 25-2]  
 Notes: • Rates are annual average new cases per 100,000 population.

⊠ Syphilis incidence has increased in Yellowstone County in recent years. The state and national rates increased as well over the past several years.

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



Sources: • Montana Department of Public Health and Human Services.  
 • Centers for Disease Control and Prevention, National Center for Health Statistics.  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 25-2]  
 Notes: • Rates are annual average new cases per 100,000 population.

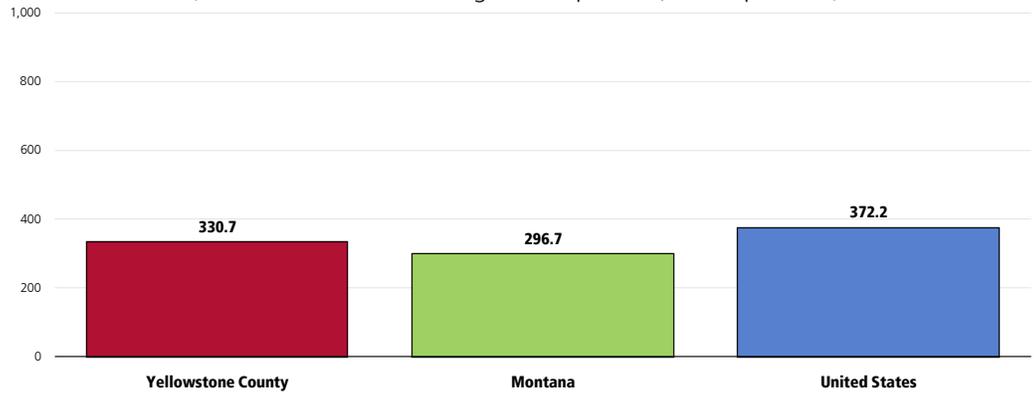
# Chlamydia

Between 2006 and 2008, the annual average chlamydia incidence rate was 330.7 cases per 100,000 population in Yellowstone County.

- Less favorable than the Montana incidence rate (296.7).
- More favorable than the national incidence rate (372.2).

## Chlamydia Incidence

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



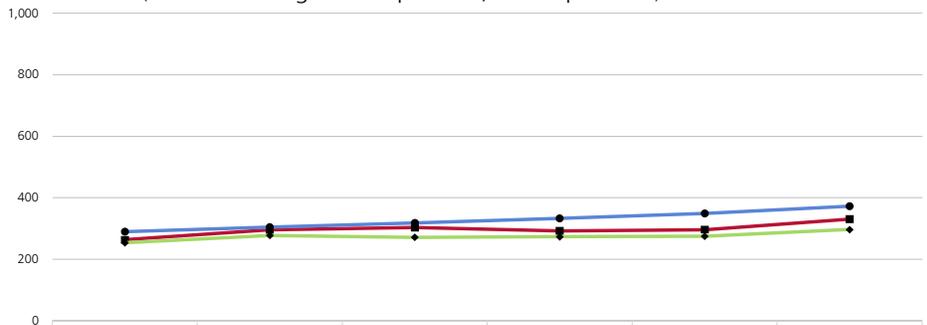
Sources: • Montana Department of Public Health and Human Services.  
• Centers for Disease Control and Prevention, National Center for Health Statistics.

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

☒ Chlamydia incidence has increase locally, tracking with state and national incidence rates.

## Chlamydia Incidence

(Annual Average Cases per 100,000 Population)



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

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

# Acute Hepatitis B

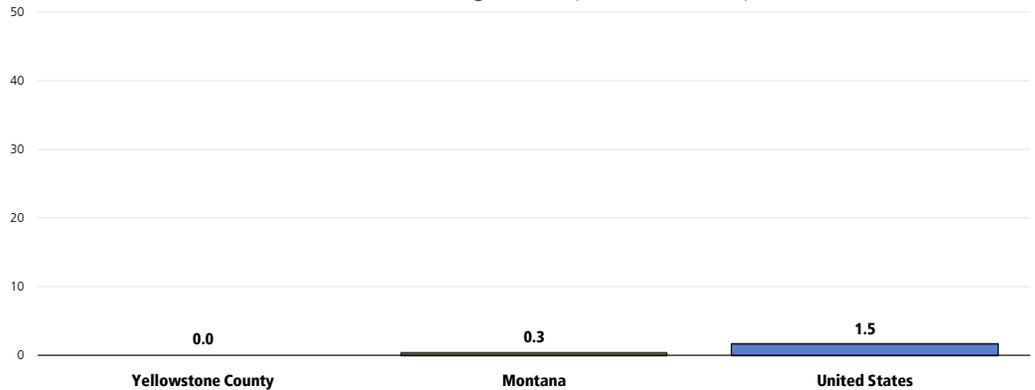
## Hepatitis B Incidence

Between 2006 and 2008, there were no hepatitis B cases in Yellowstone County.

- More favorable than the statewide rate (0.3).
- More favorable than the national rate (1.5).

### Hepatitis B (Acute) Incidence

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



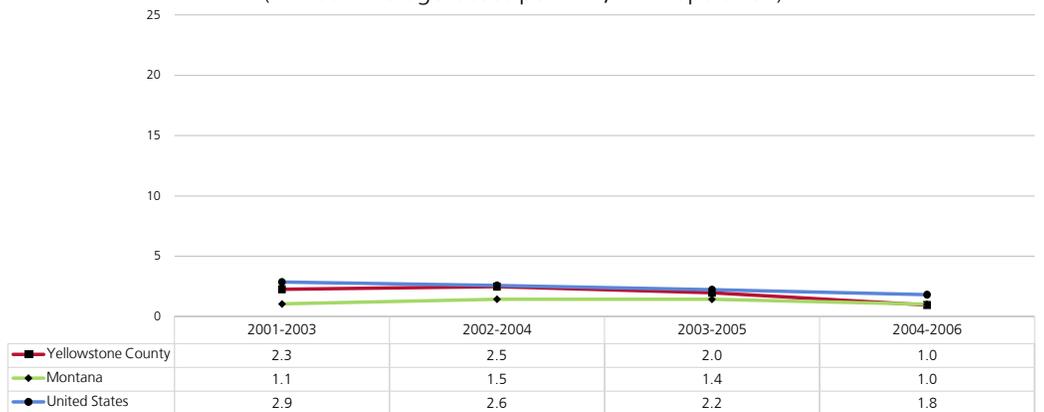
Sources: • Montana Department of Public Health and Human Services.  
 • Centers for Disease Control and Prevention, National Center for Health Statistics.

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

The county's acute hepatitis B incidence rate has decreased in recent years, echoing the downward trend reported both statewide and nationwide.

### Hepatitis B (Acute) Incidence

(Annual Average Cases per 100,000 Population)



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

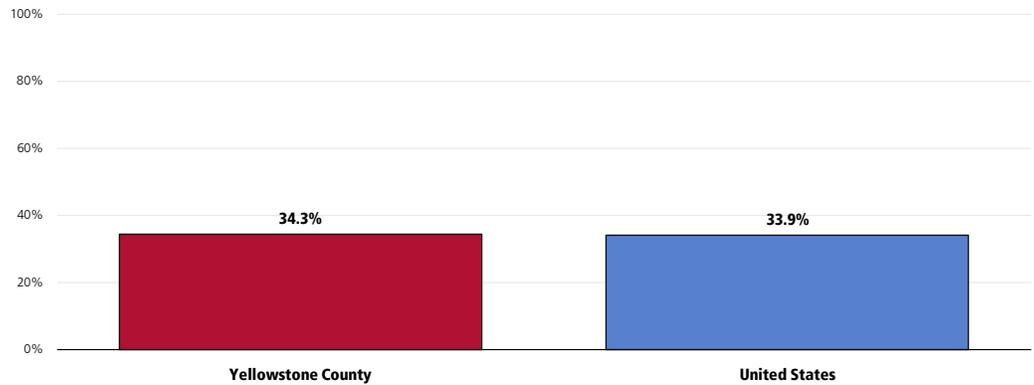
Notes: • Rates are annual average new cases per 100,000 population.

## Hepatitis B Vaccination

Based on survey data, just over one-third (34.3%) of residents have received the hepatitis B vaccine.

- Similar to the 33.9% reported nationwide.

### Have Ever Received the Hepatitis B Vaccination



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 83]  
• PRC National Health Survey, Professional Research Consultants, Inc.

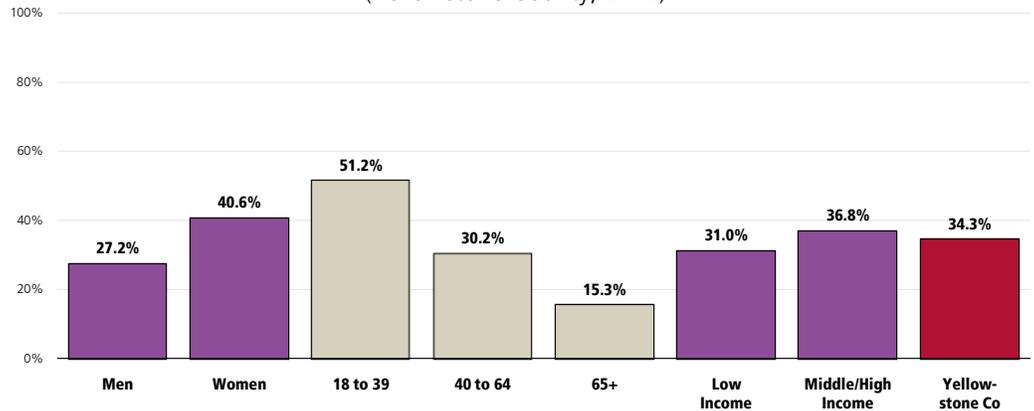
Notes: • Asked of all respondents.

👤 Women in Yellowstone County are more likely than men to have received the hepatitis B vaccine.

👤 Note the negative correlation between age and hepatitis B vaccination.

### Have Ever Received the Hepatitis B Vaccination

(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 83]

Notes: • Asked of all respondents.

• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

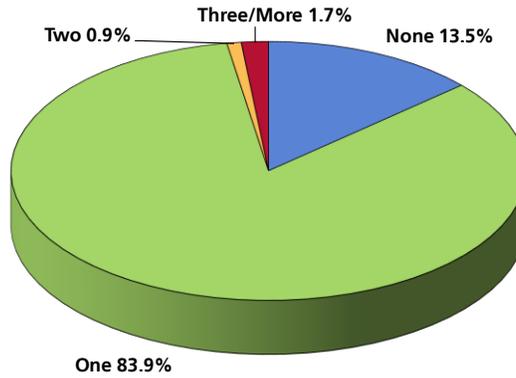
# Safe Sexual Practices

## Sexual Partners

Among Yellowstone County adults under age 65, the vast majority reports have only one (83.9%) or no (13.5%) sexual partners in the past 12 months.

### Number of Sexual Partners in Past 12 Months

(Yellowstone County; Respondents Aged 18-64, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]  
Notes: • Asked of all respondents under the age of 65.

Just 1.7% report three or more sexual partners in the past year.

Similar to 2005 findings.

### Had Three or More Sexual Partners in the Past Year

(Among Respondents Aged 18 to 64)



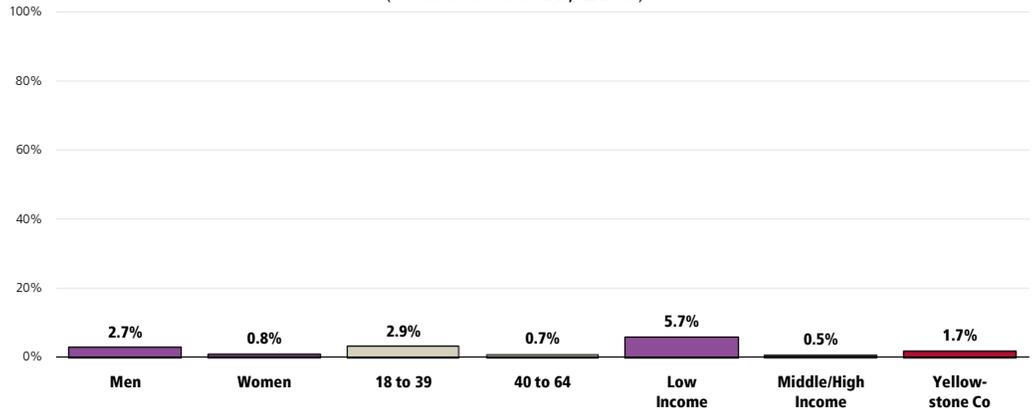
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 102]  
Notes: • Asked of all respondents under the age of 65.

Respondents (aged 18 to 64) more likely to report three or more sexual partners in the past year include:

-  Men.
-  Residents aged 18 to 39.
-  Low-income adults.

### Had Three or More Sexual Partners in the Past Year

(Adults Under 65, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]  
 Notes: • Asked of all respondents under the age of 65.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

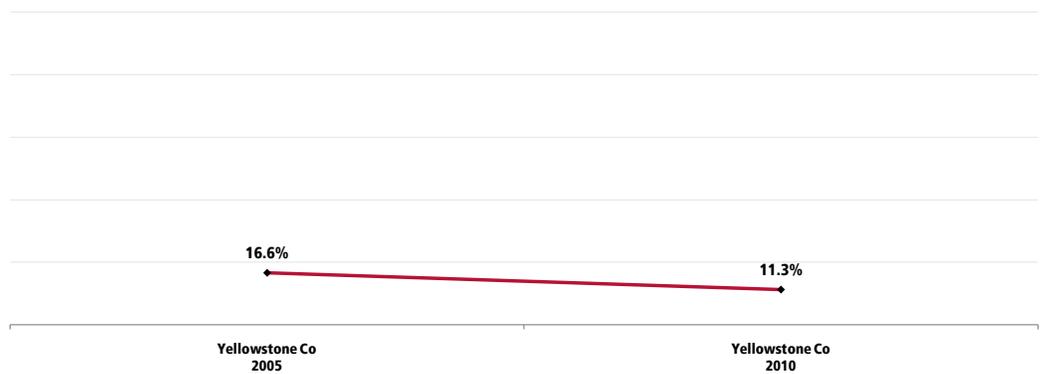
### Condom Use

Among Yellowstone County adults who are under age 65, 11.3% report using a condom during their last sexual intercourse.

 Statistically similar to 2005 findings.

### Used Condom During Last Sexual Intercourse

(Among Respondents Aged 18 to 64)



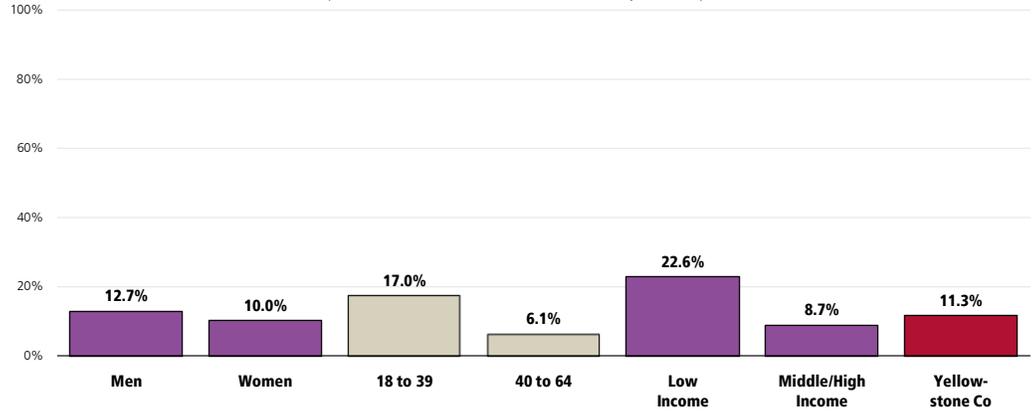
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 103]  
 Notes: • Asked of all respondents under the age of 65.

Those less likely to have used a condom during their last sexual intercourse include:

- 👤 Residents aged 40 through 64.
- 👤 Middle- to high-income respondents.

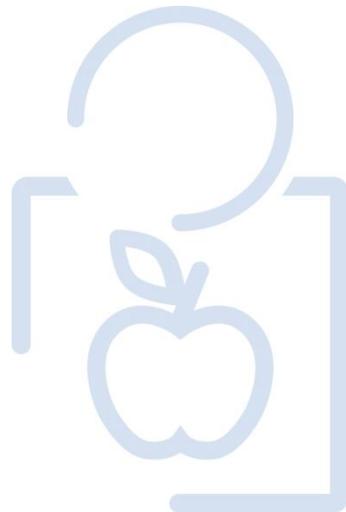
### Used Condom During Last Sexual Intercourse

(Unmarried Adults Under 65, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 103]  
Notes: • Asked of all unmarried respondents under the age of 65.  
• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

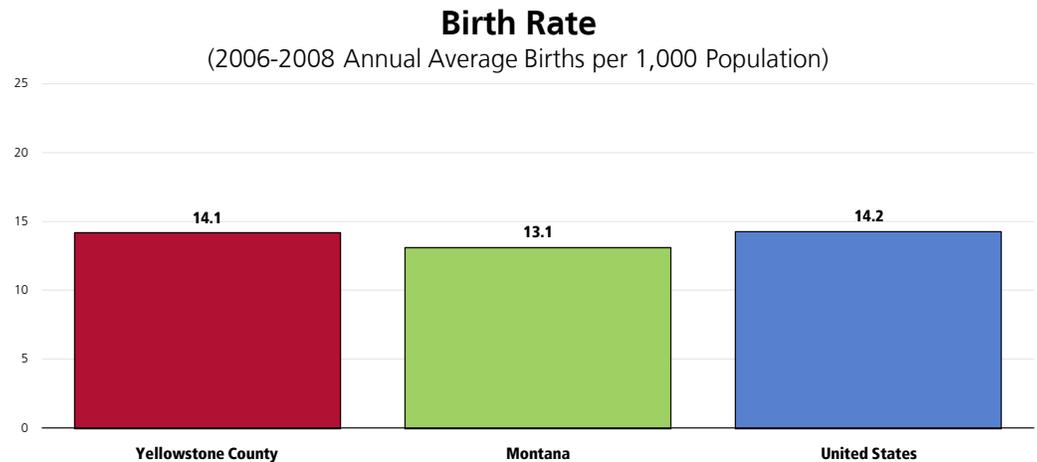
# BIRTHS



# Birth Rates

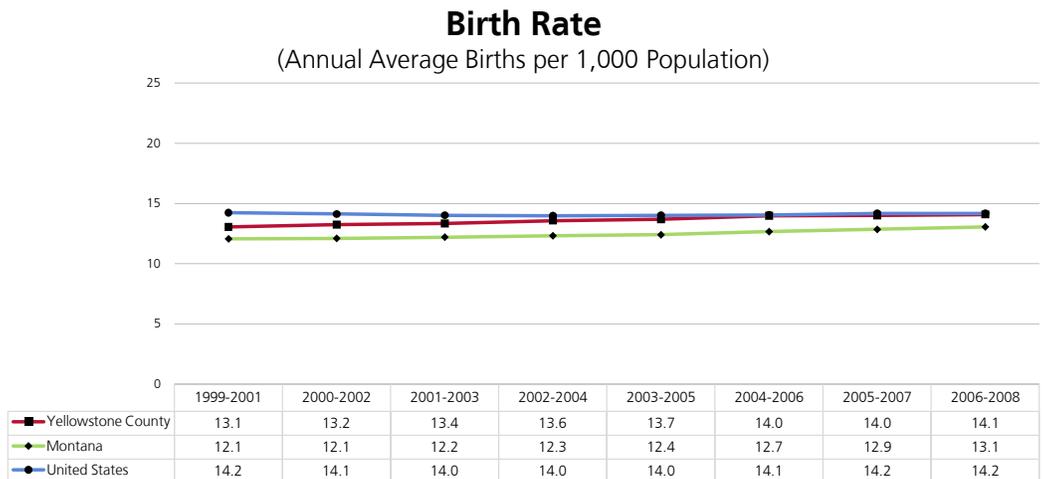
Between 2006 and 2008, Yellowstone County experienced a rate of 14.1 births per 1,000 population.

- Higher than the Montana birth rate (13.1).
- Nearly identical to the national birth rate (14.2).



Sources: • Montana Department of Public Health and Human Services.  
 • Centers for Disease Control and Prevention, National Vital Statistics System.  
 Notes: • Rates are births per 1,000 population.

The Yellowstone County birth rate increased somewhat between the 1999-2001 and 2006-2008 reporting periods, as did the Montana rate. In contrast, the national birth rate remained fairly constant.



Sources: • Montana Department of Public Health and Human Services.  
 • Centers for Disease Control and Prevention, National Vital Statistics System.  
 Notes: • Rates are births per 1,000 population.

# Timely Prenatal Care

Many risk factors can be mitigated or prevented with good pre-conception and prenatal care. Prenatal visits offer an opportunity to provide information about the adverse effects of substance use, including alcohol and tobacco during pregnancy, and serve as a vehicle for referrals to treatment services. The use of timely, high-quality prenatal care can help to prevent poor birth outcomes and improve maternal health by identifying women who are at particularly high risk and taking steps to mitigate risks, such as the risk of high blood pressure or other maternal complications.

African American and Hispanic women also are less likely than Whites to enter prenatal care early. For both African American and White women, the proportion entering prenatal care in the first trimester rises with maternal age until the late thirties, then begins to decline ... Women in certain racial and ethnic groups also are less likely than White women to breastfeed their infants..

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

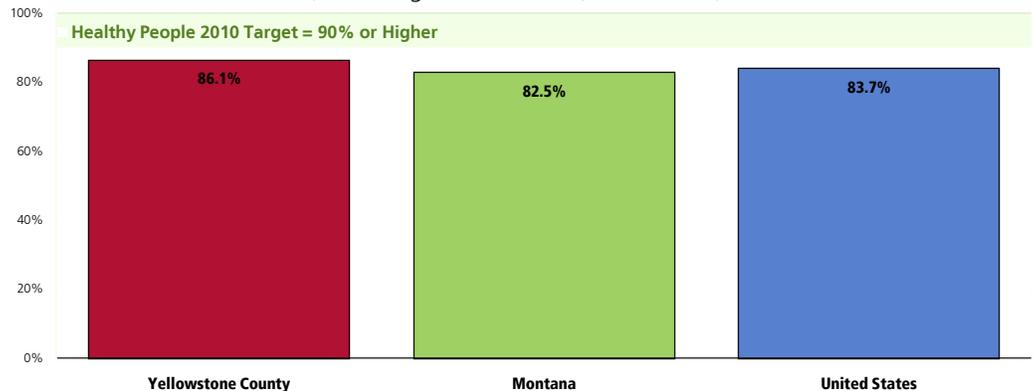
Early and continuous prenatal care is the best assurance of infant health.

## Between 2006 and 2008, 86.1% of all Yellowstone County births received prenatal care in the first trimester of pregnancy.

- More favorable than the Montana proportion (82.5%).
- More favorable than the 83.7% reported nationally.
- Fails to satisfy the Healthy People 2010 target (90% or higher).

### Mothers Receiving Prenatal Care in the First Trimester

(Percentage of Live Births, 2005-2007)



Sources: • Montana Department of Public Health and Human Services.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
• Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000 [Objective 16-6].

Note: • Numbers are a percentage of all live births within each population.

Receipt of prenatal care has remained relatively stable in recent years in Yellowstone County, echoing what is found across Montana and the US overall.

### Mothers Receiving Prenatal Care in the First Trimester (Percentage of Live Births)



	2002-2004	2003-2005	2004-2006	2005-2007
Healthy People 2010	90.0%	90.0%	90.0%	90.0%
Yellowstone County	85.8%	86.4%	85.8%	86.1%
Montana	83.3%	83.3%	82.7%	82.5%
United States	83.8%	83.9%	83.7%	83.7%

Sources:
 

- Montana Department of Public Health and Human Services.
- Centers for Disease Control and Prevention, National Vital Statistics System.
- Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000 [Objective 16-6].

 Note:
 

- Numbers are a percentage of all live births within each population.

# Birth Outcomes & Risks

The health of mothers, infants, and children is of critical importance, both as a reflection of the current health status of a large segment of the US population and as a predictor of the health of the next generation ... Infant mortality is an important measure of a nation's health and a worldwide indicator of health status and social well-being. As of 1995, the US infant mortality rates ranked 25th among industrialized nations. In the past decade, critical measures of increased risk of infant death, such as new cases of low birth weight (LBW) and very low birth weight (VLBW), actually have increased in the United States. In addition, the disparity in infant mortality rates between Whites and specific racial and ethnic groups (especially African Americans, American Indians or Alaska Natives, Native Hawaiians, and Puerto Ricans) persists. Although the overall infant mortality rate has reached record low levels, the rate for African Americans remains twice that of Whites.

LBW is associated with long-term disabilities, such as cerebral palsy, autism, mental retardation, vision and hearing impairments, and other developmental disabilities ... The general category of LBW infants includes both those born too early (preterm infants) and those who are born at full term but who are too small, a condition known as intrauterine growth retardation (IUGR). Maternal characteristics that are risk factors associated with IUGR include maternal LBW, prior LBW birth history, low prepregnancy weight, cigarette smoking, multiple births, and low pregnancy weight gain. Cigarette smoking is the greatest known risk factor.

— Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

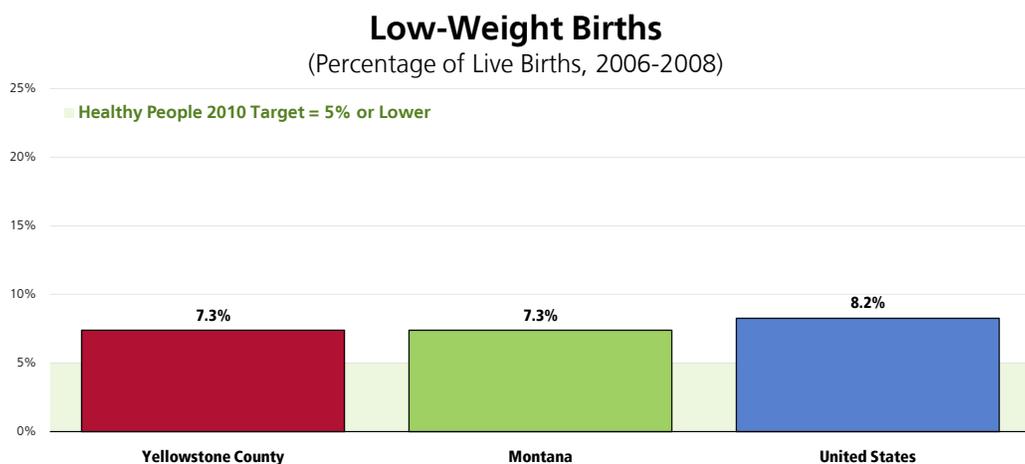
Low birthweight babies, those who weigh less than 2,500 grams (5 pounds, 8 ounces) at birth, are much more prone to illness and neonatal death than are babies of normal birthweight.

Largely a result of receiving poor or inadequate prenatal care, many low-weight births and the consequent health problems are preventable.

## Low-Weight Births

**A total of 7.3% of 2006-2008 Yellowstone County births were low-weight.**

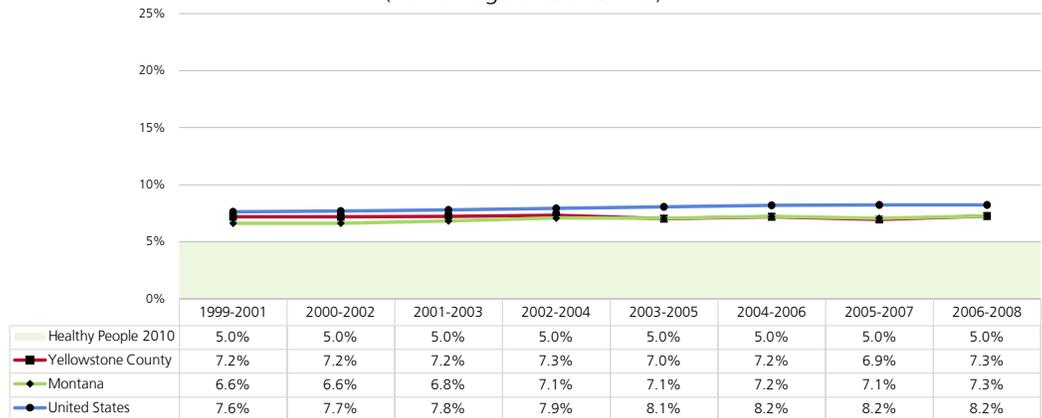
- Identical to the Montana proportion (7.3%).
- Better than the national proportion (8.2%).
- Fails to satisfy the Healthy People 2010 target (5% or lower).



Sources: • Montana Department of Public Health and Human Services.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
• Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000 [Objective 16-10].  
Note: • Numbers are a percentage of all live births within each population.

 The proportion of low-weight births has remained stable in Yellowstone County in recent years; note the slight increasing trend nationally.

## Low-Weight Births (Percentage of Live Births)



Sources: • Montana Department of Public Health and Human Services.  
 • Centers for Disease Control and Prevention, National Vital Statistics System. Births: Final Data for 2002.  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000 [Objective 16-10].  
 Note: • Numbers are a percentage of all live births within each population.

## Infant Mortality

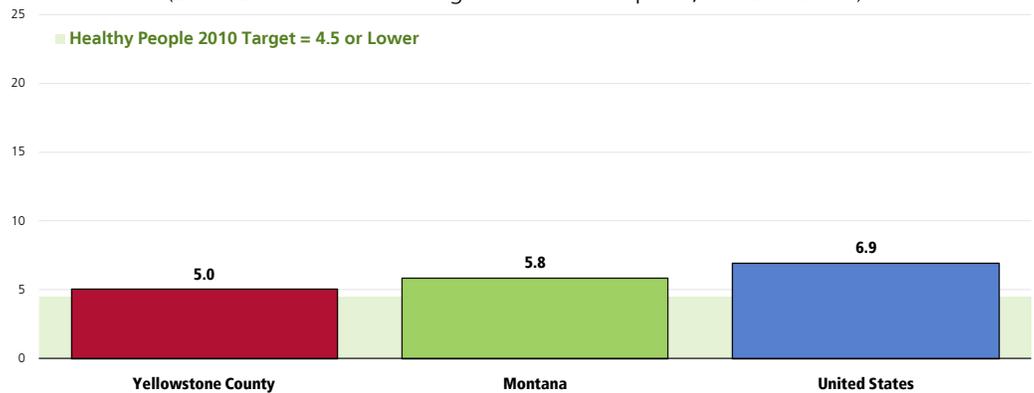
Infant mortality rates reflect deaths of children less than one year old per 1,000 live births.

**Between 2004 and 2006, there was an annual average of 5.0 infant deaths per 1,000 live births.**

- More favorable than the Montana rate (5.8).
- More favorable than the national rate (6.9).
- Fails to satisfy the Healthy People 2010 goal of 4.5 per 1,000 live births.

## Infant Mortality Rate

(2004-2006 Annual Average Infant Deaths per 1,000 Live Births)

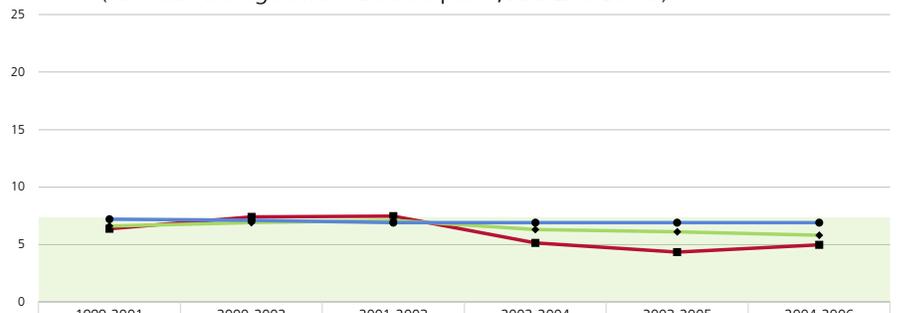


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.  
 • Centers for Disease Control and Prevention, National Center for Health Statistics.  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000 [Objective 16-1].  
 Notes: • Rates are three-year averages of deaths of children under 1 year old per 1,000 live births.

Infant mortality rates have trended downward in recent years in the county; state and national are also slowly trending downward.

### Infant Mortality Rate

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



	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006
Healthy People 2010	7.4	7.4	7.4	7.4	7.4	7.4
Yellowstone County	6.4	7.4	7.5	5.1	4.3	5.0
Montana	6.6	6.9	7.1	6.3	6.1	5.8
United States	7.2	7.1	6.9	6.9	6.9	6.9

Sources:
 

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.
- Centers for Disease Control and Prevention, National Center for Health Statistics.
- Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000 [Objective 16-1].

 Notes:
 

- Rates are three-year averages of deaths of children under 1 year old per 1,000 live births.

# Family Planning

In an era when technology should enable couples to have considerable control over their fertility, half of all pregnancies in the United States are unintended. Although between 1987 and 1994 the proportion of pregnancies that were unintended declined in the United States from 57 to 49 percent, other industrialized nations report fewer unintended pregnancies, suggesting that the number of unintended pregnancies can be reduced further. Family planning remains a keystone in attaining a national goal aimed at achieving planned, wanted pregnancies and preventing unintended pregnancies.

Socially, the costs can be measured in unintended births, reduced educational attainment and employment opportunity, greater welfare dependency, and increased potential for child abuse and neglect. Economically, healthcare costs are increased ... The consequences of unintended pregnancy are not confined to those occurring in teenagers or unmarried couples. In fact, unintended pregnancy can carry serious consequences at all ages and life stages.

With an unintended pregnancy, the mother is less likely to seek prenatal care in the first trimester and more likely not to obtain prenatal care at all. She is less likely to breastfeed and more likely to expose the fetus to harmful substances, such as tobacco or alcohol. The child of such a pregnancy is at greater risk of low birth weight, dying in its first year, being abused, and not receiving sufficient resources for healthy development. A disproportionate share of the women bearing children whose conception was unintended are unmarried or at either end of the reproductive age span—factors that, in themselves, carry increased medical and social burdens for children and their parents. Pregnancy begun without some degree of planning often prevents individual women and men from participating in preconception risk identification and management.

Unintended pregnancies occur among females of all socioeconomic levels and all marital status and age groups, but females under age 20 years and poor and African American women are especially likely to become pregnant unintentionally. More than 4 in 10 pregnancies to White and Hispanic females [nationwide] are unintended; 7 in 10 pregnancies to African American females [nationwide] are unintended. Poverty is strongly related to greater difficulty in using reversible contraceptive methods successfully, with these females also the least likely to have the resources necessary to access family planning services and the most likely to be affected negatively by an unintended pregnancy.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

## Births to Unwed Mothers

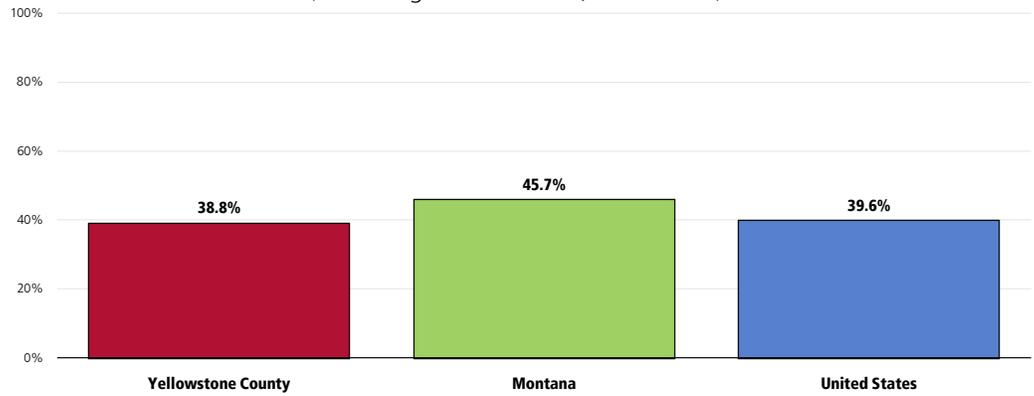
According to the CDC, an unintended pregnancy is a pregnancy that is either mistimed or unwanted at the time of conception. It is a core concept in understanding the fertility of populations and the unmet need for contraception. Unintended pregnancy is associated with an increased risk of morbidity for women, and with health behaviors during pregnancy that are associated with adverse effects. For example, women with an unintended pregnancy may delay prenatal care, which may affect the health of the infant. Women of all ages may have unintended pregnancies, but some groups, such as teens, are at a higher risk.

Because it is impossible to measure the true incidence of unintended pregnancy in the US, the following indicator looks at births occurring among unmarried mothers as a proxy measure for pregnancies that are not intended (knowing that this is not always the case).

### **A total of 38.8% of 2006-2008 Yellowstone County births were to unwed mothers.**

- Lower than the 45.7% reported statewide.
- Similar to the 39.6% found nationally.

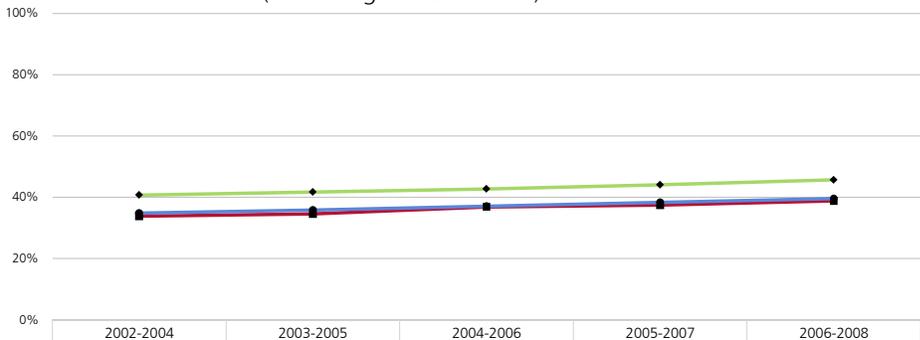
## Births to Unwed Mothers (Percentage of Live Births, 2006-2008)



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

The percentage of births to unwed mothers in Yellowstone County increased between the 2002-2004 and 2004-2006 reporting periods, echoing the state and national trends.

## Births to Unwed Mothers (Percentage of Live Births)



Sources: • Montana Department of Public Health and Human Services.  
• Centers for Disease Control and Prevention, National Vital Statistics System. Births: Final Data for 2002.  
Note: • Numbers are a percentage of all live births within each population.

## Births to Teen Mothers

For teenagers, the problems associated with unintended pregnancy are compounded, and the consequences are well documented. Teenage mothers are less likely to get or stay married, less likely to complete high school or college, and more likely to require public assistance and to live in poverty than their peers who are not mothers. Infants born to teenage mothers, especially mothers under age 15 years, are more likely to suffer from low birth weight, neonatal death, and sudden infant death syndrome. The infants may be at greater risk of child abuse, neglect, and behavioral and educational problems at later stages. Nearly 1 million teenage pregnancies occur each year in the United States.

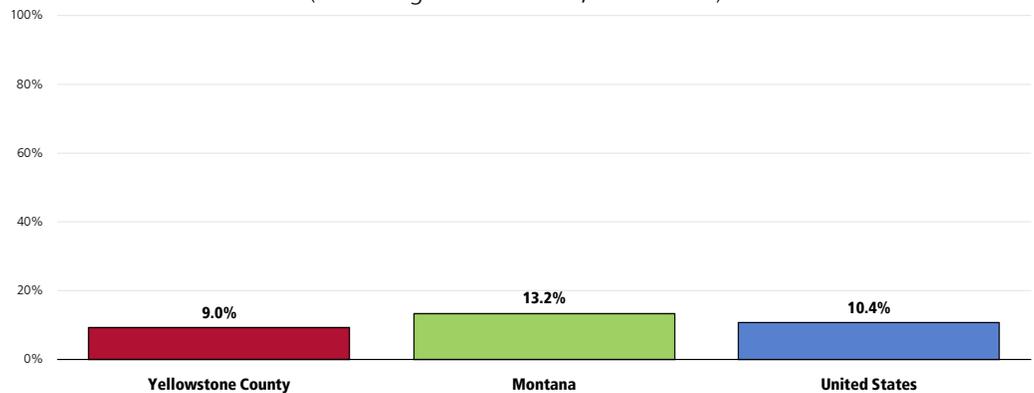
– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

### A total of 9.0% of 2006-2008 Yellowstone County births were to teenage mothers.

- Lower than the Montana proportion (13.2%).
- Lower than the 10.4% reported nationally.

### Births to Teen Mothers

(Percentage of Live Births, 2006-2008)

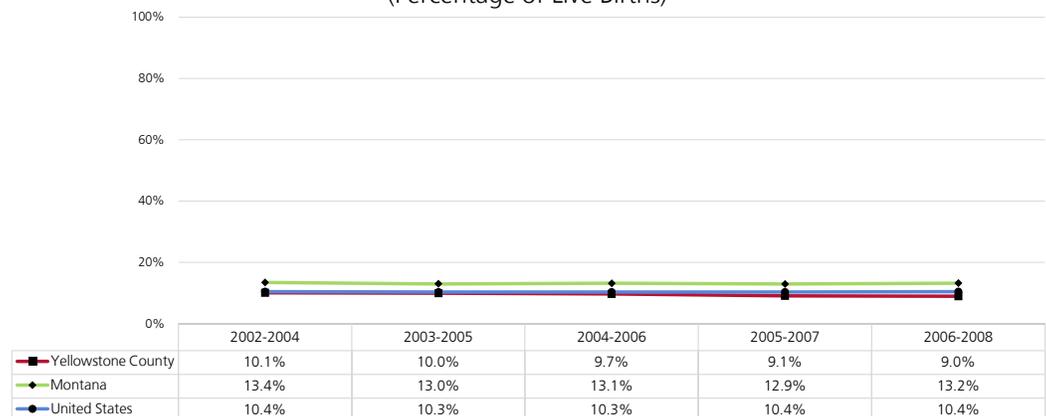


Sources: • Montana Department of Public Health and Human Services.  
• Centers for Disease Control and Prevention, National Vital Statistics System.  
Note: • Numbers are a percentage of all live births within each population.

☒ This percentage decreased slightly in Yellowstone County between the 2002-2004 and 2006-2008 reporting periods; state and national rates remained fairly stable during this time.

### Births to Teen Mothers

(Percentage of Live Births)



Sources: • Montana Department of Public Health and Human Services.  
• Centers for Disease Control and Prevention, National Vital Statistics System. Births: Final Data for 2002.  
Note: • Numbers are a percentage of all live births within each population.

## Related Focus Group Findings: Childcare

The lack of good, affordable child care was a concern among physicians and social service providers. The physicians' main concerns are for overnight care as well as sick-child care; neither of which is readily available. It was mentioned that St. Vincent's does have child care for employees' children and that they do offer some spots for community children; however, physicians noted that not enough other employers offer child care at work. Most agreed that it's not a losing proposition as some would believe since being able to bring your child to work for day care means that employees are less likely to be absent themselves. Social service providers see a need for child care in general. They realize that quality affordable childcare centers are not readily available and though organizations have tried to improve that, there are still many parents who can't afford care for their child, particularly those parents who work odd hours.

*"Access to affordable child care: since Cuddle and Care closed, I don't know that we have any ill child care in town." –Physician*

*"If you actually look at businesses that have built-in daycare, I don't think they make money but they don't lose money because the hardest thing at night or somebody calls in sick is to call in another nurse or whatever, and you're calling in because the first thing they say is I need daycare or night care, depending on what time it is. And if those facilities are available, you are much more likely to get somebody to come into work for four hours than you are if they call three relatives. And that does impact healthcare in the sense of making both hospitals run more efficiently and at less expense because if you're then paying other people, you're paying time and a half." –Physician*

*"There is very limited childcare for special needs. Kids with special needs get bounced." –Social Services*

*"There's very little childcare centers and in some neighborhoods there is no alternative except home daycare which can go on without it being licensed, and there are some very horrific ones in my neighborhood." –Social Services*

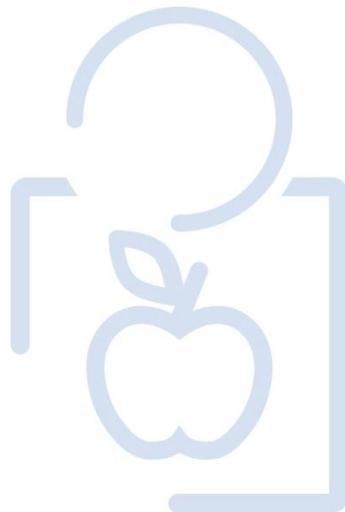
*"The absence of care from six o'clock until seven the next morning, or weekends, is nearly non-existent." –Social Services*

*"Providing part-time care is not cost-effective at all, it's very, very expensive and yet it's probably one of the highest needs for families." –Social Services*

# MODIFIABLE HEALTH RISK BEHAVIORS

*It is estimated that as many as 40% of premature deaths in the United States are attributed to behavioral factors, such as 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. Behavior patterns represent the single-most prominent domain of influence over health prospects in the US.*

*– 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.*



# Actual Causes Of Death

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

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

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

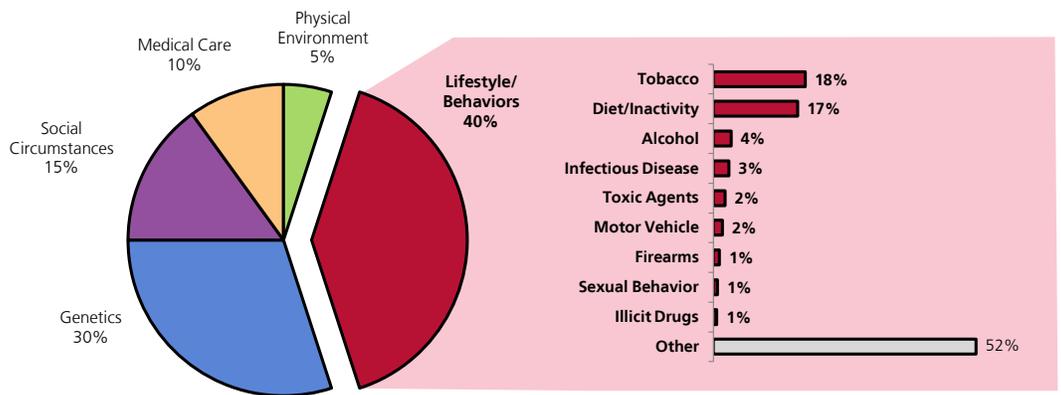
– Ali H. Mokdad, PhD; James S. Marks, MD, MPH; Donna F. Stroup, PhD, MSc; Julie L. Gerberding, MD, MPH. "Actual Causes of Death in the United States." JAMA, 291(2004):1238-1245.

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

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

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

## Factors Contributing to Premature Deaths in the United States



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

# Nutrition

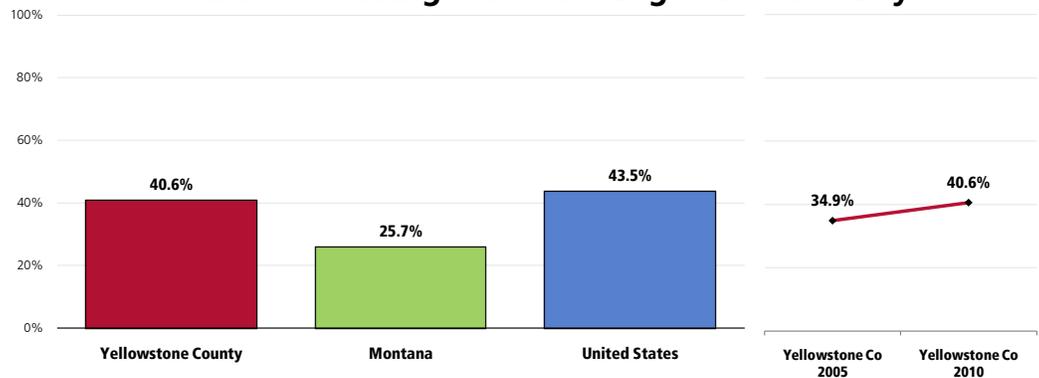
To measure fruit and vegetable consumption, survey respondents were asked multiple questions, specifically about the foods and drinks they consumed on the day prior to the interview.

## Daily Recommendation of Fruits/Vegetables

**A total of 40.6% of Yellowstone County adults report eating five or more servings of fruits and/or vegetables per day.**

- More favorable than state findings (25.7%; *keep in mind that the state BRFSS item was asked slightly differently which might account for the notable difference*).
- Similar to national findings (43.5%).
- ☒ Differences noted for combined fruit/vegetable consumption since 2005 is not large enough to be deemed statistically significant. However, note in subsequent charts that individual findings for fruits and for vegetables have each improved significantly since 2005.

### Consume 5+ Servings of Fruits/Vegetables Per Day

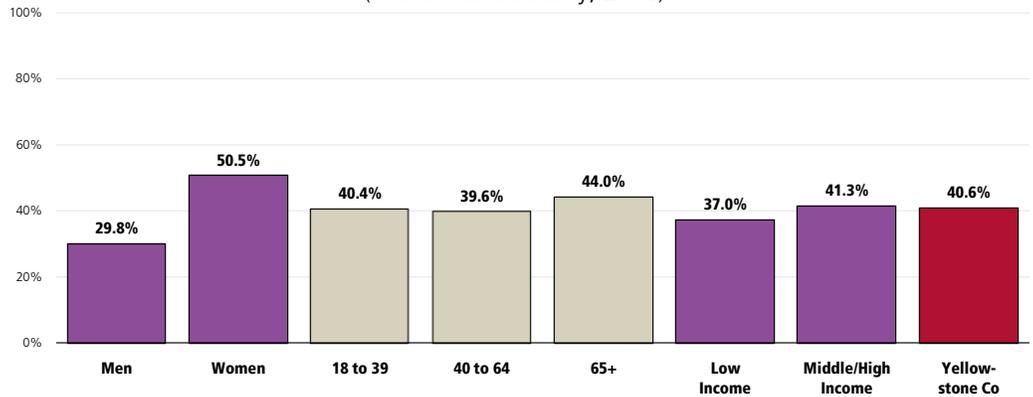


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 170]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2009 Montana data.
  - 2008 PRC National Health Survey, Professional Research Consultants.
- Notes:
- 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.

### Consume 5+ Servings of Fruits/Vegetables Per Day

(Yellowstone County, 2010)



Sources: 

- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 170]

  
 Notes: 

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty @ 100% to 200% of poverty; "middle/high income" = over 200% of poverty.
- For this issue, respondents were asked to recall their food intake on the previous day.

### Fruits

The majority (56.4%) of Yellowstone County adults reports eating at least two servings of fruit per day.

- Comparable to national findings (58.4%).
- Fails to satisfy the Healthy People 2010 target (75% or higher).
-  Denotes a statistically significant increase since 2005.

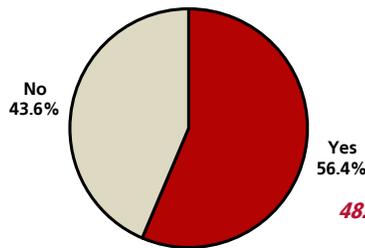
### Vegetables

A total of 38.1% of survey respondents reports eating three or more servings of vegetables per day, at least one-third of which are dark green or orange vegetables.

- Nearly identical to national findings (38.8%).
- Fails to satisfy the Healthy People 2010 target (50% or higher).
-  Marks a statistically significant increase since 2005.

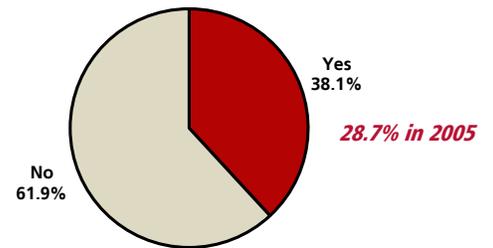
### Fruits/Vegetable Consumption

(Yellowstone County, 2010)



Consume 2+ Servings of Fruits/Fruit Juices Per Day

US=58.4%; HP2010=75% or Higher



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

US=38.8%; HP2010=50% or Higher

Sources: 

- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 168-169]
- 2008 PRC National Health Survey, Professional Research Consultants, Inc.

  
 Notes: 

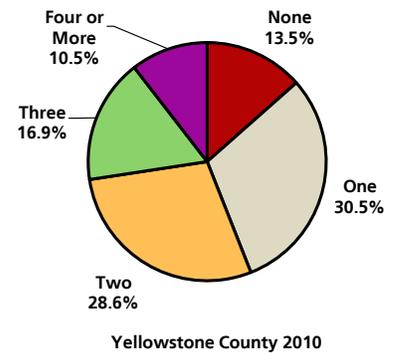
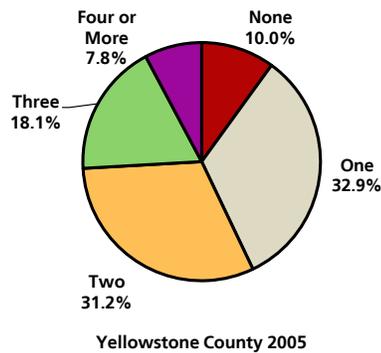
- Asked of all respondents.

## Dairy

While 13.5% of respondents do not eat any dairy on a daily basis, 30.5% eat one serving daily and 28.6% report eating two servings of dairy daily.

- Another 16.9% of respondents eat three servings of dairy per day and 10.5% reportedly eat four or more.
- ☒ Statistically similar to the 2005 findings regarding daily servings of dairy.

### Daily Servings of Dairy (Yellowstone County)



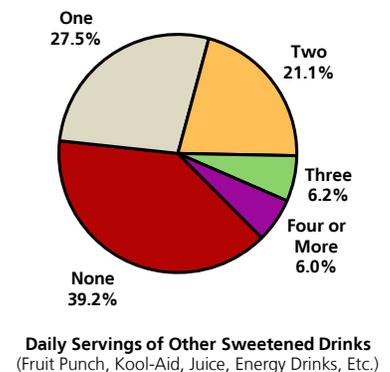
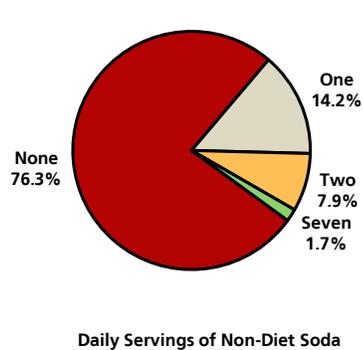
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 108]  
Notes: • Asked of all respondents.

## Children & Sugary Beverages

A total of 23.7% of parents report that their child (age 2-17) has one or more servings of non-diet soda on a typical day.

A total of 60.8% of parents report that their child (age 2-17) has one or more servings of other sugary beverages on a typical day.

### Child's Consumption of Sugary Beverages (Yellowstone County Children 2-17, 2010)



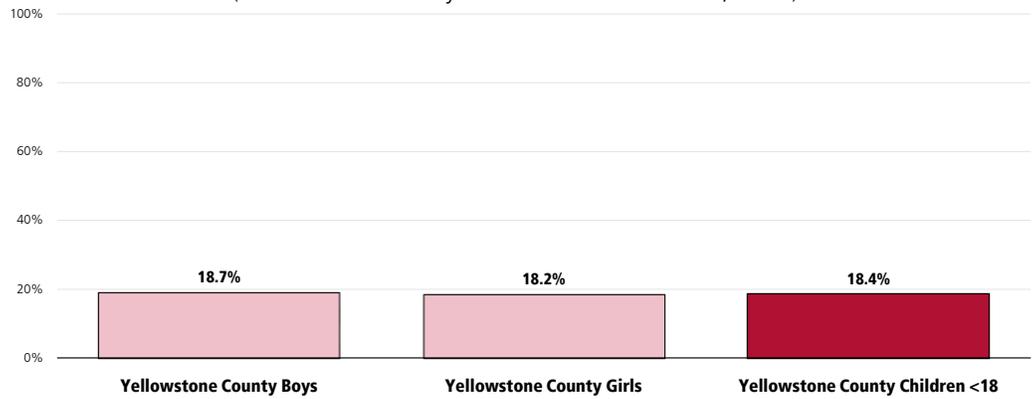
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 142-143]  
Notes: • Asked of all respondents with children 2-17 at home.  
• Other sweetened drinks include fruit punch, Kool-Aid, juice, energy drinks, etc.

**In all (when combining non-diet soda and other sugary beverages), 18.4% of Yellowstone County children aged 2-17 drink at least three sugary beverages per day.**

 Note that findings are similar when viewed by the child's gender.

### **Child Consumes Three or More Sugary Beverages Per Day**

(Yellowstone County Parents of Children <18, 2010)



- Sources:
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 205]
- Notes:
- Asked of those respondents with children under 18 at home.
  - Includes (non-diet) soda, as well as other sugary drinks (fruit punch, Kool-Aid, juice, energy drinks, etc.).

# Physical Activity & Fitness

The 1990s brought a historic new perspective to exercise, fitness, and physical activity by shifting the focus from intensive vigorous exercise to a broader range of health-enhancing physical activities. Research has demonstrated that virtually all individuals will benefit from regular physical activity. A Surgeon General's report on physical activity and health concluded that moderate physical activity can reduce substantially the risk of developing or dying from heart disease, diabetes, colon cancer, and high blood pressure. Physical activity also may protect against lower back pain and some forms of cancer (for example, breast cancer), but the evidence is not yet conclusive.

On average, physically active people outlive those who are inactive. Regular physical activity also helps to maintain the functional independence of older adults and enhances the quality of life for people of all ages.

The role of physical activity in preventing coronary heart disease (CHD) is of particular importance, given that CHD is the leading cause of death and disability in the United States. Physically inactive people are almost twice as likely to develop CHD as persons who engage in regular physical activity. The risk posed by physical inactivity is almost as high as several well-known CHD risk factors, such as cigarette smoking, high blood pressure, and high blood cholesterol. Physical inactivity, though, is more prevalent than any one of these other risk factors. People with other risk factors for CHD, such as obesity and high blood pressure, may particularly benefit from physical activity.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

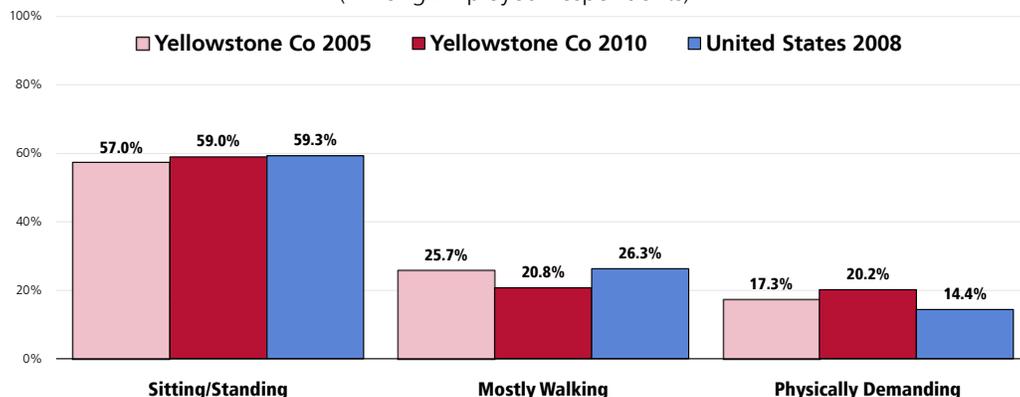
## Level of Activity at Work

**A majority of employed respondents report low levels of physical activity at work.**

- 59.0% of employed respondents report that their job entails mostly sitting or standing, similar to the US figure (59.3%).
  - 20.8% report that their job entails mostly walking (lower than the 26.3% reported nationally).
  - 20.2% report that their work is physically demanding (higher than the 14.4% reported nationally).
- ☒ Over time, no significant change was reported in physically demanding work among employed respondents.

## Primary Level of Physical Activity At Work

(Among Employed Respondents)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 109]  
 • 2008 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of those respondents who are employed for wages.

## Leisure-Time Physical Activity

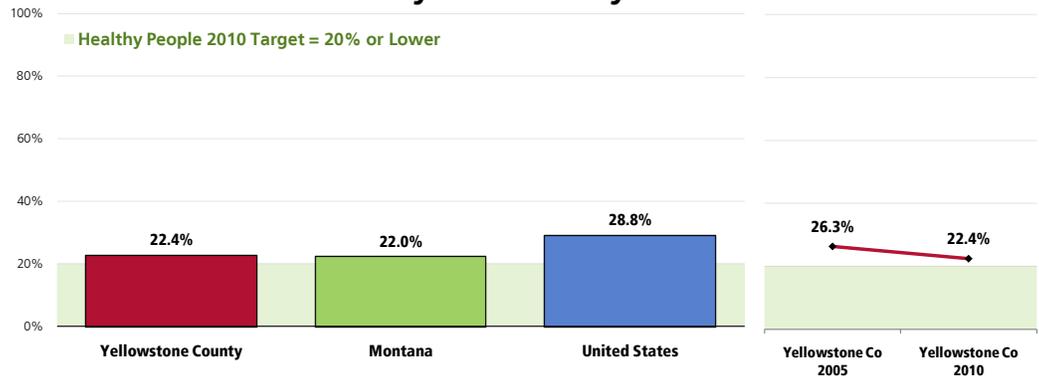
### Effects of Physical Inactivity & Unhealthy Diets

- Poor diet and physical inactivity lead to 300,000 deaths each year—second only to tobacco use.
  - People who are overweight or obese increase their risk for heart disease, diabetes, high blood pressure, arthritis-related disabilities, and some cancers.
  - Not getting an adequate amount of exercise is associated with needing more medication, visiting a physician more often, and being hospitalized more often.
- National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

### A total of 22.4% of Yellowstone County adults report no leisure-time physical activity in the past month.

- Nearly identical to statewide findings (22.0%).
- More favorable than national findings (28.8%).
- Similar to the Healthy People 2010 objective (20% or lower).
- ☒ Statistically similar to findings in 2005.

### No Leisure-Time Physical Activity in the Past Month



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 110]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2009 Montana data.
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 22-1]
- Notes:
- Asked of all respondents.

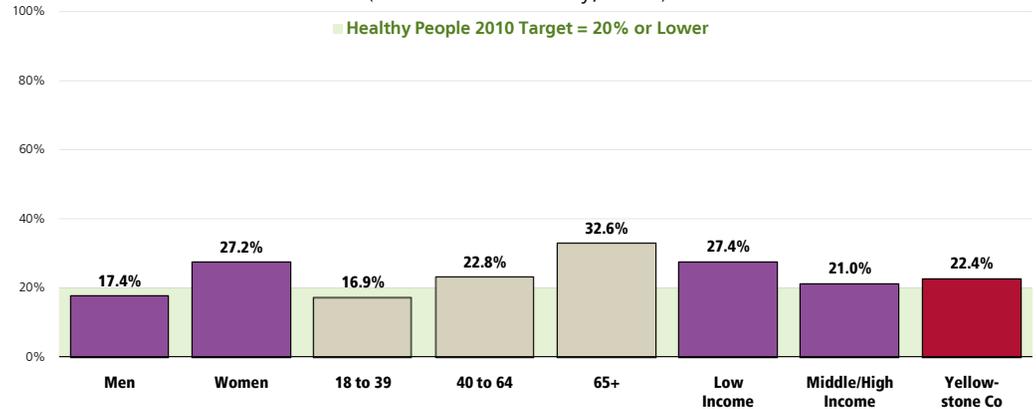
Lack of leisure-time physical activity in the area is higher among:

👥 Women.

👥 Seniors (65+).

## No Leisure-Time Physical Activity in the Past Month

(Yellowstone County, 2010)



Sources: 

- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 110]
- Healthy People 2010, 2<sup>nd</sup> Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 22-1]

Notes: 

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## Activity Levels

All adults should strive to meet either of the following physical activity recommendations:

- **Moderate-intensity physical activities** (inducing only light sweating or a slight to moderate increase in breathing or heart rate) for at least 30 minutes on 5 or more days of the week.

– Centers for Disease Control and Prevention/American College of Sports Medicine

OR

- **Vigorous-intensity physical activity** (inducing heavy sweating or a large increase in breathing or heart rate) 3 or more days per week for 20 or more minutes per occasion.

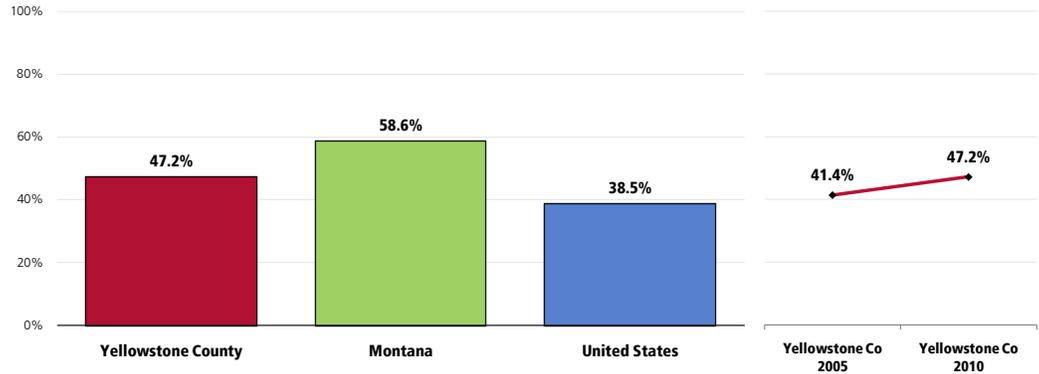
– Healthy People 2010

## Recommended Levels of Physical Activity

**A total of 47.2% of Yellowstone County adults participate in regular, sustained moderate or vigorous physical activity** (meeting physical activity recommendations).

- Less favorable than statewide findings (58.6%).
- More favorable than national findings (38.5%).
- ☒ Statistically similar to findings in 2005.

## Meets Physical Activity Recommendations

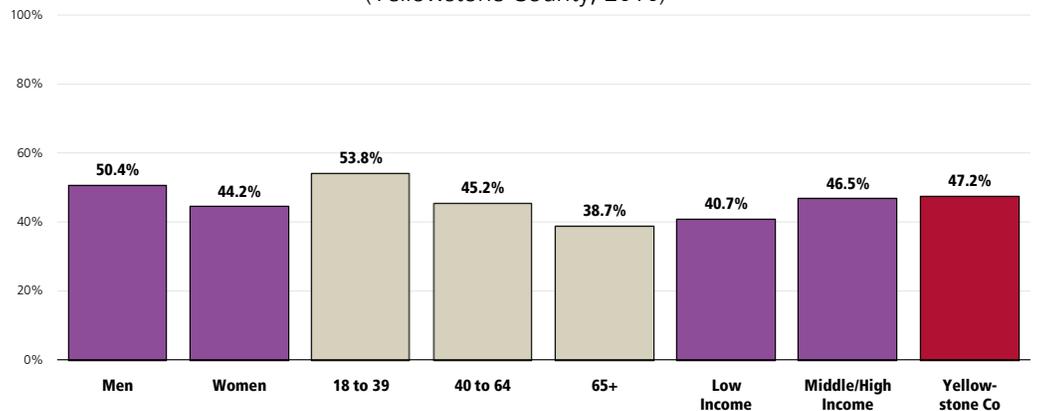


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 167]
  - 2008 PRC National Health Survey, Professional Research Consultants, Inc.
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 Montana data.

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

 Adults aged 65+ are less likely to meet physical activity requirements.

## Meets Physical Activity Recommendations (Yellowstone County, 2010)



- Sources:
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 167]

- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.
  - 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.

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

## Moderate & Vigorous Physical Activity

In the past month:

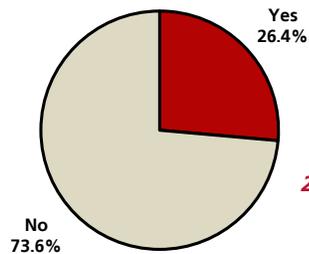
**A total of 26.4% of adults participated in moderate physical activity (5 times a week, 30 minutes at a time).**

- Similar to the national level (22.6%).
- Similar to the Healthy People 2010 objective (30% or higher).
- ☒ Statistically similar to findings in 2005.

**A total of one-third (33.5%) participated in vigorous physical activity (3 times a week, 20 minutes at a time).**

- More favorable than the nationwide figure (28.0%).
- Similar to the Healthy People 2010 objective (30% or higher).
- ☒ Statistically similar to findings in 2005.

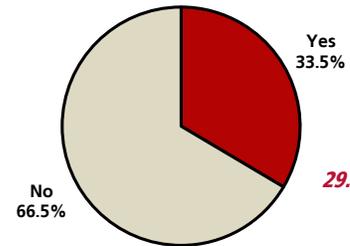
### Moderate & Vigorous Physical Activity (Yellowstone County, 2010)



*23.1% in 2005*

**Moderate Physical Activity**

**US=22.6%; HP2010=30% or Higher**



*29.1% in 2005*

**Vigorous Physical Activity**

**US=28.0%; HP2010=30% or Higher**

- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 165-166]
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 22-2]
- Notes:
- Asked of all respondents.
  - Moderate Physical Activity: Takes part in exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate at least 5 times per week for at least 30 minutes per time.
  - Vigorous Physical Activity: Takes part in activities that cause heavy sweating or large increases in breathing or heart rate at least 3 times per week for at least 20 minutes per time.

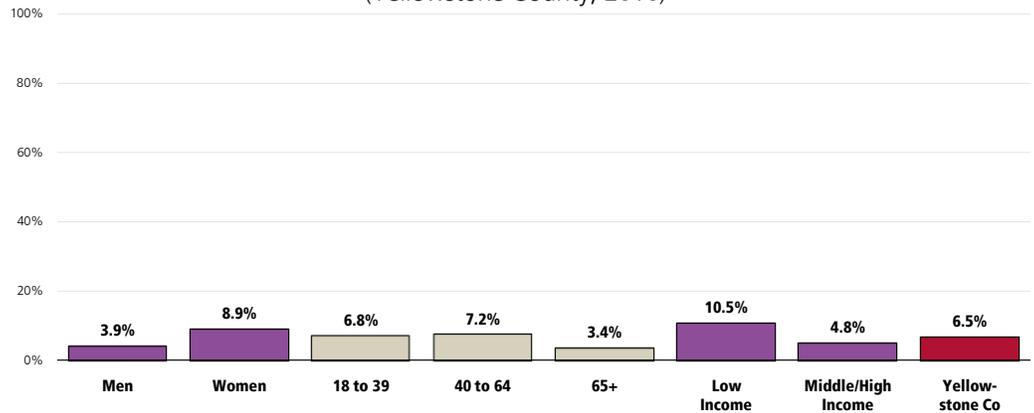
## Factors Limiting Physical Activity

A total of 6.5% of survey respondents report that at some point in the past year, they wanted to be more physically active but were not because things like traffic or crime made them feel unsafe.

Those more likely to reporting feeling this way include:

- 👥 Women.
- 👥 Adults under age 65.
- 👥 Low-income residents.

### Wanted to be More Physically Active in the Past Year But Felt Unsafe Due to Factors Like Traffic and/or Crime (Yellowstone County, 2010)



- Sources:
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 113]
- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty  $\leq$  100% to 200% of poverty; "middle/high income" = over 200% of poverty.

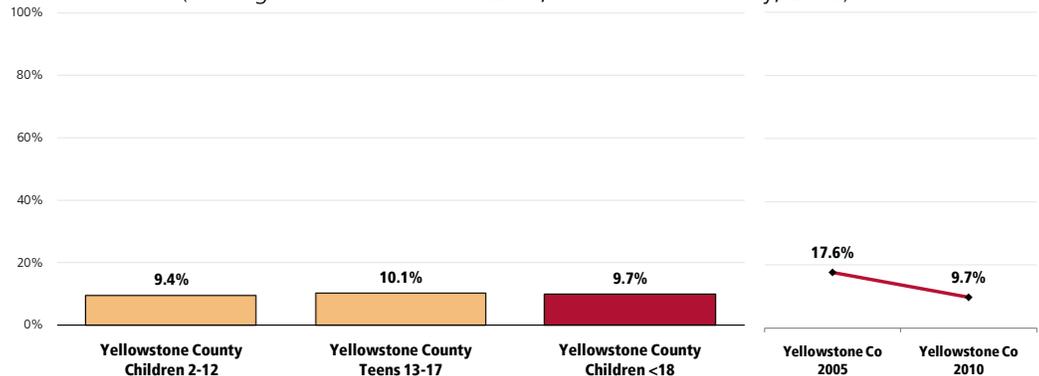
## Children's Screen Time

**One in 10 parents of children aged 2 through 17 (9.7%) reports that their child spends three or more hours watching television on a typical school day.**

-  No significant difference by age breakout.
-  Statistically similar to 2005 survey findings.

### Child Watches 3+ Hours of Television on a Typical School Day

(Among Parents of Children 2-17; Yellowstone County, 2010)



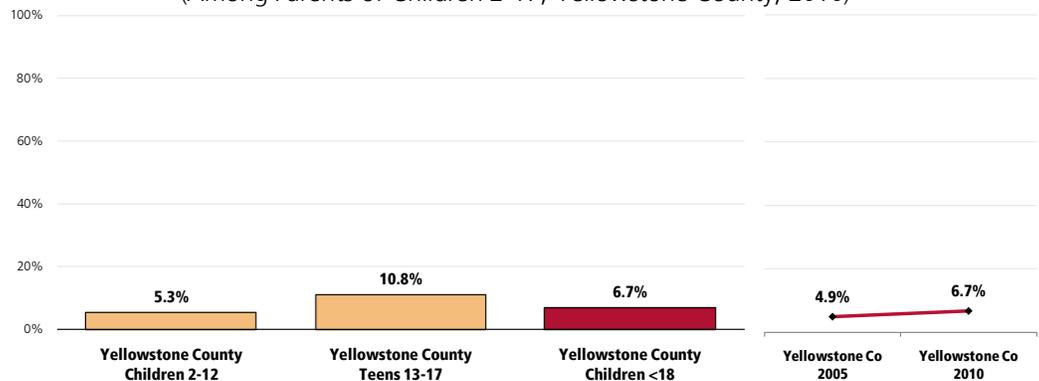
- Sources:
  - PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 144]
- Notes:
  - Asked of all respondents with children 2-17 at home.
  - For this issue, respondents with children aged 2-4 referred to "weekdays" while parents of older children referred to typical school days.
  - "3+ hours" includes reported television watching of 180 minutes or more per school day.

**With regard to non-television screen time (such as video games, the use of the Internet for entertainment, etc.), 6.7% of parents with children aged 2-17 report that their child spends three or more hours on non-TV screen time on a typical school day.**

-  No significant difference by age breakout.
-  Statistically similar to 2005 survey findings.

### Child Has 3+ Hours of Non-TV Screen Time on a Typical School Day

(Among Parents of Children 2-17; Yellowstone County, 2010)



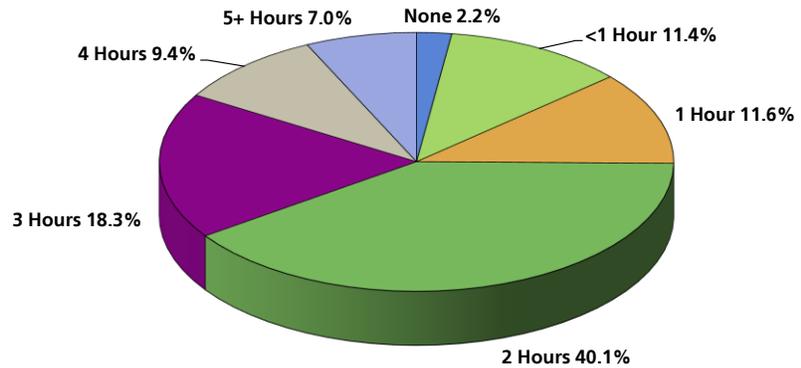
- Sources:
  - PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 145]
- Notes:
  - Asked of all respondents with children aged 2-17 at home.
  - For this issue, respondents with children aged 2-4 referred to "weekdays" while parents of older children referred to typical school days.
  - "3+ hours" includes reported non-television screen time of 180 minutes or more per school day.

**When combined, more than one-third (34.7%) of Yellowstone County children aged 2-17 spend three or more hours on screen time (both TV and non-TV) on a typical school day.**

- In contrast, 40.1% of children reportedly have **two hours** of screen time on a typical school day, while 23.0% spend one **hour or less** on screen time.

### **Children's Total Screen Time Per School Day: TV, Computer, Video Games, Etc. for Entertainment**

(Yellowstone County Parents of Children <18, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 204]  
Notes: • Asked of all respondents with children aged 2-17 at home.  
• "1 Hour" = 60-119 minutes of total screen time, "2 hours" = 120-179 minutes, "3 hours" = 180-239 minutes, etc.

# Body Weight

Body Mass Index (BMI), which describes relative weight for height, is significantly correlated with total body fat content. The BMI should be used to assess overweight and obesity and to monitor changes in body weight. In addition, measurements of body weight alone can be used to determine efficacy of weight loss therapy. BMI is calculated as weight (kg)/height squared ( $m^2$ ). To estimate BMI using pounds and inches, use: [weight (pounds)/height squared (inches<sup>2</sup>)] x 703.

In this report, overweight is defined as a BMI of 25.0 to 29.9  $kg/m^2$  and obesity as a BMI of  $\geq 30 kg/m^2$ . The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25  $kg/m^2$ . The increase in mortality, however, tends to be modest until a BMI of 30  $kg/m^2$  is reached. For persons with a BMI of  $\geq 30 kg/m^2$ , mortality rates from all causes, and especially from cardiovascular disease, are generally increased by 50 to 100 percent above that of persons with BMIs in the range of 20 to 25  $kg/m^2$ .

Overweight and obesity result from a complex interaction between genes and the environment characterized by long-term energy imbalance due to a sedentary lifestyle, excessive caloric consumption, or both. They develop in a socio-cultural environment characterized by mechanization, sedentary lifestyle, and ready access to abundant food. Attempts to prevent overweight and obesity are difficult to both study and achieve.

- Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

Classification of Overweight and Obesity by BMI	BMI ( $kg/m^2$ )
Underweight	<18.5
Normal	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	$\geq 30.0$

Source: Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

## Adult Weight Status

### Healthy Weight

**Based on self-reported heights and weights, 25.4% of Yellowstone County adults are at a healthy weight.**

- Less favorable than national findings (32.0%).
- Far from reaching the Healthy People 2010 target (60% or higher).
- ☒ Denotes a statistically significant decrease in the prevalence of healthy weight since 2005.

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

## Healthy Weight

(Body Mass Index Between 18.5 and 24.9)



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 160]
  - 2008 PRC National Health Survey, Professional Research Consultants, Inc.
  - Healthy People 2010. 2<sup>nd</sup> Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 19-1]
- 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

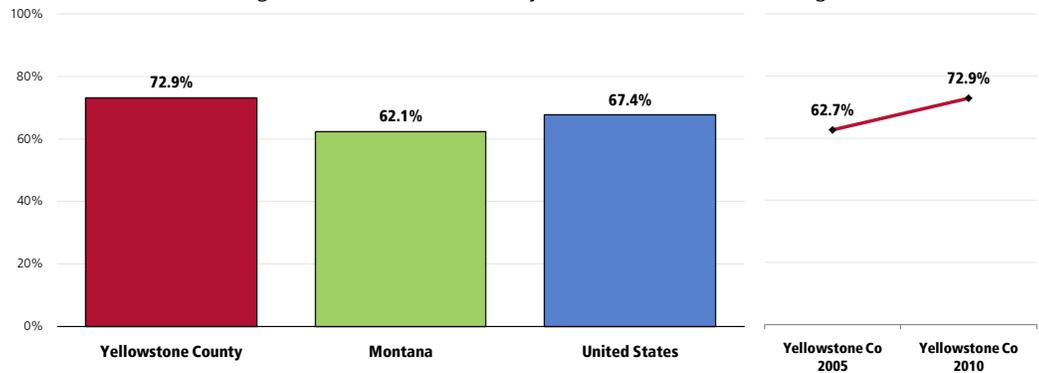
Here, "overweight" includes those respondents with a BMI value  $\geq 25$ .

**More than 7 in 10 Yellowstone County adults (72.9%) are overweight.**

- Higher than the Montana prevalence (62.1%).
- Higher than the US overweight prevalence (67.4%).
- ☒ Marks a statistically significant increase in overweight since 2005.

## Prevalence of Total Overweight

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

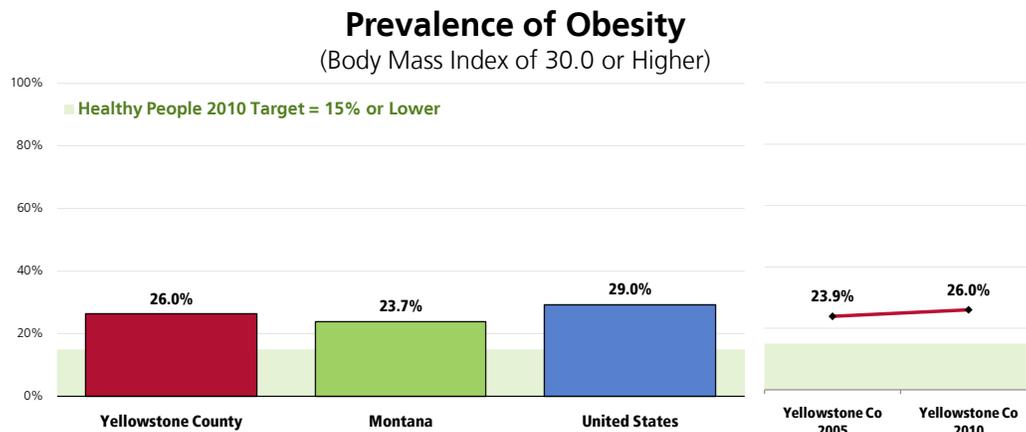


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 160]
  - 2008 PRC National Health Survey, Professional Research Consultants, Inc.
  - Healthy People 2010. 2<sup>nd</sup> Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 19-2]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2009 Montana Data.
- Notes:
- Based on reported heights and weights, asked of all respondents.
  - The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.

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

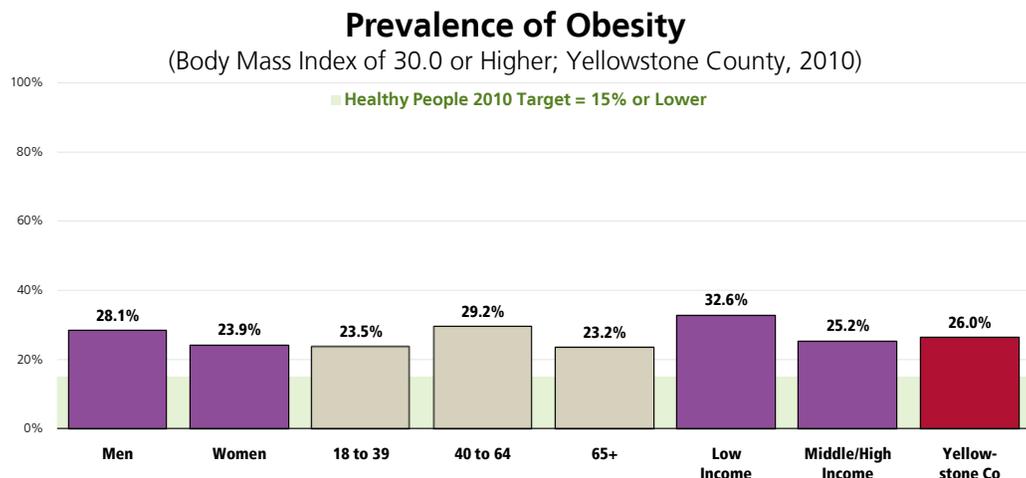
### Specifically, 26.0% of Yellowstone County adults are obese.

- Comparable to the Montana percentage (23.7%).
- Comparable to US findings (29.0%).
- Fails to satisfy the Healthy People 2010 target (15% or lower).
- ☒ Statistically similar to findings in 2005.



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 160]
  - 2008 PRC National Health Survey, Professional Research Consultants, Inc.
  - Healthy People 2010, 2<sup>nd</sup> Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 19-2]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2009 Montana Data.
- Notes:
- Based on reported heights and weights, asked of all respondents.
  - The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

☒ Respondents with lower incomes are more likely to be obese.



- Sources:
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 160]
  - Healthy People 2010, 2<sup>nd</sup> Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 19-2]
- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.
  - Based on reported heights and weights, asked of all respondents.
  - The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

## Relationship of Overweight With Other Health Issues

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

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

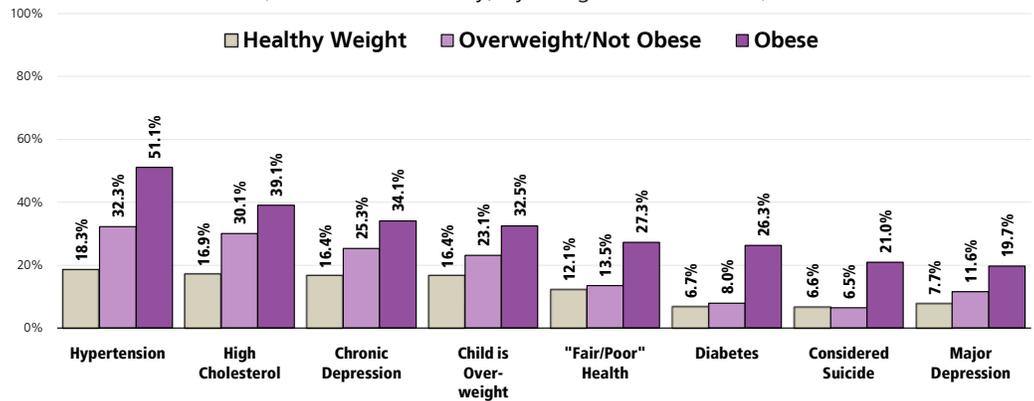
Among these are:

- Hypertension (high blood pressure).
- High cholesterol.
- Chronic depression.
- "Fair" or "poor" physical health.
- Diabetes.
- Major depression (and those who have considered suicide).

Overweight/obese residents are also more likely to have overweight children.

### Relationship of Overweight With Other Health Issues

(Yellowstone County; By Weight Classification)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 5, 30, 36, 119, 122, 153, 154, 163]  
Notes: • Based on reported heights and weights, asked of all respondents.

# Weight Management

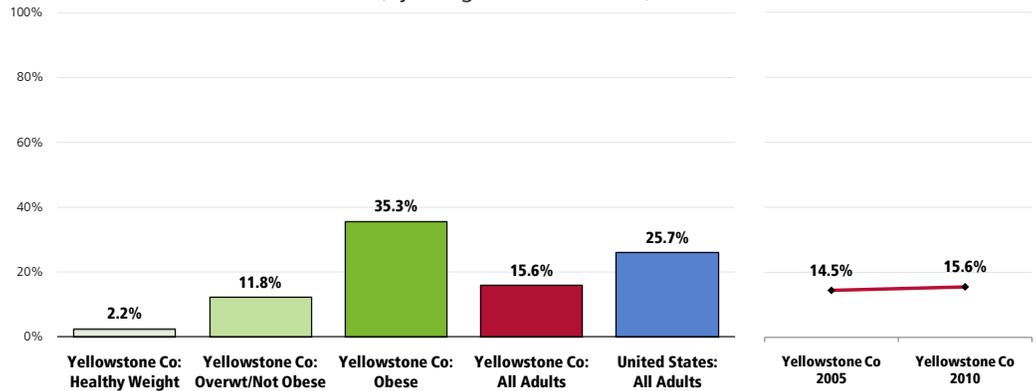
## Health Advice

**A total of 15.6% 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 (25.7%).
- 📊 Statistically unchanged from the 14.5% reported in 2005.
- 👤 Note that 35.3% of obese adults have been given advice about their weight by a health professional in the past year (while nearly two-thirds 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 162]
- 2008 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: 

- Asked of all respondents.

## Weight Control

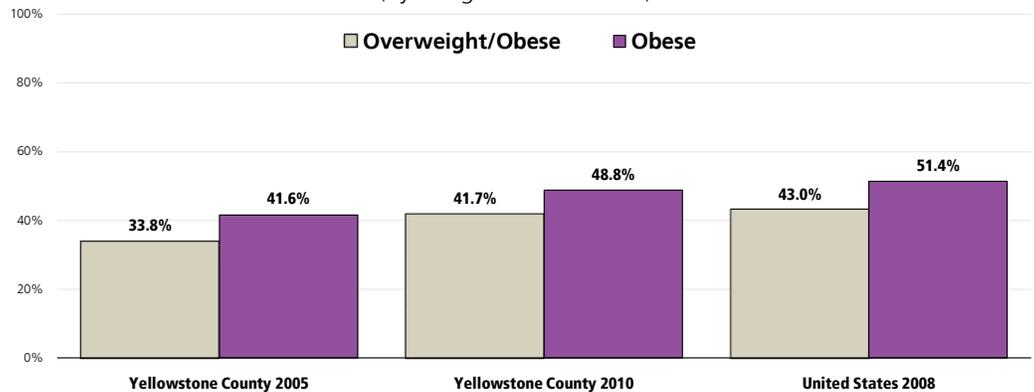
Many diseases are associated with overweight and obesity. Persons who are overweight or obese are at increased risk for high blood pressure, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, and some types of cancer. The health outcomes related to these diseases, however, often can be improved through weight loss or, at a minimum, no further weight gain.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

**A total of 41.7% of Yellowstone County adults who are overweight say that they are both modifying their diet and increasing their physical activity to try to lose weight.**

- Similar to national findings (43.0%).
- 📊 Statistically similar to the 33.8% reported among overweight adults in 2005.
- 👥 Note: 48.8% of obese county adults report that they are trying to lose weight through a combination of diet and exercise, similar to the 51.4% found nationally and the 41.6% reported in 2005.

### Trying to Lose Weight by Both Modifying Diet and Increasing Physical Activity (By Weight Classification)



Sources: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 161]
- 2008 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: 

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

## Childhood Overweight & Obesity

In children and teens, body mass index (BMI) is used to assess weight status – underweight, healthy weight, overweight, or obese. After BMI is calculated for children and teens, the BMI number is plotted on the CDC BMI-for-age growth charts (for either girls or boys) to obtain a percentile ranking. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children in the United States. The percentile indicates the relative position of the child's BMI number among children of the same sex and age.

BMI-for-age weight status categories and the corresponding percentiles are shown below:

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

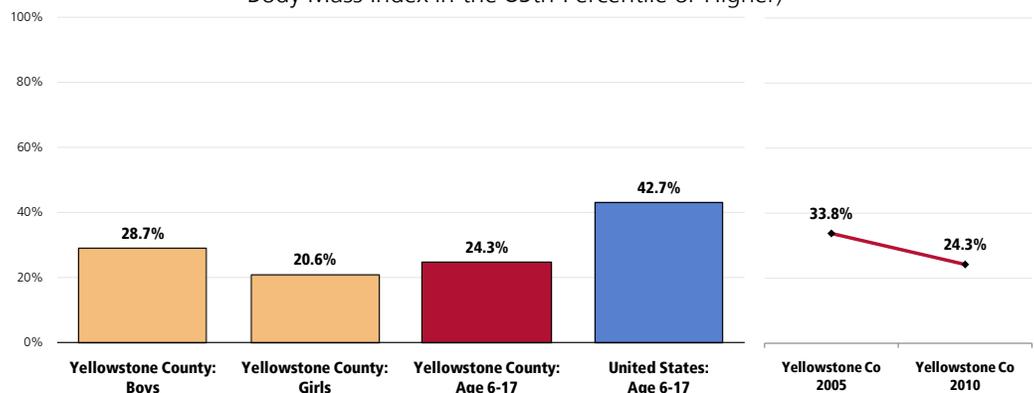
– Centers for Disease Control and Prevention.

**Based on the heights/weights reported by surveyed parents, 24.3% of Yellowstone County children aged 6 to 17 are overweight or obese (≥85<sup>th</sup> percentile).**

- Much more favorable than the 42.7% found nationally.
- 📊 Statistically similar to 2005 findings.
- 👨👩 Statistically similar by child's gender.

### Child Total Overweight Prevalence

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



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 163]  
● 2008 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: ● Asked of all respondents with children aged 6-17 at home.

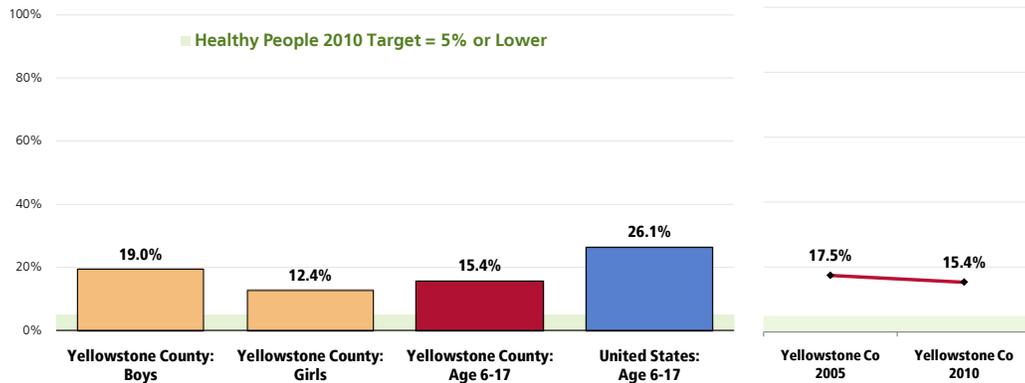
● Overweight among children is estimated based on children's Body Mass Index status at or above the 85th percentile of US growth charts by gender and age.

**Specifically, 15.4% of Yellowstone County children aged 6 to 17 are obese ( $\geq 95^{\text{th}}$  percentile).**

- More favorable than the national percentage (26.1%).
- Fails to satisfy the Healthy People 2010 target (5% or lower).
- 📊 Statistically unchanged since 2005.
- 👤 Statistically similar by child's gender.

### Child Obesity Prevalence

(Percent of Children 6-17 Who Are Obese; Body Mass Index in the 95<sup>th</sup> Percentile or Higher)



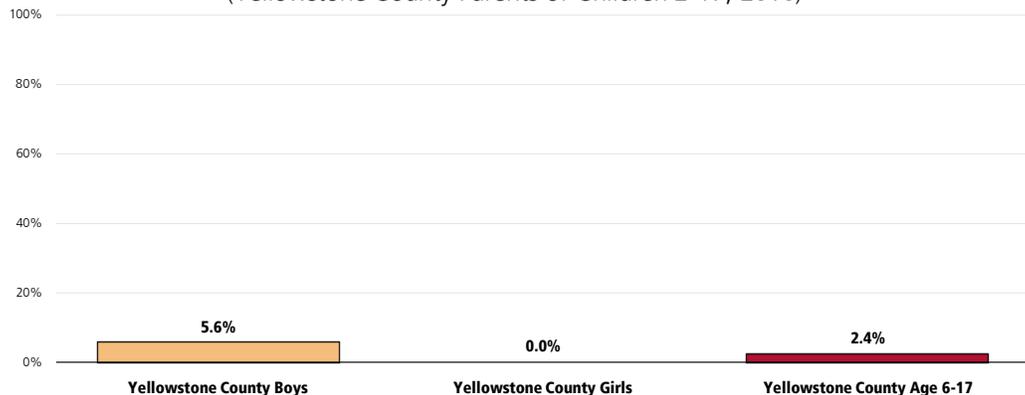
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 163]  
 • 2008 PRC National Health Survey, Professional Research Consultants, Inc.  
 • Healthy People 2010, 2<sup>nd</sup> Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 19-3]  
 Notes: • Asked of all respondents with children aged 6-17 at home.  
 • Obesity among children is estimated based on children's Body Mass Index status equal to or above the 95<sup>th</sup> percentile of US growth charts by gender and age.

**However, only 2.4% of parents with children aged 2-17 indicate that a health professional or someone at their child's school has told them in the past year that their child is overweight.**

- 👤 Statistically similar by child's gender.

### Health Professional or School Personnel Has Told Parent That Child Is Overweight in the Past Year

(Yellowstone County Parents of Children 2-17, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 141]  
 Notes: • Asked of all respondents with children 2-17 at home.

## Related Focus Group Findings: Nutrition & Physical Activity

Participants are concerned about unhealthy eating habits in the community. In their opinion, a large portion of the Billings community is overweight or obese. Participants realize this is not limited to Billings and is a national problem, but also realize that there is a need for more education regarding healthy living as well as an increase in the community's physical activity overall.

A concern brought forth is that there aren't enough outdoor spaces for physical activity. Fortunately, Billings is in the process of constructing a 26-mile bike trail; however, the current paths can be dangerous, especially for those attempting to ride their bike to work. An additional concern is the lack of indoor swimming facilities in the area. The indoor pools that are available are generally quite expensive to use.

Participants see the need for education regarding physical activity, particularly among the community's youth. Many commented on the scarcity of children playing outside and the shift to video games, computers, and television, which wasn't a problem 20 or 30 years ago.

*"I think obesity is a problem. I think we need to educate people about how to take care of themselves. To exercise, eat the right things, have the right diet and be physically fit. And I think it's a real problem to motivate some people to do that." –Legislator*

*"Our company offers a health club membership to their employees for free because we have the facility there, and I don't know how many people use it because I don't have any statistics but we've even given them three hours a week to go work on company time for wellness and I believe very few people do it. Out of 180 employees on benefits, I would say maybe five do it." –Employer*

*"When I think of a healthy community, I think of some better bike paths and things like that, walking trails. It's getting better. I think it's improving a lot. I'm not a big biker but I hear bikers are afraid to go out on their bike because I know of some who have been hit and there might be one main route, but as a rule it's not great I don't think." –Employer*

*"In Head Start, 30 percent of the children start out the year obese or nearing obesity. By the end of the year with two meals a day at Head Start we have virtually no children who are obese, but we don't serve soda. It makes a difference, but after they leave, who knows what's happening. Low income families end up eating a lot of carbohydrates because they are cheaper. It's not a lack of knowledge. If you buy fruit even at the fresh food market, it's expensive. Relative to their income, that is an issue." –Social Services*

*"We see that in our population of adults with disabilities too. They make poor food choices. I don't know if it's economic, but some of it is habit and lack of education about the impact of that kind of diet. We try lots of ways to try to teach our clients. Just what we were saying about eating a healthy diet—that's a tough habit to change. We also see it in our shelter, our domestic violence shelter. We offer healthy choices, but we see convenience foods, fast foods—it's a constant challenge. There is a lack of education. It is choices of convenience." –Social Services*

*"I think transportation enters into this somewhat too because of how the grocery stores are placed in this community. At the south side there is one IGA store, and for the rest of the south side neighborhood there are not a lot of markets, so they end up going to the convenience stores and buying junk food." –Social Services*

*"There is too much inactivity in adults and children in this community. There are kids with hypertension and other adult-like problems because of inactivity." –Educator*

*"Nutrition and obesity cut across all economic sectors. Everyone eats fast food. Some just eat fancier fast food than others." –Educator*

*"Our city is just not set up to do regular exercise outside of the gym. There are some bike trails that are inadequate, and most of the businesses are not bicycle-friendly. Businesses don't have showers for employees who have come to work on their bikes." –Physician*

# Substance Abuse

Substance abuse and its related problems are among society's most pervasive health and social concerns. Each year, about 100,000 deaths in the United States are related to alcohol consumption. Illicit drug abuse and related acquired immunodeficiency syndrome (AIDS) deaths account for at least another 12,000 deaths. In 1995, the economic cost of alcohol and drug abuse was \$276 billion. This represents more than \$1,000 for every man, woman, and child in the United States to cover the costs of healthcare, motor vehicle crashes, crime, lost productivity, and other adverse outcomes of alcohol and drug abuse.

A substantial proportion of the population drinks alcohol. Alcohol use and alcohol-related problems also are common among adolescents. Excessive drinking has consequences for virtually every part of the body. The wide range of alcohol-induced disorders is due (among other factors) to differences in the amount, duration, and patterns of alcohol consumption, as well as differences in genetic vulnerability to particular alcohol-related consequences. Alcohol use has been linked with a substantial proportion of injuries and deaths from motor vehicle crashes, falls, fires, and drownings. It also is a factor in homicide, suicide, marital violence, and child abuse and has been associated with high-risk sexual behavior.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

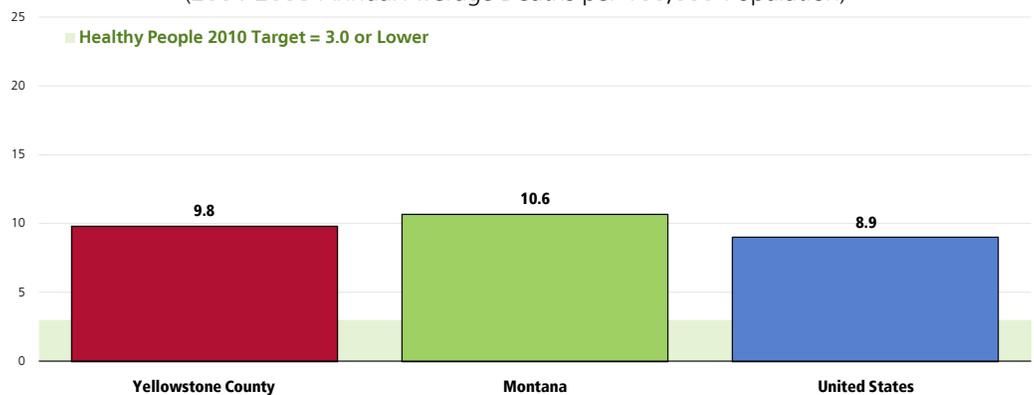
## Age-Adjusted Cirrhosis/Liver Disease Deaths

**Between 2004 and 2006, there was an annual average age-adjusted cirrhosis/liver disease mortality rate of 9.8 deaths per 100,000 population in Yellowstone County.**

- More favorable than the 10.6 reported across Montana.
- Less favorable than the national rate of 8.9.
- Fails to satisfy the Healthy People 2010 target.

### Cirrhosis/Liver Disease: Age-Adjusted Mortality

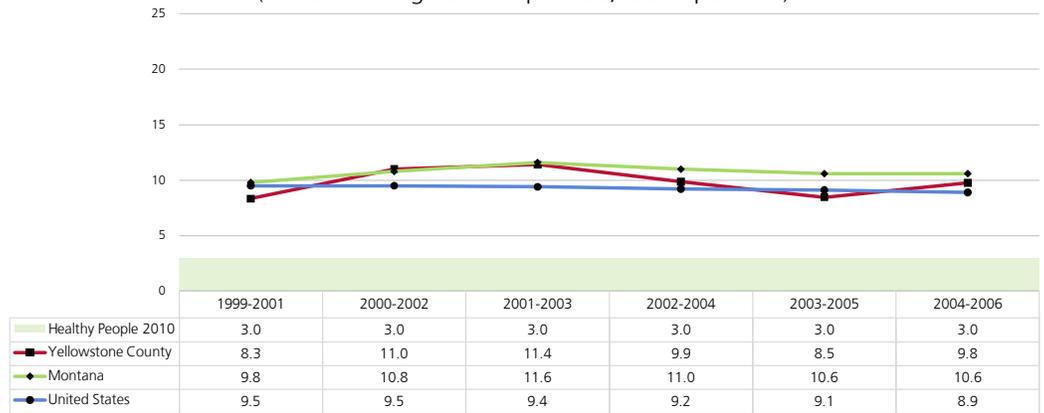
(2004-2006 Annual Average Deaths per 100,000 Population)



- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 26-2]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
  - County, state and national data are simple three-year averages.

☒ Mortality rates have fluctuated in the region, showing no clear trend; the same can be said for Montana. Nationwide, rates have decreased slightly over the past several years.

### Cirrhosis/Liver 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 November 2010.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 26-2]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
  - Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
  - State and national data are simple three-year averages.

## High-Risk Alcohol Use

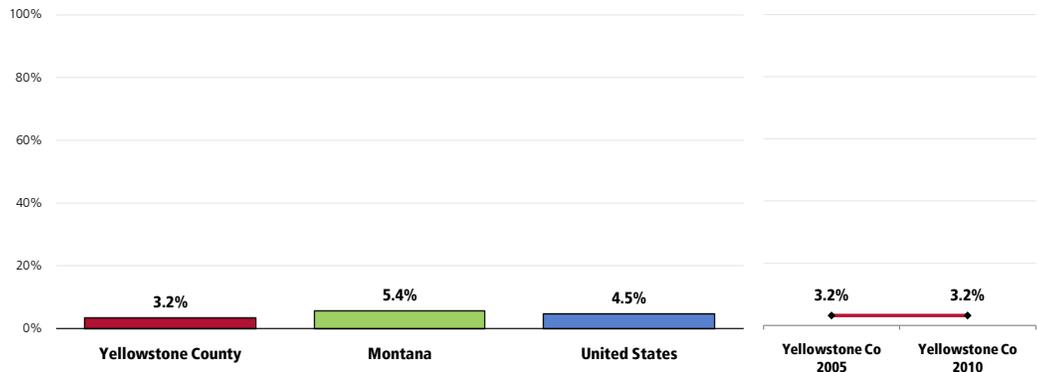
### Chronic Drinking

Chronic drinkers include survey respondents reporting 60 or more drinks of alcohol in the month preceding the interview. For the purposes of this study, a "drink" is considered one can or bottle of beer, one glass of wine, one can or bottle of wine cooler, one cocktail, or one shot of liquor.

**A total of 3.2% of area adults averaged two or more drinks of alcohol per day in the past month (chronic drinkers).**

- More favorable than the statewide proportion (5.4%).
- Similar to the national proportion (4.5%).
- ▣ Unchanged since 2005.

### Chronic Drinkers

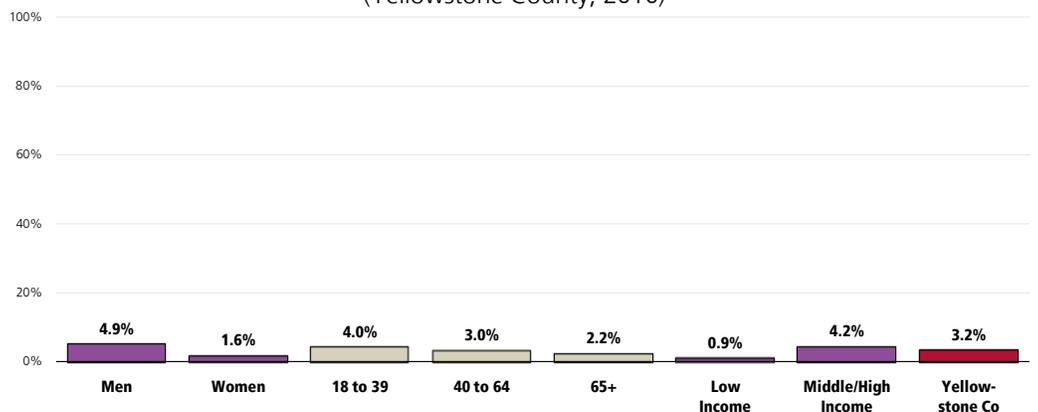


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 175]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2009 Montana data.
  - 2008 PRC National Health Survey, Professional Research Consultants.
- Notes:
- Asked of all respondents.
  - Chronic drinkers are defined as having 60+ alcoholic drinks in the past month.
  - \*The state definition for chronic drinkers is males consuming 2+ drinks per day and females consuming 1+ drink per day.

Chronic drinking is more prevalent among:

- Men.
- Adults with higher incomes.

### Chronic Drinkers (Yellowstone County, 2010)



- Sources:
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 175]
- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty  $\leq$  100% to 200% of poverty; "middle/high income" = over 200% of poverty.
  - Chronic drinkers are defined as those having 60+ alcoholic drinks in the past month.

## Binge Drinking

Binge drinkers include:

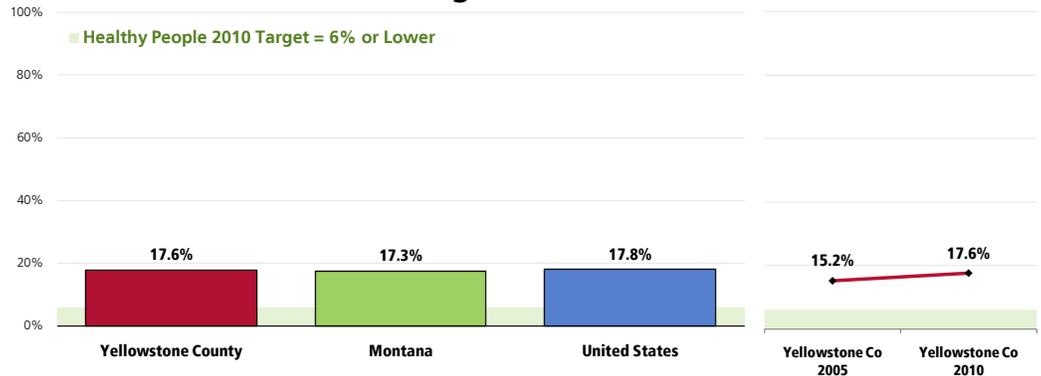
1) MEN who report drinking 5 or more alcoholic drinks on any single occasion during the past month; and

2) WOMEN who report drinking 4 or more alcoholic drinks on any single occasion during the past month.

### A total of 17.6% of Yellowstone County adults are binge drinkers.

- Similar to the 17.3% reported in Montana.
- Similar to the 17.8% reported nationwide.
- Fails to satisfy the Healthy People 2010 target (6% or lower).
- ☒ Similar to the 2005 percentage (*note that the previous definition for binge drinking was five or more drinks, regardless of gender*).

### Binge Drinkers



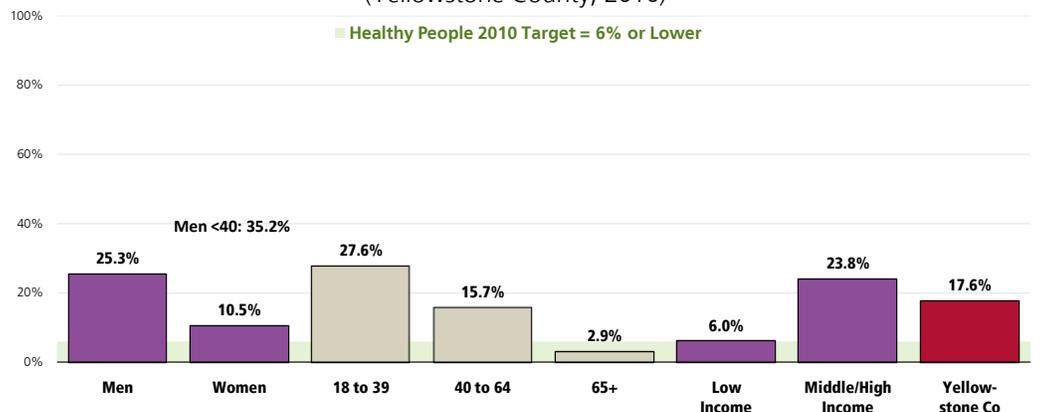
- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 176]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 Montana data.
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 26-11c]
- Notes:
- Asked of all respondents.
  - Binge drinkers are defined as men having 5+ alcoholic drinks on any one occasion or women consuming 4+ drinks on any one occasion.

Binge drinking is more prevalent among:

- ☒ Men (especially those under age 40, with a 35.2% binge prevalence).
- ☒ Adults under the age of 40.
- ☒ Adults in the higher income category.

### Binge Drinkers

(Yellowstone County, 2010)



- Sources:
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 176]
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 26-11c]
- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.
  - Binge drinkers are defined as men having 5+ alcoholic drinks on any one occasion or women consuming 4+ drinks on any one occasion

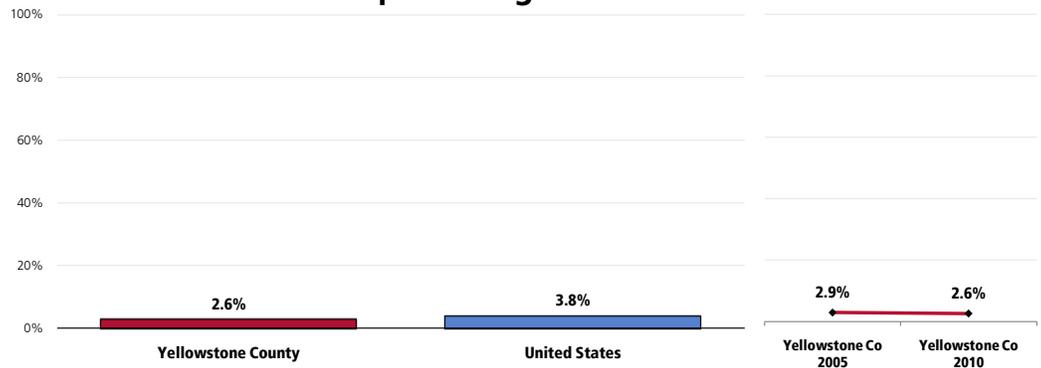
## Drinking & Driving

Note: As a self-reported measure – and because this indicator reflects potentially illegal behavior – it is reasonable to expect that it might be underreported, and that the actual incidence of drinking and driving in the community is likely higher.

**A total of 2.6% of Yellowstone County adults acknowledge having driven a vehicle in the past month after they had perhaps too much to drink.**

- Similar to the national findings (3.8%).
- ☒ The self-reported drinking and driving prevalence has not changed significantly over time.

### Have Driven in the Past Month After Perhaps Having Too Much to Drink

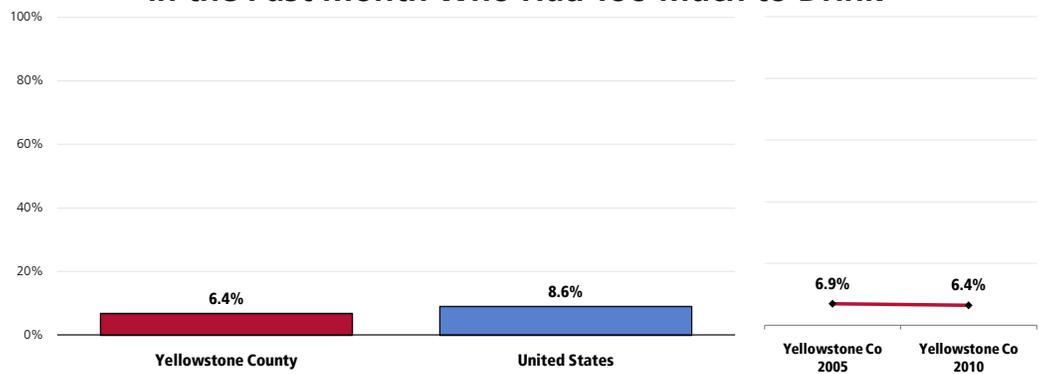


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 76]  
 • 2008 PRC National Health Survey, Professional Research Consultants.  
 Notes: • Asked of all respondents.

**A total of 6.4% of Yellowstone County adults acknowledge either drinking and driving or riding with a drunk driver in the past month.**

- Similar to the national findings (8.6%).
- ☒ Statistically similar to 2005 findings in Yellowstone County.

### Have Driven Drunk OR Ridden With a Driver in the Past Month Who Had Too Much to Drink



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 177]  
 • 2008 PRC National Health Survey, Professional Research Consultants.  
 Notes: • Asked of all respondents.

## Related Focus Group Findings: Drinking & Driving

Focus group participants expressed concern regarding the community's (and state's) attitude about drunk driving. Again, many in the community feel that the government shouldn't control what they do, so drunk driving is too common. Participants agreed that education is necessary to overcome the community's "cowboy" attitude.

*"If you look at objective statistics like DUIs and repeat offenders and those kinds of statistics, we're off the charts in relation to other communities. So in relation, our consequences are the legal system and I think the whole attitude is aligned for misuse of healthcare or lack of responsibility with drinking." –Employer*

*"In Montana there is a notion that drinking and driving is okay." –Educator*

*"There's been a denial in our community about some of the issues. The people don't like to acknowledge that there is so much trouble. I think the alcohol is huge in the state of Montana. And DUI—it's out there and it's huge. We are number one in the nation for teen suicide and adult alcohol dependency. You put the combination of availability of alcohol, availability of firearms and depression together and it's a bad combination." –Social Services*

*"I think that some of the problems in some areas is the tradition of having quite a lot of drinking in Montana, alcohol consumption, drunken drivers. That type of activity doesn't contribute to the overall health of the community. We're trying to do something in the legislature at this time about that, but who knows how effective we will be, but we'll try to do something." –Legislator*

*"I think they're doing a good job in the schools. I think the drinking problem and the driving problem is adults, and it's repeat offenders and it's our lax laws." –Legislator*

## Illicit Drug Use

Illegal use of drugs, such as heroin, marijuana, cocaine, and methamphetamine, is associated with other serious consequences, including injury, illness, disability, and death, as well as crime, domestic violence, and lost workplace productivity. Drug users and persons with whom they have sexual contact run high risks of contracting gonorrhea, syphilis, hepatitis, tuberculosis, and human immunodeficiency virus (HIV). The relationship between injection drug use and HIV/AIDS transmission is well known. Injection drug use also is associated with hepatitis B and C infections. Long-term consequences, such as chronic depression, sexual dysfunction, and psychosis, may result from drug use.

Although there has been a long-term drop in overall use, many people in the United States still use illicit drugs. Drug use among adolescents aged 12 to 17 years doubled between 1992 and 2001. Drug and alcohol use by youth also is associated with other forms of unhealthy and unproductive behavior, including delinquency and high-risk sexual activity.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

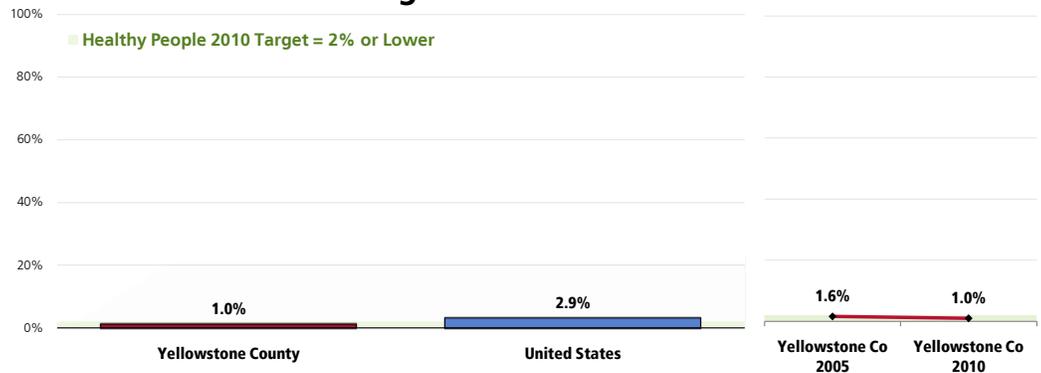
For the purposes of this survey, “illicit drug use” includes use of illegal substances or of prescription drugs taken without a physician’s order.

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.

### Just 1.0% of Yellowstone County adults acknowledge using an illicit drug in the past month.

- More favorable than the 2.9% reported across the nation.
- Satisfies the Healthy People 2010 objective of 2% or lower.
- ☒ Statistically similar to 2005 findings.

### Illicit Drug Use in the Past Month



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 78]  
 ● 2008 PRC National Health Survey, Professional Research Consultants.  
 ● Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 26-10c]  
 Notes: ● Asked of all respondents.

## Alcohol & Drug Treatment

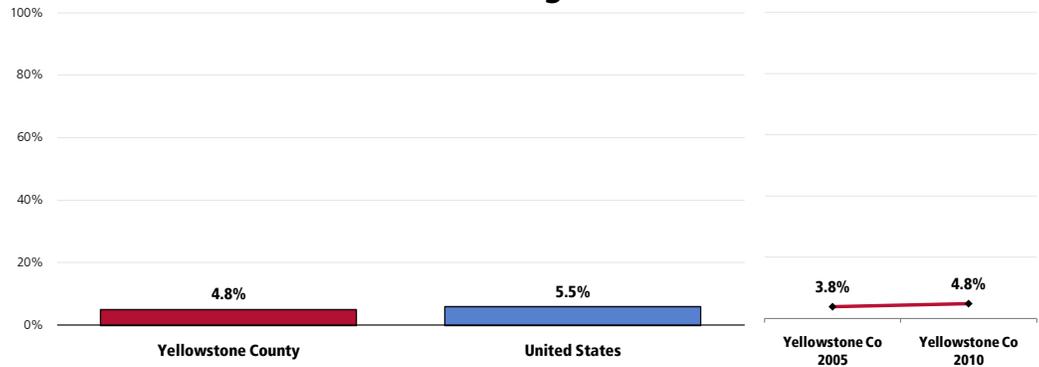
The stigma attached to substance abuse increases the severity of the problem. The hiding of substance abuse, for example, can prevent persons from seeking and continuing treatment and from having a productive attitude toward treatment. Compounding the problem is the gap between the number of available treatment slots and the number of persons seeking treatment for illicit drug use or problem alcohol use.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

**A total of 4.8% of Yellowstone County adults report that they have sought professional help for an alcohol or drug problem at some point in their lives.**

- Similar to the 5.5% reported nationally.
- 📊 Statistically similar to 2005 findings.

### Have Ever Sought Professional Help for an Alcohol- or Drug-Related Problem



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 79]  
● 2008 PRC National Health Survey, Professional Research Consultants.

Notes: ● Asked of all respondents.

## Related Focus Group Findings: Substance Abuse

The main cause of concern among participants regarding substance abuse is the lack of affordable treatment centers. Many expressed that if one doesn't have money, there are no real options for substance abuse treatment since the cost far outweighs resources that many families have to pay for treatment. Additionally, those who do get some kind of treatment, don't always get it for the length needed and then end up in the same situation as they began.

There is also concern regarding the rampant use of medical marijuana. Because of the relative ease and low expense involved in getting a card, medical marijuana use is on the rise and the concern is that it is being misused. Many of the participants would like to see tighter controls regarding medical marijuana.

*"Substance abuse centers are available if you have money. If money is an issue, you're out of luck. The Salvation Army will pay for those without money to go to a treatment center. However, it's not something they advertise—people must seek out the help." –Educator*

*"For medical marijuana, I can go to store A and B and C and that's not regulated. It needs to be regulated as the level of destruction comes from medical marijuana." –Physician*

*"If they want the treatment here, it's out of reach and even with insurance they pay close to 10, 15 percent of their stay and it's usually about \$12,000. Addictions treatment is cost-prohibitive." –Physician*

*"If you have no insurance or do not qualify for Medicaid then there's virtually nothing in the area." –Social Services*

*"I've had some experiences with employees and when they get down and out there is nowhere for them to go and they can't afford to do it and they either end up in jail or dead. And some of these people have children that are in trouble and making good money too but they can't get in and they can't spend \$15,000 on a program. And I don't really hear anything about aftercare, and I understand personal responsibility and AA and all of those kinds of things, but I can't tell you how many people I know that have been through Rim Rock three times and are still getting DUIs." –Employer*

*"We've got an explosion of medical marijuana use in the community. You're adding a lot of people that are going to have substance abuse problems. We're already one of the worst states with substance abuse or alcohol and prescription drugs. We're just adding another piece to the mix." –Legislator*

*"Marijuana is kind of exploding. We have people driving that are impaired with marijuana, not necessarily alcohol, with marijuana. You have people operating machinery and equipment and everything else impaired with marijuana. We've gone from a couple thousand card holders in two years to over 30,000." –Legislator*

# Tobacco Use

Cigarette smoking causes heart disease, several kinds of cancer (lung, larynx, esophagus, pharynx, mouth, and bladder), and chronic lung disease. Cigarette smoking also contributes to cancer of the pancreas, kidney, and cervix. Smoking during pregnancy causes spontaneous abortions, low birthweight, and sudden infant death syndrome. Other forms of tobacco are not safe alternatives to smoking cigarettes.

Tobacco use is responsible for more than 430,000 deaths per year among adults in the United States [about 20% of all deaths]... If current tobacco use patterns persist in the United States, an estimated 5 million persons under age 18 years will die prematurely from a smoking-related disease. Direct medical costs related to smoking total at least \$50 billion per year [other sources estimate more than \$75 billion in 1998 (about 8% of the personal healthcare expenditures in the US)]; direct medical costs related to smoking during pregnancy are approximately \$1.4 billion per year.

Evidence is accumulating that shows maternal tobacco use is associated with mental retardation and birth defects such as oral clefts. Exposure to secondhand smoke also has serious health effects. Researchers have identified more than 4,000 chemicals in tobacco smoke; of these, at least 43 cause cancer in humans and animals. Each year, because of exposure to secondhand smoke, an estimated 3,000 nonsmokers die of lung cancer, and 150,000 to 300,000 infants and children under age 18 months experience lower respiratory tract infections.

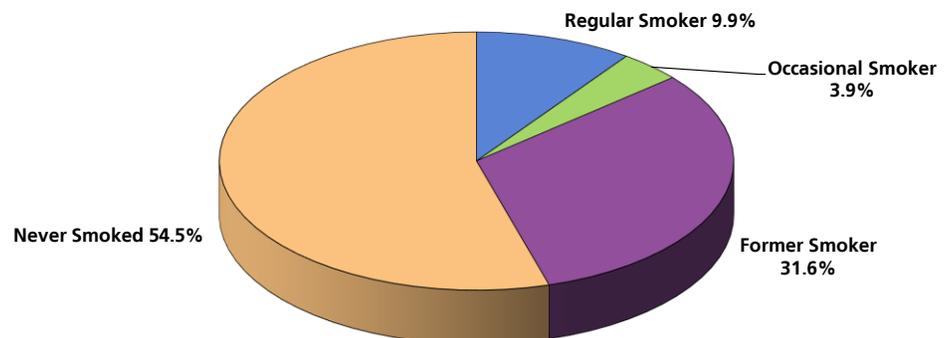
– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

## Cigarette Smoking

### Cigarette Smoking Prevalence

**A total of 13.8% of Yellowstone County adults currently smoke cigarettes, either regularly (9.9% every day) or occasionally (3.9% on some days).**

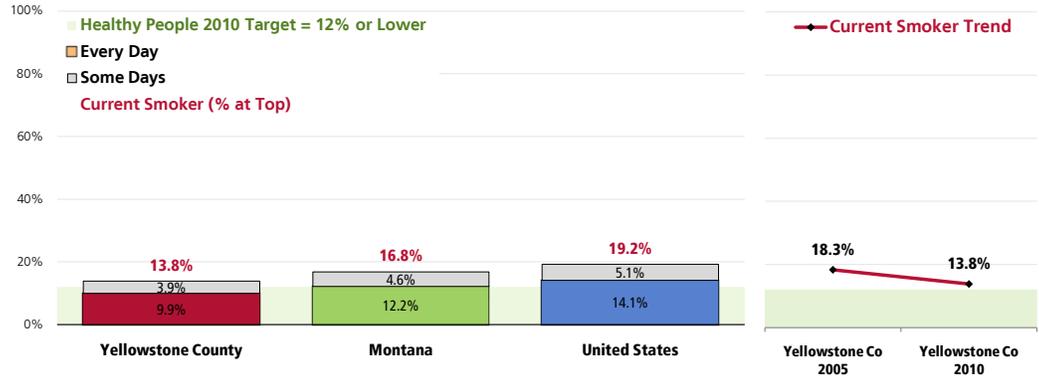
**Cigarette Smoking Prevalence**  
(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 171]  
Notes: • Asked of all respondents.

- Similar to statewide findings (16.8%).
- More favorable than national findings (19.2%).
- Similar to the Healthy People 2010 target (12% or lower).
- ☒ The current smoking percentage is statistically unchanged since 2005.

## Current Smokers



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 171]
- 2008 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): 2009 STATE Data.
- Healthy People 2010. 2nd Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 27-1a]

Notes:

- Asked of all respondents.
- Includes regular and occasional smokers (everyday and some days).

Cigarette smoking is more prevalent among:

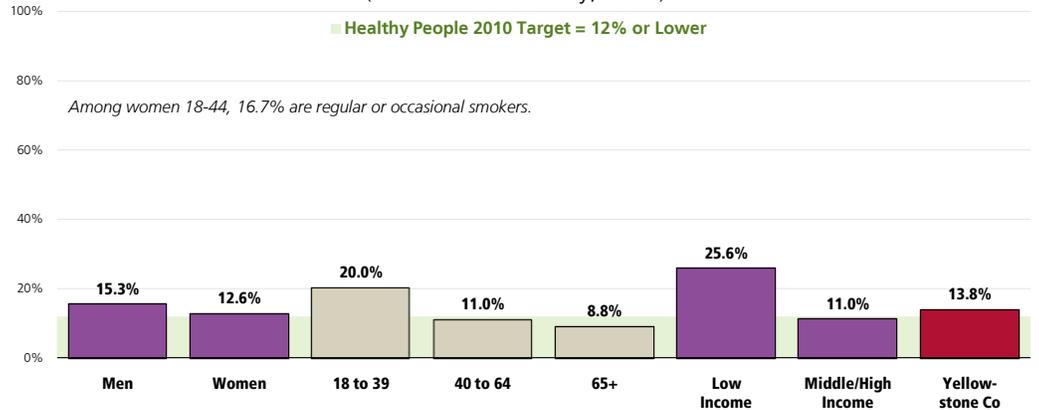
- 👤 Adults under 40.
- 👤 Lower-income residents.

Note also:

- 👤 16.7% 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

(Yellowstone County, 2010)



Sources:

- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 171-172]
- Healthy People 2010. 2nd Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 27-1a]

Notes:

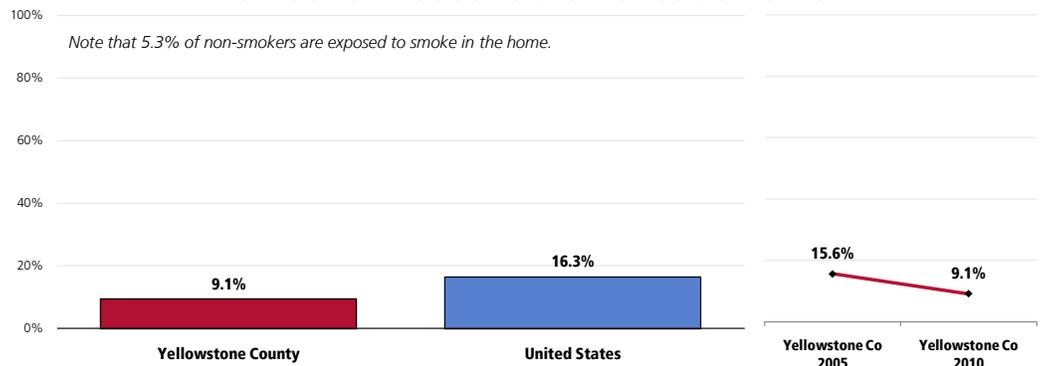
- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty @ 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## Environmental Tobacco Smoke

**A total of 9.1% of Yellowstone County adults (including smokers and non-smokers) report that a member of their household has smoked cigarettes in the home in the past month an average of four or more times per week.**

- More favorable than the 16.3% national findings.
- ▣ Marks a statistically significant decrease since 2005.
- 👤 Note that 5.3% of Yellowstone County non-smokers are exposed to cigarette smoke at home.

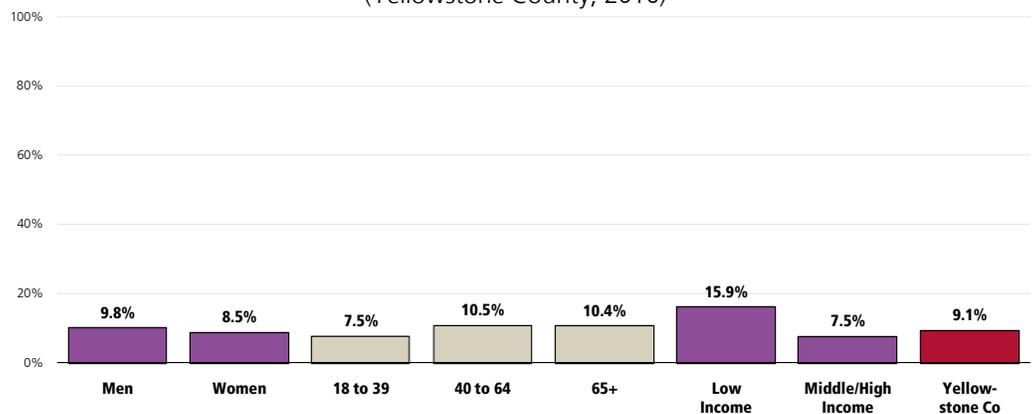
### Member of Household Smokes at Home



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 70]
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 27-5]
- Notes:
- Asked of all respondents.
  - "Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month.

- 👤 Notably higher among residents with lower incomes.

### Member of Household Smokes At Home (Yellowstone County, 2010)

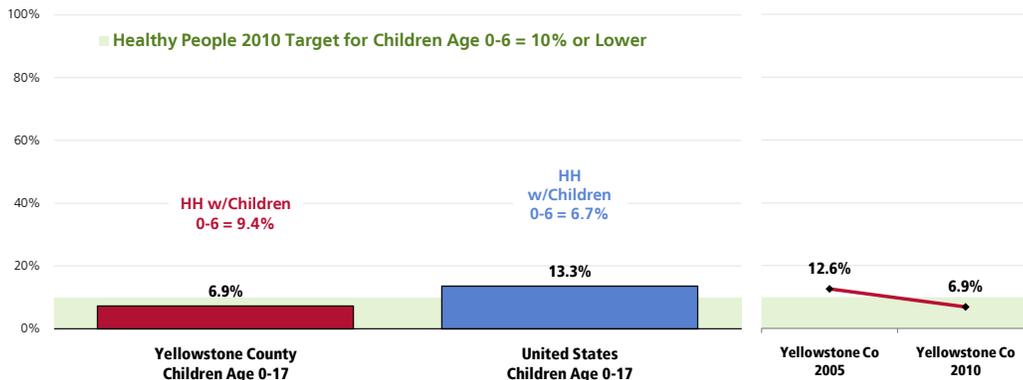


- Sources:
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 70]
- Notes:
- Asked of all respondents.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.
  - "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, 6.9% have someone who smokes cigarettes in the home.**

- More favorable than national findings (13.3%).
- ☒ Statistically similar to 2005 findings.
- 👤 Among households with children under age 7, 9.4% report that someone smokes in the home (compared to 6.7% nationwide, and a Healthy People 2010 objective of 10% or lower).

**Percentage of Households With Children In Which Someone Smokes in the Home**



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 173]  
 ● 2008 PRC National Health Survey, Professional Research Consultants.  
 ● Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 27-9]  
 Notes: ● Asked of all respondents.  
 ● "Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month.

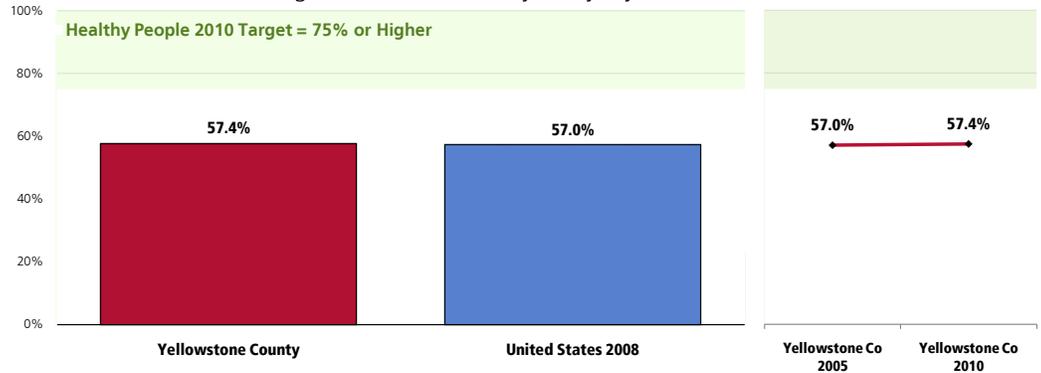
## Smoking Cessation

**More than one-half (57.4%) of regular smokers went without smoking for one day or longer in the past year because they were trying to quit smoking.**

- Nearly identical to the national percentage (57.0%).
- Fails to satisfy the Healthy People 2010 target (75% or higher).
- ☒ Statistically similar to 2005 findings.

### Have Stopped Smoking for 1 Day or Longer in the Past Year in an Attempt to Quit Smoking

(Among Yellowstone County Everyday Smokers, 2010)

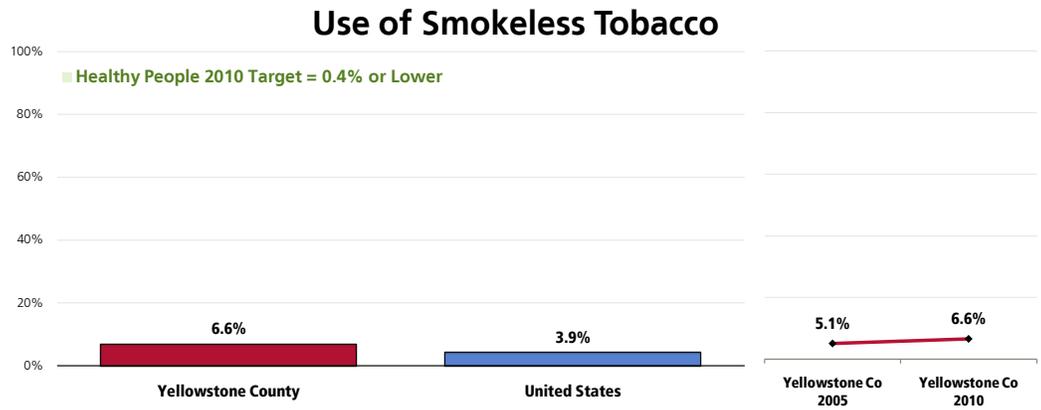


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 69]
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 27-5]
- Notes:
- Asked of respondents who smoke cigarettes every day.

## Use of Smokeless Tobacco

A total of 6.6% of Yellowstone County adults use some type of smokeless tobacco every day or on some days.

- Statistically similar to the national percentage (3.9%).
- Fails to satisfy the Healthy People 2010 target (0.4% or lower).
- ☒ Similar to 2005 findings.



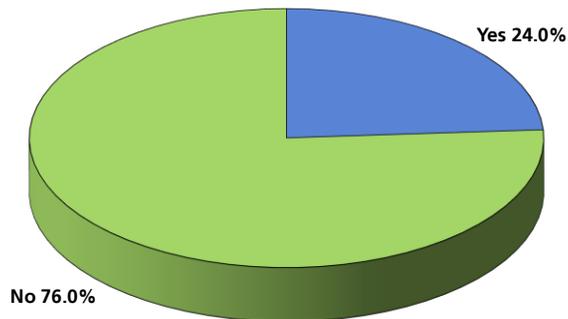
- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 71]
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objectives 27-1b]
- Notes:
- Asked of all respondents.
  - Smokeless tobacco includes chewing tobacco or snuff.

# Tattooing & Body Art

## Prevalence of Tattoos and/or Body Piercing

A total of **24.0% of Yellowstone County adults** have had tattoos and/or body piercing. (This does not include piercing in the ear lobe, but does include piercings in other body parts, such as the ear cartilage, nose, brow, etc., even if these piercings have grown closed.)

**Have Had Tattoos and/or Body Piercing**  
(Yellowstone County, 2010)

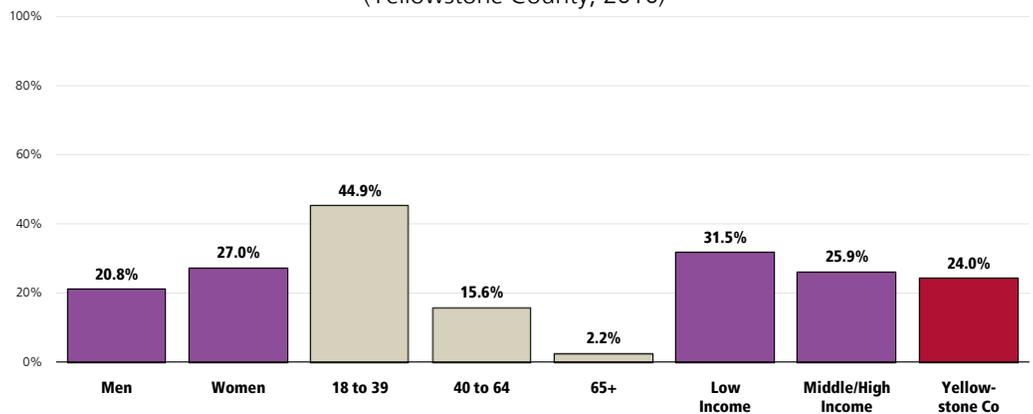


Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 63]  
Notes: • Asked of all respondents.  
• Includes piercings in body parts other than the ear lobe.

Adults more likely to have been tattooed or had body piercings include the following:

- 👩 Women.
- 👨 Adults under the age of 40 (note the negative correlation).

**Have Had Tattoos and/or Body Piercing**  
(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 63]  
Notes: • Asked of all respondents.  
• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.  
• Includes piercings in body parts other than the ear lobe.

## Setting

The vast majority of adults with tattoos and/or body piercings (87.0%) report that their tattoo/body piercing was performed by a professional artist in a studio using sterile, disposable needles and other safety practices.

## Awareness of Risks

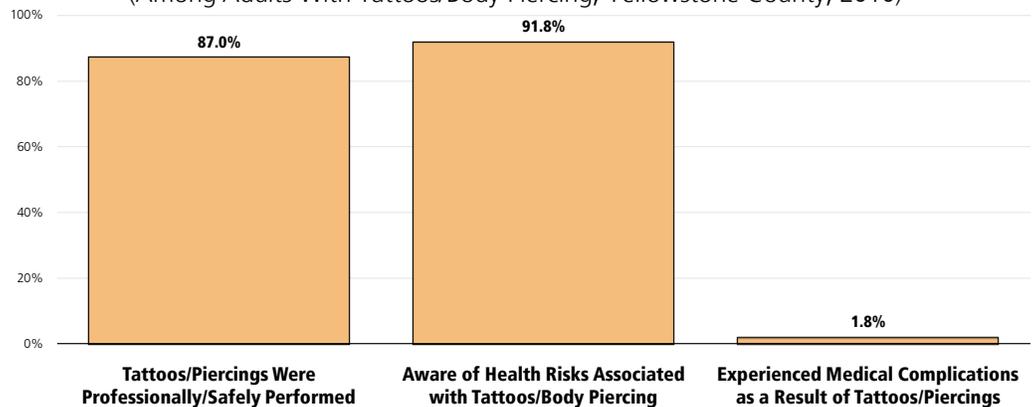
Among adults with tattoos and/or body piercings, 91.8% say they are aware that there is some risk of hepatitis and other infections associated with body art.

## Medical Complications

Just 1.8% of adults with body art report experiencing medical complications as a result of these piercings or tattoos.

### Characteristics & Awareness of Tattooing/Body Piercing

(Among Adults With Tattoos/Body Piercing; Yellowstone County, 2010)



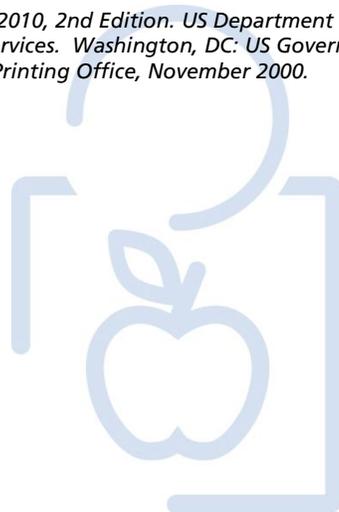
Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 64-66]  
Notes: • Asked of all respondents.  
• Includes piercings in body parts other than the ear lobe.

# ACCESS TO HEALTHCARE SERVICES

*Access to quality care is important to eliminate health disparities and increase the quality and years of healthy life for all persons in the United States.*

*Limitations in access to care extend beyond basic causes, such as a shortage of healthcare providers or a lack of facilities. Individuals also may lack a usual source of care or may face other barriers to receiving services, such as financial barriers (having no health insurance or being underinsured), structural barriers (no facilities or healthcare professionals nearby), and personal barriers (sexual orientation, cultural differences, language differences, not knowing what to do, or environmental challenges for people with disabilities).*

*– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.*



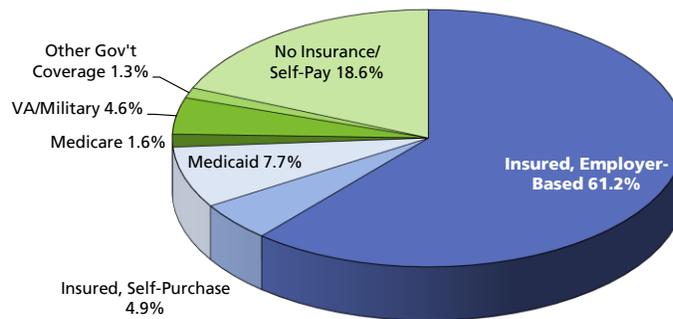
# Health Insurance Coverage

Survey respondents were asked a series of questions to determine their healthcare insurance coverage, if any, from either private or government-sponsored sources.

## Type of Healthcare Coverage

**Two-thirds (66.1%) of Yellowstone County adults aged 18 to 64 report having healthcare coverage through private insurance. Another 15.2% report coverage through a government-sponsored program (e.g., MediCal, Medicaid, Medicare, military benefits).**

**Healthcare Insurance Coverage**  
(Among Adults Age 18 to 64; Yellowstone County, 2010)



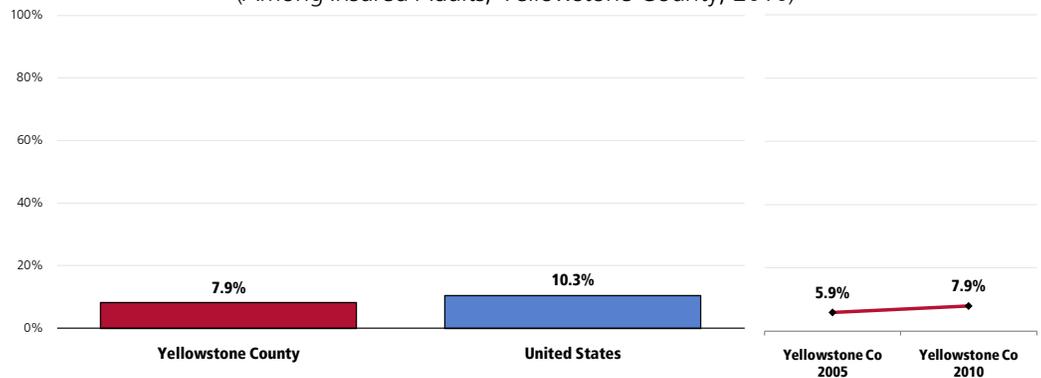
Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 195]  
Notes: • Reflects respondents aged 18 to 64.

## Recent Lack of Coverage (Insurance Instability)

**Among currently insured adults in Yellowstone County, 7.9% report that they were without healthcare coverage at some point in the past year.**

- Similar to US findings (10.3%).
- ☒ Statistically similar to 2005 findings.

**Went Without Healthcare Insurance Coverage At Some Point in the Past Year**  
(Among Insured Adults; Yellowstone County, 2010)



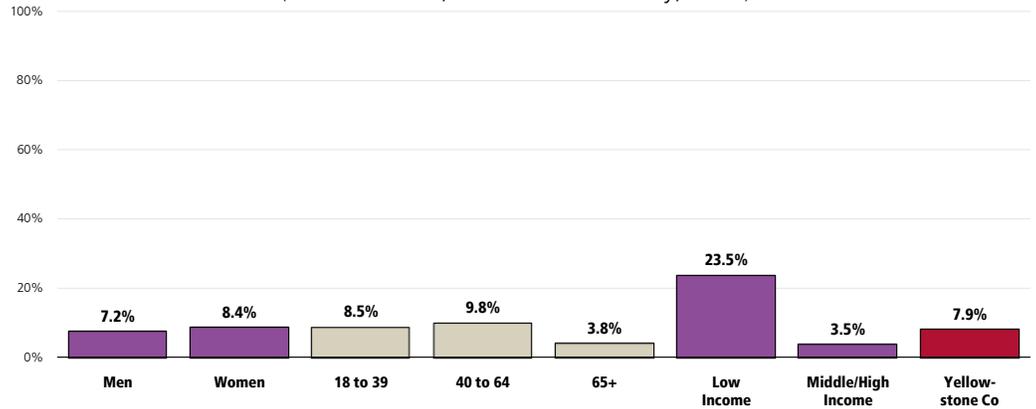
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 93]  
• 2008 PRC National Health Survey, Professional Research Consultants.  
Notes: • Asked of all insured respondents.

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 65.
- 👤 Lower-income residents.

### Went Without Healthcare Insurance Coverage At Some Point in the Past Year

(Insured Adults; Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 93]  
Notes: • Asked of all insured respondents.  
• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## Lack of Health Insurance Coverage

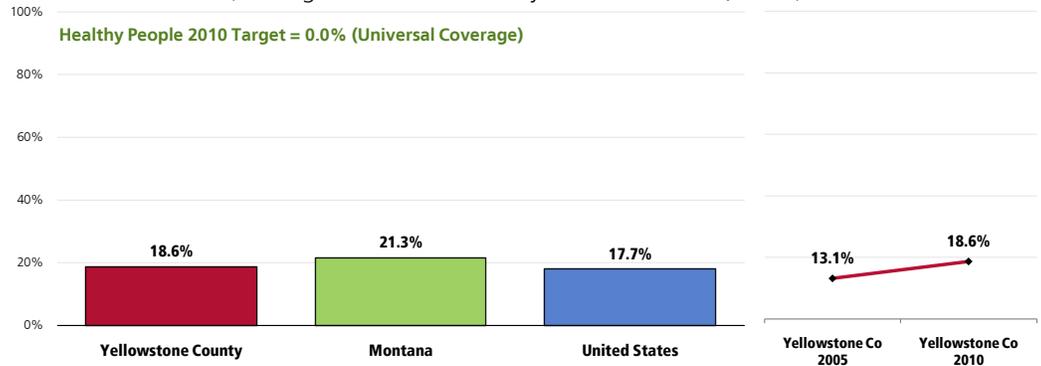
Here, lack of health insurance coverage reflects respondents aged 18 to 64 (thus, excluding the Medicare population) who have no type of insurance coverage for healthcare services – neither private insurance nor government-sponsored plans (e.g., Medicaid).

Among adults aged 18 to 64, 18.6% report having no insurance coverage for healthcare expenses.

- Similar to state finding (21.3%).
- Similar to the national finding (17.7%).
- The Healthy People 2010 target is universal coverage (0% uninsured).
- ☒ The increase seen in the following chart is not large enough to be deemed statistically significant.

### Lack of Healthcare Insurance Coverage

(Among Yellowstone County Adults Under 65, 2010)

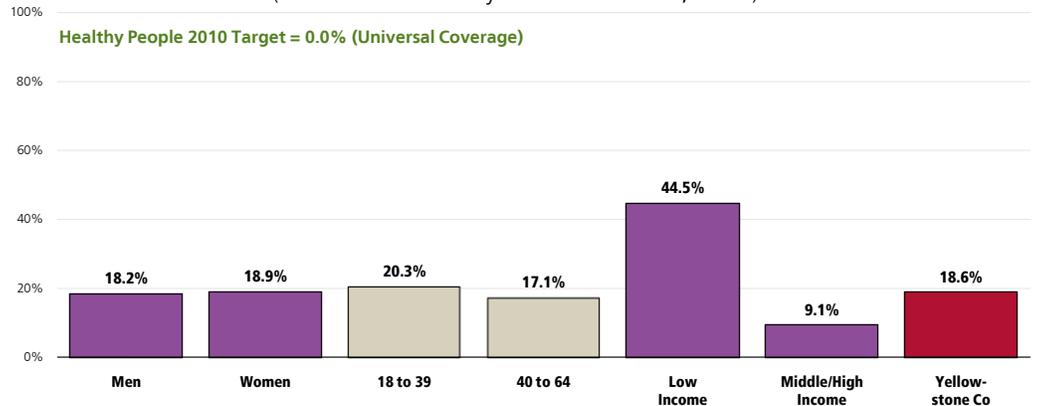


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 195]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2009 Montana data.
  - 2008 PRC National Health Survey, Professional Research Consultants.
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 1-1]
- Notes:
- Asked of all respondents under the age of 65.

- ☒ As might be expected, residents living at lower incomes are more likely to be without healthcare coverage when compared with those making higher incomes (note the 44.5% uninsured prevalence among adults living below the 200% poverty threshold).

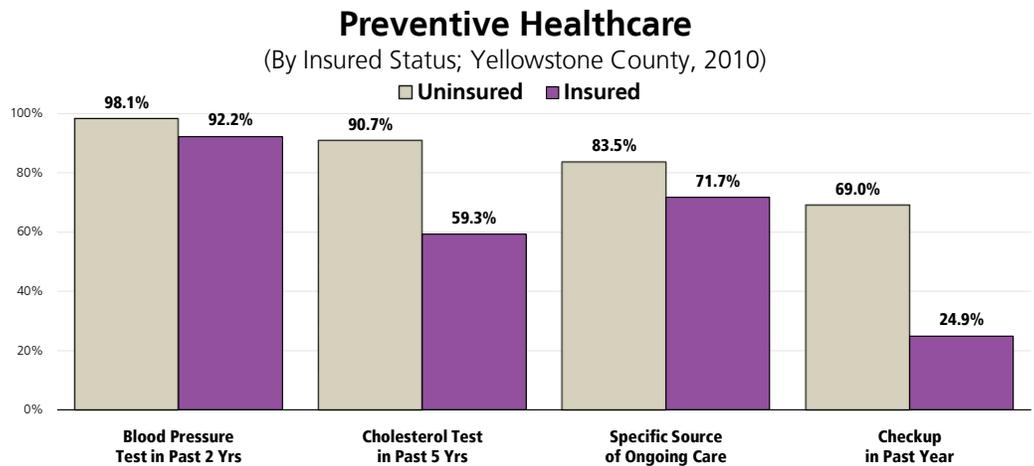
### Lack of Healthcare Insurance Coverage

(Yellowstone County Adults Under 65, 2010)



- Sources:
- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 195]
  - Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 1-1]
- Notes:
- Asked of all respondents under the age of 65.
  - Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

Also, uninsured adults in Yellowstone County are much less likely to receive routine care and preventive health screenings, and are less likely to have a specific source for ongoing care.



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 16, 40, 43, 196]  
Notes: • Asked of all respondents.

## Related Focus Group Findings: Health Insurance Coverage

Health insurance costs are a hot topic across the nation right now and Montana is no different. Many participants feel as though a good portion of the Billings community doesn't carry health insurance or carries very little of it because of the huge cost. Small businesses carry a huge burden because they generally don't offer health insurance and when they do, it's at a significant cost to them. Fortunately, Montana offers health insurance for kids whose parents qualify, and there is Medicare and Medicaid available as well, but participants feel that often people are too embarrassed to accept these offers of assistance.

*"Because of the economy in general, many aren't able to afford health insurance. They lose their job, and they lose their insurance. Many jobs don't have benefits; if something catastrophic happens, people can't pay for the care they need." –Educator*

*"There is an unspoken prejudice against lower income; people with Medicaid generally have a harder time navigating the system because they don't always understand the paperwork or the instructions they've been given and they are often too embarrassed to ask." –Educator*

*"Healthy Montana Kids is statewide health insurance for children but many parents don't enroll because they don't know they qualify or they're embarrassed or they're so wrapped up in their own problems that their children take a back seat." –Educator*

*"Lack of insurance is a big problem especially with small businesses." –Employer*

*"The problem that I see going on—really keeping people on that lower echelon is that because they do have free services, they are not able to move out into a better job. We've had a couple of people that we were going to promote and they refused the promotion because they would lose their childcare, they would lose this, they would lose that. So then either they would have to take a full-time job or they would have to move out because they would be worse off." –Social Services*

# Difficulties Accessing Healthcare

Access to quality care is important to eliminate health disparities and increase the quality and years of healthy life for all persons in the United States. Access to high-quality healthcare across each of the components in the continuum of care must be improved to realize the full potential of prevention. For example, success in reducing the burden of heart disease and narrowing the gap in heart disease outcomes between different racial groups will depend on several factors. These factors include ensuring access to clinical preventive services, such as blood pressure and cholesterol screening; effective primary care to educate people about modifiable risk factors, such as smoking, and to manage effectively chronic conditions like hypertension; high-quality emergency services to improve outcomes of acute cardiac events; and access to rehabilitative and long-term care for heart disease patients.

Improving access to appropriate preventive care requires addressing many barriers, including those that involve the patient, provider, and system of care. Patient barriers include lack of knowledge, skepticism about the effectiveness of prevention, lack of a usual source of primary care, and lack of money to pay for preventive care. Having health insurance, a high income, and a primary care provider are strong predictors that a person will receive appropriate preventive care.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

## Barriers to Healthcare Access

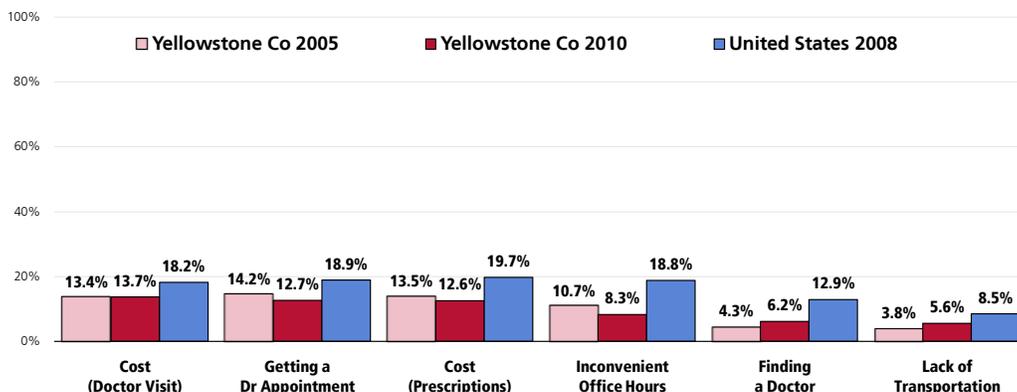
To better understand healthcare access barriers, survey participants were asked whether any of six types of barriers to access prevented them from seeing a physician or obtaining a needed prescription in the past year.

Again, these percentages reflect the total population, regardless of whether medical care was needed or sought.

Of the tested barriers, cost of a physician visit impacted the greatest share of Yellowstone County adults (13.7% say that cost prevented them from obtaining a visit to a physician in the past year).

- The proportion of county adults impacted was statistically more favorable than that found nationwide for each of the tested barriers.
- ☒ Compared to baseline 2005 data, the county has not witnessed any significant changes in barriers to access.

### Barriers to Access Have Prevented Medical Care in the Past Year

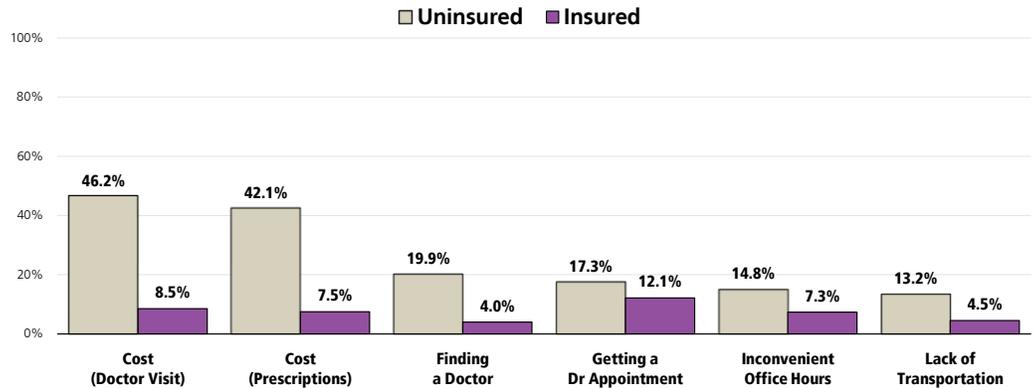


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 7-12]  
 • 2008 PRC National Health Survey, Professional Research Consultants, Inc.  
 Notes: • Asked of all respondents.

As might be expected, Yellowstone County adults without health insurance are much more likely to report access barriers when compared to the insured population, particularly those related to cost.

## Barriers to Healthcare Access

(By Insured Status, Adults 18+; Yellowstone County, 2010)



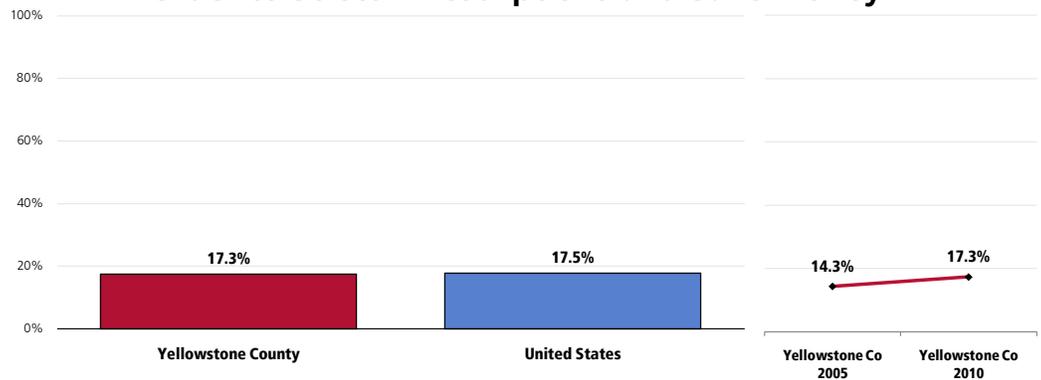
Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7-12]  
 Notes: • Asked of all respondents.

## Prescriptions

Among all Yellowstone County adults, 17.3% skipped or reduced medication doses in the past year in order to stretch a prescription and save money.

- Nearly identical to the 17.5% reported nationwide.
- ☒ Statistically similar to 2005 findings.

## Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money



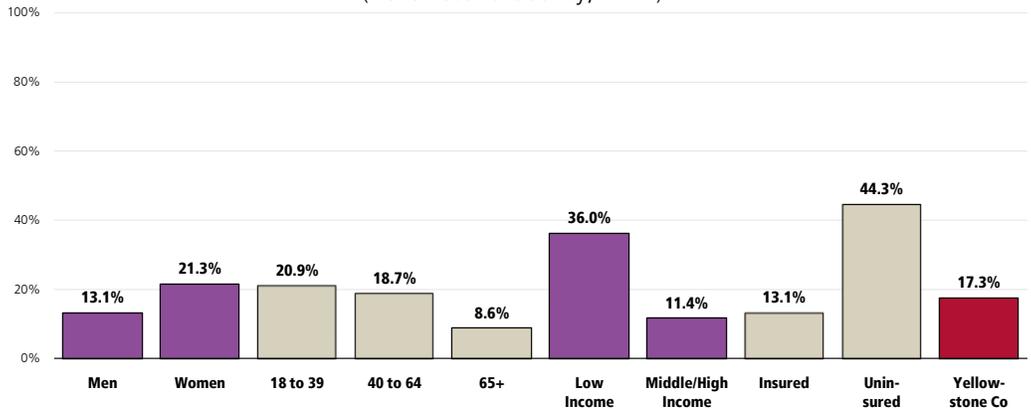
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 13]  
 • 2008 PRC National Health Survey, Professional Research Consultants.  
 Notes: • Asked of all respondents.

Adults more likely to have skipped or reduced their prescription doses include:

-  Women.
-  Adults under 65.
-  Respondents with lower incomes.
-  Uninsured adults.

### Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money

(Yellowstone County, 2010)



Sources: 

- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 13]

  
 Notes: 

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

### Accessing Healthcare for Children

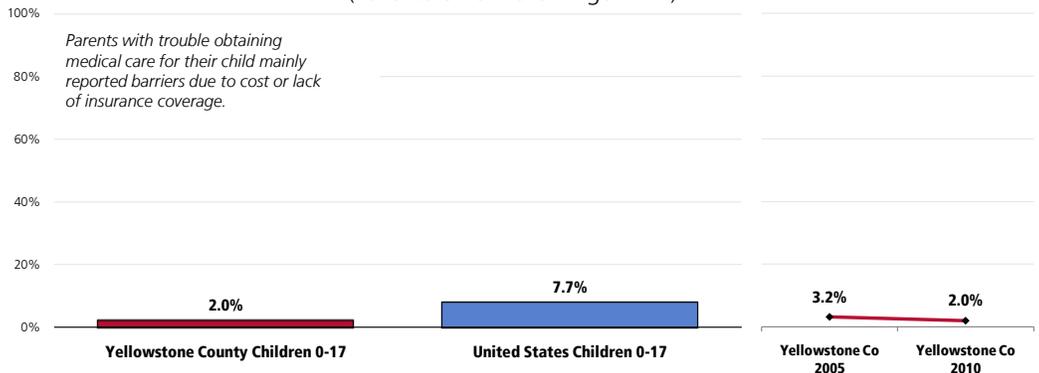
Surveyed parents were also asked if, within the past year, they experienced any trouble receiving medical care for a randomly-selected child in their household.

**A total of 2.0% 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.**

- More favorable than the 7.7% reported nationwide.
-  Statistically unchanged since 2005.

### Had Trouble Obtaining Medical Care for Child in the Past Year

(Parents of Children Age 0-18)



Sources: 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 131-132]
- 2008 PRC National Health Survey, Professional Research Consultants.

  
 Notes: 

- Asked of all respondents with children under 18 at home.

Among the parents experiencing difficulties, the majority cited **cost or a lack of insurance** as the primary reason.

## Related Focus Group Findings: Difficulties Accessing Healthcare

There are many issues regarding access to care. One that came up continuously was transportation and the difficulties surrounding traveling from one point in the community to another, particularly if one lives in an outlying area or needs specialized care not offered in Billings. Additionally, the bus system's schedule isn't always convenient for those who work off-hours.

Another issue is difficulty in finding a primary care physician in the community; several participants spoke of their own frustration in not being able to find one and having to go to a specialist instead. Participants also spoke of the time spent waiting for an available appointment. Several mentioned that there is often a wait of two or three months for an appointment. Also mentioned was the limited availability of the RiverStone clinic. There are many more people who need an appointment time than appointments are available each day.

Again, mental health was brought up and the cost involved in paying for treatment. Too many people in the community do not have the means with or without insurance to pay for their mental healthcare or that of their children. The cost of the care generally exceeds what insurance will cover and those without insurance have very little ability to pay for the treatment completely out-of-pocket.

*"One of the things I've noticed is even though we've got all these facilities it is tough to get in anywhere. I mean I've had some people with some serious issues at work. You can get into the emergency room or something like that, but you can hardly get in to see a doctor." –Employer*

*"We need more counseling for addictive disorders, drug and alcohol. I don't think we have adequate facilities for that." –Employer*

*"I'm talking about when I get referred from my family practice, primary care, internist to a specialist, many times it takes two to three months to get an appointment." –Legislator*

*"Because we don't have a lot of pediatric specialties, a lot of our kids have to travel outside the community in order to access that healthcare. And specifically I'm thinking about our kids that get diagnosed with cancer. They have to travel to Denver or they have to travel to Seattle or Salt Lake in order to get treatment for their initial stuff. And depending on what kind of cancer it is, they have to keep going back." –Physician*

*"Getting people to Billings is difficult because buses don't run from Laurel or to Laurel. And the public transportation in this town doesn't have hours for people who work a late shift. Buses stop at 7pm and there's no transportation for outlying areas." –Educator*

*"I oversee a program to provide support to families who have children in the mental health system and what we are seeing through the program that I'm running is a group of families that are coming and need support and services aren't even those lower middle class people. They are absolutely our middle class who are struggling with co-pays for their children's mental health insurance. If you work for a small business and buy your own insurance and have a child that has one mental health hospitalization, they can be out of pocket \$10,000 for one instance." –Social Services*

*"If you have Medicaid you have mental healthcare. If you have Medicaid, you can be admitted and go to a residential treatment center where Medicaid pays the bill. If you have insurance, who*

*knows what your insurance policy is going to pay for if you have a child who needs a residential placement?” –Social Services*

*“It’s the middle class that gets squished. A lot of time healthcare policies right now have a therapy limit of 15 to 20 visits a year, and if you have a child who is getting physical therapy and occupational therapy they pay for the first month’s visit. And so for the rest of the year they are paying out-of-pocket for therapy. I have families that have to choose which kind of therapy a week they can afford, and I think they go around without knowing what kind of therapies will help, but families can’t afford them and so the kids are becoming more severe because the families simply can’t afford the services.” –Social Services*

*“Well, in Billings we have public transportation but it doesn’t access some of the neediest areas and there is no other alternative that I’m aware of.” –Social Services*

*“With cancer patients the transportation is a huge issue because Billings serves such a large area (all the way to the Canadian border) and that’s probably one of the two biggest areas for cancer treatment. They almost have to have a family member who can drive them down here. Big Sky Airlines used to go out to the eastern part, now I think Great Lakes is just extremely limited on flying down here.” –Social Services*

# Primary Care Services

Improving primary care across the nation depends in part on ensuring that people have a usual source of care. Having a primary care provider as the usual source of care is especially important because of the beneficial attributes of primary care. These benefits include the provision of integrated, accessible healthcare services by clinicians who are accountable for addressing a large majority of personal healthcare needs, developing a sustained partnership with patients, and practicing in the context of family and community. Increasing the number and proportion of members of underrepresented racial and ethnic groups who are primary care providers also is important because they are more likely to practice in areas where health services are in short supply and in areas with high percentages of underrepresented racial and ethnic populations.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

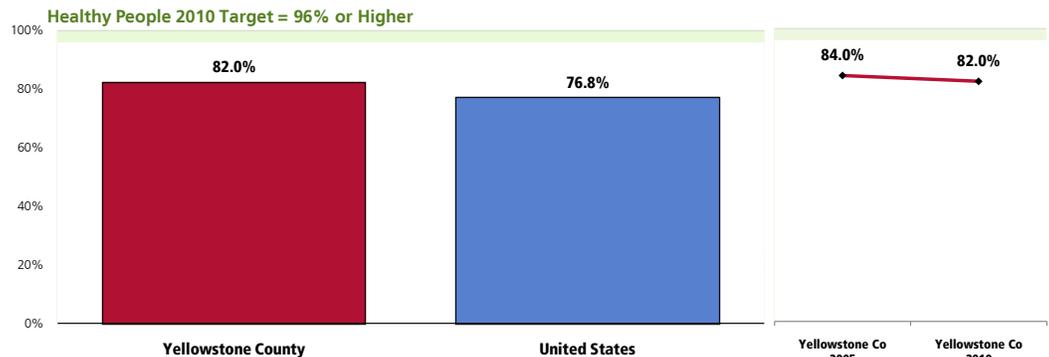
Having a specific source of ongoing care includes having a doctor's office, clinic, urgent care center, walk-in clinic, health center facility, hospital outpatient clinic, HMO or prepaid group, military/VA clinic, or some other kind of place to go if one is sick or needs advice about his or her health. A hospital emergency room is not considered a source of ongoing care in this instance.

## Specific Source of Ongoing Care

**A total of 82.0% of Yellowstone County adults were determined to have a specific source of ongoing medical care.**

- More favorable than national findings (76.8%).
- Fails to satisfy the Healthy People 2010 target (96% or higher).
- ☒ Statistically similar to 2005 findings.

## Have a Specific Source of Ongoing Medical Care

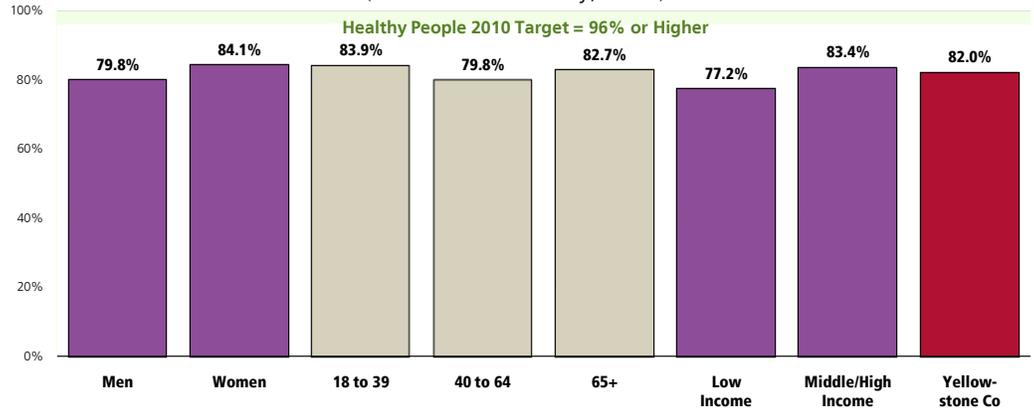


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 196]  
• 2008 PRC National Health Survey, Professional Research Consultants.

Notes: • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 1-4]  
• Asked of all respondents.

When viewed by key demographic characteristics, no significant differences are reported.

### Have a Specific Source of Ongoing Medical Care (Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 196]  
 • Healthy People 2010, 2nd Edition. U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, November 2000. [Objective 1-4]  
 Notes: • Asked of all respondents.  
 • Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty  $\leq$  100% to 200% of poverty; "middle/high income" = over 200% of poverty.

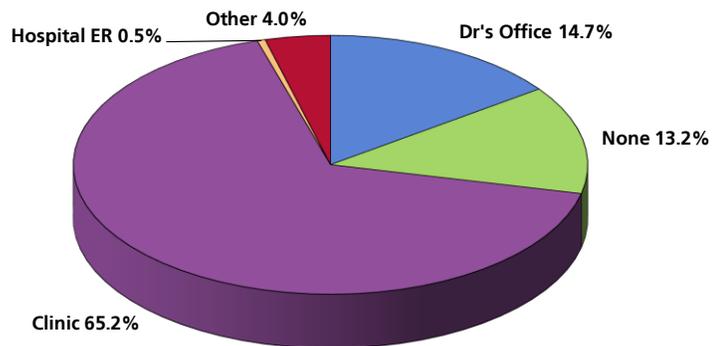
### Type of Place Used for Medical Care

When asked where they usually go if they are sick or need advice about their health, the greatest share of respondents (65.2%) identified some type of clinic.

A total of 14.7% say they usually go to a particular doctor's office, while 0.5% rely on a hospital emergency room.

Note that 13.2% of respondents do not consider themselves to have a particular place that they routinely use for medical care.

### Particular Place Utilized for Medical Care (Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 14-15]  
 Notes: • Asked of all respondents.

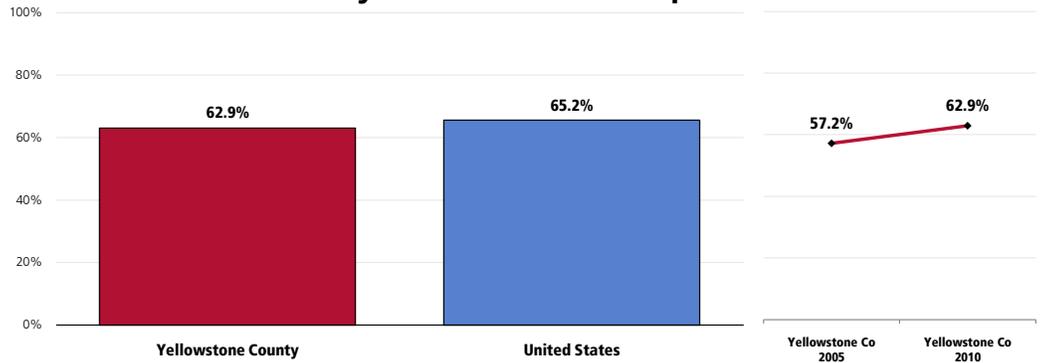
# Utilization of Primary Care Services

## Adults

A total of 62.9% of adults visited a physician for a routine checkup in the past year.

- Comparable to national findings (65.2%).
- ☒ Statistically comparable to 2005 findings.

### Have Visited a Physician for a Checkup in the Past Year



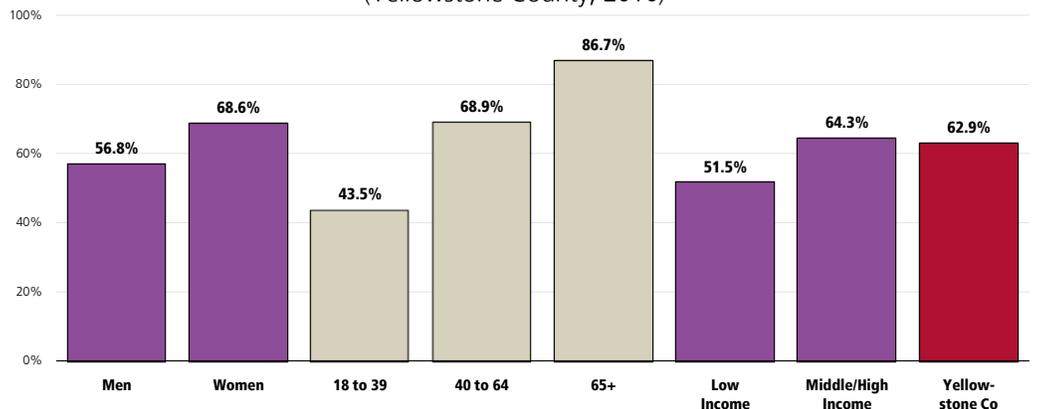
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 16]  
 • 2008 PRC National Health Survey, Professional Research Consultants.

Notes: • Asked of all respondents.

The following population segments are less likely to have visited a physician for a routine checkup in the past year.

- ☒ Men.
- ☒ Adults under 40 (note the positive correlation with age).
- ☒ Low-income residents.

### Have Visited a Physician for a Checkup in the Past Year (Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 16]

Notes: • Asked of all respondents.

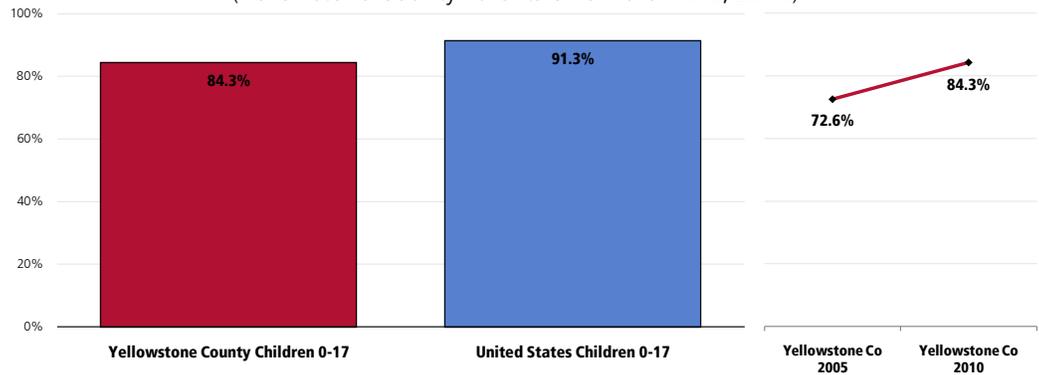
• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

## Children

Among surveyed parents, 84.3% report that their child has had a routine checkup in the past year.

- Less favorable than national findings (91.3%).
- ▣ Marks a statistically significant increase over time.

### Child Has Visited a Physician for a Routine Checkup in the Past Year (Yellowstone County Parents of Children <18, 2010)



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 133]  
● 2008 PRC National Health Survey, Professional Research Consultants.

Notes: ● Asked of all respondents with children under 18 at home.

## Related Focus Group Findings: Primary Care Services

As mentioned earlier, access to a primary care physician isn't always available. Participants mentioned that there are too few primary care physicians in Billings. Often it's difficult to find a primary care physician who is taking new patients, and if one is found, the wait for an appointment can take a couple of months. Additionally it's becoming more and more difficult to find a physician who will take Medicaid. Unfortunately, none saw these issues as being remedied any time soon, as this is the case across the nation.

*"It's hard to get a general practitioner. I can't find one. The ones that are all referred to me are all full. I can't get in. So I don't have one. If I have to go to the dermatologist, I automatically go to the specialist." –Legislator*

*"Because of the way reimbursements run, more doctors go into specialties and so primary care is not as attractive of a field to enter. It was maybe at one time, and I think it's kind of showing up here. It's clearly showing up in small, rural communities where they have a hard time getting anybody." –Legislator*

*"The pediatricians kind of take Medicaid, but it's the specialists that—some of them that don't take Medicaid." –Social Services*

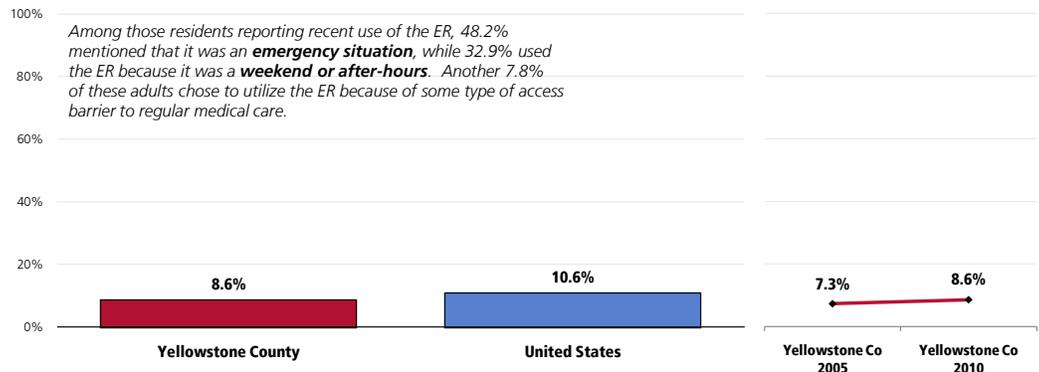
*"If you want to see an Internal Medicine doctor as your preferred doctor, you're going to wait two or three weeks to see them." –Physician*

# Emergency Room Utilization

A total of 8.6% of Yellowstone County adults have gone to a hospital emergency room more than once in the past year about their own health.

- Comparable to national findings (10.6%).
- 📊 Statistically similar to 2005 findings.

## Have Used a Hospital Emergency Room More Than Once in the Past Year



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 20-21]  
 • 2008 PRC National Health Survey, Professional Research Consultants.

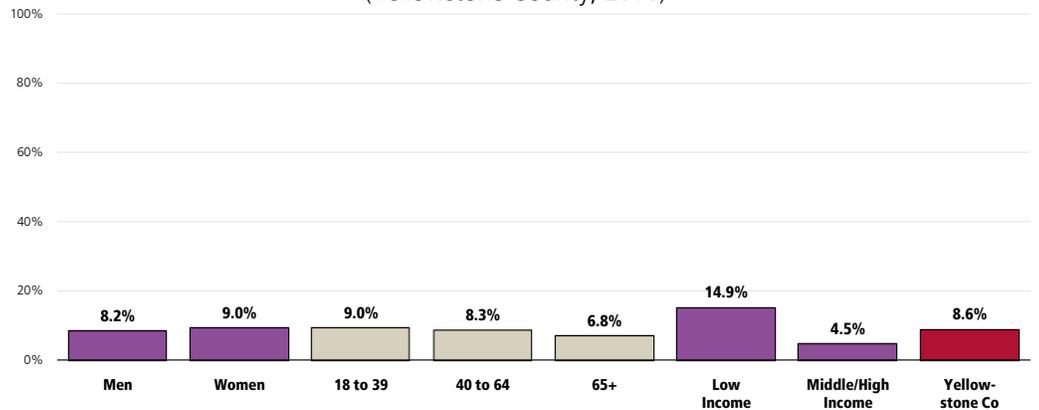
Notes: • Asked of all respondents.

Of those using a hospital ER, 48.2% say this was due to an **emergency or life-threatening situation**, while 32.9% indicated that the visit was during **after-hours or on the weekend**. A total of 7.8% cited **difficulties accessing primary care** for various reasons.

- 👤 Use of the ER appears to be higher among the low-income segment.

## Have Used a Hospital Emergency Room More Than Once in the Past Year

(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]  
 • Asked of all respondents.

Notes: • Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty at 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

# Oral Health

Oral health is an essential and integral component of health throughout life. No one can be truly healthy unless he or she is free from the burden of oral and craniofacial diseases and conditions.

Millions of people in the United States experience dental caries, periodontal diseases, and cleft lip and cleft palate, resulting in needless pain and suffering; difficulty in speaking, chewing, and swallowing; increased costs of care; loss of self-esteem; decreased economic productivity through lost work and school days; and, in extreme cases, death. Further, oral and pharyngeal cancers, which primarily affect adults over age 55 years, result in significant illnesses and disfigurement associated with treatment, substantial cost, and more than 8,000 deaths annually.

Poor oral health and untreated oral diseases and conditions can have a significant impact on quality of life. Millions of people in the United States are at high risk for oral health problems because of underlying medical or handicapping conditions, ranging from very rare genetic diseases to more common chronic diseases such as arthritis and diabetes. Oral and facial pain affects a substantial proportion of the general population.

Many persons in the United States do not receive essential dental services. Through increased access to appropriate and timely care, individuals can enjoy improved oral health. Barriers to care include cost; lack of dental insurance, public programs, or providers from underserved racial and ethnic groups; and fear of dental visits. Additionally, some people with limited oral health literacy may not be able to find or understand information and services.

In general, access to primary preventive and early intervention services must be improved, and barriers to the dental care system should be removed. Many persons of all ages are receiving professional services in the oral healthcare system, but more emphasis must be placed on vulnerable populations who need professional care.

– Healthy People 2010, 2nd Edition. US Department of Health and Human Services. Washington, DC: US Government Printing Office, November 2000.

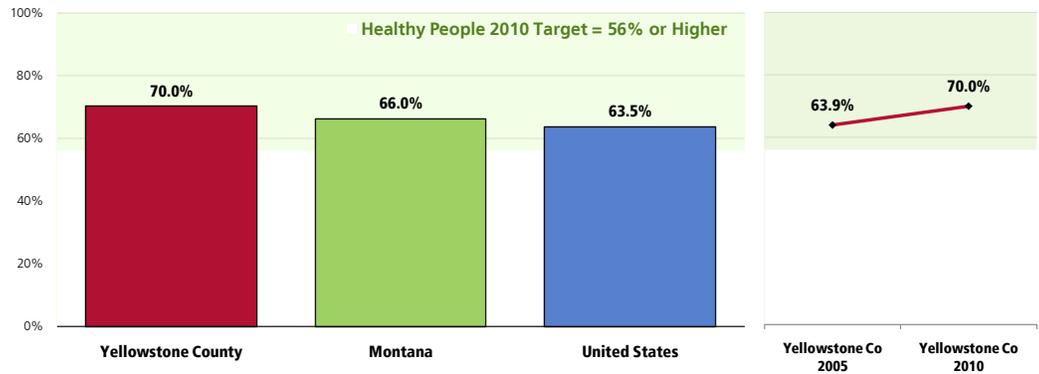
## Dental Care

### Adults

**A total of 7 in 10 Yellowstone County adults (70.0%) have visited a dentist or dental clinic (for any reason) in the past year.**

- Similar to the 66.0% reported statewide.
- More favorable than national findings (63.5%).
- Satisfies the Healthy People 2010 target (56% or higher).
- ☒ Statistically similar to 2005 findings.

## Have Visited a Dentist or Dental Clinic Within the Past Year



Sources:
 

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 17]
- 2008 PRC National Health Survey, Professional Research Consultants, Inc.
- Healthy People 2010, 2<sup>nd</sup> Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 21-10]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2008 Montana Data.

 Notes:
 

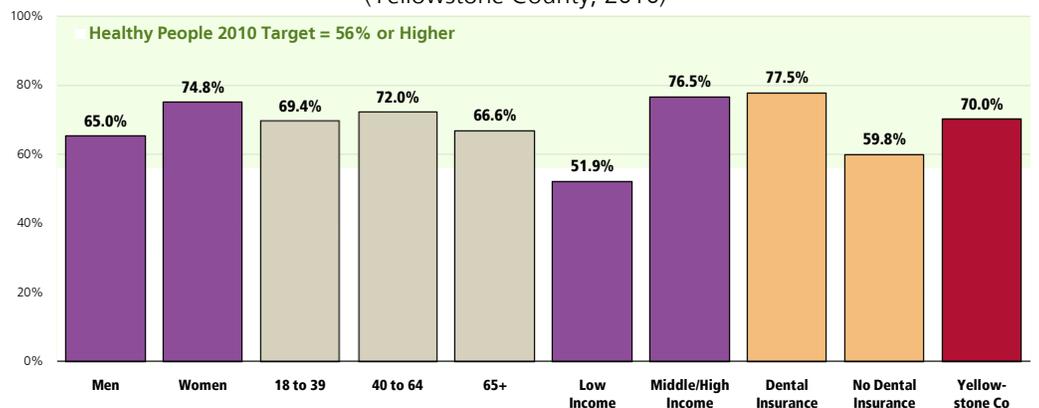
- Asked of all respondents.

Note the following:

- Women are more likely than men to report recent dental care.
- Persons living in the higher income categories report much higher utilization of oral health services (persons below 200% of poverty fail to satisfy the Healthy People 2010 objective).
- 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

(Yellowstone County, 2010)



Sources:
 

- 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 17]
- Healthy People 2010, 2<sup>nd</sup> Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 21-10]

 Notes:
 

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.
- Asked of all respondents.

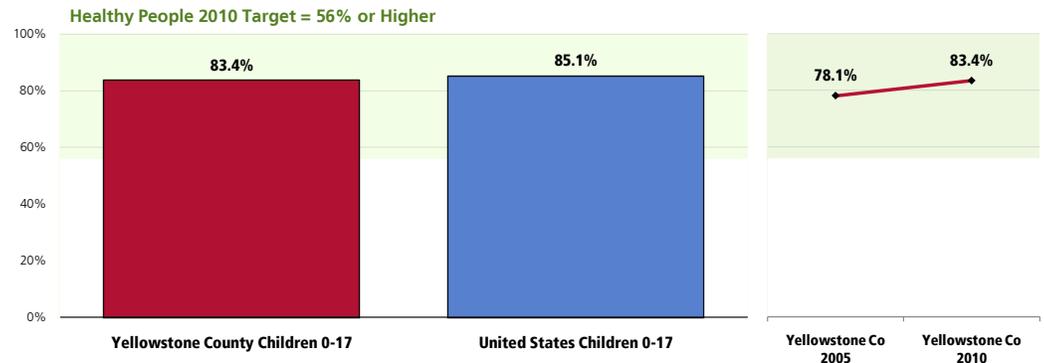
## Children

**A total of 83.4% of parents report that their child (aged 2 to 17) has been to a dentist or dental clinic within the past year.**

- Similar to national findings (85.1%).
- Satisfies the Healthy People 2010 target (56% or higher).
- ☒ Statistically similar to 2005 findings.

### Child Has Visited a Dentist or Dental Clinic Within the Past Year

(Asked of Adults With Children Aged 2-17; Yellowstone County, 2010)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 135]  
• 2008 PRC National Health Survey, Professional Research Consultants, Inc.  
• Healthy People 2010, 2<sup>nd</sup> Edition. US Department of Health & Human Services. Washington, DC: US Government Printing Office, November 2000. [Objective 21-10]

Notes: • Asked of all respondents with children aged 2 through 17.

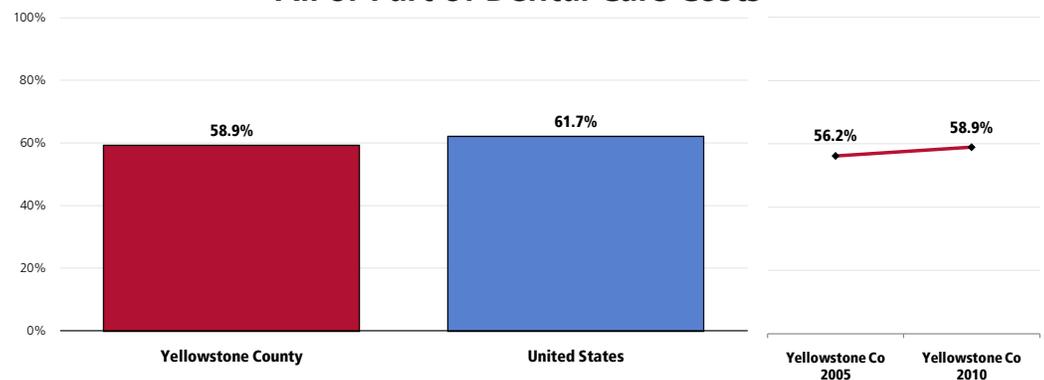
## Access to Dental Care

### Dental Insurance & Cost

**Over one-half of Yellowstone County adults (58.9%) have dental insurance that covers all or part of their dental care costs.**

- Similar to the national finding (61.7%).
- ☒ Statistically similar to 2005 findings.

### Have Insurance Coverage That Pays All or Part of Dental Care Costs



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 18]  
• 2008 PRC National Health Survey, Professional Research Consultants.

Notes: • Asked of all respondents.

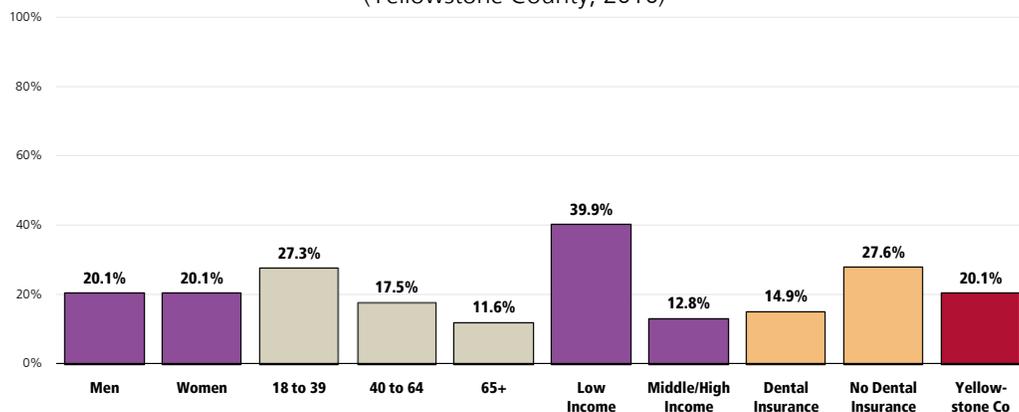
## One-fifth Yellowstone County adults (20.1%) reports that cost prevented their dental care in the past year.

Cost as a barrier to dental care is more prevalent among the following adults:

- 👤 Adults under the age of 40 (note the negative correlation).
- 👤 Residents living in the lower income category.
- 👤 Adults without dental insurance.

### Cost Prevented Dental Care in Past Year

(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 19]

Notes: • Asked of all respondents.

• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

### Related Focus Group Findings: Oral Health

All participants agreed that dental care in the Billings community is lacking among those who don't have the means to pay for the care. Finding a dentist who will take Medicaid is a challenge and even those with insurance often go without dental care because it isn't covered. There are some clinics offering free services one day a year but the number of people needing those services is so great that there is no way for dentists to see all who need the care.

There is some concern that the lack of fluoride in the water contributes to tooth decay and at least one legislator is in favor of passing a law requiring that city water be fluorinated.

*"One of the things I hear a lot, even for people who have health insurance is that many of the plans don't cover dental care. I have federal health insurance and my basic plan does not have dental coverage. If I want it, I have to buy an extra plan. I know there's a lot of people who maybe have so-so health insurance, but it doesn't have any dental plan. And they have their basic medical taken care of to a certain extent but they don't have any kind of dental so that's a real challenge." –Legislator*

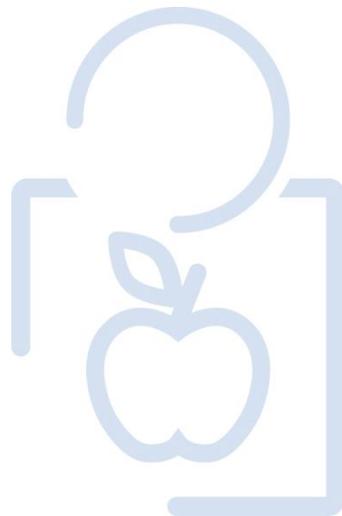
*"One of the simple things in the dental care area is fluoride in the water. If you want to count out about half of your dental needs, the cost of practitioners: fluoride. We'll never get it passed." –Legislator*

*"Dental care is an issue. There aren't enough dentists accepting Medicaid and though RiverStone Health has expanded their dental services, it's still not enough." –Educator*



*"It used to be impossible for our kids to be seen at Head Start, but now we have an array of dentists for most of our kids—the hardest part is if they need surgery because their teeth are that bad, then we have to search around for a dentist who is willing to do that and that's hard." – Social Services*

# HEALTH EDUCATION & OUTREACH



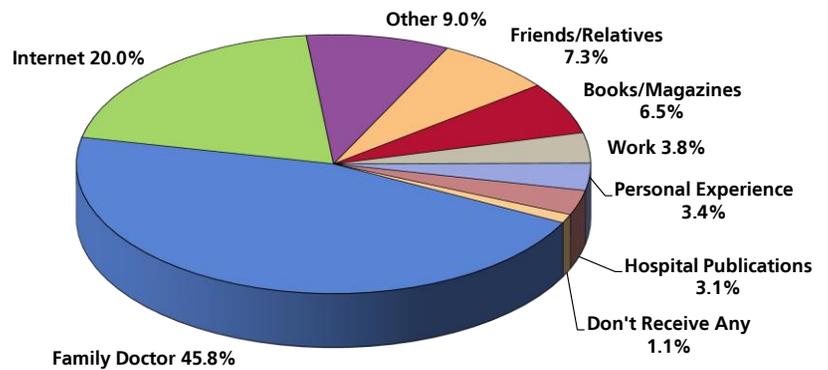
# Healthcare Information Sources

## Family physicians and the Internet are residents' primary sources of healthcare information.

- 45.8% of county adults cited their **family physician** as their primary source of healthcare information, higher than the 36.1% across the United States.
- The **Internet** received the second-highest response (20.0%), compared to the 17.4% found nationally.
  - Other sources mentioned include friends and relatives (7.3%), books and magazines (6.5%) and work (3.8%).
- Just 1.1% of survey respondents say that they do not receive any healthcare information.

### Primary Source of Healthcare Information

(Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 126]  
Notes: • Asked of all respondents.

# Related Focus Group Findings: Education & Community-Based Programs

Most participants agreed that there are numerous resources and community-based programs available and that many are advertised, but if people aren't interested or aren't looking, then they aren't aware of those services. Many participants felt the need for a directory of services available in the Billings area because even those who should know (such as school counselors, nurses and doctors) don't know everything that can be offered to those in need.

Participants also generally agreed that many people who need the services aren't willing to find out what's available and if they finally do find out, they often require a great deal of assistance with navigating through the healthcare system.

*"Even counselors don't know what's available." –Educator*

*"People have every opportunity to know what resources are available but they have to take the initiative to find those resources. There is so much hand-holding that is needed." –Educator*

*"Both hospitals do tons of promotion of their services and what they're doing. I think the knowledge of it is really good. Unless you live under a rock, you'll see it." –Legislator*

*"I think people try, but out of frustration people drop out. It's when they drop out that you lose them. But if somebody really wants to avail themselves, the services can be there, but it's what to do with the mother who might be raising two or three young kids and she's kind of overwhelmed, and when she's out of the system she's really kind of just on the sidelines and we treat them on an emergency basis." –Legislator*

*"People are frustrated that while you've got this multi-million dollar machine (air ambulance) accessible twice in facilities in a community of this size. It would be an even greater positive image in the eyes of the public if there was as little duplication as possible." –Legislator*

*"I think as an employer base in Billings and small towns around us, it's more of there's a lot of small businesses that maybe don't know resources are out there to even have a dialogue with their employees about health, whether it's financial health or mental well-being or physical health." –Employer*

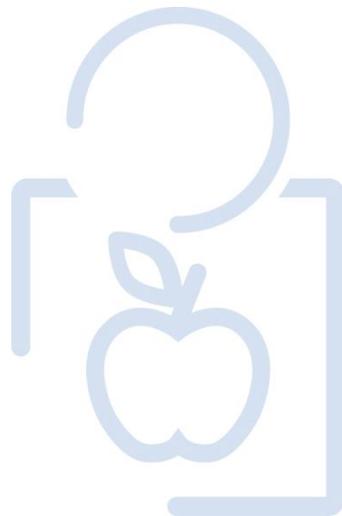
*"I think the barrier there is just education. I don't think people know the resources are there for them." –Employer*

*"I think there's a ridiculous amount of programs available to them especially by the two big hospitals. I'm not as familiar with RiverStone but always there's some new program. And if you get on the website there are hundreds of things to get involved in, and they're free. There's so much available it's almost overwhelming and if somebody wants it and looks for it, it's obvious but it doesn't really slap you in the face and say 'Hey wake up this is happening'. And I think there's no way for the hospitals to reach every human being; I think it's employer-driven." –Employer*



*"If I wasn't working in the hospital, I wonder if I would be aware of things that are going on. Would my life ever intersect those needs because I think you can go along in life and you could be oblivious. Depending on what your circles of life are you could be out of touch." –Physician*

# PERCEPTIONS OF LOCAL HEALTHCARE

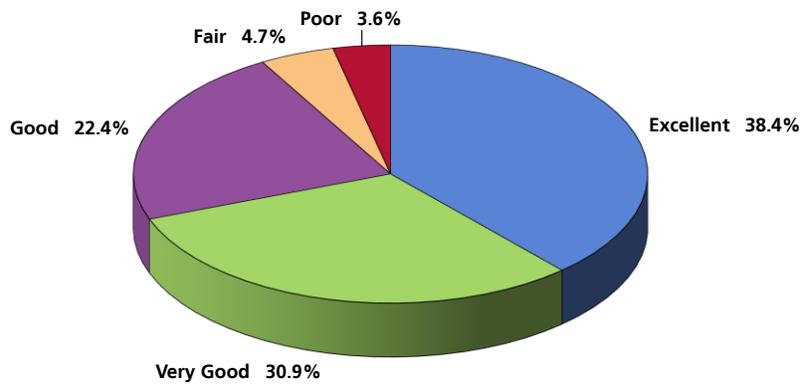


# Ratings of Healthcare Services Available in the Community

More than two-thirds of Yellowstone County adults (69.3%) rate the overall healthcare services available in their community as “excellent” or “very good.”

- More favorable than the 47.7% reported nationally.
- Another 22.4% gave “good” ratings.

**Rating of Overall Healthcare Services Available in the Community**  
(Yellowstone County, 2010)

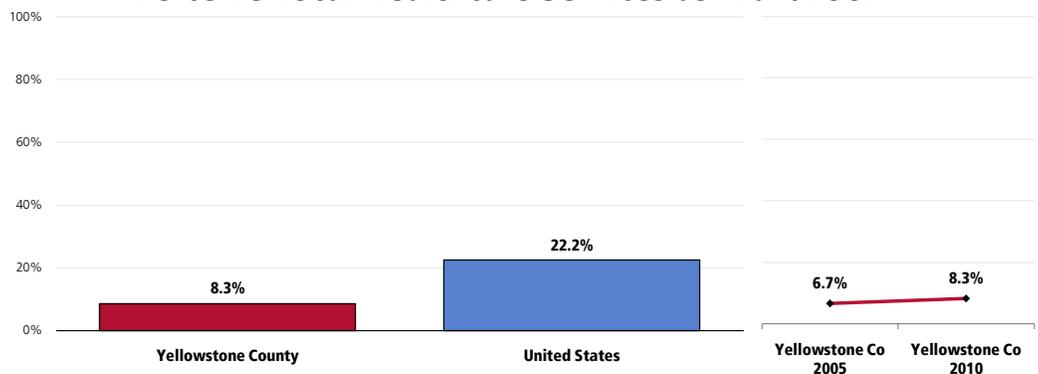


Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]  
Notes: • Asked of all respondents.

However, 8.3% of residents characterize local healthcare services as “fair” or “poor.”

- Much lower than the 22.2% prevalence reported nationally.
- 📊 Statistically unchanged since 2005.

**Perceive Local Healthcare Services as “Fair/Poor”**

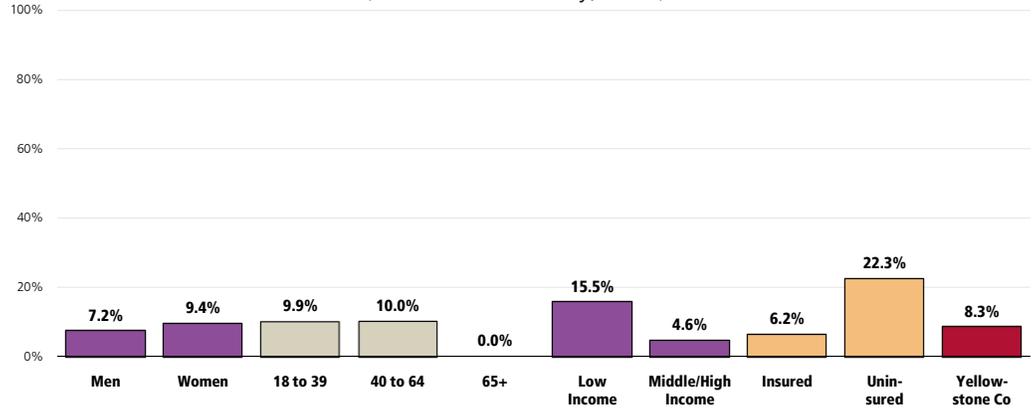


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 6]  
• 2008 PRC National Health Survey, Professional Research Consultants.  
Notes: • Asked of all respondents.

The following residents are more critical of local healthcare services:

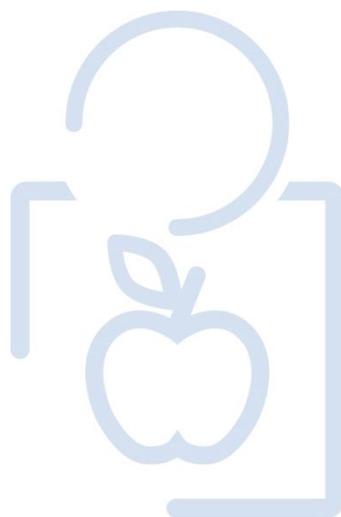
- 👤 Adults under age 65.
- 👤 Residents with lower incomes.
- 👤 Uninsured adults.

### Perceive Local Healthcare Services as "Fair/Poor" (Yellowstone County, 2010)



Sources: • 2010 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]  
Notes: • Asked of all respondents.  
• Income categories reflect respondent's household income as a ratio to the federal poverty level for their household size: "low income" = below poverty or 100% to 200% of poverty; "middle/high income" = over 200% of poverty.

# APPENDIX



# Healthy People 2020 Update

During the course of the development of this report, the U.S. Department of Health and Human Services released *Healthy People 2020*, the nation's new 10-year goals and objectives for health promotion and disease prevention. These new objectives and targets replace the Healthy People 2010 targets used for this report.

This appendix and the included tables outline both old and new Healthy People targets, and illustrate changes in status for Yellowstone County relative to the new targets. Note that many of the changes to Healthy People 2020 reflect an effort to establish targets that are more realistic, more achievable; therefore, many of the status changes for Yellowstone County are favorable in light of these updates. There are some, however, where the county compares less favorably to newly established targets. Note also that some indicators no longer have a Healthy People target or are now measured in a way that is not comparable to the data indicators used in the report.



## **Targets Previously Unmet, Now Met** (or Nearly Met)

- Diabetes Deaths
- Homicide Deaths
- Unintentional Injury Deaths
- Prenatal Care
- Low Birthweight Births
- Infant Deaths
- Obesity Prevalence (Adults & Children)
- Leisure-Time Physical Activity
- Binge Drinking



## **Targets Previously Met** (or Nearly Met), **Now Unmet**

- Osteoporosis Prevalence
- Heart Disease Deaths
- Stroke Deaths
- Flu Shots for High-Risk Adults
- Persons With Depression Seeking Professional Help

Access to Healthcare Services	Yellowstone County	Yellowstone County vs. Healthy People		
		vs. HP2010	vs. HP2020	
% Lack Health Insurance (Aged 18-64)	18.6	 0.0	 0.0	
% Have a Specific Source of Ongoing Care	82.0	 96.0	 95.0	
% Specific Source for Care (18-64)	80.6	No Previous Target for this Age Group	 89.4	
% Specific Source for Care (65+)	90.8	No Previous Target for this Age Group	 100.0	
		 favorable	 unfavorable	 similar

Arthritis, Osteoporosis & Chronic Pain	Yellowstone County	Yellowstone County vs. Healthy People		
		vs. HP2010	vs. HP2020	
% Osteoporosis 50+	9.2	 8.0	 5.3	
		 favorable	 unfavorable	 similar

✓  
Status Change

Cancer	Yellowstone County	Yellowstone County vs. Healthy People		
		vs. HP2010	vs. HP2020	
Cancer (Age-Adjusted Death Rate)	181.3	 159.9	 160.6	
Lung Cancer (Age-Adjusted Death Rate)	56.8	 44.8	 45.5	
Female Breast Cancer (Age-Adjusted Death Rate)	23.6	 22.3	 20.6	
% Colorectal Cancer Screening (Adults 50-75)	77.9	 50.0	 70.5	
% Mammogram in Past 2 Years (Women 50-74)	76.4	 70.0	 81.1	
% Pap Smear in Past 3 Years (Women 18-64)	84.5	 90.0	 93.0	
		 favorable	 unfavorable	 similar

Diabetes	Yellowstone County	Yellowstone County vs. Healthy People		
		vs. HP2010	vs. HP2020	
Diabetes Mellitus (Age-Adjusted Death Rate)	19.5	 15.1	 19.6	
		 favorable	 unfavorable	 similar

✓  
Status Change

Heart Disease & Stroke	Yellowstone County	Yellowstone County vs. Healthy People		
		vs. HP2010	vs. HP2020	
Diseases of the Heart (Age-Adjusted Death Rate)	174.3	213.7	152.7	
Stroke (Age-Adjusted Death Rate)	50.4	48.0	33.8	
% Blood Pressure Checked in Past 2 Years	97.2	95.0	94.9	
% Told Have High Blood Pressure	32.4	16.0	26.9	
% Taking Action to Control High Blood Pressure	94.4	95.0	Healthy People target no longer available	
% Cholesterol Checked in Past 5 Years	86.5	80.0	82.1	
% Told Have High Cholesterol	28.6	17.0	13.5	
		favorable	unfavorable	similar

✓  
Status Change  
✓  
Status Change

HIV	Yellowstone County	Yellowstone County vs. Healthy People		
		vs. HP2010	vs. HP2020	
HIV (Age-Adjusted Death Rate)	0.6	0.7	3.3	
		favorable	unfavorable	similar

Immunization & Infectious Disease	Yellowstone County	Yellowstone County vs. Healthy People		
		vs. HP2010	vs. HP2020	
% Flu Shot in Past Yr (Aged 65+)	70.6	90.0	90.0	
% Flu Shot in Past Yr (High-Risk Aged 18-64)	54.3	60.0	90.0	
% Pneumonia Vaccine Ever (Aged 65+)	73.8	90.0	90.0	
% Pneumonia Vaccine Ever (High-Risk Aged 18-64)	32.9	60.0	60.0	
		favorable	unfavorable	similar

✓  
Status Change

Injury & Violence	Yellowstone County	Yellowstone County vs. Healthy People		
		vs. HP2010	vs. HP2020	
Unintentional Injury (Age-Adjusted Death Rate)	37.7	 17.5	 36.0	✓ Status Change
Motor Vehicle Crashes (Age-Adjusted Death Rate)	16.9	 9.2	 12.4	
Homicide (Age-Adjusted Death Rate)	4.1	 3.0	 5.5	✓ Status Change
Suicide (Age-Adjusted Death Rate)	18.6	 5.0	 10.2	
% "Always" Wear Seat Belt	78.3	 92.0	 92.4	
% Child (Aged 0-4) "Always" Uses Auto Child Restraint	100.0	 100.0	Healthy People target no longer available	
% Child (Aged 5-17) "Always" Uses Seat Belt	87.4	 92.0	Healthy People target no longer available	
% Homes w/Unlocked Loaded Firearm	14.0	 16.0	Healthy People target no longer available	
		 favorable	 unfavorable	 similar

Maternal, Child & Infant Health	Yellowstone County	Yellowstone County vs. Healthy People		
		vs. HP2010	vs. HP2020	
% No Prenatal Care in 1st Trimester	13.9	 10.0	 22.1	✓ Status Change
% of Low Birthweight Births	7.3	 5.0	 7.8	✓ Status Change
Infant Death Rate	5.0	 4.5	 6.0	✓ Status Change
		 favorable	 unfavorable	 similar

Mental Health & Mental Disorders	Yellowstone County	Yellowstone County vs. Healthy People		
		vs. HP2010	vs. HP2020	
% Depressed Persons Seeking Help	62.1	 50.0	 75.1	✓ Status Change
		 favorable	 unfavorable	 similar

Nutrition & Overweight	Yellowstone County	Yellowstone County vs. Healthy People	
		vs. HP2010	vs. HP2020
% Eat 2+ Servings of Fruit per Day	56.4	75.0 	Healthy People target no longer available
% Eat 3+ Servings of Vegetables per Day	38.1	50.0 	Healthy People target no longer available
% Healthy Weight (BMI 18.5-25)	25.4	60.0 	33.9 
% Obese	26.0	15.0 	30.6 
% Child is Obese	15.4	5.0 	14.6 
	 favorable	 unfavorable	 similar

✓  
Status Change  
✓  
Status Change

Oral Health	Yellowstone County	Yellowstone County vs. Healthy People	
		vs. HP2010	vs. HP2020
% Have Visited Dentist in Past Yr (18+)	70.0	56.0 	49.0 
% Child (Aged 2-17) Has Visited Dentist in Past Year	83.4	56.0 	49.0 
	 favorable	 unfavorable	 similar

Physical Activity & Fitness	Yellowstone County	Yellowstone County vs. Healthy People	
		vs. HP2010	vs. HP2020
% No Leisure-Time Physical Activity	22.4	20.0 	32.6 
% Vigorous Physical Activity	33.5	30.0 	Healthy People target no longer available
% Moderate Physical Activity	26.4	30.0 	Healthy People target no longer available
	 favorable	 unfavorable	 similar

✓  
Status Change

Respiratory Disease	Yellowstone County	Yellowstone County vs. Healthy People	
		vs. HP2010	vs. HP2020
Tuberculosis Incidence/100,000	0.5	1.0 	1.0 
	 favorable	 unfavorable	 similar

Sexually Transmitted Diseases	Yellowstone County	Yellowstone County vs. Healthy People	
		vs. HP2010	vs. HP2020
Gonorrhea Incidence/100,000	37.5	19.0 	Healthy People target no longer available
Primary & Secondary Syphilis Incidence/100,000	1.2	0.2 	Healthy People target no longer available
		 favorable	 unfavorable
			 similar

Substance Abuse	Yellowstone County	Yellowstone County vs. Healthy People	
		vs. HP2010	vs. HP2020
Cirrhosis/Liver Disease (Age-Adjusted Death Rate)	9.8	3.0 	8.2 
% Binge Drinker	17.6	6.0 	24.3 
% Illicit Drug Use in Past Month	1.0	2.0 	7.1 
		 favorable	 unfavorable
			 similar

✓  
Status Change

Tobacco Use	Yellowstone County	Yellowstone County vs. Healthy People	
		vs. HP2010	vs. HP2020
% Current Smoker	13.8	12.0 	12.0 
% Have Quit Smoking 1+ Days in Past Year (Smokers)	57.4	75.0 	80.0 
% Use Smokeless Tobacco	6.6	0.4 	0.3 
		 favorable	 unfavorable
			 similar