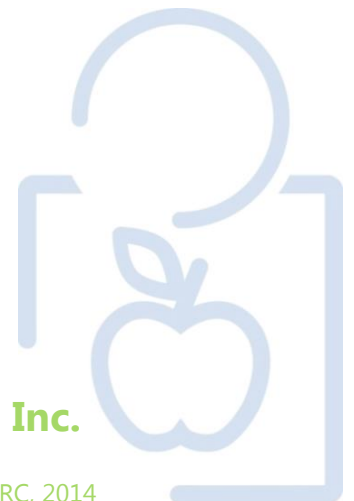


2014 PRC Community Health Needs Assessment Report

Yellowstone County, Montana

Sponsored by
Billings Clinic
RiverStone Health
St. Vincent Healthcare



Professional Research Consultants, Inc.

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Table Of Contents

| | |
|--|-----------|
| INTRODUCTION | 5 |
| Project Overview | 6 |
| Project Goals | 6 |
| Methodology | 6 |
| Summary of Findings | 14 |
| Significant Health Needs of the Community | 14 |
| Top Health Concerns Among Key Informants & Billings South Side Community Group | 16 |
| Summary Tables: Comparisons With Benchmark Data | 17 |
| GENERAL HEALTH STATUS | 30 |
| Overall Health Status | 31 |
| Self-Reported Health Status | 31 |
| Activity Limitations | 33 |
| Mental Health & Mental Disorders | 36 |
| Mental Health Status | 37 |
| Depression | 38 |
| Stress | 41 |
| Suicide | 42 |
| Mental Health Treatment | 45 |
| MODIFIABLE HEALTH RISKS | 46 |
| Actual Causes Of Death | 47 |
| Nutrition | 48 |
| Daily Recommendation of Fruits/Vegetables | 49 |
| Access to Fresh Produce | 50 |
| Health Advice About Diet & Nutrition | 51 |
| Adolescents | 51 |
| Family Meals | 53 |
| Physical Activity | 54 |
| Leisure-Time Physical Activity | 55 |
| Activity Levels | 56 |
| Health Advice About Physical Activity & Exercise | 60 |
| Attempts at Increased Activity | 61 |
| Awareness of the 5-2-1-0 Health Message | 62 |
| Children’s Physical Activity | 63 |
| Weight Status | 66 |
| Adult Weight Status | 66 |
| Weight Management | 70 |
| Childhood Overweight & Obesity | 72 |
| Substance Abuse | 74 |
| Age-Adjusted Cirrhosis/Liver Disease Deaths | 75 |
| High-Risk Alcohol Use | 76 |
| Age-Adjusted Drug-Induced Deaths | 79 |
| Prescription Drug Misuse | 80 |
| Alcohol & Drug Treatment | 81 |
| Tobacco Use | 82 |
| Cigarette Smoking | 82 |
| Other Tobacco Use | 87 |

DEATH, DISEASE & CHRONIC CONDITIONS

88

| | |
|---|------------|
| Leading Causes of Death | 89 |
| Distribution of Deaths by Cause | 89 |
| Age-Adjusted Death Rates for Selected Causes | 89 |
| Cardiovascular Disease | 91 |
| Age-Adjusted Heart Disease & Stroke Deaths | 91 |
| Prevalence of Heart Disease & Stroke | 94 |
| Cardiovascular Risk Factors | 96 |
| Cancer | 103 |
| Age-Adjusted Cancer Deaths | 103 |
| Prevalence of Cancer | 105 |
| Cancer Screenings | 106 |
| Respiratory Disease | 111 |
| Age-Adjusted Respiratory Disease Deaths | 112 |
| Injury & Violence | 117 |
| Leading Causes of Accidental Death | 118 |
| Unintentional Injury | 118 |
| Intentional Injury (Violence) | 126 |
| Diabetes | 130 |
| Age-Adjusted Diabetes Deaths | 130 |
| Prevalence of Diabetes | 132 |
| Alzheimer’s Disease | 134 |
| Age-Adjusted Alzheimer’s Disease Deaths | 134 |
| Kidney Disease | 136 |
| Age-Adjusted Kidney Disease Deaths | 136 |
| Prevalence of Kidney Disease | 137 |
| Potentially Disabling Conditions | 139 |
| Arthritis, Osteoporosis, & Chronic Pain | 139 |
| Vision & Hearing Impairment | 142 |

INFECTIOUS DISEASE

144

| | |
|--|------------|
| Vaccine-Preventable Conditions | 145 |
| Pertussis | 145 |
| Acute Hepatitis C | 146 |
| Influenza & Pneumonia Vaccination | 148 |
| Flu Vaccinations | 148 |
| Pneumonia Vaccination | 149 |
| Tuberculosis | 151 |
| HIV | 153 |
| HIV Testing | 154 |
| Sexually Transmitted Diseases | 155 |
| Gonorrhea | 156 |
| Syphilis | 157 |
| Chlamydia | 158 |
| Acute Hepatitis B | 159 |
| Safe Sexual Practices | 161 |

BIRTHS

163

| | |
|---|------------|
| Prenatal Care | 164 |
| Birth Outcomes & Risks | 165 |
| Low-Weight Births | 165 |
| Infant Mortality | 166 |
| Family Planning | 167 |
| Births to Unwed Mothers | 167 |

ACCESS TO HEALTH SERVICES 171

Health Insurance Coverage 172
 Type of Healthcare Coverage 172
 Lack of Health Insurance Coverage 172

Difficulties Accessing Healthcare 178
 Difficulties Accessing Services 178
 Barriers to Healthcare Access 179
 Prescriptions 181
 Accessing Healthcare for Children 182

Primary Care Services 183
 Specific Source of Ongoing Care 183
 Utilization of Primary Care Services 185

Emergency Room Utilization 187

Oral Health 188
 Dental Care 189
 Dental Insurance 191

Vision Care 192

LOCAL RESOURCES 193

Perceptions of Local Healthcare Services..... 194
Resources Available to Address the Significant Health Needs..... 196

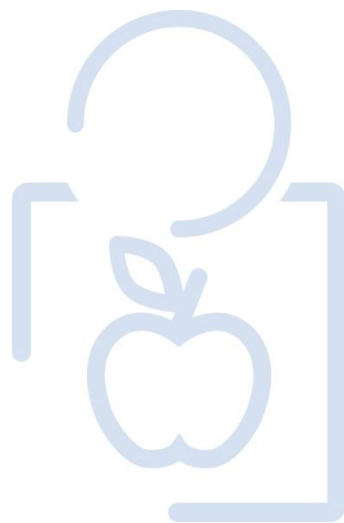
FOCUS GROUP COMMENTARY 202

Mental Health..... 203
Physical Activity 205
Obesity..... 206
Substance Abuse 207
Tobacco 210
Chronic Disease 210
Injury..... 210
Access to Healthcare Services 211
Oral Health..... 214
Collaboration..... 215
Older Adults..... 216
Housing 217

APPENDICES 219

IRS Form 990, Schedule H Compliance..... 220
Public Health Accreditation 221

INTRODUCTION



Project Overview

Project Goals

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

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

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

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

Methodology

This assessment incorporates data from both quantitative and qualitative sources. Quantitative data input includes primary research (the PRC Community Health Survey) and secondary research (vital statistics and other existing health-related data); these quantitative components allow for trending and comparison to benchmark data at the state and national levels. Qualitative data input includes primary research gathered through a series of focus groups among convenience samples of participants.

PRC Community Health Survey

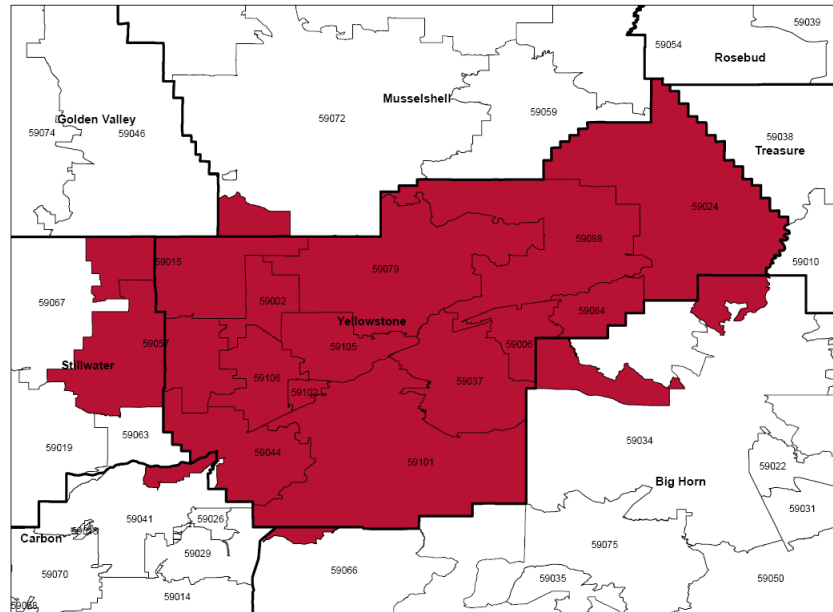
Survey Instrument

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

The final survey instrument was developed by Billings Clinic, RiverStone Health, St. Vincent Healthcare and PRC based on input provided from the Community Health Needs Assessment Advisory Group. This group was comprised of representatives from the Billings Gazette, Montana State University Billings, Rocky Mountain Health Network, United Way, Human Resource Development Council, Advanced Care Hospital, and the Yellowstone County Commissioners Office. The survey is similar to the previous surveys used in the region, allowing for data trending.

Community Defined for This Assessment

The study area for the survey effort (referred to as “Yellowstone County” in this report) includes each of the ZIP Codes significantly represented in the county: 59002, 59006, 59015, 59024, 59037, 59044, 59057, 59064, 59079, 59088, 59101, 59102, 59105, and 59106. This community definition is illustrated in the following map.



Specific Demographics of Yellowstone County

As the largest city in a 500 mile radius, Billings serves as a commercial and transportation hub for the state, as well as a major center for education and medical services. Billings benefits from having a diversified economy, where oil and gas, healthcare, livestock, and banking play significant roles. The city boasts three colleges (MSU-Billings, MSU-B

College of Technology, and Rocky Mountain College), two major hospitals, two oil refineries, and an international airport.

Covering 2,633 square miles with an estimated population of 151,882 residents in 2012, Yellowstone County is the only county which is not designated as “rural.” Billings, the county seat, is the state’s largest city, with a 2012 population estimated at 106,954. Other cities and towns in Yellowstone County include: Acton, Ballantine, Broadview, Custer, Huntley, Laurel, Pompey’s Pillar, Shepard, and Worden.

The unemployment rate for Yellowstone County as of November 2013 is 3.6% compared to a statewide rate of 5%. Persons below the poverty level in Yellowstone County (per 2008-2012 data) stand at 11.9% compared with 14.8% statewide.

Montana’s largest minority population is American Indian, at 6.3% of the state’s population compared to 0.9% nationally. In Yellowstone County, American Indians make up 4.3% of the population, with slightly more Hispanic people at 4.9%. The *U.S. Census Bureau* projects that by 2025, Montana will have the third highest percentage of elderly in the nation, with nearly a fifth of its population estimated to be over the age of 65. 2012 Census estimates indicate 15.7% of Montanans are 65 or older and 14.7% of Yellowstone County residents are 65 and older. By contrast, persons under 18 stand at 22.1% and 23.5%, respectively. The population in Yellowstone County increased by 2.6% from April 1, 2010 to July 1, 2012 compared with a statewide population increase of 1.6%.

As described in the *2012 State Public Health Assessment*, Montana’s population is hovering around 1 million people in an area of nearly 146,000 square miles. In this wide open space, there are only seven cities with more than 20,000 residents and 15 communities with 5,000 to 19,999 residents. Nearly all the state’s communities and counties in Montana are designated as Health Professional Shortage Areas (HPSAs) with Medically Underserved Populations (MUPs).

Sources: MT Dept. of Labor and Industry, US Census Bureau, Montana Department of Public Health and Human Services, Public Health and Safety Division, 2012 State Public Health Assessment

Sample Approach & Design

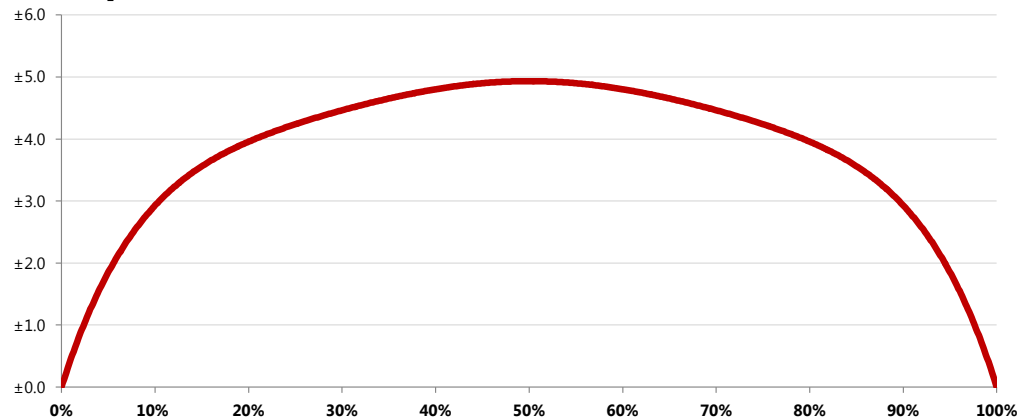
A precise and carefully executed methodology is critical in asserting the validity of the results gathered in the *PRC Community Health Survey*. Thus, to ensure the best representation of the population surveyed, a telephone interview methodology — one that incorporates both landline and cell phone interviews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

The sample design used for this effort consisted of a random sample of 404 individuals age 18 and older in Yellowstone County (which included 153 parents who also provided information about a child in the household). All administration of the surveys, data collection and data analysis was conducted by Professional Research Consultants, Inc. (PRC).

Sampling Error

For statistical purposes, the maximum rate of error associated with a sample size of 404 respondents is $\pm 4.9\%$ at the 95 percent level of confidence.

Expected Error Ranges for a Sample of 404 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 404 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.

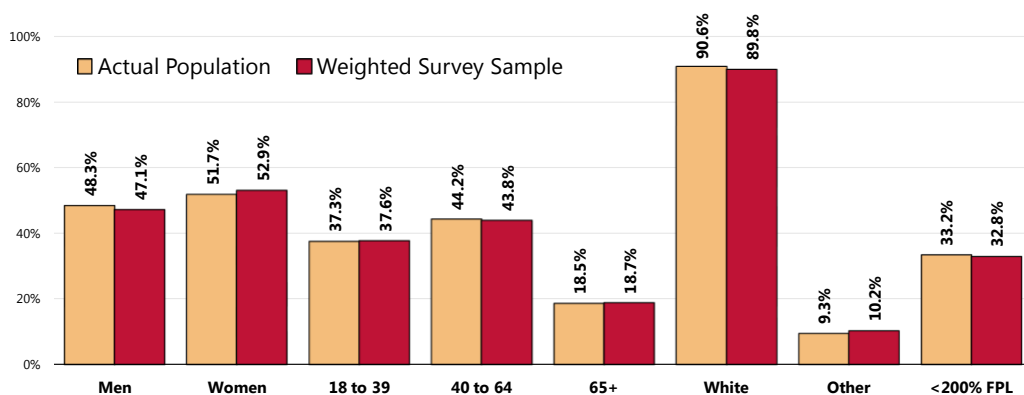
Sample Characteristics

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

Population & Survey Sample Characteristics

(Yellowstone County, 2014)



Sources:
 • Census 2010, Summary File 3 (SF 3), U.S. Census Bureau.
 • 2014 PRC Community Health Survey, Professional Research Consultants, Inc.

Further note that the poverty descriptions and segmentation used in this report are based on administrative poverty thresholds determined by the US Department of Health & Human Services. These guidelines define poverty status by household income level and number of persons in the household (*e.g., the 2013 guidelines place the poverty threshold for a family of four at \$23,550 annual household income or lower*). In sample segmentation: “**low income**” refers to community members living in a household with defined poverty status or living just above the poverty level, earning up to twice the poverty threshold; “**mid/high income**” refers to those households living on incomes which are twice or more the federal poverty level.

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

Key Informant Focus Groups

As part of the community health assessment, five focus groups were held on August 14 and 15, 2013. Focus group participants included 38 key informants (representatives from public health, physicians, other health professionals, social service providers, other community leaders, and elected officials) and 24 Billings South Side neighborhood residents.

The focus groups were among a convenient sample of participants. A list of recommended participants for the focus groups was provided by the sponsors. 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. 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 insure a reasonable turnout.

For the Billings South Side Community Group, adults were asked to participate based on their involvement with either the Friendship House or Community Leadership Development, Inc. (CLDI).

Final participation included representatives of the organizations outlined below. Through this process, input was gathered from community residents, a representative of public health, as well as several individuals whose organizations work with low-income, minority (including Hispanic, Native American and African American), or other medically underserved populations (specifically, young adults, the elderly, the disabled, lesbian/gay/bisexual/transgender (LGBT) residents, the homeless, the mentally ill, the uninsured/underinsured, and Medicaid/Medicare recipients.)

| Key Informants: Employers, Educators, Public Service Wednesday, August 14th from 7:30 to 9:30 AM | Populations Represented | | |
|---|-------------------------|----------------------|----------------------|
| | Medically Underserved | Low-Income Residents | Minority Populations |
| Organization | | | |
| Laurel Public Schools | X | X | X |
| Chamber of Commerce | | | |
| Rocky Mountain College | X | X | X |
| Billings Gazette | | | |
| CTA Architects Engineers | | | |
| MET Transit & City County Planning Department | X | X | X |
| Billings Police Department | | | |

| Key Informants: Social Services Wednesday, August 14th from Noon to 2:00 PM | Populations Represented | | |
|--|-------------------------|----------------------|----------------------|
| | Medically Underserved | Low-Income Residents | Minority Populations |
| Organization | | | |
| Center for Children and Families | X | X | X |
| Family Services | X | X | X |
| United Way of Yellowstone County | X | X | X |
| Parents Let's Unite for Kids | | X | X |
| HRDC | X | X | X |
| Rimrock Foundation | X | X | X |
| Easter Seals Montana | X | X | X |
| La Vie | X | X | X |

| Key Informants: Health Providers Thursday, August 15th from 7:00 to 8:30 AM | Populations Represented | | |
|--|-------------------------|----------------------|----------------------|
| | Medically Underserved | Low-Income Residents | Minority Populations |
| Organization | | | |
| Yellowstone Naturopathic Clinic | | X | X |
| St. Vincent Healthcare | X | X | X |
| Billings Clinic | X | X | X |
| Rocky Mountain Health Network | X | X | X |
| Montana-Wyoming Tribal Leaders Council | X | X | X |
| Advanced Care Hospital | X | X | X |
| RiverStone Health | X | X | X |
| Mental Health Center | X | X | X |
| Community Crisis Center | X | X | X |

| Key Informants: Elected Officials Thursday, August 15th from 11:00 AM to 12:30 PM | Populations Represented | | |
|--|-------------------------|----------------------|----------------------|
| | Medically Underserved | Low-Income Residents | Minority Populations |
| Organization | | | |

| Participants' Roles | | | |
|----------------------------------|---|---|---|
| City Council Member | X | X | X |
| State Legislative Representative | X | X | X |
| Mayor | X | X | X |
| City Administrator | X | X | X |

| Billings South Side Community Group Wednesday, August 14th from 5:30 to 7:30 PM | Populations Represented | | |
|--|-------------------------|----------------------|----------------------|
| | Medically Underserved | Low-Income Residents | Minority Populations |
| Participants | | | |
| 24 individual members of the community | X | X | X |

Audio from the focus groups sessions was recorded, from which verbatim comments in this report are taken. 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.

Public Health, Vital Statistics & Other Data

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

- Centers for Disease Control & Prevention
- National Center for Health Statistics
- Montana Department of Public Health & Human Services
- Montana Board of Crime Control
- US Census Bureau
- US Department of Health and Human Services
- US Department of Justice, Federal Bureau of Investigation

Benchmark Data

Trending

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

Montana Risk Factor Data

Statewide risk factor data are provided where available as an additional benchmark against which to compare local survey findings; these data are reported in the most recent *BRFSS (Behavioral Risk Factor Surveillance System) Prevalence and Trend Data*

published by the Centers for Disease Control and Prevention and the US Department of Health & Human Services. State-level vital statistics are also provided for comparison of secondary data indicators.

Nationwide Risk Factor Data

Nationwide risk factor data, which are also provided in comparison charts, are taken from the *2013 PRC National Health Survey*; the methodological approach for the national study is identical to that employed in this assessment, and these data may be generalized to the US population with a high degree of confidence. National-level vital statistics are also provided for comparison of secondary data indicators.

Healthy People 2020



Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. The Healthy People initiative is grounded in the principle that setting national objectives and monitoring progress can motivate action. For three decades, Healthy People has

established benchmarks and monitored progress over time in order to:

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

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

Information Gaps

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

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

Also, additional secondary data sources exist beyond those included in this assessment that might further inform health issues in the community. In terms of content, this assessment was designed to provide a comprehensive and broad picture of the health of the overall community. However, there are certainly a great number of medical conditions that are not specifically addressed.

Summary of Findings

Significant Health Needs of the Community

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

The Areas of Opportunity were determined after consideration of various criteria, including: standing in comparison with benchmark data; identified trends; the preponderance of significant findings within topic areas; the magnitude of the issue in terms of the number of persons affected; and the potential health impact of a given issue. These 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 | |
|---|---|
| Access to Health Services | <ul style="list-style-type: none"> • Health Insurance Coverage • Barriers to Access <ul style="list-style-type: none"> ○ Physician & Appointment Availability ○ Disparity by income • Access to Dental Care <ul style="list-style-type: none"> ○ Dental insurance coverage ○ Disparity by income |
| Cancer | <ul style="list-style-type: none"> • Cancer Deaths (Especially Lung and Prostate Cancers) • Cancer Screenings <ul style="list-style-type: none"> ○ Female breast cancer (mammography) ○ Colorectal cancer (lower endoscopy) ○ Cervical cancer (Pap smear) |
| Chronic Kidney Disease | <ul style="list-style-type: none"> • Kidney Disease Deaths |
| Dementias, Including Alzheimer's Disease | <ul style="list-style-type: none"> • Alzheimer's Disease Deaths |
| Heart Disease & Stroke | <ul style="list-style-type: none"> • Heart Disease Deaths • Hypertension |
| Injury & Violence | <ul style="list-style-type: none"> • Unintentional Injury Deaths (Including Motor Vehicle Crash Deaths) • Use of Seat Belts (Adults & Children) • Firearms Safety <ul style="list-style-type: none"> ○ Prevalence, including in homes w/children |
| Infant Health & Family Planning | <ul style="list-style-type: none"> • Infant Deaths • Births to Teens |
| Mental Health & Mental Disorders | <ul style="list-style-type: none"> • Suicide Rate |

— continued next page —

Areas of Opportunity (continued)

| | |
|--|---|
| Nutrition, Physical Activity & Weight | <ul style="list-style-type: none">• Overweight/Obesity Prevalence• Physical Activity Levels<ul style="list-style-type: none">○ Including both moderate & vigorous activity○ Safety concerns |
| Respiratory Diseases | <ul style="list-style-type: none">• Chronic Lower Respiratory Disease (CLRD) Deaths |
| Substance Abuse | <ul style="list-style-type: none">• Cirrhosis/Liver Disease Deaths• Chronic Alcohol Use• Drug-Related Deaths |
| Tobacco Use | <ul style="list-style-type: none">• Smokeless Tobacco Use |

Top Health Concerns Among Key Informants & Billings South Side Community Group

Focus groups convened for this assessment included key informants representing employers, social service providers, health providers, elected officials, as well as residents of the Billings South Side neighborhood. At the conclusion of each focus group, participants were asked to write down what they individually perceive as the top five health priorities for the community, based on the group discussion as well as on their own experiences and perceptions. Their responses were collected, categorized and tallied to produce the top-ranked priorities as identified among focus group participants. These could be used to complement and corroborate findings that emerge from the quantitative dataset.

OVERALL

1. Mental Health
2. Access to Healthcare Services
3. Substance Abuse
4. Nutrition & Obesity
5. Health Education*

** For the purposes of this ranking, "Health Education" is defined very broadly and can include a number of ideas, from education about nutrition to education about services/resources. This definition is not necessarily the same as used in other contexts or in other programs.*

Key Informants: Employers

1. Access to Healthcare Services
2. Health Education*
3. Mental Health
4. Physical Activity (tied)
5. Substance Abuse

Key Informants: Social Service Providers

1. Mental Health
2. Access to Healthcare Services
3. Substance Abuse
4. Oral Health

Key Informants: Physicians & Other Healthcare Providers

1. Mental Health
2. Substance Abuse
3. Access to Healthcare Services
4. Obesity, Nutrition & Physical Activity

Key Informants: Elected Officials

1. Access to Healthcare Services
2. Health Education*
3. (tied) Mental Health
4. (tied) Substance Abuse

Billings South Side Community Group

1. Affordable Healthcare
2. Substance Abuse
3. Nutrition & Food Deserts
4. Mental Health Services

Focus group findings are described beginning on page 203.

Summary Tables: Comparisons With Benchmark Data

The following tables provide an overview of indicators in Yellowstone County, as well as trend data. These data are grouped to correspond with the Focus Areas presented in Healthy People 2020.

Reading the Summary Tables

- In the following charts, Yellowstone County results are shown in the larger, blue column.
- The columns to the right of the Yellowstone County column provide trending, as well as comparisons between the county and any available state and national findings, and Healthy People 2020 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.






























Trending














For the purposes of the following tables, trending analysis is performed between the most current data and baseline measures, which represent the earliest historical data available or presented in this report.











Survey Data Indicators. Trends for survey-derived indicators represent significant changes since 2005 (or 2010 if the item was not addressed in 2005). Significance is determined based on the expected margins of error between the two samples.











Other (Secondary) Data Indicators. Trends for other indicators (e.g., public health data) represent point-to-point changes between the most current reporting period and the earliest presented in this report (typically representing the span of roughly a decade). Differences are determined by a simple $\pm 5\%$ variance between the current and baseline measures.
































| General Health Status | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|-------------------------------|-------------------------|---|---|---|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| % "Fair/Poor" Physical Health | 16.3 |  17.3 |  15.3 |  10.5 | |
| % Activity Limitations | 22.4 |  27.3 |  21.5 |  24.3 | |
| | |  better |  similar |  worse | |








| Access to Health Services | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|---|---|---|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| % [Age 18-64] Lack Health Insurance | 16.7 |  24.1 |  15.1 |  0.0 |  13.1 |
| % [Insured] Went Without Coverage in Past Year | 5.8 | |  8.1 | |  5.9 |
| % Difficulty Accessing Healthcare in Past Year (Composite) | 35.3 | |  39.9 | |  33.9 |
| % Inconvenient Hrs Prevented Dr Visit in Past Year | 11.6 | |  15.4 | |  10.7 |
| % Cost Prevented Getting Prescription in Past Year | 12.0 | |  15.8 | |  13.5 |
| % Cost Prevented Physician Visit in Past Year | 16.0 | |  18.2 | |  13.4 |
| % Difficulty Getting Appointment in Past Year | 18.7 | |  17.0 | |  14.2 |
| % Difficulty Finding Physician in Past Year | 8.0 | |  11.0 | |  4.3 |
| % Transportation Hindered Dr Visit in Past Year | 5.9 | |  9.4 | |  3.8 |
| % Skipped Prescription Doses to Save Costs | 14.1 | |  15.3 | |  14.3 |
| % Difficulty Getting Child's Healthcare in Past Year | 2.8 | |  6.0 | |  3.2 |
| % [Age 18+] Have a Specific Source of Ongoing Care | 81.7 | |  76.3 |  95.0 |  84.0 |
| % [Age 18-64] Have a Specific Source of Ongoing Care | 78.2 | |  75.6 |  89.4 | |








| Access to Health Services (continued) | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|---|--|--|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| % [Age 65+] Have a Specific Source of Ongoing Care | 97.7 | |  80.0 |  100.0 | |
| % Have Had Routine Checkup in Past Year | 64.7 | |  65.0 | |  57.2 |
| % Child Has Had Checkup in Past Year | 78.3 | |  84.1 | |  72.6 |
| % Two or More ER Visits in Past Year | 5.8 | |  8.9 | |  7.3 |
| % Rate Local Healthcare "Fair/Poor" | 11.0 | |  16.5 | |  6.7 |
| % (18-64) "Fair/Poor" Understanding of Insurance Exchange | 68.3 | | | | |
| % (18-64) Unlikely to Secure Coverage via Insurance Exchange | 79.7 | | | | |
| | |  better |  similar |  worse | |






| Arthritis, Osteoporosis & Chronic Back Conditions | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|---|--|--|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| % [50+] Arthritis/Rheumatism | 39.3 | |  37.3 | |  36.3 |
| % [50+] Osteoporosis | 10.9 | |  13.5 |  5.3 |  11.9 |
| % Sciatica/Chronic Back Pain | 19.8 | |  18.4 | |  22.3 |
| | |  better |  similar |  worse | |







| Cancer | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|--|--|--|--|
| | | vs. MT | vs. US | vs. HP2020 | |
| Cancer (Age-Adjusted Death Rate) | 167.6 |  161.7 |  174.2 |  160.6 |  179.8 |
| Lung Cancer (Age-Adjusted Death Rate) | 46.6 |  42.5 |  48.5 |  45.5 | |
| Prostate Cancer (Age-Adjusted Death Rate) | 29.4 |  26.2 |  22.3 |  21.2 | |










| Cancer (continued) | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|--|---|---|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| Female Breast Cancer (Age-Adjusted Death Rate) | 19.6 |  20.3 |  22.3 |  20.6 | |
| Colorectal Cancer (Age-Adjusted Death Rate) | 14.0 |  14.8 |  16.1 |  14.5 | |
| % Skin Cancer | 6.8 |  7.1 |  6.7 | |  5.5 |
| % Cancer (Other Than Skin) | 7.5 |  8.0 |  6.1 | |  6.4 |
| % [Women 50-74] Mammogram in Past 2 Years | 76.1 |  70.9 |  83.6 |  81.1 |  86.9 |
| % [Women 21-65] Pap Smear in Past 3 Years | 74.0 |  78.3 |  83.9 |  93.0 |  78.8 |
| % [Age 50+] Sigmoid/Colonoscopy Ever | 68.2 |  61.0 |  75.2 | |  62.6 |
| % [Age 50+] Blood Stool Test in Past 2 Years | 31.4 |  14.6 |  36.9 | |  35.6 |
| % [Age 50-75] Colorectal Cancer Screening | 71.0 | |  75.1 |  70.5 | |
| | |  better |  similar |  worse | |






| Chronic Kidney Disease | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|---|---|---|--|
| | | vs. MT | vs. US | vs. HP2020 | |
| Kidney Disease (Age-Adjusted Death Rate) | 14.4 |  11.9 |  15.2 | |  7.9 |
| % Kidney Disease | 2.0 | |  3.0 | | |
| | |  better |  similar |  worse | |











| Diabetes | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|---|---|---|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| Diabetes Mellitus (Age-Adjusted Death Rate) | 17.5 |  20.3 |  21.3 |  20.5 |  22.6 |
| % Diabetes/High Blood Sugar | 8.6 |  8.0 |  11.7 | |  8.7 |




























| Diabetes (continued) | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|--|---|---|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| % Borderline/Pre-Diabetes | 7.1 | |  5.1 | | |
| % [Non-Diabetes] Blood Sugar Tested in Past 3 Years | 51.8 | |  49.2 | | |
| | |  better |  similar |  worse | |







| Dementias, Including Alzheimer's Disease | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|--|---|---|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| Alzheimer's Disease (Age-Adjusted Death Rate) | 27.2 |  24.1 |  25.0 |  26.2 | |
| | |  better |  similar |  worse | |


















| Family Planning | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|----------------------------------|-------------------------|--|---|---|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| % of Births to Unwed Mothers | 38.7 |  33.9 |  40.8 |  33.8 | |
| Teenage Birth Rate (15-19)/1,000 | 39.7 |  34.4 |  34.5 |  39.8 | |
| | |  better |  similar |  worse | |












| Hearing & Other Sensory or Communication Disorders | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|--|---|---|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| % Deafness/Trouble Hearing | 12.1 | |  10.3 |  9.7 | |
| | |  better |  similar |  worse | |


































| Heart Disease & Stroke | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|---|---|---|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| Diseases of the Heart (Age-Adjusted Death Rate) | 153.7 |  159.6 |  184.6 |  158.9 |  188.9 |
| Stroke (Age-Adjusted Death Rate) | 39.6 |  40.5 |  40.2 |  33.8 |  59.8 |
| % Heart Disease (Heart Attack, Angina, Coronary Disease) | 5.9 | |  6.1 | |  5.1 |







| Heart Disease & Stroke (continued) | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|---|---|---|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| % Stroke | 3.3 |  3.2 |  3.9 | |  3.3 |
| % Blood Pressure Checked in Past 2 Years | 95.5 | |  91.0 |  92.6 |  94.6 |
| % Told Have High Blood Pressure (Ever) | 33.7 |  30.2 |  34.1 |  26.9 |  26.1 |
| % [HBP] Taking Action to Control High Blood Pressure | 83.7 | |  89.2 | |  88.9 |
| % Cholesterol Checked in Past 5 Years | 89.7 |  69.6 |  86.6 |  82.1 |  77.7 |
| % Told Have High Cholesterol (Ever) | 25.7 |  34.6 |  29.9 |  13.5 |  28.5 |
| % [HBC] Taking Action to Control High Blood Cholesterol | 79.8 | |  81.4 | |  83.6 |
| % 1+ Cardiovascular Risk Factor | 81.7 | |  82.3 | |  89.1 |
| | |  better |  similar |  worse | |














| HIV | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|--|---|---|--|
| | | vs. MT | vs. US | vs. HP2020 | |
| % [Age 18-44] HIV Test in the Past Year | 8.4 | |  19.3 |  18.9 |  9.1 |
| | |  better |  similar |  worse | |

















| Immunization & Infectious Diseases | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|---|---|---|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| Pertussis per 100,000 | 17.3 |  26.8 |  10.1 | |  0.8 |
| Hepatitis C, non-A non-B Incidence per 100,000 | 0.7 |  0.7 | |  0.25 |  0.3 |
| % [Age 65+] Flu Vaccine in Past Year | 49.1 |  55.9 |  57.5 |  90.0 |  73.7 |
| % [High-Risk 18-64] Flu Vaccine in Past Year | 48.2 | |  45.9 |  90.0 |  46.9 |
| % [Age 65+] Pneumonia Vaccine Ever | 64.6 |  69.6 |  68.4 |  90.0 |  76.5 |




























| Immunization & Infectious Diseases (continued) | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|--|---|---|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| % [High-Risk 18-64] Pneumonia Vaccine Ever | 55.7 | |  41.9 |  60.0 |  29.4 |
| Tuberculosis Incidence per 100,000 | 0.2 |  0.6 |  3.4 |  1.0 |  1.0 |
| % Ever Vaccinated for Hepatitis B | 40.4 | |  44.7 | | |
| | |  better |  similar |  worse | |








| Injury & Violence Prevention | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|--|--|--|--|
| | | vs. MT | vs. US | vs. HP2020 | |
| Unintentional Injury (Age-Adjusted Death Rate) | 43.0 |  57.6 |  38.2 |  36.0 |  39.0 |
| Motor Vehicle Crashes (Age-Adjusted Death Rate) | 18.0 |  21.9 |  11.9 |  12.4 |  18.3 |
| % "Always" Wear Seat Belt | 78.6 |  88.6 |  84.8 |  92.0 |  76.8 |
| % Child [Age 5-17] "Always" Wears ATV Helmet | 59.8 | | | | |
| % Child [Age 6-17] Healthy Weight | 55.4 | |  58.2 | | |
| % Child [Age 0-17] "Always" Uses Seat Belt/Car Seat | 82.6 | |  92.2 | |  89.3 |
| % Child [Age 5-17] "Always" Wears Bicycle Helmet | 38.5 | |  48.7 | |  36.2 |
| Firearm-Related Deaths (Age-Adjusted Death Rate) | 9.8 |  15.7 |  10.2 |  9.2 |  12.7 |
| % Firearm in Home | 55.9 | |  34.7 | |  53.5 |
| % [Homes With Children] Firearm in Home | 66.0 | |  37.4 | |  55.0 |
| % [Homes With Firearms] Weapon(s) Unlocked & Loaded | 9.7 | |  16.8 | |  9.9 |
| Homicide (Age-Adjusted Death Rate) | 3.1 |  3.4 |  6.0 |  5.5 | |
| Violent Crime per 100,000 | 254.5 |  266.6 |  392.8 | |  238.1 |




| Injury & Violence Prevention (continued) | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|--|---|---|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| % Victim of Violent Crime in Past 5 Years | 1.4 | |  2.8 |  4.0 | |
| % Victim of Domestic Violence (Ever) | 15.8 | |  15.0 | | |
| | |  better |  similar |  worse | |




| Maternal, Infant & Child Health | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---------------------------------------|-------------------------|--|---|---|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| % No Prenatal Care in First Trimester | 25.5 |  29.9 | |  22.1 | |
| % of Low Birthweight Births | 7.3 |  7.3 |  8.2 |  7.8 |  7.2 |
| Infant Death Rate | 8.2 |  6.2 |  6.5 |  6.0 |  7.5 |
| | |  better |  similar |  worse | |
















| Mental Health & Mental Disorders | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|--|---|---|--|
| | | vs. MT | vs. US | vs. HP2020 | |
| % "Fair/Poor" Mental Health | 10.6 | |  11.9 |  6.9 | |
| % Diagnosed Depression | 21.2 | |  20.4 | | |
| % Symptoms of Chronic Depression (2+ Years) | 26.9 | |  30.4 |  25.7 | |
| % Have Considered Suicide | 9.7 | | |  8.1 | |
| Suicide (Age-Adjusted Death Rate) | 17.3 |  21.2 |  11.8 |  10.2 |  17.3 |
| % [Those With Diagnosed Depression] Seeking Help | 85.0 | |  76.6 | | |
| % Typical Day Is "Extremely/Very" Stressful | 12.6 | |  11.9 |  9.5 | |
| | |  better |  similar |  worse | |




















| Nutrition & Weight Status | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|--|---|---|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| % Eat 5+ Servings of Fruit or Vegetables per Day | 40.1 | |  39.5 |  34.9 | |
| % "Very/Somewhat" Difficult to Buy Fresh Produce | 23.5 | |  24.4 | | |
| % Medical Advice on Nutrition in Past Year | 35.9 | |  39.2 |  31.4 | |
| % Healthy Weight (BMI 18.5-24.9) | 31.9 | |  34.4 |  35.8 | |
| % Overweight (BMI 25+) | 65.7 |  60.2 |  63.1 |  62.7 | |
| % Obese (BMI 30+) | 32.6 |  24.6 |  29.0 |  30.5 | |
| % [Overweights] Perceive Self "About the Right Weight" | 21.9 | |  22.1 | | |
| % Medical Advice on Weight in Past Year | 22.1 | |  23.7 |  14.5 | |
| % [Overweights] Couseled About Weight in Past Year | 31.1 | |  31.8 | | |
| % [Obese Adults] Couseled About Weight in Past Year | 41.0 | |  48.3 | | |
| % [Overweights] Trying to Lose Weight Both Diet/Exercise | 34.8 | |  39.5 |  33.8 | |
| % Children [Age 6-17] Overweight (85th Percentile) | 28.7 | |  29.7 |  33.8 | |
| % Children [Age 6-17] Obese (95th Percentile) | 15.1 | |  13.7 |  14.5 | |
| | |  better |  similar |  worse | |








| Oral Health | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|--|--|--|--|
| | | vs. MT | vs. US | vs. HP2020 | |
| % [Age 18+] Dental Visit in Past Year | 62.9 |  61.1 |  65.9 |  49.0 |  63.9 |
| % Child [Age 2-17] Dental Visit in Past Year | 75.1 | |  81.5 |  49.0 |  78.1 |


















| Oral Health (continued) | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|-------------------------|-------------------------|--|---|---|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| % Have Dental Insurance | 58.9 | | 65.6 | | 56.2 |
| | |  better |  similar |  worse | |

























| Physical Activity | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|--|---|---|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| % No Leisure-Time Physical Activity | 23.7 | 24.4 | 20.7 | 32.6 | 26.3 |
| % Meeting Physical Activity Guidelines | 42.1 | | 50.3 | | 41.4 |
| % Moderate Physical Activity | 25.4 | | 30.6 | | 23.1 |
| % Vigorous Physical Activity | 30.9 | | 38.0 | | 29.1 |
| % Medical Advice on Physical Activity in Past Year | 41.7 | | 44.0 | | 36.8 |
| % 3+ Hours per Day of Total Screen Time | 61.0 | | | | |
| % Want to be More Active But Feel Unsafe | 10.8 | | | | |
| % Increased Physical Activity/Everyday Behaviors Last Yr | 72.0 | | | | |
| % Child [Age 2-17] Physically Active 1+ Hours per Day | 42.8 | | 48.6 | | |
| % Child [Age 5-17] Watches TV 3+ Hours per Day | 11.2 | | | | |
| % Child [Age 5-17] Uses Computer 3+ Hours per Day | 13.7 | | | | |
| % Child [Age 5-17] 3+ Hours per Day of Total Screen Time | 47.1 | | | | |
| % Aware of the 5-2-1-0 Health Message | 31.3 | | | | |
| | |  better |  similar |  worse | |








| Respiratory Diseases | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|---|---|---|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| CLRD (Age-Adjusted Death Rate) | 61.2 |  54.6 |  43.2 |  64.9 | |
| Pneumonia/Influenza (Age-Adjusted Death Rate) | 15.2 |  14.3 |  16.4 |  19.4 | |
| % COPD (Lung Disease) | 6.9 | |  8.6 |  6.8 | |
| % [Adult] Currently Has Asthma | 11.1 |  9.1 |  9.4 |  8.0 | |
| % [Child 0-17] Currently Has Asthma | 4.4 | |  7.1 | | |
| | |  better |  similar |  worse | |

| Sexually Transmitted Diseases | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|--|--|--|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| Gonorrhea Incidence per 100,000 | 12.7 |  9.8 |  101.0 |  22.8 | |
| Primary & Secondary Syphilis Incidence per 100,000 | 0.9 |  0.6 |  4.5 |  0.0 | |
| Chlamydia Incidence per 100,000 | 357.1 |  344.3 |  429.6 |  263.3 | |
| Hepatitis B Incidence per 100,000 | 0.0 |  0.1 |  1.0 |  2.3 | |
| % [Unmarried 18-64] 3+ Sexual Partners in Past Year | 11.5 | |  11.7 |  5.3 | |
| % [Unmarried 18-64] Using Condoms | 42.2 | |  33.6 |  32.0 | |
| | |  better |  similar |  worse | |

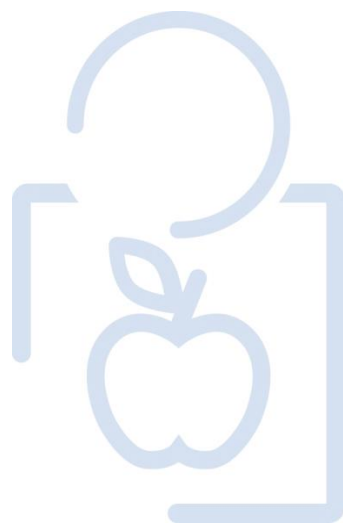
| Substance Abuse | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|---|---|---|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| Cirrhosis/Liver Disease (Age-Adjusted Death Rate) | 10.3 |  11.9 |  9.2 |  8.2 |  11.3 |
| % Current Drinker | 59.7 |  58.7 |  56.5 |  57.4 | |

| Substance Abuse (continued) | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|---|-------------------------|---|---|---|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| % Chronic Drinker (Average 2+ Drinks/Day) | 7.1 | |  5.2 |  3.2 | |
| % Binge Drinker (Single Occasion - 5+ Drinks Men, 4+ Women) | 16.2 |  20.8 |  19.5 |  24.4 |  15.2 |
| % Drinking & Driving in Past Month | 3.1 | |  5.0 |  2.9 | |
| % Use of Another's Prescription Drug in the Past Month | 0.5 | | | | |
| Drug-Induced Deaths (Age-Adjusted Death Rate) | 13.3 |  14.4 |  12.7 |  11.3 |  10.3 |
| % Ever Sought Help for Alcohol or Drug Problem | 5.2 | |  4.9 |  3.8 | |
| | |  better |  similar |  worse | |

| Tobacco Use | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|--|-------------------------|--|---|---|---|
| | | vs. MT | vs. US | vs. HP2020 | |
| % Current Smoker | 11.7 |  22.1 |  14.9 |  12.0 |  18.3 |
| % Someone Smokes at Home | 9.9 | |  12.7 |  13.0 |  15.6 |
| % [Non-Smokers] Someone Smokes in the Home | 6.7 | |  6.3 | | |
| % [Household With Children] Someone Smokes in the Home | 8.5 | |  9.7 | |  12.6 |
| % [Smokers] Received Advice to Quit Smoking | 69.0 | |  67.8 | |  48.9 |
| % [Smokers] Have Quit Smoking 1+ Days in Past Year | 46.2 | |  55.9 |  80.0 |  57.0 |
| % Smoke Cigars | 2.8 | |  4.1 |  0.2 |  3.2 |
| % Use Smokeless Tobacco | 7.6 | |  4.0 |  0.3 |  5.1 |
| | |  better |  similar |  worse | |

| Vision | Yellowstone County 2014 | Yellowstone County 2014 vs. Benchmarks | | | TREND |
|----------------------------|----------------------------|---|--|--|-------|
| | | vs. MT | vs. US | vs. HP2020 | |
| % Blindness/Trouble Seeing | 8.6 | |  8.5 |  6.5 | |
| % Eye Exam in Past 2 Years | 59.3 | |  56.8 |  63.4 | |
| | |  better |  similar |  worse | |

GENERAL HEALTH STATUS



Overall Health Status

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

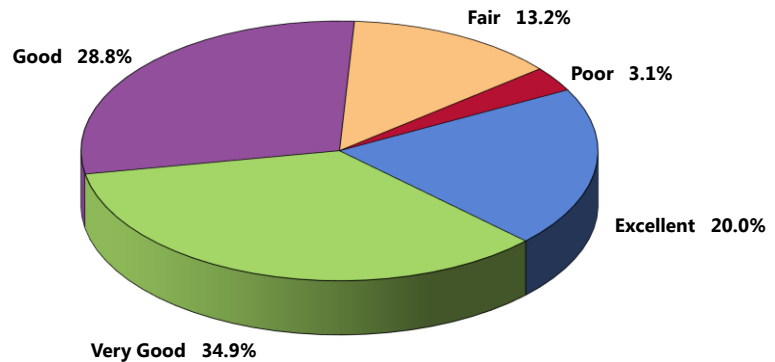
"Would you say that in general your health is: excellent, very good, good, fair or poor?"

Self-Reported Health Status

A total of 54.9% of Yellowstone County adults rate their overall health as "excellent" or "very good."

- Another 28.8% gave "good" ratings of their overall health.

Self-Reported Health Status
(Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 5]
Notes: • Asked of all respondents.

However, 16.3% of Yellowstone County adults believe that their overall health is "fair" or "poor."

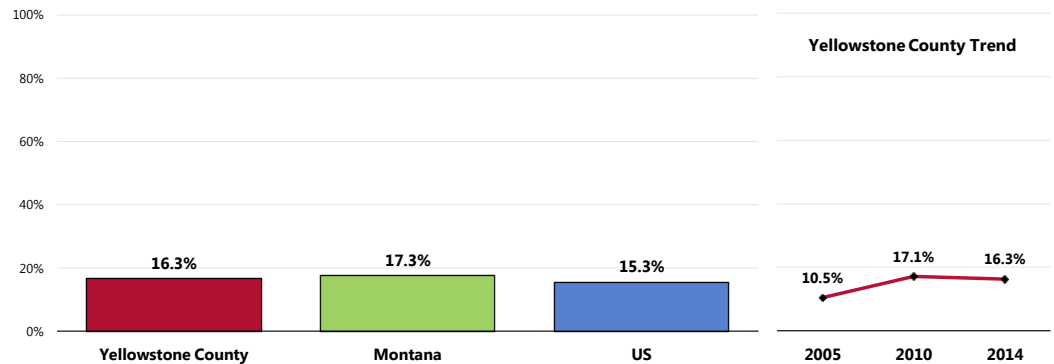
- Statistically similar to statewide findings.
- Similar to the national percentage.
- ☒ Denotes a statistically significant increase when comparing "fair/poor" overall health reports to 2005 survey results.

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" Overall Health



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 5]
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

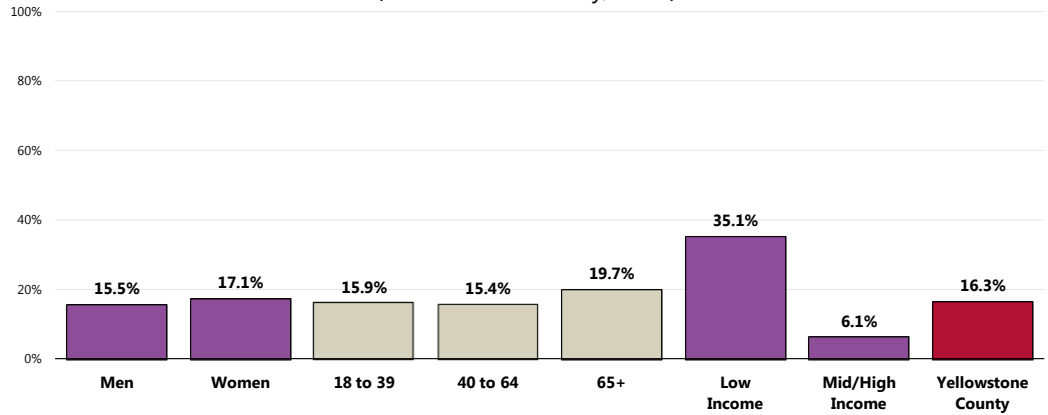
Adults more likely to report experiencing “fair” or “poor” overall health include:

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

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

Experience “Fair” or “Poor” Overall Health

(Yellowstone County, 2014)



Sources: • 2014 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 (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

Activity Limitations

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

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

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

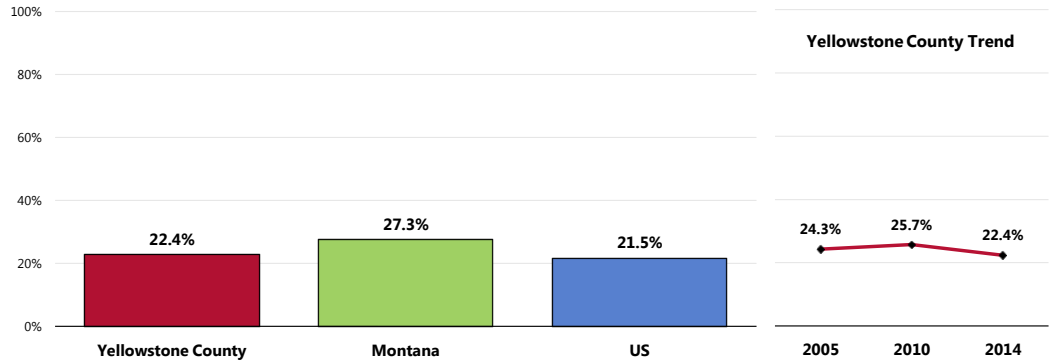
- **Improve the conditions of daily life** by: encouraging communities to be accessible so all can live in, move through, and interact with their environment; encouraging community living; and removing barriers in the environment using both physical universal design concepts and operational policy shifts.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

– Healthy People 2020 (www.healthypeople.gov)

A total of 22.4% of Yellowstone County adults are limited in some way in some activities due to a physical, mental or emotional problem.

- More favorable than the prevalence statewide.
- Similar to the national prevalence.
- ☒ Statistically similar to baseline 2005 findings.

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



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 114]
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 Montana data.
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.

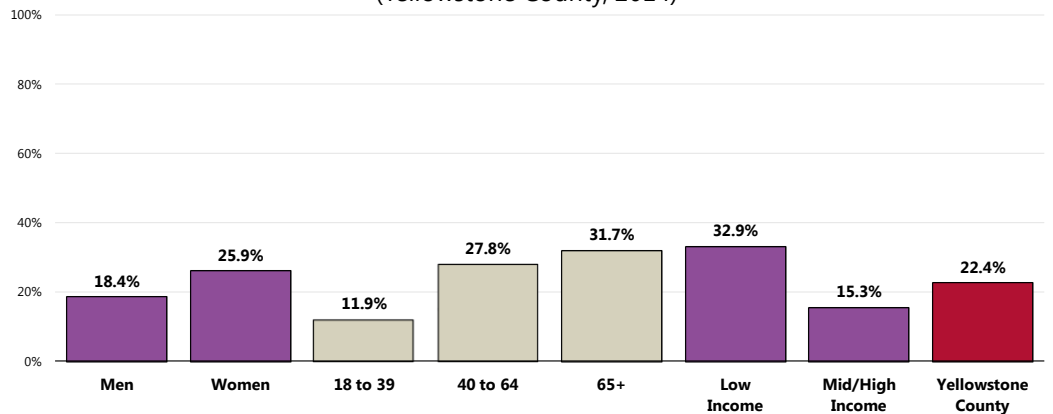
Notes: • Asked of all respondents.

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

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

- 👥 Adults age 40 and older are much more often limited in activities.
- 👥 Residents in households with low incomes more often report some type of activity limitation.

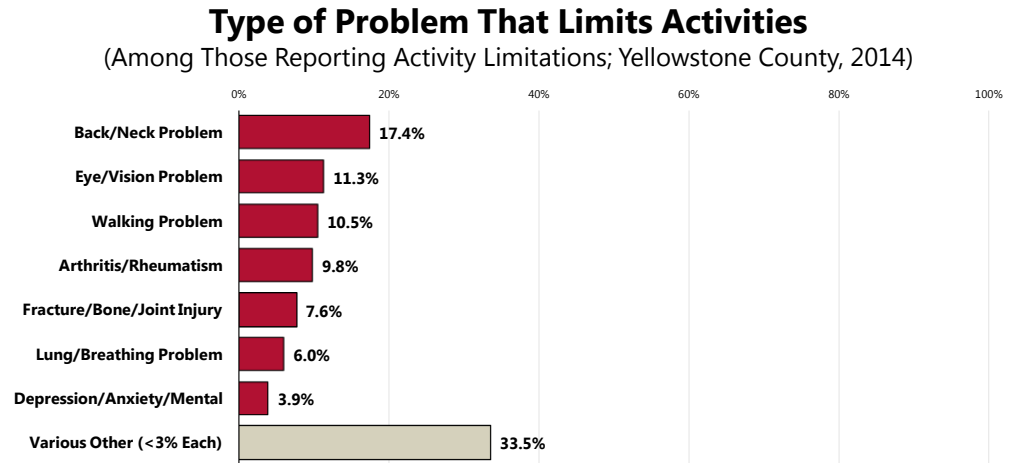
Limited in Activities in Some Way Due to a Physical, Mental or Emotional Problem (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 114]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

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

Other limitations mentioned with less frequency include vision problems, lung or breathing problems, and mental health issues.



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 115]
Notes: • Asked of those respondents reporting activity limitations.

Mental Health & Mental Disorders

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

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

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

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

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

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

– Healthy People 2020 (www.healthypeople.gov)

Mental Health Status

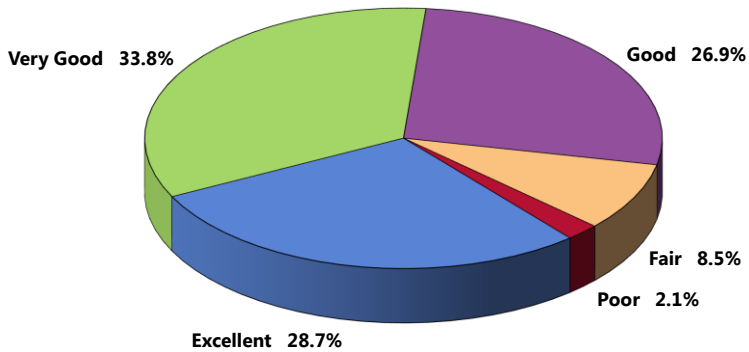
Self-Reported Mental Health Status

A total of 62.5% of Yellowstone County adults rate their overall mental health as “excellent” or “very good.”

- Another 26.9% gave “good” ratings of their own mental health status.

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

Self-Reported Mental Health Status (Yellowstone County, 2014)

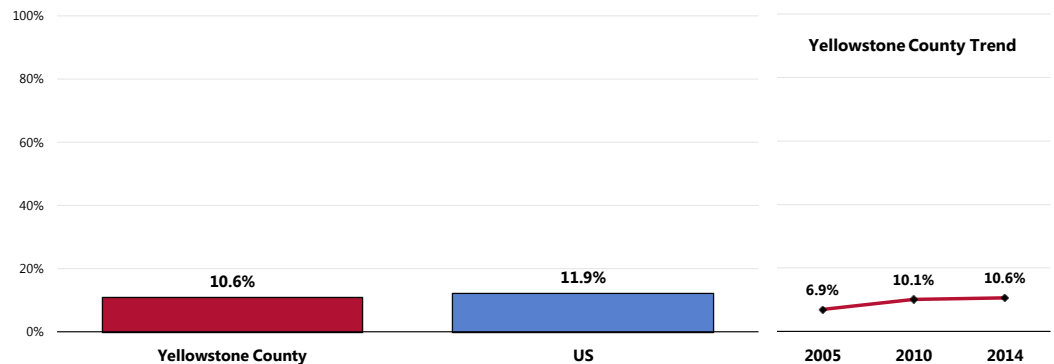


Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 108]
Notes: • Asked of all respondents.

A total of 10.6% of Yellowstone County adults, however, believe that their overall mental health is “fair” or “poor.”

- Similar to the “fair/poor” response reported nationally.
- ☒ Statistically similar to previous findings.

Experience “Fair” or “Poor” Mental Health



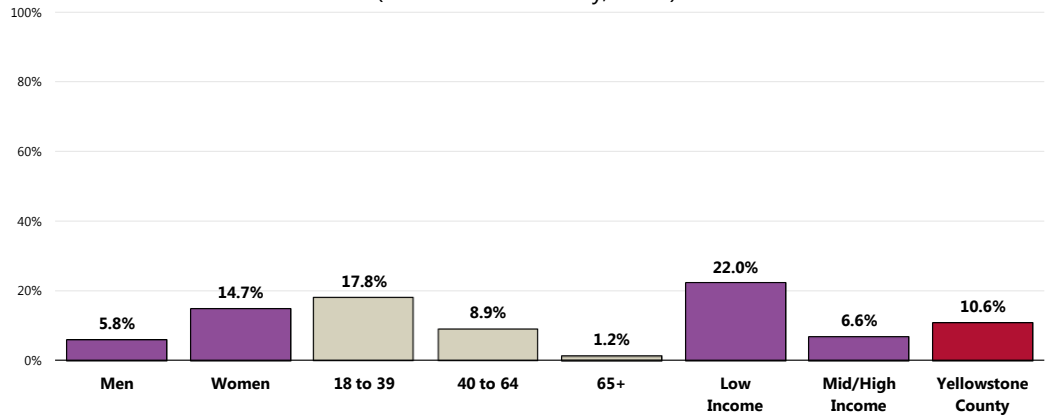
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 108]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

👥 Note the negative association between poor mental health and age.

👥 Women and low-income adults are also much more likely to report experiencing “fair/poor” mental health than their demographic counterparts.

Experience “Fair” or “Poor” Mental Health

(Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 108]

Notes: • Asked of all respondents.

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

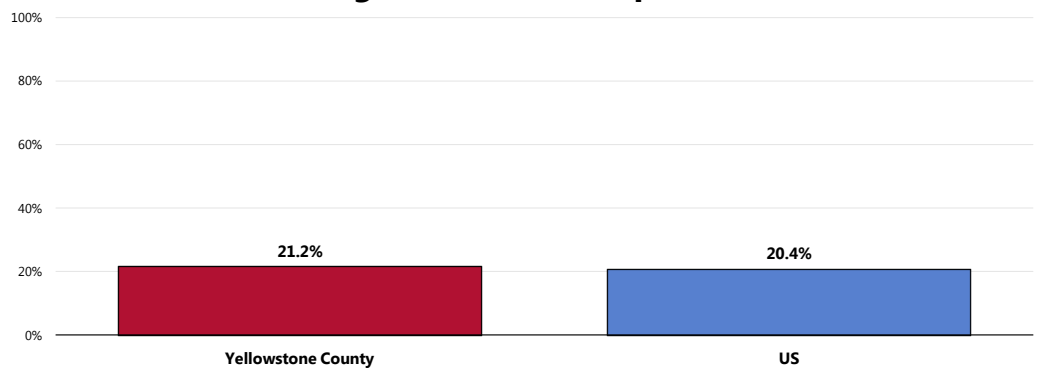
Depression

Diagnosed Depression

A total of 21.2% of Yellowstone County adults have been diagnosed by a physician as having a depressive disorder (such as depression, major depression, dysthymia, or minor depression).

- Similar to the national finding.

Have Been Diagnosed With a Depressive Disorder




Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 111]

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

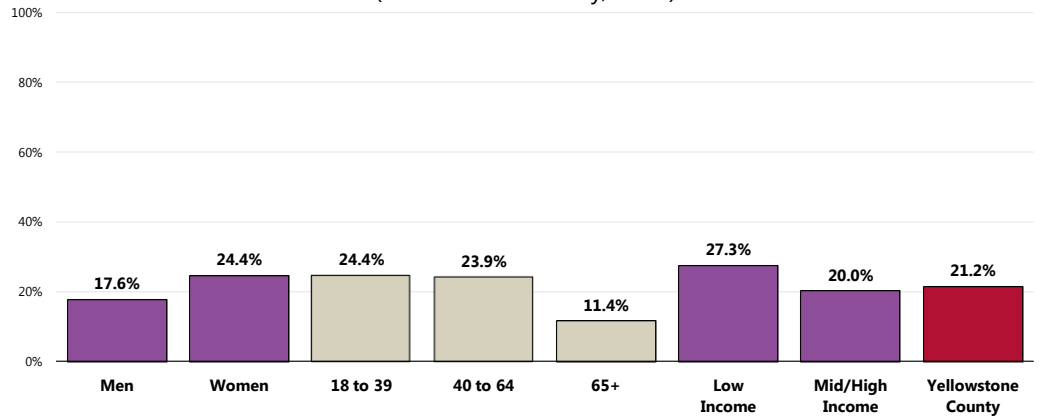
Notes: • Asked of all respondents.

• "In previous surveys, the item asked about a physician's diagnosis of "major depression."

The prevalence of diagnosed depression is significantly higher among:

 Adults under the age of 65.


Have Been Diagnosed With a Depressive Disorder (Yellowstone County, 2014)



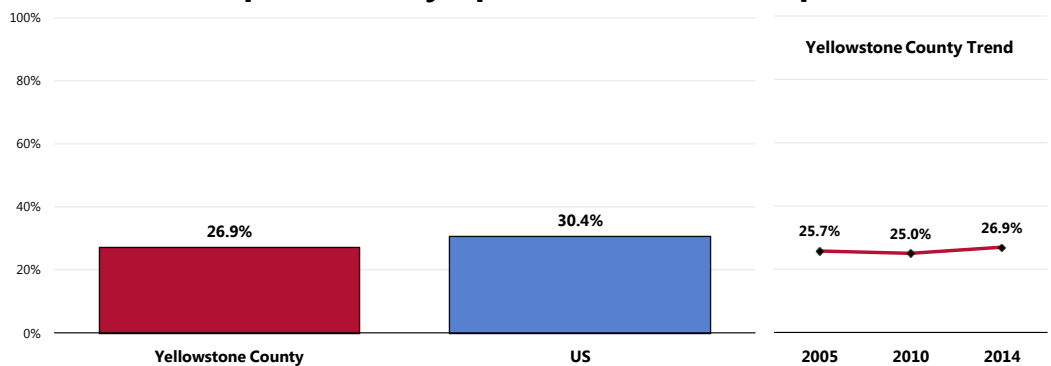
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 111]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Symptoms of Chronic Depression

A total of 26.9% of Yellowstone County adults have had two or more years in their lives when they felt depressed or sad on most days, although they may have felt okay sometimes (chronic depression).


- Comparable to national findings.
-  Comparable to that reported in Yellowstone County in 2005.

Have Experienced Symptoms of Chronic Depression

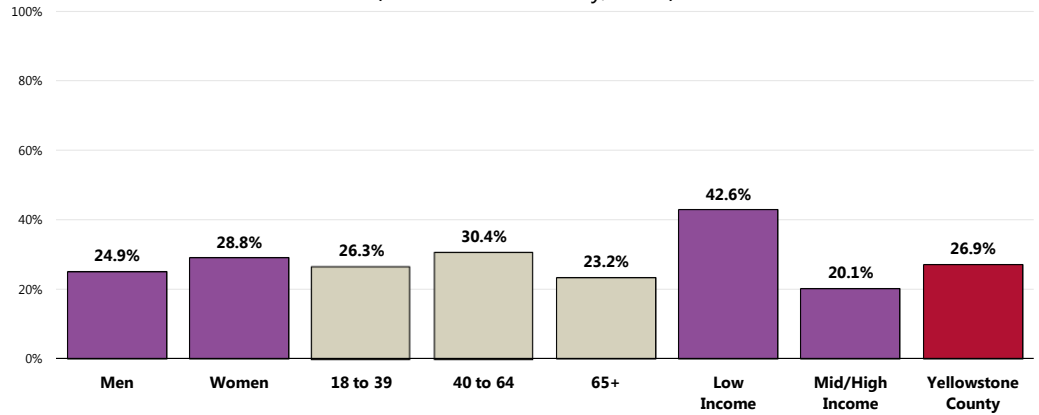


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 109]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all respondents.

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

 Adults with lower incomes.

Have Experienced Symptoms of Chronic Depression (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 109]

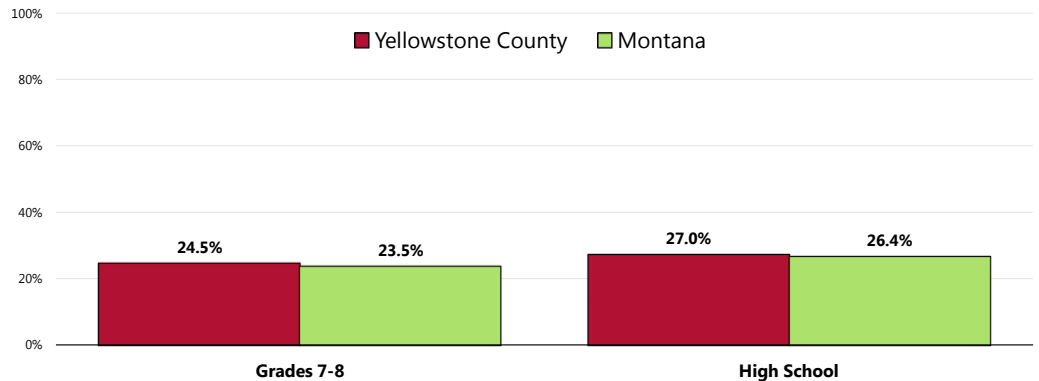
Notes: • Asked of all respondents.

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

According to the 2013 Montana Youth Risk Behavior Survey (YRBS), 24.5% of surveyed 7th and 8th graders have experienced 2+ weeks of depression, as have 27.0% of high school students.

- Similar to statewide findings.

Adolescents: Felt So Sad Or Hopeless Every Day For Two Weeks Or More In A Row That They Stopped Doing Some Usual Activities (During The Past 12 Months) (Yellowstone County Students, 2013)



Sources: • 2013 Montana Youth Risk Behavior Survey (YRBS). Montana Office of Public Instruction.

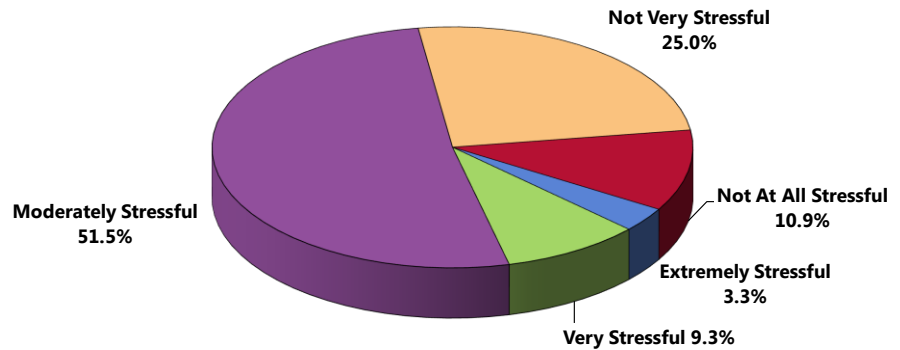
Stress

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

More than one-third of Yellowstone County adults consider their typical day to be “not very stressful” (25.0%) or “not at all stressful” (10.9%).

- Just over one-half (51.5%) of survey respondents characterizes a typical day as “moderately stressful.”

Perceived Level of Stress On a Typical Day
(Yellowstone County, 2014)

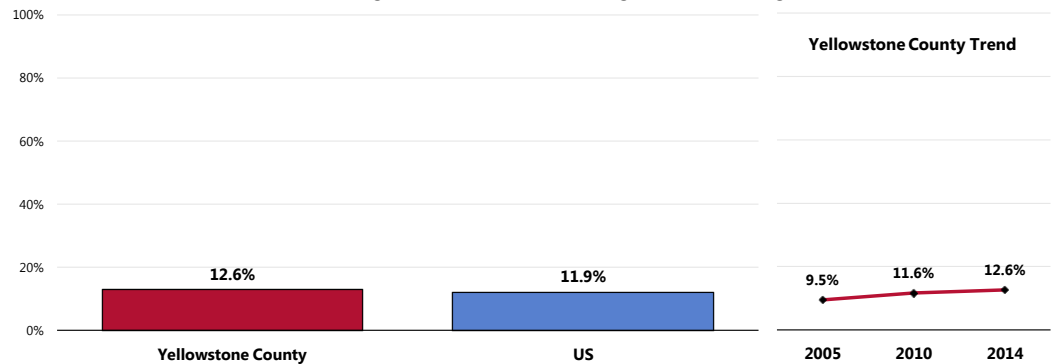


Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 110]
Notes: • Asked of all respondents.

In contrast, 12.6% of Yellowstone County adults experience “very” or “extremely” stressful days on a regular basis.

- Similar to than national findings.
- ☒ Statistically similar to previous survey findings.

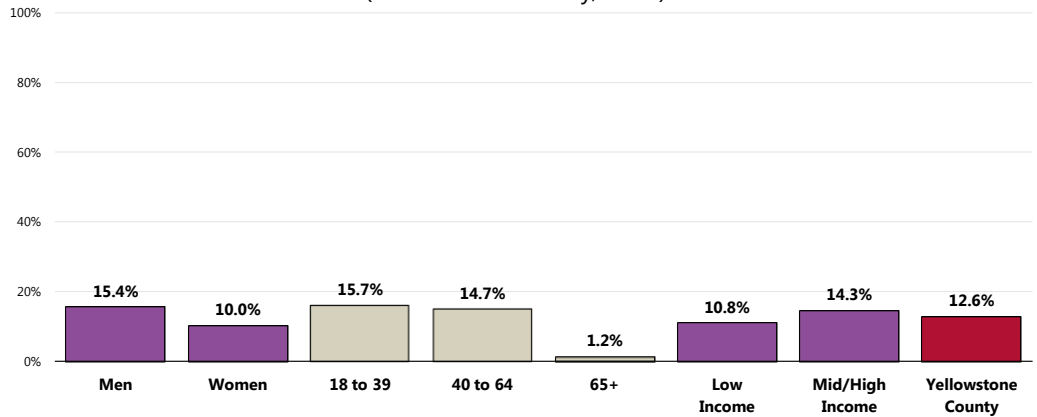
Perceive Most Days As “Extremely” or “Very” Stressful



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 110]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

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

Perceive Most Days as “Extremely” or “Very” Stressful (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 110]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

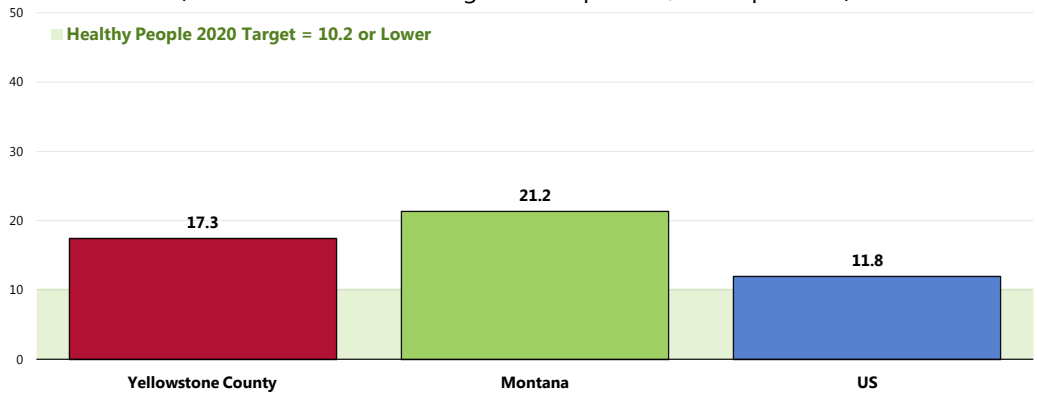
Suicide

Between 2008 and 2010, Yellowstone County reported an annual average age-adjusted suicide rate of 17.3 deaths per 100,000 population.

- Lower than the statewide rate.
- Higher than the national rate.
- Fails to satisfy the Healthy People 2020 target of 10.2 or lower.

Suicide: Age-Adjusted Mortality

(2008-2010 Annual Average Deaths per 100,000 Population)

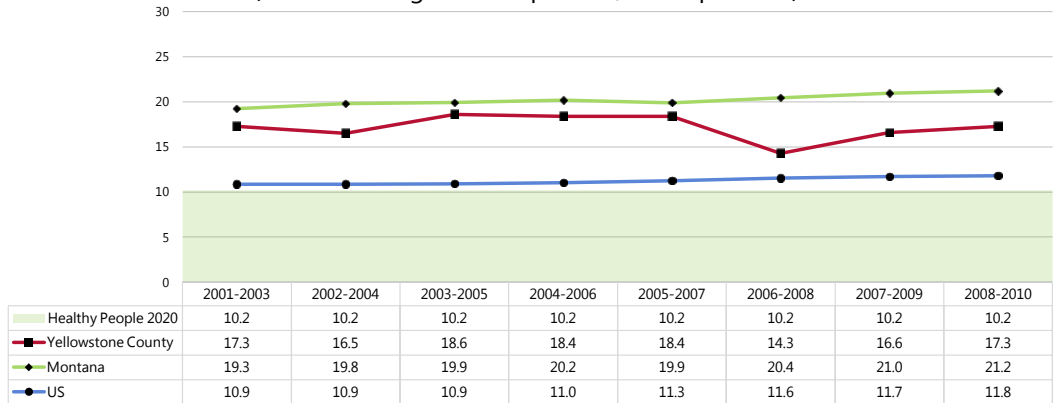


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MHMD-1]
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 • Local, state and national data are simple three-year averages.

☒ The area suicide rate has fluctuated over time, showing no clear trend (the most recent rate [2008-2010] is identical to the 2001-2003 baseline rate). Across Montana and the US overall, suicide rates have increased over the past decade.

Suicide: Age-Adjusted Mortality Trends

(Annual Average Deaths per 100,000 Population)



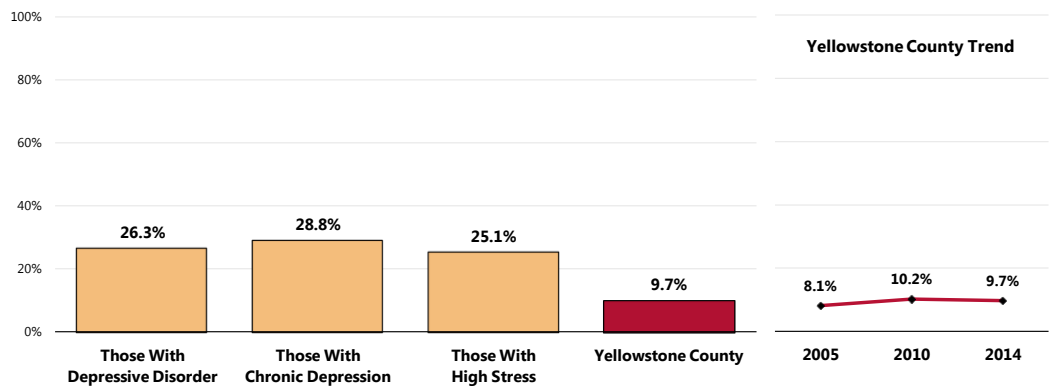
Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MHMD-1]
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 • Local, state and national data are simple three-year averages.

Suicide Ideation

A total of 9.7% of Yellowstone County adults have considered suicide at some point in their lives.



- ☒ Statistically similar to previous findings.
- 👥 The prevalence is higher among adults with depressive disorder, high stress, and/or chronic depression.

Have Considered Suicide

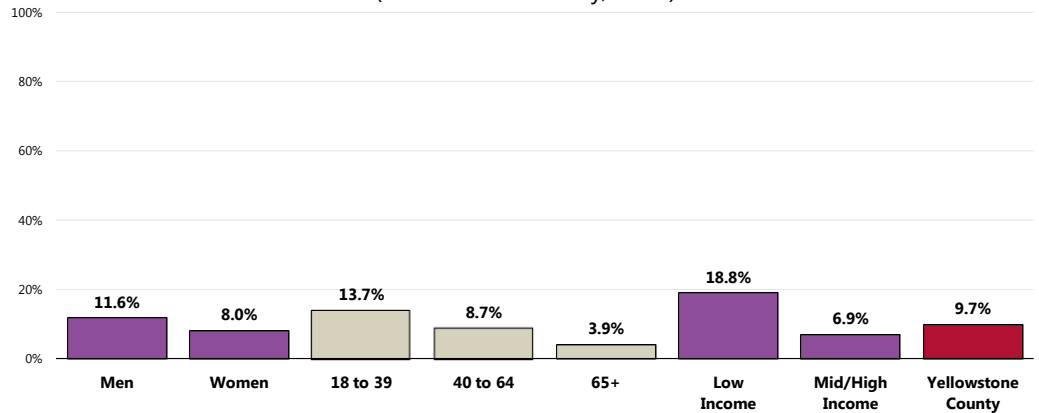


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 113]
 Notes: • Asked of all respondents.

The percentage of adults considering suicide is significantly higher among:

-  Young adults (those under age 40); note the negative association with age.
-  Community members living at lower incomes.

Have Considered Suicide (Yellowstone County, 2014)



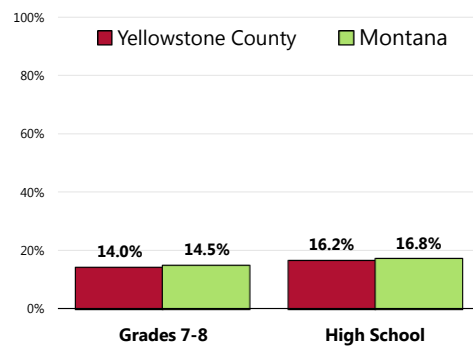
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 113]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

According to the 2013 Montana Youth Risk Behavior Survey (YRBS), 14.0% of surveyed 7th and 8th graders (and 16.2% of high school students) have seriously considered committing suicide in the past year.

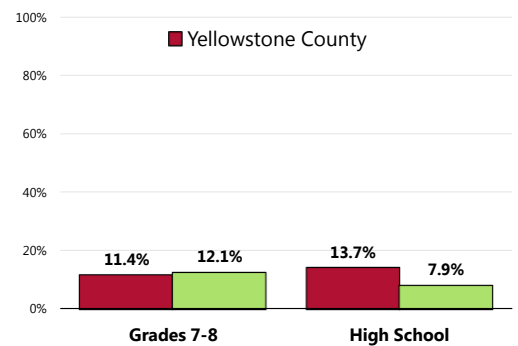
- Similar to statewide findings.
- Note that 11.4% of 7th-8th graders and 13.7% of high school students have attempted suicide at least once in the past year.
 - Higher than the prevalence recorded statewide among high school students.

Adolescents: Suicide (Yellowstone County Students, 2013)

Seriously Considered Attempting Suicide in the Past 12 Months



Actually Attempted Suicide 1+ Times in the Past 12 Months



Sources: • 2013 Montana Youth Risk Behavior Survey (YRBS), Montana Office of Public Instruction.

Mental Health Treatment

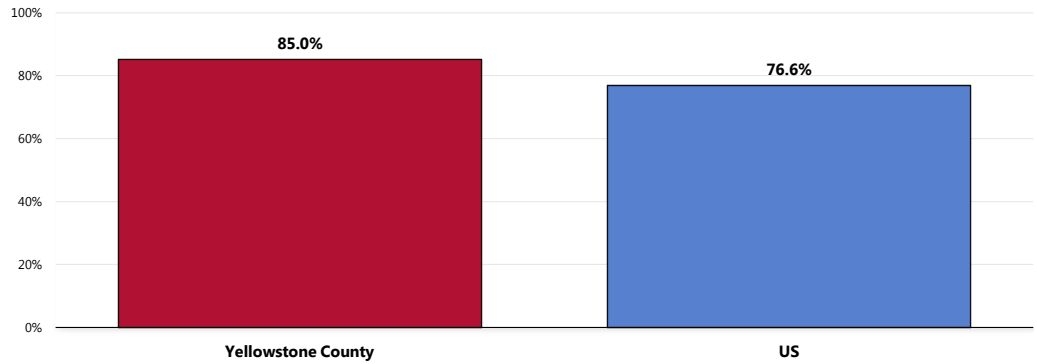
“Diagnosed depressive disorder” includes respondents reporting a past diagnosis of a depressive disorder by a physician (such as depression, major depression, dysthymia, or minor depression).

Among adults with a diagnosed depressive disorder, 85.0% acknowledge that they have sought professional help for a mental or emotional problem.

- Similar to national findings.

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

(Among Adults With Diagnosed Depressive Disorder)



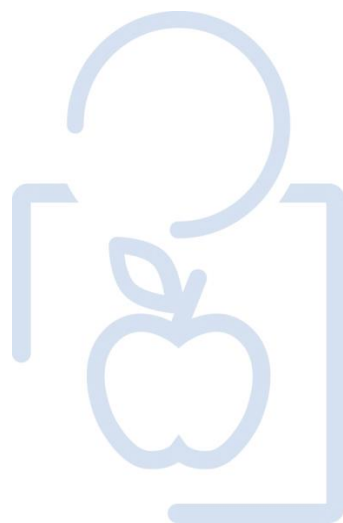
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 136]

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

Notes: • Reflects those respondents with a depressive disorder diagnosed by a physician (such as depression, major depression, dysthymia, or minor depression).

• *In previous surveys, the item asked of adults with a physician's diagnosis of major depression.

MODIFIABLE HEALTH RISKS



Actual Causes Of Death

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

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

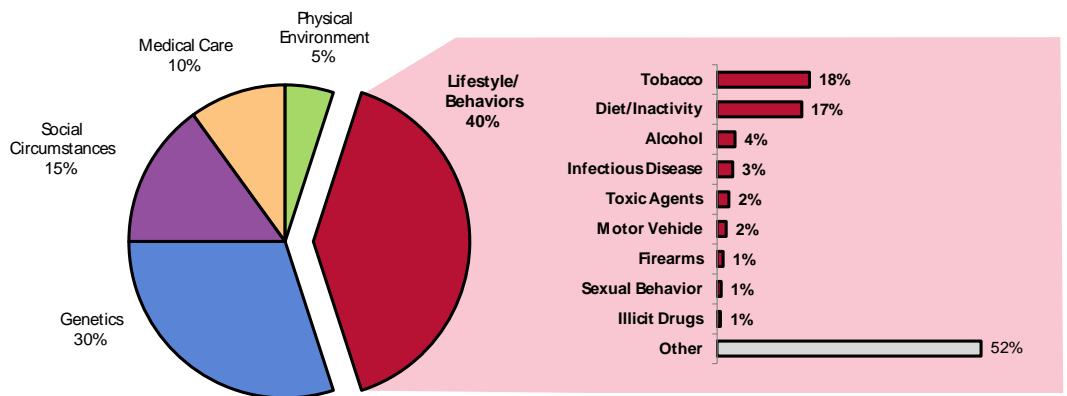
These analyses show that smoking remains the leading cause of mortality. However, poor diet and physical inactivity may soon overtake tobacco as the leading cause of death. These findings, along with escalating healthcare costs and aging population, argue persuasively that the need to establish a more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

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

| 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 (Stroke) | 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



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.

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

Nutrition

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

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

Americans with a healthful diet:

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

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

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

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

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

Social factors thought to influence diet include:

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

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

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

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

- Healthy People 2020 (www.healthypeople.gov)

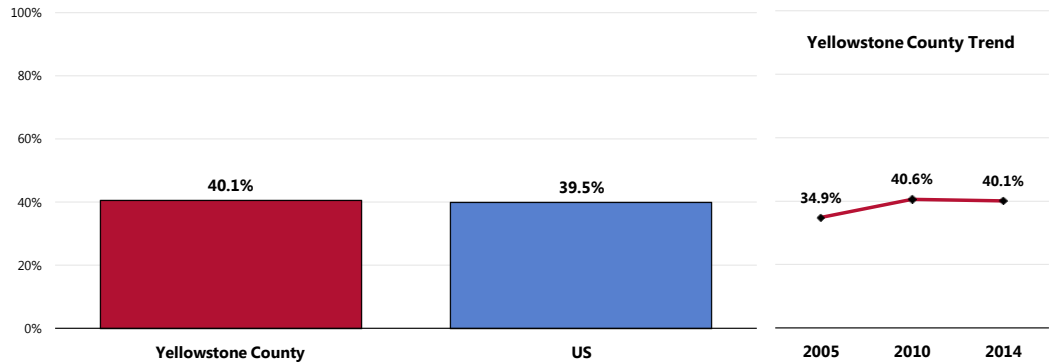
Daily Recommendation of Fruits/Vegetables

A total of 40.1% of Yellowstone County adults report eating five or more servings of fruits and/or vegetables per day.

- Comparable to the national findings.
- ☒ Fruit/vegetable consumption has not changed significantly since 2005.

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

Consume Five or More Servings of Fruits/Vegetables Per Day

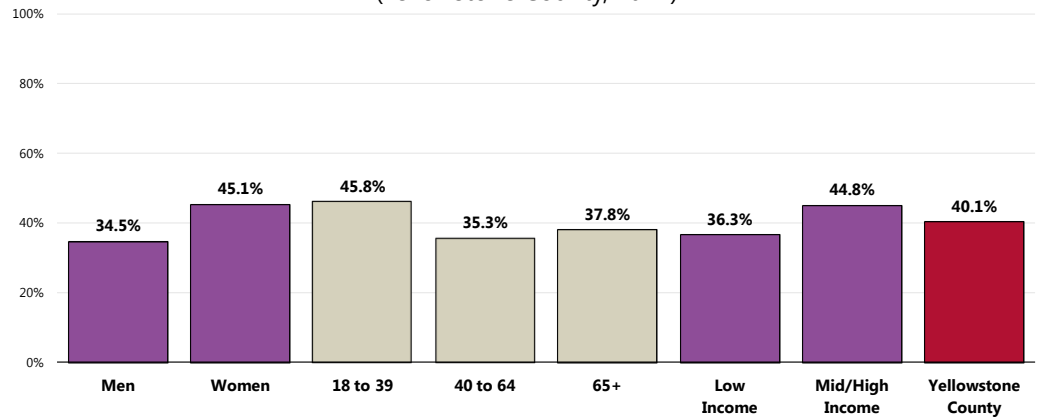


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 159]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
 - For this issue, respondents were asked to recall their food intake on the previous day.

☒ Area men are less likely to get the recommended servings of daily fruits/vegetables, as are adults aged 40 and older.

Consume Five or More Servings of Fruits/Vegetables Per Day

(Yellowstone County, 2014)



- Sources:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 159]
- Notes:
- Asked of all respondents.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 - For this issue, respondents were asked to recall their food intake on the previous day.

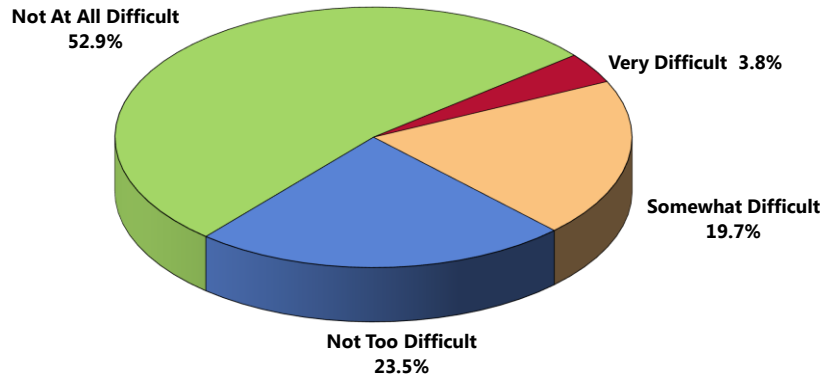
Access to Fresh Produce

Respondents were asked:

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

A total of 52.9% of Yellowstone County adults report that it is “not at all difficult” for them to access affordable, fresh fruits and vegetables, and 23.5% gave “not too difficult” responses to the inquiry.

Level of Difficulty Finding Fresh Produce at an Affordable Price (Yellowstone County, 2014)

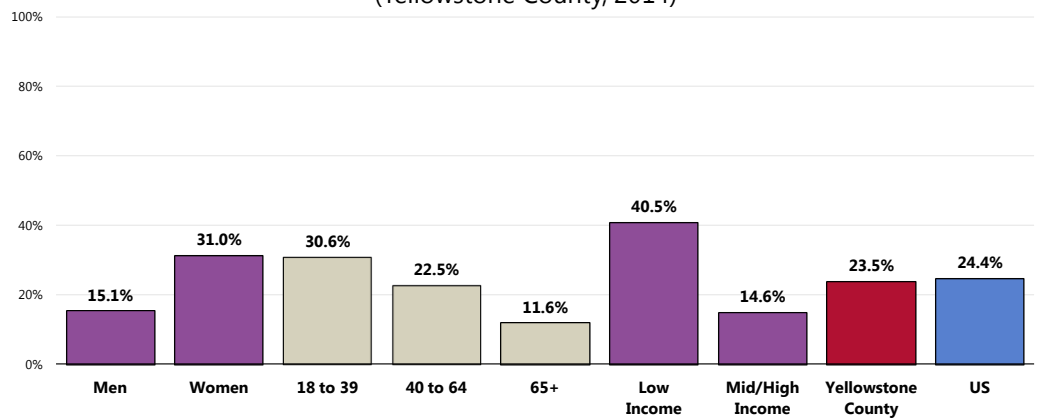


Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 93]
Notes: • Asked of all respondents.

On the other hand, 23.5% of Yellowstone County adults report that it is “very” or “somewhat” difficult for them to access affordable, fresh fruits and vegetables.

- Similar to the national proportion.
- Women, young adults (negative association with age), and lower income residents are more likely to report difficulties accessing affordable, fresh produce.

Find It “Very” or “Somewhat” Difficult to Buy Affordable Fresh Produce (Yellowstone County, 2014)



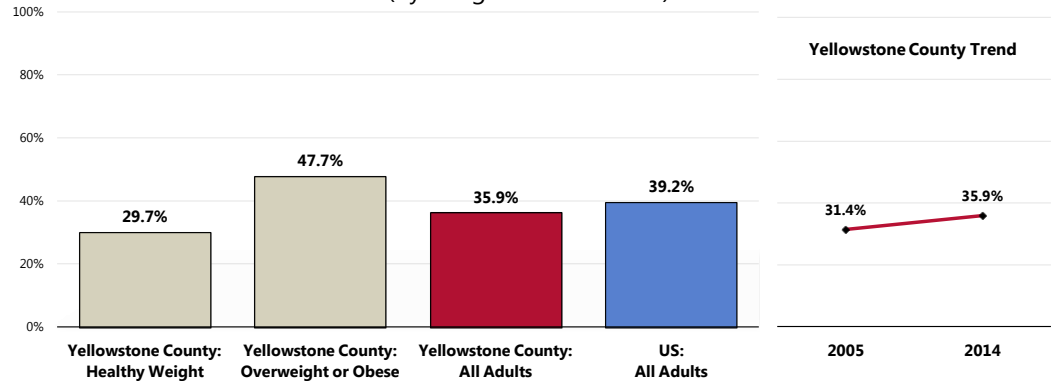
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 93]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.
• Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.

Health Advice About Diet & Nutrition

A total of 35.9% of survey respondents acknowledge that a physician counseled them about diet and nutrition in the past year.

- Comparable to national findings.
- ☒ Statistically similar to previous findings.
- 👥 Note: Among overweight/obese respondents, 47.7% report receiving diet/nutrition advice (meaning that over one-half did not).

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



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 18]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Adolescents

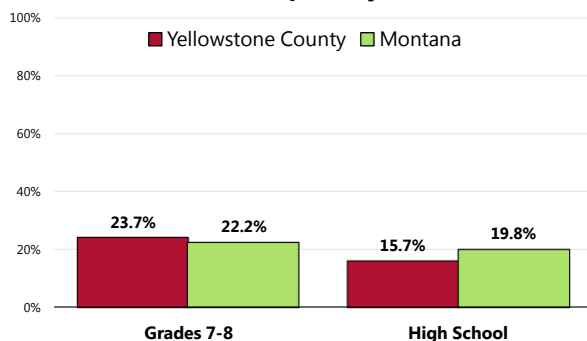
According to the 2013 Montana Youth Risk Behavior Survey (YRBS), 23.7% of surveyed 7th and 8th graders (and 15.7% of high school students) average two or more servings of fruit per day.

- Lower than statewide findings among high school students.
- Note that 7.8% of high school students ate two or more servings of vegetables daily in the past week (excluding green salad, potatoes, and carrots).
 - Comparable to the statewide percentage among high school students.

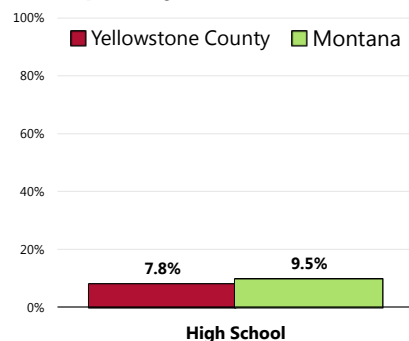
Adolescents: Fruit & Vegetable Consumption

(Yellowstone County Students, 2013)

Ate Fruit 2+ Times per Day in the Past Week



Ate Vegetables* 2+ Times per Day in the Past Week



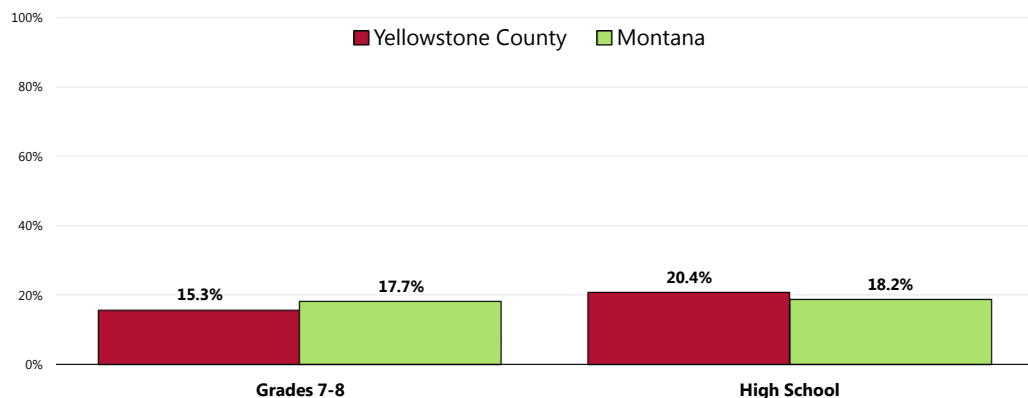
Sources: • 2013 Montana Youth Risk Behavior Survey (YRBS), Montana Office of Public Instruction.
* Excludes green salad, potatoes and carrots.

According to YRBS data, 15.3% of 7th and 8th graders (and 20.4% of high school students) average at least one serving of soda per day.

- Similar to the related findings reported statewide.

Adolescents: Drank a Can, Bottle, or Glass of Soda or Pop One or More Times per Day During the Past Seven Days

(Yellowstone County Students, 2013)



Sources: • 2013 Montana Youth Risk Behavior Survey (YRBS), Montana Office of Public Instruction.

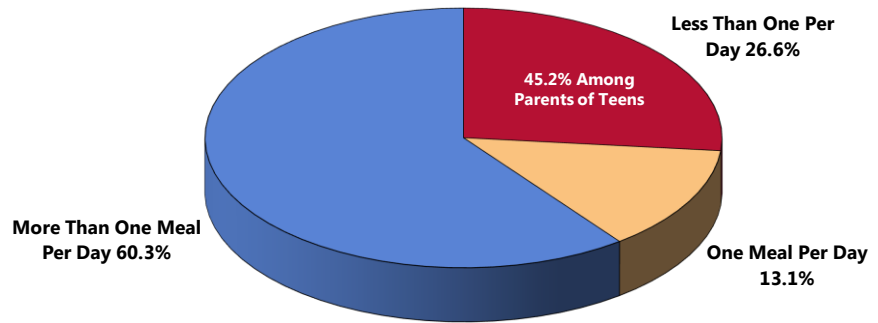
Family Meals

Among survey respondents with children under 18 at home, the majority (60.3%) shares more than one meal as a family on an average day.

- Another 13.1% of parents report eating one family meal per day.
- ☒ Just over one-fourth (26.6%) of parents report less frequent family meals; this prevalence is 45.2% among parents of teens in Yellowstone County.

Number of Meals Eaten as a Family in the Past Week

(Parents of Children <18; Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 135]
Notes: • Asked of all respondents.

Physical Activity

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

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

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

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

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

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

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

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

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

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

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

– Healthy People 2020 (www.healthypeople.gov)

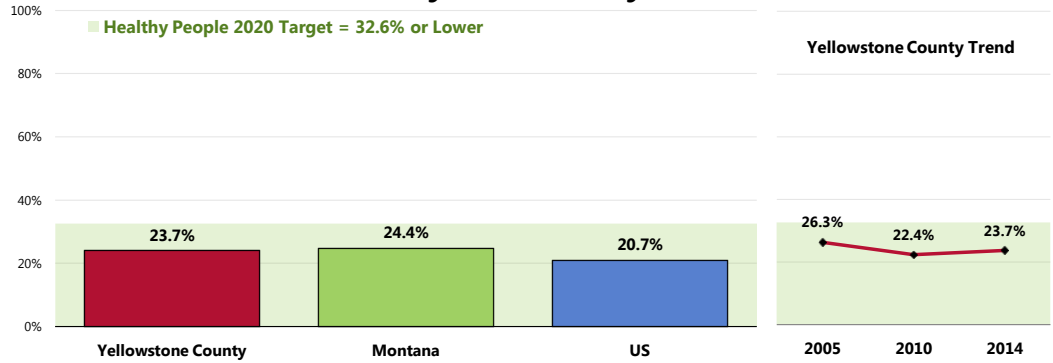
Leisure-Time Physical Activity

Leisure-time physical activity includes any physical activities or exercises (such as running, calisthenics, golf, gardening, walking, etc.) which take place outside of one's line of work.

A total of 23.7% of Yellowstone County adults report no leisure-time physical activity in the past month.

- Similar to statewide findings.
- Similar to national findings.
- Satisfies the Healthy People 2020 target (32.6% or lower).
- ☒ Statistically similar to previous findings.

No Leisure-Time Physical Activity in the Past Month



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 94]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-1]

 Notes:

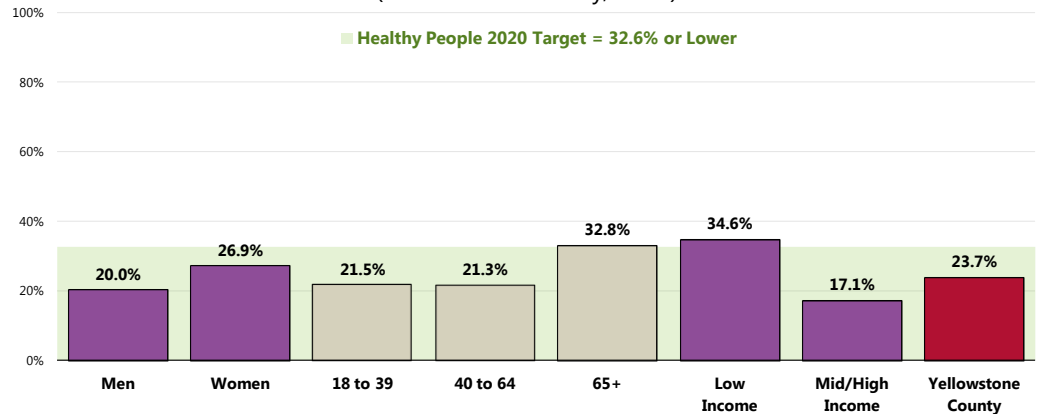
- Asked of all respondents.

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

- 👥 Seniors (age 65+).
- 👥 Lower income residents.

No Leisure-Time Physical Activity in the Past Month

(Yellowstone County, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 94]
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective PA-1]

 Notes:

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

Activity Levels

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

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

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

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

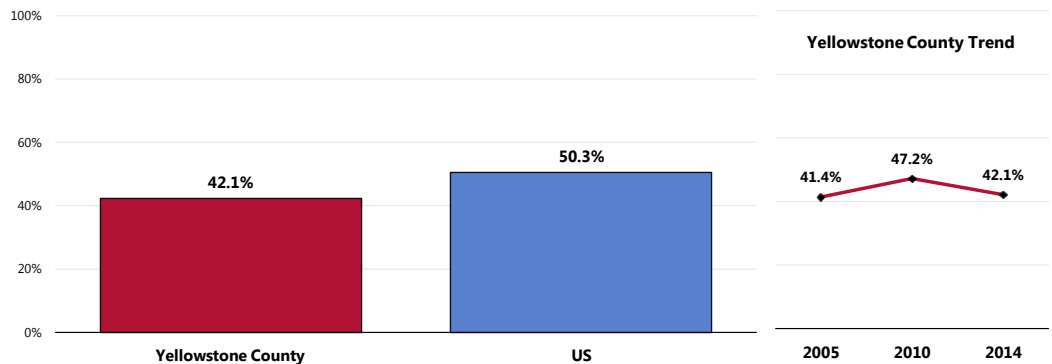
– 2008 Physical Activity Guidelines for Americans, U.S. Department of Health and Human Services. www.health.gov/PAGuidelines

Recommended Levels of Physical Activity

A total of 42.1% of Yellowstone County adults participate in regular, sustained moderate or vigorous physical activity (meeting physical activity recommendations).

- Less favorable than national findings.
- ☒ Statistically similar to baseline 2005 findings.

Meets Physical Activity Recommendations



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 160]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.

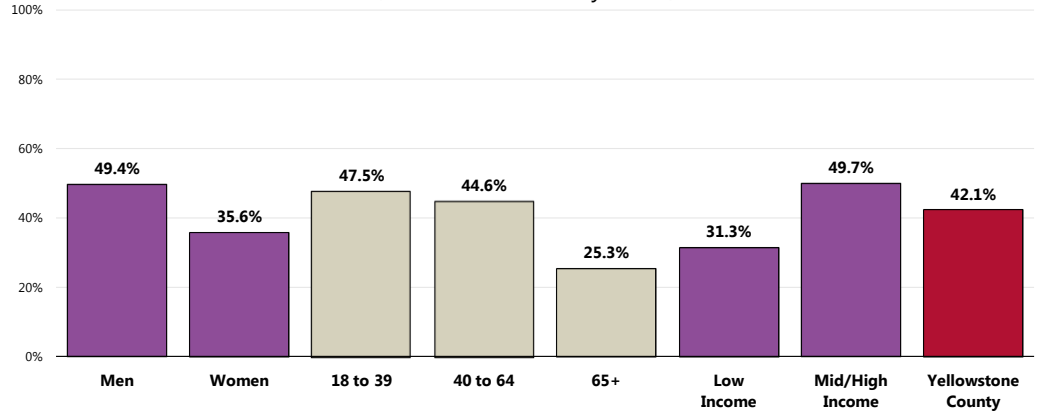
Notes:

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

Those less likely to meet physical activity requirements include:

- 👥 Women.
- 👥 Seniors (65+).
- 👥 Residents in low-income households.

Meets Physical Activity Recommendations (Yellowstone County, 2014)




- Sources:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 160]
- Notes:
- Asked of all respondents.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 - In this case the term "meets physical activity recommendations" refers to participation in moderate physical activity (exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate) at least 5 times a week for 30 minutes at a time, and/or vigorous physical activity (activities that cause heavy sweating or large increases in breathing or heart rate) at least 3 times a week for 20 minutes at a time.

Moderate & Vigorous Physical Activity

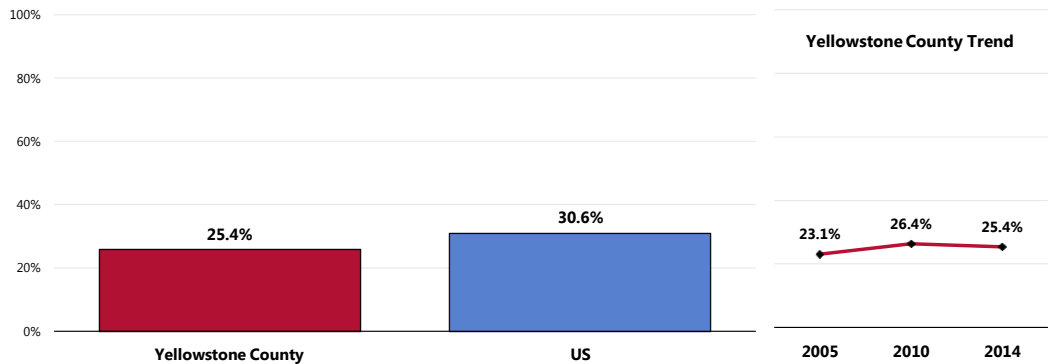
The individual indicators of moderate and vigorous physical activity are shown here.

In the past month:

A total of 25.4% of adults participated in moderate physical activity (5 times a week, 30 minutes at a time).




- Less favorable than the national level.
-  Statistically similar to previous findings.

Moderate Physical Activity

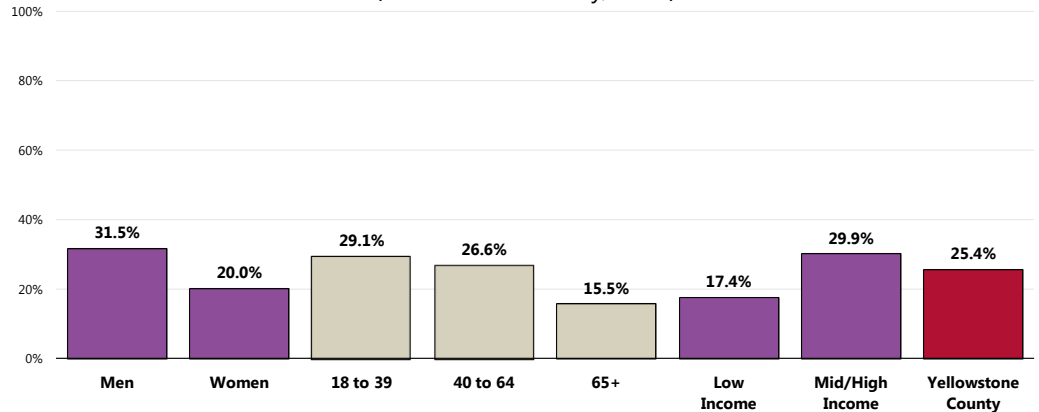


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 161]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
 - Moderate Physical Activity: Takes part in exercise that produces only light sweating or a slight to moderate increase in breathing or heart rate at least 5 times per week for at least 30 minutes per time.

Those less likely to participate in moderate physical activity include:



-  Women.
-  Seniors (65+).
-  Residents in low-income households.

Moderate Physical Activity (Yellowstone County, 2014)

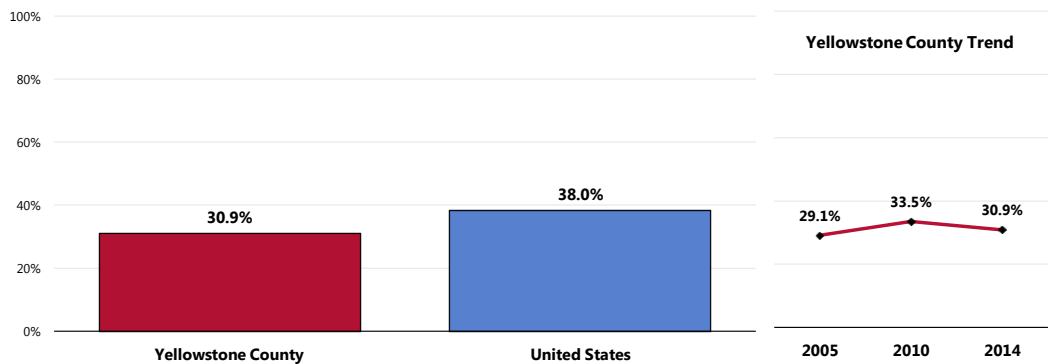


- Sources:
 - 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 161]
- Notes:
 - Asked of all respondents.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 - Moderate physical activity refers to taking 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.

A total of 30.9% participated in vigorous physical activity (3 times a week, 20 minutes at a time).



-  Less favorable than the nationwide figure.
-  Similar to 2005 findings.

Vigorous Physical Activity

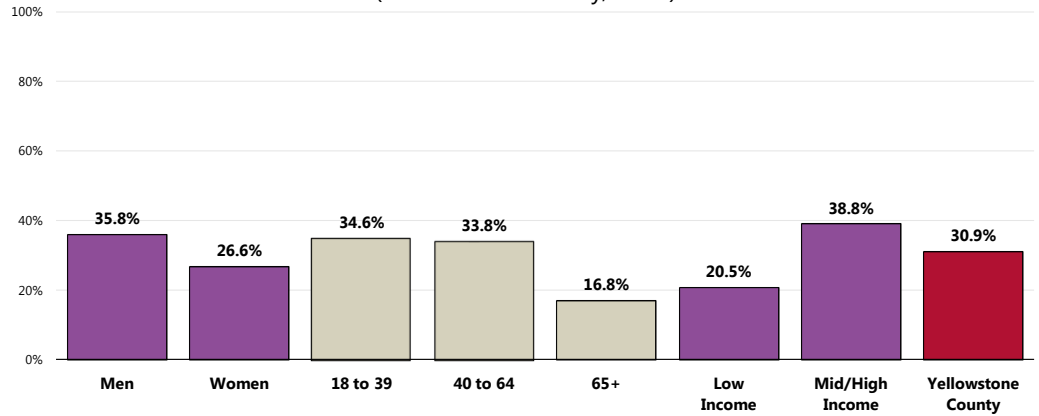


- Sources:
 - PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 162]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
 - Asked of all respondents.
 - Vigorous Physical Activity: Takes part in activities that cause heavy sweating or large increases in breathing or heart rate at least 3 times per week for at least 20 minutes per time.

Those less likely to participate in vigorous physical activity include:

-  Seniors.
-  Lower-income respondents.

Vigorous Physical Activity (Yellowstone County, 2014)



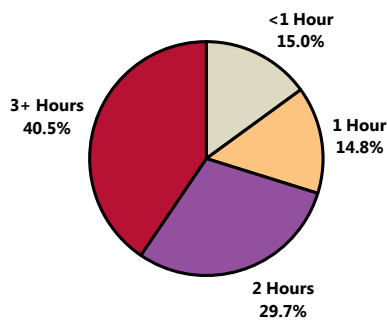
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 162]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 • Vigorous physical activity refers to taking 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.

Television Watching & Other Screen Time

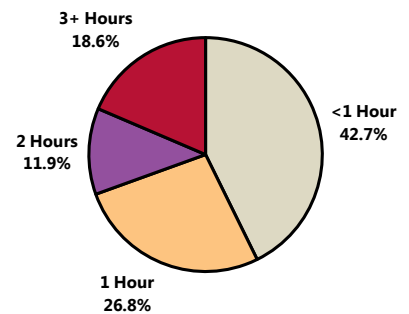
Among Yellowstone County adults, 40.5% are reported to watch three or more hours of television per day; 18.6% are reported to spend three or more hours on other types of screen time for entertainment (video games, Internet, etc.).

Screen Time

(Among Yellowstone County Adults, 2014)




Hours per Day of Television



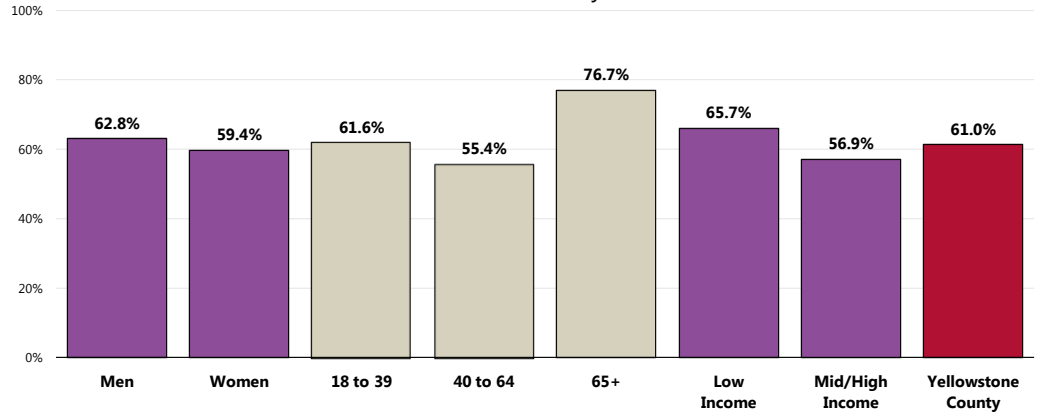
Hours per Day of Other Screen Time
(i.e., video games, computer/Internet entertainment)

Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 100-101]
 Notes: • Asked of all respondents.

When combined, 61.0% of Yellowstone County adults spend three or more hours on screen time (whether television or computer, Internet, video games, etc.) per day.

 Highest in the senior population.



Three or More Hours of Total Screen Time (TV, Computer, Video Games, Etc. for Entertainment) (Yellowstone County, 2014)



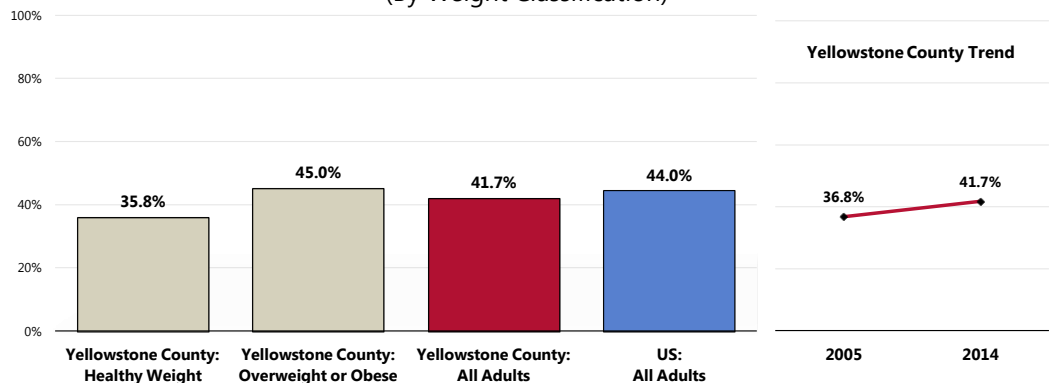
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 194]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 • "Three or more hours" includes reported screen time of 180 minutes or more per day.

Health Advice About Physical Activity & Exercise

A total of 41.7% of Yellowstone County adults report that their physician has asked about or given advice to them about physical activity in the past year.

- Similar to the national average.
-  Statistically similar to previous findings.
-  Note: 45.0% of overweight/obese Yellowstone County respondents say that they have talked with their doctor about physical activity/exercise in the past year.


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




Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 19]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all respondents.

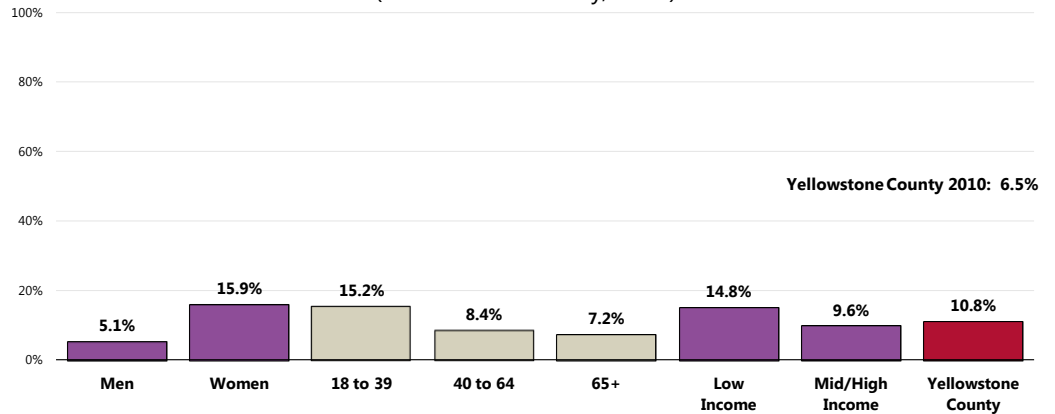
Attempts at Increased Activity

A total of 10.8% of survey respondents report that they wanted to be more physically active in the past year but felt unsafe due to factors such as crime or traffic.

 Marks a statistically significant increase since 2010.

 Highest in women and young adults.

Wanted to be More Physically Active in the Past Year But Felt Unsafe Due to Factors Such as Traffic and/or Crime (Yellowstone County, 2014)



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

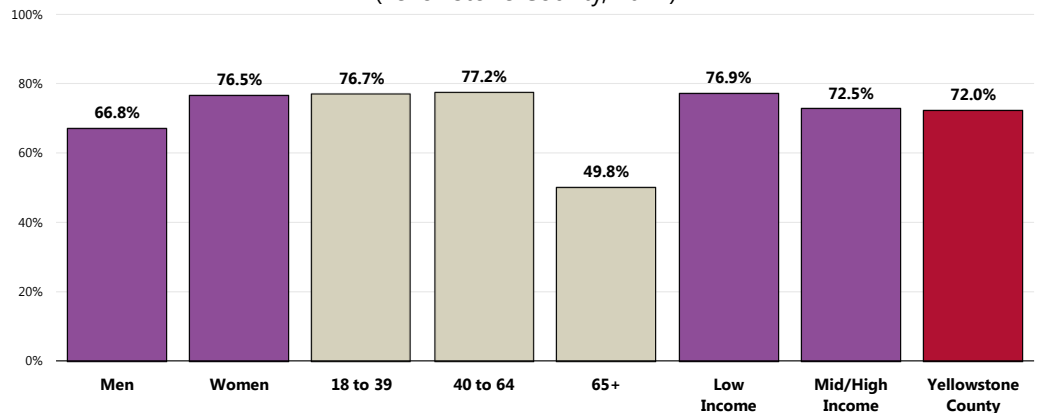
Notes: • Asked of all respondents.

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

Most (72.0%) county residents attempted to increase their physical activity over the past year through everyday behavioral changes like taking the stairs, parking farther from destinations, walking or biking instead of driving, etc.

 The prevalence is lower among Yellowstone County men and seniors.

Made an Attempt in the Past Year to Increase Activity Through Changes to Everyday Behavior (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 98]

Notes: • Asked of all respondents.

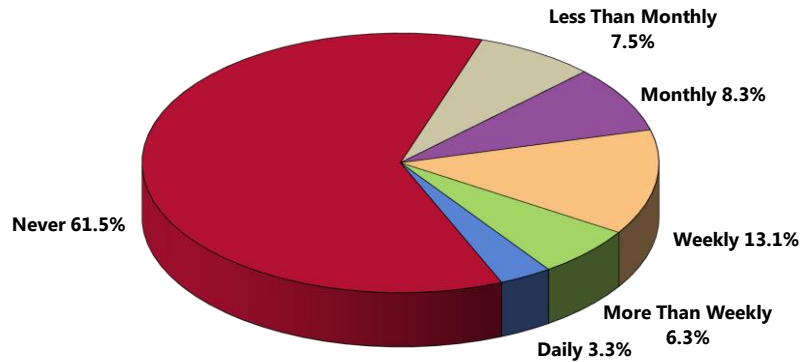
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty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

• In this case, everyday behavior might include taking the stairs instead of the elevator, parking farther from a destination, walking or biking instead of driving, etc.

Of the total sample of respondents, 61.5% report “never” walking, biking, or using public transportation for their daily commute.

- On the other hand, 22.7% of respondents walk, bike, or utilize public transportation for their daily commute at least weekly.

Frequency of Walking, Biking, or Using Public Transportation for Daily Commute (Yellowstone County, 2014)



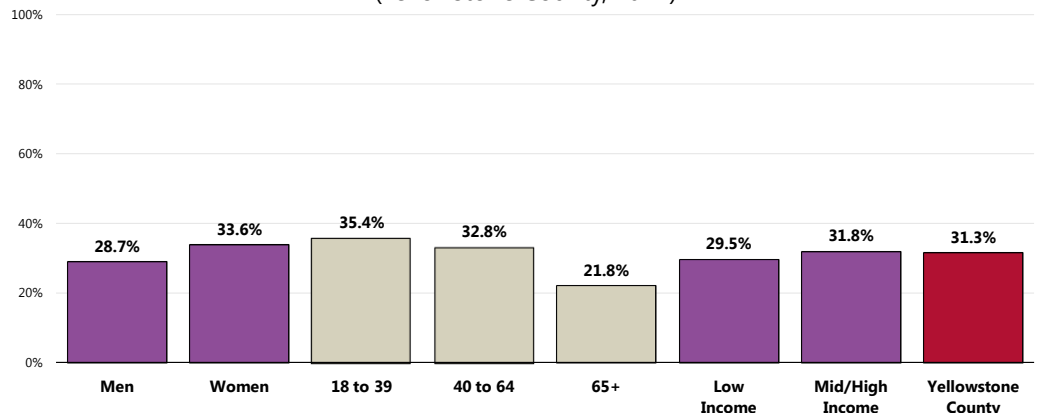
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 99]
Notes: • Asked of all respondents.

Awareness of the 5-2-1-0 Health Message

Just over 3 in 10 (31.3%) Yellowstone County adults have heard of the community-wide health message 5-2-1-0 (meaning 5 servings of fruits and vegetables, 2 hours or less of screen time, 1 hour of physical activity, and zero sugary beverages).

👤 The prevalence is lowest among the county’s senior population.

Awareness of 5-2-1-0 Health Message (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 102]
Notes: • Asked of all respondents.
• Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.
• The 5-2-1-0 health message refers to 5 servings of fruit and vegetables, 2 hours or less of screen time, 1 hour of physical activity, and 0 sugary beverages daily.

Children's Physical Activity

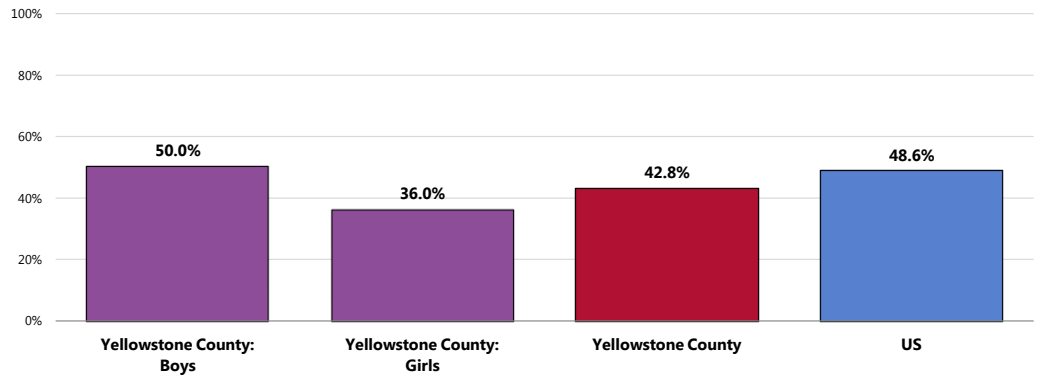
Among Yellowstone County children age 2 to 17, 42.8% are reported to have had 60 minutes of physical activity on each of the seven days preceding the interview (1+ hours per day).

- Comparable to that found nationally.



The difference between boys and girls is not statistically significant.

Child Is Physically Active for One or More Hours per Day (Among Children Ages 2-17)

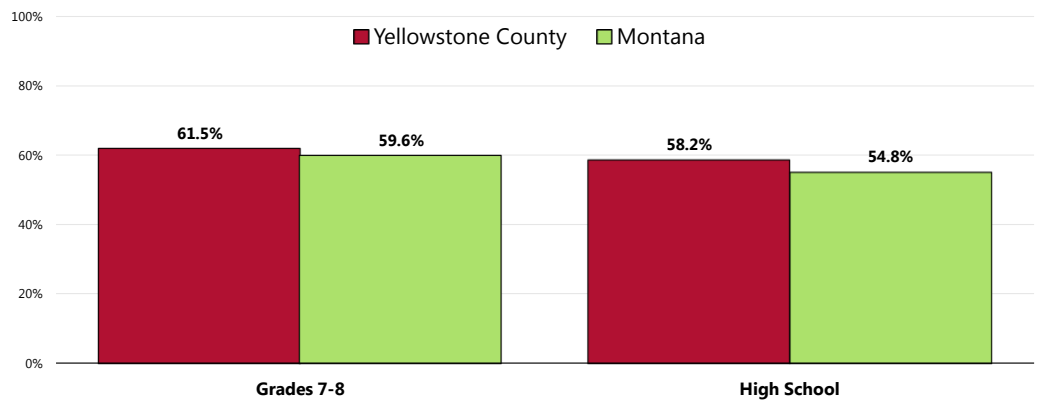


- Sources:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 126]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents with children age 2-17 at home.
 - Includes children reported to have one or more hours of physical activity on each of the seven days preceding the survey.

According to 2013 YRBS data, 61.5% of surveyed 7th and 8th graders were physically active for at least an hour on 5 of the previous 7 days, as were 58.2% of high school students.

- Similar to statewide findings.

Adolescents: Were Physically Active for 60+ Minutes per Day on Five or More of the Past Seven Days (Yellowstone County Students, 2013)



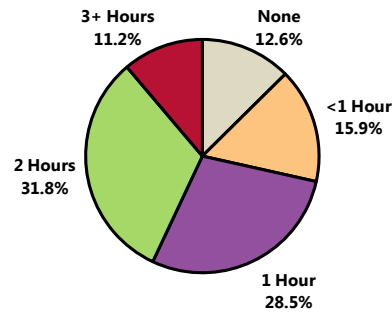
- Sources:
- 2013 Montana Youth Risk Behavior Survey (YRBS), Montana Office of Public Instruction.

Television Watching & Other Screen Time

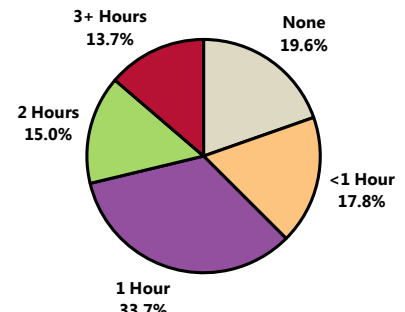
Among children aged 5 through 17, 11.2% are reported to watch three or more hours of television per day; 13.7% are reported to spend three or more hours on other types of screen time for entertainment (video games, Internet, etc.).

Children's Screen Time

(Among Parent Respondents on Behalf Children Ages 5-17; Yellowstone County, 2014)



Hours per Day of Television



Hours per Day of Other Screen Time
(i.e., video games, computer/Internet entertainment)

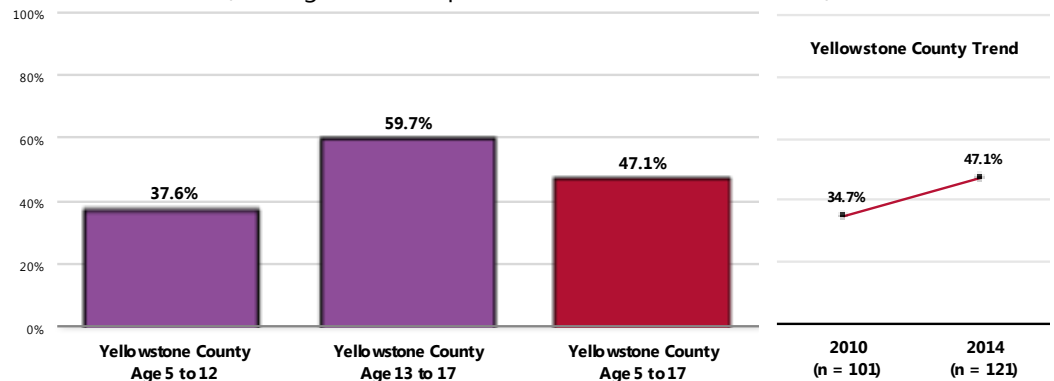
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 130-131, 163-164]
Notes: • Asked of respondents with a child aged 5 to 17 in the household.

When combined, 47.1% of Yellowstone County children aged 5 to 17 spend three or more hours on screen time (whether television or computer, Internet, video games, etc.) per day.

👤 Higher among teens in the county.

📊 Statistically similar to previous findings (*it is important to keep in mind the small sample sizes which these percentages represent when making trend comparisons over time*).

Children With Three or More Hours per School Day of Total Screen Time [TV, Computer, Video Games, Etc. for Entertainment] (Among Parent Respondents on Behalf Children 5-17)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 165]
Notes: • Asked of all respondents with children 5-17 at home.
• For this issue, respondents with children who are not in school were asked about "weekdays," while parents of children in school were asked about typical "school days."
• "Three or more hours" includes reported screen time of 180 minutes or more per day.

Weight Status

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

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

– Healthy People 2020 (www.healthypeople.gov)

Body Mass Index (BMI), which describes relative weight for height, is significantly correlated with total body fat content. The BMI should be used to assess overweight and obesity and to monitor changes in body weight. In addition, measurements of body weight alone can be used to determine efficacy of weight loss therapy. BMI is calculated as weight (kg)/height squared (m^2). To estimate BMI using pounds and inches, use: [weight (pounds)/height squared (inches²)] x 703.

In this report, overweight is defined as a BMI of 25.0 to 29.9 kg/m^2 and obesity as a BMI $\geq 30 kg/m^2$. The rationale behind these definitions is based on epidemiological data that show increases in mortality with BMIs above 25 kg/m^2 . The increase in mortality, however, tends to be modest until a BMI of 30 kg/m^2 is reached. For persons with a BMI $\geq 30 kg/m^2$, mortality rates from all causes, and especially from cardiovascular disease, are generally increased by 50 to 100 percent above that of persons with BMIs in the range of 20 to 25 kg/m^2 .

– Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

| Classification of Overweight and Obesity by BMI | BMI (kg/m^2) |
|---|------------------|
| Underweight | <18.5 |
| Normal | 18.5 – 24.9 |
| Overweight | 25.0 – 29.9 |
| Obese | ≥ 30.0 |

Source: Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. National Institutes of Health. National Heart, Lung, and Blood Institute in Cooperation With The National Institute of Diabetes and Digestive and Kidney Diseases. September 1998.

Adult Weight Status

Healthy Weight

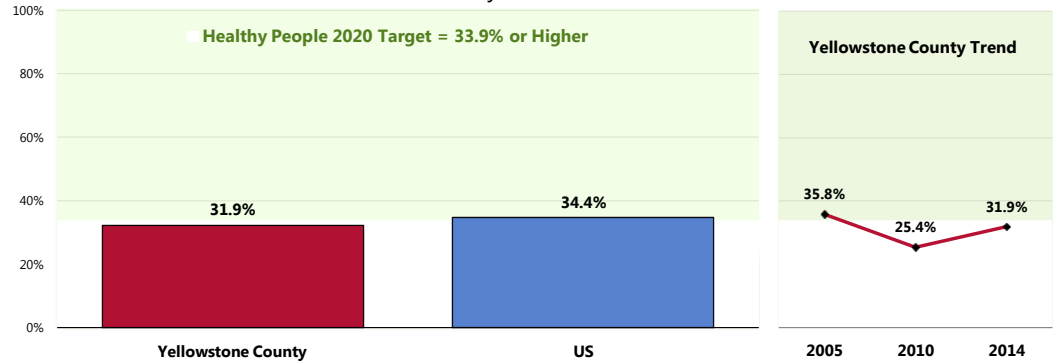
“Healthy weight” means neither underweight, nor overweight (BMI = 18.5-24.9).

Based on self-reported heights and weights, 31.9% of Yellowstone County adults are at a healthy weight.

- Similar to national findings.
- Similar to the Healthy People 2020 target (33.9% or higher).
- ☒ Statistically similar to baseline 2005 findings but increasing since 2010.

Healthy Weight

(Percent of Adults With a Body Mass Index Between 18.5 and 24.9)



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 167]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-8]

 Notes:

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

Overweight Status

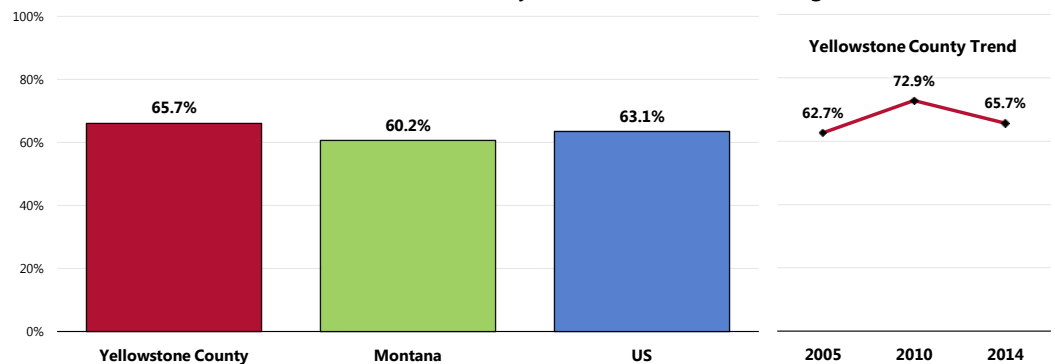
Here, "overweight" includes those respondents with a BMI value ≥ 25 .

Nearly 2 in 3 Yellowstone County adults (65.7%) are overweight.

- Worse than the Montana prevalence.
- Comparable to the US overweight prevalence.
- ☒ Statistically similar to 2005 findings (but decreasing since 2010).

Prevalence of Total Overweight

(Percent of Adults With a Body Mass Index of 25.0 or Higher)



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 167]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.

 Notes:

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

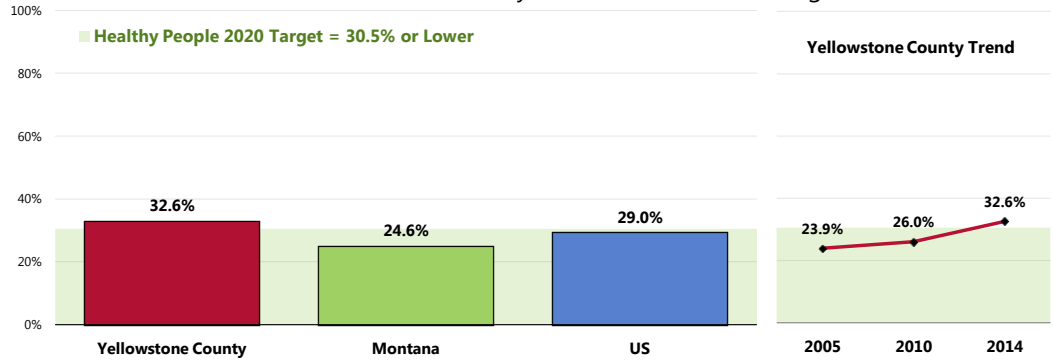
“Obese” (also included in overweight prevalence discussed previously) includes respondents with a BMI value ≥ 30 .

Further, 32.6% of Yellowstone County adults are obese.

- Less favorable than Montana findings.
- Comparable to US findings.
- Comparable to the Healthy People 2020 target (30.6% or lower).
- ▣ Denotes a statistically significant increase in obesity since 2005.

Prevalence of Obesity

(Percent of Adults With a Body Mass Index of 30.0 or Higher)



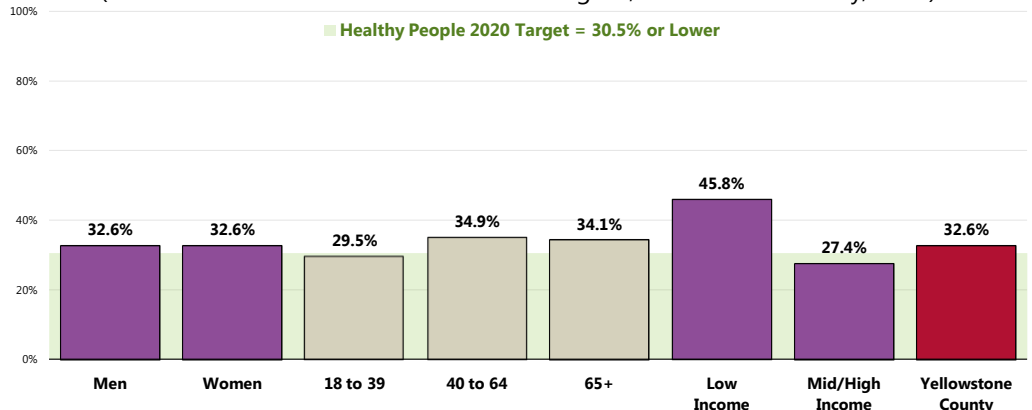
- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 167]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-9]
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 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.

Obesity is significantly more prevalent among:

- ▣ Respondents with lower incomes.

Prevalence of Obesity

(Percent of Adults With a BMI of 30.0 or Higher; Yellowstone County, 2014)



- Sources:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 167]
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-9]
- Notes:
- Based on reported heights and weights, asked of all respondents.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 - The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

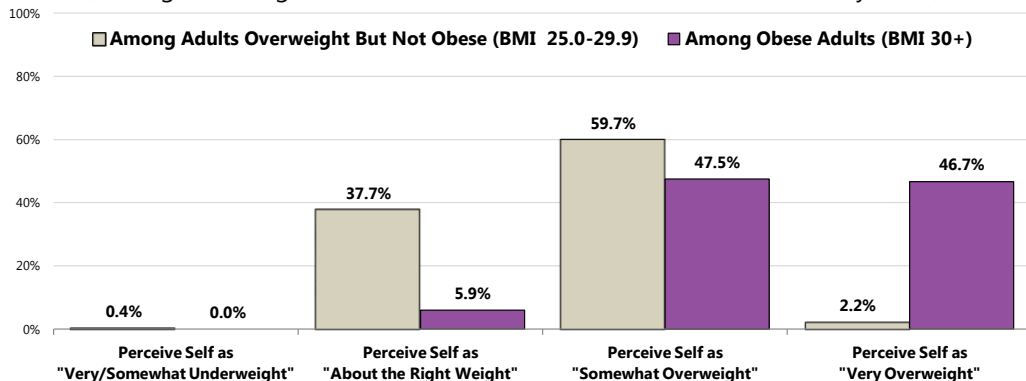
Actual vs. Perceived Body Weight

A total of 37.7% of obese adults and 5.9% of overweight (but not obese) adults feel that their current weight is “about right.”

- 59.7% of overweight (but not obese) adults see themselves as “somewhat overweight.”
- 46.7% of obese adults see themselves as “very overweight.”

Actual vs. Perceived Weight Status

(Among Overweight/Obese Adults Based on BMI; Yellowstone County, 2014)



Sources: ● 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 107]
Notes: ● BMI is based on reported heights and weights, asked of all respondents.
● The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.

Relationship of Overweight With Other Health Issues

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

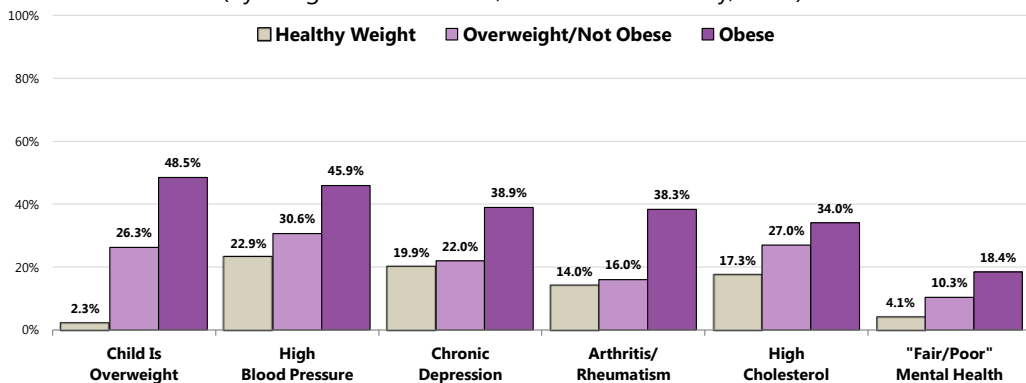
Among these are:

- Hypertension (high blood pressure).
- Chronic depression.
- Arthritis/rheumatism.
- High cholesterol.
- “Fair” or “poor” mental health.

Overweight/obese residents are also more likely to have overweight children.

Relationship of Overweight With Other Health Issues

(By Weight Classification; Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 28,108,109,138,139,171]
Notes: • Based on reported heights and weights, asked of all respondents.

Weight Management

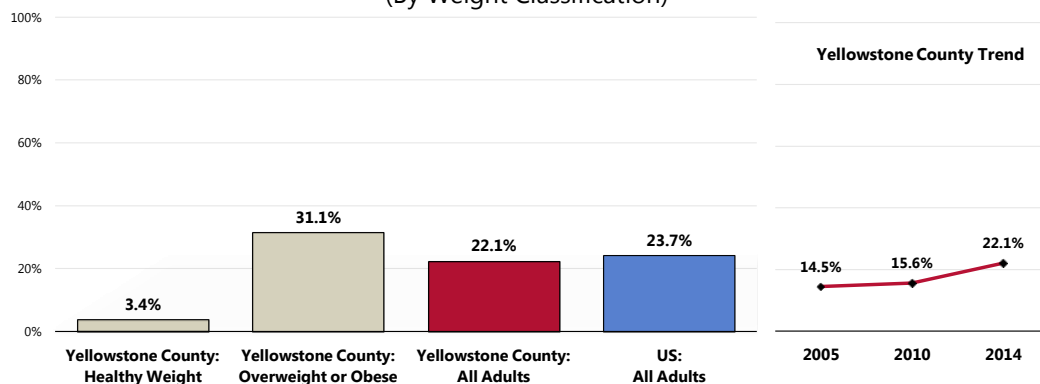
Health Advice

A total of 22.1% of adults have been given advice about their weight by a doctor, nurse or other health professional in the past year.

- Statistically similar to the national findings.
- ▣ Marks a significant increase over time in Yellowstone County.
- 👥 Note that 31.1% of overweight/obese adults have been given advice about their weight by a health professional in the past year (while almost 7 in 10 have not).
 - This is similar to the Healthy People 2020 target of 31.8% or higher.
 - Among obese adults, the increase over time is not significant.

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. [Items 106, 169-170]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Weight Control

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

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

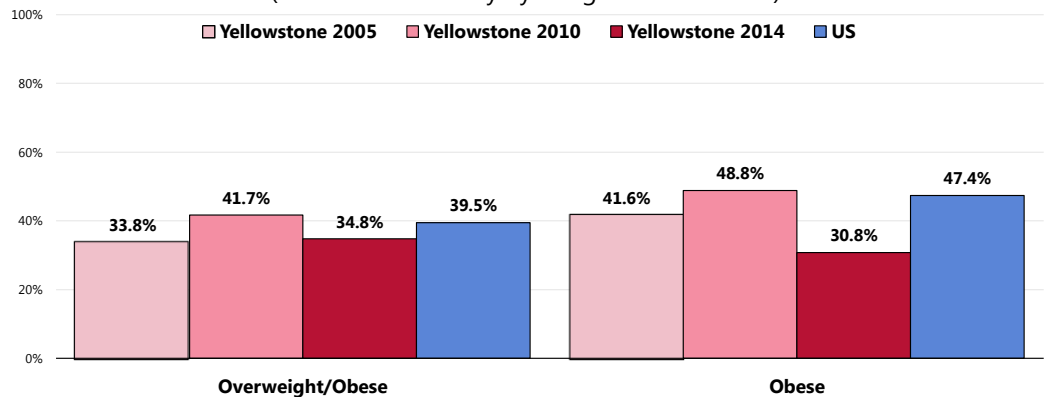
All Americans should avoid unhealthy weight gain, and those whose weight is too high may also need to lose weight.

– Healthy People 2020 (www.healthypeople.gov)

A total of 34.8% 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.
- 📊 Statistically similar to that reported among overweight adults in 2005 and 2010.
- 👥 Note: 30.8% of obese Yellowstone County adults report that they are trying to lose weight through a combination of diet and exercise, lower than the national prevalence and marking a significant decrease from 2010 survey results (but similar to 2005 findings).

Trying to Lose Weight by Both Modifying Diet and Increasing Physical Activity (Yellowstone County By Weight Classification)



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 168]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● 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 \geq 5th and <85th percentile
- Overweight \geq 85th and <95th percentile
- Obese \geq 95th percentile

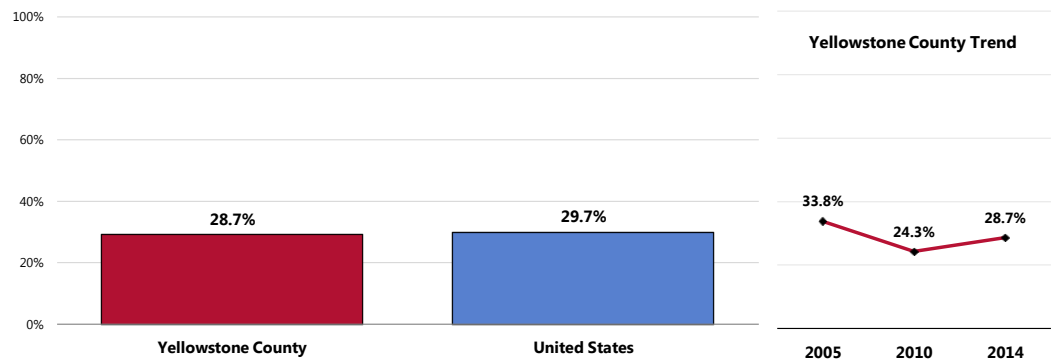
– Centers for Disease Control and Prevention.

Based on the heights/weights reported by surveyed parents, 28.7% of Yellowstone County children age 6 to 17 are overweight or obese (\geq 85th percentile).

- Comparable to that found nationally.
- 📊 Statistically similar to 2005 findings.

Child Total Overweight Prevalence

(Children 6-17 Who Are Overweight/Obese; BMI in the 85th Percentile or Higher)



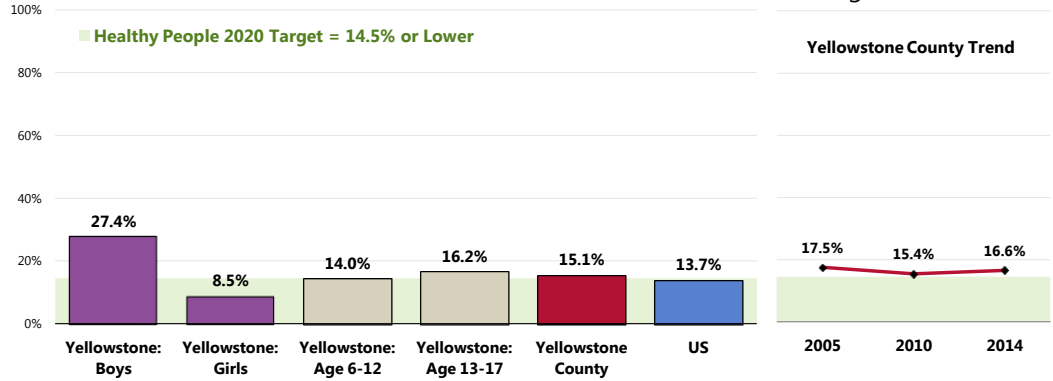
Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 171]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: ● Asked of all respondents with children age 6-17 at home.
● Overweight among children is determined by children's Body Mass Index status at or above the 85th percentile of US growth charts by gender and age.

Further, 15.1% of Yellowstone County children age 6 to 17 are obese (\geq 95th percentile).

- Similar to the national percentage.
- Similar to the Healthy People 2020 target (14.5% or lower for children age 2-19).
- 📊 Statistically similar to 2005 findings.
- 👤 Significantly higher among boys than among girls; similar by age.

Child Obesity Prevalence (Children 6-17 Who Are Obese; BMI in the 95th Percentile or Higher)

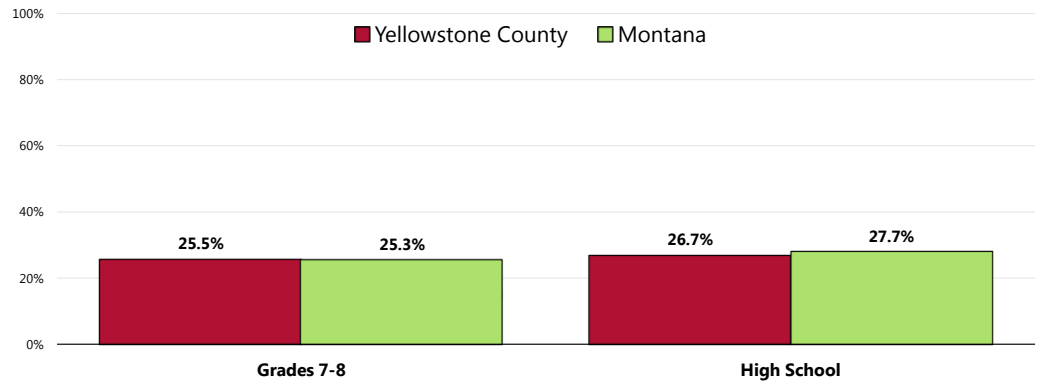


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 171]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective NWS-10.4]
 Notes: • Asked of all respondents with children age 6-17 at home.
 • Obesity among children is determined by children's Body Mass Index status equal to or above the 95th percentile of US growth charts by gender and age.

According to 2013 Montana YRBS data, 25.5% of surveyed 7th and 8th graders and 26.7% of high school students consider themselves to be slightly or very overweight.

- Similar to statewide findings.

Adolescents: Describe Themselves as Slightly or Very Overweight (Yellowstone County Students, 2013)



Sources: • 2013 Montana Youth Risk Behavior Survey (YRBS). Montana Office of Public Instruction.

Substance Abuse

In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95% of people with substance use problems are considered unaware of their problem. Of those who recognize their problem, 273,000 have made an unsuccessful effort to obtain treatment. These estimates highlight the importance of increasing prevention efforts and improving access to treatment for substance abuse and co-occurring disorders.

Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. These problems include:

- Teenage pregnancy
- Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)
- Other sexually transmitted diseases (STDs)
- Domestic violence
- Child abuse
- Motor vehicle crashes
- Physical fights
- Crime
- Homicide
- Suicide

The field has made progress in addressing substance abuse, particularly among youth. According to data from the national Institute of Drug Abuse (NIDA) Monitoring the Future (MTF) survey, which is an ongoing study of the behaviors and values of America's youth between 2004 and 2009, a drop in drug use (including amphetamines, methamphetamine, cocaine, hallucinogens, and LSD) was reported among students in 8th, 10th, and 12th grades. Note that, despite a decreasing trend in marijuana use which began in the mid-1990s, the trend has stalled in recent years among these youth. Use of alcohol among students in these three grades also decreased during this time.

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Social attitudes and political and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues. In addition to the considerable health implications, substance abuse has been a flash-point in the criminal justice system and a major focal point in discussions about social values: people argue over whether substance abuse is a disease with genetic and biological foundations or a matter of personal choice.

Advances in research have led to the development of evidence-based strategies to effectively address substance abuse. Improvements in brain-imaging technologies and the development of medications that assist in treatment have gradually shifted the research community's perspective on substance abuse. There is now a deeper understanding of substance abuse as a disorder that develops in adolescence and, for some individuals, will develop into a chronic illness that will require lifelong monitoring and care.

Improved evaluation of community-level prevention has enhanced researchers' understanding of environmental and social factors that contribute to the initiation and abuse of alcohol and illicit drugs, leading to a more sophisticated understanding of how to implement evidence-based strategies in specific social and cultural settings.

A stronger emphasis on evaluation has expanded evidence-based practices for drug and alcohol treatment. Improvements have focused on the development of better clinical interventions through research and increasing the skills and qualifications of treatment providers.

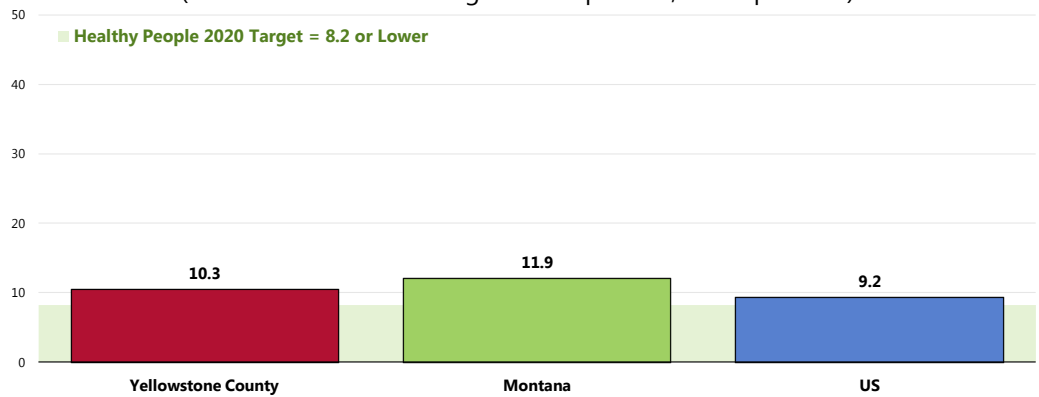
– Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Cirrhosis/Liver Disease Deaths

Between 2008 and 2010, there was an annual average age-adjusted cirrhosis/liver disease mortality rate of 10.3 deaths per 100,000 population in Yellowstone County.

- Lower than the statewide rate.
- Higher than the national rate.
- Fails to satisfy the Healthy People 2020 target (8.2 or lower).

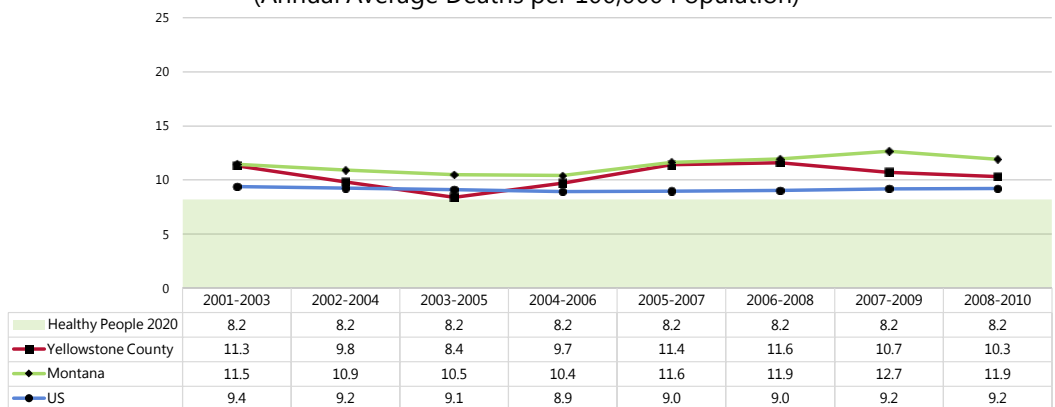
Cirrhosis/Liver Disease: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)



- 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 2013.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-11]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 - Local, state and national data are simple three-year averages.

☒ The county's mortality rate has fluctuated over the past decade.

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 2013.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-11]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 - State and national data are simple three-year averages.

High-Risk Alcohol Use

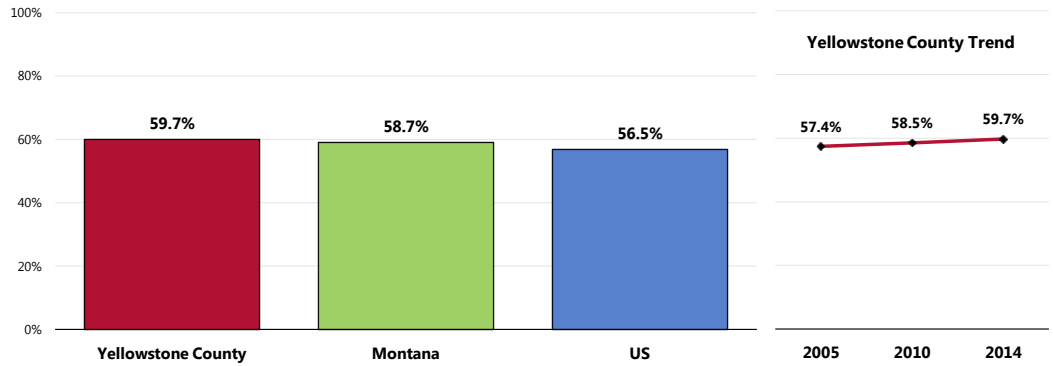
Current Drinking

“Current drinkers” include survey respondents who had at least one drink of alcohol in the month preceding the interview. For the purposes of this study, a “drink” is considered one can or bottle of beer, one glass of wine, one can or bottle of wine cooler, one cocktail, or one shot of liquor.

A total of 59.7% of area adults had at least one drink of alcohol in the past month (current drinkers).

- Similar to the statewide proportion.
- Similar to the national proportion.
- 📊 Statistically similar to 2005 findings.

Current Drinkers

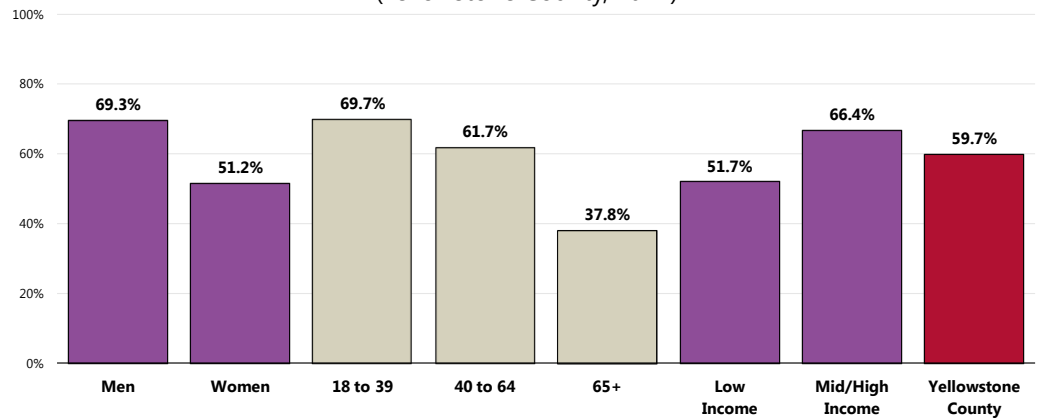


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 176]
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.
 • Current drinkers had at least one alcoholic drink in the past month.

👤 Current drinking is more prevalent among men, adults under 65 (negative association with age), and residents in households with higher incomes.

Current Drinkers (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 176]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 • Current drinkers had at least one alcoholic drink in the past month.

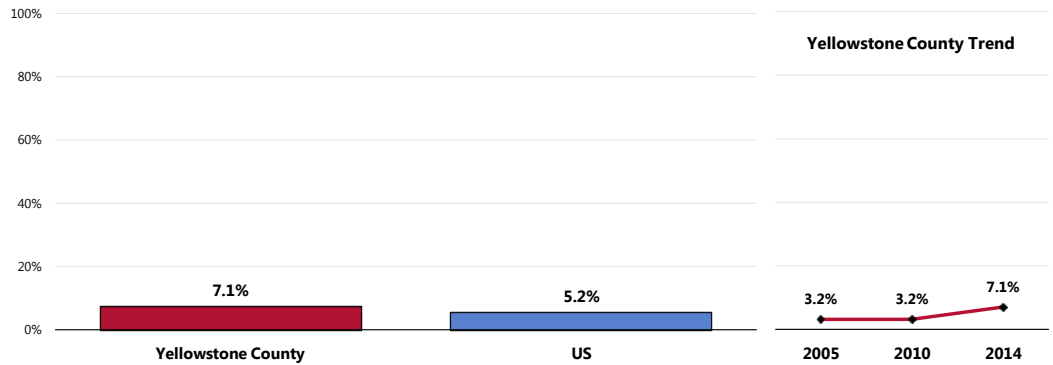
Chronic Drinking

“Chronic drinkers” include survey respondents reporting 60 or more drinks of alcohol in the month preceding the interview.

A total of 7.1% of area adults averaged two or more drinks of alcohol per day in the past month (chronic drinkers).

- Comparable to the national proportion.
- ▣ Denotes a significant increase from 2005 (and 2010) survey findings.

Chronic Drinkers



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 177]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.

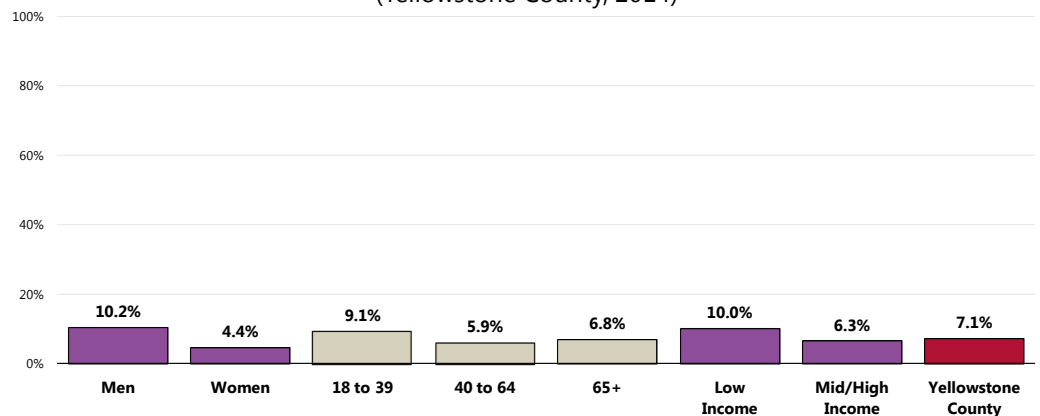
Notes:

- Asked of all respondents.
- Chronic drinkers are defined as having 60+ alcoholic drinks in the past month.

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

☿ Chronic drinking is more prevalent among men in Yellowstone County.

Chronic Drinkers (Yellowstone County, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 177]

Notes:

- Asked of all respondents.
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
- Chronic drinkers are defined as those having 60+ alcoholic drinks in the past month.

Binge Drinking

"Binge drinkers" include:

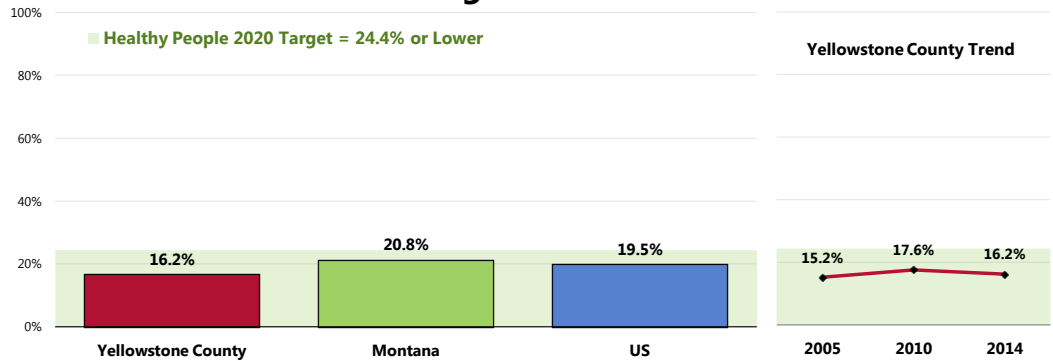
1) MEN who report drinking 5 or more alcoholic drinks on any single occasion during the past month; and

2) WOMEN who report drinking 4 or more alcoholic drinks on any single occasion during the past month.

A total of 16.2% of Yellowstone County adults are binge drinkers.

- More favorable than Montana findings.
- Similar to national findings.
- Satisfies the Healthy People 2020 target (24.3% or lower).
- ☒ Similar to the 2005 percentage (note, however, that the previous definition for binge drinking was five or more drinks, regardless of gender).

Binge Drinkers

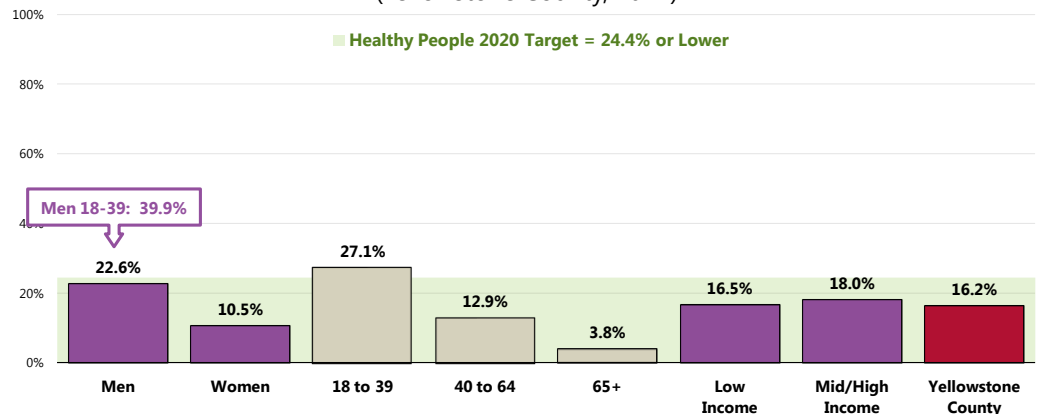


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 178]
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2011 Montana data.
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-14.3]
- Notes:
- Asked of all respondents.
 - Binge drinkers are defined as men having 5+ alcoholic drinks on any one occasion or women consuming 4+ drinks on any one occasion.

Binge drinking is more prevalent among:

- ☿ Men (especially those under age 40).
- ☿ Young adults.

Binge Drinkers (Yellowstone County, 2014)



- Sources:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 178-179]
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-14.3]
- Notes:
- Asked of all respondents.
 - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 - Binge drinkers are defined as men having 5+ alcoholic drinks on any one occasion or women consuming 4+ drinks on any one occasion

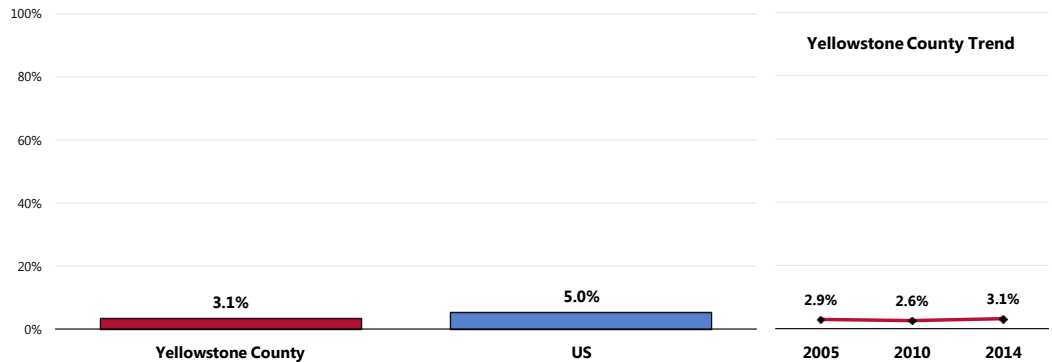
Drinking & Driving

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 3.1% 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.
- ☒ The 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 65]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.

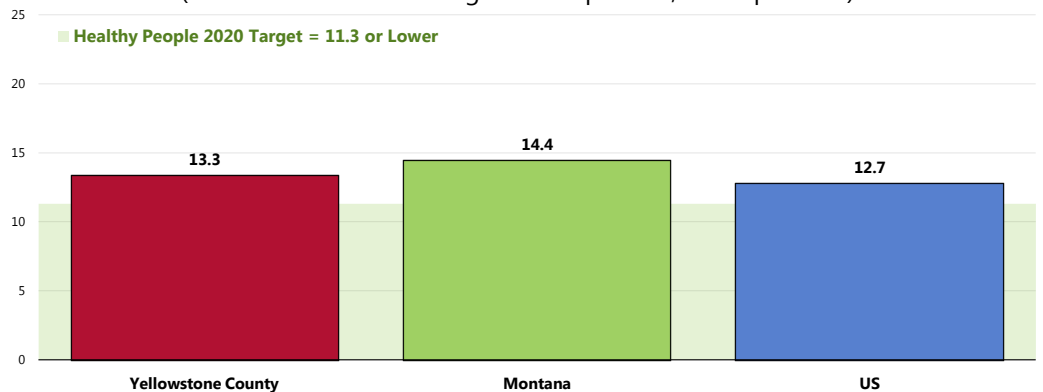
Notes: • Asked of all respondents.

Age-Adjusted Drug-Induced Deaths

Between 2008 and 2010, there was an annual average age-adjusted drug-induced mortality rate of 13.3 deaths per 100,000 population in Yellowstone County.


- Better than the statewide rate.
- Similar to the national rate.
- Fails to satisfy the Healthy People 2020 target (11.3 or lower).

Drug-Induced Deaths: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)

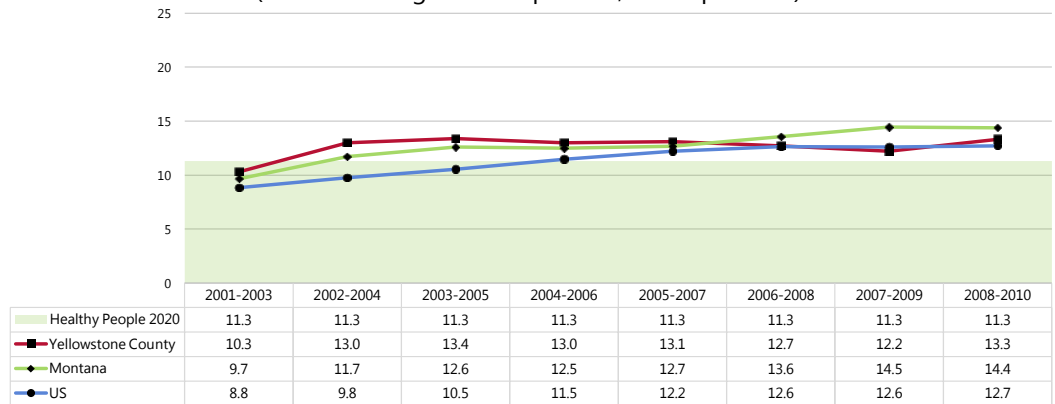


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.

Notes: • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-12]
 • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 • Local, state and national data are simple three-year averages.

 The mortality rate has overall increased over the past decade in Yellowstone County.

Drug-Induced Deaths: 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 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective SA-12]

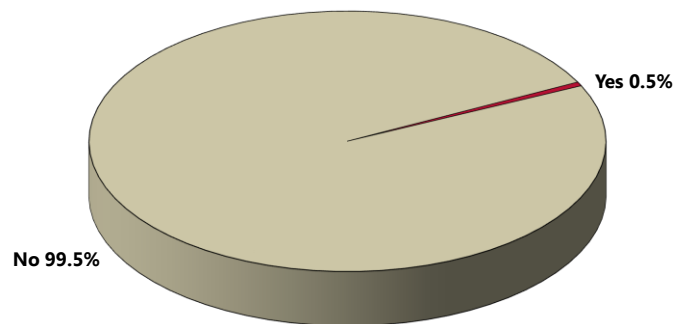
Notes:

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

Prescription Drug Misuse

Just 0.5% of survey respondents acknowledge using someone else's prescription medication in the past month.

Use of Another Person's Prescription Drugs in the Past Month (Yellowstone County, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 66]

Notes:

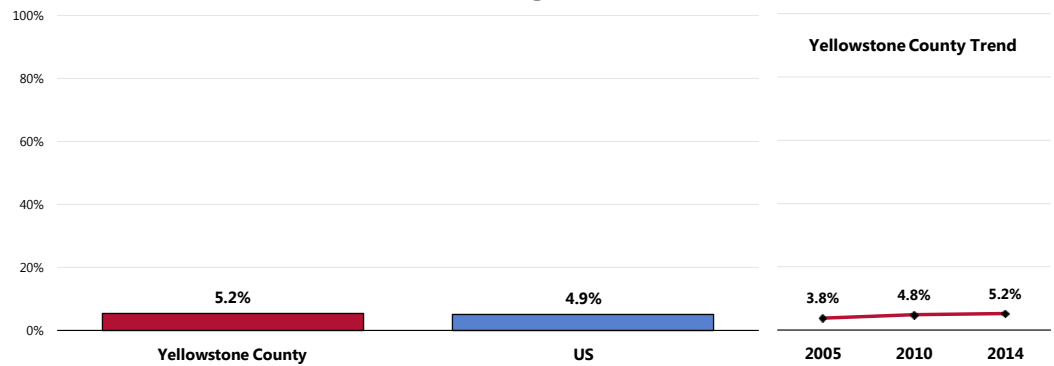
- Asked of all respondents.

Alcohol & Drug Treatment

A total of 5.2% 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 national findings.
- ☒ Statistically similar to previous findings.

Have Ever Sought Professional Help for an Alcohol/Drug-Related Problem



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 67]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. Each year, approximately 443,000 Americans die from tobacco-related illnesses. For every person who dies from tobacco use, 20 more people suffer with at least one serious tobacco-related illness. In addition, tobacco use costs the US \$193 billion annually in direct medical expenses and lost productivity.

Scientific knowledge about the health effects of tobacco use has increased greatly since the first Surgeon General's report on tobacco was released in 1964.

Tobacco use causes:

- Cancer
- Heart disease
- Lung diseases (including emphysema, bronchitis, and chronic airway obstruction)
- Premature birth, low birth weight, stillbirth, and infant death

There is no risk-free level of exposure to secondhand smoke. Secondhand smoke causes heart disease and lung cancer in adults and a number of health problems in infants and children, including: severe asthma attacks; respiratory infections; ear infections; and sudden infant death syndrome (SIDS).

Smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth and gums, periodontitis, and tooth loss. Cigar use causes cancer of the larynx, mouth, esophagus, and lung.

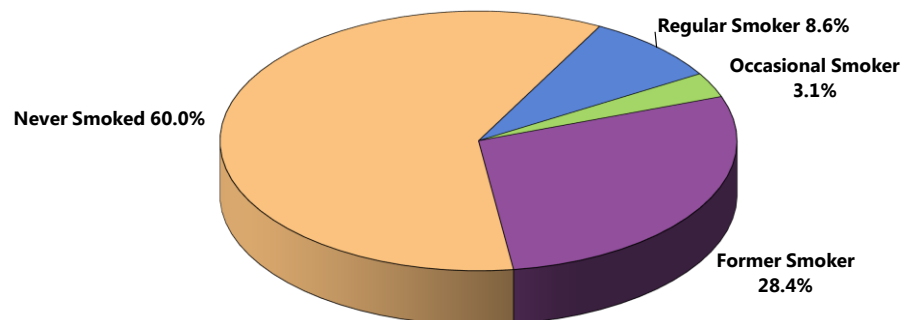
– Healthy People 2020 (www.healthypeople.gov)

Cigarette Smoking

Cigarette Smoking Prevalence

A total of 11.7% of Yellowstone County adults currently smoke cigarettes, either regularly (8.6% every day) or occasionally (3.1% on some days).

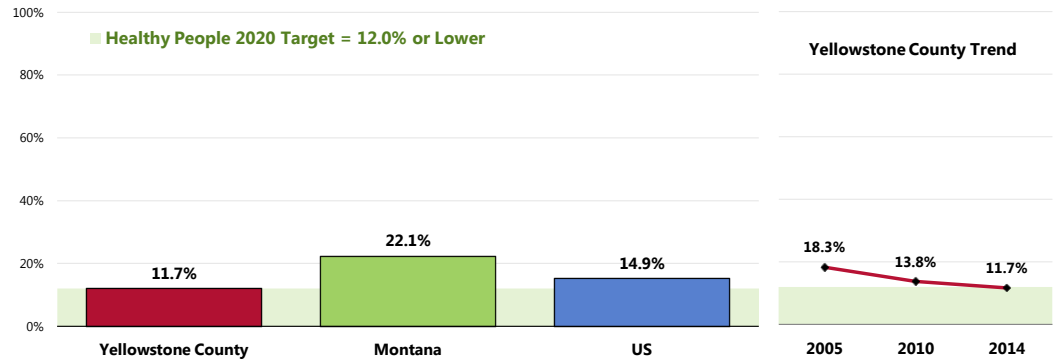
Cigarette Smoking Prevalence
(Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 172]
Notes: • Asked of all respondents.

- More favorable than statewide findings.
- Similar to national findings.
- Similar to the Healthy People 2020 target (12% or lower).
- ☒ The current smoking percentage has decreased significantly since 2005.

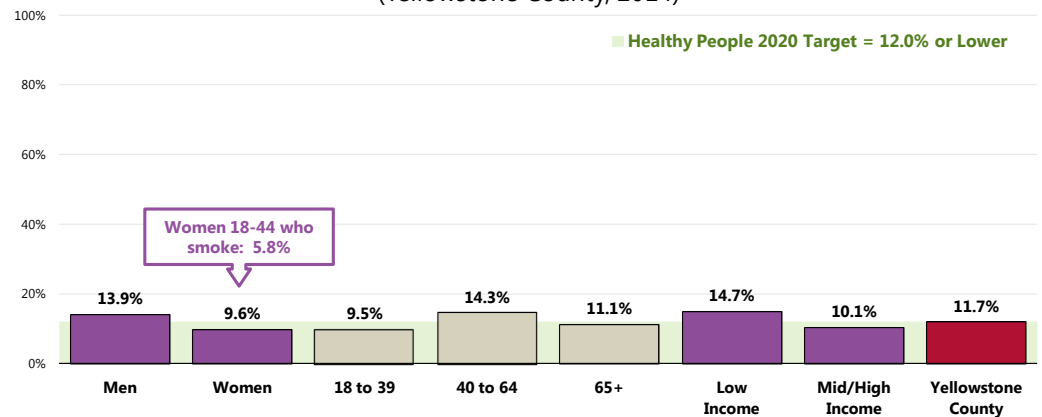
Current Smokers



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 172]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.1]
- Notes:
- Asked of all respondents.
 - Includes regular and occasional smokers (those who smoke cigarettes everyday or on some days).

- ☺ Cigarette smoking does not vary significantly by demographic characteristics.
- ☺ Note that 5.8% 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, 2014)



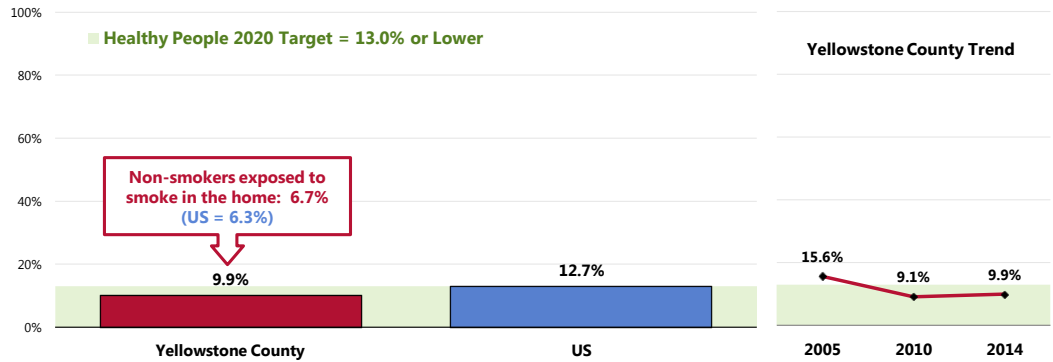
- Sources:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 172-173]
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.1]
- Notes:
- Asked of all respondents.
 - Hispanics can be of any race. Other race categories are non-Hispanic categorizations (e.g., "White" reflects non-Hispanic White respondents).
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 - Includes regular and occasion smokers (everyday and some days).

Environmental Tobacco Smoke

A total of 9.9% of Yellowstone County adults (including smokers and non-smokers) report that a member of their household has smoked cigarettes in the home an average of 4+ times per week over the past month.

- Statistically similar to national findings.
- 📉 Marks a statistically significant decrease from 2005 survey findings.
- 👤 Note that 6.7% of Yellowstone County non-smokers are exposed to cigarette smoke at home.

Member of Household Smokes at Home

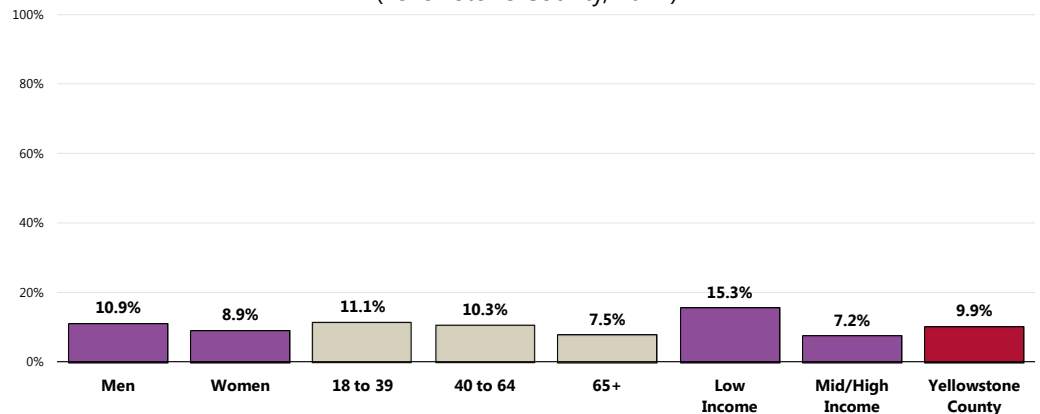


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 58, 174]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.
 • "Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month.

- 👤 No significant differences by demographic characteristics.

Member of Household Smokes At Home (Yellowstone County, 2014)



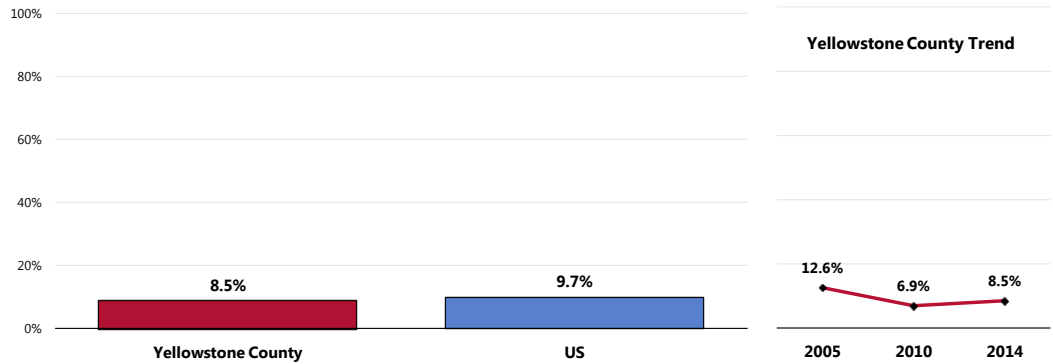
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 58]

Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 • "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, 8.5% have someone who smokes cigarettes in the home.

- Comparable to national findings.
- ☒ Statistically similar to previous findings.

Percentage of Households With Children In Which Someone Smokes in the Home



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 175]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.
• "Smokes at home" refers to someone smoking cigarettes, cigars, or a pipe in the home an average of four or more times per week in the past month.

Smoking Cessation

Preventing tobacco use and helping tobacco users quit can improve the health and quality of life for Americans of all ages. People who stop smoking greatly reduce their risk of disease and premature death. Benefits are greater for people who stop at earlier ages, but quitting tobacco use is beneficial at any age.

Many factors influence tobacco use, disease, and mortality. Risk factors include race/ethnicity, age, education, and socioeconomic status. Significant disparities in tobacco use exist geographically; such disparities typically result from differences among states in smoke-free protections, tobacco prices, and program funding for tobacco prevention.

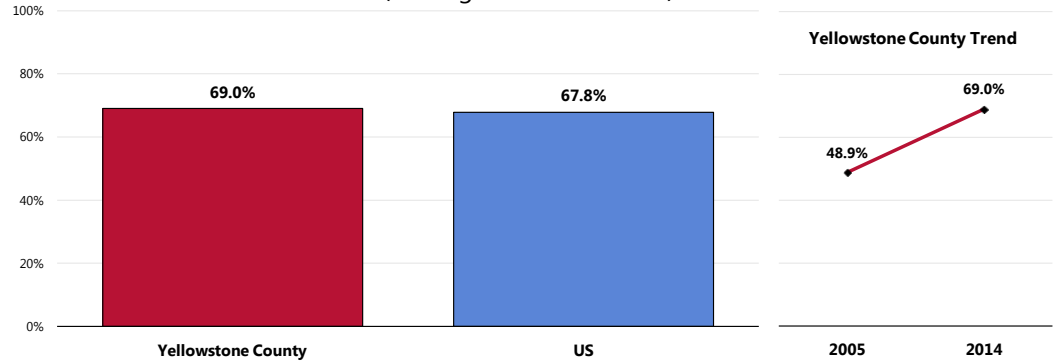
- Healthy People 2020 (www.healthypeople.gov)

Health Advice About Smoking Cessation

A total of 69.0% of smokers say that a doctor, nurse or other health professional has recommended in the past year that they quit smoking.

- Comparable to the national percentage.
- ☒ Denotes a significant increase since 2005.

Advised by a Healthcare Professional in the Past Year to Quit Smoking (Among Current Smokers)



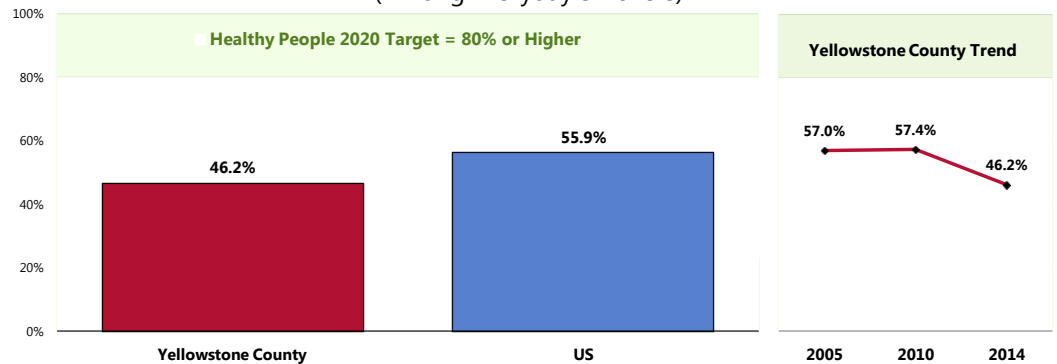
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 61]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all current smokers.

Smoking Cessation Attempts

Just less than one-half (46.2%) of regular smokers went without smoking for one day or longer in the past year because they were trying to quit smoking.

- Statistically similar to the national percentage.
- Fails to satisfy the Healthy People 2020 target (80% or higher).
- ☒ The decrease from previous survey findings is not statistically significant.

Have Stopped Smoking for One Day or Longer in the Past Year in an Attempt to Quit Smoking (Among Everyday Smokers)



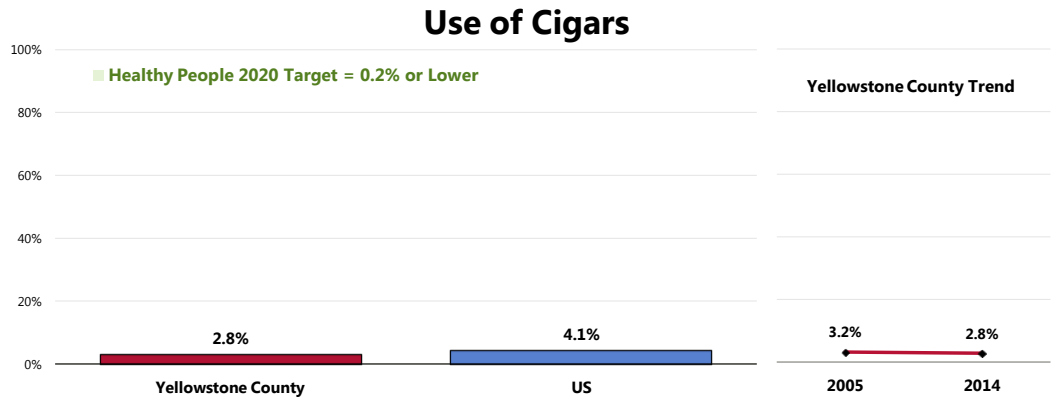
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 57]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-4.1]
 Notes: • Asked of respondents who smoke cigarettes every day.

Other Tobacco Use

Cigars

A total of 2.8% of Yellowstone County adults use cigars every day or on some days.

- Similar to the national percentage.
- Fails to satisfy the Healthy People 2020 target (0.2% or lower).
- ☒ Statistically similar to 2005 findings.



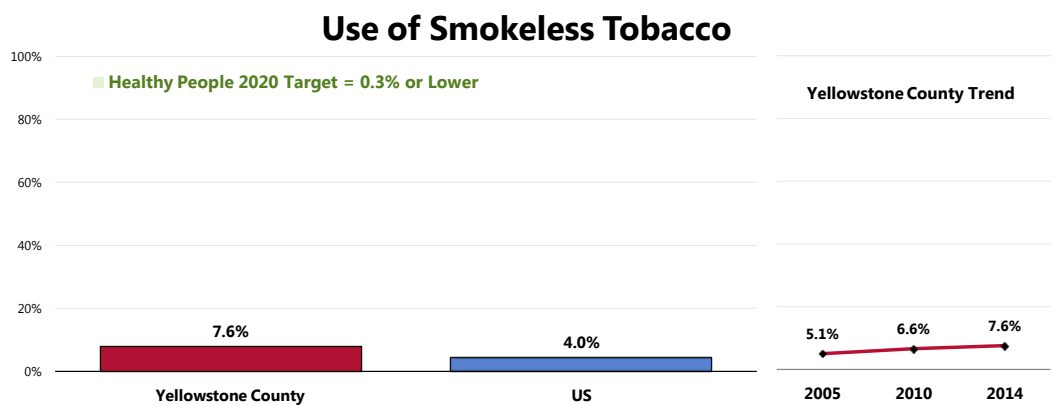
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 60]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.3]
 Notes: • Asked of all respondents.

Smokeless Tobacco

A total of 7.6% of Yellowstone County adults use some type of smokeless tobacco every day or on some days.

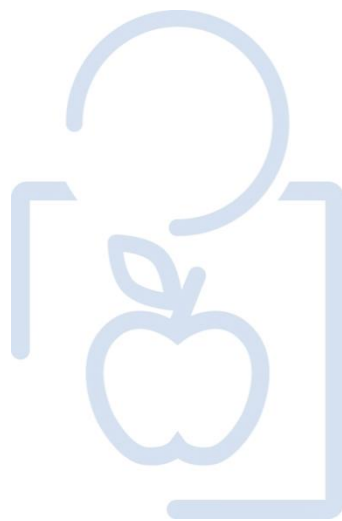
- Less favorable than the national percentage.
- Fails to satisfy the Healthy People 2020 target (0.3% or lower).
- ☒ Statistically similar to previous findings.

Examples of smokeless tobacco include chewing tobacco, snuff, or "snus."



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 59]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective TU-1.2]
 Notes: • Asked of all respondents.
 • Smokeless tobacco includes chewing tobacco or snuff.

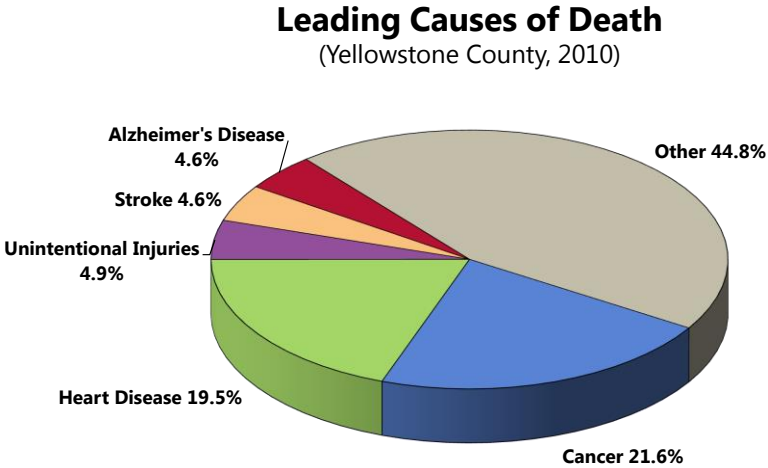
DEATH, DISEASE & CHRONIC CONDITIONS



Leading Causes of Death

Distribution of Deaths by Cause

Together, cardiovascular disease (heart disease and stroke) and cancers accounted for nearly one-half of all deaths in Yellowstone County in 2010.



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 2013.
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
• CLRD is chronic lower respiratory disease.

Age-Adjusted Death Rates for Selected Causes

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

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

The following chart outlines 2008-2010 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 worse than national rates for these causes of death: Alzheimer’s disease, suicide, chronic lower respiratory disease (CLRD), unintentional injuries (including motor vehicle accidents), and cirrhosis/liver disease.

Of the causes outlined in the following chart for which Healthy People 2020 objectives have been established, Yellowstone County rates fail to satisfy the related goals for suicide, stroke, unintentional injuries (including motor vehicle accidents), firearms, cirrhosis/liver disease, and drug-induced deaths.

Age-Adjusted Death Rates for Selected Causes
(2008-2010 Deaths per 100,000)

| | Yellowstone County | Montana | US | HP2020 |
|---|--------------------|---------|-------|--------|
| Malignant Neoplasms (Cancers) | 167.6 | 161.7 | 174.2 | 160.6 |
| Diseases of the Heart | 153.7 | 159.6 | 184.6 | 158.9* |
| Chronic Lower Respiratory Disease (CLRD) | 61.2 | 54.6 | 43.2 | n/a |
| Unintentional Injuries | 43.0 | 57.6 | 38.2 | 36.0 |
| Cerebrovascular Disease (Stroke) | 39.6 | 40.5 | 40.2 | 33.8 |
| Alzheimer’s Disease | 27.2 | 24.1 | 25.0 | n/a |
| Motor Vehicle Deaths | 18.0 | 21.9 | 11.9 | 12.4 |
| Diabetes Mellitus | 17.5 | 20.3 | 21.3 | 20.5* |
| Intentional Self-Harm (Suicide) | 17.3 | 21.2 | 11.8 | 10.2 |
| Pneumonia/Influenza | 15.2 | 14.3 | 16.4 | n/a |
| Kidney Diseases | 14.4 | 11.9 | 15.2 | n/a |
| Drug-Induced | 13.3 | 14.4 | 12.7 | 11.3 |
| Cirrhosis/Liver Disease | 10.3 | 11.9 | 9.2 | 8.2 |
| Firearm-Related | 9.8 | 15.7 | 10.2 | 9.2 |
| Homicide/Legal Intervention ** | 3.1 | 3.4 | 6.0 | 5.5 |

- Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>.
 Note: • Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population and coded using ICD-10 codes.
 • *The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart; the Diabetes target is adjusted to reflect only diabetes mellitus-coded deaths.
 • Local, state and national data are simple three-year averages.
 • **Due to low counts in Yellowstone County, homicide rates represent 2001-2010 data.

Cardiovascular Disease

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

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

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

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

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

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

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

– Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Heart Disease & Stroke Deaths

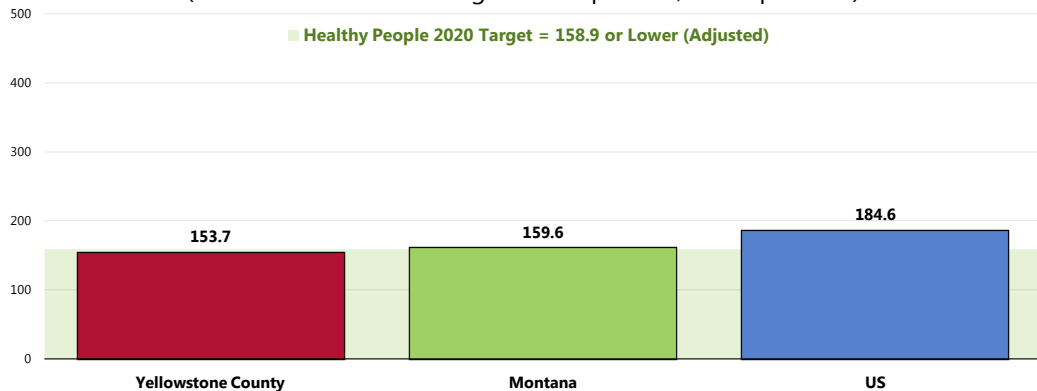
Heart Disease Deaths

Between 2008 and 2010 there was an annual average age-adjusted heart disease mortality rate of 153.7 deaths per 100,000 population in Yellowstone County.

- Similar to the statewide rate.
- Lower than the national rate.
- Similar to the Healthy People 2020 target (as adjusted to account for all diseases of the heart).

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

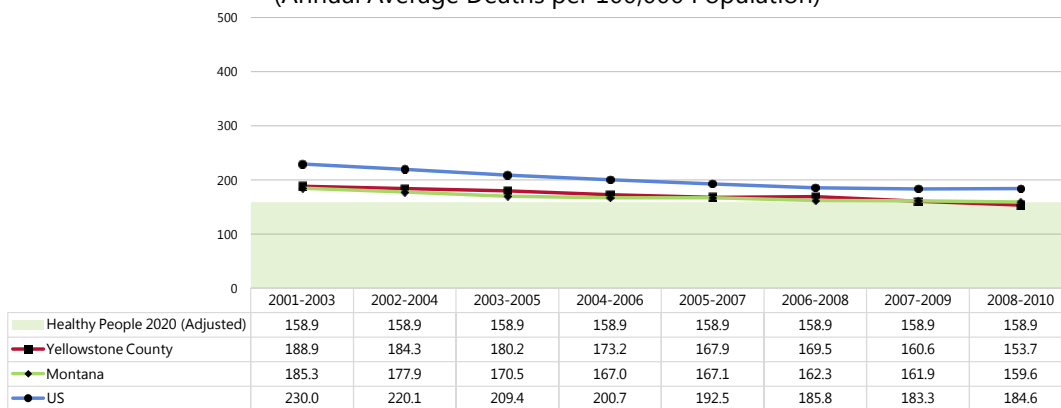
Heart Disease: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)



- 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 2013.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-2]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 - Local, state and national data are simple three-year averages.
 - The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

☒ The heart disease mortality rate has 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 2013.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-2]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 - Local, state and national data are simple three-year averages.
 - The Healthy People 2020 Heart Disease target is adjusted to account for all diseases of the heart.

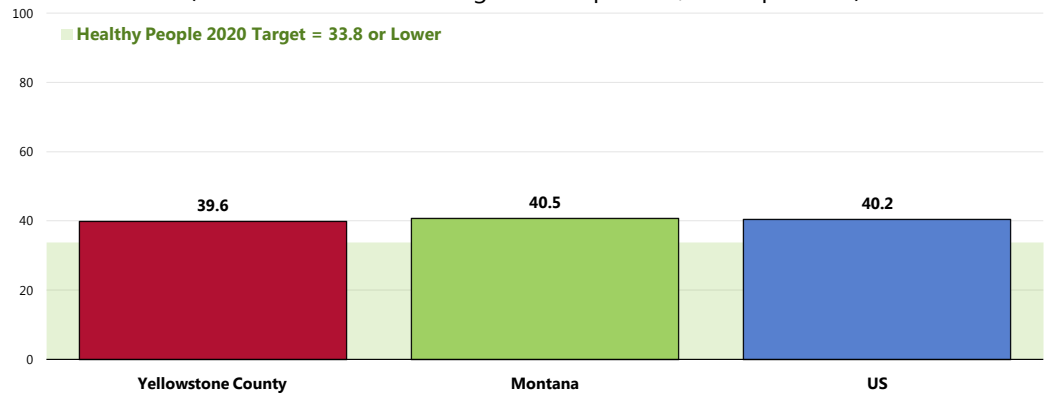
Stroke Deaths

Between 2008 and 2010, there was an annual average age-adjusted stroke mortality rate of 39.6 deaths per 100,000 population in Yellowstone County.

- Comparable to the Montana rate.
- Comparable to the national rate.
- Fails to satisfy the Healthy People 2020 target of 33.8 or lower.

Stroke: Age-Adjusted Mortality

(2008-2010 Annual Average Deaths per 100,000 Population)

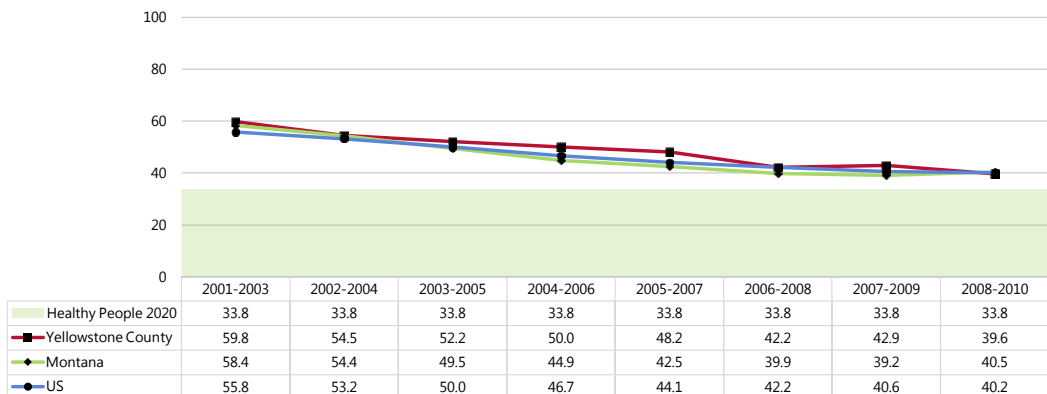


- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 - Local, state and national data are simple three-year averages.

- ▣ The stroke rate has declined in recent years, in keeping with the statewide 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 2013.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 - Local, state and national data are simple three-year averages.

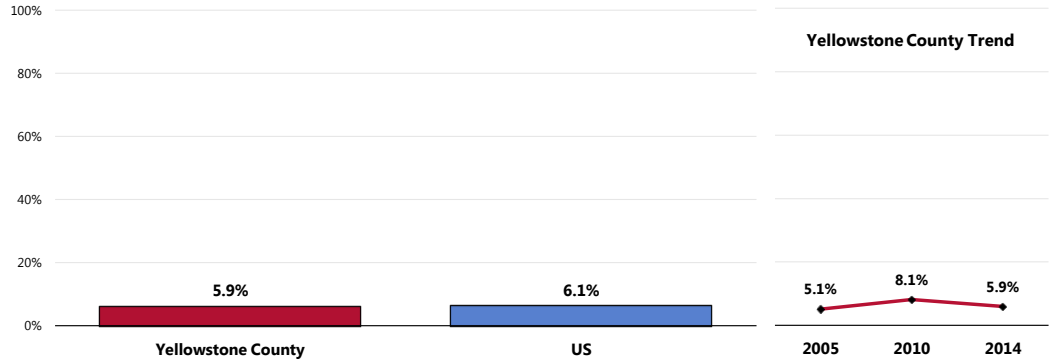
Prevalence of Heart Disease & Stroke

Prevalence of Heart Disease

A total of 5.9% of surveyed adults report that they suffer from or have been diagnosed with heart disease, such as coronary heart disease, angina or heart attack.

- Similar to the national prevalence.
- 📊 Statistically similar to previous findings.

Prevalence of Heart Disease



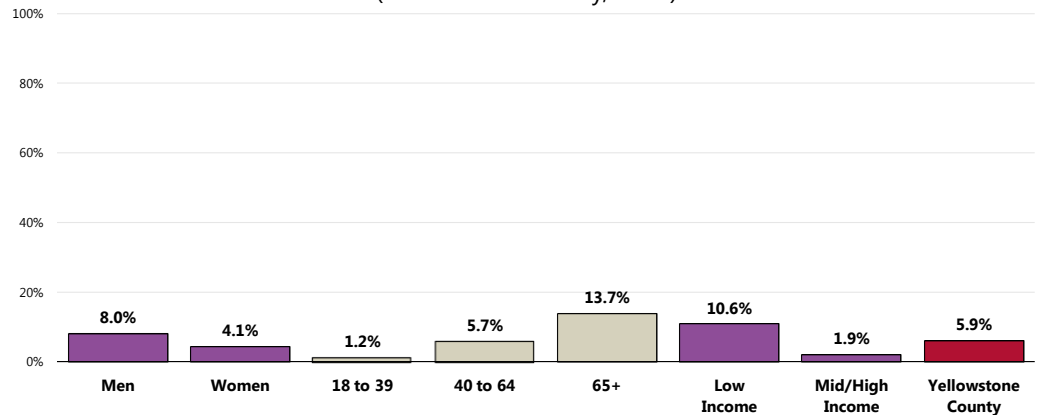
Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 137]
 ● 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: ● Asked of all respondents.
 ● Includes diagnoses of heart attack, angina or coronary heart disease.

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

- 👥 Seniors (note the positive association with age).
- 👥 Residents with lower incomes.

Prevalence of Heart Disease

(Yellowstone County, 2014)



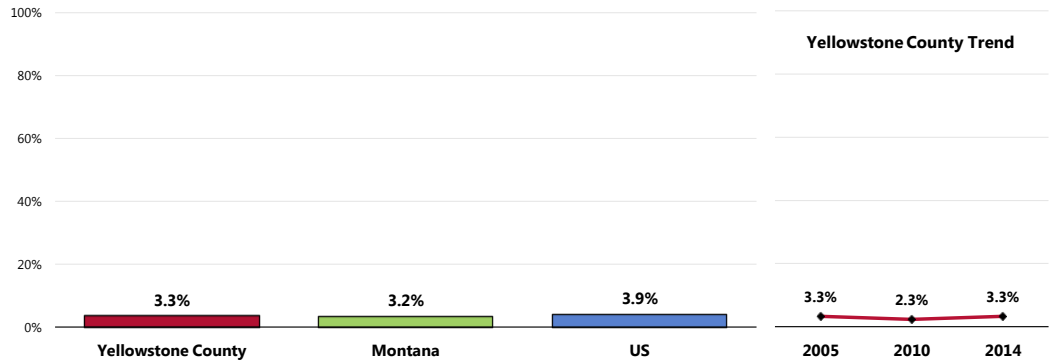
Sources: ● 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 137]
 Notes: ● Asked of all respondents.
 ● Includes diagnoses of heart attack, angina or coronary heart disease.
 ● Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Prevalence of Stroke

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

- Similar to statewide findings.
- Similar to national findings.
- ▣ Similar to previous survey findings in Yellowstone County.

Prevalence of Stroke



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 36]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 Montana data.

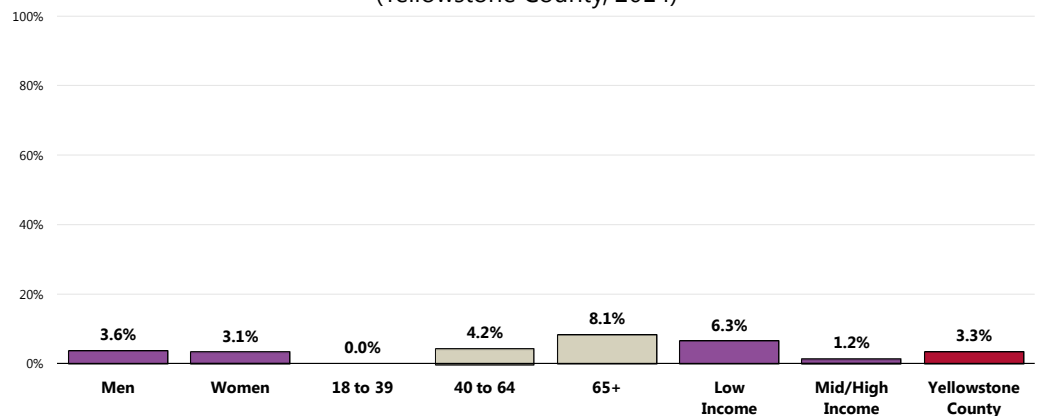
 Notes:

- Asked of all respondents.

Adults more likely to have been diagnosed with stroke include:

- ▣ Those age 40 and older (positive association with age).

Prevalence of Stroke (Yellowstone County, 2014)



Sources:

- 2014 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 (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Cardiovascular Risk Factors

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

– Healthy People 2020 (www.healthypeople.gov)

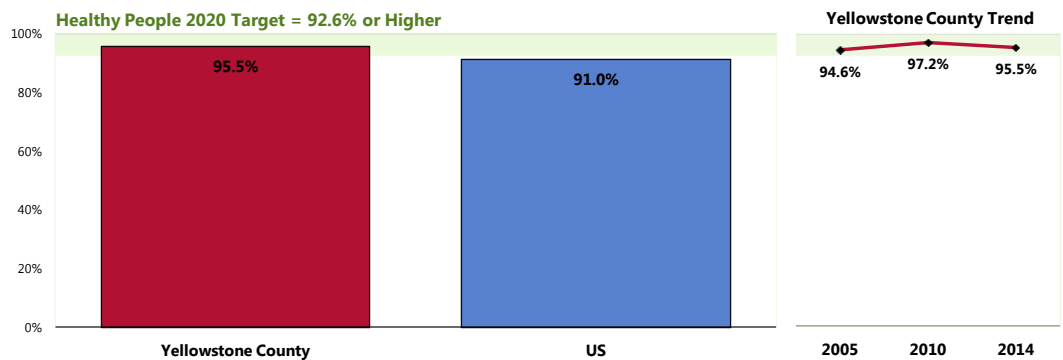
Hypertension (High Blood Pressure)

High Blood Pressure Testing

A total of 95.5% of Yellowstone County adults have had their blood pressure tested within the past two years.

- More favorable than national findings.
- Satisfies the Healthy People 2020 target (94.9% or higher).
- ☒ Statistically similar to previous findings.

Have Had Blood Pressure Checked in the Past Two Years



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 45]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.
● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-4]

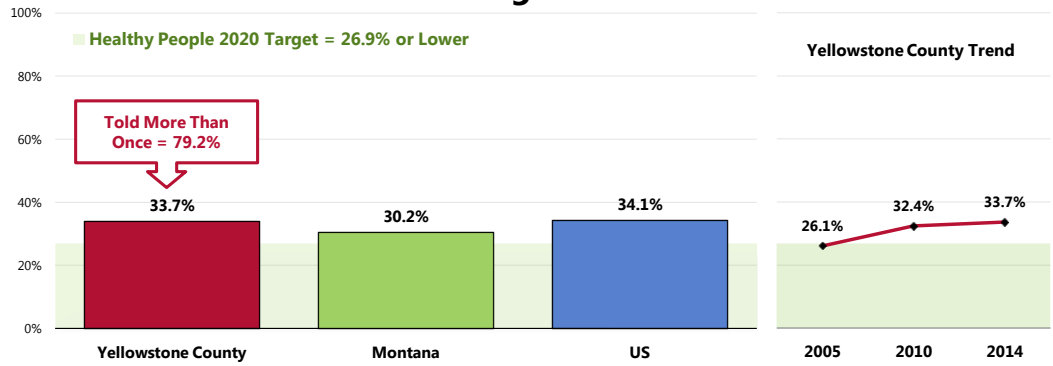
Notes: ● Asked of all respondents.

Prevalence of Hypertension

One-third (33.7%) of adults have been told at some point that their blood pressure was high.

- Comparable to the Montana prevalence.
- Comparable to the national prevalence.
- Fails to satisfy the Healthy People 2020 target (26.9% or lower).
- ☒ Marks a significant increase over time.
- 👥 Among hypertensive adults, 79.2% have been told by a healthcare professional more than once that they have high blood pressure.

Prevalence of High Blood Pressure



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 43, 138]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-5.1]

 Notes:

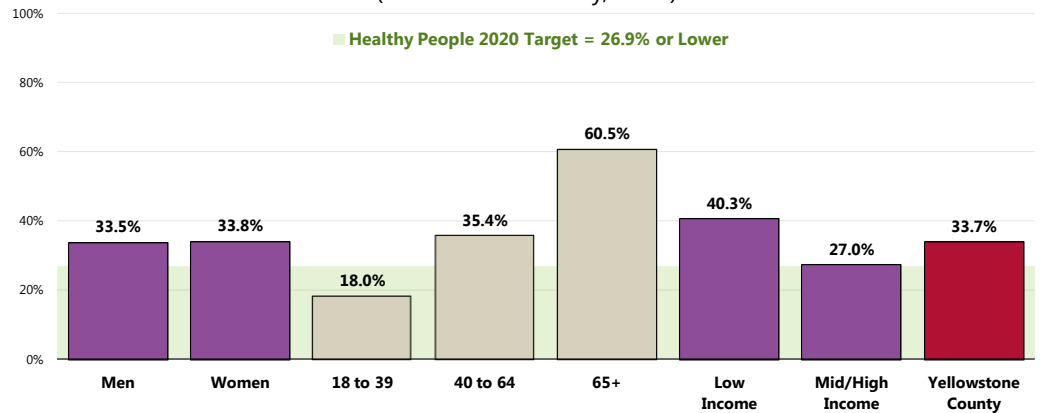
- Asked of all respondents.

Adults more often told by a healthcare professional that they have high blood pressure include:

- 👥 Adults age 40 and older, and especially those age 65+.
- 👥 Residents living on lower incomes.

Prevalence of High Blood Pressure

(Yellowstone County, 2014)



Sources:

- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 138]
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-5.1]

 Notes:

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

Hypertension Management

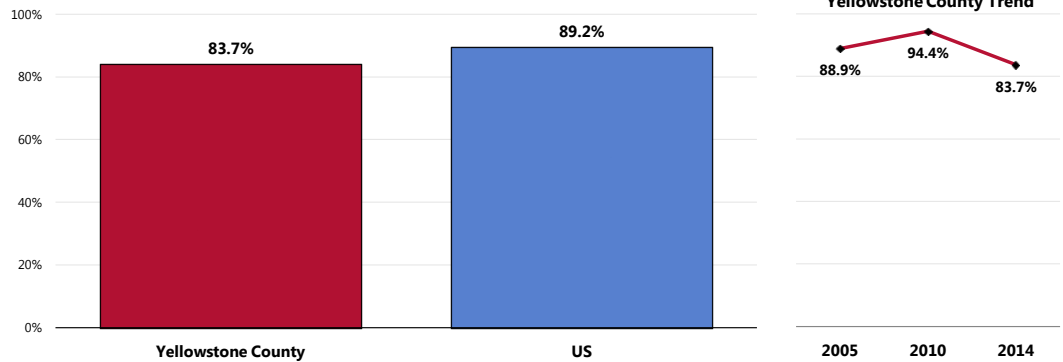
Respondents reporting high blood pressure were further asked:

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

Among respondents who have been told that their blood pressure was high, 83.7% report that they are currently taking actions to control their condition.

- Similar to national findings.
- ☒ Statistically similar to 2005 findings.

Taking Action to Control Hypertension (Among Adults With High Blood Pressure)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 44]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all respondents who have been diagnosed with high blood pressure.
 • In this case, the term "action" refers to medication, change in diet, and/or exercise.

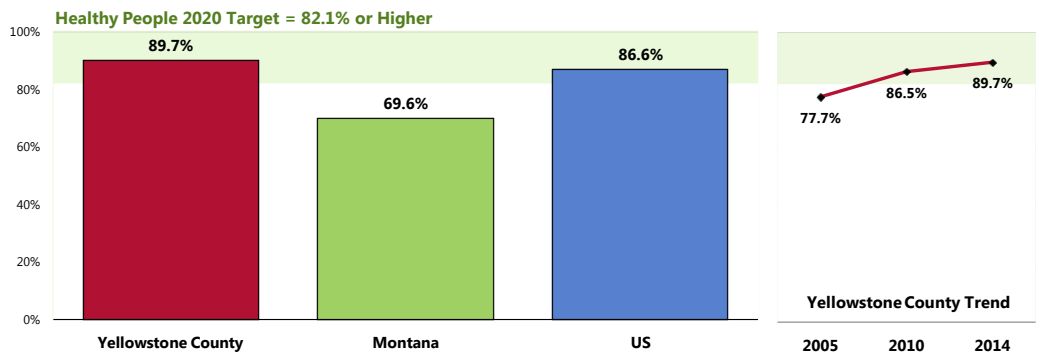
High Blood Cholesterol

Blood Cholesterol Testing

A total of 89.7% of Yellowstone County adults have had their blood cholesterol checked within the past five years.


- More favorable than Montana findings.
- Statistically similar to the national findings.
- Satisfies the Healthy People 2020 target (82.1% or higher).
- ☒ Denotes a statistically significant increase since 2005.

Have Had Blood Cholesterol Levels Checked in the Past Five Years

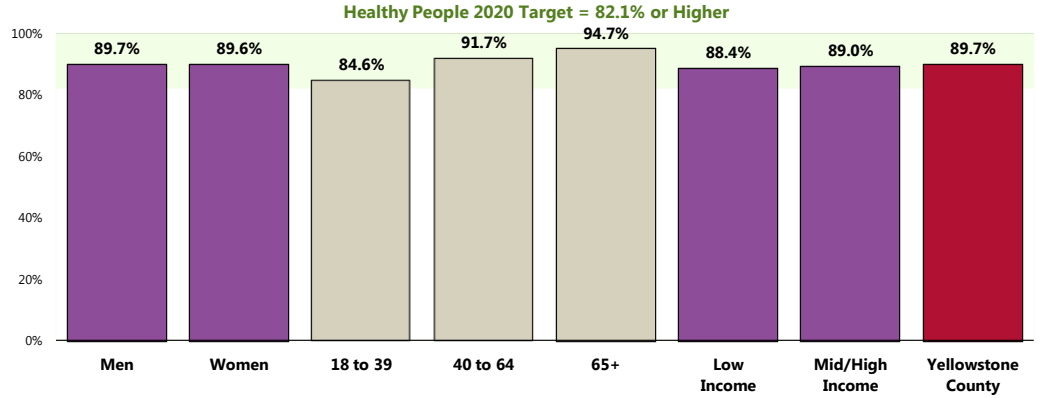


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 48]
 • Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia, United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-6]
 Notes: • Asked of all respondents.

The following demographic segments report lower screening levels:

 Young adults.


Have Had Blood Cholesterol Levels Checked in the Past Five Years (Yellowstone County, 2014)



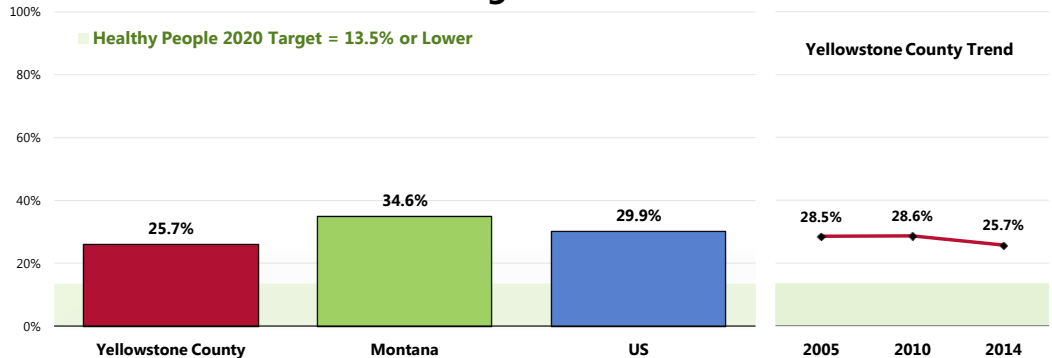
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 48]
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-6]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Self-Reported High Blood Cholesterol

A total of 25.7% of adults have been told by a health professional that their cholesterol level was high.

- More favorable than the Montana findings.
- Similar to the national prevalence.
- Nearly twice the Healthy People 2020 target (13.5% or lower).
-  Statistically similar to previous findings.

Prevalence of High Blood Cholesterol

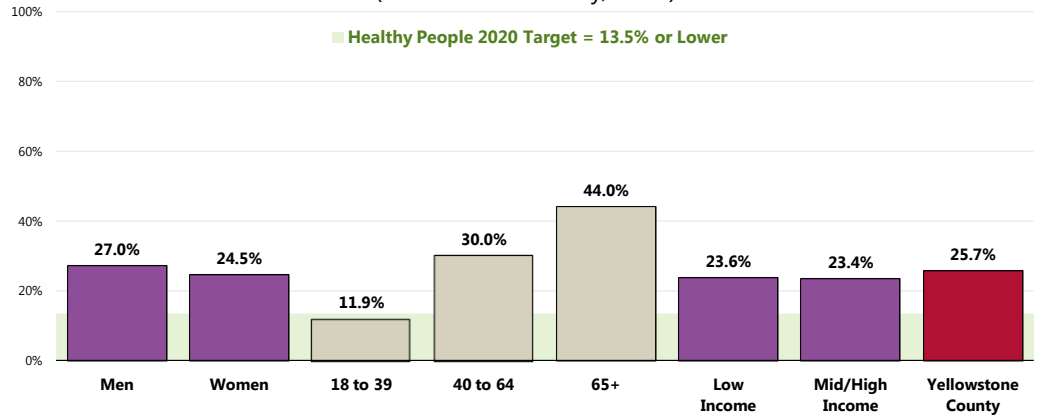


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 139]
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-7]
 Notes: • Asked of all respondents.
 • *The Montana data reflects those adults who have been tested for high cholesterol and who have been diagnosed with it.

Note that 13.2% of Yellowstone County adults report not having high blood cholesterol, but: 1) have never had their blood cholesterol levels tested; 2) have not been screened in the past 5 years; or 3) do not recall when their last screening was. For these individuals, current prevalence is unknown.

- 👥 Note the positive association between age and high blood cholesterol.
- 👥 Keep in mind that “unknowns” are relatively high in young adults.

Prevalence of High Blood Cholesterol (Yellowstone County, 2014)



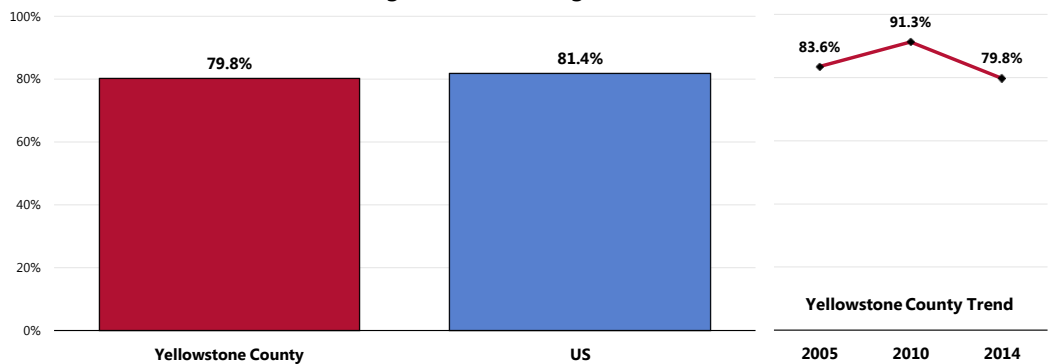
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 139]
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HDS-7]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

High Cholesterol Management

Among adults who have been told that their blood cholesterol was high, 79.8% report that they are currently taking actions to control their cholesterol levels.

- Similar to the US prevalence.
- 📊 Statistically similar to 2005 findings.

Taking Action to Control High Blood Cholesterol Levels (Among Adults With High Cholesterol)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 47]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all respondents who have been diagnosed with high blood cholesterol levels.
 • In this case, the term "action" refers to medication, change in diet, and/or exercise.

Respondents reporting high cholesterol were further asked:

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

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

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

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

Three health-related behaviors contribute markedly to cardiovascular disease:

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

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

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

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

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

Total Cardiovascular Risk

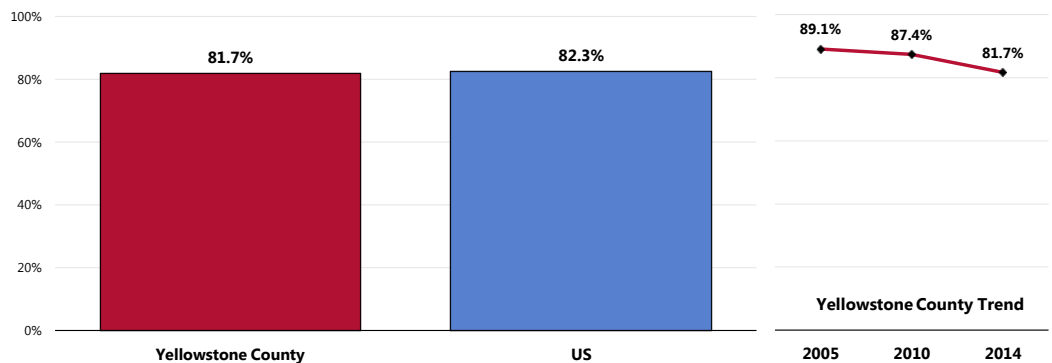
A total of 81.7% of Yellowstone County adults report one or more cardiovascular risk factors, such as being overweight, smoking cigarettes, being physically inactive, or having high blood pressure or cholesterol.

- Similar to national findings.
- ▣ Marks a significant decrease over time.

RELATED ISSUE:

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

Present One or More Cardiovascular Risks or Behaviors



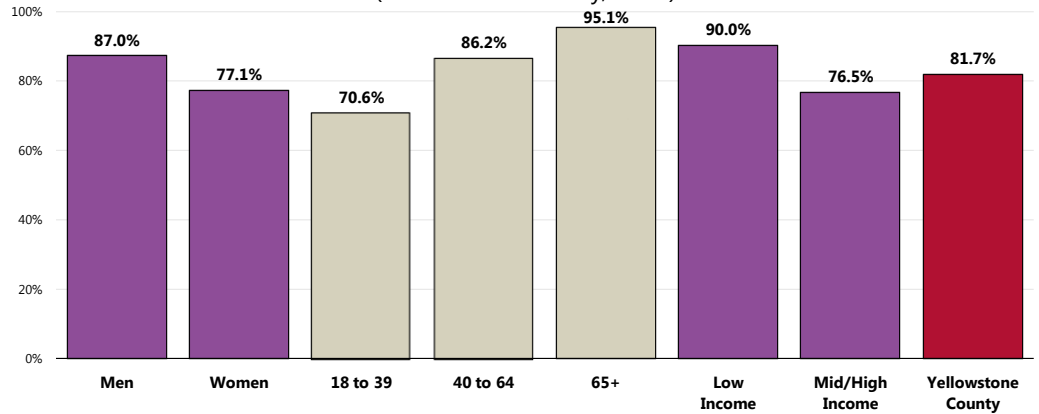
Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 140]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.

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

Adults more likely to exhibit cardiovascular risk factors include:

- Men.
- Adults age 40 and older, and especially seniors.
- Residents in households with lower incomes.

Present One or More Cardiovascular Risks or Behaviors (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 140]
Notes: • Asked of all respondents.
• Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) hypertension; 4) high blood cholesterol; and/or 5) being overweight/obese.
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Cancer

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

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

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

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

– Healthy People 2020 (www.healthypeople.gov)

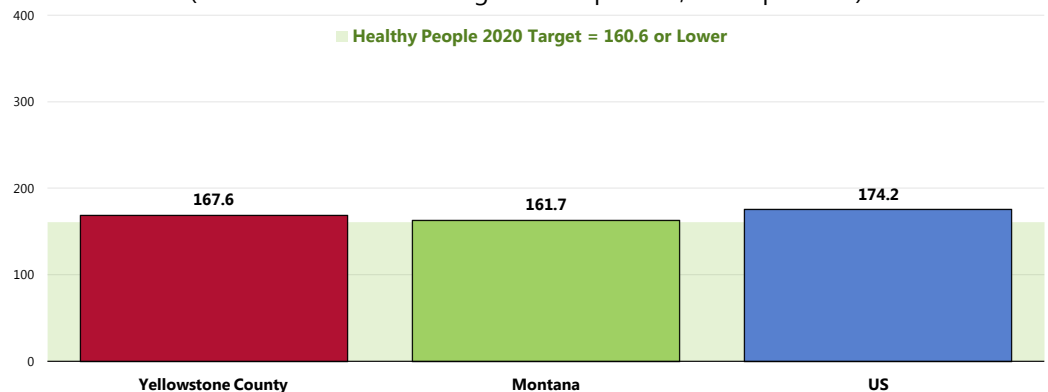
Age-Adjusted Cancer Deaths

All Cancer Deaths

Between 2008 and 2010, there was an annual average age-adjusted cancer mortality rate of 167.6 deaths per 100,000 population in Yellowstone County.

- Similar to the statewide rate.
- Similar to the national rate.
- Similar to the Healthy People 2020 target of 160.6 or lower.

Cancer: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)

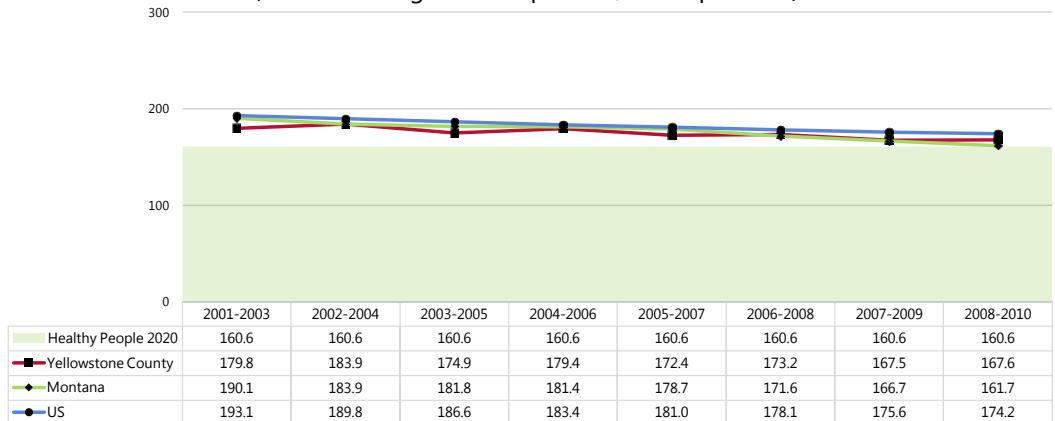


Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.
● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-1]
Notes: ● Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
● Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
● Local, state and national data are simple three-year averages.

- ☒ Cancer mortality has decreased over the past decade 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 2013.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-1]

 Notes:

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

Cancer Deaths by Site

Lung cancer is by far the leading cause of cancer deaths in 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 2008-2010 annual average age-adjusted death rates):

- The Yellowstone County **lung cancer** death rate is higher than the state rate but similar to the national rate.
- 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 similar to the statewide rate but lower than the US figure.
- The Yellowstone County **colorectal cancer** death rate is lower than both the state and national rates.

Note that the Yellowstone County prostate cancer death rate fails to satisfy the related Healthy People 2020 target (the lung and colorectal cancer rates are similar to the 2020 goals, and the female breast cancer rate satisfies its target).

Age-Adjusted Cancer Death Rates by Site (2008-2010 Annual Average Deaths per 100,000 Population)

| | Yellowstone County | Montana | US | HP2020 |
|-----------------------------|--------------------|-------------|-------------|-------------|
| Lung Cancer | 46.6 | 42.5 | 48.5 | 45.5 |
| Prostate Cancer | 29.4 | 26.2 | 22.3 | 21.2 |
| Female Breast Cancer | 19.6 | 20.3 | 22.3 | 20.6 |
| Colorectal Cancer | 14.0 | 14.8 | 16.1 | 14.5 |

Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov>

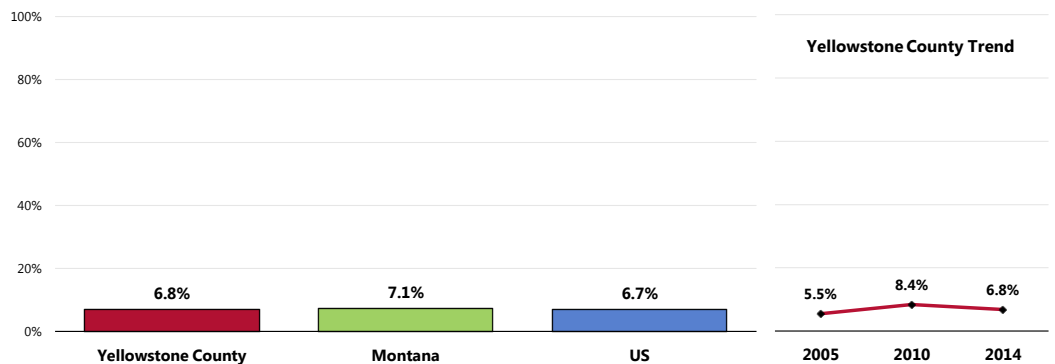
Prevalence of Cancer

Skin Cancer

A total of 6.8% of surveyed Yellowstone County adults report having been diagnosed with skin cancer.

- Comparable to the Montana average.
- Comparable to the US average.
- ☒ The prevalence of skin cancer is similar to previous findings.

Prevalence of Skin Cancer



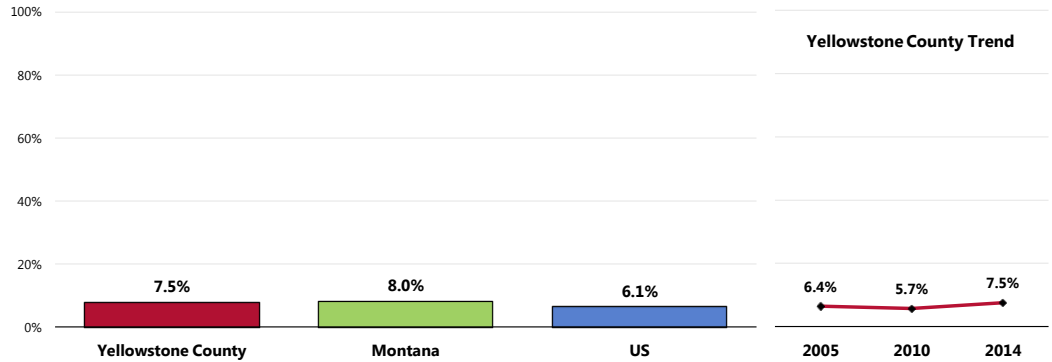
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 31]
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all respondents.

Other Cancer

A total of 7.5% of respondents have been diagnosed with some type of (non-skin) cancer.

- Similar to the statewide prevalence.
- Similar to the national prevalence.
- ☒ The prevalence of cancer is similar to 2005 findings.

Prevalence of Cancer (Other Than Skin Cancer)



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 30]
● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: ● Asked of all respondents.

Cancer Risk

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

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

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

Cancer Screenings

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

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

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

Female Breast Cancer Screening

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

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

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

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

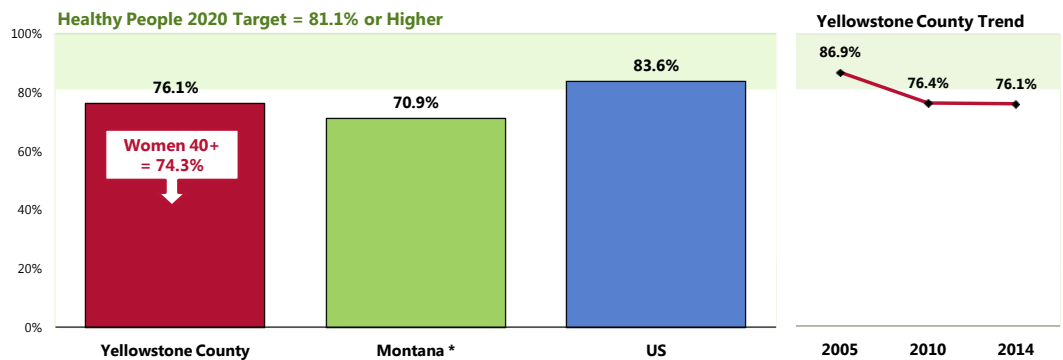
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

Mammography

Among women age 50-74, 76.1% had a mammogram within the past two years.

- Similar to statewide findings (which represent all women 50+).
- Statistically similar to national findings.
- Similar to the Healthy People 2020 target (81.1% or higher).
- 📉 Marks a significant decrease from 2005 survey findings (similar to the 2010 percentage).
- 👥 Among women 40+, 74.3% had a mammogram in the past two years.

Have Had a Mammogram in the Past Two Years (Among Women Ages 50-74)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 141-142]
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2011 Montana data.
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-17]
Notes: • Reflects female respondents 50-74.
• *Note that state data reflects all women 50 and older (vs. women 50-74 in local, US and Healthy People data).

Cervical Cancer Screenings

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

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

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

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

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

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

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

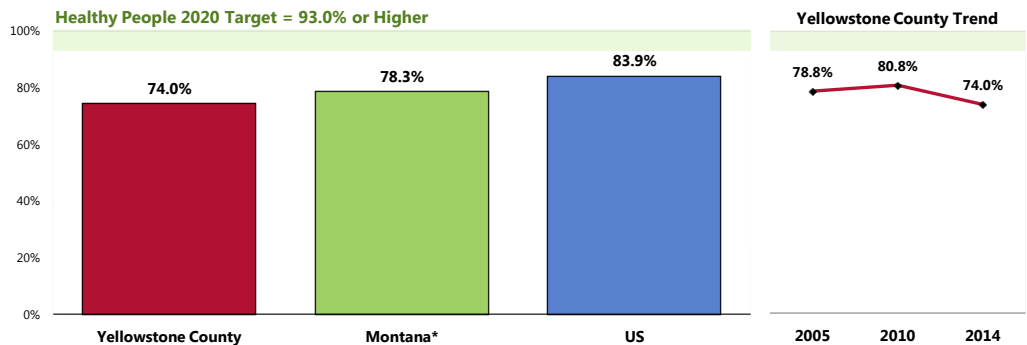
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

Pap Smear Testing

Among women age 21 to 65, 74.0% had a Pap smear within the past three years.

- Comparable to Montana findings (which represents all women 18+).
- Less favorable than national findings.
- Fails to satisfy the Healthy People 2020 target (93% or higher).
- ☒ Statistically similar to 2005 findings.

Have Had a Pap Smear in the Past Three Years (Among Women Ages 21-65)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 143]
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-15]

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

Colorectal Cancer Screenings

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

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

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

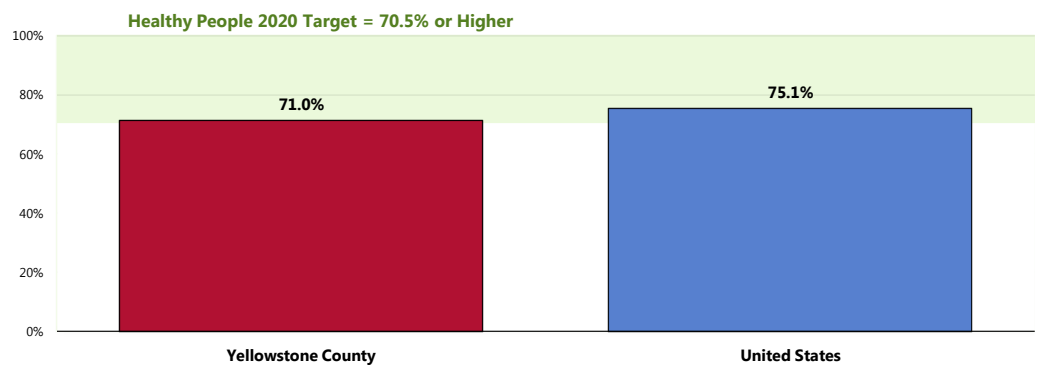
Note that other organizations (e.g., American Cancer Society, American Academy of Family Physicians, American College of Physicians, National Cancer Institute) may have slightly different screening guidelines.

Colorectal Cancer Screening

Among adults age 50-75, 71.0% have had an appropriate colorectal cancer screening (fecal occult blood testing within the past year and/or sigmoidoscopy/ colonoscopy [lower endoscopy] within the past 10 years).

- Similar to national findings.
- Similar to the Healthy People 2020 target (70.5% or higher).

Have Had a Colorectal Cancer Screening (Among Adults Age 50-75)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 146]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective C-16]
Notes: • Asked of all respondents age 50 through 75.
• In this case, the term "colorectal screening" refers to adults age 50-75 receiving a FOBT (fecal occult blood test) in the past year and/or a lower endoscopy (sigmoidoscopy/colonoscopy) in the past 10 years.

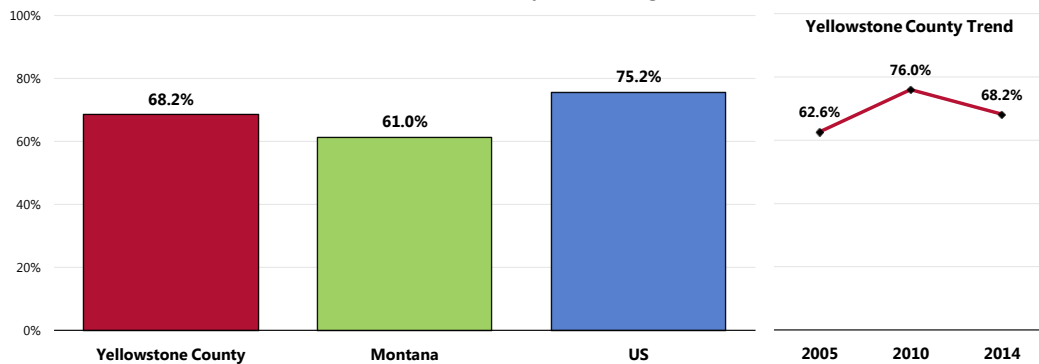
Lower Endoscopy

Among adults age 50 and older, nearly 7 in 10 (68.2%) have had a lower endoscopy (sigmoidoscopy or colonoscopy) at some point in their lives.

- More favorable than Montana findings.
- Less favorable than national findings.
- ☒ Statistically similar to the 2005 survey findings.

Have Ever Had a Sigmoidoscopy/Colonoscopy

(Yellowstone County Adults Age 50+)



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 144]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.

 Notes:

- Asked of all respondents.

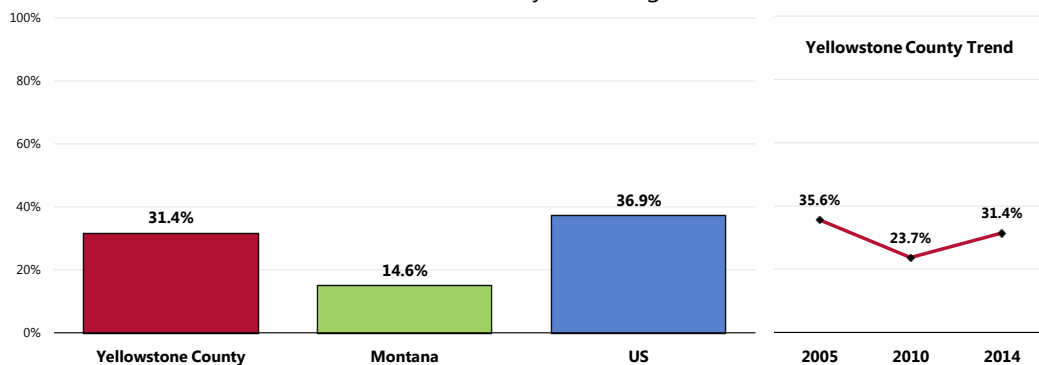
Blood Stool Testing

Among adults age 50 and older, 31.4% have had a blood stool test (aka "fecal occult blood test") within the past two years.

- Better than Montana findings.
- Similar to national findings.
- ☒ Statistically similar to 2005 findings.

Have Had a Blood Stool Exam in the Past 2 Years

(Yellowstone County Adults Age 50+)



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 145]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.

 Notes:

- Asked of all respondents.

Respiratory Disease

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

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

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

Several additional respiratory conditions and respiratory hazards, including infectious agents and occupational and environmental exposures, are covered in other areas of Healthy People 2020. Examples include tuberculosis, lung cancer, acquired immunodeficiency syndrome (AIDS), pneumonia, occupational lung disease, and smoking. Sleep Health is now a separate topic area of Healthy People 2020.

Currently in the United States, more than 23 million people have asthma. Approximately 13.6 million adults have been diagnosed with COPD, and an approximately equal number have not yet been diagnosed. The burden of respiratory diseases affects individuals and their families, schools, workplaces, neighborhoods, cities, and states. Because of the cost to the healthcare system, the burden of respiratory diseases also falls on society; it is paid for with higher health insurance rates, lost productivity, and tax dollars. Annual healthcare expenditures for asthma alone are estimated at \$20.7 billion.

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

Risk factors for asthma currently being investigated include:

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

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

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

– Healthy People 2020 (www.healthypeople.gov)

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

Note: COPD was changed to chronic lower respiratory disease (CLRD) in 1999 with the introduction of ICD-10 codes.

CLRD — which includes asthma, chronic bronchitis, emphysema, and other lower respiratory illnesses — is used in vital statistics reporting, but COPD is still widely used and commonly found in surveillance reports.

Age-Adjusted Respiratory Disease Deaths

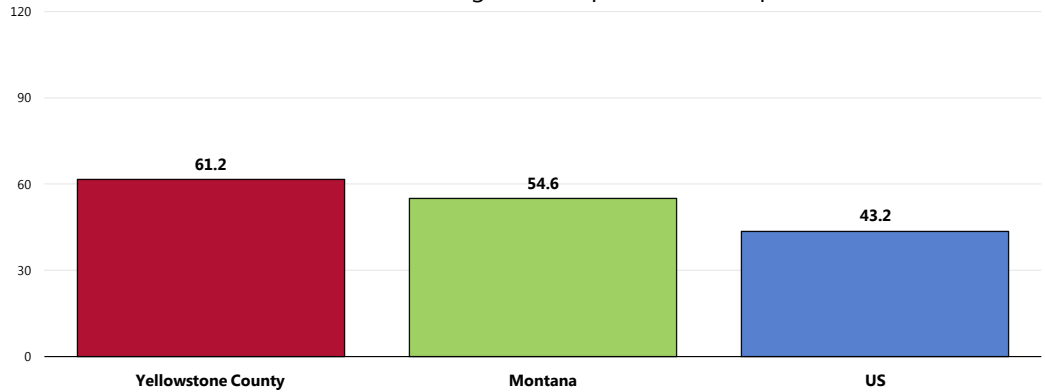
Chronic Lower Respiratory Disease Deaths (CLRD)

Note: COPD was changed to chronic lower respiratory disease (CLRD) in 1999 with the introduction of ICD-10 codes. CLRD is used in vital statistics reporting, but COPD is still widely used and commonly found in surveillance reports.

Between 2008 and 2010, there was an annual average age-adjusted CLRD mortality rate of 61.2 deaths per 100,000 population in Yellowstone County.

- Less favorable than found statewide.
- Less favorable than the national rate.

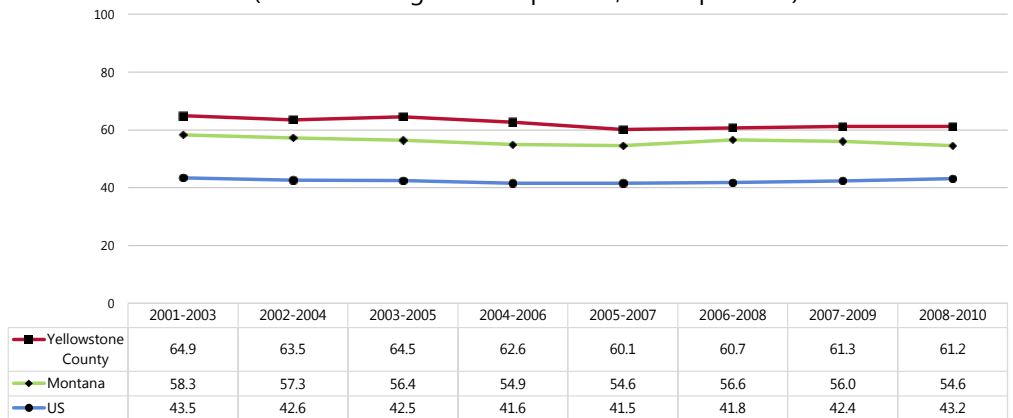
CLRD: Age-Adjusted Mortality
(2008-2010 Annual Average Deaths per 100,000 Population)



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 2013.
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.
• Local, state and national data are simple three-year averages.
• CLRD is chronic lower respiratory disease.

While CLRD mortality in Yellowstone County has decreased slightly, it has remained consistently above state and national rates.

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 2013.
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.

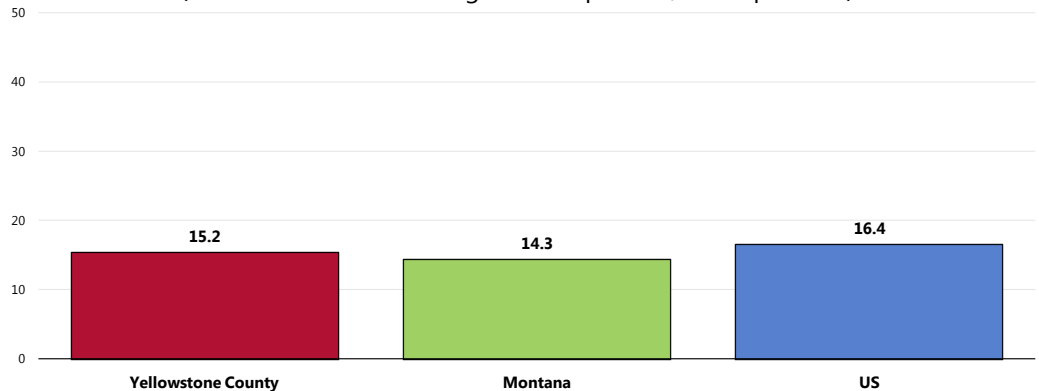
Pneumonia/Influenza Deaths

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

Between 2008 and 2020, there was an annual average age-adjusted pneumonia influenza mortality rate of 15.2 deaths per 100,000 population in Yellowstone County.

- Higher than found statewide.
- Lower than the national rate.

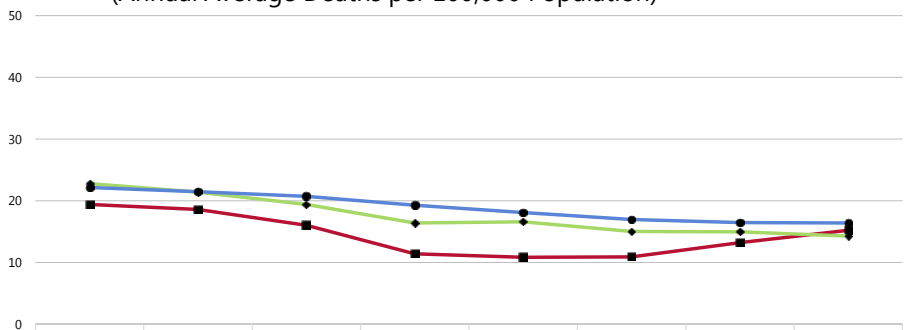
Pneumonia/Influenza: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)



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 2013.
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.
• Local, state and national data are simple three-year averages.

☒ In Yellowstone County, pneumonia/influenza mortality declined in the early 2000s, but has since begun to increase. Across Montana and the US, pneumonia/influenza death rates have decreased.

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 2013.
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.

Chronic Obstructive Pulmonary Disease (COPD)

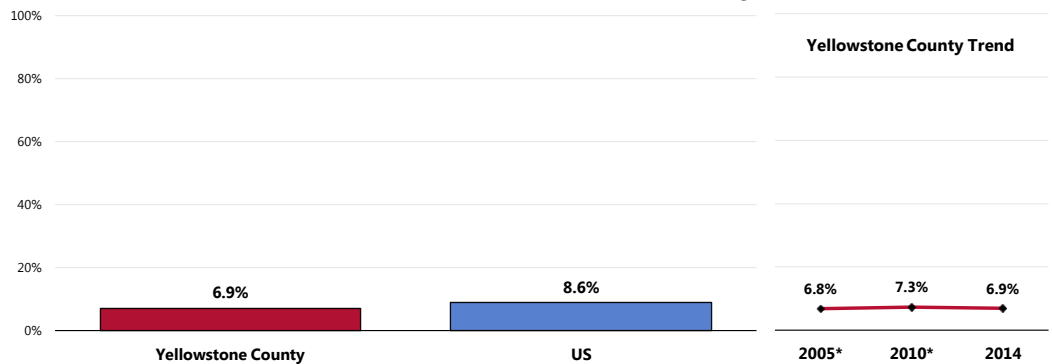
Survey respondents were next asked to indicate whether they suffer from or have been diagnosed with various respiratory conditions, including asthma and COPD.

A total of 6.9% of Yellowstone County adults suffer from chronic obstructive pulmonary disease (COPD, including emphysema and bronchitis).

- Similar to the national prevalence.
- ☒ NOTE: in prior data, this question was asked slightly differently; respondents in 2005 were asked if they had ever been diagnosed with “chronic lung disease, including bronchitis or emphysema,” rather than “COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema” as is asked currently.

In comparing to 2005 data, the prevalence has not changed.

Prevalence of Chronic Obstructive Pulmonary Disease (COPD)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 25]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.
• Includes those having ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema.
• *In prior data, the term “chronic lung disease” was used, which also included bronchitis or emphysema.

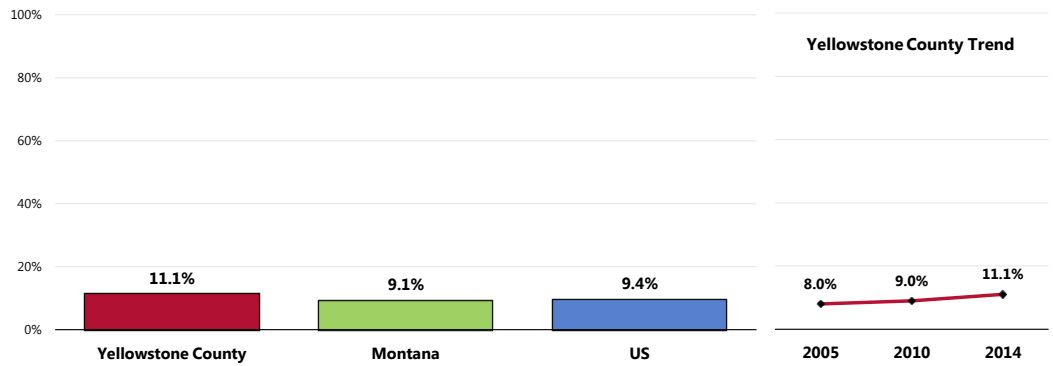
Asthma

Adults

A total of 11.1% of Yellowstone County adults currently suffer from asthma.

- Similar to the statewide prevalence.
- Similar to the national prevalence.
- ☒ The prevalence has not changed significantly over time.

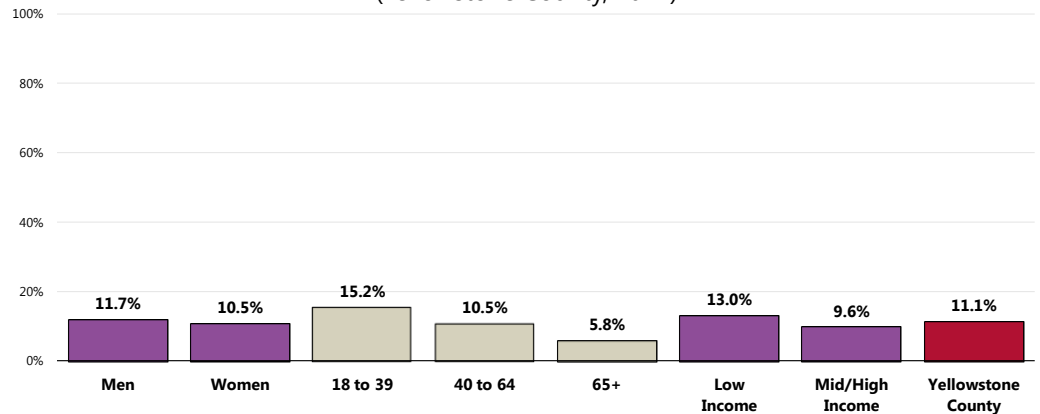
Adult Asthma: Current Prevalence



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 147]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
- Notes:
- Asked of all respondents.
 - Includes those who have ever been diagnosed with asthma, and who report that they still have asthma.

Viewed by demographic characteristics, there are no significant differences in asthma prevalence.

Currently Have Asthma (Yellowstone County, 2014)



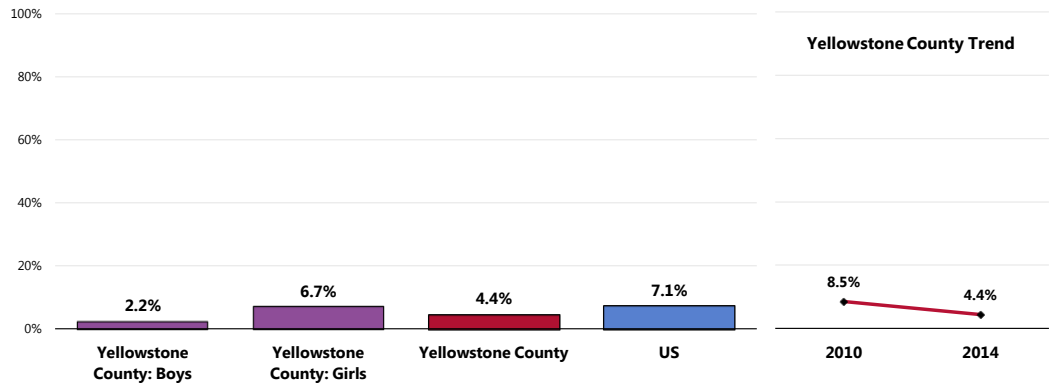
- Sources:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 147]
- Notes:
- Asked of all respondents.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Children

Among Yellowstone County children under age 18, 4.4% currently have asthma.

- Statistically similar to national findings.
- 👤 The difference by child's gender is not statistically significant.
- 📅 The decrease in childhood asthma since 2010 is not significant.

Childhood Asthma: Current Prevalence (Among Parent Respondents on Behalf of Children Age 0-17)



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 148]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents with children 0 to 17 in the household.
 - Includes children who have ever been diagnosed with asthma, and whom are reported to still have asthma.

Injury & Violence

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

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

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

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

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

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

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

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

Efforts to prevent violence may focus on:

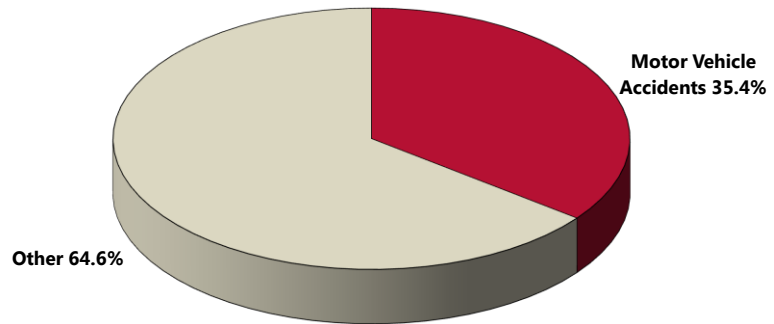
- Changing social norms about the acceptability of violence
- Improving problem-solving skills (for example, parenting, conflict resolution, coping)
- Changing policies to address the social and economic conditions that often give rise to violence

– Healthy People 2020 (www.healthypeople.gov)

Leading Causes of Accidental Death

Motor vehicle accidents accounted for 35.4% of accidental deaths in Yellowstone County between 2008 and 2010.

Leading Causes of Accidental Death (Yellowstone County, 2008-2010)



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 2013.
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

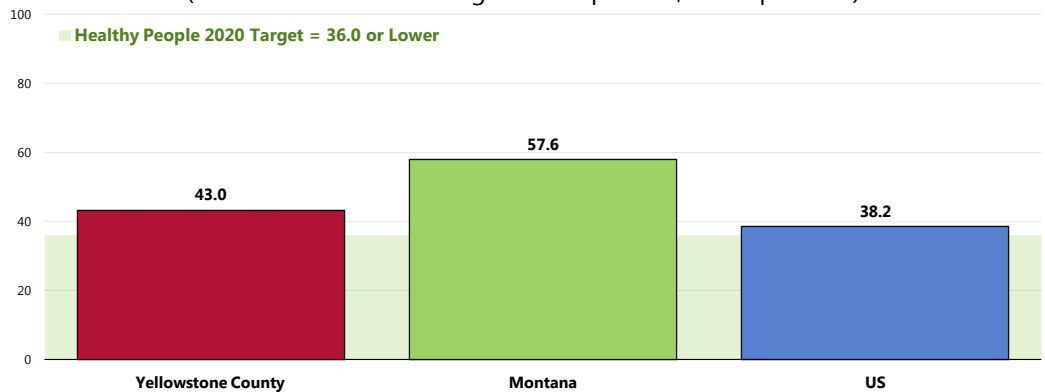
Unintentional Injury

Age-Adjusted Unintentional Injury Deaths

Between 2008 and 2010, there was an annual average age-adjusted unintentional injury mortality rate of 43.0 deaths per 100,000 population in Yellowstone County.

- More favorable than the Montana rate.
- Less favorable than the national rate.
- Fails to satisfy the Healthy People 2020 target (36.0 or lower).

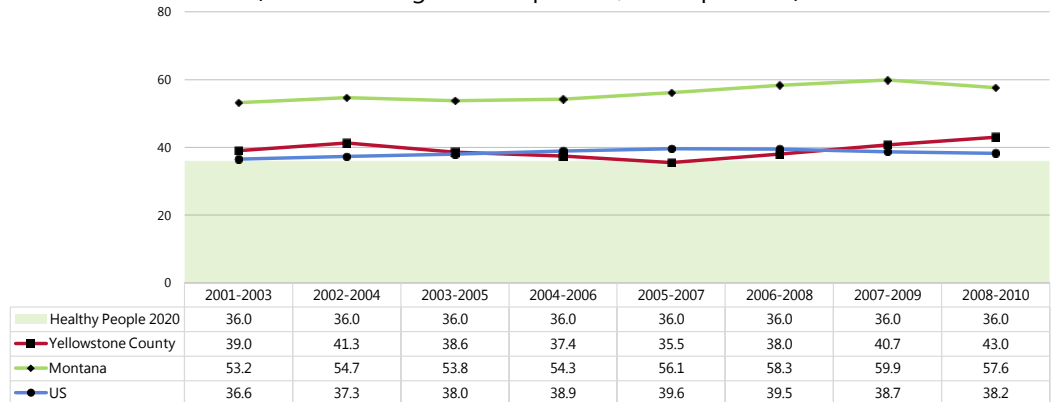
Unintentional Injuries: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)



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 2013.
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-11]
Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
• Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
• Local, state and national data are simple three-year averages.

Despite fluctuations, there is an upward trend in recent unintentional injury mortality rates in Yellowstone County; note also the slowly increasing trends reported in Montana and the US overall.

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 2013.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-11]
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 • Local, state and national data are simple three-year averages.

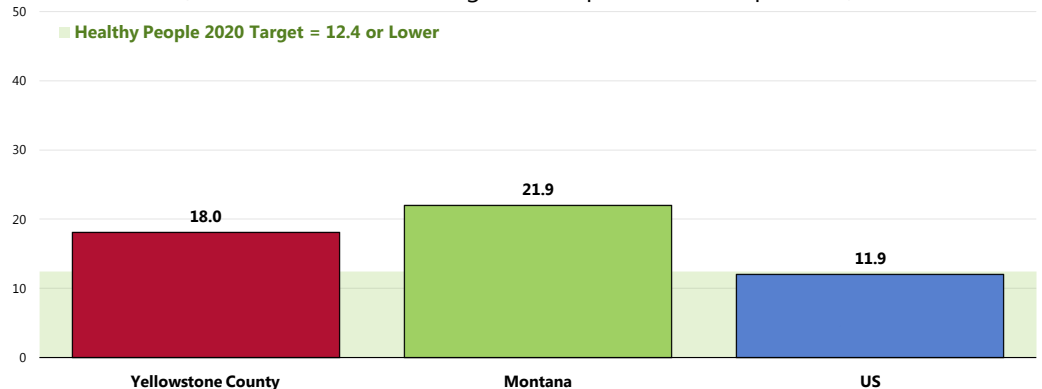
Motor Vehicle Safety

Age-Adjusted Motor-Vehicle Related Deaths

Between 2008 and 2010, there was an annual average age-adjusted motor vehicle crash mortality rate of 18.0 deaths per 100,000 population in Yellowstone County.

- Lower than found statewide.
- Higher than found nationally.
- Fails to satisfy the Healthy People 2020 target (12.4 or lower).

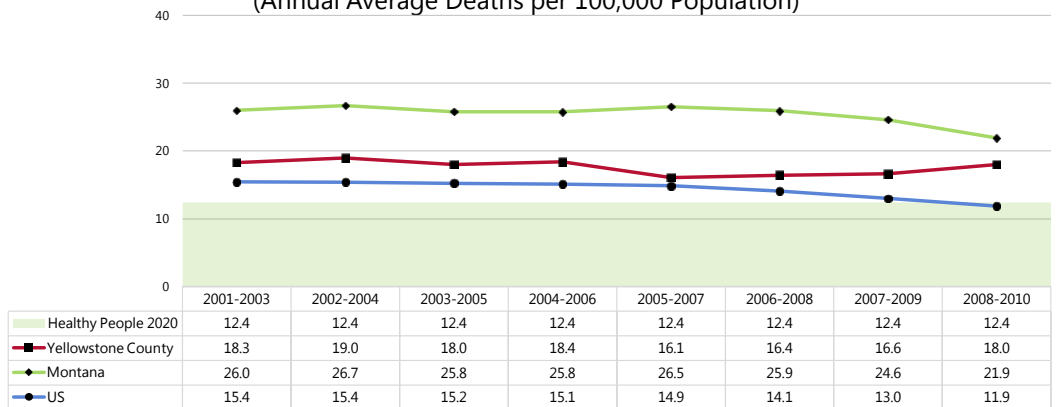
Motor Vehicle Crashes: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)



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 2013.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-13.1]
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 • Local, state and national data are simple three-year averages.

Overall, the mortality rate in Yellowstone County has not changed notably over the past decade; in Montana and the US, motor vehicle mortality is decreasing.

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



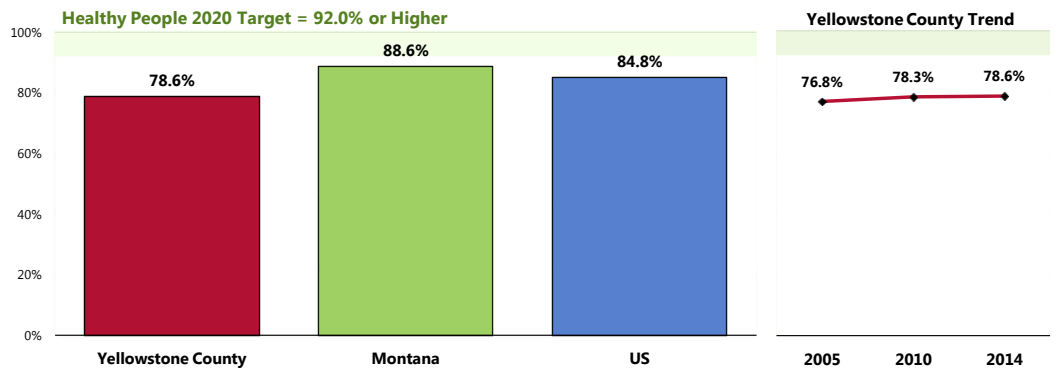
Sources: CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.
 US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-13.1]
 Notes: Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 Local, state and national data are simple three-year averages.

Seat Belt Usage - Adults

Most Yellowstone County adults (78.6%) report "always" wearing a seat belt when driving or riding in a vehicle.

- Less favorable than the statewide percentage.
 - Less favorable than the percentage found nationally.
 - Fails to satisfy the Healthy People 2020 target of 92.4% or higher.
- ▣ No significant change since 2005.

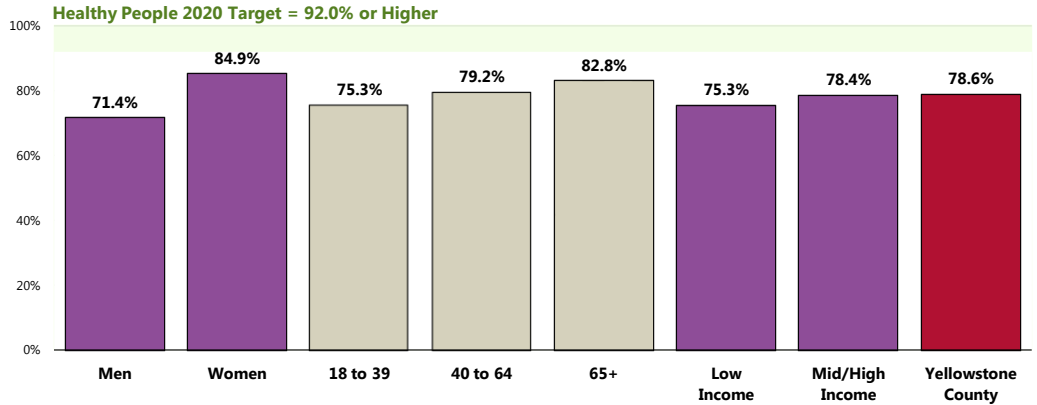
"Always" Wear a Seat Belt When Driving or Riding in a Vehicle



Sources: PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 49]
 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2011 Montana data.
 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IPV-15]
 Notes: Asked of all respondents.

Men in Yellowstone County are less likely to report consistent seat belt usage.

“Always” Wear a Seat Belt When Driving or Riding in a Vehicle (Yellowstone County, 2014)



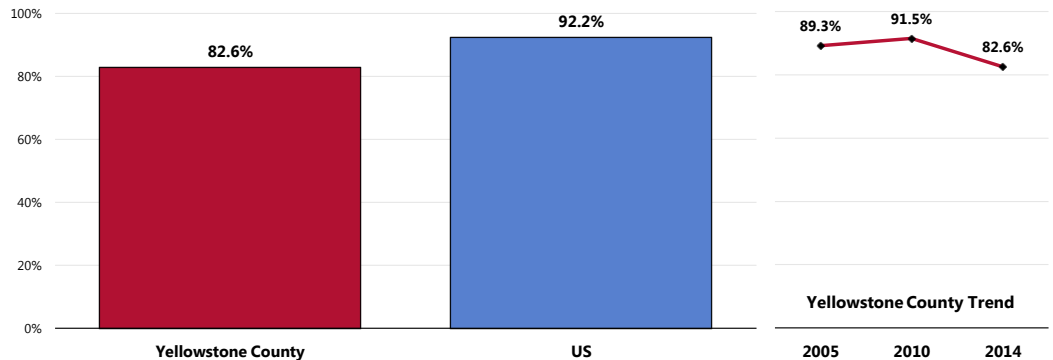
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 49]
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IPV-15]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Seat Belt Usage - Children

A total of 82.6% of Yellowstone County parents report that their child (age 0 to 17) “always” wears a seat belt (or appropriate car seat for younger children) when riding in a vehicle.

- Less favorable than the national percentage.
- ☒ Statistically similar to 2005 findings.

Child “Always” Wears a Seat Belt or Appropriate Restraint When Riding in a Vehicle (Among Parent Respondents on Behalf of Children Age 0-17)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 134]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all respondents with children 0 to 17 in the household.

Helmet Usage

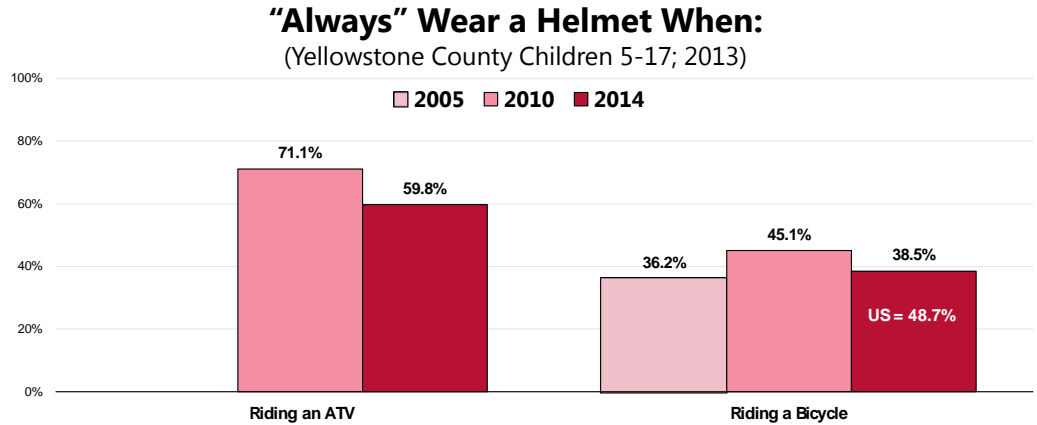
Six in 10 county children age 5 to 17 (59.8%) are reported to “always” wear a helmet when riding an ATV (all-terrain vehicle).

📊 Statistically similar to previous findings.

A total of 38.5% of Yellowstone County children (age 5 to 17) are reported to “always” wear a helmet when riding a bicycle.

● Comparable to the national prevalence.

📊 Statistically similar to previous findings.



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 132-133]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents with children 5-17 at home.
● Percentages exclude respondents who say they never take part in these activities.

Firearm Safety

Age-Adjusted Firearm-Related Deaths

Between 2008 and 2010, there was an annual average age-adjusted rate of 9.8 deaths per 100,000 population due to firearms in Yellowstone County.

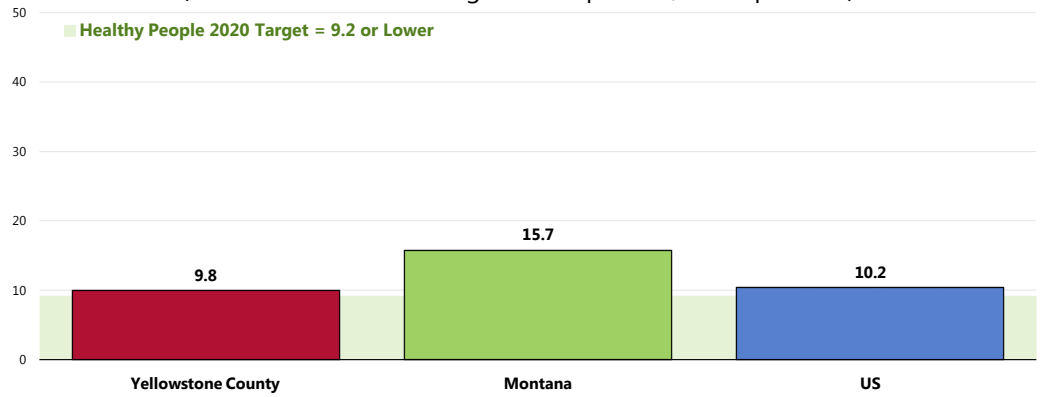
- Lower than found statewide.
- Similar to that found nationally.
- Fails to satisfy the Healthy People 2020 objective (9.2 or lower).

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.”

Firearms-Related Deaths: Age-Adjusted Mortality

(2008-2010 Annual Average Deaths per 100,000 Population)

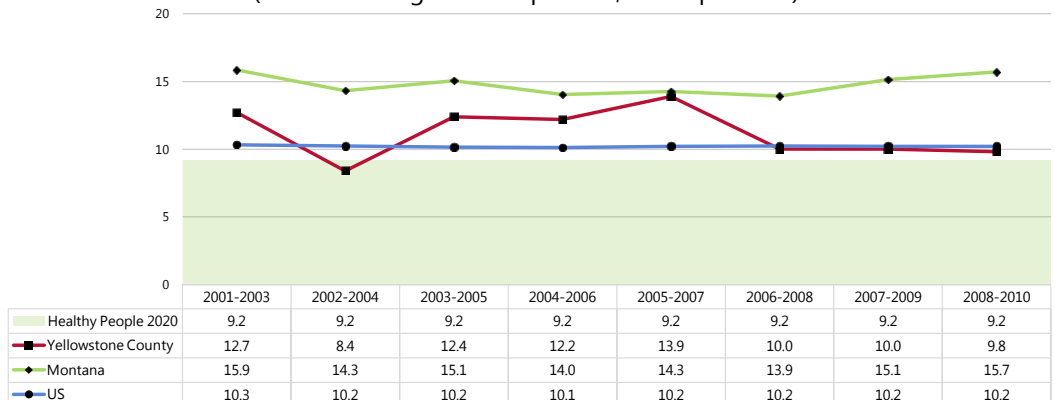


- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-30]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - Local, state and national data are simple three-year averages.

The mortality rate in Yellowstone County has fluctuated over the past decade.

Firearms-Related Deaths: 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 2013.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-30]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 US Standard Population.
 - Local, state and national data are simple three-year averages.

Presence of Firearms in Homes

Overall, more than one-half (55.9%) of Yellowstone County adults has a firearm kept in or around their home.

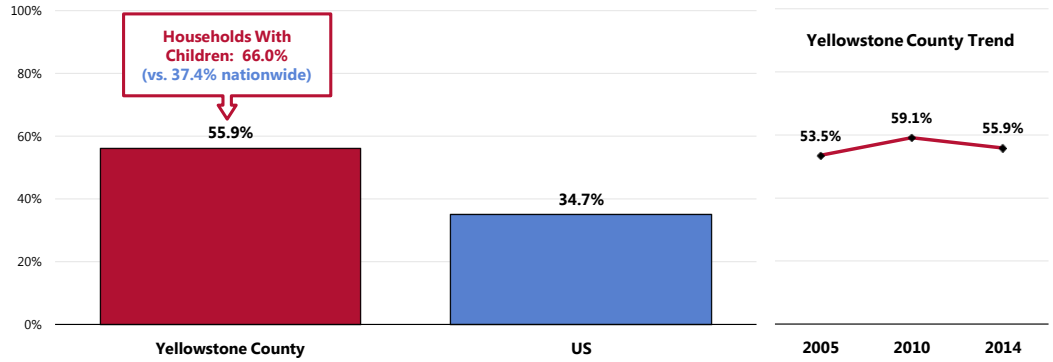
- Much higher than the national prevalence.

Similar to that reported in 2005.

Among Yellowstone County households with children, 66.0% have a firearm kept in or around the house (less favorable than reported nationally).

The prevalence of firearms in households with children has increased significantly over time (not shown).

Have a Firearm Kept in or Around the Home



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 52, 149]

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

Notes: • Asked of all respondents.

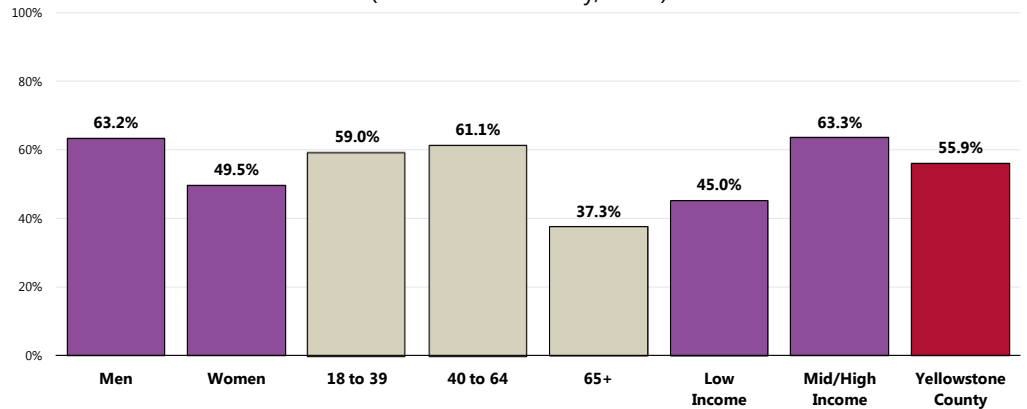
• In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.

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

- 👤 Men.
- 👤 Residents under age 65.
- 👤 Higher-income households.

Have a Firearm Kept in or Around the House

(Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 52]

Notes: • Asked of all respondents.

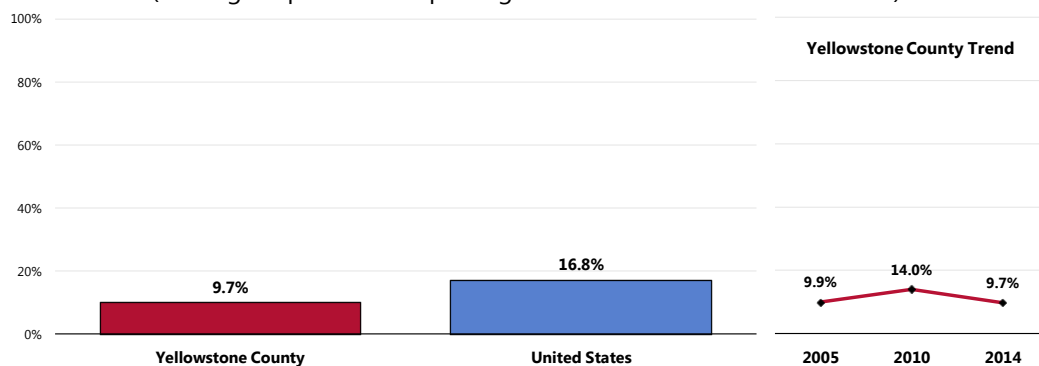
• In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.

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

Among Yellowstone County households with firearms, 9.7% report that there is at least one weapon that is kept unlocked and loaded.

- More favorable than that found nationally.
- ☒ Statistically similar to that reported in 2005.

Household Has An Unlocked, Loaded Firearm (Among Respondents Reporting a Firearm In or Around the Home)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 150]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all respondents with a firearm in or around the home.
 • In this case, firearms include pistols, shotguns, rifles, and other types of guns; this does not include starter pistols, BB guns, or guns that cannot fire.

Intentional Injury (Violence)

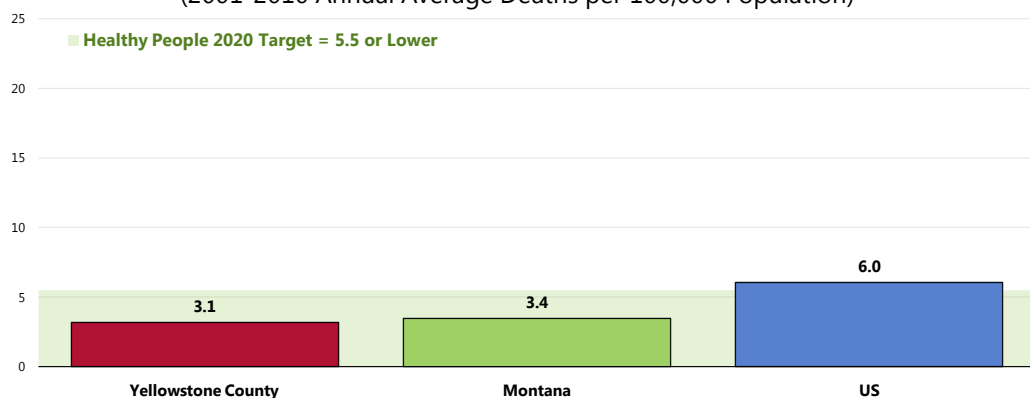
Age-Adjusted Homicide Deaths

Between 2001 and 2010, there was an annual average age-adjusted homicide rate of 3.1 deaths per 100,000 population in Yellowstone County.

- More favorable than the rate found statewide.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target of 5.5 or lower.

Homicide: Age-Adjusted Mortality

(2001-2010 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 2013.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IVP-29]
 Notes: • Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 • Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.

Violent Crime

Violent Crime Rates

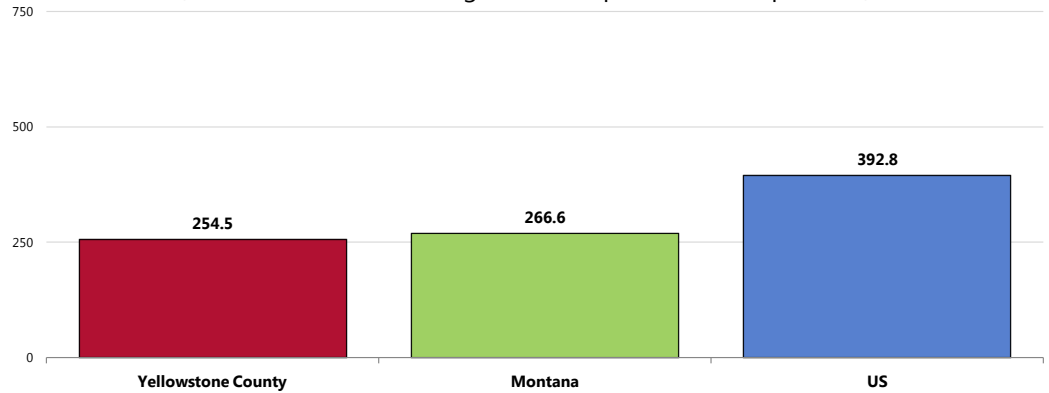
Between 2010 and 2012, there was an annual average violent crime rate of 254.5 offenses per 100,000 population in Yellowstone County.

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

- Statistically similar to the Montana rate for the same period.
- Well below the national rate.

Violent Crime Rates

(2010-2012 Annual Average Offenses per 100,000 Population)

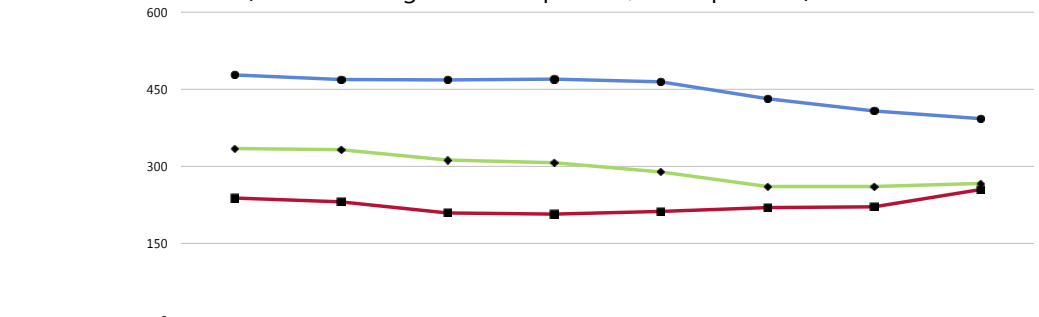


Sources: • Montana Board of Crime Control.
 • US Department of Justice, Federal Bureau of Investigation
 Notes: • Rates are offenses per 100,000 population among agencies reporting.

☒ The Yellowstone County crime rate has increased in most recent years, in contrast to the decreasing state and national trends.

Violent Crime Rates

(Annual Average Offenses per 100,000 Population)



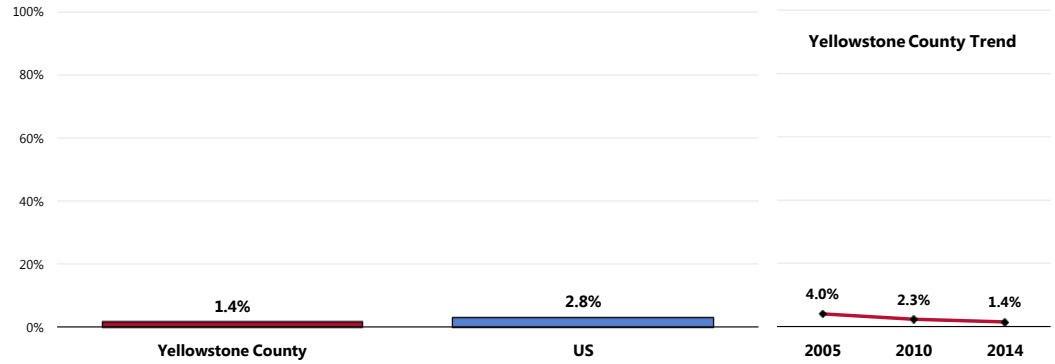
Sources: • Montana Board of Crime Control.
 • US Department of Justice, Federal Bureau of Investigation
 Notes: • Rates are offenses per 100,000 population among agencies reporting.

Self-Reported Violence

A total of 1.4% of Yellowstone County adults acknowledge being the victim of a violent crime in the past five years.

- Statistically similar to national findings.
- ▣ Marks a statistically significant decrease over time.

Victim of a Violent Crime in the Past Five Years

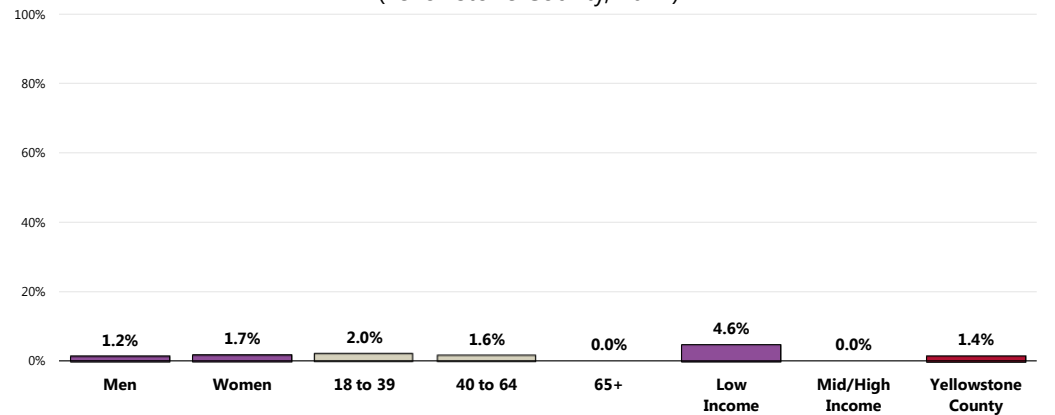


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 50]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

👥 Reports of violence are significantly higher among young adults and residents living in the lower income category.

Victim of a Violent Crime in the Past Five Years (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 50]

Notes: • Asked of all respondents.

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

Self-Reported Family Violence

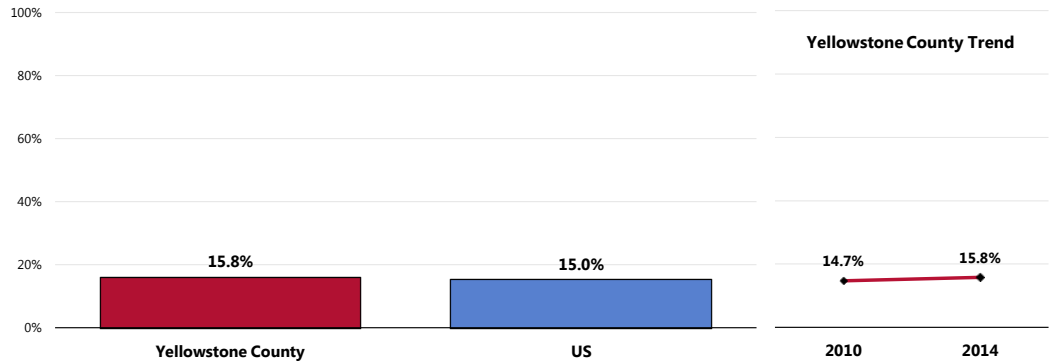
Respondents were told:

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

A total of 15.8% of respondents acknowledge that they have ever been hit, slapped, pushed, kicked, or otherwise hurt by an intimate partner.

- Comparable to national findings.
- 📊 Statistically similar to previous findings.

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



Sources:

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

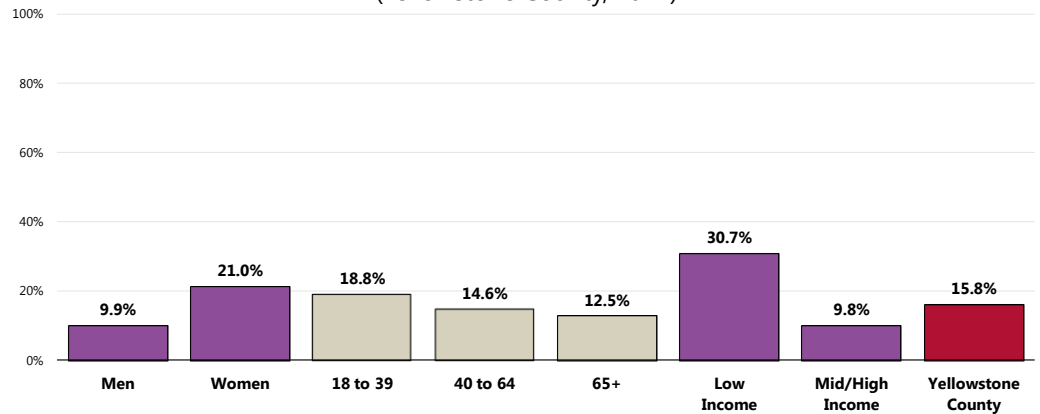
Notes:

- Asked of all respondents.

Reports of domestic violence are also significantly higher among:

- 👩 Women.
- 👨 Those with lower incomes.

Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner (Yellowstone County, 2014)



Sources:

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

Notes:

- Asked of all respondents.

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

Diabetes

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

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

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

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

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

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

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

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

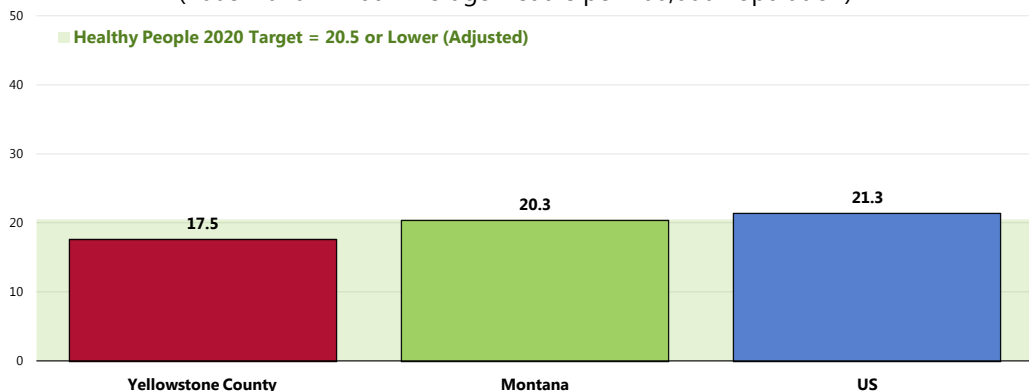
– Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Diabetes Deaths

Between 2008 and 2010, there was an annual average age-adjusted diabetes mortality rate of 17.5 deaths per 100,000 population in Yellowstone County.

- More favorable than that found statewide.
- More favorable than the national rate.
- Satisfies the Healthy People 2020 target (19.6 or lower).

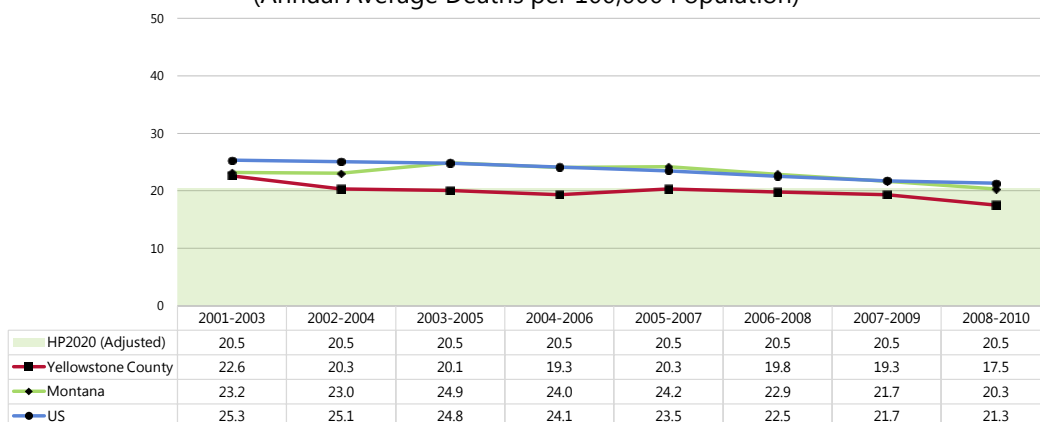
Diabetes: Age-Adjusted Mortality (2008-2010 Annual Average Deaths per 100,000 Population)



- 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 2013.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective D-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 - Local, state and national data are simple three-year averages.
 - The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

☒ Diabetes mortality has decreased over time in Yellowstone County, echoing the state and national trends.

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



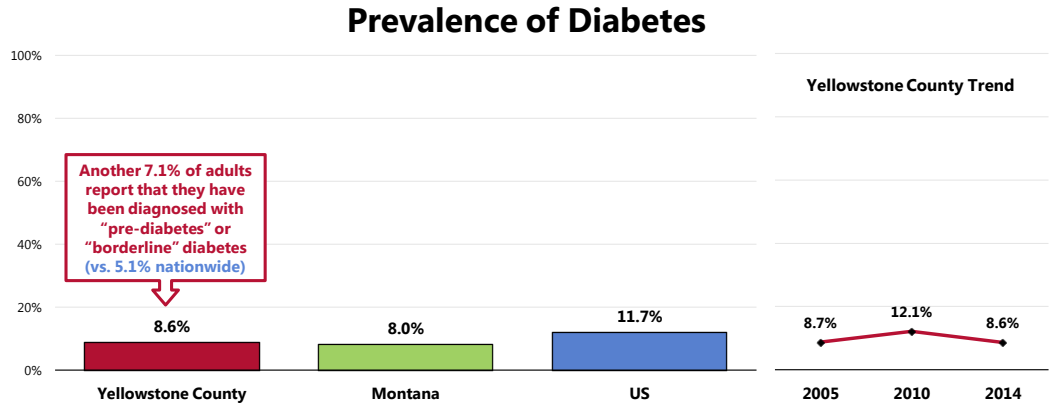
- Sources:
- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective D-3]
- Notes:
- Deaths are coded using the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).
 - Rates are per 100,000 population, age-adjusted to the 2000 U.S. Standard Population.
 - Local, state and national data are simple three-year averages.
 - The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

Prevalence of Diabetes

A total of 8.6% of Yellowstone County adults report having been diagnosed with diabetes.

- Similar to the national proportion.
- ☒ Similar to 2005 findings.

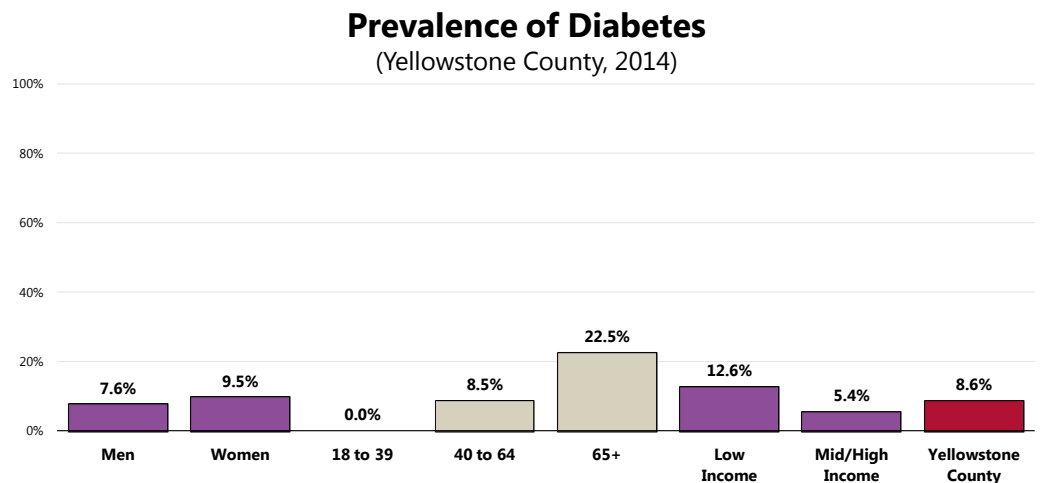
In addition to the prevalence of diagnosed diabetes referenced above, another 7.1% of Yellowstone County adults report that they have “pre-diabetes” or “borderline diabetes.”



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 39, 41]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
- Notes:
- Asked of all respondents.
 - Local and national data exclude gestation diabetes (occurring only during pregnancy).

A higher prevalence of diagnosed diabetes (excluding pre-diabetes or borderline diabetes) is reported among:

- 👴 Older adults (note the strong positive association between diabetes and age, with 22.5% of seniors with diabetes).



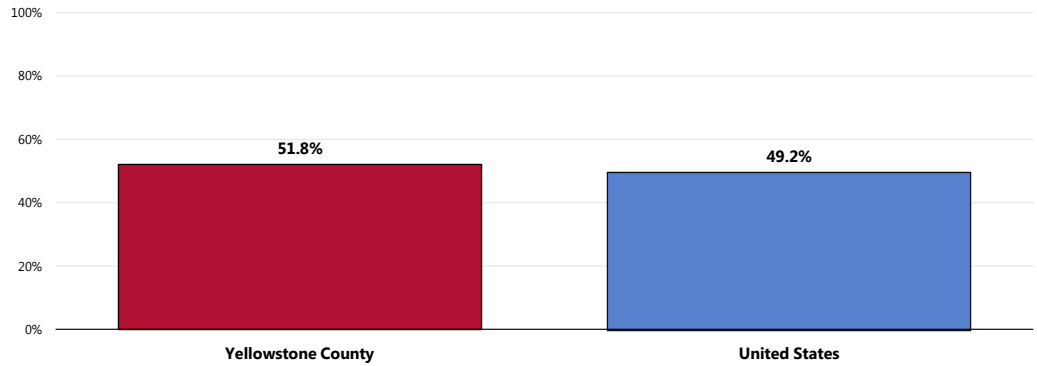
- Sources:
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 39]
- Notes:
- Asked of all respondents.
 - Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
 - Excludes gestation diabetes (occurring only during pregnancy).

Diabetes Testing

Of Yellowstone County adults who have not been diagnosed with diabetes, 51.8% report having had their blood sugar level tested within the past three years.

- Similar to the national proportion.

Have Had Blood Sugar Tested in the Past Three Years (Among Non-Diabetics)



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

Alzheimer's Disease

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

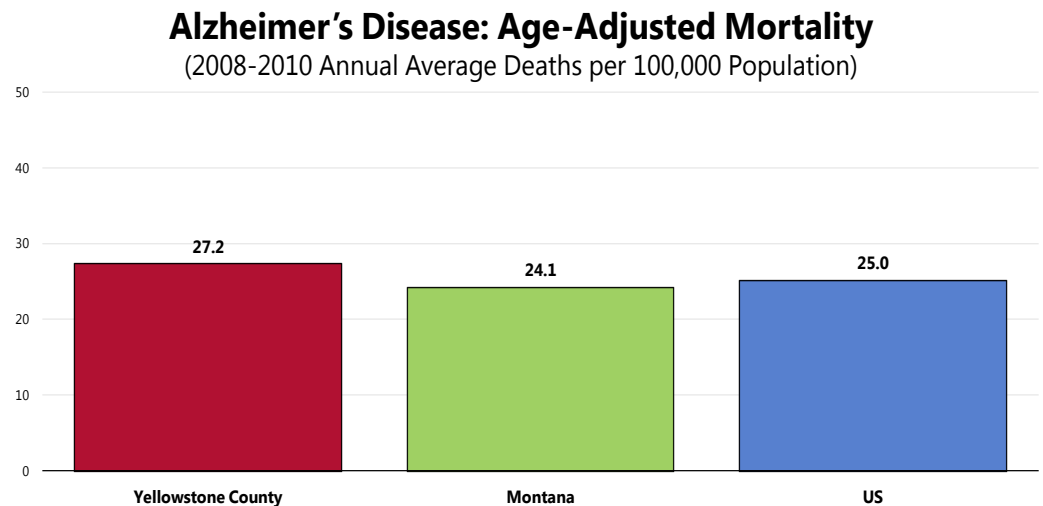
Alzheimer's disease is the 6th leading cause of death among adults age 18 years and older. Estimates vary, but experts suggest that up to 5.1 million Americans age 65 years and older have Alzheimer's disease. These numbers are predicted to more than double by 2050 unless more effective ways to treat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

– Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Alzheimer's Disease Deaths

Between 2008 and 2010, there was an annual average age-adjusted Alzheimer's disease mortality rate of 27.2 deaths per 100,000 population in Yellowstone County.

- Less favorable than the statewide rate.
- Less favorable than the national rate.

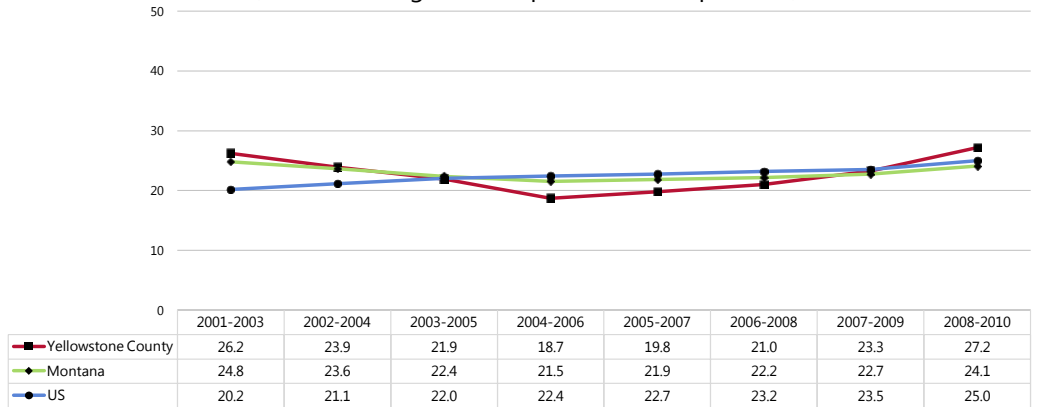


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.

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

- After declining in the early 2000s, Alzheimer's disease mortality in Yellowstone County has since been on the rise. Across Montana and the US, rates have increased steadily in recent years.

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



Sources:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.

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.

Kidney Disease

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

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

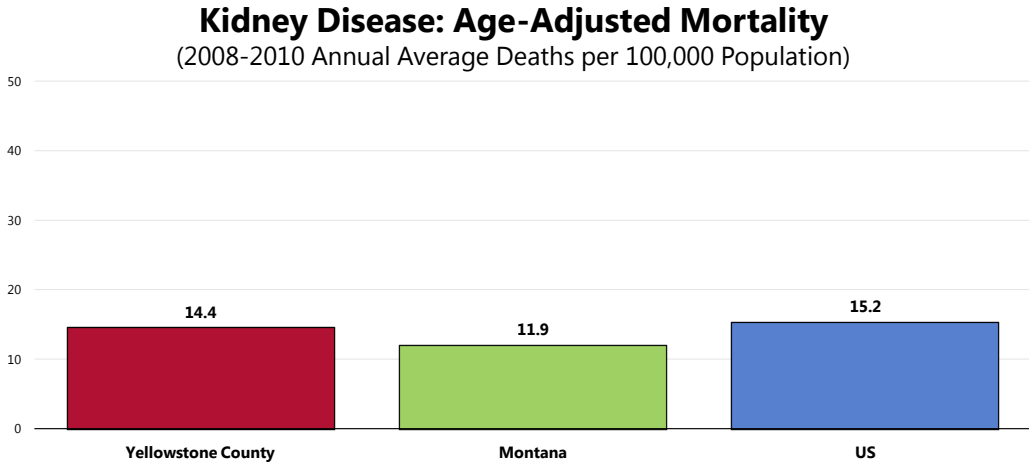
Diabetes is the most common cause of kidney failure. The results of the Diabetes Prevention Program (DPP) funded by the national Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) show that moderate exercise, a healthier diet, and weight reduction can prevent development of type 2 diabetes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

- Healthy People 2020 (www.healthypeople.gov)

Age-Adjusted Kidney Disease Deaths

Between 2008 and 2010 there was an annual average age-adjusted kidney disease mortality rate of 14.4 deaths per 100,000 population in Yellowstone County.

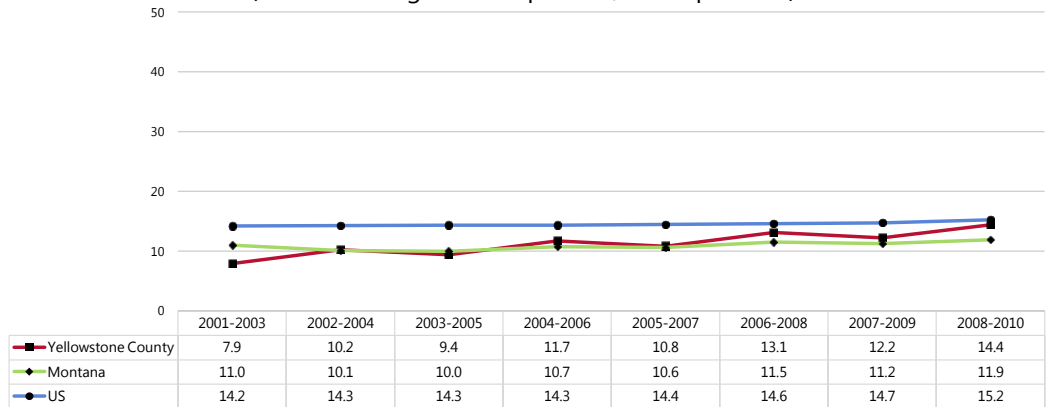
- Worse than the rate found statewide.
- Better than the national rate.



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 2013.
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.
• Local, state and national data are simple three-year averages.

- ☒ The county's age-adjusted kidney disease death rate has increased over time, echoing the Montana and US trends.

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



Sources:

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.

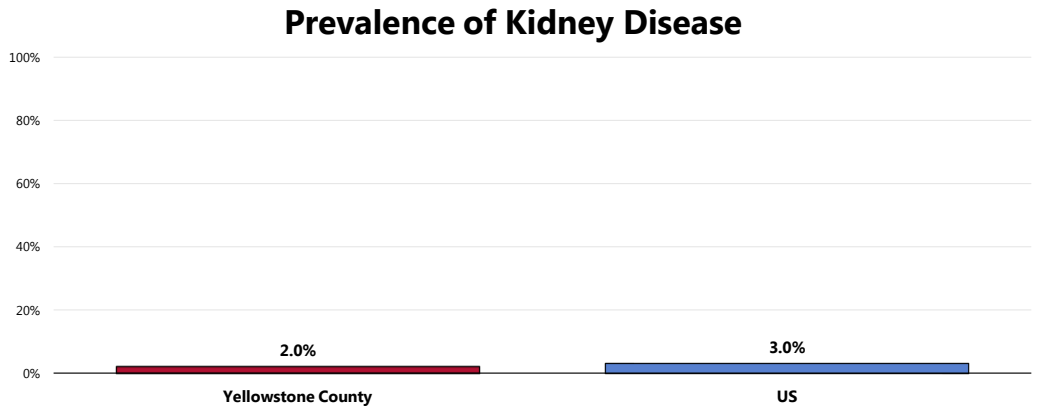
 Notes:

- 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 Kidney Disease

A total of 2.0% of Yellowstone County adults report having been diagnosed with kidney disease.

- Similar to the national proportion.



Sources:

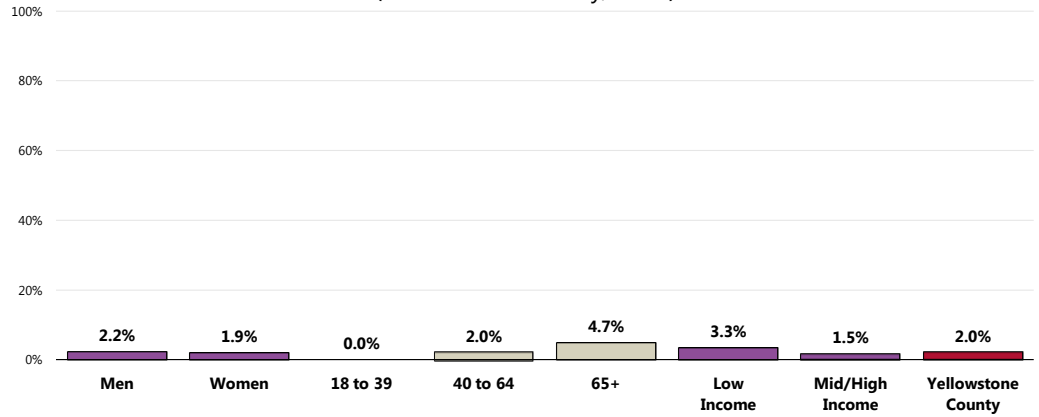
- 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 33]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.

 Notes:

- Asked of all respondents.

👥 A higher prevalence of kidney disease is reported among seniors in Yellowstone County (note the positive association with age).

Prevalence of Kidney Disease (Yellowstone County, 2014)



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

Notes: • Asked of all respondents.

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

Potentially Disabling Conditions

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

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

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

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

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

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

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

– Healthy People 2020 (www.healthypeople.gov)

Arthritis, Osteoporosis, & Chronic Pain

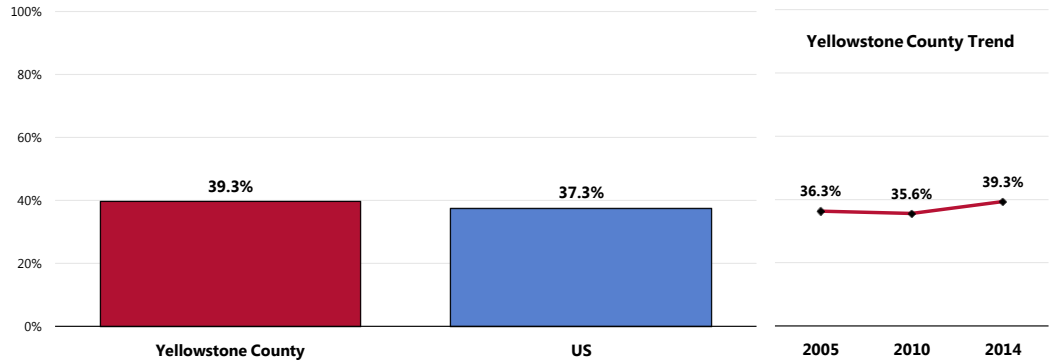
Prevalence of Arthritis/Rheumatism

Nearly 4 in 10 (39.3%) Yellowstone County adults age 50 and older report suffering from arthritis or rheumatism.

- Comparable to that found nationwide.
- ☒ The prevalence of arthritis/rheumatism is similar to that reported in previous years.

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

Prevalence of Arthritis/Rheumatism (Among Adults Age 50 and Older)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 151]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.

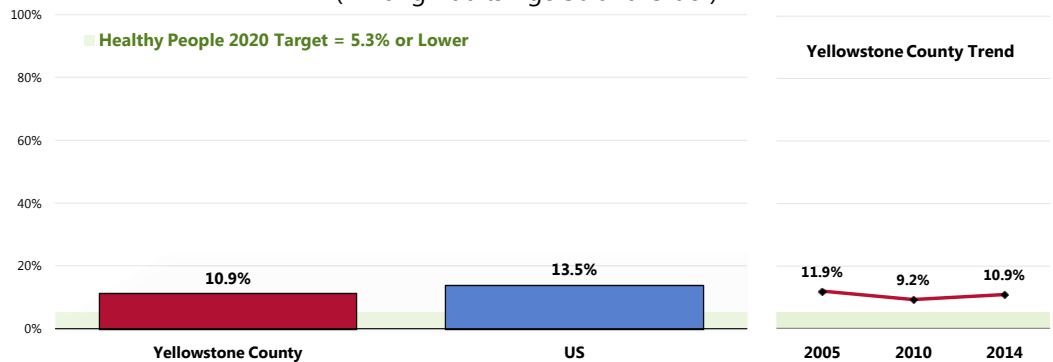
Notes: • Reflects respondents age 50 and older.

Prevalence of Osteoporosis

A total of 10.9% of survey respondents age 50 and older have osteoporosis.

- Similar to that found nationwide.
- Fails to satisfy the Healthy People 2020 target of 5.3% or lower.
- ☒ Statistically similar to previous findings.

Prevalence of Osteoporosis (Among Adults Age 50 and Older)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 152]

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

• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AOCBC-10]

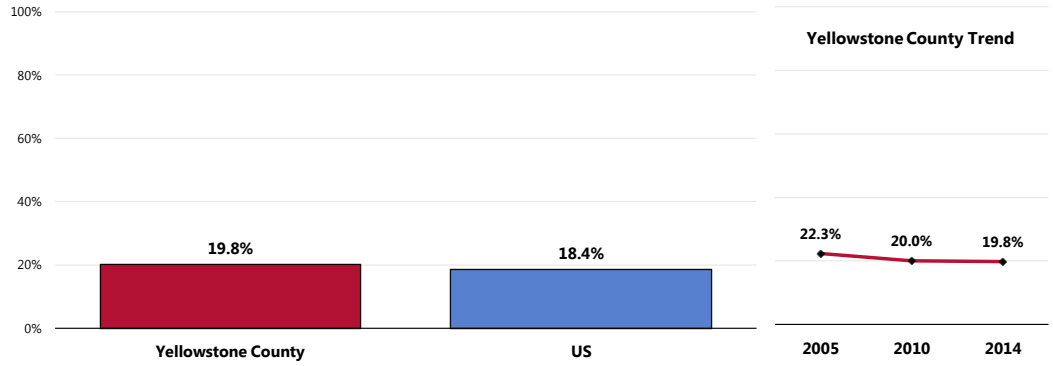
Notes: • Reflects respondents age 50 and older.

Prevalence of Sciatica/Chronic Back Pain

A total of 19.8% of survey respondents suffer from chronic back pain or sciatica.

- Comparable to that found nationwide.
- ☒ Statistically similar to previous findings.

Prevalence of Sciatica/Chronic Back Pain



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 29]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

Vision & Hearing Impairment

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

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

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

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

– Healthy People 2020 (www.healthypeople.gov)

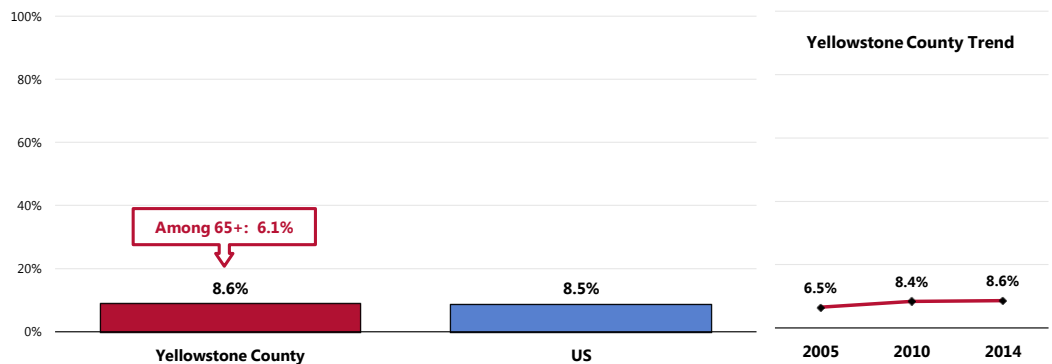
Vision Trouble

A total of 8.6% of Yellowstone County adults are blind, or have trouble seeing even when wearing corrective lenses.

- Almost identical to that found nationwide.
- ☒ Statistically similar to previous findings.
- 👥 Among Yellowstone County adults age 65 and older, 6.1% have vision trouble.

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

Prevalence of Blindness/Trouble Seeing



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 26]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

Hearing Trouble

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

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

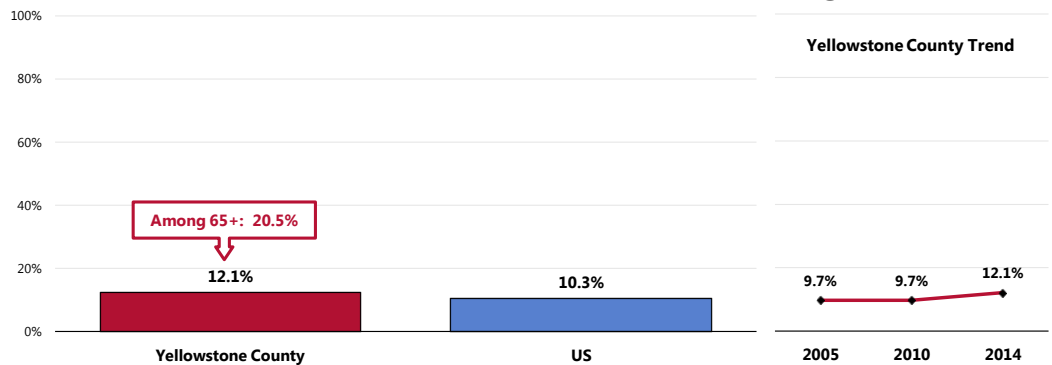
As the nation's population ages and survival rates for medically fragile infants and for people with severe injuries and acquired diseases improve, the prevalence of sensory and communication disorders is expected to rise.

– Healthy People 2020 (www.healthypeople.gov)

In all, 12.1% of Yellowstone County adults report being deaf or having difficulty hearing.

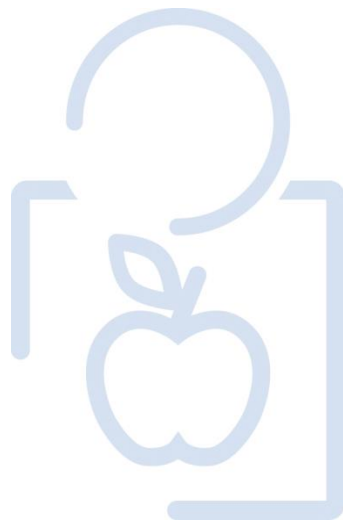
- Similar to that found nationwide.
- 📊 Similar to previous findings.
- 👥 Among Yellowstone County adults age 65 and older, 20.5% have partial or complete hearing loss.

Prevalence of Deafness/Trouble Hearing



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 27]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

INFECTIOUS DISEASE



Vaccine-Preventable Conditions

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

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

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

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

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

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

– Healthy People 2020 (www.healthypeople.gov)

Pertussis

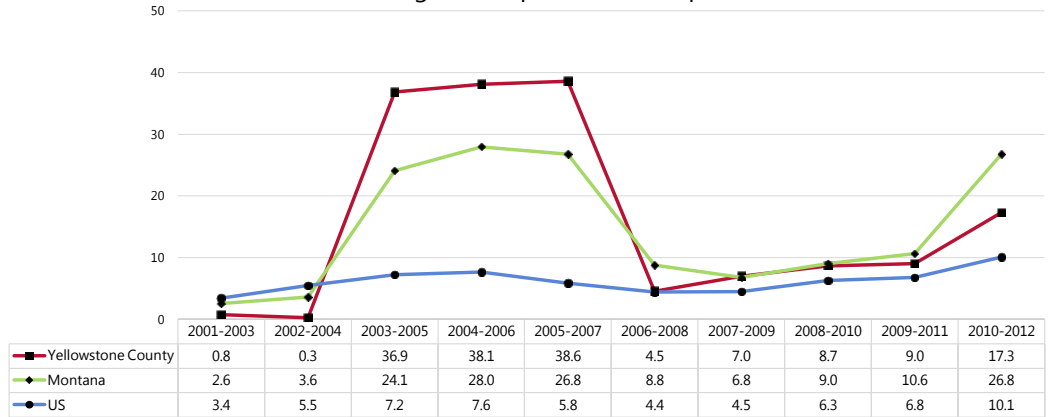
Between 2010 and 2012, the annual average pertussis incidence rate (new cases per year) was 17.3 cases per 100,000 population in Yellowstone County.

- Below the Montana incidence rate.
- Above the national incidence rate for the 2010–2012 reporting period.
- ☒ Incidence spiked due to an outbreak in 2005; the overall trend, however, has been upward.

“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.

Pertussis Incidence (Annual Average Cases per 100,000 Population)



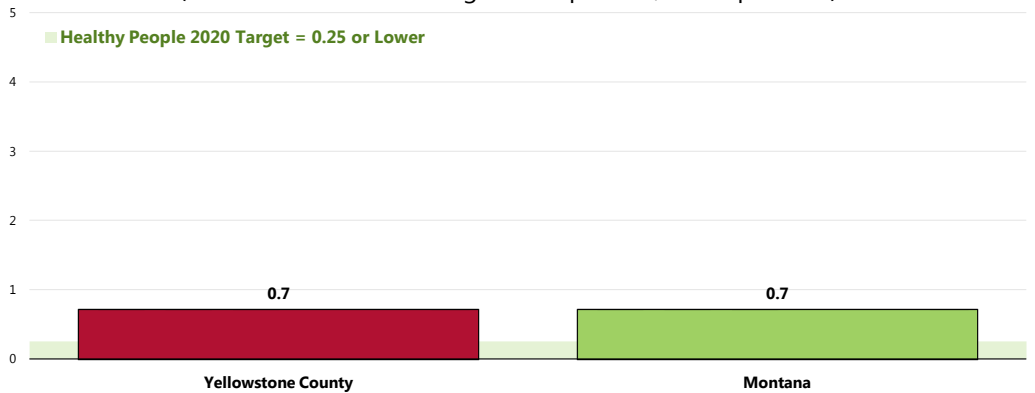
Sources: • Montana Department of Public Health and Human Services.
 • Centers for Disease Control and Prevention, National Center for Health Statistics.
 Notes: • Rates are annual average new cases per 100,000 population.

Acute Hepatitis C

The Yellowstone County experienced an incidence rate of less than one case of hepatitis C per 100,000 population between 2010 and 2012.

- Identical to the statewide rate.
- Just above the Healthy People 2020 target of 0.25 or lower.

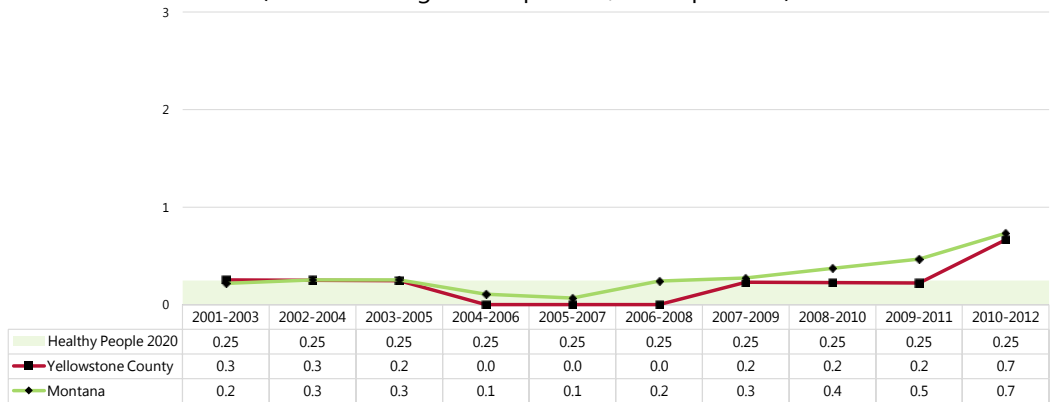
Hepatitis C (Acute) Incidence (2010-2012 Annual Average Cases per 100,000 Population)



Sources: • Montana Department of Public Health and Human Services.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-26]
 Notes: • Rates are annual average new cases per 100,000 population.

Incidence has increased in Yellowstone County in the most recent reporting years, echoing the statewide trend.

Hepatitis C (Acute) Incidence (Annual Average Cases per 100,000 Population)



Sources: • Montana Department of Public Health and Human Services.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-26]
 Notes: • Rates are annual average new cases per 100,000 population.

Influenza & Pneumonia Vaccination

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

– Healthy People 2020 (www.healthypeople.gov)

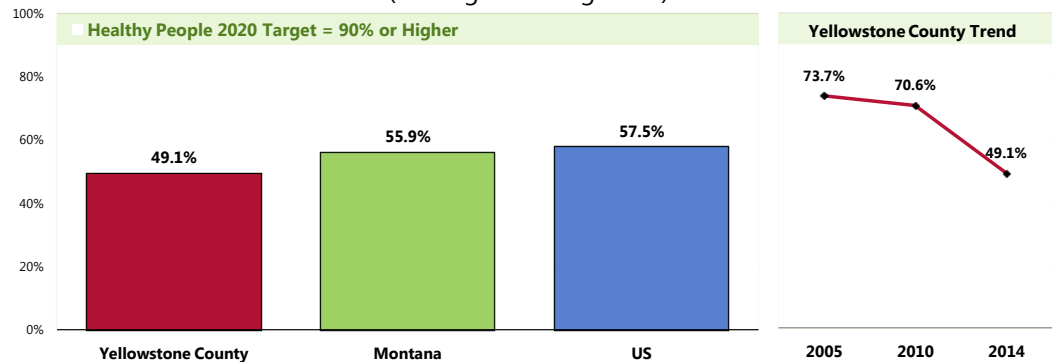
Flu Vaccinations

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

Among Yellowstone County seniors, 49.1% received a flu shot (or FluMist®) within the past year.

- Statistically comparable to the Montana finding.
- Comparable to the national finding.
- Fails to satisfy the Healthy People 2020 target (90% or higher).
- ☒ Marks a significant decrease since 2005.

Older Adults: Have Had a Flu Vaccination in the Past Year (Among Adults Age 65+)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 153]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). 2011 Montana data.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-12.7]

Notes: • Reflects respondents 65 and older.
 • Includes FluMist as a form of vaccination.

High-Risk Adults

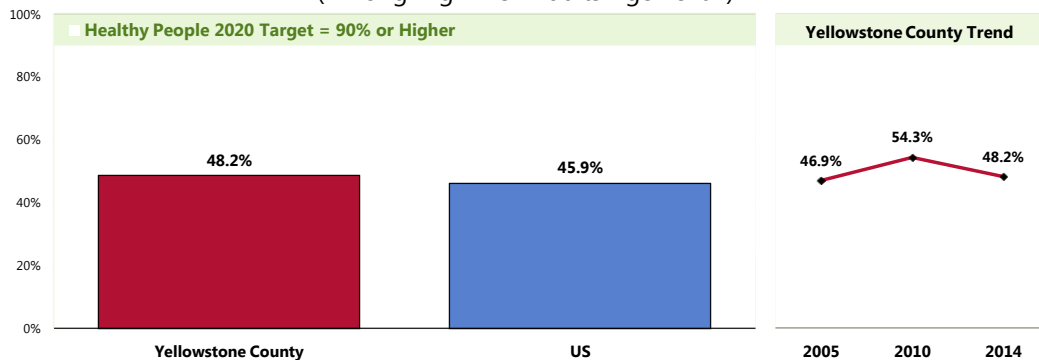
“High-risk” includes adults who report having been diagnosed with heart disease, diabetes or respiratory disease.

A total of 48.2% of high-risk adults age 18 to 64 received a flu vaccination (flu shot or FluMist®) within the past year.

- Similar to national findings.
- Fails to satisfy the Healthy People 2020 target (90% or higher).
- ☒ Statistically similar to 2005 findings.

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

(Among High-Risk Adults Age 18-64)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 154]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-12.6]

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

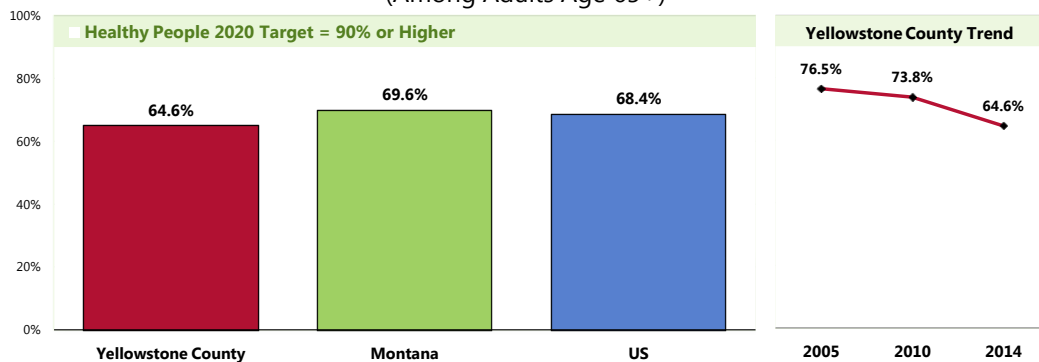
Pneumonia Vaccination

Among adults age 65 and older, 64.6% have received a pneumonia vaccination at some point in their lives.

- Comparable to the Montana finding.
- Comparable to the national finding.
- Fails to satisfy the Healthy People 2020 target of 90% or higher.
- ☒ The decrease over time is not statistically significant.

Older Adults: Have Ever Had a Pneumonia Vaccine

(Among Adults Age 65+)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 155]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2011 Montana data.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-13.1]

Notes: • Reflects respondents 65 and older.

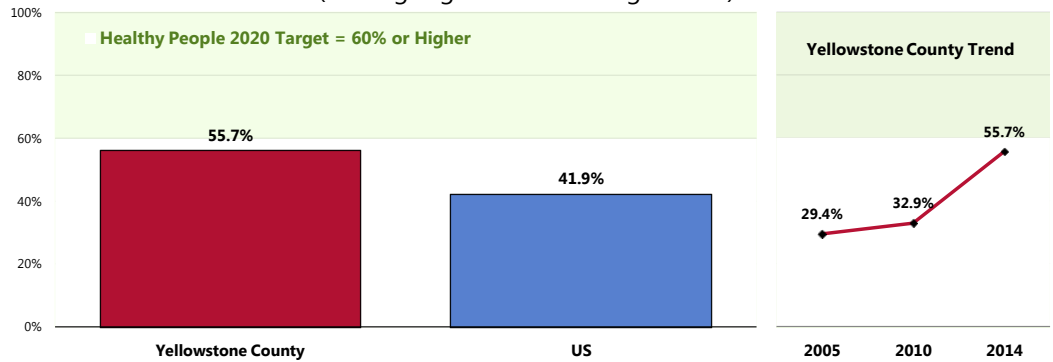
High-Risk Adults

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

A total of 55.7% of high-risk adults age 18 to 64 have ever received a pneumonia vaccination.

- More favorable than national findings.
- Similar to the Healthy People 2020 target (60% or higher).
- ▣ Marks a significant increase since 2005.

High-Risk Adults: Have Ever Had a Pneumonia Vaccine (Among High-Risk Adults Age 18-64)



- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 156]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 - US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-13.2]
- Notes:
- Asked of all high-risk respondents under 65.
 - “High-Risk” includes adults age 18 to 64 who have been diagnosed with heart disease, diabetes or respiratory disease.

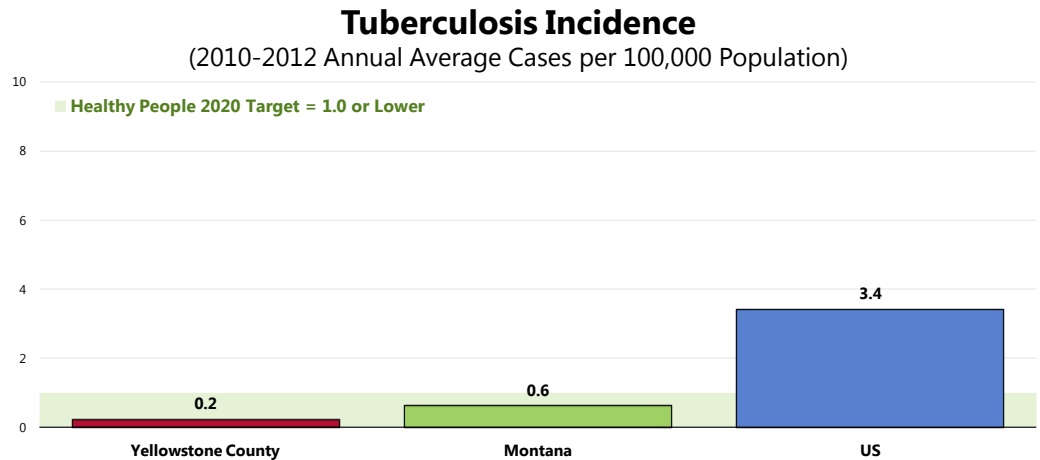
Tuberculosis

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

– Healthy People 2020 (www.healthypeople.gov)

Between 2010 and 2012, the annual average tuberculosis incidence rate (new cases per year) was 0.2 cases per 100,000 population in Yellowstone County.

- Below the Montana incidence rate.
- Well below the national incidence rate.
- Satisfies the Healthy People 2020 target (1.0 or lower).

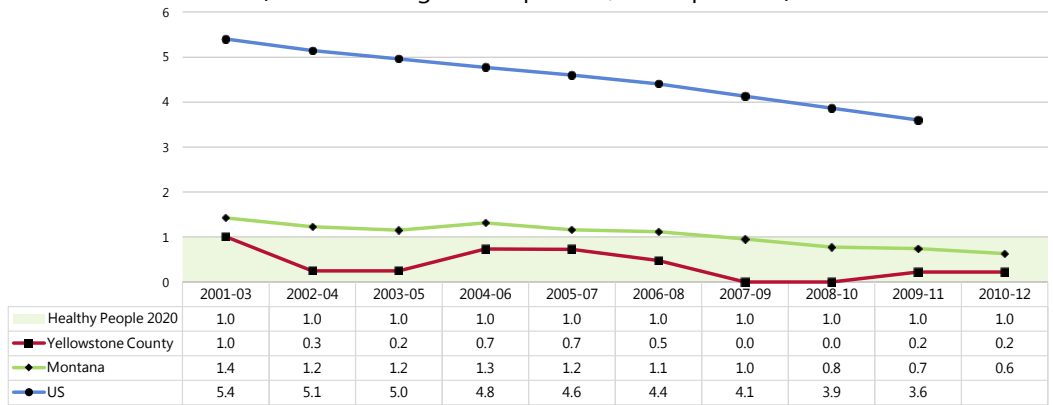


Sources: ● Montana Department of Public Health and Human Services.
● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-29]
● Centers for Disease Control and Prevention, Division of Public Health Surveillance and Informatics. Epidemiology Program Office.

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

Although fluctuating, tuberculosis incidence in Yellowstone County has overall declined. A decreasing trend is noted across the state and US as well.

Tuberculosis Incidence
(Annual Average Cases per 100,000 Population)



Sources:

- Montana Department of Public Health and Human Services.
- US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective IID-29]
- Centers for Disease Control and Prevention, Division of Public Health Surveillance and Informatics. Epidemiology Program Office.

 Notes:

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

HIV

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

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

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

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

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

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

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

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

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

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

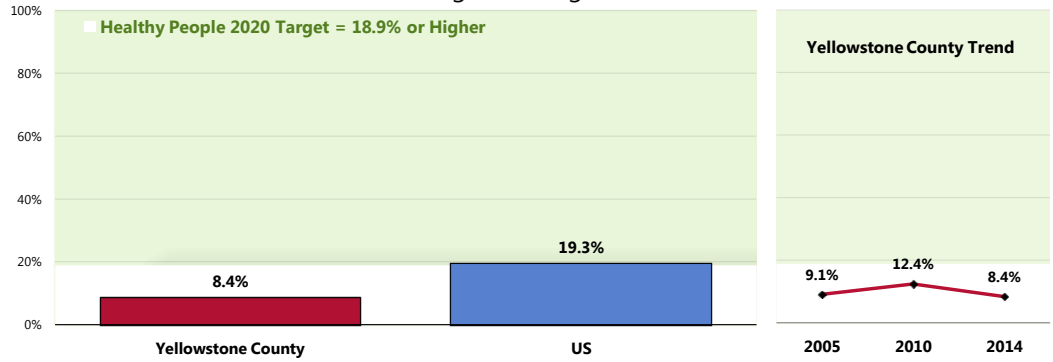
– Healthy People 2020 (www.healthypeople.gov)

HIV Testing

Among Yellowstone County adults age 18-44, 8.4% report that they have been tested for human immunodeficiency virus (HIV) in the past year.

- Well below the proportion found nationwide.
- Fails to satisfy the Healthy People 2020 target of 16.9% or higher.
- ☒ Testing among this age group has remained stable since 2005.

Tested for HIV in the Past Year (Among Adults Age 18-44)



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 157]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.
● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective HIV-14.1]
Notes: ● Reflects respondents age 18 to 44.
● Note that the Healthy People 2020 objective is for ages 15-44.

Sexually Transmitted Diseases

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

The Centers for Disease Control and Prevention (CDC) estimates that there are approximately 19 million new STD infections each year—almost half of them among young people ages 15 to 24. Because many cases of STDs go undiagnosed—and some common viral infections, such as human papillomavirus (HPV) and genital herpes, are not reported to CDC at all—the reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STDs in the US. Untreated STDs can lead to serious long-term health consequences, especially for adolescent girls and young women. CDC estimates that undiagnosed and untreated STDs cause at least 24,000 women in the United States each year to become infertile. Several factors contribute to the spread of STDs.

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

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

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

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

– Healthy People 2020 (www.healthypeople.gov)

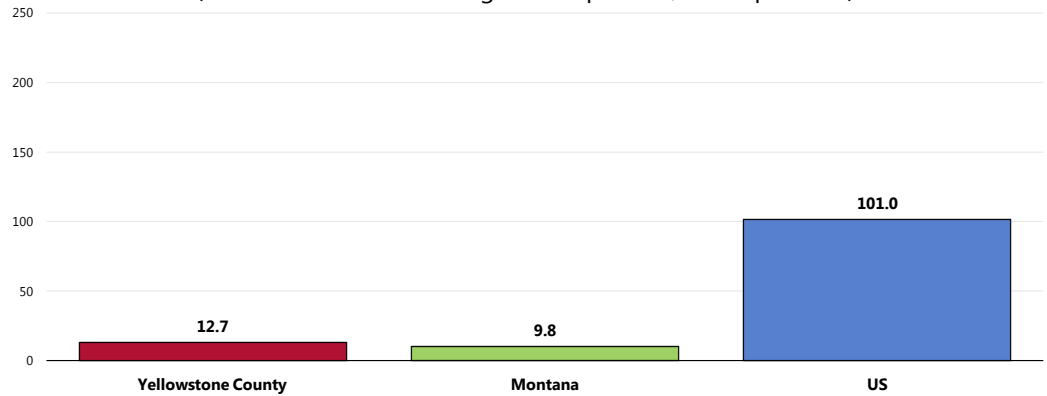
Gonorrhea

Between 2010 and 2012, the annual average gonorrhea incidence rate was 12.7 cases per 100,000 population in Yellowstone County.

- Higher than the Montana incidence rate.
- Well below the national incidence rate.

Gonorrhea Incidence

(2010-2012 Annual Average Cases per 100,000 Population)

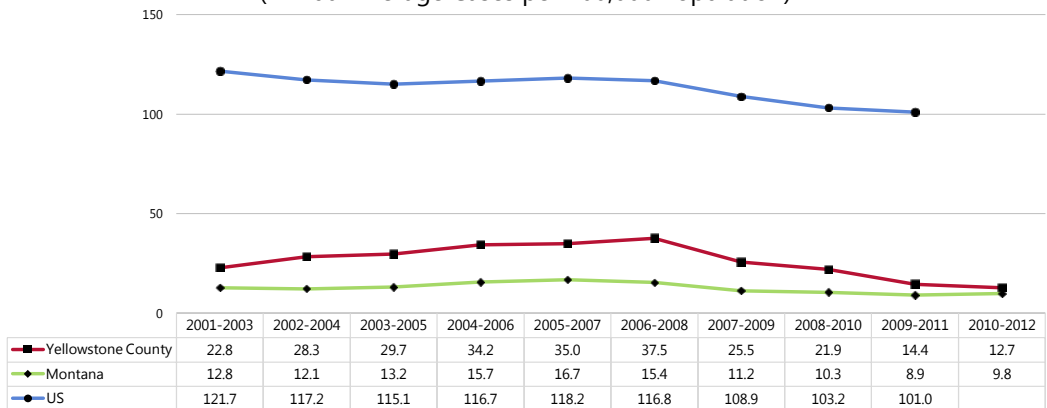


Sources: • Montana Department of Public Health and Human Services.
• Centers for Disease Control and Prevention, National Center for Health Statistics.
Notes: • Rates are annual average new cases per 100,000 population.
• The US rate represents 2009-2011 data.

- ☒ The gonorrhea rate in Yellowstone County increased in the early 2000s, but has since declined notably.

Gonorrhea Incidence

(Annual Average Cases per 100,000 Population)



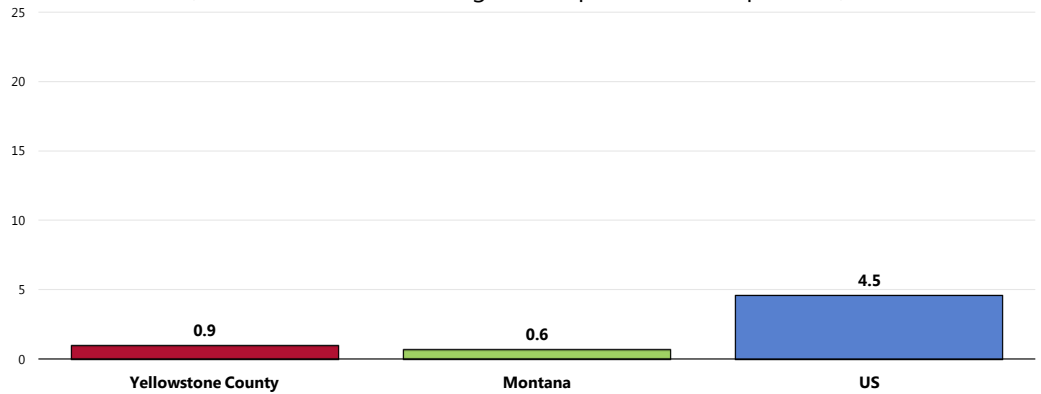
Sources: • Montana Department of Public Health and Human Services.
• Centers for Disease Control and Prevention, National Center for Health Statistics.
Notes: • Rates are annual average new cases per 100,000 population.

Syphilis

The 2010-2012 annual average primary/secondary syphilis incidence rate in Yellowstone County was 0.9 cases per 100,000 population.

- Above the Montana incidence rate.
- Well below the national incidence rate.

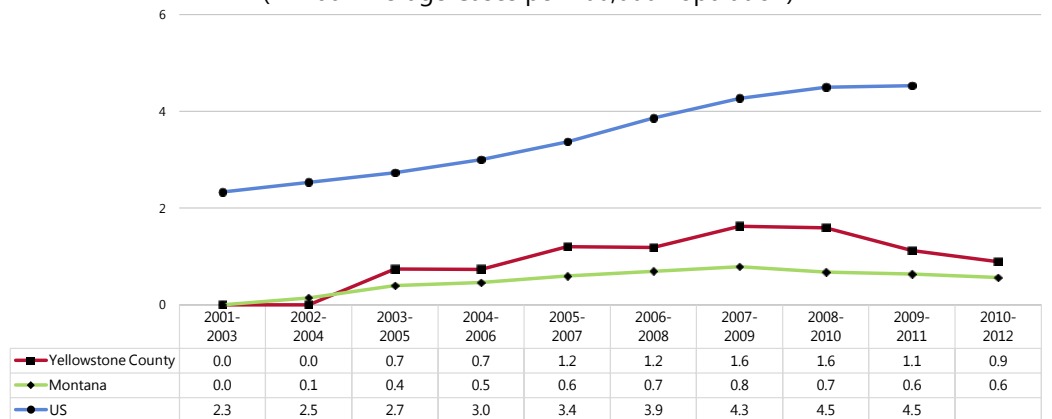
Primary/Secondary Syphilis Incidence
(2010-2012 Annual Average Cases per 100,000 Population)



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 US rate represents 2009-2011 data.

☒ Syphilis incidence increased during much of the 2000s in Yellowstone County, although the most recent reporting years show the beginnings of declining incidence.

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

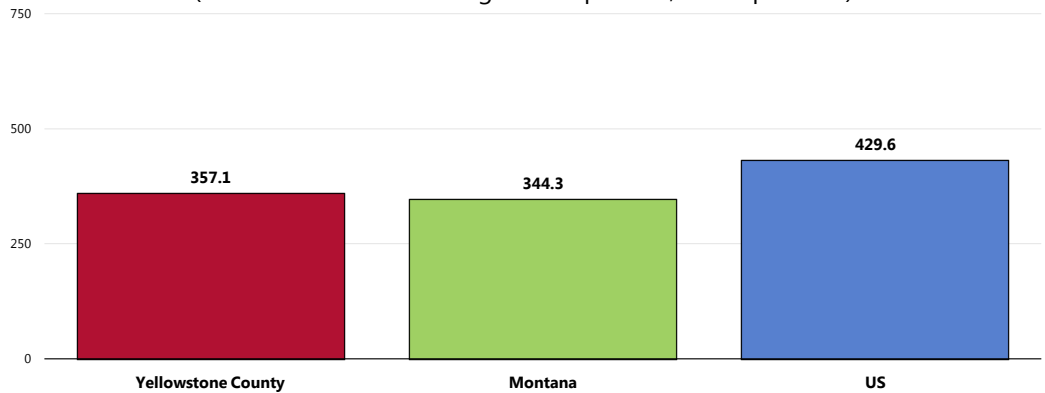
Chlamydia

Between 2010 and 2012, the annual average chlamydia incidence rate was 357.1 cases per 100,000 population in Yellowstone County.

- Similar to the Montana incidence rate.
- More favorable than the national incidence rate.

Chlamydia Incidence

(2010-2012 Annual Average Cases per 100,000 Population)

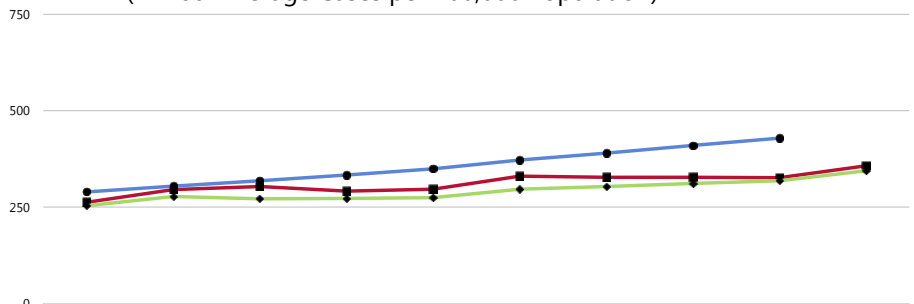


Sources: • Montana Department of Public Health and Human Services.
 • Centers for Disease Control and Prevention, National Center for Health Statistics.
 Notes: • Rates are annual average new cases per 100,000 population.
 • The US rate represents 2009-2011 data.

- ☒ Chlamydia incidence increased in Yellowstone County over the past decade, as did the state and national incidence rates.

Chlamydia Incidence

(Annual Average Cases per 100,000 Population)



| | 2001-2003 | 2002-2004 | 2003-2005 | 2004-2006 | 2005-2007 | 2006-2008 | 2007-2009 | 2008-2010 | 2009-2011 | 2010-2012 |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Yellowstone County | 263.3 | 295.5 | 303.9 | 292.0 | 296.5 | 330.7 | 327.3 | 327.7 | 326.9 | 357.1 |
| Montana | 253.6 | 277.9 | 271.7 | 273.2 | 275.0 | 296.7 | 303.9 | 311.5 | 318.9 | 344.3 |
| US | 289.4 | 304.4 | 318.8 | 333.3 | 349.3 | 372.2 | 390.3 | 409.8 | 429.6 | - |

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

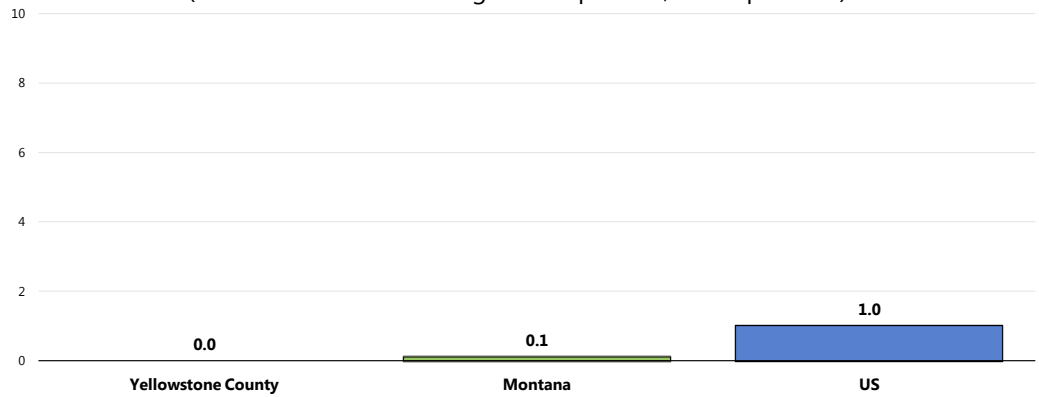
Hepatitis B Incidence

There were no cases of hepatitis B reported in Yellowstone County during the 2010-2012 reporting period.

- More favorable than the statewide rate.
- More favorable than the national rate.

Hepatitis B (Acute) Incidence

(2010-2012 Annual Average Cases per 100,000 Population)

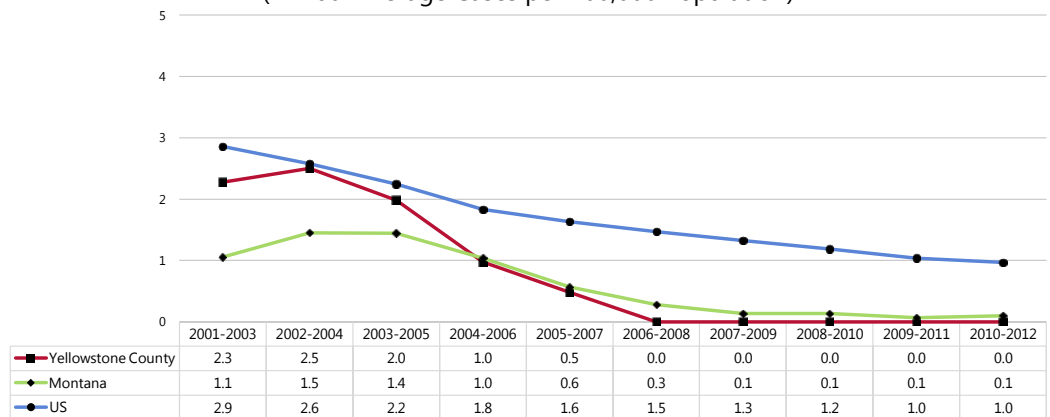


Sources: • Montana Department of Public Health and Human Services.
• Centers for Disease Control and Prevention, National Center for Health Statistics.
Notes: • Rates are annual average new cases per 100,000 population.

Incidence of hepatitis B in Yellowstone County 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.

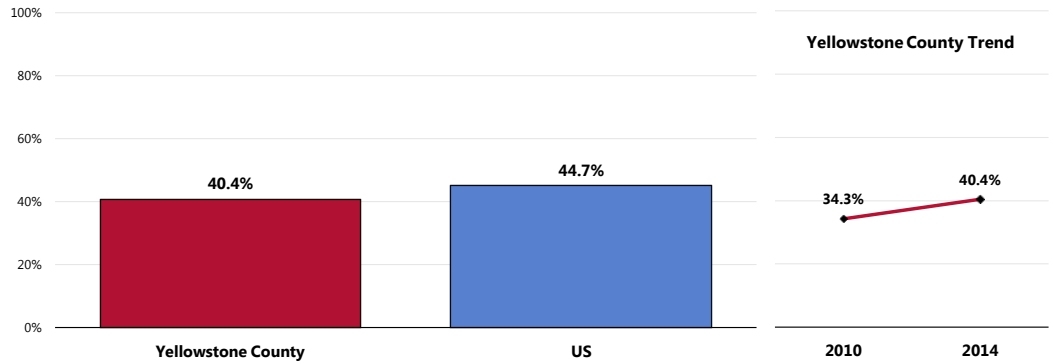
Hepatitis B Vaccination

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

Based on survey data, a total of 4 in 10 (40.4%) residents report having received the hepatitis B vaccination series.

- Similar to what is reported nationwide.
- 📊 Statistically similar to previous findings.

Have Completed the Hepatitis B Vaccination Series

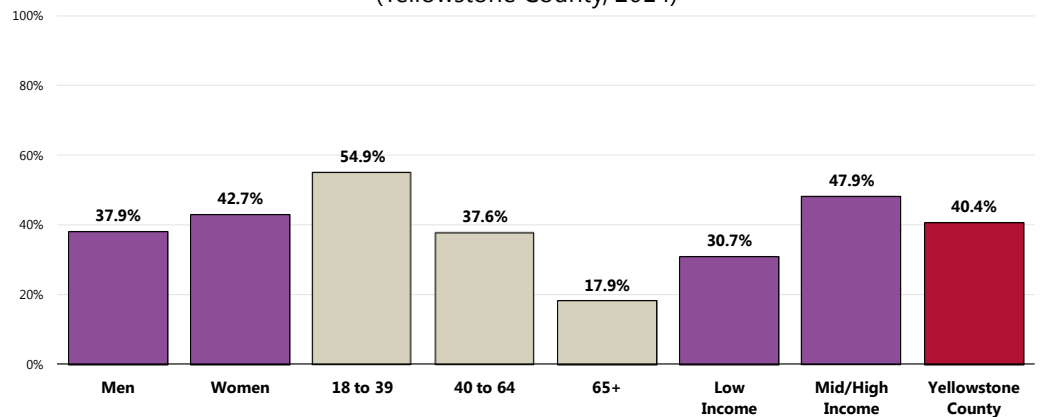


- Sources:
- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 70]
 - 2013 PRC National Health Survey, Professional Research Consultants, Inc.
- Notes:
- Asked of all respondents.
 - Includes a series of three shots, usually administered at least one month between shots

- 👥 Note the negative association between age and hepatitis B vaccination.
- 👥 In addition, residents living at higher incomes are much more likely than those with lower incomes to have received the hepatitis B vaccine.

Have Completed the Hepatitis B Vaccination Series

(Yellowstone County, 2014)



- Sources:
- 2014 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 (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

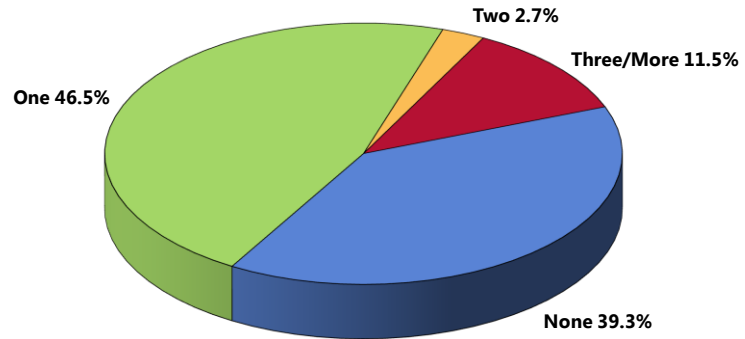
Safe Sexual Practices

Sexual Partners

Among unmarried Yellowstone County adults under 65, the vast majority cites having one (46.5%) or no (39.3%) sexual partners in the past 12 months.

Number of Sexual Partners in Past 12 Months

(Among Unmarried Adults Age 18-64; Yellowstone County, 2014)



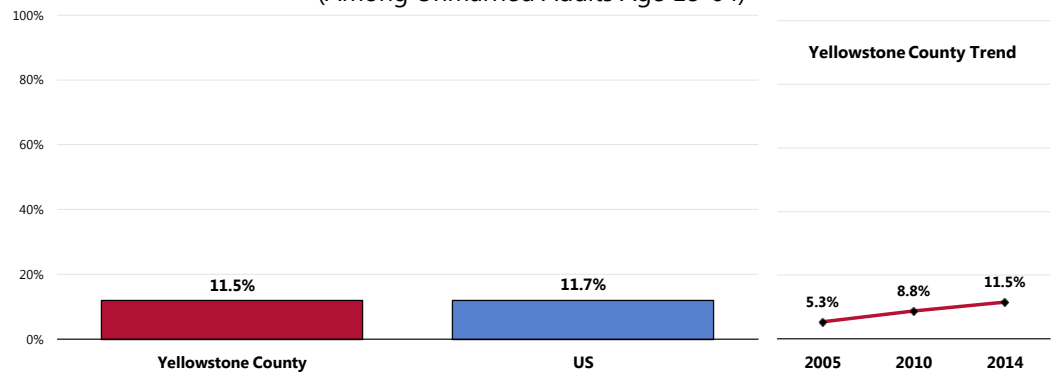
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 88]
Notes: • Asked of all unmarried respondents under the age of 65.

However, 11.5% report three or more sexual partners in the past year.

- Comparable to that reported nationally.
- 📈 The increase over time is not significant.

Had Three or More Sexual Partners in the Past Year

(Among Unmarried Adults Age 18-64)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 88]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all unmarried respondents under the age of 65.

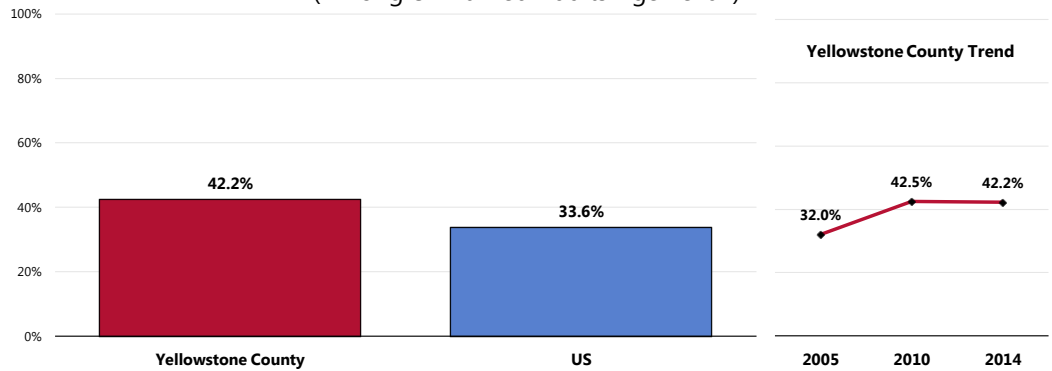
Condom Use

Among Yellowstone County adults who are under age 65 and unmarried, 42.2% report that a condom was used during their last sexual intercourse.

- Statistically similar to national findings.
- 📊 The increase since 2005 is not statistically significant.

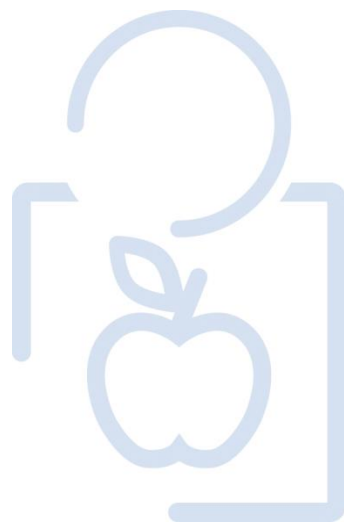
Condom Was Used During Last Sexual Intercourse

(Among Unmarried Adults Age 18-64)



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 89]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all unmarried respondents under the age of 65.

BIRTHS



Prenatal Care

Improving the well-being of mothers, infants, and children is an important public health goal for the US. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the healthcare system. The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality preconception (before pregnancy) and inter-conception (between pregnancies) care. Moreover, healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. Many factors can affect pregnancy and childbirth, including pre-conception health status, age, access to appropriate healthcare, and poverty.

Infant and child health are similarly influenced by socio-demographic factors, such as family income, but are also linked to the physical and mental health of parents and caregivers. There are racial and ethnic disparities in mortality and morbidity for mothers and children, particularly for African Americans. These differences are likely the result of many factors, including social determinants (such as racial and ethnic disparities in infant mortality; family income; educational attainment among household members; and health insurance coverage) and physical determinants (i.e., the health, nutrition, and behaviors of the mother during pregnancy and early childhood).

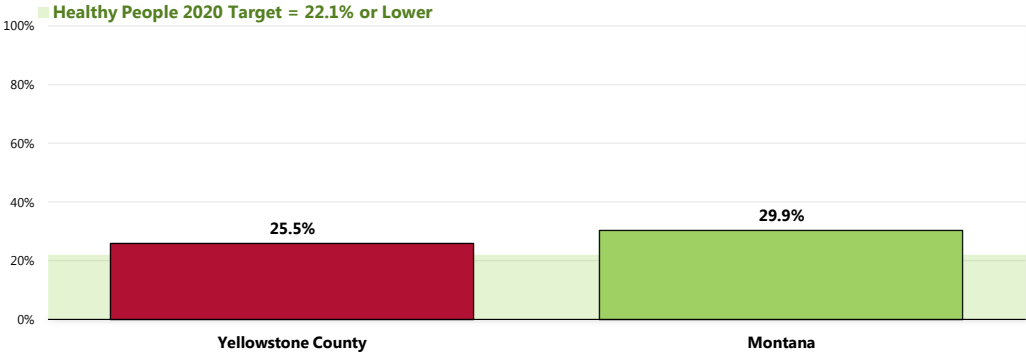
- Healthy People 2020 (www.healthypeople.gov)

Between 2009 and 2011, 25.5% of all Yellowstone County births were to mothers who did not receive prenatal care in the first trimester of pregnancy.

- More favorable than the Montana proportion.
- Fails to satisfy the Healthy People 2020 target (22.1% or lower).

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

Lack of Prenatal Care in the First Trimester (Percentage of Live Births, 2009-2011)



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

Birth Outcomes & Risks

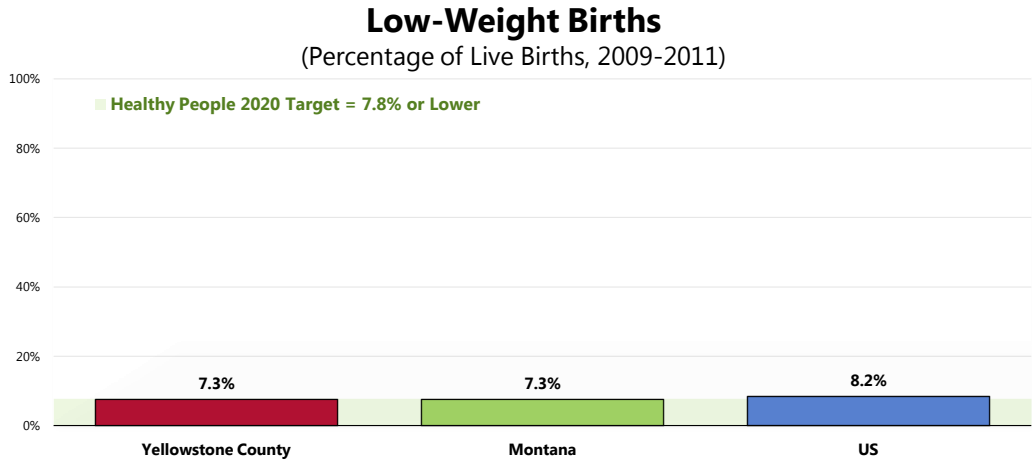
Low-Weight Births

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

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

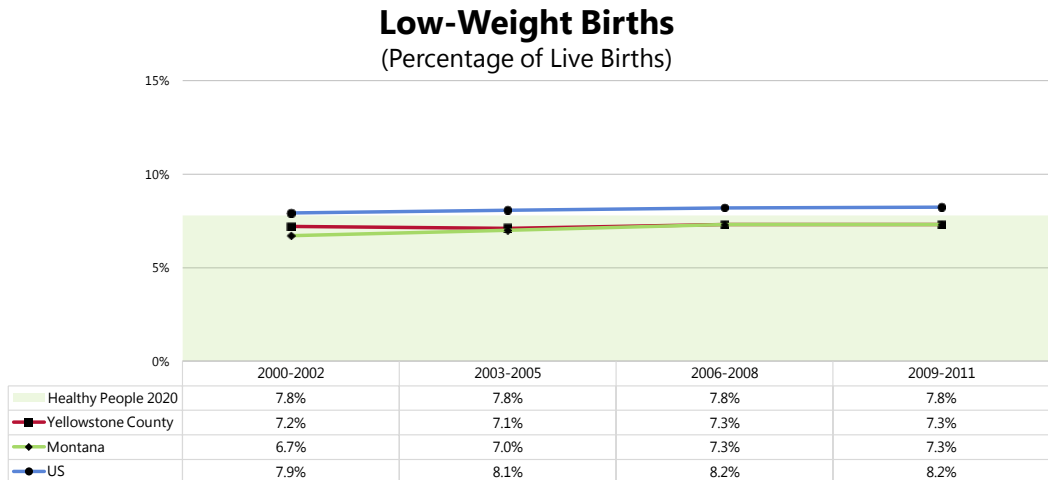
A total of 7.3% of 2009-2011 Yellowstone County births were low-weight.

- Identical to the Montana proportion.
- Better than the national proportion.
- Satisfies the Healthy People 2020 target (7.8% or lower).



Sources: • Montana Department of Public Health and Human Services.
 • Centers for Disease Control and Prevention, National Vital Statistics System.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-8.1]
 Note: • Numbers are a percentage of all live births within each population.
 • Defined as an infant born weighing less than 5.5 pounds (2,500 grams) regardless of gestational age.

☒ The proportion of low-weight births has not changed significantly in Yellowstone County in recent years; on the other hand, note the increasing trends reported for both Montana and the US over the past decade.



Sources: • Montana Department of Public Health and Human Services.
 • Centers for Disease Control and Prevention, National Vital Statistics System.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-8.1]
 Note: • Numbers are a percentage of all live births within each population.
 • Defined as an infant born weighing less than 5.5 pounds (2,500 grams) regardless of gestational age.

Infant Mortality

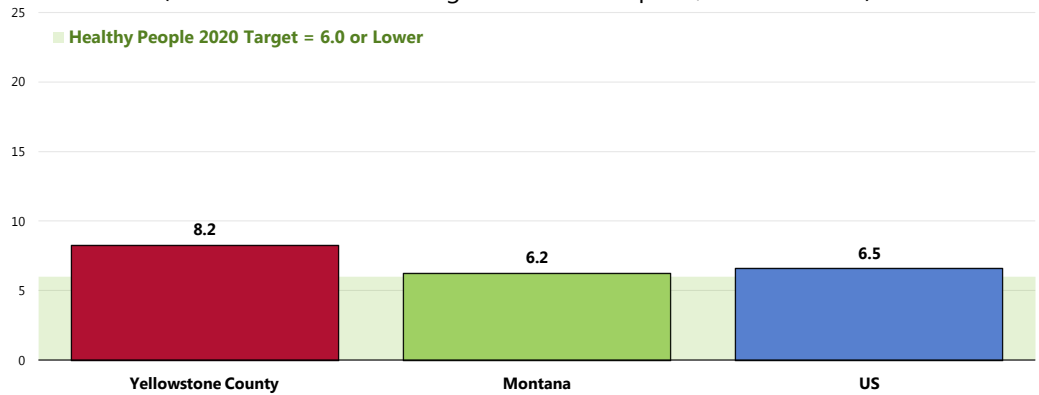
Infant mortality rates reflect deaths of children less than one year old per 1,000 live births.

Between 2008 and 2010, there was an annual average of 8.2 infant deaths per 1,000 live births.

- Less favorable than the Montana rate.
- Less favorable than the national rate.
- Fails to satisfy the Healthy People 2020 target of 6.0 per 1,000 live births.

Infant Mortality Rate

(2008-2010 Annual Average Infant Deaths per 1,000 Live Births)

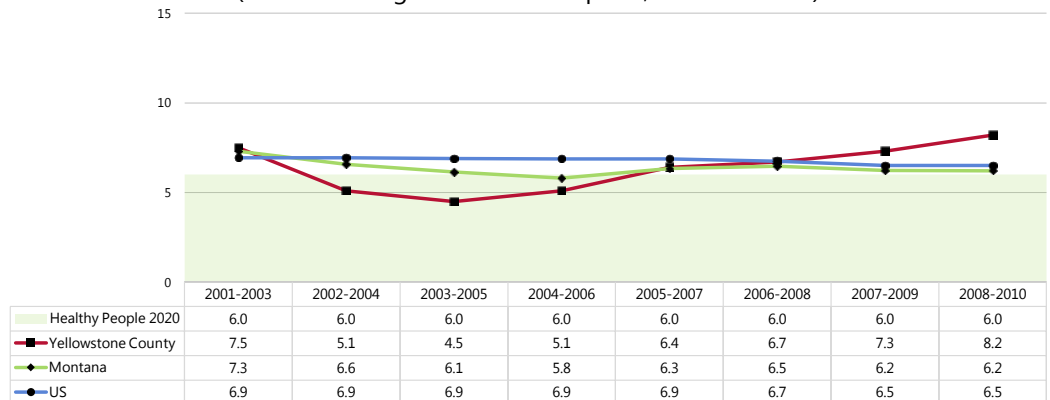


Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted November 2013.
 • Centers for Disease Control and Prevention, National Center for Health Statistics.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-1.3]
 Notes: • Rates are three-year averages of deaths of children under 1 year old per 1,000 live births.

☒ The infant mortality rate has increased during the past decade in Yellowstone County, in contrast to the decreasing trends reported in Montana and the US overall.

Infant Mortality Rate

(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 2013.
 • Centers for Disease Control and Prevention, National Center for Health Statistics.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective MICH-1.3]
 Notes: • Rates are three-year averages of deaths of children under 1 year old per 1,000 live births.

Family Planning

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

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

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

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

– Healthy People 2020 (www.healthypeople.gov)

Births to Unwed Mothers

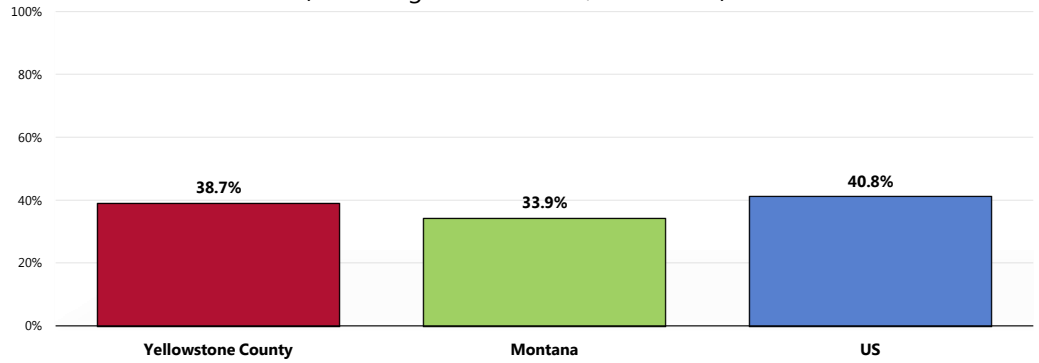
According to the CDC, an unintended pregnancy is a pregnancy that is either mistimed or unwanted at the time of conception. It is a core concept in understanding the fertility of populations and the unmet need for contraception. Unintended pregnancy is associated with an increased risk of morbidity for 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 full 38.7% of 2009-2011 births were to unwed mothers.

- Higher than the percentage reported statewide.
- Lower than that found nationally.

Births to Unwed Mothers (Percentage of Live Births, 2009-2011)



Sources:

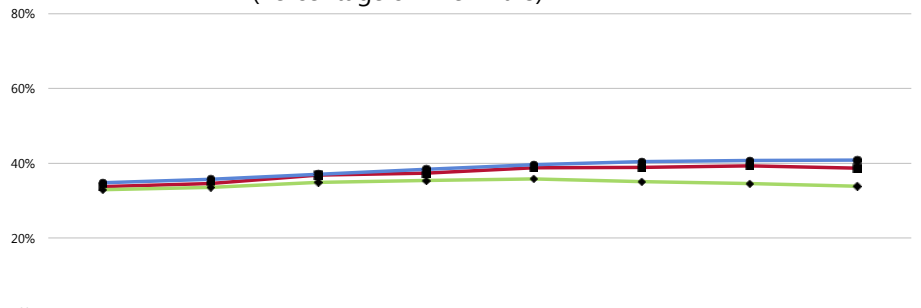
- Montana Department of Public Health and Human Services.
- Centers for Disease Control and Prevention, National Vital Statistics System.

 Note:

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

☒ The percentage of births to unwed mothers in Yellowstone County increased over the past decade, echoing the national trend.

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.

 Note:

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

Births to Teen Mothers

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

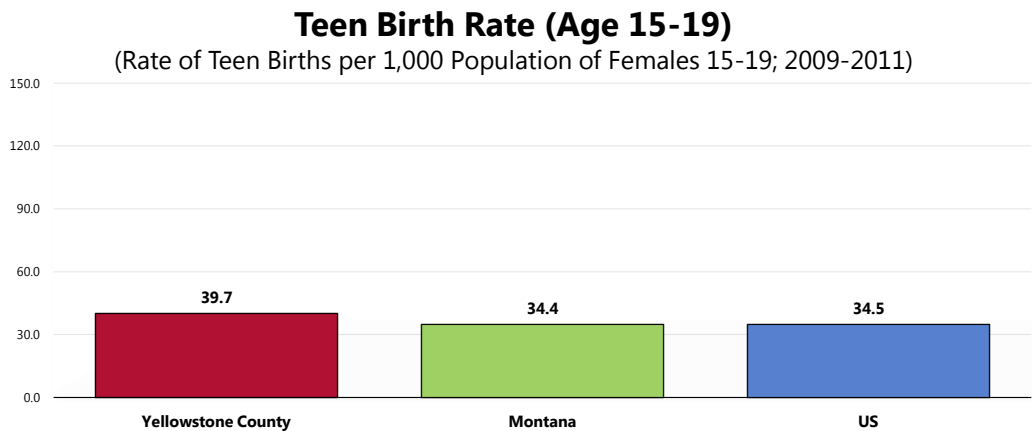
- Are less likely to graduate from high school or attain a GED by the time they reach age 30.
- Earn an average of approximately \$3,500 less per year, when compared with those who delay childbearing.
- Receive nearly twice as much Federal aid for nearly twice as long.

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

– Healthy People 2020 (www.healthypeople.gov)

Between 2009 and 2011, Yellowstone County reported a teen (age 15-19) birth rate of 39.7 births per 1,000 population of females age 15 to 19.

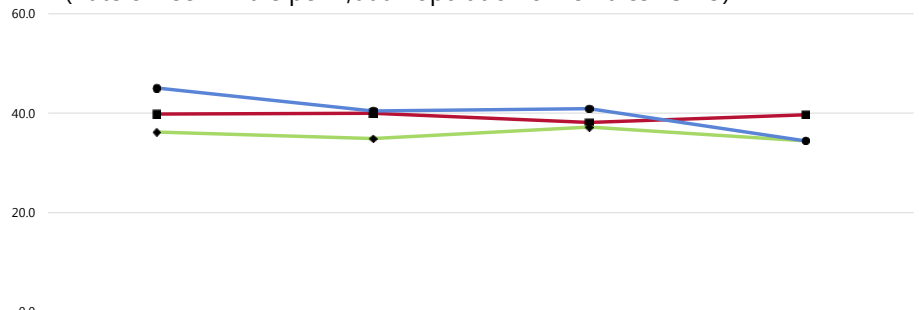
- Higher than the Montana rate.
- Higher than the national rate.



Sources: ● Montana Department of Public Health and Human Services.
● Centers for Disease Control and Prevention, National Vital Statistics System.
Note: ● Numbers represent teen birth rates per 1,000 females age 15 to 19.

☒ The rate has not changed over the past decade in Yellowstone County (although it has decreased in Montana and especially across the US overall).

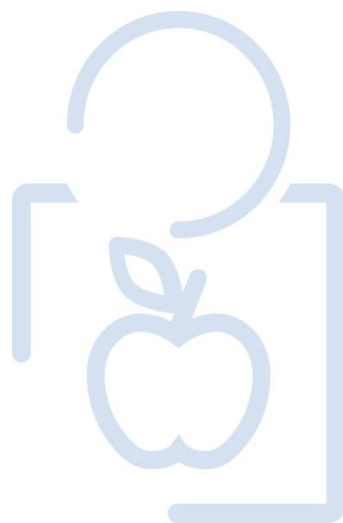
Trend in Teen Birth Rates (Age 15-19) (Rate of Teen Births per 1,000 Population of Females 15-19)



| | 2000-2002 | 2003-2005 | 2006-2008 | 2009-2011 |
|--------------------|-----------|-----------|-----------|-----------|
| Yellowstone County | 39.8 | 40.0 | 38.1 | 39.7 |
| Montana | 36.2 | 34.9 | 37.2 | 34.4 |
| US | 45.1 | 40.4 | 40.9 | 34.5 |

Sources: • Montana Department of Public Health and Human Services.
 • Centers for Disease Control and Prevention, National Vital Statistics System.
 Note: • Numbers represent teen birth rates per 1,000 females age 15 to 19.

ACCESS TO HEALTH SERVICES

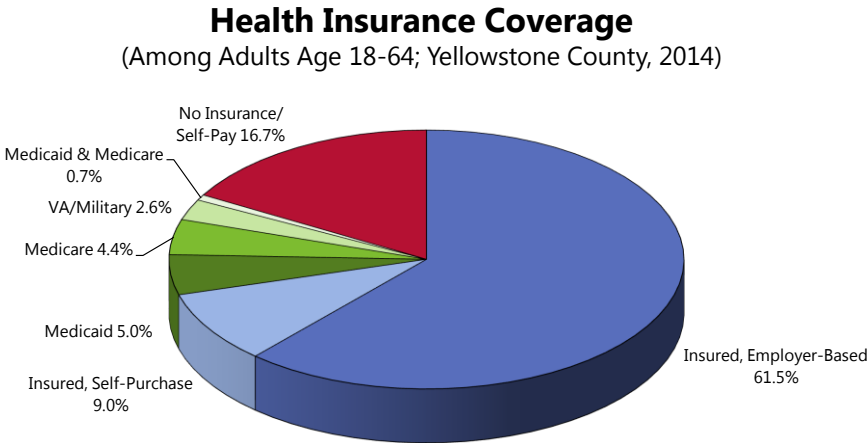


Health Insurance Coverage

Survey respondents were asked a series of questions to determine their health insurance coverage, if any, from either private or government-sponsored sources.

Type of Healthcare Coverage

A total of 70.5% of Yellowstone County adults age 18 to 64 report having healthcare coverage through private insurance. Another 12.7% report coverage through a government-sponsored program (e.g., Medicaid, Medicare, military benefits).



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 180]
Notes: • Reflects respondents age 18 to 64.

Lack of Health Insurance Coverage

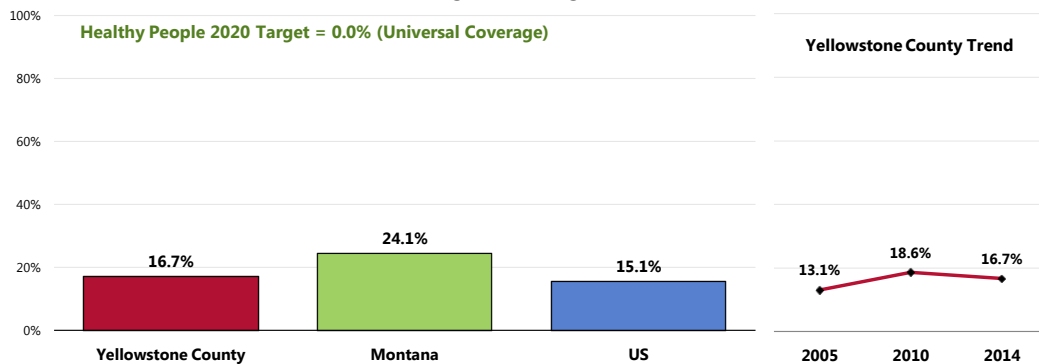
Here, lack of health insurance coverage reflects respondents age 18 to 64 (thus, excluding the Medicare population) who have no type of insurance coverage for healthcare services – neither private insurance nor government-sponsored plans (e.g., Medicaid).

Among adults age 18 to 64, 16.7% report having no insurance coverage for healthcare expenses.

- More favorable than the state finding.
- Similar to the national finding.
- The Healthy People 2020 target is universal coverage (0% uninsured).
- ☒ Statistically similar to 2005 findings.

Lack of Health Insurance Coverage

(Among Adults Age 18-64)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 180]
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-1]

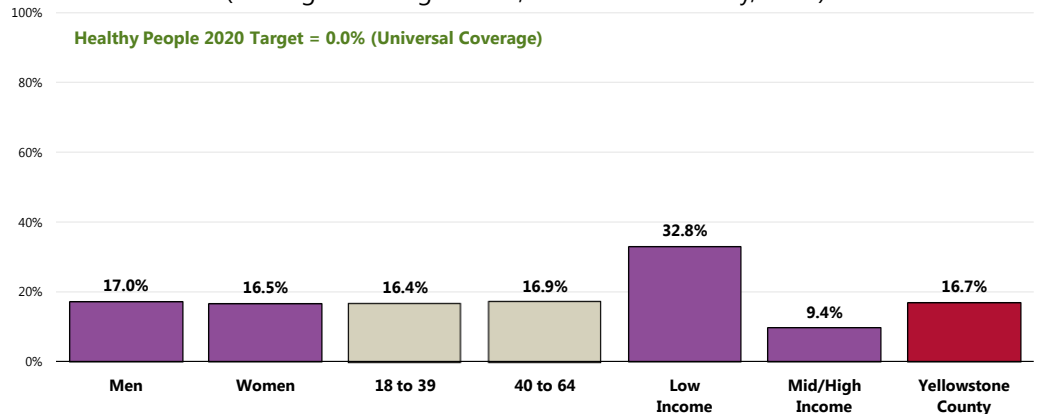
Notes: • Asked of all respondents under the age of 65.

These residents are more likely to be without health insurance coverage:

- 👤 Adults living at lower incomes (note the 32.8% uninsured prevalence among low-income respondents).

Lack of Health Insurance Coverage

(Among Adults Age 18-64; Yellowstone County, 2014)

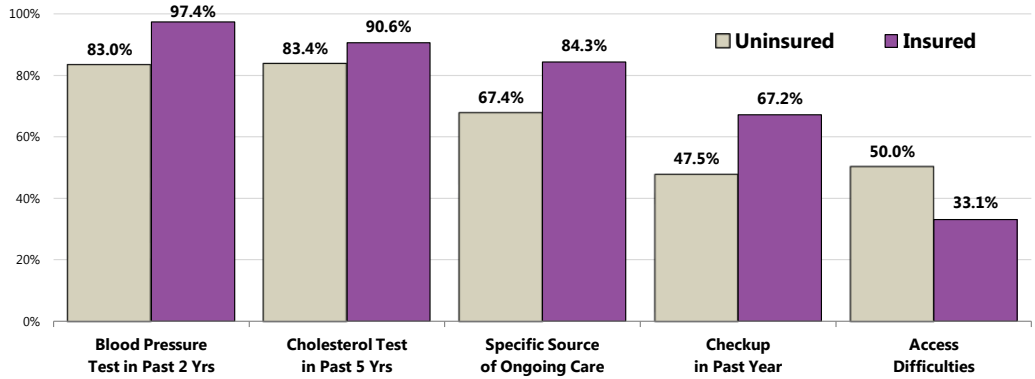


Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 180]
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-1]

Notes: • Asked of all respondents under the age of 65.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

- 👤 As might be expected, uninsured adults in Yellowstone County are less likely to receive routine care and preventive health screenings, and are more likely to have experienced difficulties accessing healthcare.

Preventive Healthcare (By Insured Status; Yellowstone County, 2014)



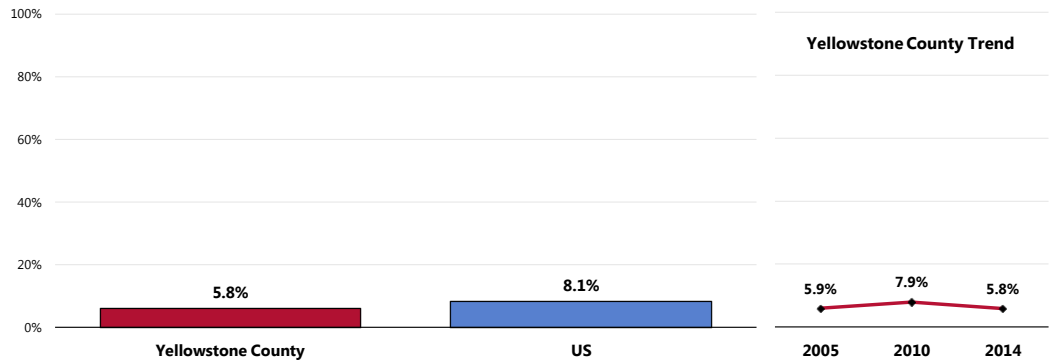
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 17, 45, 48, 181, 184]
 Notes: • Asked of all respondents.

Recent Lack of Coverage (Insurance Instability)

Among currently insured adults in Yellowstone County, 5.8% report that they were without healthcare coverage at some point in the past year.

- Similar to US findings.
- ☒ Statistically similar to baseline 2005 findings.

Went Without Healthcare Insurance Coverage At Some Point in the Past Year (Among Insured Adults)

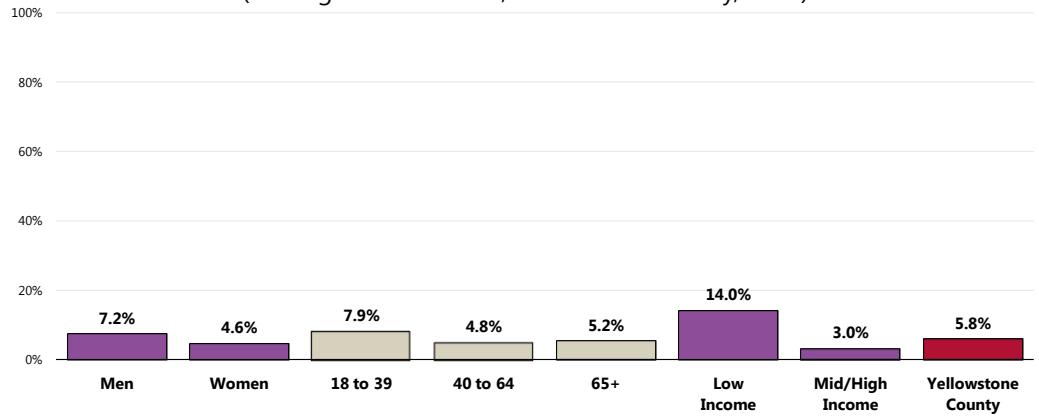


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 79]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all insured respondents.

👥 Among insured adults, those living on lower incomes are more likely to have gone without health insurance coverage at some point in the past year.

Went Without Healthcare Insurance Coverage At Some Point in the Past Year

(Among Insured Adults; Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 79]

Notes: • Asked of all insured respondents.

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

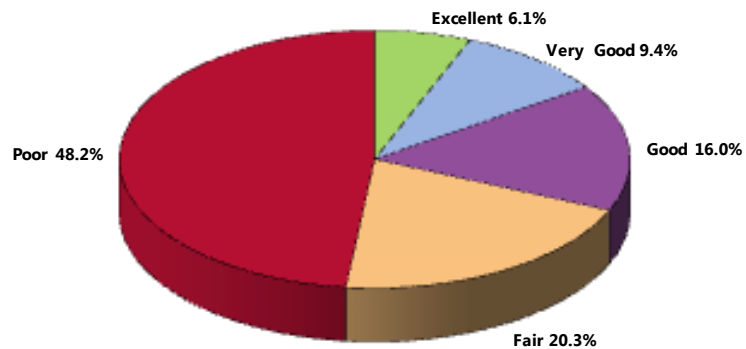
Health Insurance Exchange

When asked to rate their level of understanding of the new health insurance exchange being offered in Montana as part of the Affordable Care Act, 15.5% of survey respondents under age 65 gave "excellent" or "very good" ratings of their understanding.

- Another 16.0% of respondents age 18 to 64 feel they have a "good" understanding of the exchange.

Rating of Understanding of the Health Insurance Exchange Being Offered in Montana as Part of the Affordable Care Act

(Yellowstone County Adults 18-64, 2014)



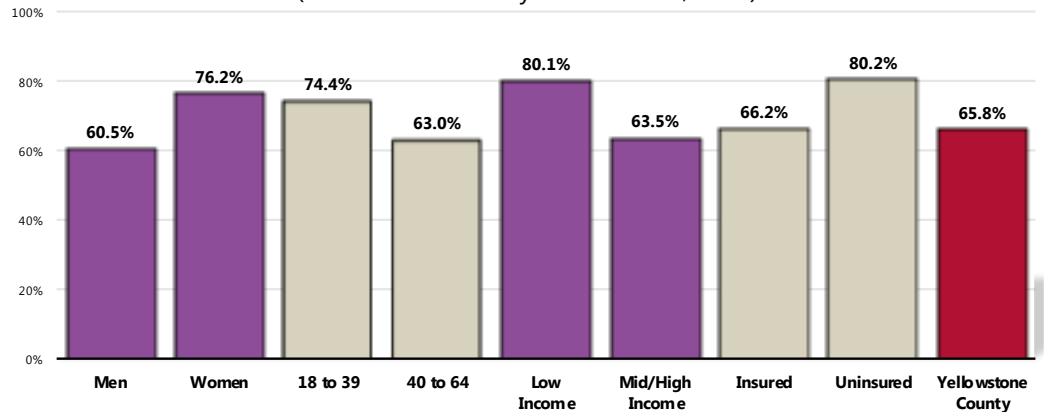
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 80]

Notes: • Reflects those respondents age 18 to 64.

On the other hand, most (65.8%) Yellowstone County adults under 65 have a “fair” or “poor” understanding of the new health insurance exchange being offered in Montana.

Of those aged 18 to 64, the prevalence is highest in women, young adults, residents in households with lower incomes, and the uninsured population.

“Fair/Poor” Understanding of Health Insurance Exchange (Yellowstone County Adults 18-64, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 80]
 Notes: • Asked of all respondents age 18 to 64.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

When evaluating their likelihood of securing coverage through Montana’s health insurance exchange, nearly 8 in 10 survey respondents under age 65 gave “not likely” responses.

- In contrast, 8.0% of adults under 65 are “very likely” to secure coverage through the exchange and 13.4% gave “somewhat likely” responses to the inquiry.

Likelihood of Securing Insurance Through One of Montana’s Health Insurance Exchange (Yellowstone County Adults 18 to 64, 2014)

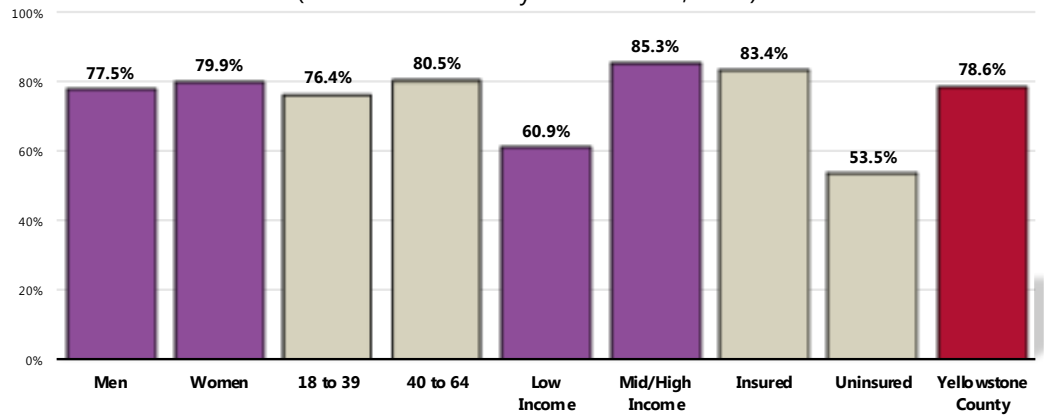


Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 81]
 Notes: • Reflects those respondents age 18 to 64.

👥 Among adults under 65, those in the higher income bracket and those with some type of healthcare coverage more often gave “not at all likely” responses.

“Not At All Likely” to Secure Coverage Through Health Insurance Exchange

(Yellowstone County Adults 18-64, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 81]

Notes: • Asked of all respondents age 18 to 64.

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

Difficulties Accessing Healthcare

Access to comprehensive, quality healthcare services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. It impacts: overall physical, social, and mental health status; prevention of disease and disability; detection and treatment of health conditions; quality of life; preventable death; and life expectancy.

Access to health services means the timely use of personal health services to achieve the best health outcomes. It requires three distinct steps: 1) Gaining entry into the healthcare system; 2) Accessing a healthcare location where needed services are provided; and 3) Finding a healthcare provider with whom the patient can communicate and trust.

- Healthy People 2020 (www.healthypeople.gov)

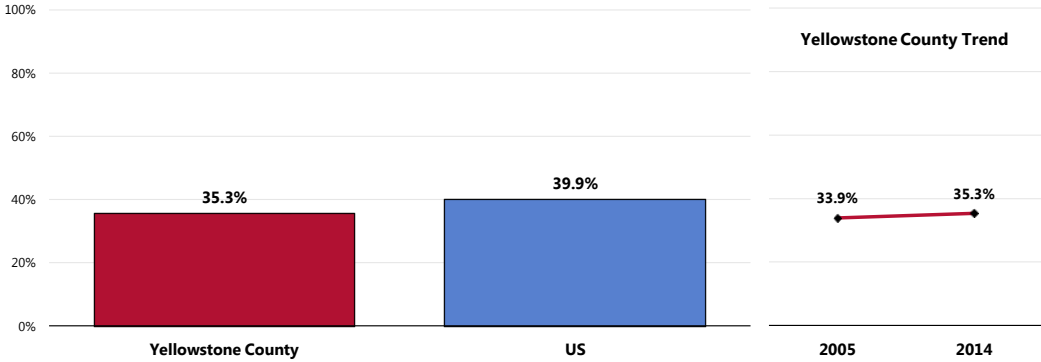
Difficulties Accessing Services

A total of 35.3% of Yellowstone County adults report some type of difficulty or delay in obtaining healthcare services in the past year.

- Comparable to the national figure.
- 🏠 Similar to the percentage reported in 2005.

This indicator reflects the percentage of the total population experiencing problems accessing healthcare in the past year, regardless of whether they needed or sought care.

Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year



Sources:

- PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 184]
- 2013 PRC National Health Survey, Professional Research Consultants, Inc.

 Notes:

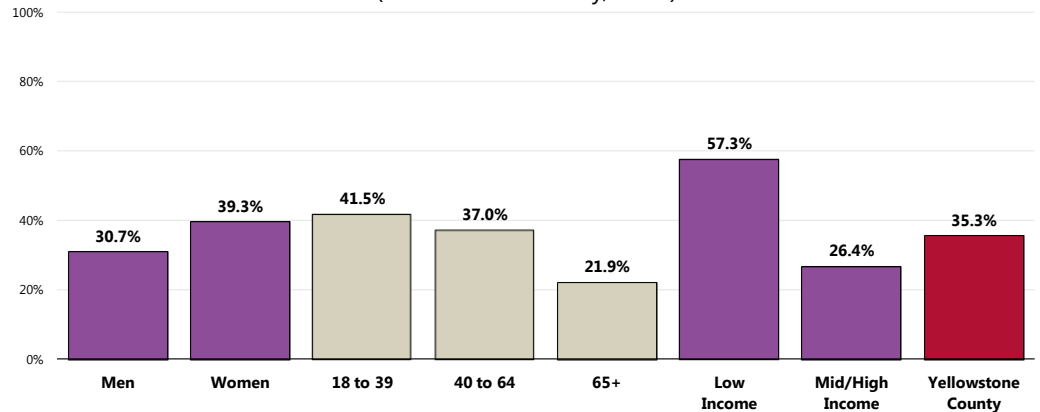
- Asked of all respondents.
- Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.

Note that the following demographic groups more often report difficulties accessing healthcare services:

- 👤 Adults under the age of 65 (negative association with age).
- 👤 Lower-income residents.

Experienced Difficulties or Delays of Some Kind in Receiving Needed Healthcare in the Past Year

(Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 184]
 Notes: • Asked of all respondents.
 • Represents the percentage of respondents experiencing one or more barriers to accessing healthcare in the past 12 months.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Barriers to Healthcare Access

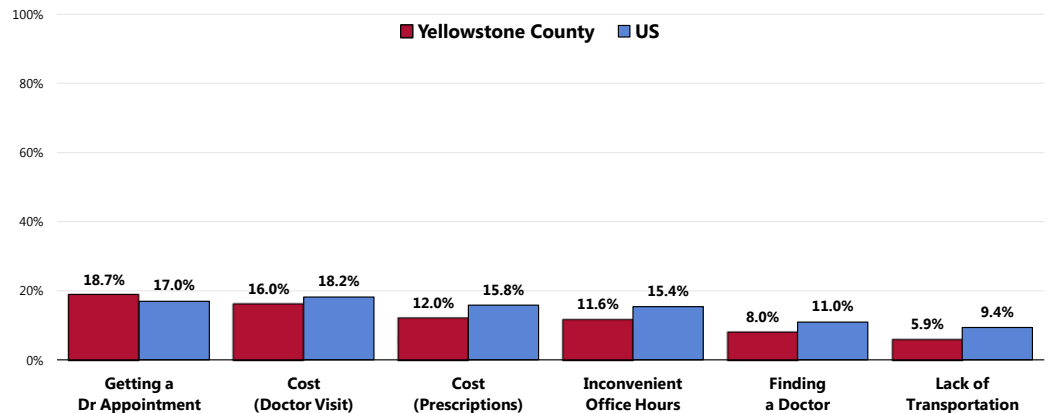
To better understand healthcare access barriers, survey participants were asked whether any of six types of barriers to access prevented them from seeing a physician or obtaining a needed prescription in the past year.

Again, these percentages reflect the total population, regardless of whether medical care was needed or sought.

Of the tested barriers, difficulty getting an appointment impacted the greatest share of Yellowstone County adults (18.7% say that difficulty obtaining a medical appointment prevented their medical care in the past year).

- The proportion of Yellowstone County adults impacted was statistically comparable to or better than that found nationwide for **each** of the tested barriers.

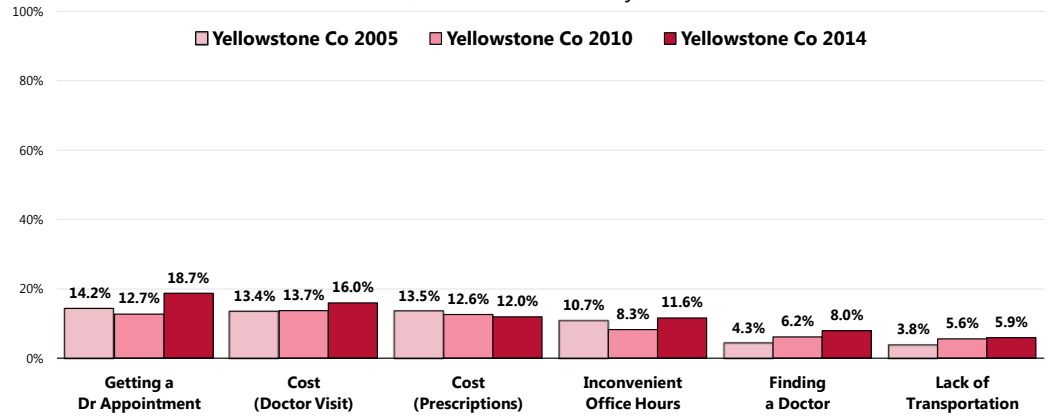
Barriers to Access Have Prevented Medical Care in the Past Year



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7-12]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all respondents.

☒ Compared to baseline 2005 data, the Yellowstone County has seen a significant increase with regard to the barrier of **finding a physician** (the remaining barriers were similar to baseline 2005 data).

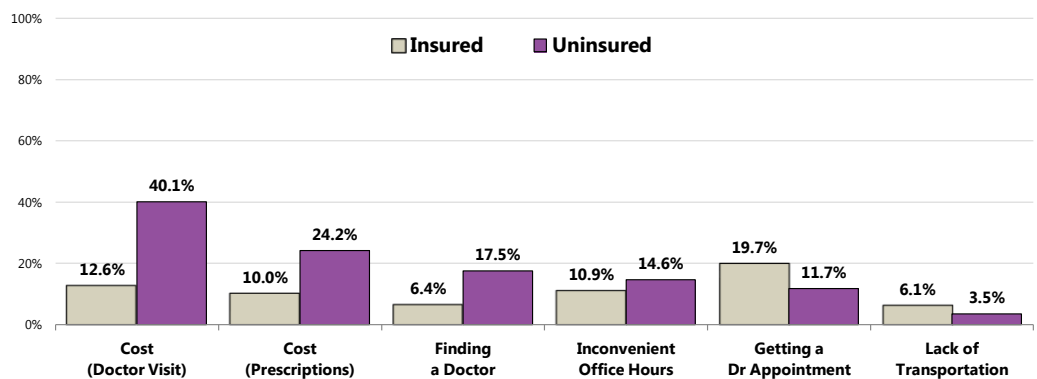
Trend in Barriers to Access in the Past Year (Yellowstone County)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 7-12]
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; Yellowstone County, 2014)



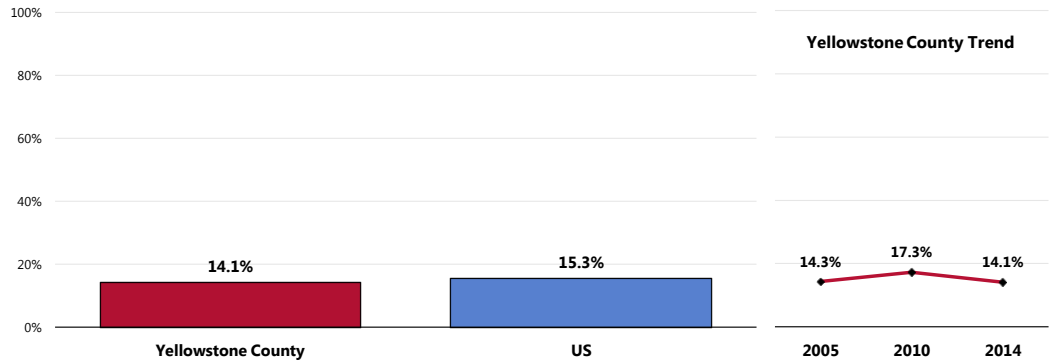
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7-12]
Notes: • Asked of all respondents.

Prescriptions

Among all Yellowstone County adults, 14.1% skipped or reduced medication doses in the past year in order to stretch a prescription and save money.

- Comparable to national findings.
- ☒ Statistically comparable to 2005 findings.

Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money

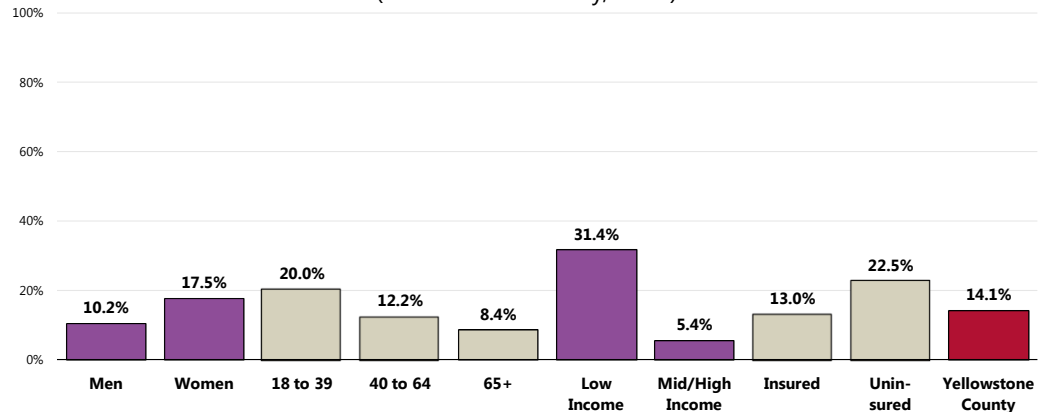


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 13]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all respondents.

Adults more likely to have skipped or reduced their prescription doses include:

- 👩 Women.
- 👩 Adults under 40 (negative association with age).
- 👩 Respondents with lower incomes.
- 👩 Uninsured adults.

Skipped or Reduced Prescription Doses in Order to Stretch Prescriptions and Save Money (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 13]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

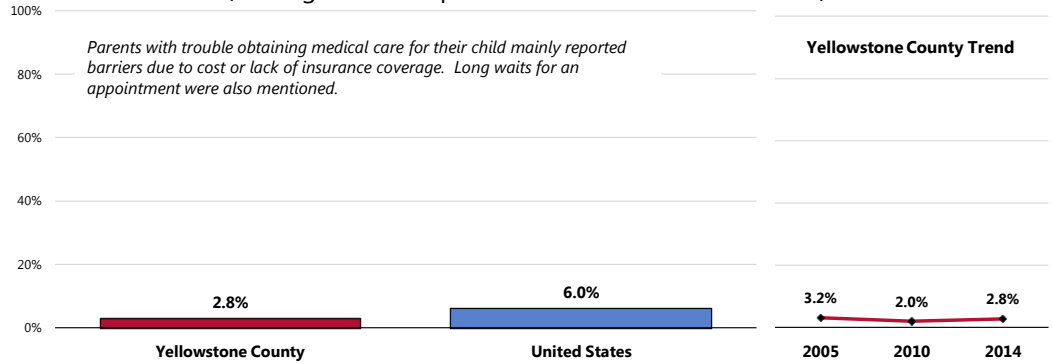
Accessing Healthcare for Children

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 2.8% of parents say there was a time in the past year when they needed medical care for their child, but were unable to get it.

- Statistically similar to what is reported nationwide.
- ☒ Statistically similar to previous findings.

Had Trouble Obtaining Medical Care for Child in the Past Year (Among Parent Respondents on Behalf Children 0-17)



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 120-121]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.

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

Among the parents experiencing difficulties, the majority cited **cost or a lack of insurance** as the primary reason; others cited long waits for appointments.

Primary Care Services

Improving healthcare services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes and fewer disparities and costs. Having a primary care provider (PCP) as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community. Having a usual PCP is associated with:

- Greater patient trust in the provider
- Good patient-provider communication
- Increased likelihood that patients will receive appropriate care

Improving healthcare services includes increasing access to and use of evidence-based preventive services. Clinical preventive services are services that: **prevent** illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention); or **detect** a disease at an earlier, and often more treatable, stage (secondary prevention).

– Healthy People 2020 (www.healthypeople.gov)

Specific Source of Ongoing Care

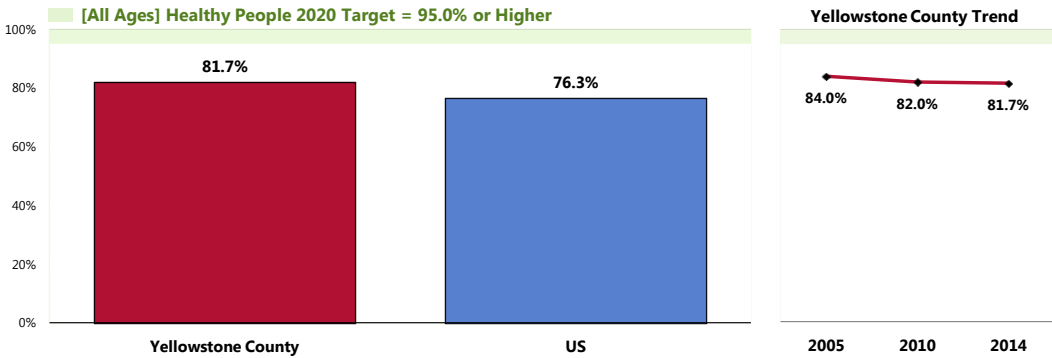
A total of 81.7% of Yellowstone County adults were determined to have a specific source of ongoing medical care (a “medical home”).

- More favorable than national findings.
- Fails to satisfy the Healthy People 2010 objective (95% or higher).
- ☒ Statistically similar to previous findings.

Having a specific source of ongoing care includes having a doctor’s office, clinic, urgent care center, walk-in clinic, health center facility, hospital outpatient clinic, HMO or prepaid group, military/VA clinic, or some other kind of place to go if one is sick or needs advice about his or her health. This resource is also known as a “medical home.”

A hospital emergency room is not considered a source of ongoing care in this instance.

Have a Specific Source of Ongoing Medical Care



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 181]
 ● 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 ● US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective AHS-5.1]
 Notes: ● Asked of all respondents.

When viewed by demographic characteristics, the following population segments are less likely to have a specific source of care:

- 👤 Adults under age 65.
- 👤 Among adults age 18-64, 78.2% have a specific source for ongoing medical care, similar to national findings.
 - Fails to satisfy the Healthy People 2020 target for this age group (89.4% or higher).
- 👤 Among adults 65+, 97.7% have a specific source for care, better than the percentage reported among seniors nationally.
 - Comparable to the Healthy People 2020 target of 100% for seniors.

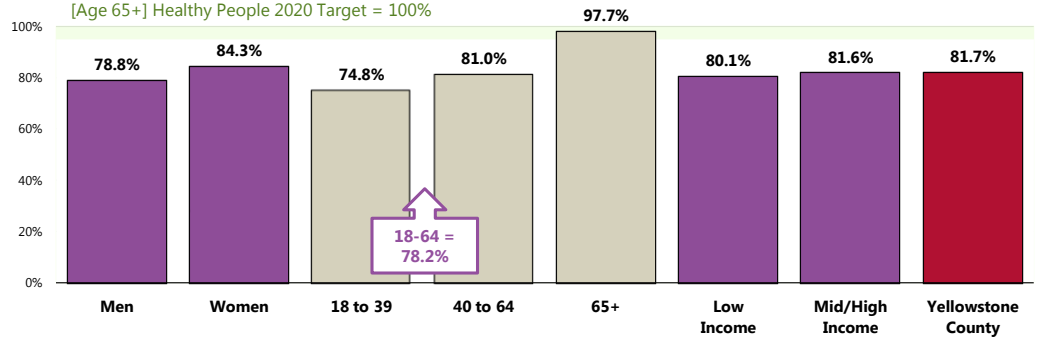
Have a Specific Source of Ongoing Medical Care

(Yellowstone County, 2014)

[All Ages] Healthy People 2020 Target = 95.0% or Higher

[Age 18-64] Healthy People 2020 Target = 89.4% or Higher

[Age 65+] Healthy People 2020 Target = 100%



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 181-183]

• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objectives AHS-5.1, 5.3, 5.4]

Notes: • Asked of all respondents.

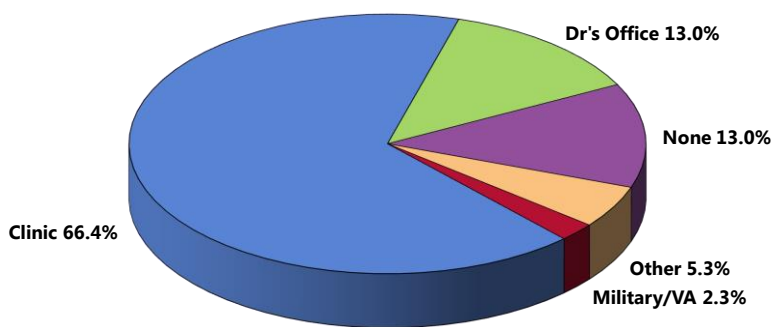
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty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

Type of Place Used for Medical Care

When asked where they usually go if they are sick or need advice about their health, the greatest share of respondents (66.4%) identified some type of clinic.

A total of 13.0% say they usually go to a particular doctor's office, while 2.3% rely on a military/VA facility.

Particular Place Utilized for Medical Care (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 15-16]
Notes: • Asked of all respondents.

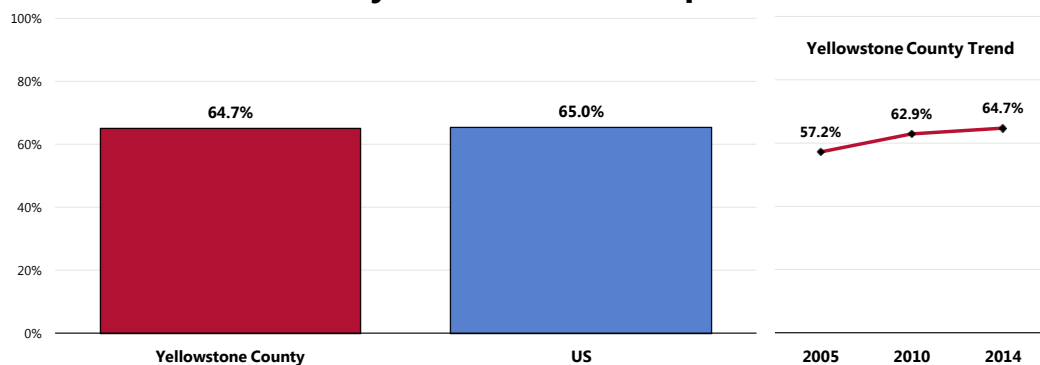
Utilization of Primary Care Services

Adults

Nearly two-thirds (64.7%) of adults visited a physician for a routine checkup in the past year.

- Comparable to national findings.
- ▣ Denotes a significant increase over time.

Have Visited a Physician for a Checkup in the Past Year

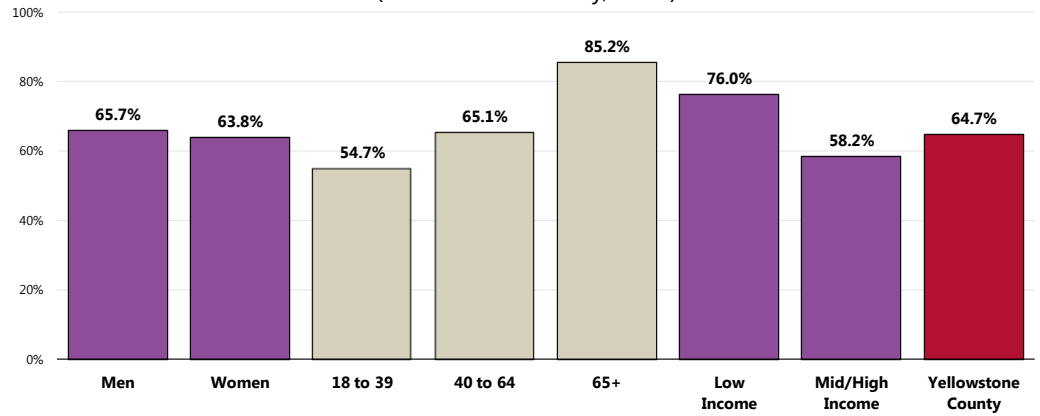


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 17]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

👥 Adults under age 40 are less likely to have received routine care in the past year (note the positive association with age), as are residents in households with higher incomes.

Have Visited a Physician for a Checkup in the Past Year

(Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 17]

Notes: • Asked of all respondents.

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

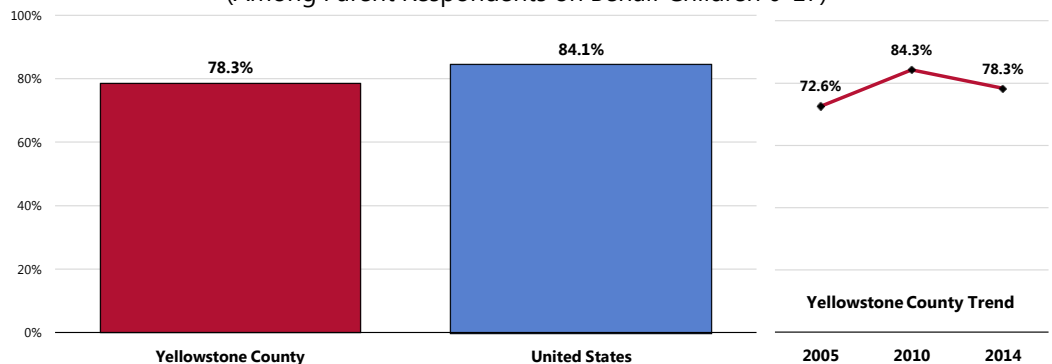
Children

Among surveyed parents, 78.3% report that their child has had a routine checkup in the past year.

- Similar to national findings.
- 📊 Statistically similar to 2005 findings.

Child Has Visited a Physician for a Routine Checkup in the Past Year

(Among Parent Respondents on Behalf Children 0-17)



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 122]

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

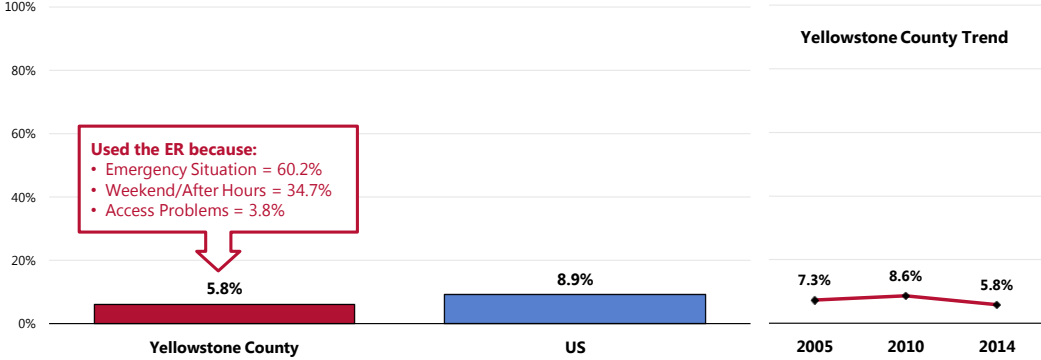
Notes: • Asked of all respondents with children 0 to 17 in the household.

Emergency Room Utilization

A total of 5.8% of Yellowstone County adults have gone to a hospital emergency room more than once in the past year about their own health.

- Lower than national findings.
- ☒ Statistically similar to baseline 2005 findings.

Have Used a Hospital Emergency Room More Than Once in the Past Year

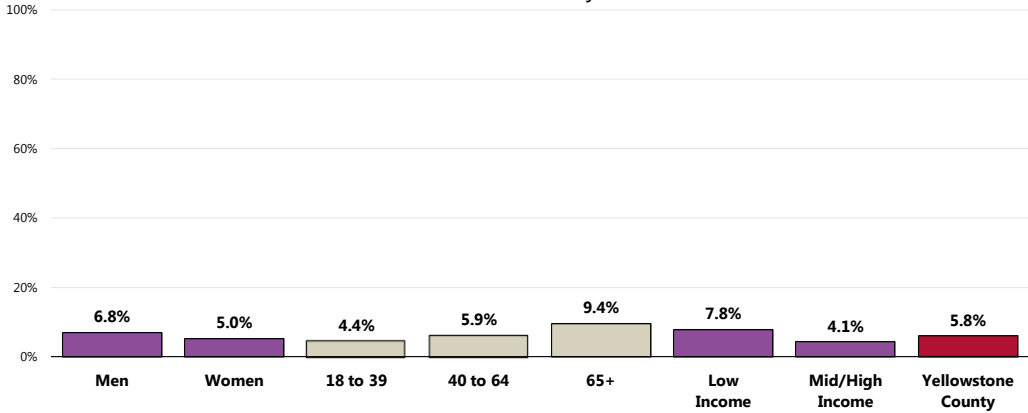


Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Items 23-24]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 Notes: • Asked of all respondents.

Of those using a hospital ER, 60.2% say this was due to an **emergency or life-threatening situation**, while 34.7% indicated that the visit was during **after-hours or on the weekend**. A total of 3.8% cited **difficulties accessing primary care** for various reasons.

☒ No statistical differences in ER use when viewed by demographic characteristics.

Have Used a Hospital Emergency Room More Than Once in the Past Year (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 23]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Oral Health

The health of the mouth and surrounding craniofacial (skull and face) structures is central to a person's overall health and well-being. Oral and craniofacial diseases and conditions include: dental caries (tooth decay); periodontal (gum) diseases; cleft lip and palate; oral and facial pain; and oral and pharyngeal (mouth and throat) cancers.

The significant improvement in the oral health of Americans over the past 50 years is a public health success story. Most of the gains are a result of effective prevention and treatment efforts. One major success is community water fluoridation, which now benefits about 7 out of 10 Americans who get water through public water systems. However, some Americans do not have access to preventive programs. People who have the least access to preventive services and dental treatment have greater rates of oral diseases. A person's ability to access oral healthcare is associated with factors such as education level, income, race, and ethnicity.

Oral health is essential to overall health. Good oral health improves a person's ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions. However, oral diseases, from cavities to oral cancer, cause pain and disability for many Americans. Good self-care, such as brushing with fluoride toothpaste, daily flossing, and professional treatment, is key to good oral health. Health behaviors that can lead to poor oral health include:

- Tobacco use
- Excessive alcohol use
- Poor dietary choices

Barriers that can limit a person's use of preventive interventions and treatments include:

- Limited access to and availability of dental services
- Lack of awareness of the need for care
- Cost
- Fear of dental procedures

There are also social determinants that affect oral health. In general, people with lower levels of education and income, and people from specific racial/ethnic groups, have higher rates of disease. People with disabilities and other health conditions, like diabetes, are more likely to have poor oral health.

Community water fluoridation and school-based dental sealant programs are 2 leading evidence-based interventions to prevent tooth decay.

Major improvements have occurred in the nation's oral health, but some challenges remain and new concerns have emerged. One important emerging oral health issue is the increase of tooth decay in preschool children. A recent CDC publication reported that, over the past decade, dental caries (tooth decay) in children ages 2 to 5 have increased.

Lack of access to dental care for all ages remains a public health challenge. This issue was highlighted in a 2008 Government Accountability Office (GAO) report that described difficulties in accessing dental care for low-income children. In addition, the Institute of Medicine (IOM) has convened an expert panel to evaluate factors that influence access to dental care.

Potential strategies to address these issues include:

- Implementing and evaluating activities that have an impact on health behavior.
- Promoting interventions to reduce tooth decay, such as dental sealants and fluoride use.
- Evaluating and improving methods of monitoring oral diseases and conditions.
- Increasing the capacity of State dental health programs to provide preventive oral health services.
- Increasing the number of community health centers with an oral health component.

– Healthy People 2020 (www.healthypeople.gov)

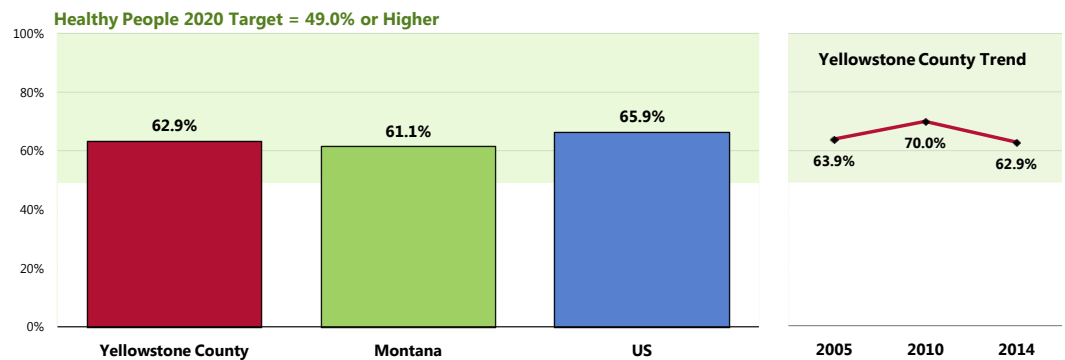
Dental Care

Adults

Just over 6 in 10 Yellowstone County adults (62.9%) have visited a dentist or dental clinic (for any reason) in the past year.

- Similar to statewide findings.
- Similar to national findings.
- Satisfies the Healthy People 2020 target (49% 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 21]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
• US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2011 Montana data.

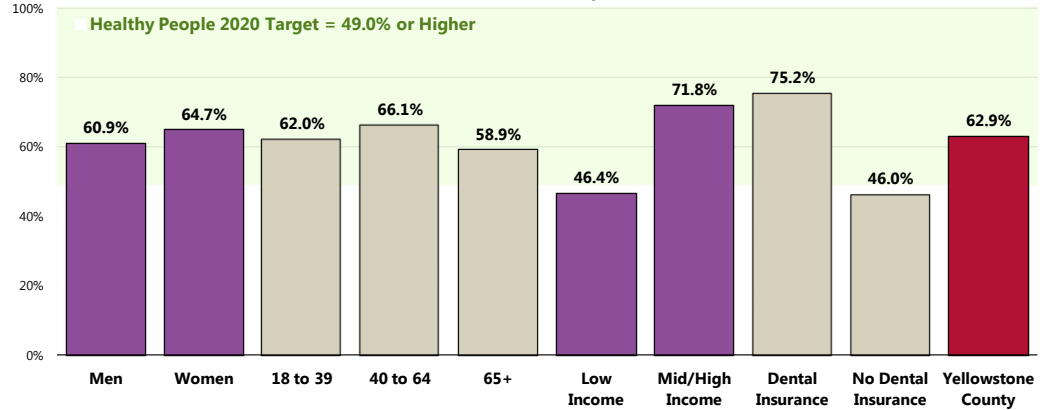
Notes: • Asked of all respondents.

Note the following:

- ☒ Persons living in the higher income category report much higher utilization of oral health services (low-income adults fail to satisfy the Healthy People 2020 target).
- ☒ 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, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 21]
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]
 Notes: • Asked of all respondents.
 • Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

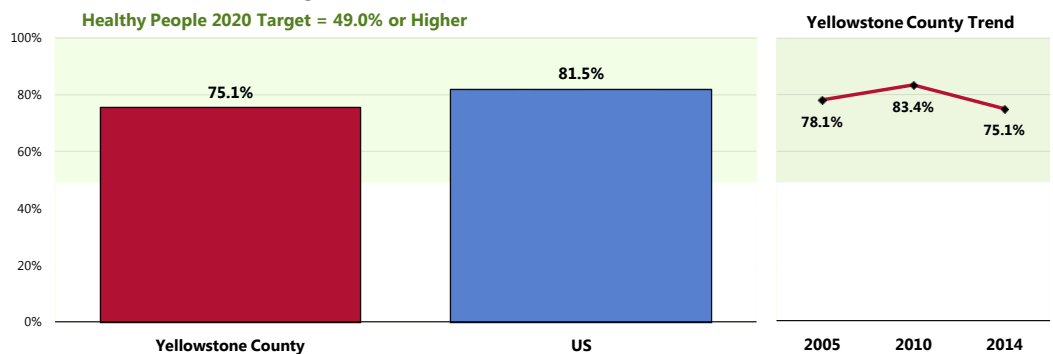
Children

A total of 75.1% of parents report that their child (age 2 to 17) has been to a dentist or dental clinic within the past year.

- Comparable to national findings.
- Satisfies the Healthy People 2020 target (49% or higher).
- ☒ Statistically similar to baseline 2005 findings among children age 2-17 in the county.

Child Has Visited a Dentist or Dental Clinic Within the Past Year

(Among Parent Respondents on Behalf Children 2-17)



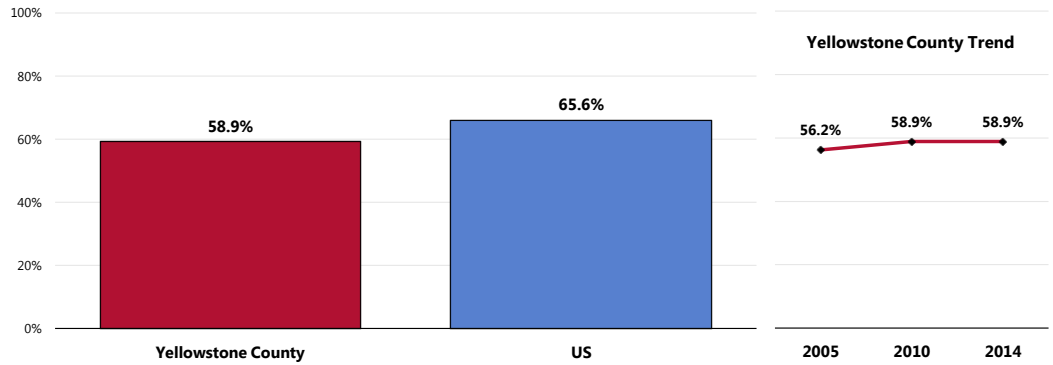
Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 125]
 • 2013 PRC National Health Survey, Professional Research Consultants, Inc.
 • US Department of Health and Human Services. Healthy People 2020. December 2010. <http://www.healthypeople.gov> [Objective OH-7]
 Notes: • Asked of all respondents with children age 2 through 17.

Dental Insurance

Just less than 6 in 10 Yellowstone County adults (58.9%) have dental insurance that covers all or part of their dental care costs.

- Lower than the national finding.
- ☒ Statistically similar to previous findings.

Have Insurance Coverage That Pays All or Part of Dental Care Costs



Sources: ● PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 22]
● 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: ● Asked of all respondents.

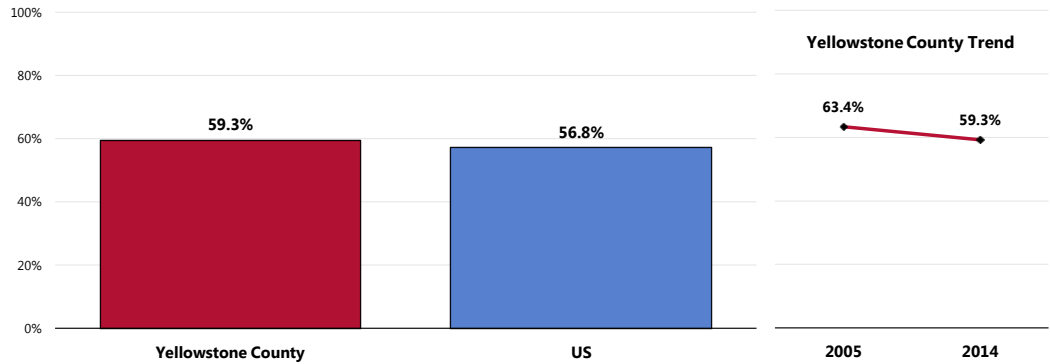
Vision Care

RELATED ISSUE:
See also *Vision & Hearing* in
the **Deaths & Disease**
section of this report.

A total of 59.3% of residents had an eye exam in the past two years during which their pupils were dilated.

- Statistically comparable to national findings.
- ☒ Similar to previous findings.

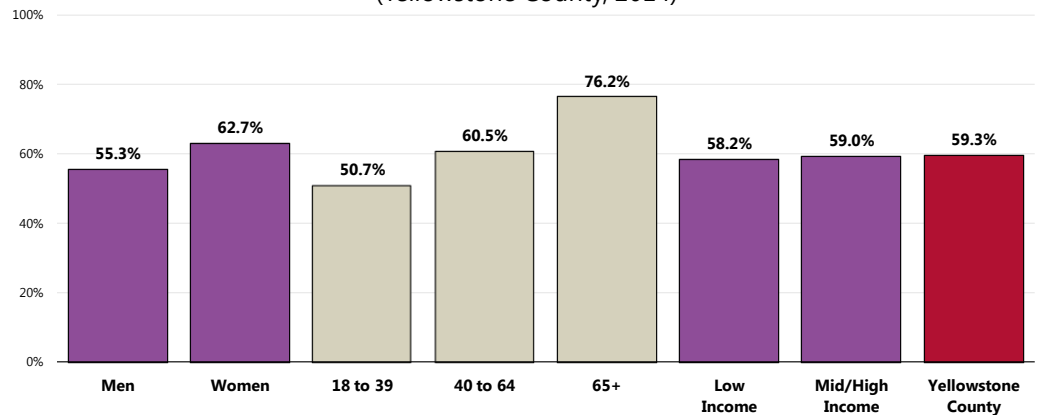
Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 20]
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.
Notes: • Asked of all respondents.

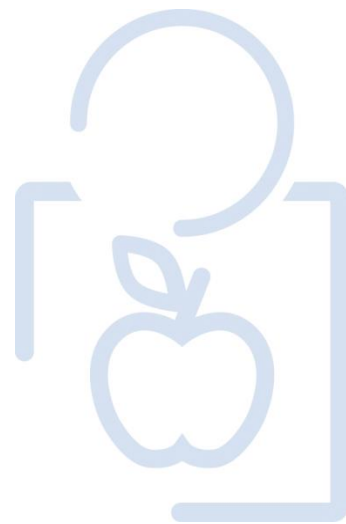
☺ Note the positive association between age and recent eye exams.

Had an Eye Exam in the Past Two Years During Which the Pupils Were Dilated (Yellowstone County, 2014)



Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 20]
Notes: • Asked of all respondents.
• Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

LOCAL RESOURCES

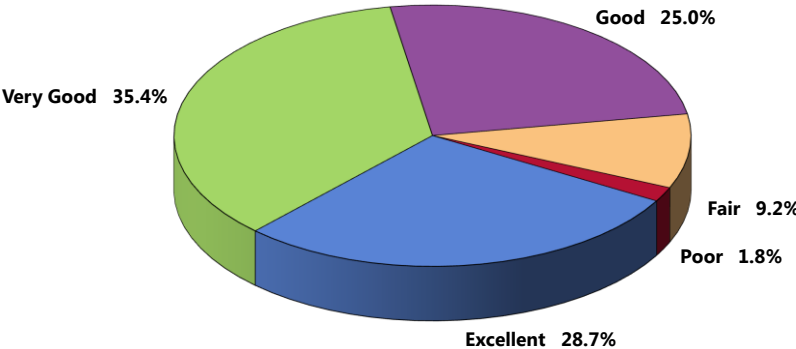


Perceptions of Local Healthcare Services

Over 6 in 10 Yellowstone County adults (64.1%) rate the overall healthcare services available in their community as “excellent” or “very good.”

- Another 25.0% gave “good” ratings.

Rating of Overall Healthcare Services Available in the Community
(Yellowstone County, 2014)



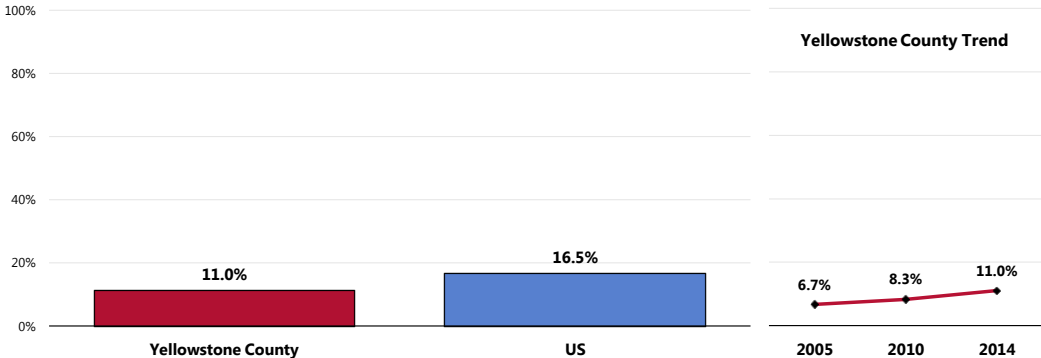
Sources: • 2014 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 6]

Notes: • Asked of all respondents.

However, 11.0% of residents characterize local healthcare services as “fair” or “poor.”

- More favorable than reported nationally.
- ▣ Marks a statistically significant increase in low ratings over time.

Perceive Local Healthcare Services as “Fair/Poor”



Sources: • PRC Community Health Surveys, Professional Research Consultants, Inc. [Item 6]

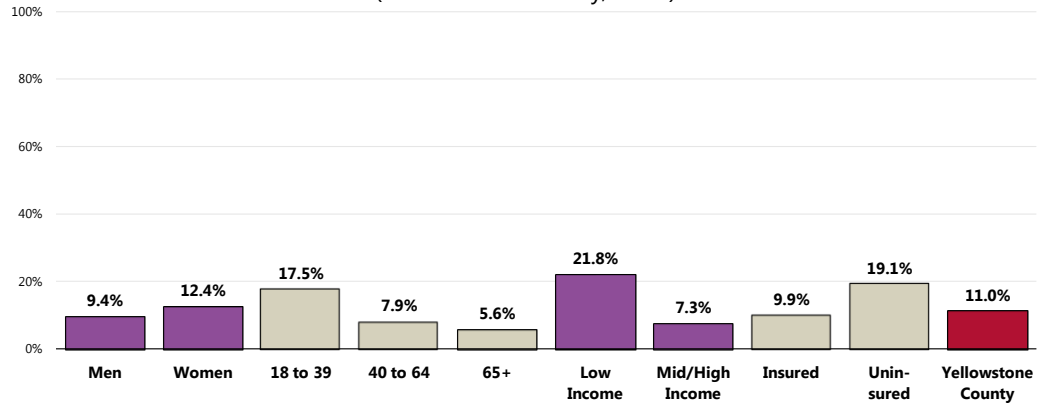
• 2013 PRC National Health Survey, Professional Research Consultants, Inc.

Notes: • Asked of all respondents.

The following residents are more critical of local healthcare services:

- 👤 Young adults.
- 👤 Residents with lower incomes.
- 👤 Uninsured adults.

Perceive Local Healthcare Services as “Fair/Poor” (Yellowstone County, 2014)



Sources: • 2014 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 (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level; "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.

Resources Available to Address the Significant Health Needs

The following list contains potential resources that may support responses to significant health needs identified in the Community Health Needs Assessment (CHNA). The list includes programs, agency organizations, and facilities available in Yellowstone County. This list is not exhaustive, rather outlines those resources identified during the Community Health Needs Assessment (CHNA) process and additional research of resources that can be accessed by residents of Yellowstone County.

- Adult Education Center
- Adult Resource Alliance of Yellowstone County
- Advance Employment Services
- Al Bedoo Shriners
- Alpha House
- Alternative Education
- Alliance: Billings Clinic, RiverStone Health, St. Vincent Healthcare
- Alzheimer's Association
- American Cancer Society Eastern Field Office
- American Diabetes Association
- American Lung Association of the Northern Rockies
- American Red Cross
- Angela's Piazza: Women's Drop-in Center
- Arthritis Foundation - Montana Branch of the Rocky Mountain Chapter
- Back to School Program
- Better Billings Foundation
- Big Brothers Big Sisters of Yellowstone County
- Big Sky Apartments
- Big Sky Critical Incident Stress Management
- Big Sky Economic Development Authority (Big Sky EDA)
- Big Sky Senior Services Inc./ Prevention of Elder Abuse
- Big Sky State Games (Montana Amateur Sports)
- BikeNet
- Billings Action for Healthy Kids
- Billings Area Chamber of Commerce/Convention & Visitors Bureau
- Billings Area Indian Health Service
- Billings City Attorney-Domestic Violence Unit

- Billings Clinic
- Billings Community Center
- Billings Educational Opportunity Center/TRiO
- Billings Food Bank
- Billings Job Service Workforce Center
- Billings Montana Family YMCA
- Billings Park, Recreation & Public Lands Department (City of Billings)
- Billings Public Library
- Billings School District 2
- Billings Senior Citizens
- Blind & Low Vision Services
- Boys & Girls Clubs of Yellowstone County
- Bureau of Indian Affairs
- Care Net Women's Clinic West
- Career Guidance Center
- Catholic Social Services for Montana
- Chamber of Commerce
- Child Care Assistance
- Child Find
- Child Support Enforcement Division
- City of Billings
- City-County Planning Department
- Community Crisis Center
- Community Gardens-Housing Authority of Billings
- Community Hope of Laurel
- Community Housing Resource Board (CHRB)
- Community Leadership Development Inc.
- Compassionate Friends
- Consumer Credit Counseling Service of Montana
- COR Enterprises
- Crimestoppers
- Crowley Fleck
- Debt Reduction Services
- Developmental Disabilities Program Division of Disabilities Services (REG. III)
- District 7 HRDC
- District Court Services, 13th Judicial
- DPHHS/Child & Family Services Yellowstone County

- Eagle Mount Billings
- Early Childhood Intervention/Part C Program/BPS
- Easter Seals-Goodwill, Northern Rocky Mountain
- Eastern Montana Association of Affordable Housing
- Eastern Montana Landlord's Association, Inc.
- Employment and Training Center
- Employment and Training for Adults
- Faith Based Organizations
- Family Counseling Center
- Family Housing Matters
- Family Promise (formerly Interfaith Hospitality Networks)
- Family Services Inc.
- Family Support Network
- Farmer's Markets
- First Time Home Buyer
- Foster Grandparent Program, St. Vincent Healthcare
- Fraser Tower
- Friendship House of Christian Service
- Garfield Community Resource
- Good Earth Market Classes
- Government Officials
- Grocery Stores
- Harmony House
- Head Start, Inc.
- Healthcare for the Homeless
- Healthy By Design
- Home Repair Program
- Housing Authority of Billings
- Independence Hall
- Indian Health Board of Billings
- Job Connection, Inc.
- Job Corps Admission & Placement Office
- Job Placement Services, Inc.
- Keene Insight
- Knights Templar Eye Foundation
- Labor Ready
- Laurel Gardens

- Laurel Senior Center
- LaVie
- Law Enforcement
- League of Women Voters of Billings
- Literacy Volunteers of America Billings, Inc.
- Living Independently for Today and Tomorrow, Inc. (LIFTT)
- Lockwood Community Education
- Low income Energy Assistance Program
- Lutheran Social Services of Montana
- March of Dimes
- McCall Development
- Meals on Wheels
- Mental Health Center
- MET Special Transit
- Montana Association for the Blind Yellowstone Chapter
- Montana Center on Disabilities
- Montana Conservation Corps
- Montana Department of Corrections
- Montana Department of Environmental Quality Permitting/Compliance Division
- Montana Fair Housing Agency
- Montana Legal Services Association
- Montana Migrant Health Program
- **Montana Nutrition and Physical Activity Program (NAPA)**
- Montana Office of Consumer Protection (Attorney General's Office)
- Montana Rescue Mission
- Montana State University Billings
- Montech Program, University of Montana Rural Institute
- Mountain Peaks Inc.
- MSU Billings
- MSU Billings College of Technology
- MSU-Northern Center for Veterans
- Muscular Dystrophy Association
- National Alliance for the Mentally Ill-Billings (NAMI-Billings)
- National MS Society
- North Park Recreation Center
- Northern Plains Resource Council
- Northern Rockies Radiation Oncology Center

- Nutrition for the Future, Inc.
- Office of Public Assistance
- Passages
- Planned Parenthood of Montana
- Ponderosa Acres Apartments
- Prairie Tower Apartments
- Prescription and Vision Assistance
- Primrose Personal Care Home
- Private Providers- Medical
- Private Providers – Mental Health
- Project Challenge: Work Again, AFL-CIO
- Q360 Health
- Regional Burn Service
- Residential Support Services (RSS)
- Resource, Support & Development, Inc. (R.S.D)
- Rimrock Foundation
- RiverStone Health
- Rocky Mountain College
- Ronald McDonald House
- Ronald McDonald Mobile Dental Unit
- Rose Park Plaza
- Rural Employment Opportunities (REO)
- Saddle Therapy and Recreation, Inc. (STAR)
- Safe Routes to School
- Sage Tower
- Salvation Army
- School Districts
- School Health Advisory Council
- South Central MT Regional Mental Health Center
- St. Vincent De Paul
- St. Vincent Healthcare
- Supplemental Nutrition Assistance Program (SNAP)
- Temporary Assistance for Needy Families (TANF)
- The Alliance
- The Center for Children and Families
- The Family Tree Center
- The Hub

- The Salvation Army
- Tumbleweed Runaway Program, Inc.
- United Way of Yellowstone County
- USDA Food and Nutrition Service
- USDA Rural Development
- Veterans Affairs Division
- Victim Services Program: Billings Area Family Violence Task Force
- Visiting Nurse Service
- Vital Statistics
- Vocational Rehabilitation
- Wheels for Work
- Yellowstone Aids Project
- Yellowstone Boys and Girls Ranch
- Yellowstone County Extension Service
- Yellowstone County Family Drug Treatment Court (YCFDTC)
- Yellowstone County Office of Public Assistance
- Young Families Early Head Start
- Youth Dynamics, Inc.
- Youth Employment
- Youth Intake and Assessment Center
- Youth Service Center
- YWCA of Billings
- Yellowstone Boys and Girls Ranch

Additional available online resources:

<http://www.allianceyc.org/links/>

<http://prevention.mt.gov/resource/inventory/countyres.php?county=Yellowstone>

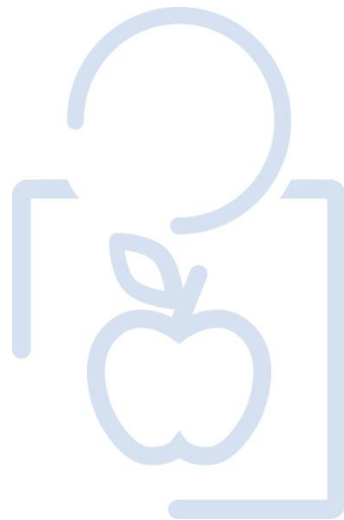
http://mtdh.ruralinstitute.umt.edu/?page_id=662

<http://nccsdataweb.urban.org/PubApps/geoShowOrgs.php?code=C30111&v=n>

<http://ask.hrdc7.org/listings/>

<http://www.healthybydesignyellowstone.org/>

FOCUS GROUP COMMENTARY



The quotations and themes that follow are recorded from focus groups conducted with professionals and leaders in the community, as well as a South Side Neighborhood Community Group. These comments and opinions are only representative of those who took part in these discussions and do not reflect the views of any specific entities or the community at-large.

Mental Health

Focus group members discussed the fragmented mental health system and the limited services available to residents, with focus on:

- Co-occurring substance abuse
- Inadequate number of psychiatrists and treatment facilities
- Community's mental health services remain overburdened
- Need for support groups
- Medication costs and negative side effects
- Stigma
- Psychiatric services for youth

During the focus groups, issues surrounding mental health services arose several times. Respondents worry because many who suffer from mental illness have **co-occurring substance abuse** issues; these individuals self-medicate with drugs or alcohol. A participant explains:

"So they self-medicate—legally, illegally, whatever. Alcohol's legal, you know, or they get stuff off the street—anything to make them feel better. So you start self-medicating, and then by the time we get them not only do you have a plethora of mental health and addiction problems, but a lot of times these people are coming to us so physically ill, with just the comorbidities, the diabetes, the congestive heart failure. Sometimes I feel like we're a mini-hospital, and ill-equipped sometimes for the level of care they need." — Social Service Provider

Overall, the community suffers due to an **inadequate number of psychiatrists, counselors, and treatment facilities** available to address residents' behavioral health needs, especially for those without health insurance. Attendees believe many mentally ill persons travel to Billings because the city is known throughout the region as having some care available to this population. A respondent describes his concerns:

"So we don't practice what they call bus therapy here. And I think we're a recipient of that. I was on the board when you were planning the HUB and trying to hash out some of the details of it, and it was a big problem then. And since then, it's almost as if Billings has become known statewide as the dumping ground. 'Oh, they've got mental health facilities. Dump people there.' And it immediately became an overburdened situation, because there is such a need, and it is statewide. And it's almost a shame that Billings ever advertised that they were trying to take care of the mentally ill." — Elected Official

In general, the **community's mental health services remain overburdened**. Case managers do not receive adequate compensation; therefore, the turnover is high and continuity of care suffers. Behavioral health options include inpatient beds at Billings

Clinic, the Mental Health Center, the Bridge Clinic, the Community Crisis Center 23-hour hold, Mental Health Court, and the emergency room. Many of these outpatient options have several-month waiting periods to see a psychiatrist and get access to medication. The few private psychiatrists in the community generally do not accept Medicaid or uninsured residents. Due to the inadequate number of psychiatrists, family practice physicians must provide treatment for anyone with a behavioral health concern.

“The primary care providers are having to really step up in terms of mental health issues that are probably beyond their – you know – they’re doing more than they probably should have to. A lot of consults over the phone to try to take care of these patients because the providers are just really innovative; rural, especially mid-level providers and primary care providers in rural areas.”
— Employer Representative

In the Billings South Side Community Group, participants think that **support groups** could help fill some of the void within the behavioral healthcare continuum, or provide assistance to those residents with less severe mental illness.

“Well, you know, they listen to me, and I rant and rave and I carry on sometimes, but you know, there’s a lot of times when I am sitting at home by myself and I’m feeling sad or I’m feeling angry, I’m feeling—and there’s no place for me to go. There’s nobody for me to talk to. You know, your family’s busy working or they’ve got their own lives with their own kids, you know. And I—what do you do? Where do you go? Who do you talk to?”— South Side Neighborhood Community Member

The **cost of medication** may also impede a community member’s ability to access mental health services. Medication costs remain high. A resident explains the dilemma friends and family face when trying to decide if they can afford behavioral healthcare services on a fixed income:

“I mean, any medical care here is expensive, and if you don’t have insurance, your mental health is expensive. It comes down to, ‘Okay, so do I want to eat this month or do I want to go and take care of my visions that I’m having?’ you know? Or, ‘Do I pay my gas bill this month or do I add an extra blanket to my bed?’ You know, and that’s sad. You shouldn’t have to do that. But then you can’t see anybody at a reasonable rate. I mean, it’s sad that you can’t go someplace and talk to a counselor and not get charged \$350.00 at the end of your session.”— South Side Neighborhood Community Member

RiverStone Health, St. Vincent Healthcare, and Billings Clinic each participate in supporting a Medication Assistance Program located at RiverStone Health, which helps connect patients with pharmaceutical companies to obtain reduced-cost or free medications; additionally, the two hospitals have independent medication assistance programs; however, many **prescription drugs have negative side effects**, which lead to compliancy issues.

“They’re awful. And you get a choice if you want the newer ones that probably are doing a lot better but you can’t afford them. Or the older ones where you get a whole lot of side effects and don’t want to take them.”— Healthcare Professional

Participants also believe that **stigma** impacts residents’ willingness to access behavioral healthcare. The culture in Montana is to “cowboy up” and not seek behavioral health services, which respondents feel leads to the high suicide rate in the state. Several focus

group members explain the “cowboy up” phenomenon:

“Pull yourself up by your bootstraps; you can do it on your own. I think that also plays into the fact that some people, if they’re borderline, don’t want to try and get in the system because they think they’re going to get labeled – so they avoid as long as they can, maybe too long.” — Employer Representative

“That’s (‘cowboy up’) especially true ... we’ve done some work in eastern Montana with mental health issues. I guess as a society we’ve tended not to think of those (mental health concerns) as real health problems. And so you tend to suppress those or don’t admit them or don’t get access to them. And a cowboy doesn’t talk about their feelings and that sort of things. So I think that’s where – it is a real phenomenon. It’s unbelievable.” — Healthcare Professional

Psychiatric services for youth also experience high demand; however, younger patients generally have better options than adults. Key informants describe that two adolescent psychiatrists work in Yellowstone County and schools can receive reimbursement when they provide mental health services to Medicaid recipients. Attendees did express concern about the lack of services for homeless youth:

“I have (seen as a patient) a child with severe failure to thrive and I could not find anyone in the community that could offer early intervention. I mean I couldn’t find anyone in the community that could seriously help – they were homeless. So the home based programs couldn’t treat them because they wouldn’t go to the hotel to see the family. And there wasn’t any center-based program here that could intensively work with this family. And it was honestly ridiculous for a community this size to not be able to help because this was a homeless family. And I see a lot of homeless kids. And they’re not – they might not be living in the shelter, but they’re living in a hotel room or they’re living, you know they’re moving between different families. And it’s those support services for mental health to help with parenting, to help with coming up with behavior plans with the kids. Things that as a pediatrician I don’t have the time and really the knowledge to be able to sit down and work that intensely with a family.” — Healthcare Professional

Physical Activity

Many focus group participants discussed the lack of physical activity in the community. The main discussion centered on:

- Sedentary lifestyle
- Technology (television or computer)
- Built environment
- Low-income residents

Focus group attendees feel that portions of the population in Yellowstone County lead a very **sedentary lifestyle**, which contributes to the overweight and obesity rates. Many families spend a lot of time in front of the **television, computers, or video games**, which contribute to the low physical activity rates.

In addition, the **built environment** in the city of Billings can discourage active lifestyles because some areas are not safe due to drug paraphernalia and activity, and limited sidewalks.

“Everyone in the park is not meant to be in the park. Your kids can tell you before you even know

whether there's something wrong about that place or not, and our kids especially just don't like it there. It's just that vibe of all the people drinking and everything else. There's always drug deals. There's always something going on that you just don't want your kids present for.” — South Side Neighborhood Community Member

Outside of the city, physical activity options are plentiful with access to hunting, hiking, and fishing; however, some residents may not realize that just moving is not necessarily enough activity. A key informant explains:

“What mixes into that is the farmer-rancher mentality. I’ll tell my husband—we bought an elliptical because he didn’t like the idea of going to the gym. And he says, ‘Well, how about we just go cut firewood instead?’ He’s pretty common among those with that mentality. It’s like, ‘I work hard. I shouldn’t have to exercise.’” — Social Service Provider

Lower income residents and their families may also participate less in physical activity because they are not aware of low-cost or free activities, and cannot afford to join an organized sport team.

“You know you have to have the time to get out and sweat and some people just, you know, they’re so overwhelmed just trying to keep their food on the table and that kind of thing— even though the resource is there they may not be able to take advantage of it as well as others.” — Employer Representative

Several community group participants note that everyday stress and lack of time contribute to their children’s inability to participate in physical activities.

“The only thing that’s failing our kids is we’re so busy and tired by the end of the day we don’t get to do things. Friendship House takes them swimming. I get free Y membership. My kids could go; I just don’t have the time.” — South Side Neighborhood Community Member

Obesity

Many focus group participants discussed nutrition and obesity. The main findings include:

- Poor nutrition
- Cultural preferences
- Fast food establishments
- Food deserts
- Hunger concerns

Participants believe that residents have **poor nutritional habits** which contribute to the high prevalence of obesity in the community. The cultural preferences lean toward red meat and starchy vegetables like potatoes. Respondents also worry about the youth in the population because of the high childhood obesity rates.

Key informants think that poor nutrition stems from a variety of sources. Many community members rely on **fast food establishments** because of their busy lifestyles.

Fast food represents the quick, easy option for families who do not have time to make dinner. For low-income families, fast food is also the cheap option as healthy, organic foods tend to cost more. A South Side resident describes her recent grocery shopping experience:

"I tried to buy healthier stuff this month when I went grocery shopping. I was like, 'Okay, we just need more fruits and vegetables.' But by the time I got done getting our fruits and vegetables I was at my limit for that week, and I'm like, 'Oh. So I have to put this back because this isn't going to feed us all week.' And I had to go get boxed foods that are going to make it through the whole week or else I'm in trouble. And I really wanted to get more fruits and vegetables. I really wanted to try that, because I know my kids love it, and I can't give it to them because it is way expensive." — South Side Neighborhood Community Member

In the south side of Billings, residents lack access to fresh fruits and vegetables, which key informants believe contribute to the high obesity levels. Some residents live in neighborhoods, classified as **food deserts**, wherein community members do not have easy access to grocery stores.

"It really hurt the south side when they took the IGA out of the south side, because it was the only grocery store. Now you have to walk either downtown or all the way to the Albertson's on Central, and that's a walk. I think they need to open up another grocery store, an actual grocery store, not a convenience store, on the south side again. I mean, they took away a lot when they got rid of that store." — South Side Neighborhood Community Member

On the other side of the obesity epidemic are **hunger concerns**. Participants believe that hunger does impact portions of the county. Family Service, Inc. provides food boxes every week and tries to have healthy choices in each box. The agency works with local grocery stores and also provides recipes to the recipients. A participant explains the program:

"It's produce and the meat, and as soon as they pull the meat they freeze it right away so that we receive most all of it frozen. And then we put together boxes according to the number of people in the family. So you get 80 pounds for two people, 130 for five, and it's a large amount of food. Can we say every day that it's going to be specifically this or that? No. It's whatever we get from the store. But we are working to make those boxes nutritious." — Social Service Provider

Substance Abuse

Substance abuse in the community is of concern to many focus group attendees. The main issues discussed surrounding substance abuse included:

- Prevalence of drug use
- Alcohol use
- Young adults
- Prescription medication abuse
- Need additional substance abuse treatment programs and facilities

A number of focus group participants worry about the **prevalence of drug use** in Yellowstone County because it negatively impacts every aspect of a person's life.

Attendees have concern about high rates of alcohol use and alcoholism, especially among Native Americans living in urban areas. **Alcohol** is a part of the culture and the community lacks recognition that alcohol use is an issue. In addition, participants worry about drinking and driving because it is currently socially acceptable.

"It's almost like you go to a party or something and the designated driver has already had four glasses of wine. That is a problem. I mean the statistic on that in Montana is after 10:00 at night, one in five cars someone's been drinking. It's a pretty sobering statistic." — Healthcare Professional

"Well, this is a community that still does use a lot of alcohol. A lot of alcohol. I mean, it's not uncommon – in the paper – for you to see somebody having their 13th DUI. This just always kind of makes me wonder – 'Why aren't you in jail and off the streets?'" — Elected Official

"Alcohol and tobacco – the perception is that it's not cool to be Western and not have a beer and a smoke." — Elected Official

Participants expressed that binge drinking and overindulging with alcohol is a learned behavior that is being passed along to the younger generations. Key informants feel that drinking among **young adults** is "generally accepted" in the county.

"It's a generally accepted rule of thumb—they don't have a non-alcohol party for their graduating seniors. They have a 'throw your keys, I'll keep them here, your friends can come drink.' And that is our state I think." — Social Service Provider

Attendees agree that substance use occurs across all demographics and worry additionally about methamphetamines, marijuana, synthetic drugs, and prescription drugs. One South Side resident describes how prevalent drug use is in Yellowstone County.

"I read the newspaper about Billings before I got here to get a feel for what I was going to see, and you read about drugs, but you don't realize how out in the open it is. You know, you think that it might be like in a back alley that you would never go visit, or you know, in an exceptionally bad area of town, but it's just everywhere." — South Side Neighborhood Community Member

The large amount of discarded drug paraphernalia represents another worry for residents:

"You find needles—they scatter them around the parks. I walk all the time, so we find them all the time. And we've gotten to the point where we pick them up and we throw them away. I've got little kids. I would hate to know what would happen if they accidentally stepped on someone's dirty needle." — South Side Neighborhood Community Member

Community members also feel that synthetic drugs, like spice (dried, shredded plant material and chemical additives that are responsible for their psychoactive [mind-altering] effects), are of concern because they perceive that everyone knows where to access these types of illegal substances. Other key informants describe that many residents have easy access to **prescription medication**, and some community members "doctor shop" for opiates.

"We've admitted patients—and this is more common than I hate to even admit—that have

chronic back pain, and they've gone to one healthcare facility and they've recognized them as somebody who's seeking. So they go to another facility and maybe they might get three days of Oxycontin or whatever. That's not going to be enough, and so they drive to Sheridan, Wyoming, and they'll get a prescription there, and then they'll hook back into Hardin and end up at our doorstep at 8:00 that night—very common.” — Social Service Provider

It is perceived that some providers over-prescribe and key informants recognize that for these physicians, it may be easier to offer a prescription than work with the patient on controlling their pain. In addition, some patients want a quick fix and the community lacks resources to support those true chronic pain sufferers who are willing to be engaged in their care.

“There are lots of musculoskeletal issues that come along with the hard labor jobs. But people want a quick fix. They want the Percocet to feel better. They don't want to become active participants in their health and lose their weight and make the lifestyle changes. And we have very few resources to help people to do that in the community. It's hard to say, hey, go take a yoga class when a yoga class is \$15.00 a class and people aren't buying into it. And that's one of the things that I would love to be able to see is promotion of health and exercise. I mean alternative ways to manage your medical issues besides reaching for that pill. But that requires engagement.” — Healthcare Professional

RiverStone Health has developed a chronic pain management toolkit. This toolkit is designed to provide both patients and providers with a clear understanding of RiverStone Health's philosophy in managing chronic pain. There is also a Chronic Pain Task Force, involving the Alliance partners, that is working with the provider community to address the abuse of prescription drugs.

Attendees feel that the community **needs additional substance abuse treatment programs and facilities**. Only a limited number of organizations provide substance abuse treatment. Rimrock Foundation represents the only inpatient option in Yellowstone County. The treatment center offers only a few state-subsidized beds for Medicaid recipients, or uninsured residents, but these beds have long wait lists. A community group participant describes the unfortunate reality for addicts who are turned away:

“Rimrock Foundation offers beds, but you're an addict so you go in there for help because you've hit rock bottom, and they tell you you've got a six-month wait for a bed to open up. Well, after six months... you're going to be dead... Or in six months you don't want to get clean anymore 'cause then hope's lost, you know? You don't have anything more to fight for.” — South Side Neighborhood Community Member

Other times residents only get the treatment needed after they are incarcerated:

“I know somebody who's—she's on meth. She tried to get help. She could never qualify for Rimrock Foundation. Now she's in Montana State Prison, women's prison, and now they're helping her. Now she's off the drugs but she's lost her kids. She's lost everything, you know, but they wouldn't help her before that. And we tried to get her help and it was always, 'No, we don't have room. We don't have space. We can't do it. She doesn't have insurance' or whatever. But now they're helping her, for the next five, ten years—I don't even know anymore. That is a big issue. When you go in as a drug addict and you're asking for help, you don't really get help. You shouldn't have to commit a felony to get help.” — South Side Neighborhood Community Member

Tobacco

Many focus group participants are concerned with these tobacco-related issues in the community:

- Negative health consequences of tobacco use, and secondhand smoke inhalation
- Addictive nature of tobacco
- Positive impact after changing public policies

Focus group participants agree that cigarette use occurs across demographics from young adults to senior citizens. Respondents worry about the **negative health consequences of tobacco use, and secondhand smoke inhalation**. Anti-tobacco education campaigns have also helped lower smoking rates. However, attendees recognize the **addictive nature of tobacco** products and the challenges encountered when attempting to quit, but believe that **changing public policies have helped** people change their behavior and decrease the number of smokers. Key informants describe lower tobacco use after new state laws and increased cost of cigarette.

"I'm sorry – but some of its convenience driven and if the state doesn't allow you to smoke in all the places where people have traditionally smoked, you know, at some point it's not worth the effort but that doesn't mean necessarily that they quit but maybe they smoke less because they're starting to do some of the other activities." — Employer Representative

Chronic Disease

Focus group participants mentioned the following chronic health conditions which continue to affect the community: allergies, diabetes, depression, heart disease, hypertension, and obesity.

Injury

Many focus group participants are concerned with injury and violence in the community. The main issues included:

- Preventable injury
- Seat belt and helmet utilization

Focus group members express concern about the high rates of **preventable injury**, which negatively impact the community. Many injuries could be avoided if residents and their children increased **seat belt and helmet utilization**. A respondent explains:

So, I mean I think part of it has to do with, again, that cowboy up libertarian streak of people. Like you're not going to tell me what to do. I'll wear a seatbelt if I want to, talk on my phone if I want to. I can do this. That's fine. And I can drink and do whatever else. That negatively impacts our community when we can't pass a primary seat belt law. We're one of the only states

in the country that doesn't do that. Because of that, people don't see it as being a law at all. So they just don't follow it because it's secondary enforcement. You can't pull me over for it. So who cares?" — Healthcare Professional

Access to Healthcare Services

Many of the key informants participating in the focus groups are concerned with access to healthcare, discussing such issues as:

- Barriers to accessing healthcare
- Limited number of primary care providers
- "Cowboy" mentality
- Fear of diagnosis
- Physician office hours
- Under-insured or uninsured population
- Transportation

Focus group participants agree that the community has a great variety of medical facilities in the city of Billings, but residents still encounter several **barriers** when trying to **access healthcare services**. Many attendees describe only a **limited number of primary care providers** working in Yellowstone County, but the community has many specialty care physicians; therefore, people self-refer, but key informants worry that this practice actually raises healthcare costs.

Many residents do not think about long-term health consequences or the **importance of preventive healthcare**. Respondents feel that the community needs to change the healthcare culture to promote health prevention. Physicians need to spend time with their patients providing one-on-one education. A key informant explains:

"People going to the emergency room which can be a factory; that's not preventive care, that's not quality care. A 50-year-old woman walks into the emergency room with shoulder pain; they're going to treat the shoulder. They're not going to talk to her about have you had a mammogram, have you had a pap smear recently, have you had a colonoscopy, or is there a history of cancer? So those are basic issues that just need to come out on the table." — Employer Representative

Attendees think that health education programs need to begin early in life, and they recognize that schools do currently have some programs in place.

Participants agree that residents avoid accessing healthcare services until they become very ill for several reasons. The **"cowboy up" mentality** exists in the community, the idea that residents should handle the issue themselves. Other community members are **afraid to receive a negative health diagnosis**. Key informants describe that for some in the Native American population, it may be considered taboo to receive a screening because they do not want to bring the disease upon themselves.

"Some of the other underserved populations, like some in the American Indian culture, have expressed that there, traditionally, wasn't even a word for cancer or for some of these health issues ... it may be passed on from generation to generation that you don't go to the doctor

because what you don't know is basically better than what you know. You're going to die anyway, so why would you go to the doctor?" — Healthcare Professional

The community group also spent time discussing the importance of the relationship between the doctor and the patients. These residents do not feel that providers spend enough time with them and believe that many physicians hold preconceived notions and have already predetermined the course of action before entering the room.

"I went into the doctor. My doctor tells me, 'There's nothing wrong with you.' So I dealt with it for about another month. I went into another doctor and he said, 'Oh, you need surgery and you need it pretty fast. I mean, this could paralyze you if not kill you.' And the first doctor I saw, he said, 'Well, you're just here for pain medication so we can't help you.' And fortunately I was able to see another doctor that didn't think that way, but I'm running back into it again. My primary care physician thinks I'm there just to get pain medication and that's it. And I mean—so every time I go in there I have to tell them, 'Look, I don't want any pain medication. I just want to get fixed.' I mean, you know, that's one of the biggest problems I see with doctors. They're really eager to push prescriptions on you, but at the same time, they figure it's their way or nothing. And a lot of them don't understand that some people have legitimate complaints, but it's like a people mill, I guess I would call it. You know, you push them in and push them out, push them in and push them out, and that's it. And that's what I noticed a lot with the medical community here. A lot of them just want to get you in and push you out. They don't care if you're healthy or not." — South Side Neighborhood Community Member

"I don't know if this is necessarily about access, but I've had like some bad experiences with not feeling like I was in control with my doctor, like feeling that they were kind of trying to tell me what to do without really listening to me. And so I guess maybe some of those experiences make me hesitant to go." — South Side Neighborhood Community Member

Other residents may not access services because of day care issues and the inability to take time off work. **Physician office hours** can delay a resident's ability to access healthcare. Many residents work multiple jobs, which make getting to a doctor appointment during normal office hours difficult. These residents do not want to miss work because of the dock in pay.

"Some of the under-resourced people are trying to work two and three jobs and often a lot of part-time jobs. And they just can't take off during the day at all. So it's this issue of transportation and hours that we make ourselves available to people. And a lot of people only have after hours and weekends to access health and that's why they go to the Emergency Departments." — Healthcare Professional

Focus group members feel that many residents are also **under-insured or uninsured**, limiting their access to healthcare services. The underinsured population includes the working poor, those individuals who may qualify for employer insurance but the deductibles are too high or the monthly employee cost too much, so they elect to go without. These low-income populations are more likely to have poorer health outcomes. The cost, or perception of cost, can be a major barrier to obtaining healthcare or medication.

"We have an awful lot of people here who work minimum-wage jobs, and if you work a minimum-wage job, it's pretty hard to afford a place to live, let alone a place to live and health insurance for your family. So the problem is, once you become an adult, there isn't a fill-in like Medicaid for children." — Elected Official

"I think a lot of people, if I've got to go to that big building over there it's going to cost me a lot of money and whether I can afford it or not I'm not willing to spend it on that" — Employer Representative

The represented community group participants also feel that cost of care and lack of insurance is a major barrier for many of them. A resident explains:

"Another barrier that I'm seeing a lot of my families here—they maybe have insurance through an employer but there's a lot of exclusions and a lot of limitations and high deductibles. So they might need treatments or their kids might need treatments, but they can't necessarily afford the \$5,000.00 copay or whatever, and so they don't take the kids in to get the care they need, or they themselves won't go in to deal with their depression because their meds are not covered or whatever. So there's that bit of a loophole between not poor enough to get it free, but making too much and having what I call lukewarm insurance that doesn't give them the best access." — South Side Neighborhood Community Member

Examples of available care: RiverStone Health's clinic offers a sliding fee schedule to serve south side residents and remains very busy. (Attendees believe that RiverStone Health has done an excellent job of offering care on the south side of Billings and also has excellent outreach programs.) At St. Vincent Healthcare or Billings Clinic, individuals in need of emergency care will never be denied treatment or care if they do not have insurance or are unable to pay.

Transportation can also act as a barrier, with many low-income families depending on one car for the entire family, and other families without any personal vehicles. Within the city of Billings, public transportation operates but runs limited routes and times. Residents may spend hours on the bus because of inefficient itineraries. In addition, community members describe that the actual cost of the bus can be prohibitive so some residents walk everywhere.

Residents outside of Billings must travel into the city to receive care. A bus service will take residents from Laurel to Billings, but does not shuttle them to locations within town. A key informant describes the issue:

"Proximity – if you're looking at health service on a county-wide scale, proximity is an issue simply because, from my own experience in Laurel, even though we're only 15 miles away, a lot of the seniors and a lot of the low-income people do not have reliable transportation. And even though we have a bus service, I personally have been involved with people who make all of their health appointments on the same day, and the services are not there to ferry them from one appointment to the next to the next." — Elected Official

Other transportation options include Wheels for Work, a program sponsored by the United Way and the Hope Respect Dream Change (HRDC) Community Action agency, which provides a gas card to employed residents. The Council on Aging also provides an on-demand bus where community members can make appointments to meet their transportation needs.

Oral Health

Many focus group participants discussed oral health in the community, with primary concerns including the following:

- Importance of regular preventive dental care
- Few providers for Medicaid recipients
- Children's poor oral health

Focus group participants agree that neglect of oral health can result in a significant decrease in a person's overall health, and can increase the chances of poor health outcomes. Attendees recognize the **importance of regular preventive dental care**, but many residents do not get this type of care.

"How many people never, ever, ever see a dentist in their life and I mean I see those people all the time when they come to parent teacher conferences I mean it's scary and even something as simple as going to a dentist I think can have a huge impact on their health, on all kinds of other health issues, and it's a good indicator that if they're not taking care of their teeth, they're probably not taking care of anything else either, and so I think it's – it has to do with do they have insurance, do they have the affordability, do they even have the wherewithal or the knowledge to know that this is important to take care of yourself." — Employer Representative

Many residents face barriers in accessing dental treatment because of the low number of dentists who will see **Medicaid recipients**. RiverStone Health has a program for adults, but patients must call daily to obtain an appointment. These individuals do not get timely care and may end up in the emergency room with abscesses.

Many **children** in the community also have **poor oral health**, as a respondent describes:

"Our initial launch was at Head Start, and all those young guys and girls need a physical and a dental exam before they can be enrolled. And I bawled for a day because we had these little kids in there, and they're four, five years old ...and their teeth were so infected, and they were having the equivalent of an adult root canal on their baby teeth because they were so rotted." — Social Service Provider

In a positive note, access to children's oral healthcare services has increased in recent years. The Ronald McDonald mobile dental unit serves the young population, RiverStone Health provides children with dental care, as do private dentists who accept Healthy Montana Kids.

Collaboration

Participants spent time discussing the high level of collaboration occurring in the community between non-profit organizations, schools, healthcare providers and hospitals. The themes surrounding collaboration were:

- Level of collaboration continues to grow
- Healthy by Design Coalition
- Communication
- Strong sense of community on south side
- Friendship House

Attendees believe that the **level of collaboration continues to grow** in the community. Participants agree that many coalitions operate throughout the county to improve the health of the residents and resources are limited, so collaboration is critical. The attendees describe many coordinated efforts in Yellowstone County, including the city of Laurel's partnership with the Council on Aging and the city of Billings' relationship with RiverStone Health and other agencies. Laurel schools also collaborate with RiverStone Health and Yellowstone Boys and Girls Ranch. The Billings School District has become more inclusive in recent years. Many of these efforts occurred because organizations recognize that independently they cannot accomplish everything and need to build relationships to further their missions.

"I've only been in my role for two years. But I think we're on the verge of something really big for collaboration. We're probably in our infancy right now, but just even everybody sitting around this table right now. I think that everybody's starting to reach out understanding that you can't do it in isolation or on your own and working together...But it just generates such a better understanding. Even listening to Stacy talk about that, I was like, 'That is phenomenal, and I didn't even know about that.' And I thought I had this big, resource-rich head. I don't. And just to find out about those things and then start that collaboration—I think we're on the verge of something big here." — Social Service Provider

The Alliance members (Billings Clinic, RiverStone Health, and St. Vincent Healthcare, founders of the **Healthy by Design Coalition**) demonstrate the possibilities when large entities cooperate and do not let competition get in the way. One participant explains the progress the Healthy by Design Coalition has made in the community:

"I mean as far as planning efforts there's so many things that the Healthy by Design community has done to help build the community and do positive things for planning. This is just like one of the best groups in the world I think because it's doing a lot of good for the efforts that we have been trying to achieve for many, many years. Just getting a lot of different players involved, it's great." — Employer Representative

One area where members think that Yellowstone County can improve is in **communication**. Increased communication to residents about the available resources would increase awareness and utilization.

During the community group the participants describe the **south side** of Billings as an area with a **strong sense of community**, a place where everyone looks out for one another and it is the area's greatest strength. Residents feel safe on the south side and describe it as very welcoming.

"For the most part the best thing I can say is that there still are people that are still willing to help you. You know, like if you're struggling with something and you've got a neighbor, chances are your neighbor will go out of their way to help you. So people are still really nice here." — South Side Neighborhood Community Member

Respondents think that the **Friendship House** is a huge asset to the south side. Here, one resident explains the organization's relationship with other health agencies:

"I see something beautiful happening in this community and that's agencies working together try to address what I call mega-problems rather than just micromanaging individuals. You know, I see some great collaboration happening between RiverStone and Friendship House and the Mission and Salvation Army and United Way, and there's the beginning of buds of some fruit happening so that an underserved population can get services and access. And I would love to see that happen community-wide for all sectors of the population, and I think that in some senses the underserved population is modeling that because the agencies and the people that care about them are starting to make a difference. So that's a very positive thing to be a part of." — South Side Neighborhood Community Member

Community members did note that local police could do a better job enforcing the laws, so that individuals who want to vandalize the area, or use illegal drugs in public places, may be caught or deterred. A resident explains his concerns:

"If the police would really enforce things—I mean, I would call the police often and they wouldn't do anything about some bums. And our kids were supposed to go use that new gazebo that we all just raised money to use, and our kids couldn't go there because the police wouldn't kick the druggies and the homeless and the drunks off of it. So now we're forced to go sit in the grass and our kids are sitting on drug needles. Almost every week a kid sits on a drug needle. So that's one thing that's an issue, our police are not doing their job." — South Side Neighborhood Community Member

Older Adults

Many focus group participants discussed the limited number of services available to senior citizens, with emphasis on the following:

- Aging population
- Palliative care
- Complexity of Medicare system
- Accessibility of assisted living facilities
- Limited transportation options

Participants agree that Yellowstone County has an **aging population**. Respondents worry about the health of senior citizens living in the region and feel that communication to seniors needs to improve. Information surrounding **palliative care** needs to occur more as well; attendees think that many residents have limited knowledge about palliative care options.

In addition, the **complexity of the Medicare system** worries group attendees. The complicated paperwork involved with initiating and accessing the system is amplified for some elderly persons with health issues, as well as other vulnerable adults.

"I had difficulty getting through the Medicare process, but it turned out okay, but you know, the average person, particularly those people who are disenfranchised or don't have a background and so on. I mean it is just so complex and there are so many ins and outs and loopholes, I don't know what the solution is and it's going to get worse with this whole healthcare change." — Employer Representative

Several focus group members believe that an adequate number of **assisted living facilities** does exist in the county, but the cost of these facilities make them inaccessible to seniors with limited incomes.

Respondents also feel that **limited transportation** options, especially in rural areas, negatively impacts seniors and may lead to isolation.

Housing

Focus group participants are concerned with the lack of affordable, quality housing available in the community. The main issues discussed surrounding housing included:

- Availability of affordable and quality housing
- Basic needs not met

Focus group members worry about the **availability of affordable and quality housing** in Yellowstone County. Oil rigs in North Dakota have increased the demand for housing, which in turn raises rental prices; current tenants either do not get leases renewed, or the renewal comes with a higher rent that many low-income residents cannot afford. Several community members describe their concerns:

"Who's got \$1,200.00 to pay for a three-bedroom place a month, you know? You don't even make that much from a standard job. How are you supposed to come up with that much money for a place to live? And then they wonder why so many people are homeless and can't afford paying rent or getting into places, because no one's got the money these days to do it." — South Side Neighborhood Community Member

"I think it's kind of a double-edged sword. Billings, by comparison to the rest of Yellowstone County, has almost double the cost of housing and rental and real estate and all that. But if you go out to the outlying communities and you get a cheaper place to live, all the jobs are in Billings. So then you have transportation to figure in." — South Side Neighborhood Community Member

Local non-profits have limited funding each year to help people move into a home, or

stay in a home, so these residents are forced to move out, and often move in with family or friends.

Key informants believe that the community members whose **basic needs** (housing) are not being met cannot even think about health or preventive care. In addition, compliance with medical care drops when these needs are not met.

“People cannot be expected, even with all the access to healthcare, to give two seconds to their health if they don’t have a roof over their head. So that piece, even though it probably isn’t considered traditional healthcare, is. I mean, you’re talking Maslow’s Hierarchy. And if we can’t meet their basic needs, they don’t care that they have diabetes or that they have substance addiction problem or that their kids are hungry.” — Social Service Provider



APPENDICES

IRS Form 990, Schedule H Compliance

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

| | |
|---|----------------------|
| Part V Section B Line 1a | See Page 7 |
| <i>A definition of the community served by the hospital facility</i> | |
| Part V Section B Line 1b | See Page 9 |
| <i>Demographics of the community</i> | |
| Part V Section B Line 1c | See Page 196 |
| <i>Existing healthcare facilities and resources within the community that are available to respond to the health needs of the community</i> | |
| Part V Section B Line 1d | See Page 6 |
| <i>How data was obtained</i> | |
| Part V Section B Line 1e | See Page 14 |
| <i>The health needs of the community</i> | |
| Part V Section B Line 1f | Addressed Throughout |
| <i>Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups</i> | |
| Part V Section B Line 1g | Pending |
| <i>The process for identifying and prioritizing community health needs and services to meet the community health needs</i> | |
| Part V Section B Line 1h | See Page 10 |
| <i>The process for consulting with persons representing the community's interests</i> | |
| Part V Section B Line 1i | See Page 13 |
| <i>Information gaps that limit the hospital facility's ability to assess the community's health needs</i> | |

Public Health Accreditation

The Community Health Needs Assessment addresses the Public Health accreditation domains listed below. By its nature, the CHNA is a cooperative venture sponsored by The Alliance. It examines Yellowstone County and puts the county data into perspective with state and national data and benchmarks (Youth Behavioral Risk Survey, Healthy People 2020, etc.). Through this instrument and the associated community conversations, The Alliance identifies barriers to healthcare and learns what the community thinks are service gaps and assets. Ultimately, community health improvement plans and institutional strategic plans result from the CHNA and the community response to it.

Adherence to Public Health Accreditation Standards

- ✓ Domain 1.1.2 L Complete a Tribal/local community health assessment
- ✓ Domain 1.2.2 L Participate in or conduct a Tribal/local partnership for the development of a comprehensive community health assessment of the population served by the health department
- ✓ Domain 5.2.1 L Conduct a process to develop community health improvement plan
- ✓ Domain 7.1.1 A Convene and/or participate in a collaborative process to assess the availability of health care services
- ✓ Domain 7.1.2 A Identify populations who experience barriers to health care services
- ✓ Domain 7.1.3 A Identify gaps in access to health care services