

HEALTH RELATED RISKS AND BEHAVIORS IN MONTANA:



SURVEY RESULTS FROM THE 2011 MONTANA BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM





Public Health and Safety Division

Montana Department of Public Health and Human Services

DIVISION MISSION: *To Improve & Protect the Health & Safety of Montanans*

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May 20, 2013

From the Director:

The Montana Department of Public Health and Human Services is pleased to present this report of selected findings based on our 2011 Montana Behavioral Risk Factor Surveillance System (BRFSS) survey results. We have participated in this health monitoring system of adults ages 18 and older since its inception by the Centers for Disease Control and Prevention (CDC) in 1984.

Montana is one of 50 states, the District of Columbia, and several territories to administer this continually on-going state-based telephone survey through funding and support by CDC. In 2011, over 10,000 Montana adults completed the annual survey and we are indebted to the public for their willingness to participate and provide us with this valuable health-related information.

The information gathered is used to identify populations at high risk for disease, injuries, and disabilities, as well as to help us understand the use of health care services for well-being. The evidence derived from the system serves as an important guide for planning health promotion and disease prevention activities and also helps to establish benchmarks for public health improvement over time.

Our goal is to improve the health of Montanans to the highest possible level using efficient and effective measures which are sustainable over time. Thank you for helping to inform our efforts and we hope that this report will serve as a resource for you and others, as Montanans continue to address our health challenges.

Sincerely,

Richard H. Opper
Director

ACKNOWLEDGEMENTS

Montana BRFSS, 2011

The Centers for Disease Control and Prevention (CDC), Division of Behavioral Surveillance provided financial and technical support for developing the questionnaires, implementing the survey, and processing and weighting the data. CDC's financial support has greatly facilitated the Montana Department of Public Health and Human Services (DPHHS) ability to continually monitor health risk factors for preventable diseases, disabilities, and injuries, access to health care and use of preventive screenings, and other emerging health issues.

Special appreciation is extended to the telephone interviewers and staff of the University of Nebraska Medical Center and call center located in Lincoln, NE. Their dedication and experience has yielded high quality survey data for the Montana BRFSS.

To the citizens of the state of Montana, we thank you for your continued cooperation and willingness to participate in this very important health survey. The information you have provided regarding health risk behaviors is invaluable for assessing state trends for public health planning purposes and allowing us the ability to compare Montana's progress to the rest of the states and the nation.

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SUMMARY

Montana BRFSS, 2011

This report presents selected findings from the 2011 Montana Behavioral Risk Factor Surveillance System (BRFSS) survey. BRFSS is an annual statewide landline and cell phone survey of non-institutionalized Montana residents ages 18 years of age and older. The survey is conducted through a collaborative effort with the Division of Behavioral Surveillance of the Centers for Disease Control and Prevention (CDC) and the Montana Department of Public Health and Human Services (DPHHS).

Access to Health Care

- 15.4% of Montana adults who could not afford to see a doctor in the past year, similar to the national median (see Figure A, also Appendix B).
- The prevalence of uninsured Montana adults ages 18 – 64 years was 24.1% and the prevalence of no routine checkup in the past 12 months was 44.3%, considerably higher than the national medians of 21.3% and 33.5%, respectively.

Health Status and Outcomes

- 17.2% of Montana adults reported that their general health status was “fair” to “poor.”
- The percentages of Montana adults who reported being overweight, having any cardiovascular disease (heart attack, stroke, angina,) or current asthma were similar to the nation’s median.
- Montana adults reported less clinically diagnosed diabetes (8.0%) and less obesity (24.6%) than the national medians of 9.5% and 35.7%, respectively.

Health Risk Behaviors

- The percentage of Montana adults reporting no leisure-time physical activity (24.4%) was lower than the national median (26.2%).
- Binge drinking and heavy drinking were slightly more prevalent among Montanans than the national median.

Clinical Preventive Measures

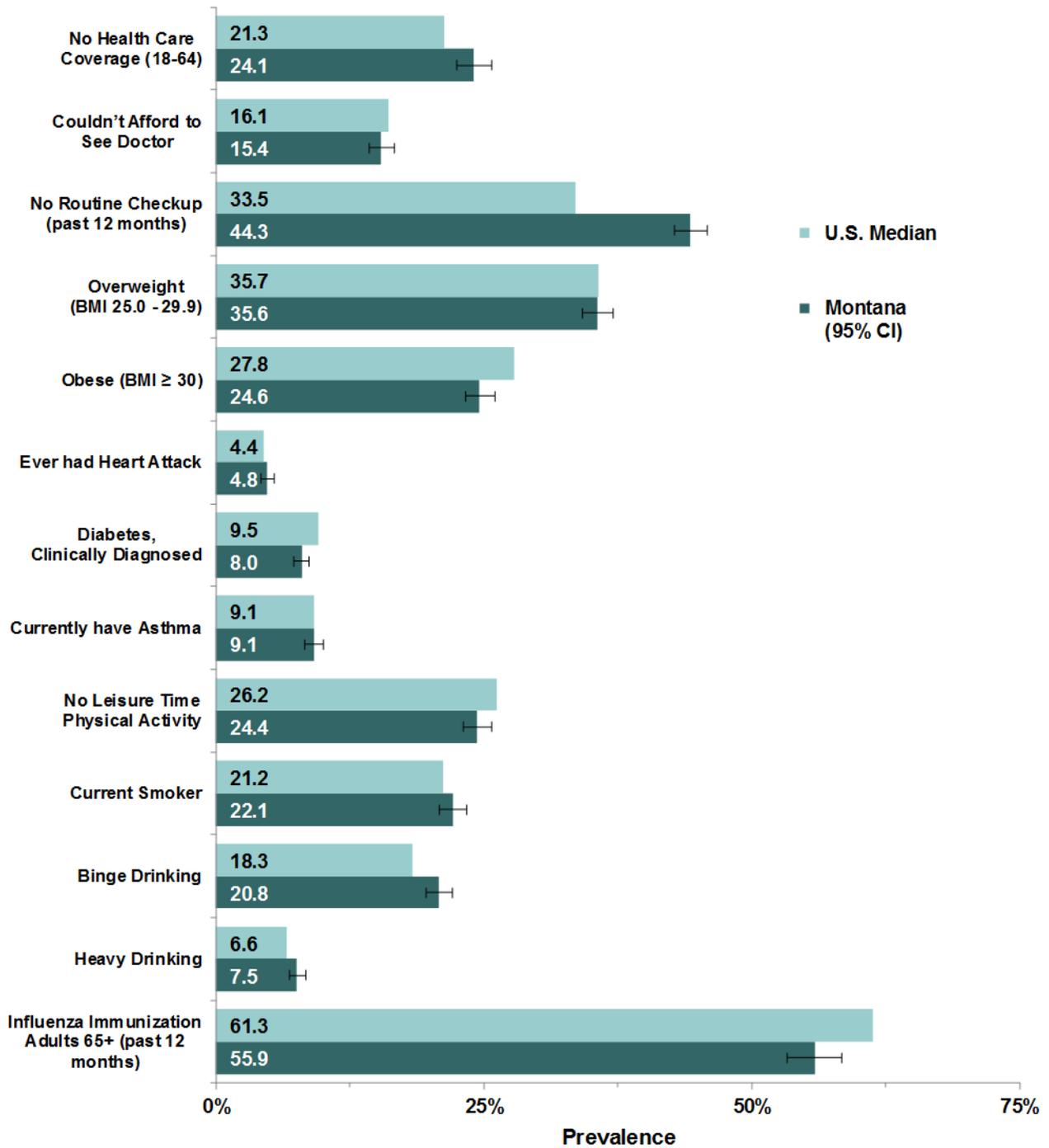
- The prevalence of influenza vaccination for adults 65 years of age and older was 55.9%, lower than the nation’s median of 61.3%.

Population Subgroups

- Adults with less education (particularly those who have not completed high school), those with lower household incomes (<\$25,000), and American Indian/Alaska Natives more often reported risky health behaviors and poorer health outcomes than other population subgroups.

The results provided in this report have been weighted, as described in the methods section, to be representative of the non-institutionalized Montana adult population. **The BRFSS 2011 prevalence data should be considered a baseline year for data analysis and is not directly comparable to previous years of BRFSS data because of the changes in weighting methodology and the addition of the cell phone sampling frame.**

**Figure A. 2011 BRFSS Selected Risk Factors and Health Conditions
U.S. Median and Montana**



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PUBLIC HEALTH IMPLICATIONS OF FINDINGS

Montana BRFSS, 2011

Reduce the proportion of adults in Montana with no health care coverage and increase the proportion of adults receiving routine checkups.

The *Healthy People 2020* (HP2020)¹ target for health care coverage is to have 100% of adults insured. The prevalence for adults 18-64 years of age will need to increase 24.1% or an average of 2.7% per year to meet the HP 2020 goals. In addition, increasing the percent of adults who have a personal health care provider and reducing health care access limitations due to costs are very important for improved health outcomes.

Reduce tobacco use as a major risk factor for poor health outcomes among Montana adults.

Cigarette smoking is the leading cause of preventable death in the United States. Adult Montanans have higher prevalence estimates of smoking (22.1%) than at least half of the U.S. states (21.2% median), well above the HP2020 target goal of $\leq 12.0\%$. Use of smokeless tobacco (7.1%) is also well above the HP2020 target of $\leq 0.3\%$. Smoking cigarettes and smokeless tobacco use are particularly high for American Indians/Alaska Natives (47.6% and 11.1%, respectively). Montana's Public Health and Safety Division has programs and policies in place to help reduce tobacco use, <http://tobaccofree.mt.gov/>.

Increase the use of seatbelts to save lives.

In 2011, 26.9% Montana adults reported that they did not always wear a seat belt. To meet the HP2020 target of $\geq 92.4\%$ always using a seatbelt, Montana adults need to increase use by 19.3% or an average of 2.1% per year over the next nine years. Montana's Public Health and Safety Division has programs and policies in place to help address this public health issue, see Montana's Injury Prevention Program, <http://www.dphhs.mt.gov/ems/prevention/>.

Reduce the prevalence of binge drinking, especially among adults 35 years of age and younger.

In 2011, an estimated 20.8% of Montana adults reported binge drinking on at least one occasion within the past month. The prevalence of binge drinking among males is almost twice that of females. DPHHS has programs and policies in place to help reduce binge drinking, <http://www.dphhs.mt.gov/amdd/chemicaldependencieservices/index.shtml>.

Improve the quality of life for people affected by arthritis and increase awareness of appropriate self-management.

In 2011, more than one-quarter (26.4%) of Montana adults reported having been diagnosed with some form of arthritis. Almost one-half (49.5%) of adults with arthritis in Montana have activity limitations due to joint symptoms. Montana's Public Health and Safety Division has programs and policies in place to help reduce and manage arthritis related illnesses, <http://www.dphhs.mt.gov/arthritis/index.shtml>.

¹ U.S. Department of Health and Human Services. **Healthy People 2020**. Washington, DC: U.S. Government Printing Office. Available at: <http://www.healthypeople.gov>.

INTRODUCTION

Montana BRFSS, 2011

From 1981 to 1983, the Centers for Disease Control and Prevention (CDC) funded states in the U.S. to conduct point-in-time pilot surveys about health-related behaviors that were thought-to-be associated with an increased risk of disease and premature death. Montana has the distinction of having been one of the original 29 states to conduct the pilot surveys for CDC. Because of successful implementation of these pilot surveys, the CDC established the Behavioral Risk Factor Surveillance System (BRFSS) in 1984 and Montana was one of the 15 states to secure funding from CDC when this initiative formally began. BRFSS is an annual state-based telephone survey assessing the health status and behavioral risk factors of the non-institutionalized adult population 18 years of age and older. The BRFSS began with four primary goals:

1. To document health trends at the state level;
2. To identify emerging health issues;
3. To compare health behaviors across states; and
4. To measure progress toward the nation's health goals.

Through cooperative agreements between CDC and state departments of public health, the BRFSS expanded to include all 50 states, the District of Columbia, and several U.S. territories. BRFSS is now the largest continuously conducted telephone health survey in the world.

The BRFSS survey provides valuable information on health trends, chronic disease risks, and data for monitoring the effectiveness of policies, programs, and interventions. Subject areas include self-reported health status, access to health care, health awareness, use of preventive services, as well as knowledge and attitudes of health care and health care practices. Each year modifiable behaviors such as smoking, excessive alcohol consumption, overweight, and physical inactivity contribute to a substantial portion of the mortality and morbidity associated with chronic disease and unintentional injury. Underutilization of preventive health services (e.g. blood pressure, cholesterol, and cancer screenings) may also contribute to morbidity and premature death from many diseases. Measuring the prevalence of high-risk behaviors and preventive health service utilization provides information for developing and monitoring interventions designed to reduce premature death and disease. In 2011, 72% of Montana deaths were associated with modifiable health risk behaviors and conditions (Table A).

The *Healthy People 2020* (U.S. DHHS) is a national initiative designed to serve as a road map for improving the health of all people in the United States during the second decade of the 21st century. *Healthy People 2020 (HP 2020)* builds on similar initiatives pursued over the past three decades. Four overarching goals serve as a guide for developing objectives that will measure progress:

1. Attain high-quality, longer lives free of preventable disease, disability, injury, and premature death;
2. Achieve health equity, eliminate disparities, and improve the health of all groups;
3. Create social and physical environments that promote good health for all; and
4. Promote quality of life, healthy development, and health behaviors across all life stages.

Data from the annual BRFSS survey are one of the primary means of monitoring progress towards achieving *HP 2020* health objectives. Table B summarizes Montana's progress toward *Healthy People 2020* goals that were measured on the 2011 survey.

Table A: Behavioral Risk Factors Associated with the Leading Causes of Death in Montana, 2011*

Rank	Cause of Death	# of Deaths	% of Total Deaths ¹	Crude Rate ²	Associated Risk Factors ³
1	Cancer	1,991	21.9%	199.6	Smoking, high-fat diet, chronic alcohol abuse
2	Heart Disease	1,907	21.0%	191.1	Smoking, physical inactivity, hypertension, high-fat diet, high blood cholesterol, overweight
3	Chronic Lower Respiratory Disease	638	7.0%	63.9	Smoking, exposure to certain chemicals
4	Unintentional Injuries	577	6.3%	57.8	Binge and chronic drinking, non-use of safety belts
5	Cerebrovascular disease (including stroke)	451	5.0%	45.2	High blood pressure, smoking, high blood cholesterol
6	Alzheimer's disease	258	2.8%	25.9	Head injuries
7	Diabetes	246	2.7%	24.7	Overweight, physical inactivity, poor nutrition
8	Intentional Self-Harm	225	2.5%	22.6	Depression, alcohol or substance abuse, major stressor events
9	Pneumonia and Influenza	155	1.7%	15.5	Infection with pneumococcal bacteria or influenza virus, compromised immune system
10	Chronic Liver Disease	126	1.4%	12.6	Chronic alcohol abuse, Hepatitis B or Hepatitis C
Total deaths from leading causes		6,574	72.3%		

* Mortality data are from Montana Vital Statistics, 2011 Annual Report.

¹ Total deaths from all causes in 2011, excluding fetal deaths, were 9,098.

² Cause-specific crude death rates are per 100,000 estimated population.

³ Not a comprehensive or definitive lists of all associated risk factors.

Table B: Healthy People 2020 Objectives¹ for the Nation and Montana: Summary of Montana 2011 BRFSS Data

Healthy People 2020 Objective ²	2020 Target	MT 2011	
Health Insurance (AHS-1.1)	100.0	75.9	
Usual Primary Care Provider (AHS-3)	≥ 83.9	71.6	
Reduce Health Care Access Limitations due to Cost (AHS-6.2)	≤ 4.2	15.4	
Increase the Proportion of People ³ Using the Oral Health Care System (OH-7)	≥ 49.0	61.4	✓
Annual Influenza Immunization, 65 and older (IID-12.7)	≥ 90.0	55.9	
Pneumococcal Pneumonia Vaccination, 65 and older (IID-13.1)	≥ 90.0	69.6	
No Leisure Time Physical Activity (PA-1)	≤ 32.6	24.4	✓
Obese, BMI ≥ 30 (NWS-9)	≤ 30.5	24.6	✓
Cigarette Smoking (TY-1.1)	≤ 12.0	22.1	
Smokeless Tobacco Use (TU-1.2)	≤ 0.3	7.1	
Binge Drinking, During the Past Month (SA-14.3)	≤ 24.4	20.8	✓
Arthritis, Reduce Activity Limitations due to Arthritis (AOCBC-2)	≥ 35.5	49.5	
Reduce the Prevalence of Hypertension (HDS-5.1)	≤ 26.9	30.2	
Cholesterol Screening, Previous 5 Years (HDS-6)	≥ 82.1	69.5	
Cholesterol, Reduce High Cholesterol Prevalence (HDS-7)	≤ 13.5	34.6	
Increase the Use of Safety Belts (IVP-15)	≥ 92.4	73.1	

¹ Objectives are for adults age 18 or older except as noted.

² U.S. Department of Health and Human Services. *Healthy People 2020*. Washington, DC, 2010.

³ Includes children, adolescents, and adults.

✓ Met *Healthy People 2020* Objectives in Montana in 2011.

METHODS

Montana BRFSS, 2011

Sampling Design

Montana’s sampling frame in 2011 contained seven strata. Since 2000, Montana’s BRFSS sample has been stratified based on county population density and proportion of American Indians/Alaska Natives, Montana’s largest minority population. Stratum I consists of seven counties containing high population density and a high proportion of American Indians/Alaska Natives; Stratum II consists of 41 counties with relatively low population density and a low proportion of American Indians/Alaska Natives; and Stratum III consists of eight counties with relatively high population density and a low proportion of American Indians/Alaska Natives. These three strata allow the potential for oversampling households of American Indians/Alaska Natives and are used strictly for sampling, rather than analytical purposes

In 2002, CDC began the Selected Metropolitan/Micropolitan Area Risk Trends (SMART BRFSS) in order to analyze the data from selected metropolitan and micropolitan statistical areas (MMSAs).¹ The Montana BRFSS began participating in SMART BRFSS in 2004 and added a fourth stratum (Stratum IV) that includes Yellowstone and Carbon Counties – Billings, Montana’s largest

MMSA with a minimal sample size of 500. Starting in 2006, Montana BRFSS added two additional strata (Stratum V and Stratum VI) to the sampling frame to be rotated among Montana’s other MMSAs so that each MMSA has two consecutive years of data collected approximately every four to five years. In 2011, the MMSAs that achieved a sample size of at least 500 included: Great Falls, Missoula, and Helena. Beginning in 2003, Montana’s dataset has been weighted for regional analyses based on the state’s five health planning regions (HP1 – HP5) to report regional health information for public health planning purposes (see Appendix A for map of health planning regions). In 2010, an additional stratum (Stratum VII) was added to further increase the proportion of American Indians/Alaska Natives as respondents statewide.

YEAR	Billings	Great Falls	Missoula	Bozeman	Butte	Helena	Kalispell	Havre
2008	x			x	x			
2009	x			x	x		x	
2010	x					x	x	
2011		x	x			x		
2012		x	x					x
2013				x	x			x
2014	x			x	x			
2015	x					x	x	
2016		x				x	x	
2017		x	x					x
2018			x	x				x
2019	x			x	x			
2020	x				x	x		

* This schedule will be followed if funding remains sufficient and as long as no additional communities reach MMSA status. Should a new MMSA be identified it will be added to the rotation.

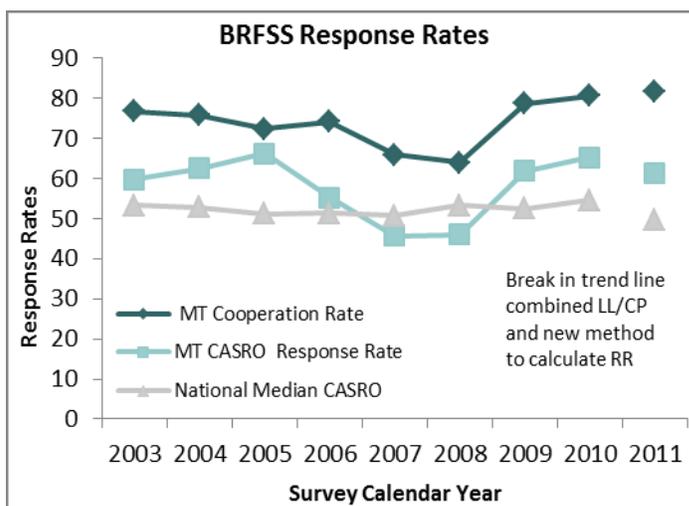
Based on CDC protocol, the sample is selected using a Disproportionate Stratified Sampling (DSS) design.² In the DSS design, the universe of all Montana telephone numbers is disproportionately stratified by telephone blocks. This means all landline telephone numbers are based on phone bank density, listedness (i.e., known household number in phone bank) and population density of American Indians/Alaska Natives. Phone numbers are randomly dialed using this list-assisted methodology. High density or listed household numbers are sampled at a rate of 1.5 over low density or unlisted numbers. This random-digit-dialing approach serves to lower costs and improve interviewer efficiency in sample usage.

For the past decade, CDC has been researching dual frame methodologies in order to include cellular telephones in the BRFSS samples. Approximately one-third of U.S. households rely exclusively on cell phones (Blumberg and Luke 2001; CDC 2012). Because of increased use of cell phone communication across the country, 2011 marks the first year in which all BRFSS surveys collect data from both landline and cell phone respondents.

Survey Administration

Interviews were conducted by University of Nebraska Medical Center with headquarters in Omaha and the call center in Lincoln. Interviews were conducted during daytime and evening hours on Monday through Friday and on weekends to ensure that selected individuals had ample opportunity to participate in the survey. Fifteen efforts were made to reach a landline telephone number and five attempts were made to reach a cell phone number at different times of the day and evening and on different days before a number was classified as unreachable. Once a phone number is successfully identified as a residence rather than business, an individual respondent is randomly selected from all adults ages 18 and older living in the household. The selected adult is then invited to be interviewed in accordance with the BRFSS protocol (CDC 2006). In 2011, approximately 855 interviews were completed each month, for a yearly total sample size of 10,265 (8,579 landline and 1,686 cell phones). In addition, at least 10 percent of all interviews were monitored and validated by the quality assurance section of the call center, using the system’s monitoring function to observe and score interviews in progress for quality improvement purposes (CDC 2006).

Over the past few years, the Montana BRFSS has been able to maintain or increase the annual number of completed interviews. A larger sample size increases the usefulness of the survey by providing more precise estimates and enabling more subpopulation calculations. The Council of American Survey Research Organizations (CASRO) response rate for combined landline and cell phone calls for Montana in 2011 was 61.4%, which was one of the top 4 in the nation. Of all selected respondents contacted, 81.6% resulted in completed interviews making Montana one of the top 10 BRFSS cooperation rates in the nation in 2011.



Data Weighting and Analysis

Data were weighted to account for the design of the survey and differences in the probability of selection due to the disproportionate sampling method and due to households with different number of adults and different numbers of telephones. This adjustment is intended to reduce biases that may result from excluding Montanans without telephone service (non-coverage) or from the varying characteristics of those that choose not to participate in the survey (non-response).

Starting with the 2011 data, CDC's Division of Behavioral Surveillance began using a new weighting method for BRFSS data in order to allow the incorporation of cell phones into the weighting scheme and to more closely match the demographic make-up within each state by using a broader range of demographic subgroups.³ This method called raking, ensures that groups which are under- or over- represented in the sample can be accurately represented in the final data set (CDC 2012). For a more complete discussion, see the *2011 Issue 3 Montana Fact[or]s, Changing BRFSS Protocols: Transition to Raking Weights and Incorporation of Cell Phone Sampling* published at www.brfss.mt.gov. **2011 should be considered a new baseline year for all future comparisons.**

The demographic characteristics of the 2011 survey respondents are presented in Table C. This table describes the 2011 survey population, including the unweighted number of respondents, the population estimate, and the weighted percent of respondents by selected demographic characteristics.

Data Reliability and 95% Confidence Intervals

The precision of a sample statistic (e.g., prevalence) can be estimated by calculating the confidence interval of the statistic; 95% confidence intervals (CI) are presented with the prevalence estimates in this report. As an example, a prevalence estimate for cigarette smoking of 20 percent with a computed 95% confidence interval of $\pm 2\%$, translates to a lower limit of 18 percent and an upper limit of 22 percent. We are 95% confident that the interval 18% to 22% includes the true percentage of smokers in the Montana population. The width of a confidence interval (e.g., $\pm 2\%$) using weighted data is dependent upon sample size and the design effect of the survey. Generally, estimates based on large samples have narrower confidence intervals and are more precise than are estimates based on small samples.

Confidence intervals must be considered when making comparisons among subgroups of the population (e.g., among age classes). Percentages for different subgroups of the population can be considered significantly different if their confidence intervals do not overlap.

Table C: Demographic Distribution of Montana Adults in the 2011 Behavioral Risk Factor Surveillance System (BRFSS)

	2011 BRFSS Sample		
	Sample Size (N)	Population Estimate	Weighted Percent †
All Adults:	10,265	769,600	100.0
Sex:			
Male	4,407	382,200	49.7
Female	5,858	387,300	50.3
Age:			
18 - 24	519	99,400	13.0
25 - 34	970	121,800	15.9
35 - 44	1,115	113,800	14.9
45 - 54	1,865	146,100	19.1
55 - 64	2,466	135,200	17.6
65+	3,271	150,000	19.6
Unknown§	59		
Education:			
<High School	751	76,300	9.9
High School	3,317	243,300	31.6
Some College	2,993	255,800	33.3
College Degree	3,183	193,500	25.2
Unknown§	21		
Income:			
<\$15,000	1,144	82,000	12.0
\$15,000 - \$24,999	1,915	128,900	18.8
\$25,000 - \$49,999	2,904	211,900	31.0
\$50,000 - \$74,999	1,433	110,200	16.1
\$75,000 +	1,786	151,200	22.1
Unknown§	1,083		
Race/Ethnicity:			
White, non-Hispanic	9,037	685,200	89.5
AI/AN*	639	40,000	5.2
Other or Hispanic**	530	41,000	5.3
Unknown§	59		
Disability:			
No Disability	6,563	529,700	73.0
Disability	3,141	195,700	27.0
Unknown§	561		
Region:			
1- Eastern MT	1,207	65,500	8.6
2- N Central MT	1,977	110,800	14.5
3- S Central MT	1,728	154,400	20.3
4- Southwest MT	2,176	181,000	23.8
5- Northwest MT	3,031	250,000	32.8
Unknown§	146		

† Weighted percentages are based on CDC's 2011 pop. estimate of 769,600 adults.

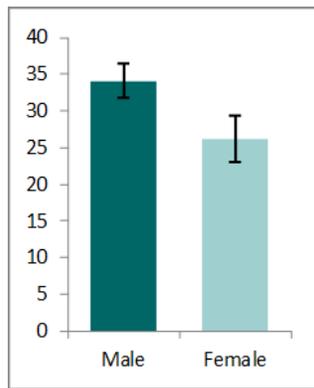
§ Cases with unknown values are excluded from relevant analyses.

* American Indian or Alaska Native only.

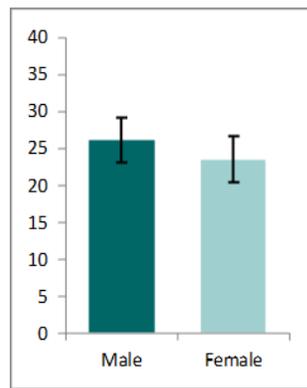
** All other non-White (including multi-racial or Hispanic).

A statistical test is needed to determine if estimates are different when the confidence intervals overlap.

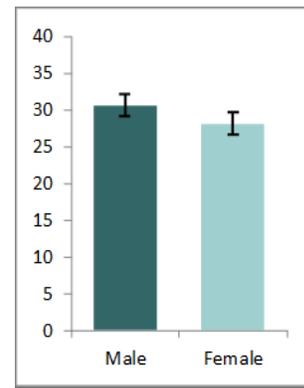
Analysis of subpopulations results in a concomitant reduction of sample size. The more subgroups into which the data are partitioned, the smaller the sample size per subgroup. **Prevalence estimates based on denominators with fewer than 50 respondents or half-width confidence intervals greater than 10 percent were not reported due to their inherent low precision.**



No Overlap
Significantly different
($p < .05$)



Substantial Overlap
Not significantly different
($p > .05$)



Some Overlap
Needs a chi-square or other
statistical test to determine
significance

The SAS statistical software package for survey data analysis was used to compute prevalence estimates (expressed as percentages) and associated 95% confidence intervals using sample weights provided by CDC.

Questionnaire

The BRFSS questionnaire has three parts: the core, consisting of the fixed core questions (asked every year), rotating core questions (asked in alternating years), and emerging core questions (asked for only one year). There are also optional modules provided by CDC, any number of which can be selected by individual states for inclusion; and state-added questions of specific interest to individual states. All states must ask the core questions without modification in wording. As part of the core, respondents are asked to provide demographic information including such indicators as sex, age, race, marital status, annual household income, employment status, and education level. Optional modules and state-added questions may be added by individual states to their respective questionnaires. Montana's BRFSS Working Group, consisting of state data analysts and users, helps to establish the state questionnaire content each year using the "Criteria for Adding Questions to the MT BRFSS," which can be found at the Montana BRFSS website: www.brfss.mt.gov.

The 2011 Montana BRFSS questionnaire consisted of 179 questions. Not all respondents were asked all questions, since some questions pertain to a specific age group or sex or persons with a particular health condition. In 2011, the average length of time to complete the survey was 28 minutes.

Survey Limitations

Surveys that require self-reporting of data have limitations and should be interpreted with caution. Respondents may have a tendency to under-report behaviors that are socially undesirable, unhealthy, or illegal and to over-reporting desirable behaviors. The accuracy of self-reported information also is affected by the ability of respondents to fully recall past behaviors or health screening results.

Telephone surveys exclude households without telephones, which may result in a biased survey population due to under-representation of certain segments of the population. In 2011, based on NCHS estimates, about 2.0% of Montana households did not have any telephone service.

¹ These geographic subdivisions are designated by the U. S. Office of Management and Budget and used by the U. S. Census Bureau as of June 2003. See <http://www.cdc.gov/brfss/smart/faqs.htm#2> for frequently asked questions and answers about SMART BRFSS and MMSAs.

² For a detailed description of BRFSS methodology, see the BRFSS User's Guide, an online version at: <http://www.cdc.gov/brfss/training.htm>.

³ Raking, also called Automated Sample Weighting System methodology or Iterative Proportional Fit, credited to W.E. Deming and F. Stephan, was first used to estimate U.S. Census population totals in 1940. Raking is commonly used when only the marginal population totals of the adjusted weights are known and the joint population distributions of post-strata are unknown. Raking is preferable as a post-stratification method when the cell counts of the responders within each demographic combination are too small to produce stable estimates. It is equivalent to log-linear regression expected totals.

REFERENCES AND SUGGESTED READINGS

Montana BRFSS, 2011

- Blumberg SJ, Luke JV. **Wireless substitution: Early release estimates from the National Health Interview Survey, January—June 2011.** Atlanta, GA: US Department of Health and Human Services, CDC; 2011. Available at: <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201112.pdf>. Accessed January 24th, 2013.
- Centers for Disease Control and Prevention. **Behavioral Risk Factor Surveillance System Operational and User's Guide.** Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006. Available at: <http://www.cdc.gov/brfss>.
- Centers for Disease Control and Prevention. Methodologic Changes in the Behavioral Risk Factor Surveillance System in 2011 and Potential Effects on Prevalence Estimates. **MMWR** 2012;61:410–13.
- Centers for Disease Control and Prevention. **Health Risks in the United States: Behavioral Risk Factor Surveillance System at a Glance, 2010.** Atlanta: U.S. Department of Health and Human Services. Available at: <http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2010/brfss1.pdf>
- Centers for Disease Control and Prevention. **The Burden of Chronic Diseases and Their Risk Factors: National and State Perspectives 2004.** Atlanta: U.S. Department of Health and Human Services; 2004. Available at: <http://www.cdc.gov/nccdphp/burdenbook2004>.
- Centers for Disease Control and Prevention. **The Power of Prevention—Chronic Disease... The Public Health Challenge of the 21st Century.** Atlanta: U.S. Department of Health and Human Services; 2009. Available at: http://www.cdc.gov/chronic_disease/resources/publications/index.htm.
- Centers for Disease Control and Prevention. Vital Signs: State-Specific Obesity Prevalence Among Adults—United States, 2009. **MMWR** 2010; 59. Available at: www.cdc.gov/mmwr.
- Deming WE, Stephans F. On a Least Squares Adjustment of a Sampled Frequency Table When the Expected Marginal Tables are Known, **Annals of Mathematical Statistics**, 1940; 11: 427-444.
- Frazier EL, Okoro CA, Smith C, and McQueen DV. State- and sex-specific prevalence of selected characteristics: Behavioral Risk Factor Surveillance System, 1992 and 1993. **MMWR**. 1996, 45(SS-6):1-34.
- Hoffman C, Paradise J. Health Insurance and Access to Health Care in the United States. **Ann NY Acad Sci** 2008;1136:149-160.
- Izrael D, Hoaglin D, and Battaglia M, **SAS Macro for Balancing a Weighted Sample.** <http://www2.sas.com/proceedings/sugi25/25/st/25p258.pdf5>.
- Korn EL, Graubard BI, **Analysis of Health Surveys**, New York: John Wiley & Sons, Series 3, 1999.
- Lohr S. **Sampling: Design and Analysis**, Boston, MA: Brooks/Cole. 2010.
- McKenna MT, Collins JL. Current issues and challenges in chronic disease control. In , Remington PL, Brownson RC, Wegner MV, eds. **Chronic Disease Epidemiology and Control**. 3rd Ed. Washington, DC: American Public Health Association, January 2010.
- Mokdad AH, Marks JS, Stroup DF, and Gerberding JL. Actual causes of death in the United States, 2000. **JAMA** 2004; 291; 1238-1245.
- Starfield B, Leiyu S, Macinko J. Contribution of Primary Care to Health Systems and Health. **The Milbank Quarterly** 2005, 83 (3):457-502.
- U.S. Department of Health and Human Services. **Healthy People 2020.** Washington, DC: U.S. Government Printing Office. Available at: <http://www.healthypeople.gov>.

INTERPRETING THE TABLES

Montana BRFSS, 2011

Each table presents a set of prevalence estimates weighted to represent the proportion of the non-institutionalized adult population age 18 years and older in Montana, unless a demographic sub-group is specified. Weighting adjusts for different probability of selection by the random dialing procedure and the varied demographic characteristics of the respondents (see Methods, page 5). As a result, for the table below, it is appropriate to state: **“Among Montana adults, 18 through 64 years of age, 24.1% did not have health care coverage in 2011.”** For this table, all adults include only those less than 65 years of age, because those age 65 years and older are expected to have Medicare coverage.

The survey questions that the tables are based on appear in the footnote of the table. For the full question and response categories from which the data were derived, see the “Questionnaires” link: www.brfss.mt.gov.

Weighted data are used in all calculations of prevalence. The weighted population estimate in the footnote provides the estimated number of adults in Montana who are characterized by a particular risk factor or behavior. The unweighted sample size (UnWt. N.) is the number of respondents who gave a particular response, but this is given only as an indicator of sample size. It is not appropriate to use unweighted numbers to compute prevalence estimates of risk factors and health conditions. Unless stated differently within the table, estimates do not include respondents who refused to answer the question, said “Don’t know/Not Sure” or the response is missing.

These tables also contain 95% confidence intervals (CI) for each estimate. The 95% CI is the range of values within which the true value falls with 95% certainty. The column headings of LL represent the lower limit and UL represent the upper limit of the 95% confidence interval. The confidence interval associated with the prevalence estimate for adults 18 to 64 years of age with no health care coverage ranges from 22.5% to 25.7%. The small width of this confidence interval indicates that the estimate is fairly precise (see Methods, page 6).

Risk factors or health conditions may be more or less common among Montana adults of various demographic groups. In general, where confidence intervals for two subgroups do not overlap, the subgroups can be said to be statistically different. Formal statistical tests, such as chi-square, are needed to evaluate statistically significant differences when confidence intervals overlap. For example from this table, “Men reported not having health care coverage more often than females (26.6 %, 21.4%).”

Table 3: Access to Health Care, Montana Adults, 2011

	No Health Care Coverage (ages 18–64) †			
	Wt. %	LL	UL	UnWt. N
All Adults:	24.1	22.5	25.7	1,422
Sex:				
Male	26.6	24.3	29.1	708
Female	21.4	19.5	23.5	714
Age:				
18 - 24	24.6	20.3	29.4	129
25 - 34	31.9	28.1	36.0	273
35 - 44	22.7	19.3	26.6	240
45 - 54	23.4	20.3	26.7	377
55 - 64	18.5	16.2	20.9	403
65+	Not Applicable			
Education:				
<High School	40.5	33.8	47.5	160
High School	31.8	28.8	34.9	583
Some College	22.5	20.0	25.3	416
College Degree	11.8	9.8	14.1	262
Income:				
<\$15,000	39.5	34.3	44.9	276
\$15,000 - \$24,999	43.6	39.4	48.0	450
\$25,000 - \$49,999	22.1	19.4	25.1	374
\$50,000 - \$74,999	13.9	10.9	17.6	109
\$75,000 +	6.0	4.3	8.3	83
Race/Ethnicity:				
White, non-Hispanic	23.8	22.2	25.5	1,260
AI/AN*	14.7	10.5	20.1	54
Other or Hispanic**	35.4	27.7	43.9	101
Disability:				
No Disability	23.8	21.9	25.7	936
Disability	24.6	21.7	27.8	397
Region:				
1- Eastern MT	18.6	14.7	23.3	124
2- N Central MT	21.7	18.5	25.3	252
3- S Central MT	22.9	19.4	26.9	228
4- Southwest MT	23.1	20.0	26.4	301
5- Northwest MT	28.0	25.1	31.0	493

† Do you have any kind of health care coverage (analysis limited to ages 18-64)? Total Sample Size: 6,908, Weighted Prevalence Estimate: 147,000.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

This is a statistically significant difference because the confidence intervals do not overlap.

Following CDC guidance, data that are considered unreliable have been suppressed. If the total number of respondents in the sample (found in the footnote for each question in the table) is less than 50, then the data are not reported. If the half-width of the confidence interval is greater than 10 percentage points, the estimate is considered unreliable. In tables where NSD is presented, it means that there was "not sufficient data" to report, i.e., either too few respondents in the population subgroup that answered the question or too wide a confidence interval to give a reliable estimate.

The survey results that follow are the major demographic trends of each health risk behavior, chronic health condition, and health care access or utilization. **Only relationships or associations that are statistically significant are described in the corresponding text for each table.** Respondents who indicated "don't know," "not sure," or "refused" were excluded from the calculation of prevalence estimates. Therefore, the sample sizes used to calculate the estimates in this report vary. Appendix B contains a summary of selected 2011 health indicators for the nation, state, MMSAs, and health planning regions in Montana.

Important Changes in the 2011 Survey

Due to methodology changes, the 2011 BRFSS estimates should not be compared to BRFSS estimates from previous years; 2011 should be considered a new baseline for future estimates. Any trend lines produced from BRFSS data should show a break between 2010 and 2011 data. The methodological changes of adding cell phones and using a larger number of sociodemographic categories to weight the data will greatly improve the accuracy, coverage, validity, and representativeness of BRFSS data. For more information on these changes, please visit the CDC website: <http://www.cdc.gov/surveillancepractice/reports/brfss/brfss.html>

HEALTH-RELATED QUALITY OF LIFE

Montana BRFSS, 2011

In 2011, 17.2% of Montana adults reported their general health was “fair” or “poor.” An estimated 12.8% of Montana adults reported experiencing 14 or more days of poor physical health in the previous month. Eleven percent of Montana adults reported having 14 or more days of poor mental health in the previous month.

Sociodemographic Trends

- ◆ More women than men reported having 14 or more days of poor mental health in the previous month.
- ◆ Fair or poor general health status and frequent poor physical health increased with age.
- ◆ Fair or poor general health and frequent poor physical and mental health decreased with increasing education and household income levels.
- ◆ American Indians/Alaska Natives reported fair to poor general health and poor physical or mental health more frequently than other racial-ethnic groups.
- ◆ Adults with a disability reported fair to poor general health and poor physical and mental health more frequently than adults without a disability.

Figure 1. Health Status by Racial-Ethnic Group, Montana BRFSS, 2011

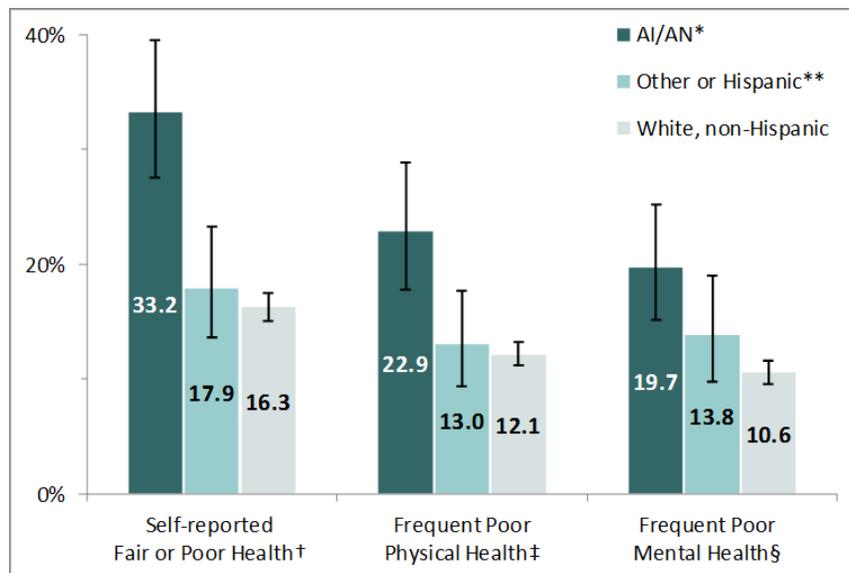


Table 1a: Health Related Quality of Life Measures, Montana Adults, 2011

	Self-reported Fair or Poor Health †				Frequent Poor Physical Health ‡				Frequent Poor Mental Health §			
	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N
		LL	UL			LL	UL			LL	UL	
All Adults:	17.2	16.1	18.4	1,787	12.8	11.8	13.8	1,322	11.3	10.4	12.3	1,075
Sex:												
Male	18.0	16.4	19.8	796	12.5	11.1	14.1	538	9.9	8.6	11.3	392
Female	16.5	15.0	18.0	991	13.0	11.8	14.4	784	12.7	11.4	14.2	683
Age:												
18 - 24	7.8	5.3	11.4	36	5.4	3.5	8.3	27	10.5	7.6	14.4	54
25 - 34	8.3	6.3	10.8	81	8.2	6.1	10.9	71	10.5	8.4	13.2	109
35 - 44	12.2	9.5	15.5	124	8.7	6.5	11.5	97	10.6	8.3	13.4	131
45 - 54	20.3	17.4	23.5	304	15.1	12.7	17.9	237	14.5	12.2	17.1	248
55 - 64	22.9	20.5	25.5	505	16.4	14.3	18.7	364	12.8	10.9	14.9	287
65+	26.5	24.2	29.0	724	19.0	16.9	21.3	515	8.4	7.0	10.1	237
Education:												
<High School	37.5	32.4	42.9	278	23.3	19.1	28.0	178	21.4	17.0	26.6	127
High School	19.3	17.3	21.4	677	13.1	11.5	14.9	449	12.0	10.4	13.8	389
Some College	16.5	14.6	18.5	517	13.3	11.6	15.2	412	11.4	9.8	13.1	340
College Degree	7.7	6.5	9.0	309	7.8	6.5	9.3	279	6.5	5.4	7.7	218
Income:												
<\$15,000	38.6	34.3	43.2	440	25.9	22.3	30.0	318	21.4	18.0	25.3	252
\$15,000 - \$24,999	24.4	21.6	27.3	498	18.0	15.6	20.7	349	16.5	14.1	19.2	286
\$25,000 - \$49,999	13.6	11.8	15.7	425	10.6	9.1	12.3	328	9.5	8.0	11.3	264
\$50,000 - \$74,999	8.8	6.7	11.5	128	7.0	5.1	9.7	94	6.7	4.9	9.2	79
\$75,000 +	4.8	3.6	6.4	98	6.1	4.5	8.3	106	5.4	3.7	7.8	87
Race/Ethnicity:												
White, non-Hispanic	16.3	15.1	17.5	1,475	12.1	11.2	13.2	1,100	10.6	9.6	11.6	874
AI/AN*	33.2	27.5	39.5	196	22.9	17.8	28.9	131	19.7	15.2	25.2	116
Other or Hispanic**	17.9	13.6	23.3	106	13.0	9.4	17.7	84	13.8	9.8	19.0	76
Disability:												
No Disability	7.5	6.5	8.6	462	4.6	3.8	5.5	262	6.3	5.5	7.3	394
Disability	40.8	38.1	43.5	1,204	33.7	31.1	36.3	981	22.5	20.2	24.9	608
Region:												
1- Eastern MT	20.6	17.1	24.6	212	10.9	8.7	13.7	130	11.7	9.0	15.0	110
2- N Central MT	19.1	16.6	21.9	393	14.7	12.4	17.3	291	13.8	11.4	16.5	244
3- S Central MT	18.0	15.3	21.1	289	13.5	11.2	16.1	225	10.5	8.6	12.8	171
4- Southwest MT	14.9	13.0	17.1	333	11.4	9.7	13.4	246	11.0	9.2	13.0	219
5- Northwest MT	16.7	14.8	18.7	534	13.1	11.4	15.1	413	10.6	9.0	12.5	313

† How would you say your general health is? Total Sample Size: 10,229, Weighted Prevalence Estimate: 132,300.

‡ How many days during the past month was your physical health “not good”? Frequent is defined as 14 or more days in the past 30. Total Sample Size: 10,046 Weighted Prevalence Estimate: 96,300

§ How many days during the past month was your mental health “not good”? Frequent is defined as 14 or more days in the past 30. Total Sample Size: 10,082 Weighted Prevalence Estimate: 85,500

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

HEALTH-RELATED QUALITY OF LIFE

Montana BRFSS, 2011

During 2011, an estimated 8.6% of Montana adults reported their usual activities were limited 14 or more days in the previous month due to poor physical or mental health. Montana adults experienced an average of 6.6 unhealthy days per month.

Sociodemographic Trends

- ◆ Older adults reported limiting their usual activities because of poor health and reported on average more unhealthy days than younger adults.
- ◆ Frequent activity limitation and the average number of unhealthy days increased significantly with decreasing educational attainment and household income levels.
- ◆ American Indian/Alaska Native (AI/AN) adults reported more frequent activity limitation than White, non-Hispanic adults, and AI/AN reported on average more unhealthy days than other racial groups.
- ◆ Adults with a disability reported limiting their usual activities due to poor health more frequently than adults without a disability. In addition, adults with a disability reported more unhealthy days on average than adults without a disability.

Figure 2. Health Status by Educational Attainment, Montana BRFSS, 2011

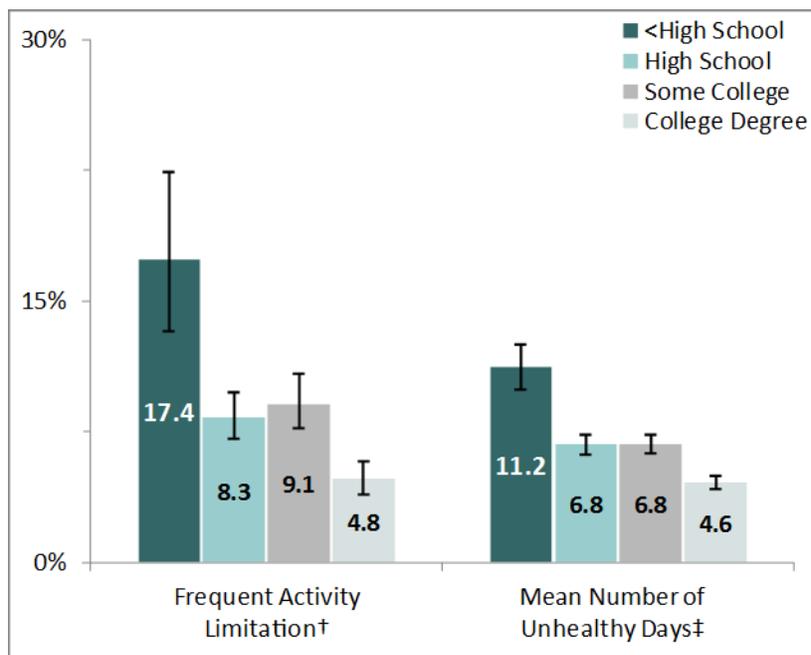


Table 1b: Health Related Quality of Life Measures (continued), Montana Adults, 2011

	Frequent Activity Limitation †				Mean Number of Unhealthy Days ‡		
	Wt. %	95% CI		UnWt. N	Mean	95% CI	
		LL	UL			LL	UL
All Adults:	8.6	7.8	9.5	865	6.6	6.3	7.0
Sex:							
Male	8.3	7.1	9.6	354	6.2	5.8	6.7
Female	8.8	7.8	10.0	511	7.1	6.7	7.5
Age:							
18 - 24	1.8	1.0	3.3	14	5.4	4.5	6.3
25 - 34	5.5	3.7	8.2	47	5.9	5.2	6.7
35 - 44	6.9	5.0	9.5	66	5.5	4.7	6.3
45 - 54	10.6	8.5	13.2	169	7.8	7.0	8.6
55 - 64	12.0	10.2	14.1	263	7.4	6.8	8.1
65+	11.5	9.8	13.4	298	7.1	6.5	7.7
Education:							
<High School	17.4	13.3	22.4	114	11.2	9.9	12.5
High School	8.3	7.1	9.8	293	6.8	6.2	7.3
Some College	9.1	7.7	10.8	276	6.8	6.3	7.3
College Degree	4.8	3.9	5.8	179	4.6	4.2	5.0
Income:							
<\$15,000	21.0	17.5	25.1	241	11.7	10.6	12.8
\$15,000 - \$24,999	11.7	9.8	14.0	229	8.8	8.1	9.6
\$25,000 - \$49,999	6.3	5.2	7.8	195	5.8	5.3	6.3
\$50,000 - \$74,999	5.2	3.5	7.5	66	4.6	3.9	5.3
\$75,000 +	2.7	1.9	3.9	54	3.9	3.3	4.5
Race/Ethnicity:							
White, non-Hispanic	8.1	7.3	9.0	704	6.3	6.0	6.7
AI/AN*	14.9	10.8	20.2	94	11.2	9.6	12.7
Other or Hispanic**	9.6	6.5	13.8	62	7.3	5.8	8.7
Disability:							
No Disability	1.9	1.5	2.5	118	3.9	3.6	4.2
Disability	24.5	22.2	27.1	688	13.6	12.9	14.3
Region:							
1- Eastern MT	9.5	7.1	12.6	94	6.6	5.7	7.5
2- N Central MT	9.7	7.8	12.0	183	7.4	6.6	8.1
3- S Central MT	9.5	7.4	12.1	150	6.4	5.7	7.1
4- Southwest MT	7.0	5.7	8.5	153	6.3	5.7	6.9
5- Northwest MT	8.5	7.1	10.1	274	6.7	6.2	7.3

† Being limited in your usual activities due to poor physical or mental health for 14 or more days during the past 30. Total Sample Size: 10,155 Weighted Prevalence Estimate: 65,300.

‡ Mean number of the total unhealthy days (poor physical health days and poor mental health days combined) in the past 30 days. Total Sample Size: 9,912

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

DISABILITY

Montana BRFSS, 2011

- ◆ In 2011, 28.7% of Montana adults had a self-reported disability, which is defined as being limited in any activities because of physical, mental, or emotional problems or requiring the use of special equipment, such as a cane, a wheelchair, a special bed, or a special telephone due to a health problem. An estimated 27.3% of Montana adults reported being limited in their activities, while 9.1% of Montana adults reported having a health problem that required the use of special equipment.

Sociodemographic Trends

- ◆ The prevalence of disability was significantly higher for women than men.
- ◆ Disability increased significantly with increasing age.
- ◆ Disability decreased significantly with increasing educational attainment and household income levels.
- ◆ The prevalence of the use of special equipment and activity limitations due to health increased with age and decreased with increasing educational attainment and household income levels.

Figure 3. Disability Status and Use of Special Equipment by Age, Montana BRFSS, 2011

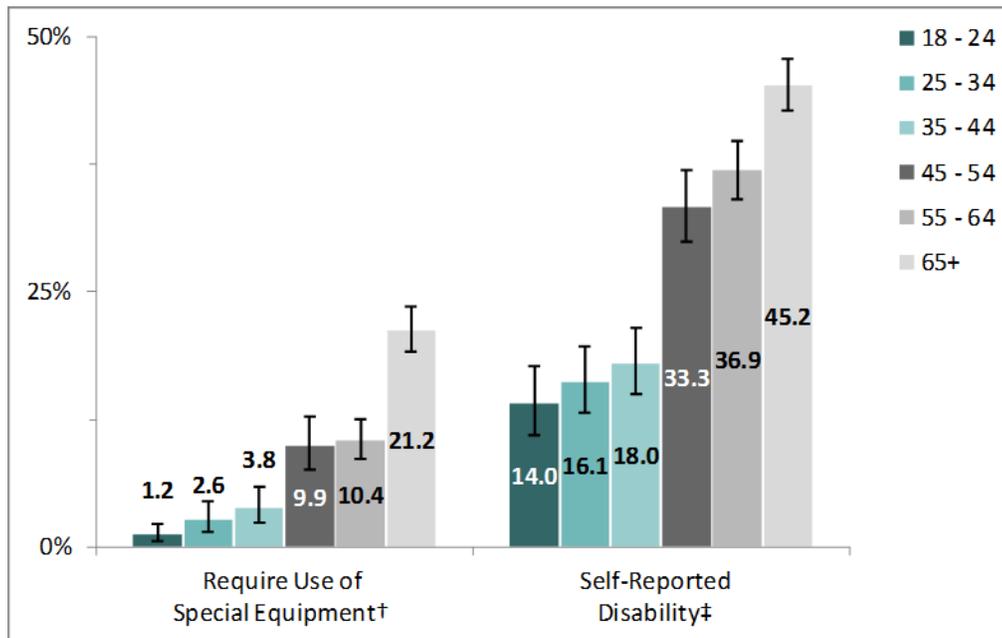


Table 2: Disability, Montana Adults, 2011

	Limited due to Health Problems †				Require Use of Special Equipment ‡				Self-Reported Disability §			
	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N
		LL	UL			LL	UL			LL	UL	
All Adults:	27.3	26.0	28.6	2,972	9.1	8.3	10.0	959	28.7	27.4	30.1	3,141
Sex:												
Male	25.4	23.5	27.4	1,172	8.8	7.6	10.2	364	26.8	24.9	28.8	1,238
Female	29.1	27.3	30.9	1,800	9.3	8.3	10.5	595	30.6	28.8	32.5	1,903
Age:												
18 - 24	12.8	9.8	16.6	71	1.2	0.6	2.3	9	14.0	11.0	17.7	89
25 - 34	15.7	12.8	19.2	144	2.6	1.5	4.5	23	16.1	13.2	19.6	147
35 - 44	17.7	14.7	21.2	200	3.8	2.4	5.9	35	18.0	15.0	21.5	203
45 - 54	32.2	28.8	35.8	502	9.9	7.6	12.8	119	33.3	29.9	36.9	517
55 - 64	36.1	33.3	38.9	840	10.4	8.6	12.5	210	36.9	34.1	39.8	862
65+	40.3	37.7	42.9	1,199	21.2	19.1	23.5	556	45.2	42.7	47.8	1,323
Education:												
<High School	38.4	33.1	44.1	271	18.5	14.4	23.5	126	40.3	34.9	46.0	297
High School	26.8	24.6	29.1	965	8.5	7.3	10.0	312	28.5	26.2	30.9	1,022
Some College	28.4	26.0	30.9	897	9.2	7.8	10.9	288	29.9	27.5	32.4	943
College Degree	22.3	20.3	24.3	835	6.0	5.0	7.3	230	23.2	21.2	25.3	874
Income:												
<\$15,000	50.1	45.4	54.8	553	20.8	17.3	25.0	234	51.9	47.2	56.6	577
\$15,000 - \$24,999	32.3	29.2	35.4	701	12.7	10.7	15.0	259	34.1	31.0	37.3	749
\$25,000 - \$49,999	24.6	22.3	27.0	786	6.6	5.4	7.9	210	26.1	23.8	28.5	830
\$50,000 - \$74,999	18.8	16.1	21.9	302	5.0	3.6	6.9	74	20.7	17.8	23.9	319
\$75,000 +	16.6	14.3	19.1	342	2.0	1.4	2.9	55	16.9	14.6	19.4	352
Race/Ethnicity:												
White, non-Hispanic	27.0	25.6	28.4	2,601	9.0	8.1	9.9	833	28.6	27.2	30.0	2,752
AI/AN*	28.0	22.7	33.9	190	12.0	8.1	17.5	68	29.1	23.8	35.1	199
Other or Hispanic**	29.7	23.9	36.3	168	7.4	5.0	10.7	53	30.2	24.4	36.8	176
Disability:												
No Disability		Not Applicable				Not Applicable				Not Applicable		
Disability	94.9	93.8	95.8	2,968	31.6	29.1	34.2	955		Not Applicable		
Region:												
1- Eastern MT	24.7	21.1	28.7	313	7.8	5.9	10.1	112	26.8	23.1	30.8	343
2- N Central MT	27.2	24.3	30.3	579	9.4	7.5	11.7	197	28.9	25.9	32.0	613
3- S Central MT	25.7	22.7	29.0	454	9.7	7.8	12.1	168	26.8	23.8	30.1	481
4- Southwest MT	27.5	24.9	30.3	629	8.4	7.0	10.1	192	29.0	26.3	31.7	662
5- Northwest MT	28.8	26.4	31.3	963	9.5	8.0	11.3	277	30.2	27.8	32.8	1,005

† Are you limited in any way in any activities because of physical, mental, or emotional problems? Total Sample Size: 9,710, Weighted Prevalence Estimate: 197,300.

‡ Do you now have any health problems that require you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone? Total Sample Size: 9,750. Weighted Prevalence Estimate: 66,000.

§ Disability is defined as a "Yes" response to one or both of the questions: 1. Are you limited in any way in any activities because of physical, mental, or emotional problems? 2. Do you now have any health problem that requires you to use special equipment? Total Sample Size: 9,704,

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

ACCESS TO HEALTH CARE

Montana BRFSS, 2011

In 2011, 24.1% of Montana adults 64 years of age and younger did not have health care coverage; 15.4% of Montana adults were in need of medical care in the previous 12 months, but were unable to see a doctor due to cost.

Sociodemographic Trends

- ◆ Men reported having no health care coverage more often than women. However, women reported not seeing a doctor within the preceding 12 months due to cost more often than men.
- ◆ The prevalence of no health care coverage decreased with age, higher educational attainment and higher household income levels.
- ◆ Adults 64 years of age and younger reported being unable to see a doctor due to cost more often than adults age 65 years and older.
- ◆ Educational attainment levels and household incomes were negatively associated with being unable to see a doctor in the previous year due to cost.
- ◆ American Indian/Alaska Native adults reported having health care coverage more often than other race or ethnic groups. In addition, White, non-Hispanics and American Indians/Alaska Natives reported being unable to afford seeing a doctor due to cost less often than other race or ethnic groups.
- ◆ Adults with a disability reported more frequently than adults without a disability of being unable to see a doctor in the preceding year due to cost.
- ◆ The prevalence of being uninsured or unable to see a doctor due to cost in the preceding year was significantly higher for adults living in the Northwest health planning region than those living in the Eastern health planning region.

Figure 4. Access to Health Care by Household Income, Montana BRFSS, 2011

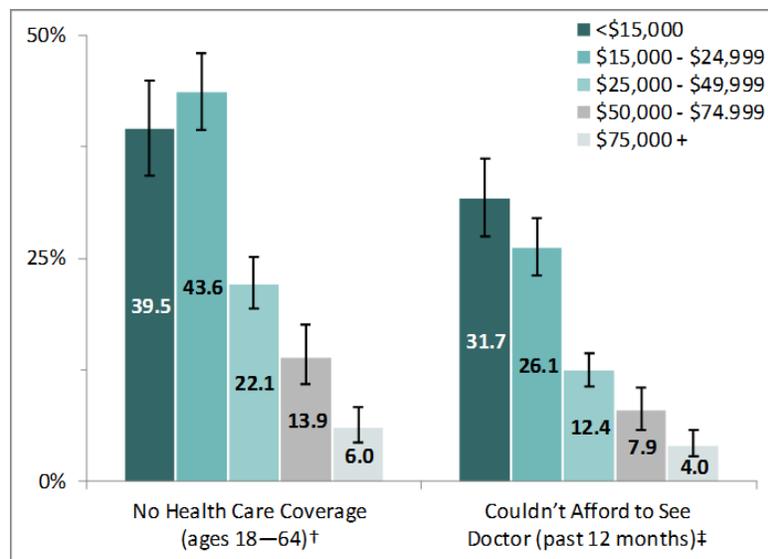


Table 3: Access to Health Care, Montana Adults, 2011

	No Health Care Coverage (ages 18—64) †				Couldn't Afford to See Doctor (past 12 months) ‡			
	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N
		LL	UL			LL	UL	
All Adults:	24.1	22.5	25.7	1,422	15.4	14.3	16.6	1,295
Sex:								
Male	26.6	24.3	29.1	708	13.9	12.4	15.7	495
Female	21.4	19.5	23.5	714	16.9	15.4	18.5	800
Age:								
18 - 24	24.6	20.3	29.4	129	17.6	14.0	21.9	94
25 - 34	31.9	28.1	36.0	273	20.0	16.9	23.5	188
35 - 44	22.7	19.3	26.6	240	17.2	14.2	20.8	183
45 - 54	23.4	20.3	26.7	377	20.9	18.0	24.2	351
55 - 64	18.5	16.2	20.9	403	15.0	13.1	17.2	349
65+		Not Applicable			4.2	3.2	5.4	124
Education:								
<High School	40.5	33.8	47.5	160	22.5	18.2	27.5	140
High School	31.8	28.8	34.9	583	16.4	14.4	18.6	452
Some College	22.5	20.0	25.3	416	17.0	15.0	19.2	432
College Degree	11.8	9.8	14.1	262	9.4	7.8	11.2	269
Income:								
<\$15,000	39.5	34.3	44.9	276	31.7	27.5	36.2	304
\$15,000 - \$24,999	43.6	39.4	48.0	450	26.1	23.1	29.5	413
\$25,000 - \$49,999	22.1	19.4	25.1	374	12.4	10.7	14.4	328
\$50,000 - \$74,999	13.9	10.9	17.6	109	7.9	5.8	10.5	78
\$75,000 +	6.0	4.3	8.3	83	4.0	2.8	5.8	67
Race/Ethnicity:								
White, non-Hispanic	23.8	22.2	25.5	1,260	14.6	13.4	15.8	1,069
AI/AN*	14.7	10.5	20.1	54	19.4	14.8	25.0	111
Other or Hispanic**	35.4	27.7	43.9	101	24.9	19.1	31.7	106
Disability:								
No Disability	23.8	21.9	25.7	936	12.1	10.9	13.5	632
Disability	24.6	21.7	27.8	397	23.2	20.8	25.7	578
Region:								
1- Eastern MT	18.6	14.7	23.3	124	11.7	9.0	15.0	115
2- N Central MT	21.7	18.5	25.3	252	15.0	12.6	17.8	257
3- S Central MT	22.9	19.4	26.9	228	14.3	11.7	17.3	201
4- Southwest MT	23.1	20.0	26.4	301	14.7	12.4	17.2	255
5- Northwest MT	28.0	25.1	31.0	493	18.1	16.0	20.3	445

† Do you have any kind of health care coverage (analysis limited to ages 18-64)? Total Sample Size: 6,908, Weighted Prevalence Estimate: 147,000.

‡ Did you need to see a doctor in the past year, but could not because of the cost? Total Sample Size: 10,243, Weighted Prevalence Estimate: 118,400.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

HEALTH CARE UTILIZATION

Montana BRFSS, 2011

During 2011, 28.4% of Montana adults did not have a personal health care provider and 44.3% of Montana adults did not have a routine checkup in the past 12 months.

Sociodemographic Trends

- ◆ Men reported not having a personal doctor or a routine checkup in the previous year more frequently than women.
- ◆ Lack of a personal health care provider and no routine checkup in the past 12 months decreased with increasing age.
- ◆ The prevalence of having a personal health care provider increased with higher educational attainment and household income levels.
- ◆ American Indians/Alaska Natives and adults from other racial-ethnic groups reported not having a personal health care provider more often than White, non-Hispanic adults.
- ◆ Adults without a disability reported not having a personal health care provider or a routine checkup in the preceding year more frequently than adults with a disability.

Figure 5. Health Care Utilization by Sex, Montana BRFSS, 2011

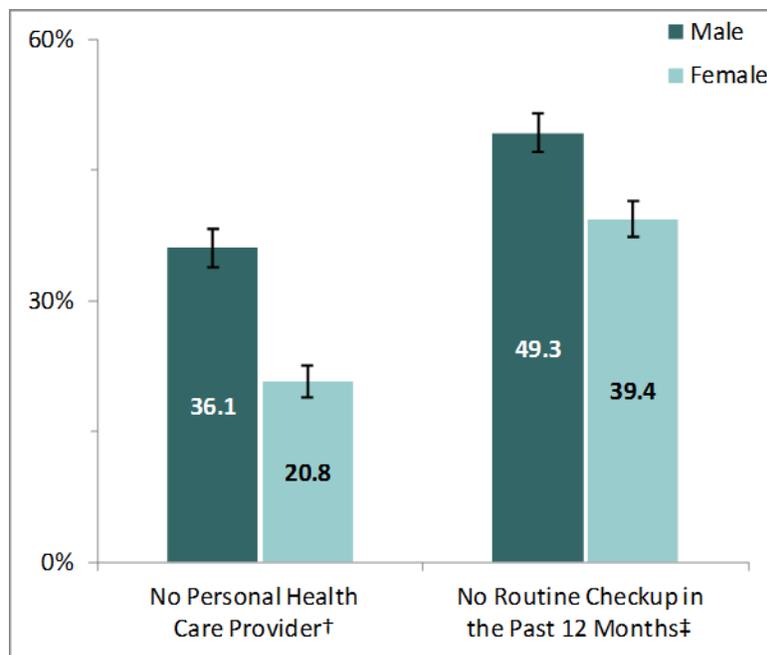


Table 4: Health Care Utilization, Montana Adults, 2011

	No Personal Health Care Provider †				No Routine Checkup in the Past 12 Months ‡			
	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N
		LL	UL			LL	UL	
All Adults:	28.4	27.0	29.8	2,176	44.3	42.8	45.8	3,853
Sex:								
Male	36.1	33.9	38.3	1,258	49.3	47.1	51.5	1,868
Female	20.8	19.0	22.6	918	39.4	37.4	41.4	1,985
Age:								
18 - 24	47.4	42.1	52.8	245	54.8	49.4	60.1	273
25 - 34	42.7	38.7	46.8	380	56.6	52.5	60.6	513
35 - 44	33.4	29.5	37.5	337	53.7	49.6	57.7	558
45 - 54	27.1	24.0	30.4	456	47.5	44.1	51.0	838
55 - 64	18.9	16.6	21.4	416	36.6	33.8	39.4	873
65+	10.3	8.9	11.9	328	24.0	21.9	26.2	771
Education:								
<High School	33.5	28.2	39.1	198	44.9	39.4	50.5	289
High School	32.3	29.7	35.0	789	45.7	43.1	48.4	1,323
Some College	26.4	24.1	29.0	610	44.6	41.9	47.3	1,109
College Degree	24.1	21.8	26.6	576	42.1	39.5	44.8	1,126
Income:								
<\$15,000	30.9	26.6	35.5	268	48.8	44.2	53.4	465
\$15,000 - \$24,999	32.1	28.8	35.5	478	47.7	44.3	51.2	785
\$25,000 - \$49,999	30.2	27.6	33.0	650	44.9	42.1	47.6	1,127
\$50,000 - \$74,999	24.2	21.0	27.7	264	43.3	39.5	47.2	515
\$75,000 +	20.3	17.3	23.7	270	41.0	37.4	44.6	618
Race/Ethnicity:								
White, non-Hispanic	27.0	25.6	28.5	1,857	43.8	42.3	45.4	3,386
AI/AN*	38.3	32.3	44.7	171	45.3	39.2	51.6	232
Other or Hispanic**	41.1	33.6	49.0	129	52.8	45.5	60.0	214
Disability:								
No Disability	32.7	30.9	34.5	1,633	47.1	45.3	49.0	2,639
Disability	16.9	14.8	19.2	401	37.7	35.0	40.4	1,013
Region:								
1- Eastern MT	26.1	22.3	30.3	248	40.3	36.0	44.7	441
2- N Central MT	28.9	25.8	32.3	423	42.5	39.1	45.9	727
3- S Central MT	28.4	25.1	32.0	375	41.7	38.2	45.2	628
4- Southwest MT	28.8	26.0	31.8	486	47.3	44.3	50.3	869
5- Northwest MT	27.9	25.3	30.5	598	45.6	42.8	48.4	1,127

† Do you have one person you think of as your personal doctor or health care provider? Total Sample Size: 10,227, Weighted Prevalence Estimate: 217,300.

‡ About how long has it been since you last visited a doctor for a routine checkup? Total Sample Size: 10,101, Weighted Prevalence Estimate: 333,900.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

ORAL HEALTH

Montana BRFSS, 2011

In 2011, 38.6% of Montana adults had not visited a dentist in the past year.

Sociodemographic Trends

- ◆ Women reported visiting a dentist in the previous year more frequently than men.
- ◆ The prevalence of no dental visit in the past year decreased with increasing education and household income levels.
- ◆ American Indians/Alaska Natives and adults from other racial-ethnic groups visited a dentist less frequently in the previous year than White, non-Hispanic adults.
- ◆ Adults with a disability visited a dentist in the preceding year less often than adults without a disability.
- ◆ The prevalence of visiting a dentist in the preceding year was significantly higher for adults in the Southwest health planning region than adults living in the Eastern health planning region.

Figure 6. Oral Health by Household Income Category, Montana BRFSS, 2011

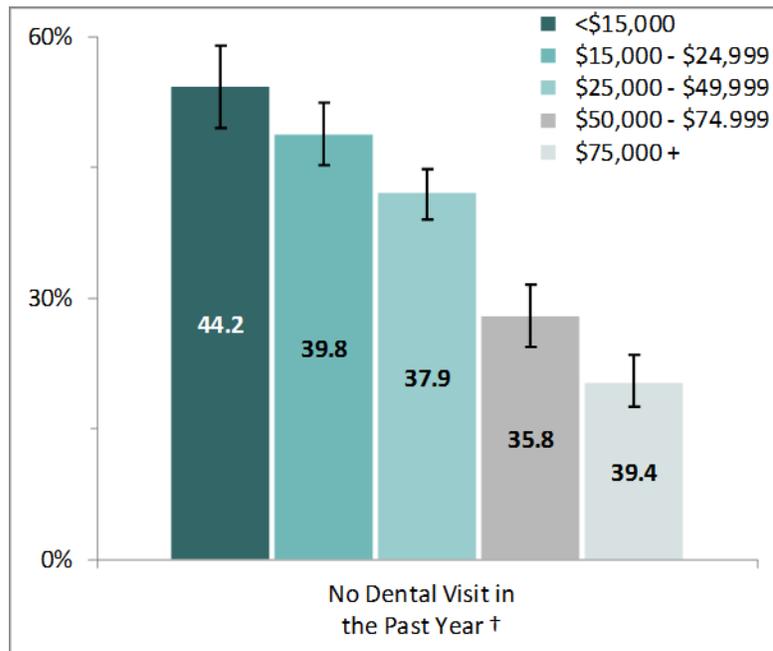


Table 5: Oral Health, Montana Adults, 2011

	No Dental Visit in the Past Year †			
	Wt. %	95% CI		UnWt. N
LL		UL		
All Adults:	38.6	37.1	40.1	3,381
Sex:				
Male	42.6	40.3	44.9	1,638
Female	34.6	32.7	36.7	1,743
Age:				
18 - 24	34.1	28.9	39.7	158
25 - 34	40.2	36.1	44.5	353
35 - 44	38.1	33.9	42.5	375
45 - 54	39.5	36.0	43.1	614
55 - 64	35.7	32.8	38.7	744
65+	42.4	39.8	45.1	1,123
Education:				
<High School	55.8	50.0	61.5	370
High School	46.6	43.9	49.4	1,313
Some College	36.5	33.8	39.2	996
College Degree	25.4	23.0	27.9	697
Income:				
<\$15,000	54.3	49.5	59.0	555
\$15,000 - \$24,999	48.8	45.2	52.4	804
\$25,000 - \$49,999	42.0	39.1	44.8	1,007
\$50,000 - \$74,999	27.9	24.4	31.6	352
\$75,000 +	20.3	17.5	23.5	345
Race/Ethnicity:				
White, non-Hispanic	37.5	35.9	39.1	2,920
AI/AN*	45.9	39.3	52.7	234
Other or Hispanic**	49.3	41.6	57.0	210
Disability:				
No Disability	36.4	34.6	38.2	2,118
Disability	43.9	41.2	46.6	1,244
Region:				
1- Eastern MT	44.2	39.7	48.7	439
2- N Central MT	39.8	36.3	43.4	642
3- S Central MT	37.9	34.2	41.6	542
4- Southwest MT	35.8	32.8	38.9	675
5- Northwest MT	39.4	36.6	42.2	1,052

† How long since you last visited a dentist for any reason? Total Sample Size: 9,419. Weighted Prevalence Estimate: 270,000.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

IMMUNIZATIONS—AGES 65+

Montana BRFSS, 2011

During 2011, 55.9% of adults ages 65 years and older had received a seasonal influenza vaccination in the previous year. An estimated 69.6% of adults ages 65 years and older have received a pneumonia vaccination during their lifetime.

Sociodemographic Trends among Adults 65 Years of Age and older

- ◆ The prevalence of having the flu vaccination in the past year increased as educational attainment levels increased.
- ◆ The prevalence of receiving a seasonal flu vaccination in the preceding year was significantly higher for American Indians/Alaska Natives than White, non-Hispanic adults.
- ◆ Adults with a disability had significantly higher prevalence of receiving a seasonal flu vaccination in the past year or a pneumonia vaccination within their lifetime than adults without a disability.

Figure 7. Immunization among Adults 65 years of age and older and Disability Status, Montana BRFSS, 2011

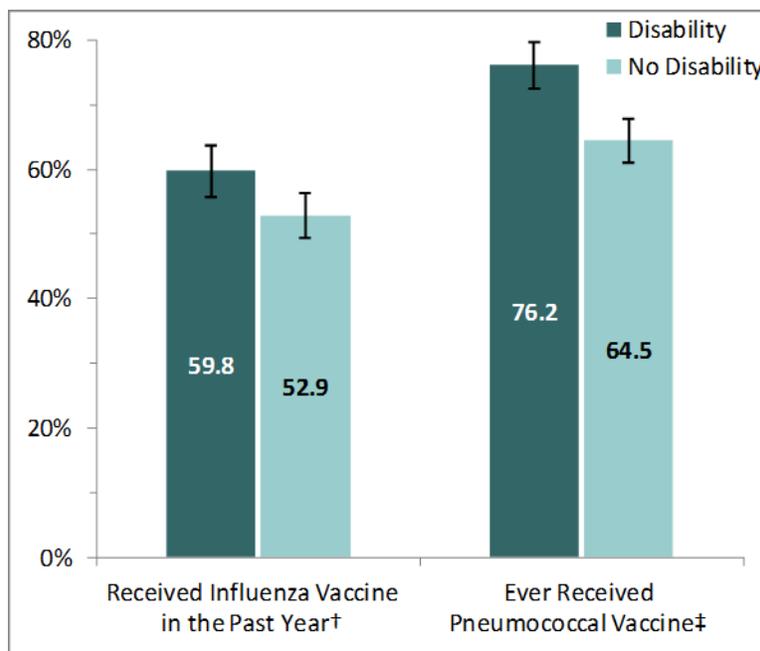


Table 6: Immunization, Montana Adults Ages 65 and older, 2011

	Received Influenza Vaccine in the Past Year †				Ever Received Pneumococcal Vaccine ‡			
	95% CI				95% CI			
	Wt. %	LL	UL	UnWt. N	Wt. %	LL	UL	UnWt. N
All Adults:	55.9	53.3	58.4	1,739	69.6	67.1	72.1	2,127
Sex:								
Male	55.0	50.9	59.0	692	66.6	62.5	70.5	809
Female	56.6	53.3	59.9	1,047	72.1	68.9	75.1	1,318
Age:								
18 - 24								
25 - 34								
35 - 44		Not Applicable				Not Applicable		
45 - 54								
55 - 64								
65+								
Education:								
<High School	45.1	37.3	53.1	140	63.4	55.1	71.0	196
High School	56.6	52.3	60.8	631	72.2	68.0	76.0	806
Some College	55.4	50.4	60.3	452	71.2	66.2	75.7	586
College Degree	62.5	57.8	67.0	512	67.3	62.6	71.7	534
Income:								
<\$15,000	55.8	48.5	62.9	206	74.4	67.1	80.5	267
\$15,000 - \$24,999	50.3	44.9	55.6	383	69.1	63.7	74.0	520
\$25,000 - \$49,999	60.6	55.9	65.1	560	71.1	66.3	75.6	688
\$50,000 - \$74,999	58.3	50.4	65.8	194	67.9	59.8	75.0	213
\$75,000 +	55.8	47.6	63.8	168	60.2	51.9	68.0	169
Race/Ethnicity:								
White, non-Hispanic	55.2	52.5	57.8	1,602	69.4	66.8	71.9	1,956
AI/AN*	79.9	68.3	88.0	68	NSD^Δ			87
Other or Hispanic**	NSD^Δ			57	NSD^Δ			71
Disability:								
No Disability	52.9	49.4	56.3	935	64.5	61.0	67.8	1,135
Disability	59.8	55.8	63.7	792	76.2	72.5	79.6	980
Region:								
1- Eastern MT	53.0	45.7	60.1	202	65.3	57.6	72.3	254
2- N Central MT	59.3	53.2	65.0	327	70.6	64.7	75.9	399
3- S Central MT	57.8	51.8	63.5	327	69.8	63.9	75.1	384
4- Southwest MT	52.1	46.7	57.4	341	71.9	66.6	76.6	437
5- Northwest MT	56.8	51.8	61.6	524	69.2	64.3	73.8	634

† Have you had a flu shot in the past year (age 65 years and older)? Total Sample Size: 3,078, Weighted Prevalence Estimate: 78,600.

‡ Have you ever had a pneumonia vaccination (age 65 years and older)? Total Sample Size: 2,982, Weighted Prevalence Estimate: 95,000.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

Δ Not Sufficient Data to report a reliable estimate.

HIV TESTING AND RISK BEHAVIOR

Montana BRFSS, 2011

During 2011, 37.0% of Montana adults ages 18 to 64 reported ever having been tested for HIV. An estimated 2.7% of Montana adults reported participating in one or more HIV risk related behaviors in the past year (i.e., used intravenous drugs, been treated for a sexually transmitted disease, given or received money or drugs in exchange for sex, or had anal sex without a condom).

Sociodemographic Trends

- ◆ Younger adults reported having participated in one or more HIV risk related behaviors in the past year more frequently than older adults.
- ◆ Adults with higher educational attainment reported engaging in one or more HIV risk related behaviors in the past year less often than adults with less education.
- ◆ The prevalence of having participated in any HIV risk related behavior in the past year decreased as household income increased.
- ◆ The prevalence of ever having been tested for HIV was significantly higher among American Indians/Alaska Natives and adults from other racial-ethnic groups than White, non-Hispanic adults. American Indians/Alaska Natives reported participating in HIV high risk behavior more often than White, non-Hispanic adults.
- ◆ Adults with a disability reported having been tested for HIV more often than adults without a disability.

Figure 8. HIV Testing and Risk Behaviors by Age Group, Montana BRFSS, 2011

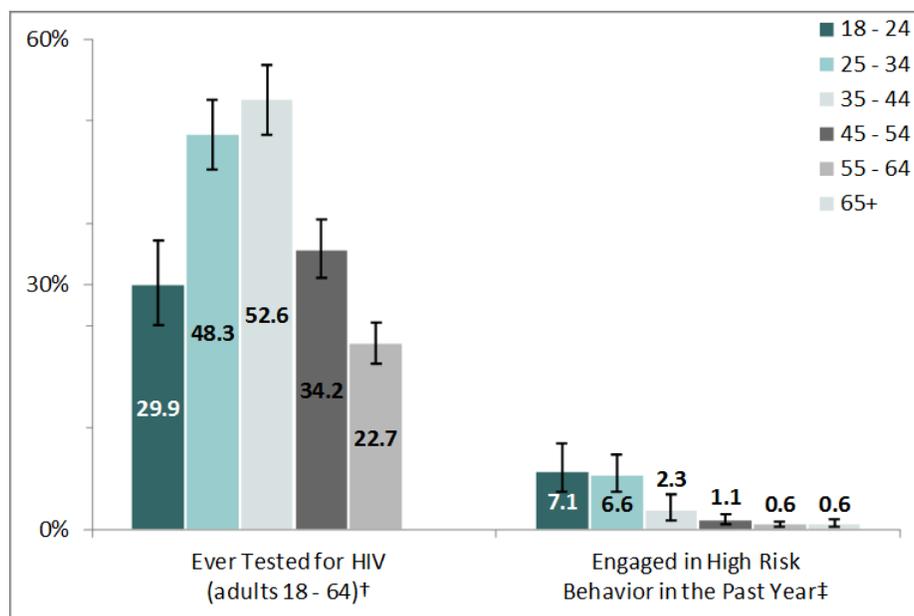


Table 7: HIV Testing and Risk Behavior, Montana Adults, 2011

	Ever Tested for HIV (adults 18 - 64) †				Engaged in High Risk Behavior in the Past Year ‡			
	95% CI				95% CI			
	Wt. %	LL	UL	UnWt. N	Wt. %	LL	UL	UnWt. N
All Adults:	37.0	35.2	38.8	2,186	2.7	2.2	3.4	163
Sex:								
Male	35.1	32.5	37.8	903	2.8	2.1	3.8	72
Female	38.8	36.4	41.3	1,283	2.6	1.9	3.5	91
Age:								
18 - 24	29.9	25.0	35.3	152	7.1	4.7	10.6	35
25 - 34	48.3	44.0	52.6	433	6.6	4.6	9.2	48
35 - 44	52.6	48.3	56.9	503	2.3	1.2	4.4	17
45 - 54	34.2	30.8	37.9	563	1.1	0.6	1.9	27
55 - 64	22.7	20.3	25.3	525	0.6	0.3	1.0	19
65+		Not Applicable			0.6	0.3	1.3	17
Education:								
<High School	43.8	36.5	51.4	140	6.0	3.5	10.1	22
High School	34.1	30.9	37.5	593	2.9	2.1	4.1	62
Some College	35.7	32.7	38.8	667	2.7	1.8	3.9	50
College Degree	39.6	36.5	42.7	784	1.3	0.8	2.2	29
Income:								
<\$15,000	48.1	42.4	53.8	316	4.5	2.6	7.8	28
\$15,000 - \$24,999	41.9	37.5	46.6	388	3.9	2.6	5.8	46
\$25,000 - \$49,999	31.8	28.7	35.0	519	1.4	0.9	2.3	31
\$50,000 - \$74,999	38.4	34.1	42.9	341	2.9	1.6	5.1	21
\$75,000 +	35.1	31.4	39.0	461	1.7	1.0	2.8	20
Race/Ethnicity:								
White, non-Hispanic	35.0	33.1	36.9	1,780	2.4	1.9	3.0	135
AI/AN*	52.8	45.7	59.7	206	7.0	3.3	14.1	14
Other or Hispanic**	51.6	43.4	59.8	187	4.8	2.3	9.6	13
Disability:								
No Disability	34.4	32.4	36.5	1,467	2.6	2.0	3.3	107
Disability	45.0	41.5	48.6	712	3.0	2.0	4.6	55
Region:								
1- Eastern MT	29.4	24.6	34.7	210	2.0	1.0	3.8	16
2- N Central MT	37.6	33.6	41.7	430	1.5	0.8	2.8	20
3- S Central MT	38.3	34.1	42.8	348	3.2	2.0	5.1	34
4- Southwest MT	37.1	33.6	40.8	485	2.8	1.7	4.5	32
5- Northwest MT	37.9	34.7	41.2	683	3.1	2.1	4.3	57

† Have you ever been tested for HIV, except blood donation? Total Sample Size: 6,404 Weighted Prevalence Estimate: 208,400.

‡ One or more of the behaviors: Used intravenous drugs, been treated for a sexually transmitted disease, given or received money or drugs in exchange for sex, or had anal sex without a condom. Total Sample Size: 9,530 Weighted Prevalence Estimate: 19,300.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

Δ Not Sufficient Data to report a reliable estimate.

PHYSICAL ACTIVITY

Montana BRFSS, 2011

During 2011, 24.4% of Montana adults had not participated in any leisure-time physical activity in the past month; 44.7% percent of Montanans did not meet the national recommendation for aerobic activity; and 69.8% of adults did not meet the national recommendation for muscle strengthening.

Sociodemographic Trends

- ◆ The prevalence of muscle strengthening activity was significantly higher for men than for women.
- ◆ Older adults reported participating in leisure-time physical activity in the past month and meeting the national recommendation for muscle strengthening less often than younger adults.
- ◆ The prevalence of participating in leisure-time physical activity in the previous month or to having met the national recommendations for aerobic and muscle strengthening activity was significantly lower for adults with less education and lower household income levels than those with more education or income.
- ◆ American Indians/Alaska Natives reported participating in leisure-time physical activity in the past month less often than White, non-Hispanic adults.
- ◆ The prevalence of having participated in leisure-time physical activity in the past month or having met the national recommendations for aerobic and muscle strengthening activity was significantly lower for adults with a disability than adults without a disability.
- ◆ Adults living in Eastern and North Central health regions reported not participating in any leisure-time physical activity in the past month more often than adults living in the Southwest and Northwest health regions. Adults living in the Eastern health regions reported not meeting the national recommendations for strength training more often than adults living in the Southwest and Northwest health regions. Adults living in the Southwest and Northwest health regions reported meeting the national recommendations for aerobic activity more often than the rest of the state.

Figure 9. Physical Activity by Health Planning Region, Montana BRFSS, 2011

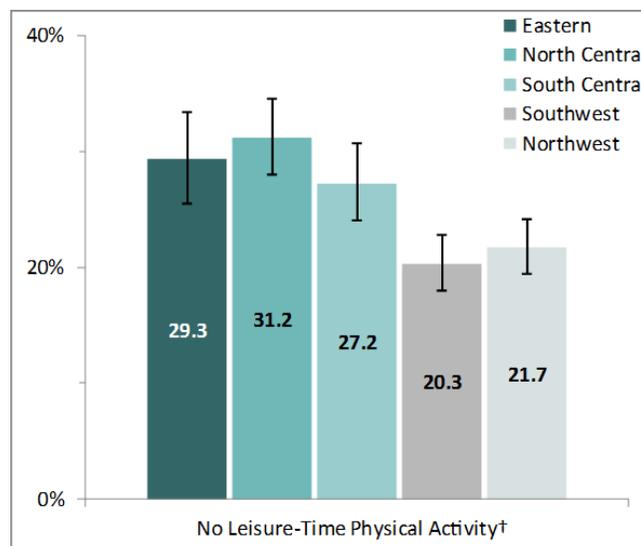


Table 8: Physical Activity, Montana Adults, 2011

	No Leisure-Time Physical Activity †				Did Not Meet Aerobic Activity Recommendation ‡				Did Not Meet Muscle Strengthening Recommendation §			
	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N
		LL	UL			LL	UL			LL	UL	
All Adults:	24.4	23.1	25.7	2,532	44.7	43.2	46.2	4,266	69.8	68.4	71.2	6,997
Sex:												
Male	24.5	22.6	26.6	1,094	43.3	41.1	45.6	1,808	66.6	64.4	68.8	2,910
Female	24.3	22.6	26.1	1,438	46.0	44.0	48.1	2,458	73.0	71.1	74.7	4,087
Age:												
18 - 24	16.3	12.7	20.7	86	40.2	34.9	45.7	205	55.4	49.8	60.8	274
25 - 34	20.0	16.7	23.8	177	45.3	41.1	49.5	410	62.3	58.1	66.3	580
35 - 44	19.7	16.5	23.3	214	44.9	40.8	49.2	470	70.1	66.2	73.6	725
45 - 54	27.2	24.0	30.7	447	46.3	42.8	49.9	802	75.0	71.8	78.0	1,311
55 - 64	25.5	23.0	28.2	604	42.3	39.4	45.2	1,020	73.6	70.9	76.0	1,740
65+	32.9	30.5	35.4	993	47.1	44.5	49.7	1,348	76.8	74.6	78.9	2,335
Education:												
<High School	38.0	32.7	43.6	293	57.2	51.4	62.9	406	77.3	71.8	81.9	569
High School	29.8	27.5	32.3	1,027	49.2	46.4	51.9	1,530	75.4	73.0	77.7	2,401
Some College	23.4	21.2	25.7	736	44.1	41.4	46.8	1,270	68.2	65.5	70.8	2,079
College Degree	14.0	12.2	16.0	472	35.5	33.0	38.2	1,054	62.4	59.8	64.9	1,937
Income:												
<\$15,000	31.9	27.6	36.6	361	50.2	45.4	55.0	536	77.9	73.8	81.4	843
\$15,000 - \$24,999	28.2	25.3	31.4	578	48.3	44.8	51.9	880	72.4	69.0	75.5	1,372
\$25,000 - \$49,999	26.9	24.4	29.5	753	47.9	45.1	50.7	1,264	71.1	68.4	73.7	2,044
\$50,000 - \$74,999	18.7	16.0	21.8	277	40.5	36.7	44.3	548	68.0	64.3	71.5	947
\$75,000 +	15.3	12.9	18.2	277	35.2	31.9	38.7	612	62.3	58.7	65.8	1,116
Race/Ethnicity:												
White, non-Hispanic	24.1	22.8	25.5	2,200	44.7	43.1	46.3	3,741	70.1	68.6	71.5	6,195
AI/AN*	32.9	27.1	39.4	197	48.5	42.0	55.1	297	70.0	63.3	75.9	440
Other or Hispanic**	22.5	16.8	29.5	126	42.5	35.2	50.1	211	68.0	60.6	74.6	330
Disability:												
No Disability	20.6	19.1	22.1	1,419	41.7	39.8	43.5	2,640	67.4	65.6	69.1	4,555
Disability	34.3	31.8	37.0	1,083	52.5	49.8	55.2	1,576	75.8	73.5	78.0	2,380
Region:												
1- Eastern MT	29.3	25.5	33.4	360	50.8	46.4	55.3	582	76.7	72.6	80.3	876
2- N Central MT	31.2	28.0	34.5	587	52.8	49.2	56.3	943	73.2	69.9	76.3	1,423
3- S Central MT	27.2	24.0	30.7	446	49.0	45.3	52.7	753	71.5	68.1	74.7	1,186
4- Southwest MT	20.3	18.0	22.8	436	41.1	38.1	44.1	801	67.7	64.8	70.5	1,400
5- Northwest MT	21.7	19.4	24.1	668	39.8	37.1	42.7	1,129	67.3	64.5	69.9	2,019

† During the past month, other than your regular job, did you do any physical activities or exercise? Total Sample Size: 9,839. Weighted Prevalence Estimate: 179,200.

‡ Insufficient aerobic activity is defined as not having met the recommendations of engaging in at least 30 minutes of moderate-intensity activity, 5 days per week, or 20 minutes of vigorous-intensity activity, 3 days per week. Total Sample Size: 9,547 Weighted Prevalence Estimate: 317,900

§ Insufficient muscle strengthening activity is defined as not having met the recommendations of engaging moderate or high intensity muscle-strengthening activities 2 or more days a week. Total Sample Size: 9,724 Weighted Prevalence Estimate: 506,700

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

BODY MASS INDEX

Montana BRFSS, 2011

In 2011, 35.6 percent of Montana adults were overweight ($25.0 \leq \text{BMI} < 30.0$) and 24.6% of Montana adults were obese ($\text{BMI} \geq 30.0$).

Sociodemographic Trends

- ◆ The prevalence of being overweight was higher for men than for women, but there was no significant difference in the prevalence of obesity by sex.
- ◆ Adults with lower household incomes reported being overweight less often than adults with higher household incomes. However, adults with lower household incomes reported being obese more often than adults with higher household income levels.
- ◆ The prevalence of obesity was significantly higher among American Indians/Alaska Natives than adults from other racial-ethnic groups.
- ◆ The prevalence of obesity was significantly higher among adults with a disability than those without a disability.
- ◆ Adults living in the North Central health planning region reported being obese more often than adults living in the South Central, Southwest, and Northwest health regions.

Figure 9. Body Mass Index by Sex, Montana BRFSS, 2011

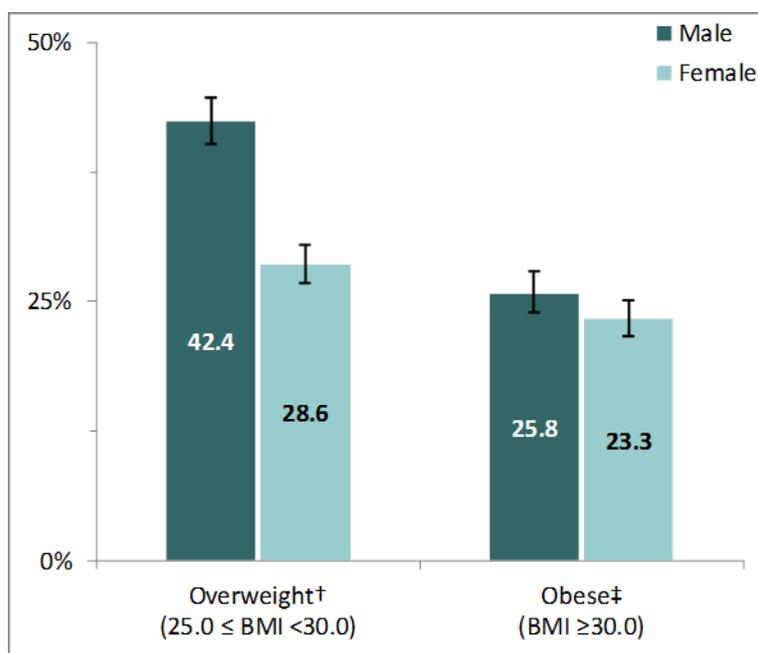


Table 9: Body Mass Index, Montana Adults, 2011

	Overweight † (25.0 ≤ BMI <30.0)				Obese ‡ (BMI ≥30.0)			
	95% CI				95% CI			
	Wt. %	LL	UL	UnWt. N	Wt. %	LL	UL	UnWt. N
All Adults:	35.6	34.2	37.1	3,740	24.6	23.3	26.0	2,500
Sex:								
Male	42.4	40.2	44.6	2,007	25.8	23.9	27.9	1,152
Female	28.6	26.8	30.5	1,733	23.3	21.6	25.1	1,348
Age:								
18 - 24	25.3	20.7	30.5	125	15.7	12.0	20.3	77
25 - 34	33.8	30.0	37.7	310	23.8	20.4	27.5	227
35 - 44	38.1	34.1	42.3	390	23.8	20.4	27.6	276
45 - 54	34.9	31.7	38.3	664	31.7	28.5	35.1	513
55 - 64	38.1	35.3	40.9	943	28.4	25.7	31.2	688
65+	40.2	37.7	42.7	1293.0	21.9	19.8	24.1	716
Education:								
<High School	35.5	30.3	41.1	254	23.5	19.4	28.2	204
High School	36.5	34.0	39.1	1,233	27.8	25.3	30.3	848
Some College	35.1	32.7	37.7	1,105	25.3	23.0	27.7	787
College Degree	35.2	32.8	37.8	1,142	20.2	18.1	22.5	659
Income:								
<\$15,000	29.4	25.5	33.7	354	31.2	27.0	35.7	347
\$15,000 - \$24,999	34.8	31.6	38.2	674	25.6	22.7	28.8	503
\$25,000 - \$49,999	37.7	35.1	40.4	1,131	25.5	23.1	28.1	734
\$50,000 - \$74,999	38.7	35.0	42.6	557	24.3	21.1	27.8	333
\$75,000 +	36.7	33.5	40.1	685	21.1	18.3	24.3	384
Race/Ethnicity:								
White, non-Hispanic	35.6	34.1	37.1	3,316	24.1	22.7	25.5	2,101
AI/AN*	34.8	28.9	41.2	215	36.1	30.7	41.8	259
Other or Hispanic**	36.2	29.3	43.8	190	23.7	18.4	29.9	135
Disability:								
No Disability	36.2	34.4	38.0	2,482	21.7	20.2	23.3	1,392
Disability	33.0	30.6	35.5	1,050	32.5	30.0	35.2	999
Region:								
1- Eastern MT	36.7	32.6	40.9	431	28.2	24.5	32.1	326
2- N Central MT	33.5	30.4	36.8	701	32.6	29.3	36.1	586
3- S Central MT	37.1	33.7	40.7	644	25.1	22.0	28.4	421
4- Southwest MT	35.7	32.9	38.7	788	21.8	19.4	24.4	455
5- Northwest MT	35.3	32.7	37.9	1,126	22.3	20.0	24.7	682

† Self-reported height and weight yield a body mass index (BMI) greater than or equal to 25 and less than 30. Total Sample Size: 9,882 Weighted Prevalence Estimate: 264,400.

‡ Self-reported height and weight yield a body mass index (BMI) greater than or equal to 30. Total Sample Size: 9,882 Weighted Prevalence Estimate: 182,600.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

TOBACCO USE

Montana BRFSS, 2011

During 2011, 22.1 percent of Montana adults were currently smoking most days or every day and 7.1% of Montana adults were using smokeless tobacco (i.e., chew, snuff, or snus) most days or every day.

Sociodemographic Trends

- ◆ The prevalence of current smokeless tobacco use was significantly higher among men than women.
- ◆ Older adults reported to regularly smoke cigarettes or to use smokeless tobacco less often than younger adults.
- ◆ Current smoking decreased with increasing education and household income levels.
- ◆ The prevalence of smoking cigarettes was significantly higher among American Indians/Alaska Natives than other racial-ethnic groups.
- ◆ The prevalence of smoking cigarettes was significantly lower among adults without a disability than adults with a disability.
- ◆ Adults in the North Central health region reported regularly smoking cigarettes more often than adults in the Southwest health region.

Figure 11. Tobacco Use by Age Group, Montana BRFSS, 2011

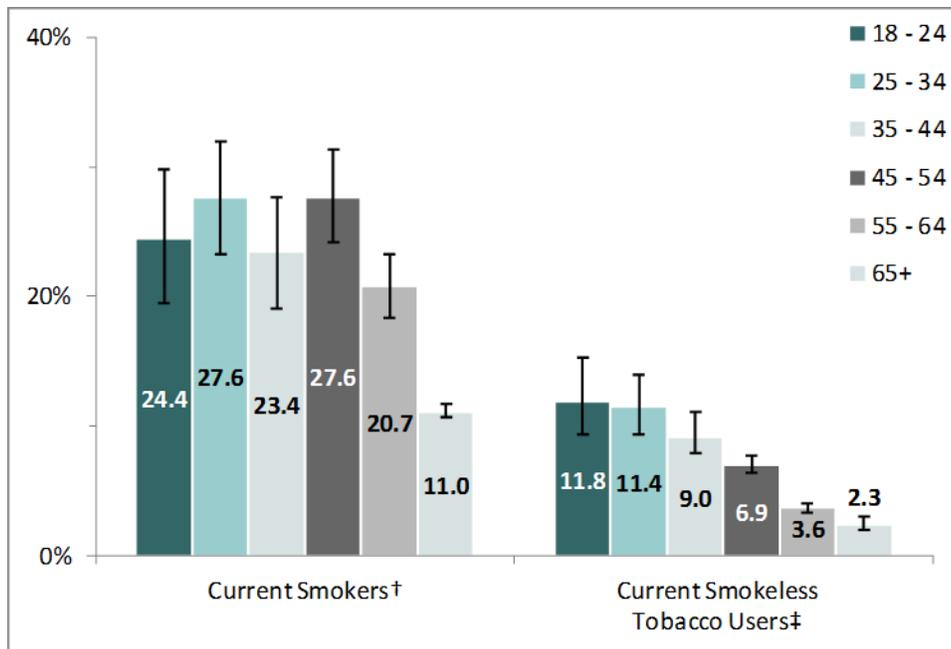


Table 10: Tobacco Use, Montana Adults, 2011

	Current Smokers †				Current Smokeless Tobacco Users ‡			
	95% CI				95% CI			
	Wt. %	LL	UL	UnWt. N	Wt. %	LL	UL	UnWt. N
All Adults:	22.1	20.8	23.4	1,867	7.1	6.4	7.9	601
Sex:								
Male	23.2	21.3	25.2	840	13.3	11.9	14.9	543
Female	21.0	19.3	22.7	1,027	1.0	0.7	1.4	58
Age:								
18 - 24	24.4	20.2	29.1	139	11.8	9.0	15.5	68
25 - 34	27.6	24.1	31.3	263	11.4	9.3	13.9	112
35 - 44	23.4	20.0	27.2	256	9.0	7.1	11.5	113
45 - 54	27.6	24.4	31.0	435	6.9	5.3	8.9	137
55 - 64	20.7	18.4	23.3	442	3.6	2.8	4.6	100
65+	11.0	9.4	12.7	322.0	2.3	1.6	3.4	69
Education:								
<High School	41.9	36.6	47.5	245	7.8	5.6	10.7	55
High School	27.5	25.2	30.0	757	8.8	7.4	10.5	246
Some College	22.2	20.1	24.5	596	7.0	5.7	8.5	177
College Degree	7.2	6.1	8.6	267	4.9	3.9	6.1	122
Income:								
<\$15,000	39.0	34.6	43.6	390	7.1	5.2	9.6	65
\$15,000 - \$24,999	30.0	26.9	33.3	481	6.5	4.9	8.6	102
\$25,000 - \$49,999	19.9	17.7	22.3	498	6.8	5.6	8.3	187
\$50,000 - \$74,999	13.7	11.1	16.7	167	8.1	6.3	10.4	95
\$75,000 +	11.1	8.7	14.0	162	8.1	6.2	10.5	108
Race/Ethnicity:								
White, non-Hispanic	19.9	18.6	21.2	1,445	6.9	6.2	7.8	514
AI/AN*	47.6	41.4	53.7	266	11.1	7.8	15.6	50
Other or Hispanic**	33.4	26.7	40.7	146	5.9	3.8	9.1	34
Disability:								
No Disability	18.8	17.4	20.4	1,061	7.3	6.4	8.3	412
Disability	29.4	26.8	32.1	693	5.7	4.5	7.0	147
Region:								
1- Eastern MT	20.0	16.6	24.0	207	7.7	5.9	9.9	89
2- N Central MT	26.5	23.5	29.7	427	6.7	5.3	8.5	111
3- S Central MT	23.1	20.1	26.4	330	7.1	5.6	9.1	105
4- Southwest MT	20.6	18.2	23.3	358	8.0	6.4	9.8	143
5- Northwest MT	21.1	18.8	23.5	519	6.3	5.0	7.9	143

† A current smoker is defined as someone who has ever smoked 100 cigarettes and who now smokes every day or some days. Total Sample Size: 10,225 Weighted Prevalence Estimate: 169,300.

‡ A current user is defined as using chewing tobacco, snuff or snus everyday or some days. Total Sample Size: 10,261 Weighted Prevalence Estimate: 54,700.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

ALCOHOL RELATED RISK BEHAVIORS

Montana BRFSS, 2011

In 2011, 20.8% of Montana adults reported binge drinking sometime within the past month, 7.5% of adults reported drinking heavily in the previous month. Of those adults who binge drank the previous month, 10.5% reported they drove after binge drinking.

Sociodemographic Trends

- ◆ The prevalence of binge drinking was significantly higher for men than for women.
- ◆ Older adults reported binge drinking or drinking heavily within the past month less often than younger adults.
- ◆ The prevalence of having driven after the most recent binge drinking episode was significantly higher among White non-Hispanic adults than American Indian/Alaska Native adults.
- ◆ Adults without a disability reported binge drinking in the past month more frequently than adults with a disability.

Figure 12. Alcohol-Related Risk Behaviors by Education, Montana BRFSS, 2011

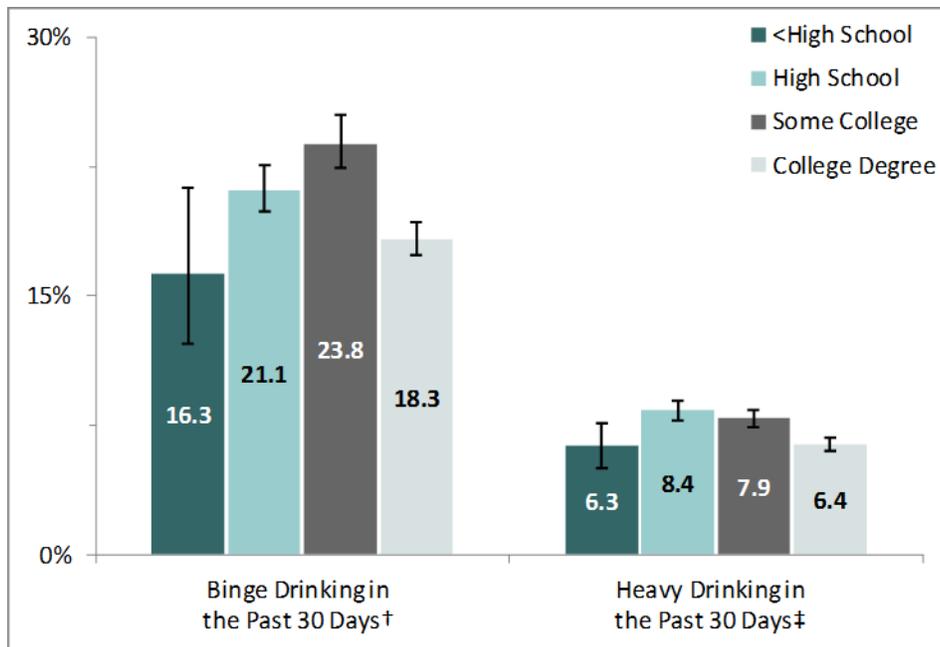


Table 11: Alcohol Related Risk Behaviors, Montana Adults, 2011

	Heavy Drinking in the Past 30 Days ‡				Binge Drinking in the Past 30 Days †				Binge Drinking and Driving in Past 30 Days §			
	95% CI				95% CI				95% CI			
	Wt.	LL	UL	UnWt. N	Wt. %	LL	UL	UnWt. N	Wt. %	LL	UL	UnWt. N
All Adults:	7.5	6.8	8.4	668	20.8	19.6	22.1	1,538	10.5	8.5	13.0	171
Sex:												
Male	8.2	7.0	9.5	318	27.3	25.3	29.4	931	12.5	9.7	15.9	119
Female	7.0	6.0	8.0	350	14.5	13.1	16.1	607	7.0	4.7	10.3	52
Age:												
18 - 24	9.9	7.2	13.5	53	34.2	29.2	39.6	172	11.4	6.1	20.3	13
25 - 34	10.4	8.3	13.1	93	34.4	30.5	38.5	292	9.2	6.1	13.6	30
35 - 44	6.4	4.5	8.9	67	25.2	21.6	29.0	258	8.9	5.7	13.7	27
45 - 54	8.6	6.9	10.7	152	20.1	17.4	23.0	349	10.9	6.9	16.8	44
55 - 64	7.0	5.7	8.7	174	14.3	12.2	16.6	303	13.4	8.2	21.2	35
65+	4.2	3.3	5.4	129	5.1	4.1	6.3	162	11.2	6.2	19.6	21
Education:												
<High School	6.3	4.3	9.2	40	16.3	12.7	20.7	97	3.8	1.3	10.9	5
High School	8.4	6.9	10.2	212	21.1	18.8	23.6	490	11.9	7.8	17.7	51
Some College	7.9	6.6	9.5	203	23.8	21.4	26.4	489	11.1	8.0	15.3	61
College Degree	6.4	5.3	7.7	212	18.3	16.4	20.4	461	10.0	7.0	13.9	54
Income:												
<\$15,000	8.2	6.0	11.1	81	20.9	17.2	25.2	163	7.1	3.8	12.9	16
\$15,000 - \$24,999	8.7	6.9	11.0	125	20.6	17.7	23.7	254	9.9	5.8	16.3	23
\$25,000 - \$49,999	6.7	5.5	8.1	180	19.9	17.7	22.2	443	11.6	8.1	16.3	56
\$50,000 - \$74,999	7.2	5.4	9.6	95	22.4	19.1	26.0	244	15.5	10.2	22.9	37
\$75,000 +	8.5	6.6	10.8	138	25.2	21.9	28.8	324	11.1	6.2	19.1	33
Race/Ethnicity:												
White, non-Hispanic	7.4	6.6	8.3	597	20.3	18.9	21.6	1,335	11.4	9.2	14.2	158
AI/AN*	9.0	5.6	14.2	29	27.3	21.6	33.9	113	0.8	0.3	2.1	5
Other or Hispanic**	8.4	5.4	12.8	39	25.3	19.1	32.7	85	NSD^Δ			8
Disability:												
No Disability	7.7	6.8	8.7	473	23.3	21.7	24.9	1,194	11.0	8.7	13.8	142
Disability	7.3	5.9	8.9	191	14.9	12.9	17.2	341	8.7	5.0	14.7	29
Region:												
1- Eastern MT	6.6	4.7	9.2	66	18.4	14.9	22.7	165	5.8	3.0	11.1	15
2- N Central MT	7.8	6.0	10.1	114	20.8	18.0	24.0	295	9.1	5.6	14.4	36
3- S Central MT	7.0	5.3	9.1	107	19.6	16.8	22.7	247	6.5	3.9	10.6	20
4- Southwest MT	8.0	6.6	9.7	165	22.1	19.6	24.8	348	10.2	6.9	14.8	39
5- Northwest MT	7.8	6.4	9.5	209	21.1	18.8	23.7	455	14.9	10.4	20.8	60

† Binge drinking is defined as having five or more alcoholic drinks on one occasion for men, and four or more alcoholic drinks on one occasion for women. Total Sample Size: 9,546, Weighted Prevalence Estimate: 148,000.

‡ Heavy drinking is defined as the consumption of more than two alcoholic drinks per day for men or more than one alcoholic drink per day for women. Total Sample Size: 9,541 Weighted Prevalence Estimate: 53,600.

§ Did you drive a motor vehicle such as a car, truck, or motorcycle during or within a couple of hours after this occasion? Total Sample Size: 1,463 Weighted Prevalence Estimate: 14,800.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

Δ Not Sufficient Data to report a reliable estimate.

PAIN MEDICATION MISUSE

Montana BRFSS, 2011

In 2011, 3.3% of Montana adults used their prescribed pain medication in a higher frequency or dosage than was advised by their doctor; 3.8% of Montana adults used pain medication that was not prescribed by a doctor (excluding over the counter medications).

Sociodemographic Trends

- ◆ The prevalence of having misused prescription pain medication in the previous year was significantly higher among men than women.
- ◆ Younger adults reported misusing non-prescribed pain medication in the previous year more frequently than older adults.
- ◆ Adults with higher educational attainment reported misusing prescribed pain medication and misusing non-prescribed pain medication less often than adults with less education.
- ◆ Adults with lower household incomes reported misusing prescribed pain medication more often than adults with higher household incomes.

Figure 13. Pain Medication Use by Age, Montana BRFSS, 2011

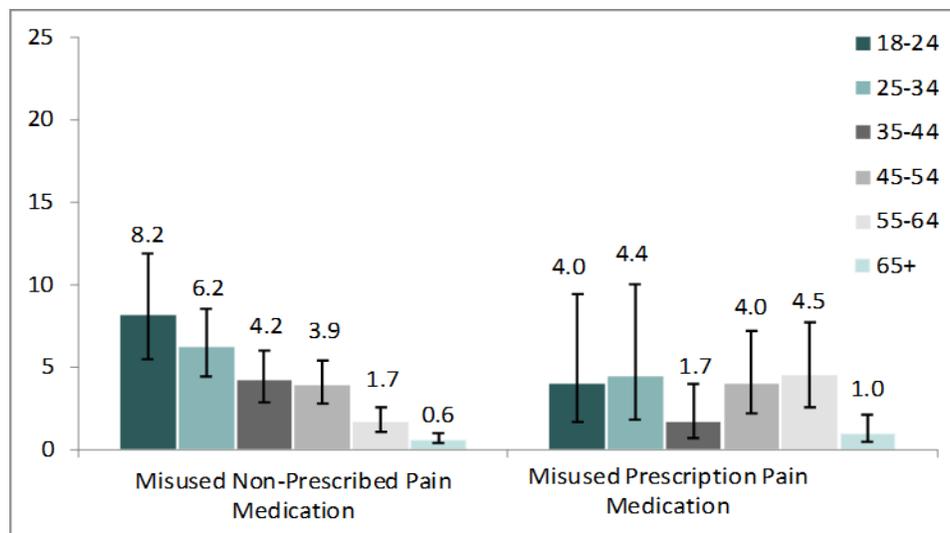


Table 12: Pain Medication Misuse, Montana Adults, 2011

	Misused Prescribed Pain Medication†				Non-Prescribed Pain Medication Use‡			
	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N
		LL	UL			LL	UL	
All Adults:	3.3	2.4	4.6	83	3.8	3.2	4.5	264
Sex:								
Male	5.1	3.4	7.7	42	4.1	3.2	5.1	128
Female	1.8	1.1	3.0	41	3.5	2.7	4.4	136
Age:								
18 - 24	4.0	1.7	9.4	6	8.2	5.5	11.9	41
25 - 34	4.4	1.8	10.0	10	6.2	4.4	8.5	54
35 - 44	1.7	0.7	4.0	6	4.2	2.9	6.0	40
45 - 54	4.0	2.2	7.2	23	3.9	2.8	5.4	64
55 - 64	4.5	2.6	7.7	28	1.7	1.1	2.6	43
65+	1.0	0.5	2.1	10	0.6	0.4	1.0	22
Education:								
<High School	6.7	2.9	14.7	12	5.5	3.7	8.3	31
High School	4.2	2.7	6.7	29	3.4	2.5	4.7	73
Some College	3.1	1.9	5.2	30	4.5	3.4	6.0	91
College Degree	0.7	0.3	1.3	12	2.6	1.9	3.5	69
Income:								
<\$15,000	3.5	2.0	6.3	21	5.3	3.4	8.1	44
\$15,000 - \$24,999	4.3	2.4	7.6	22	3.5	2.6	4.8	60
\$25,000 - \$49,999	5.0	2.6	9.4	20	4.1	3.0	5.4	74
\$50,000 - \$74,999	2.4	1.0	5.6	9	3.9	2.5	6.2	35
\$75,000 +	0.6	0.2	1.6	6	3.3	1.9	5.4	35
Race/Ethnicity:								
White, non-Hispanic	2.9	2.0	4.2	55	3.6	3.0	4.3	217
AI/AN*	7.0	3.3	14.3	19	5.7	3.5	9.1	27
Other or Hispanic**	6.0	2.2	15.2	9	5.7	3.2	10.1	19
Disability:								
No Disability	2.3	1.4	4.0	28	3.4	2.7	4.2	149
Disability	4.3	2.9	6.4	54	4.8	3.7	6.2	115
Region:								
1- Eastern MT	5.5	2.5	11.8	10	2.6	1.5	4.5	17
2- N Central MT	4.8	2.6	8.7	26	2.8	1.9	4.2	45
3- S Central MT	1.1	0.4	2.9	7	3.5	2.5	5.0	45
4- Southwest MT	2.6	1.3	5.2	12	3.2	2.4	4.3	61
5- Northwest MT	4.1	2.3	7.3	28	5.1	3.8	6.8	94

† The last time you filled a prescription for pain medication, did you use any of the pain medication more frequently or in higher doses than directed by a doctor? Total Sample Size: 2,549, Weighted Prevalence Estimate: 6,200.

‡ In the past year, did you use prescription pain medication that was NOT prescribed specifically to you by a doctor? We only want to know about prescription medication NOT medication that is available over the counter. Total Sample Size: 9,269, Weighted Prevalence Estimate: 25,900.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

ASTHMA

Montana BRFS, 2011

During 2011, 13.4% of Montana adults reported ever having been diagnosed with asthma and 9.1% of adults currently had asthma.

Sociodemographic Trends

- ◆ Women reported ever having been diagnosed, or currently being diagnosed, with asthma more frequently than men.
- ◆ Younger adults reported ever having been diagnosed with asthma more frequently than older adults.
- ◆ The prevalence of ever having been diagnosed with asthma was significantly higher among adults with lower educational attainment levels than those with higher educational attainment levels.
- ◆ Adults with lower household incomes reported ever having been diagnosed with asthma and currently having asthma more often than adults with higher household incomes.
- ◆ The prevalence of ever having been diagnosed with asthma was significantly higher among American Indians/Alaska Natives and adults from other racial-ethnic groups than White, non-Hispanic adults. Also, adults from other or Hispanic racial-ethnic groups reported currently having asthma more often than White, non-Hispanic adults.
- ◆ The prevalence of ever having been or currently being diagnosed with asthma was significantly higher among adults with a disability than adults without a disability.

Figure 13. Asthma by Household Income Category, Montana BRFS, 2011

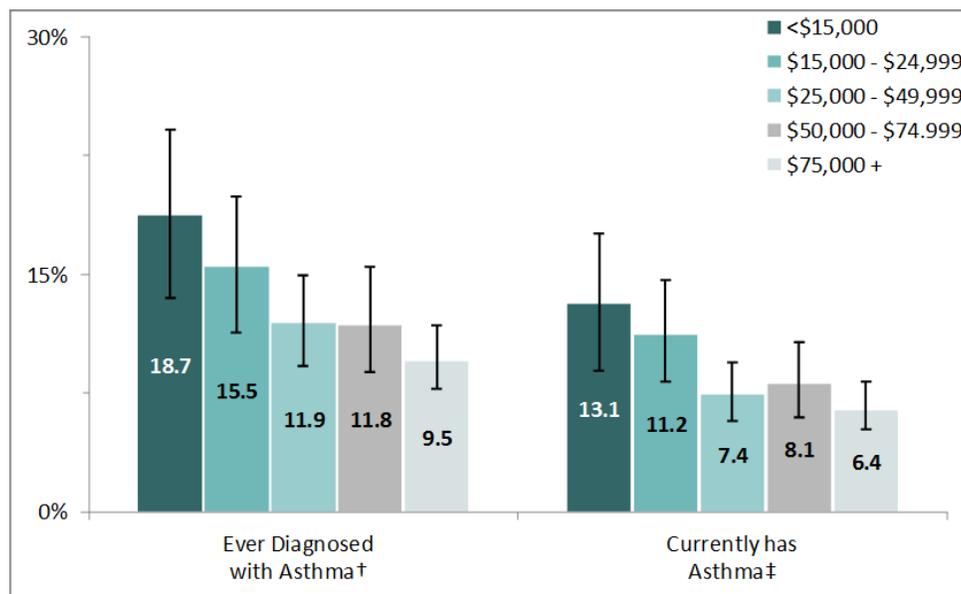


Table 13: Asthma, Montana Adults, 2011

	Ever Diagnosed with Asthma †				Currently has Asthma ‡			
	95% CI				95% CI			
	Wt. %	LL	UL	UnWt. N	Wt. %	LL	UL	UnWt. N
All Adults:	13.4	12.4	14.5	1,320	9.1	8.3	10.0	924
Sex:								
Male	11.3	10.0	12.8	487	6.6	5.6	7.8	303
Female	15.5	14.0	17.1	833	11.6	10.3	13.0	621
Age:								
18 - 24	16.7	13.1	21.0	88	8.5	5.9	12.1	43
25 - 34	15.4	12.7	18.5	158	10.6	8.3	13.5	102
35 - 44	14.0	11.3	17.2	152	11.0	8.6	14.1	114
45 - 54	13.6	11.3	16.3	232	9.0	7.2	11.3	157
55 - 64	12.2	10.4	14.2	302	8.8	7.3	10.6	224
65+	10.2	8.8	11.7	382	7.3	6.2	8.5	280
Education:								
<High School	19.1	14.8	24.3	125	12.8	9.2	17.4	90
High School	12.2	10.6	14.0	411	7.7	6.4	9.1	282
Some College	13.5	11.9	15.4	409	9.5	8.2	11.1	297
College Degree	12.5	10.7	14.5	373	8.9	7.3	10.8	253
Income:								
<\$15,000	18.7	15.3	22.8	208	13.1	10.2	16.6	147
\$15,000 - \$24,999	15.5	13.2	18.2	278	11.2	9.1	13.6	205
\$25,000 - \$49,999	11.9	10.2	13.7	350	7.4	6.2	8.9	247
\$50,000 - \$74,999	11.8	9.4	14.7	158	8.1	6.1	10.7	107
\$75,000 +	9.5	7.9	11.5	184	6.4	5.0	8.2	120
Race/Ethnicity:								
White, non-Hispanic	12.6	11.6	13.7	1,103	8.6	7.8	9.5	768
AI/AN*	18.4	14.0	23.8	106	10.1	7.3	14.0	69
Other or Hispanic**	19.4	14.1	26.2	102	14.3	9.6	20.9	79
Disability:								
No Disability	10.3	9.3	11.5	648	6.5	5.7	7.5	426
Disability	21.0	18.8	23.4	605	15.7	13.8	17.9	457
Region:								
1- Eastern MT	14.1	11.2	17.5	142	9.5	7.1	12.6	99
2- N Central MT	15.4	13.0	18.2	279	11.1	9.0	13.6	205
3- S Central MT	14.7	12.1	17.8	228	10.2	8.0	12.8	156
4- Southwest MT	12.5	10.7	14.6	289	8.3	6.8	10.2	198
5- Northwest MT	12.2	10.6	14.1	360	8.2	6.8	9.8	253

† Did a doctor ever tell you that you had asthma? Total Sample Size: 10,227, Weighted Prevalence Estimate: 102,900.

‡ Do you currently have asthma? Total Sample Size: 10,184, Weighted Prevalence Estimate: 69,600.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

ARTHRITIS

Montana BRFSS, 2011

In 2011, 26.4 % of Montana adults had been diagnosed with arthritis. Of those adults diagnosed with arthritis, 49.5% were limited in their daily activities due to joint pain.

Sociodemographic Trends

- ◆ The prevalence of ever having been diagnosed with arthritis was significantly higher for women than men.
- ◆ The prevalence of arthritis increased with age and decreased with increasing education.
- ◆ Adults living in lower income households reported having been diagnosed with arthritis more often than adults with higher household incomes. In addition, adults living in lower income households reported being limited in their daily activities due to joint pain and to have work-related limitations due to arthritis more often than adults in higher income households.
- ◆ The prevalence of arthritis, being limited in their daily activities, and having arthritis work-related limitations was significantly higher for adults with a disability than adults without a disability.
- ◆ Adults with arthritis living in the Southwest and Northwest health regions reported having their daily activities limited by joint pain more often than those living in the Eastern health region.

Figure 16. Arthritis by Disability Status, Montana BRFSS, 2011

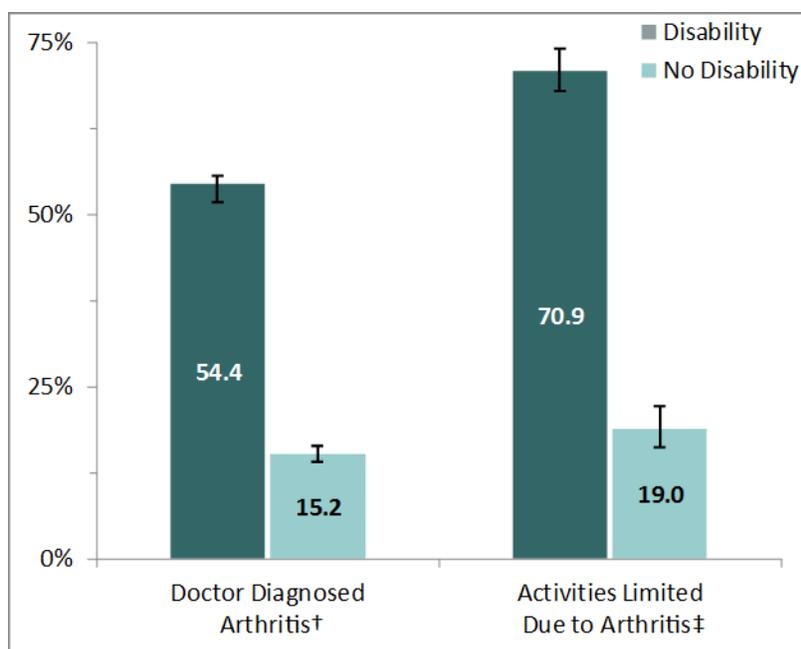


Table 14: Arthritis, Montana Adults, 2011

	Doctor Diagnosed Arthritis †				Activities Limited Due to Arthritis ‡				Arthritis Limits Work-Related Activities §			
	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N
		LL	UL			LL	UL			LL	UL	
All Adults:	26.4	25.2	27.7	3,493	49.5	46.9	52.2	1,588	35.6	33.0	38.2	1,070
Sex:												
Male	24.9	23.2	26.8	1,351	46.5	42.3	50.7	569	35.5	31.5	39.7	433
Female	27.9	26.3	29.5	2,142	52.2	48.9	55.5	1,019	35.7	32.4	39.1	637
Age:												
18 - 24	4.5	2.8	7.2	26	NSD^Δ			11	NSD^Δ			6
25 - 34	8.8	6.8	11.4	94	NSD^Δ			43	NSD^Δ			40
35 - 44	14.3	11.6	17.5	166	NSD^Δ			75	NSD^Δ			63
45 - 54	29.8	26.7	33.1	533	55.9	49.2	62.5	261	43.6	36.9	50.5	198
55 - 64	38.8	36.1	41.6	993	52.1	47.6	56.5	475	40.6	36.2	45.1	371
65+	49.8	47.3	52.3	1,662	44.1	40.5	47.7	714	26.9	23.6	30.4	388
Education:												
<High School	36.4	31.4	41.6	334	57.5	49.1	65.6	167	42.6	34.2	51.5	130
High School	27.4	25.2	29.6	1,188	46.1	41.6	50.7	518	35.6	31.2	40.2	366
Some College	26.6	24.5	28.8	1,040	51.8	47.2	56.4	499	38.4	33.8	43.2	354
College Degree	21.0	19.2	22.9	925	46.1	41.3	50.9	402	26.5	22.4	31.0	219
Income:												
<\$15,000	37.4	33.2	41.7	522	75.3	69.4	80.4	345	57.2	49.8	64.3	263
\$15,000 - \$24,999	34.1	31.1	37.4	785	51.2	45.5	56.8	391	43.6	38.0	49.5	291
\$25,000 - \$49,999	25.4	23.3	27.6	980	43.4	38.7	48.2	427	29.6	25.5	34.2	280
\$50,000 - \$74,999	19.4	16.9	22.3	393	38.6	31.4	46.2	138	27.1	20.5	34.8	82
\$75,000 +	19.4	17.0	22.0	454	36.6	30.1	43.5	151	16.4	12.5	21.4	82
Race/Ethnicity:												
White, non-Hispanic	26.3	25.0	27.6	3,075	48.0	45.2	50.8	1,357	34.5	31.8	37.3	894
AI/AN*	31.2	25.8	37.1	231	NSD^Δ			132	NSD^Δ			103
Other or Hispanic**	24.1	18.9	30.2	174	NSD^Δ			94	NSD^Δ			69
Disability:												
No Disability	15.2	14.1	16.4	1,440	19.0	16.3	22.1	288	15.7	12.8	19.2	203
Disability	54.4	51.7	57.1	1,883	70.9	67.8	73.8	1,289	49.6	46.1	53.2	861
Region:												
1- Eastern MT	29.2	25.6	33.1	419	38.9	32.1	46.1	174	31.1	24.9	38.1	130
2- N Central MT	27.9	25.2	30.8	712	47.1	41.5	52.8	298	34.3	29.0	40.0	214
3- S Central MT	26.2	23.4	29.1	590	47.3	41.0	53.7	261	33.2	27.5	39.5	164
4- Southwest MT	26.1	23.6	28.7	699	52.7	47.0	58.4	329	38.4	32.7	44.4	208
5- Northwest MT	25.7	23.6	28.0	1,033	52.6	47.7	57.4	511	36.5	31.8	41.4	341

† Ever been told by a health care professional that you have arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia? Total Sample Size: 10,190, Weighted Prevalence Estimate: 200,600.

‡ Among adults with doctor diagnosed arthritis: Are you limited in doing your usual activities because of arthritis? Total Sample Size: 3,313 Weighted Prevalence Estimate: 94,200.

§ Do arthritis or joint symptoms now affect whether you work, the type of work you do or the amount of work you do? Total Sample Size: 3,278 Weighted Prevalence Estimate: 66,900.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

Δ Not Sufficient Data to report a reliable estimate.

HYPERTENSION AND HIGH CHOLESTEROL

Montana BRFSS, 2011

During 2011, 30.2% of Montana adults reported having high blood pressure, 69.5% of adults reported having their cholesterol checked in the past five year and of those adults who had ever had a cholesterol test, 34.6% reported having high blood cholesterol.

Sociodemographic Trends

- ◆ The prevalence of high blood pressure was higher among men than women. Women reported having their blood cholesterol checked within the past 5 years more frequently than men.
- ◆ The prevalence of high blood pressure, high cholesterol, and having cholesterol screening increased with increasing age.
- ◆ Adults with lower educational levels reported having hypertension and high cholesterol more often than adults with higher education. Adults with higher education reported having been recently screened for cholesterol levels more often than adults with lower education.
- ◆ Adults with lower household incomes reported having high blood pressure more frequently than those with higher household incomes. Adults with higher household incomes reported having been recently screened for cholesterol levels more often than adults in lower income households.
- ◆ White, non-Hispanics and American Indian/Alaska Native adults reported having been recently screened for cholesterol levels within the past 5 years more often than other or Hispanic racial-ethnic groups.
- ◆ The prevalence of hypertension, high cholesterol, and not having had recent cholesterol screenings was higher among adults with a disability than adults without a disability.
- ◆ Adults in the North Central health region reported having hypertension more frequently than those in the Northwest and Southwest health regions.

Figure 15. Hypertension and High Cholesterol by Educational Attainment Groups, Montana BRFSS, 2011

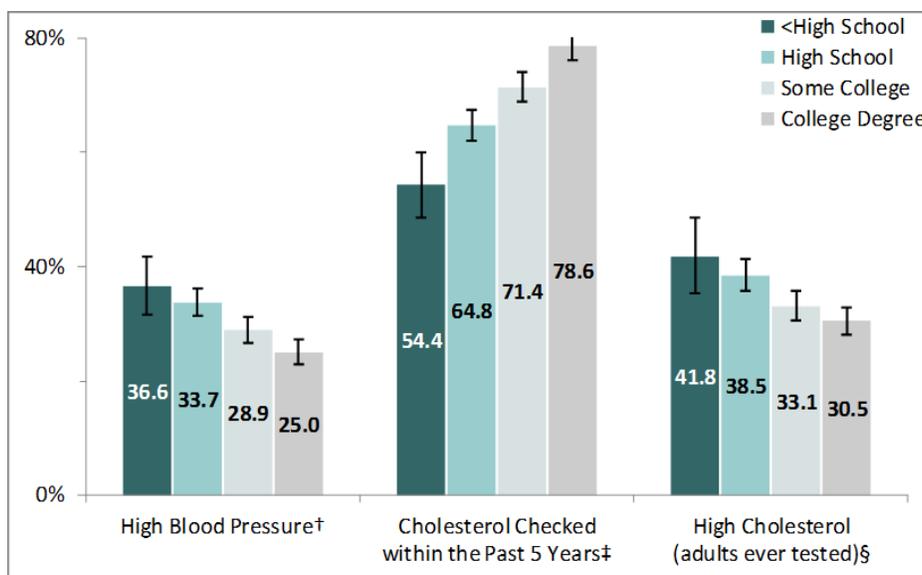


Table 15: Hypertension and High Cholesterol and Cholesterol Screening, Montana Adults, 2011

	High Blood Pressure †				Cholesterol Checked within the Past 5 Years ‡				High Cholesterol (adults ever tested) §			
	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N
		LL	UL			LL	UL			LL	UL	
All Adults:	30.2	28.9	31.5	3,755	69.5	68	71.0	7,875	34.6	33.1	36.1	3,410
Sex:												
Male	32.6	30.7	34.7	1,726	67.4	65.2	69.6	3,264	36.2	34.0	38.6	1,497
Female	27.8	26.2	29.5	2,029	71.6	69.6	73.6	4,611	33.0	31.1	35.0	1,913
Age:												
18 - 24	7.0	4.7	10.4	33	31.6	26.7	37.0	147	2.8	1.3	6.3	6
25 - 34	13.9	11.3	17.1	128	50.7	46.5	54.9	475	11.3	8.3	15.2	70
35 - 44	16.4	13.5	19.9	182	66.8	62.6	70.8	738	22.3	18.5	26.5	183
45 - 54	30.4	27.3	33.7	528	75.5	72.1	78.5	1,438	34.7	31.2	38.3	538
55 - 64	41.4	38.6	44.3	1,007	84.2	81.6	86.5	2,121	44.9	41.9	47.9	1,057
65+	58.7	56.3	61.2	1,857	91.3	89.7	92.6	2,918	51.4	48.8	54.0	1,541
Education:												
<High School	36.6	31.6	41.8	337	54.4	48.6	60.0	476	41.8	35.3	48.6	236
High School	33.7	31.3	36.1	1,332	64.8	62.0	67.5	2,428	38.5	35.7	41.4	1,083
Some College	28.9	26.7	31.2	1,088	71.4	68.8	74.0	2,315	33.1	30.6	35.7	1,023
College Degree	25.0	23.0	27.3	991	78.6	76.1	80.9	2,644	30.5	28.1	32.9	1,064
Income:												
<\$15,000	37.9	33.7	42.3	511	58.2	53.4	62.9	773	38.3	33.2	43.6	368
\$15,000 - \$24,999	35.0	32.0	38.1	813	62.6	59.0	66.1	1,353	36.9	33.4	40.6	634
\$25,000 - \$49,999	31.1	28.7	33.6	1,071	71.4	68.6	74.1	2,252	35.9	33.2	38.8	998
\$50,000 - \$74,999	26.5	23.3	30.0	468	78.3	74.8	81.5	1,190	29.9	26.5	33.6	481
\$75,000 +	22.6	20.0	25.6	498	81.8	78.4	84.8	1,537	31.6	28.4	34.9	600
Race/Ethnicity:												
White, non-Hispanic	30.2	28.9	31.6	3,303	71.2	69.7	72.7	7,009	34.5	32.9	36.0	3,031
AI/AN*	34.2	28.9	40.0	257	64.8	58.2	71.0	477	34.2	28.4	40.5	208
Other or Hispanic**	25.0	19.7	31.2	177	48.7	41.3	56.1	348	36.3	28.2	45.1	150
Disability:												
No Disability	23.9	22.5	25.4	1,992	66.1	64.2	67.9	4,888	30.1	28.4	31.9	1,899
Disability	45.7	43.1	48.4	1,551	78.4	75.8	80.8	2,584	44.4	41.6	47.3	1,355
Region:												
1- Eastern MT	31.7	28.0	35.6	473	72.1	67.7	76.1	948	38.8	34.4	43.5	430
2- N Central MT	35.4	32.2	38.6	799	67.9	64.5	71.1	1,481	33.5	30.1	37.1	646
3- S Central MT	32.3	29.1	35.6	632	71.3	67.7	74.7	1,348	34.5	30.9	38.2	560
4- Southwest MT	26.9	24.5	29.4	719	71.4	68.3	74.3	1,676	31.7	28.9	34.6	658
5- Northwest MT	29.2	26.9	31.6	1,088	67.5	64.6	70.3	2,320	36.6	33.8	39.5	1,073

† Were you ever told by a health care professional that your blood pressure was high? Total Sample Size: 10,235, Weighted Prevalence Estimate: 231,700.

‡ Had blood cholesterol checked in the past 5 years? Total Sample Size: 9,963, Weighted Prevalence Estimate: 224,500.

§ Were you ever told by a health care professional that your blood cholesterol was high? Total Sample Size: 8,433, Weighted Prevalence Estimate: 194,000.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

CARDIOVASCULAR DISEASE

Montana BRFSS, 2011

In 2011, 4.8% of Montana adults had been diagnosed with a heart attack or what is called a myocardial infarction, 4.0% of adults had been diagnosed with angina or coronary heart disease (CHD) and 3.2% of adults had experienced a stroke.

Sociodemographic Trends

- ◆ The prevalence of having had a heart attack, angina or CHD was higher among men than women.
- ◆ Older adults reported having been diagnosed with a heart attack, angina or CHD, and a stroke more often than younger adults.
- ◆ The prevalence of all three cardiovascular diseases decreased with increasing education and household income levels.
- ◆ Adults with a disability reported having been diagnosed with a heart attack, angina or CHD, and a stroke more frequently than adults without a disability.
- ◆ Adults living in the Southwest health region reported having had a stroke less frequently than those in North and South Central health regions.

Figure 16. Cardiovascular Disease and Sex of Respondent, Montana BRFSS, 2011

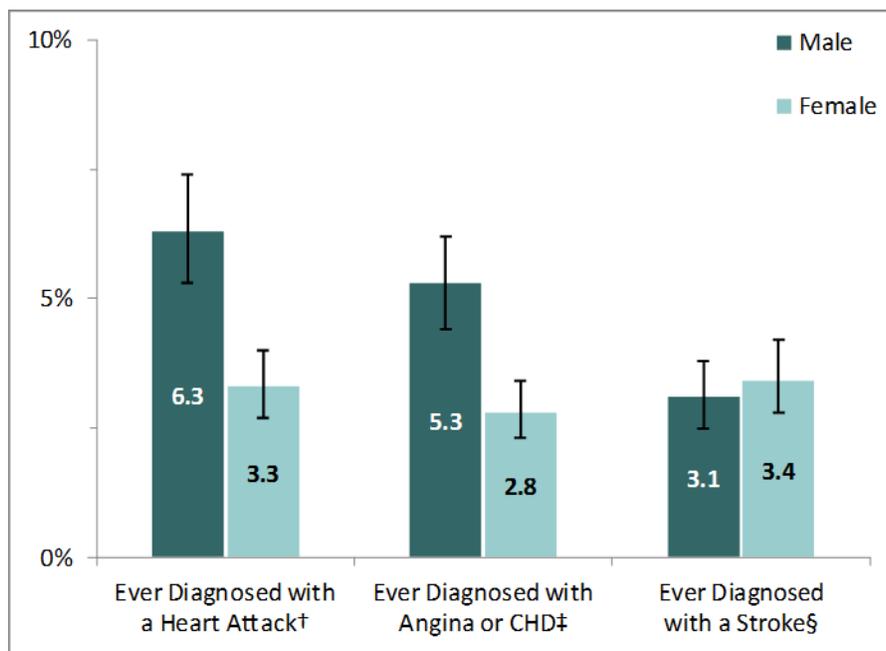


Table 16: Cardiovascular Disease, Montana Adults, 2011

	Ever Diagnosed with a Heart Attack †				Ever Diagnosed with Angina or CHD ‡				Ever Diagnosed with a Stroke §			
	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N
		LL	UL			LL	UL			LL	UL	
All Adults:	4.8	4.2	5.4	591	4.0	3.5	4.7	504	3.2	2.8	3.8	389
Sex:												
Male	6.3	5.3	7.4	350	5.3	4.4	6.4	280	3.1	2.5	3.8	174
Female	3.3	2.7	4.0	241	2.8	2.3	3.4	224	3.4	2.8	4.2	215
Age:												
18 - 24	1.0	0.3	3.3	3	0.1	0.0	0.9	1	1.0	0.3	3.0	5
25 - 34	0.4	0.1	1.7	4	0.1	0.0	0.6	2	0.2	0.1	0.8	3
35 - 44	1.4	0.7	3.1	16	1.2	0.4	3.6	8	0.3	0.1	0.7	6
45 - 54	4.2	2.7	6.4	53	3.4	2.1	5.6	41	2.0	1.3	3.2	36
55 - 64	5.8	4.5	7.4	127	5.6	4.3	7.2	114	3.7	2.8	5.0	81
65+	13.1	11.4	15.0	386	11.4	9.8	13.3	336	10.2	8.6	12.1	257
Education:												
<High School	11.6	8.5	15.7	91	9.5	6.5	13.6	64	6.1	4.3	8.5	61
High School	4.3	3.4	5.3	201	3.0	2.4	3.8	151	3.4	2.7	4.4	137
Some College	4.9	4.0	6.1	176	4.2	3.4	5.2	165	3.4	2.6	4.5	120
College Degree	2.5	1.9	3.1	121	3.0	2.2	4.1	123	1.7	1.2	2.3	71
Income:												
<\$15,000	9.4	6.8	12.7	109	7.5	5.3	10.7	84	7.1	5.3	9.5	90
\$15,000 - \$24,999	6.6	5.3	8.4	155	5.6	4.3	7.2	125	4.4	3.3	5.9	113
\$25,000 - \$49,999	4.2	3.2	5.4	158	3.5	2.7	4.4	143	2.6	1.9	3.4	92
\$50,000 - \$74,999	2.2	1.5	3.2	50	3.2	2.0	5.1	58	0.7	0.4	1.2	20
\$75,000 +	1.6	1.1	2.4	45	1.7	1.1	2.4	48	1.0	0.5	1.9	21
Race/Ethnicity:												
White, non-Hispanic	4.7	4.0	5.3	508	4.0	3.5	4.7	439	3.3	2.8	3.8	335
AI/AN*	7.1	4.6	10.9	57	3.8	2.3	6.4	38	4.1	2.4	6.9	35
Other or Hispanic**	4.8	2.6	8.6	24	4.5	2.4	8.3	25	2.1	0.9	4.6	18
Disability:												
No Disability	2.4	2.0	2.9	220	2.0	1.6	2.5	181	1.5	1.1	1.9	121
Disability	10.6	8.9	12.5	327	9.1	7.6	10.9	295	7.8	6.6	9.3	250
Region:												
1- Eastern MT	4.2	3.0	5.9	78	2.9	1.9	4.3	54	3.6	2.1	6.2	44
2- N Central MT	5.7	4.1	7.8	132	3.4	2.2	5.1	95	3.9	2.8	5.3	80
3- S Central MT	5.8	4.3	7.7	110	5.7	4.2	7.8	99	4.1	3.0	5.5	86
4- Southwest MT	4.0	3.0	5.4	99	3.4	2.5	4.5	89	1.8	1.3	2.6	60
5- Northwest MT	4.5	3.6	5.7	169	4.0	3.2	5.0	159	3.4	2.6	4.5	114

† Has a doctor ever told you that you had a heart attack? Total Sample Size: 10,217, Weighted Prevalence Estimate: 36,500.

‡ Has a doctor ever told you that you have angina or coronary heart disease (CHD)? Total Sample Size: 10,165, Weighted Prevalence Estimate: 30,900.

§ Has a doctor ever told you that you had a stroke? Total Sample Size: 10,233, Weighted Prevalence Estimate: 24,900.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

DIABETES

Montana BRFSS, 2011

During 2011, 8.0% of adults reported having ever been diagnosed with diabetes and 6.7% ever had been diagnosed with pre-diabetes.

Sociodemographic Trends

- ◆ Women reported having been diagnosed with pre-diabetes more often than men, but the prevalence of diabetes was similar by sex.
- ◆ The prevalence of diabetes and pre-diabetes increased with increasing age.
- ◆ Adults with higher education reported having been diagnosed with diabetes less frequently than those with less education.
- ◆ Adults with higher household incomes reported having been diagnosed with diabetes less often than those with lower household incomes.
- ◆ The prevalence of ever having been diagnosed with diabetes was significantly higher among American Indian/Alaskan Native adults than White, non-Hispanic adults or those from other racial-ethnic groups.
- ◆ Adults with a disability reported having been diagnosed with diabetes or pre-diabetes more often than adults without a disability.
- ◆ Adults in the Southwest health region reported having been diagnosed with diabetes less frequently than those in the North Central or South Central regions.

Figure 17. Diabetes by Disability Status, Montana BRFSS, 2011

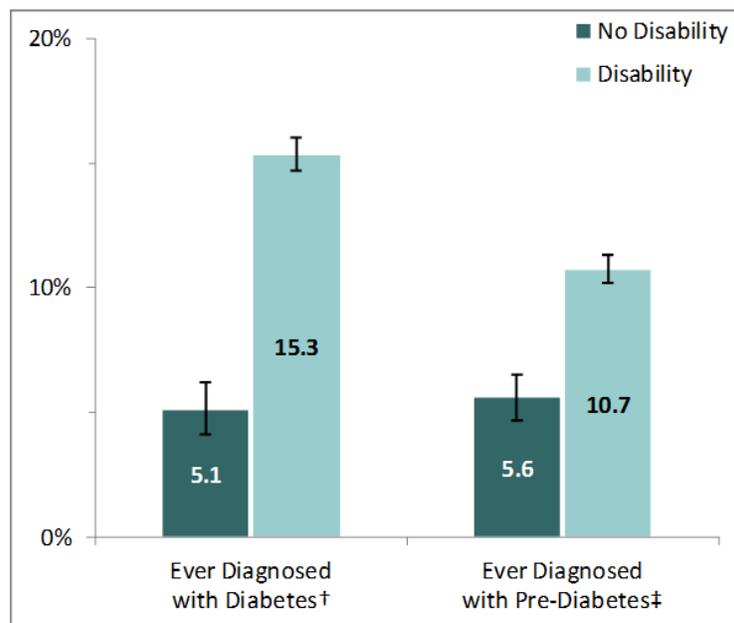


Table 17: Diabetes, Montana Adults, 2011

	Ever Diagnosed with Diabetes †				Ever Diagnosed with Pre-Diabetes ‡			
	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N
		LL	UL			LL	UL	
All Adults:	8.0	7.3	8.7	1,020	6.7	6.0	7.5	723
Sex:								
Male	8.0	7.0	9.1	458	5.5	4.5	6.7	260
Female	8.0	7.0	9.0	562	7.9	6.9	9.0	463
Age:								
18 - 24	0.7	0.2	3.4	3	3.0	1.5	5.8	17
25 - 34	2.2	1.2	4.0	20	6.1	4.3	8.5	68
35 - 44	2.6	1.7	3.7	44	5.1	3.4	7.4	62
45 - 54	6.9	5.4	9.0	126	9.0	7.1	11.4	147
55 - 64	11.8	10.1	13.8	275	8.0	6.6	9.6	191
65+	18.9	16.8	21.1	545.0	8.0	6.6	9.6	234
Education:								
<High School	10.7	8.1	14.2	110	7.5	4.9	11.2	62
High School	8.7	7.4	10.2	345	7.2	6.0	8.7	242
Some College	8.8	7.6	10.3	329	7.0	5.7	8.6	214
College Degree	4.7	3.9	5.6	231	5.3	4.3	6.6	204
Income:								
<\$15,000	13.5	10.8	16.6	190	9.9	7.4	13.2	113
\$15,000 - \$24,999	10.1	8.4	12.2	236	7.2	5.7	9.0	157
\$25,000 - \$49,999	7.9	6.6	9.3	286	5.6	4.4	7.1	187
\$50,000 - \$74,999	5.2	3.9	6.8	96	7.3	5.3	10.1	82
\$75,000 +	3.8	2.9	5.0	98	5.6	4.3	7.4	119
Race/Ethnicity:								
White, non-Hispanic	7.6	6.9	8.4	824	6.5	5.8	7.4	600
AI/AN*	16.7	12.6	21.7	139	10.2	7.3	14.1	68
Other or Hispanic**	5.8	3.9	8.5	54	7.1	4.3	11.4	52
Disability:								
No Disability	5.1	4.4	5.8	456	5.6	4.7	6.5	403
Disability	15.3	13.5	17.4	503	10.7	9.0	12.6	297
Region:								
1- Eastern MT	9.6	7.6	12.1	131	7.5	5.6	10.0	89
2- N Central MT	9.8	7.9	12.1	220	7.8	6.3	9.5	168
3- S Central MT	9.6	7.8	11.7	190	8.0	6.1	10.4	127
4- Southwest MT	6.4	5.2	7.7	171	5.8	4.5	7.4	132
5- Northwest MT	7.1	5.9	8.5	294	5.7	4.6	7.1	198

† Have you ever been told by a doctor you have diabetes? Total Sample Size: 10,251
Weighted Prevalence Estimate: 61,300.

‡ Have you ever been told by a doctor you have pre-diabetes or borderline diabetes?
Includes women who were diagnosed with pre-diabetes only during pregnancy. Total
Sample Size: 9,160 Weighted Prevalence Estimate: 46,900.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

OTHER CHRONIC CONDITIONS

Montana BRFSS, 2011

In 2011, 2.5% of Montana adults reported ever having been diagnosed with kidney disease and 20.5% of Montana adults reported ever having been diagnosed with a depressive disorder (e.g., depression, major depression, dysthymia, or minor depression).

Sociodemographic Trends

- ◆ The prevalence of a depressive disorder was higher among women than men.
- ◆ Older adults reported having been diagnosed with kidney disease more frequently than younger adults.
- ◆ Adults living in households with higher incomes and those with higher education reported having been diagnosed with a depressive disorder less often than those with lower household incomes and lower education attainment.
- ◆ Adults living in households with lower income reported ever having been diagnosed with kidney disease more often than adults with higher household incomes.
- ◆ Adults with a disability reported ever having been diagnosed with kidney disease or a depressive disorder more often than adults without a disability.

Figure 20. Other Chronic Conditions and Household Income Category, Montana BRFSS, 2011

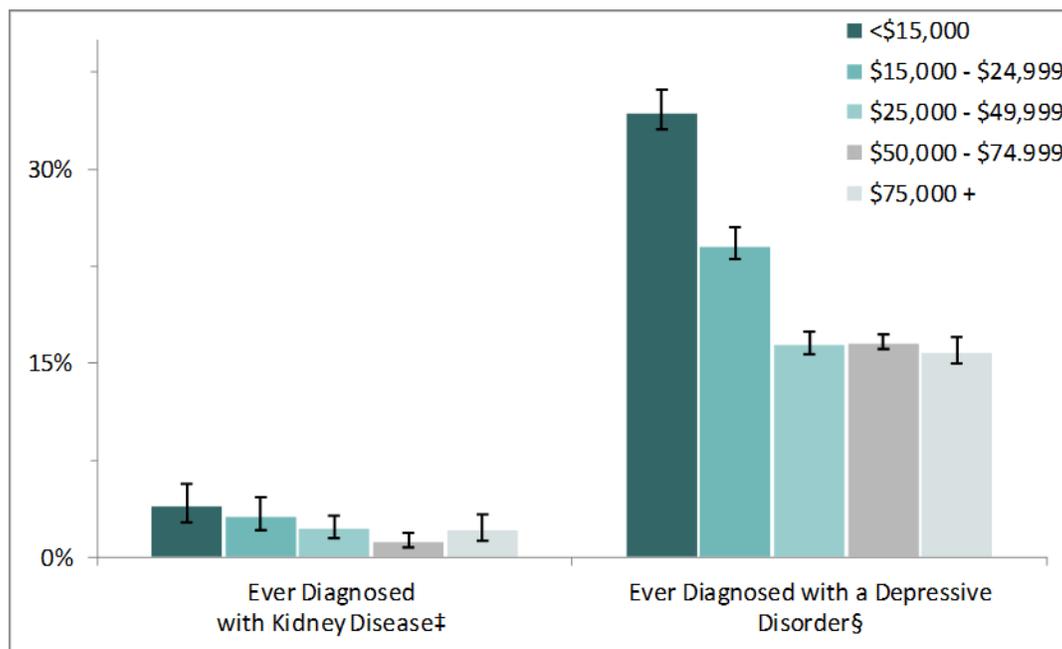


Table 18: Other Chronic Conditions, Montana Adults, 2011

	Ever Diagnosed with Kidney Disease ‡				Ever Diagnosed with a Depressive Disorder §			
	Wt. %	95% CI		UnWt. N	Wt. %	95% CI		UnWt. N
LL		UL	LL			UL		
All Adults:	2.5	2.1	3.0	320	20.5	19.3	21.7	2,125
Sex:								
Male	2.4	1.8	3.2	122	15.8	14.2	17.6	668
Female	2.7	2.1	3.4	198	25.1	23.4	26.9	1,457
Age:								
18 - 24	1.5	0.6	4.0	6	17.0	13.6	21.2	98
25 - 34	0.5	0.2	1.3	7	22.7	19.3	26.4	216
35 - 44	2.2	1.0	4.7	19	20.2	17.0	23.8	236
45 - 54	2.1	1.4	3.3	45	23.7	20.8	26.9	418
55 - 64	2.7	2.0	3.7	80	23.6	21.3	26.0	631
65+	5.4	4.3	6.7	162	15.6	13.8	17.5	518
Education:								
<High School	3.5	1.8	6.5	27	30.9	25.9	36.4	203
High School	2.6	1.8	3.6	102	18.6	16.7	20.7	660
Some College	2.4	1.7	3.2	94	22.0	19.8	24.3	640
College Degree	2.4	1.8	3.2	95	16.8	15.0	18.8	619
Income:								
<\$15,000	3.9	2.7	5.7	64	34.3	30.0	38.8	398
\$15,000 - \$24,999	3.1	2.1	4.6	75	24.5	21.8	27.5	475
\$25,000 - \$49,999	2.2	1.5	3.2	73	16.4	14.5	18.5	529
\$50,000 - \$74,999	1.2	0.8	1.9	33	16.5	13.8	19.5	233
\$75,000 +	2.1	1.3	3.3	41	15.8	13.4	18.7	293
Race/Ethnicity:								
White, non-Hispanic	2.6	2.2	3.2	281	19.6	18.4	20.9	1,801
AI/AN*	1.9	1.1	3.3	25	28.2	22.9	34.1	178
Other or Hispanic**	1.6	0.6	4.0	13	27.1	21.1	34.0	137
Disability:								
No Disability	1.9	1.4	2.5	134	13.7	12.5	15.0	930
Disability	4.5	3.5	5.8	174	38.5	35.8	41.2	1,099
Region:								
1- Eastern MT	1.3	0.8	2.1	31	18.4	15.2	22.0	216
2- N Central MT	3.0	2.1	4.2	72	21.7	19.0	24.7	442
3- S Central MT	2.3	1.5	3.5	50	23.5	20.6	26.7	384
4- Southwest MT	2.8	1.9	4.0	70	20.1	17.8	22.7	443
5- Northwest MT	2.7	1.9	3.8	92	19.0	17.0	21.3	616

‡ Has a doctor ever told you that you have kidney disease? Do NOT include kidney stones, bladder infection or incontinence.

§ Has a doctor ever told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

INJURY PREVENTION

Montana BRFSS, 2011

In 2011, 26.9% of Montana adults reported that they did not always wear a seat belt.

Sociodemographic Trends

- ◆ Men reported not always wearing seat belts more often than women.
- ◆ Younger adults reported not always wearing seat belts more often than older adults.
- ◆ Adults with less education and lower household income levels reported not always wearing seat belts more frequently than adults with higher education and household income levels.
- ◆ The prevalence of not always wearing a seat belt was higher among adults from Hispanic or other racial-ethnic groups than White, non-Hispanic adults.
- ◆ The prevalence of not always wearing a seat belt was higher among adults living in the Eastern health region than adults in other regions. The prevalence of not always wearing a seat belt was also higher among adults living in the North Central health region than adults living in the Northwestern health region.

Figure 18. Injury Prevention and Racial-Ethnic Group, Montana BRFSS, 2011

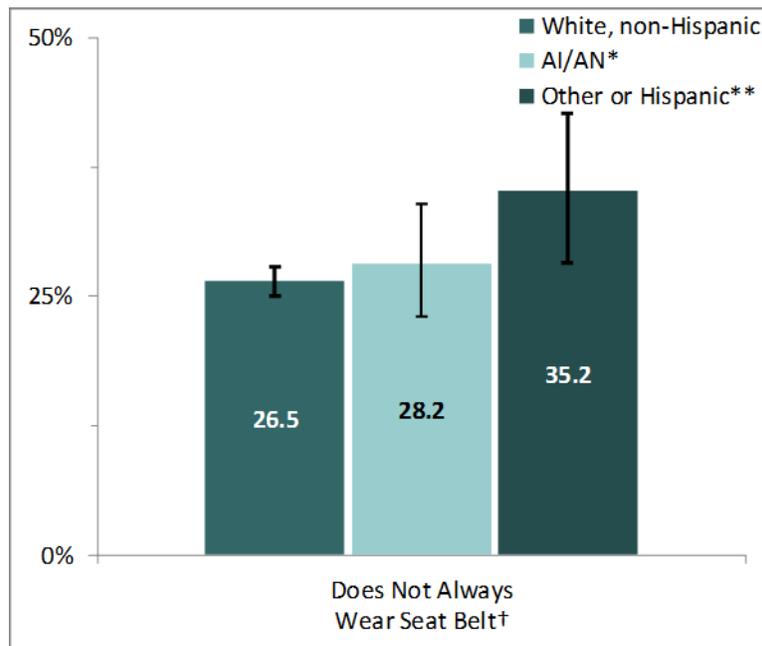


Table 19: Injury Prevention, Montana Adults, 2011

	Does Not Always Wear Seat Belt †			
	Wt. %	95% CI		UnWt. N
LL		UL		
All Adults:	26.9	25.6	28.3	2,623
Sex:				
Male	33.6	31.5	35.7	1,461
Female	20.5	18.9	22.2	1,162
Age:				
18 - 24	38.9	33.7	44.3	199
25 - 34	32.3	28.6	36.2	324
35 - 44	23.5	20.2	27.1	284
45 - 54	27.0	23.9	30.2	495
55 - 64	24.0	21.7	26.5	622
65+	20.1	18.2	22.2	688
Education:				
<High School	33.1	28.1	38.6	233
High School	30.6	28.2	33.2	967
Some College	27.5	25.1	30.0	791
College Degree	19.4	17.5	21.5	630
Income:				
<\$15,000	32.2	27.9	36.7	328
\$15,000 - \$24,999	28.6	25.7	31.8	531
\$25,000 - \$49,999	27.9	25.5	30.5	781
\$50,000 - \$74,999	26.2	22.8	29.8	351
\$75,000 +	22.1	19.0	25.5	393
Race/Ethnicity:				
White, non-Hispanic	26.5	25.1	27.9	2,292
AI/AN*	28.2	23.1	33.9	167
Other or Hispanic**	35.2	28.3	42.7	153
Disability:				
No Disability	27.1	25.5	28.7	1,788
Disability	26.4	24.1	28.9	821
Region:				
1- Eastern MT	40.8	36.5	45.2	443
2- N Central MT	31.3	28.1	34.6	593
3- S Central MT	26.5	23.4	29.9	424
4- Southwest MT	25.7	23.2	28.5	514
5- Northwest MT	23.0	20.7	25.5	619

† How often do you use seat belts when you drive or ride in a car?
 Total Sample Size: 9,694, Weighted Prevalence Estimate: 194,600.

* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

SEXUAL VIOLENCE

Montana BRFSS, 2011

In 2011, 9.1% of Montana adults reported experiencing an attempted sexual assault at some point in their life and 8.1% of Montanans reported ever having been the victim of a completed sexual assault.

Sociodemographic Trends

- ◆ The prevalence of experiencing an attempted or completed sexual assault was significantly higher among women than men.
- ◆ Older adults reported having been the victim of an attempted or completed sexual assault less often than younger adults.
- ◆ Having experienced a completed or attempted sexual assault decreased with increasing household income levels.
- ◆ White, non Hispanic adults reported having experienced attempted sexual assault less often than other racial groups.
- ◆ The prevalence of attempted or completed sexual assault was significantly higher among adults with a disability than adults without a disability.
- ◆ Adults in the Northwest health planning region reported having been the victim of an attempted sexual assault more often than those in the Southwest region.

Figure 21. Sexual Violence and Sex, Montana BRFSS, 2011

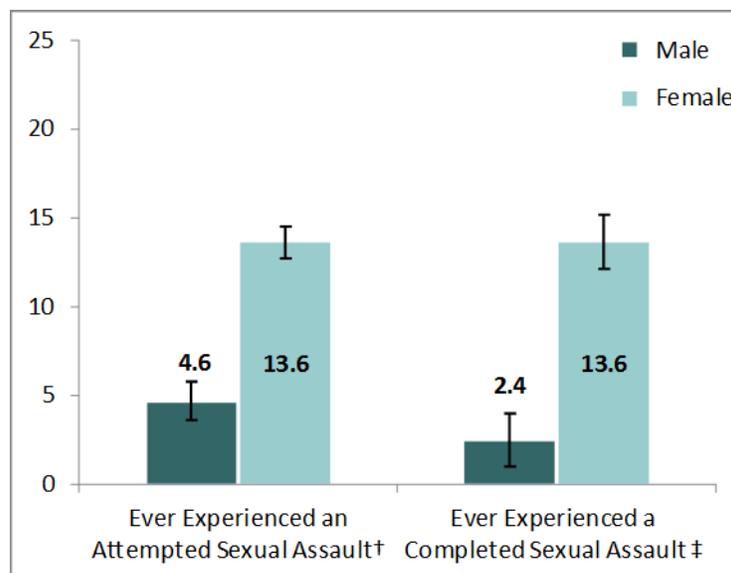


Table 20: Sexual Violence, Montana Adults, 2011

	Ever Experienced an Attempted Sexual Assault†				Ever Experienced a Completed Sexual Assault ‡			
	95% CI				95% CI			
	Wt. %	LL	UL	UnWt. N	Wt. %	LL	UL	UnWt. N
All Adults:	9.1	8.2	10.1	810	8.1	7.2	9.0	723
Sex:								
Male	4.6	3.6	5.8	143	2.4	1.8	3.3	85
Female	13.6	12.2	15.2	667	13.6	12.1	15.2	638
Age:								
18 - 24	12.3	8.9	16.7	58	8.6	5.8	12.5	38
25 - 34	12.1	9.5	15.3	103	11.4	8.8	14.5	95
35 - 44	9.1	7.0	11.6	109	10.0	7.8	12.7	112
45 - 54	10.4	8.3	13.1	183	9.2	7.4	11.2	180
55 - 64	8.3	6.8	10.1	206	7.5	6.1	9.2	186
65+	4.3	3.4	5.5	146	3.2	2.4	4.3	108
Education:								
<High School	12.6	9.0	17.5	71	12.4	8.8	17.3	68
High School	8.4	6.9	10.1	216	6.5	5.3	7.9	196
Some College	9.6	8.0	11.4	250	9.5	7.9	11.2	247
College Degree	8.3	6.9	9.9	272	6.6	5.4	8.0	210
Income:								
<\$15,000	17.6	14.0	21.8	179	16.3	13.1	20.1	169
\$15,000 - \$24,999	10.6	8.6	13.1	166	10.5	8.3	13.2	159
\$25,000 - \$49,999	6.4	5.2	7.8	191	5.7	4.6	7.1	160
\$50,000 - \$74,999	6.8	4.8	9.5	85	5.8	4.2	8.0	78
\$75,000 +	8.0	6.0	10.7	127	5.3	4.1	6.8	100
Race/Ethnicity:								
White, non-Hispanic	8.6	7.7	9.6	662	7.7	6.8	8.6	586
AI/AN*	14.0	9.5	20.2	72	11.6	7.8	16.7	66
Other or Hispanic**	14.0	9.6	20.0	71	11.1	7.7	15.7	67
Disability:								
No Disability	6.8	5.9	7.9	400	6.0	5.2	7.0	351
Disability	15.0	13.0	17.3	406	13.2	11.3	15.2	368
Region:								
1- Eastern MT	8.3	5.9	11.4	74	7.1	4.8	10.3	65
2- N Central MT	10.1	8.0	12.7	169	6.7	5.3	8.6	139
3- S Central MT	8.1	6.4	10.2	126	7.5	5.8	9.6	118
4- Southwest MT	7.4	6.0	9.0	160	7.3	5.8	9.1	141
5- Northwest MT	11.0	9.1	13.2	274	9.8	8.1	11.7	254

† Has anyone EVER had sex with you after you said or showed that you didn't want them to or without your consent? Total Sample Size: 10,220, Weighted Prevalence Estimate: 19,500

‡ Has anyone EVER ATTEMPTED to have sex with you after you said or showed that you didn't want to or without your consent, BUT SEX DID NOT OCCUR? Total Sample Size: 9,064, Weighted Prevalence Estimate: 54,000.

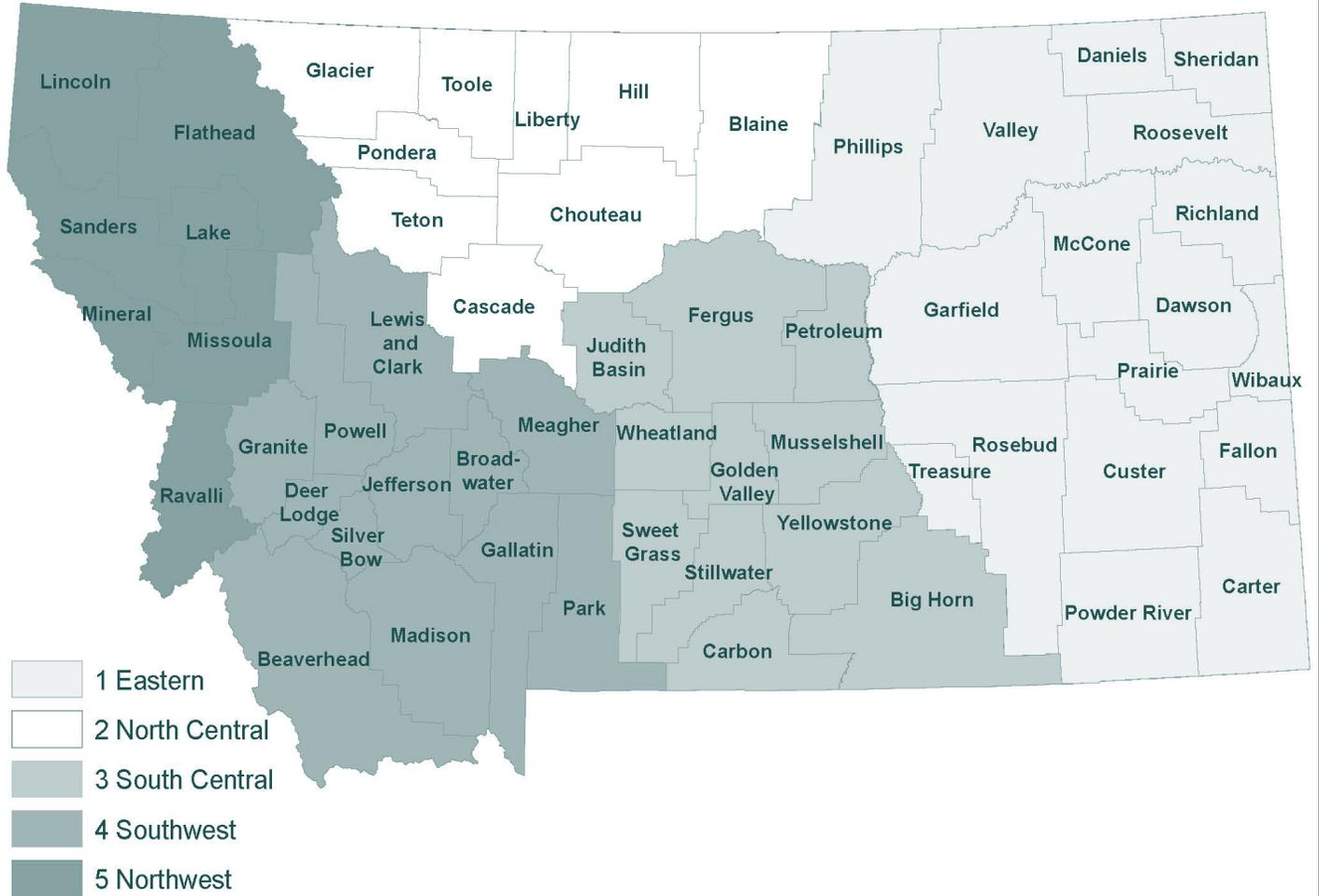
* American Indian or Alaska Native only.

** All other non-White (including multi-racial or Hispanic).

APPENDIX A

Montana BRFSS, 2011

Map of Montana's Health Planning Regions



APPENDIX B

Montana BRFSS, 2011

Comparison of Selected 2011 Health Indicators of Montana Adults

2011 Health Indicator	U.S. 2011 Median (Range)	Montana Wt% 95% CI	Eastern Wt% 95% CI	N. Central Wt% 95% CI	S. Central Wt% 95% CI	Southwest Wt% 95% CI	Northwest Wt% 95% CI
Access to Health Care:							
No Health Care Coverage (18-64)	21.3 (7.8-34.7)	24.1 22.5-25.7	18.6 14.7-23.3	21.7 18.5-25.3	22.9 19.4-26.9	23.1 20.0-26.4	28.0 25.1-31.0
Couldn't Afford to See Doctor (past 12 months)	16.1 (8.7-23.3)	15.4 14.3-16.6	11.7 9.0-15.0	15.0 12.6-17.8	14.3 11.7-17.3	14.7 12.4-17.2	18.1 16.0-20.3
No Personal Health Care Provider	21.9 (11.7-37.0)	28.4 27.0-29.8	26.1 22.3-30.3	28.9 25.8-32.3	28.4 25.1-32.0	28.8 26.0-31.8	27.9 25.3-30.5
No Routine Checkup within the Past Year	33.5 (21.0- 46.5)	44.3 42.8-45.8	40.3 36.0-44.7	42.5 39.1-45.9	41.7 38.2-45.2	47.3 44.3-50.3	45.6 42.8-48.4
Health Status or Outcomes							
Fair or Poor General Health	16.9 (12.0 -25.1)	17.2 16.1-18.4	20.6 17.1-24.6	19.1 16.6-21.9	18.0 15.3-21.1	14.9 13.0-17.1	16.7 14.8-18.7
Overweight	35.7 (29.1-38.9)	35.6 34.2-37.1	36.7 32.6-40.9	33.5 30.4-36.8	37.1 33.7-40.7	35.7 32.9-38.7	35.3 32.7-37.9
Obese	27.8 (20.7-34.9)	24.6 23.3-26.0	28.2 24.5-32.1	32.6 29.3-36.1	25.1 22.0-28.4	21.8 19.4-24.4	22.3 20.0-24.7
Ever had Heart Attack	4.4 (2.7-6.5)	4.8 4.2-5.4	4.2 3.0-5.9	5.7 4.1-7.8	5.8 4.3-7.7	4.0 3.0-5.4	4.5 3.6-5.7
Ever Diagnosed with Angina or CVD	4.1 (2.5- 6.7)	4.0 3.5-4.7	2.9 1.9-4.3	3.4 2.2-5.1	5.7 4.2-7.8	3.4 2.5-4.5	4.0 3.2-5.0
Ever had Stroke	2.9 (2.0- 4.6)	3.2 2.8-3.8	3.6 2.1-6.2	3.9 2.8-5.3	4.1 3.0-5.5	1.8 1.3-2.6	3.6 2.6-4.5
Diabetes, Doctor Diagnosed	9.5 (6.7-12.4)	8.0 7.3-8.7	9.6 7.6-12.1	9.8 7.9-12.1	9.6 7.8-11.7	6.4 5.2-7.7	7.1 5.9-8.5
Currently have Asthma	9.1 (6.4 -12.1)	9.1 8.3-10.0	9.5 7.1-12.6	11.1 9.0-13.6	10.2 8.0-12.8	8.3 6.8-10.2	8.2 6.8-9.8
Health-Related Behaviors							
No Leisure Time Physical Activity	26.2 (16.5-36.0)	24.4 23.1-25.7	29.3 25.5-33.4	31.2 28.0-34.5	27.2 24.0-30.7	20.3 18.0-22.8	21.7 19.4-24.1
Current Smoker	21.2 (11.8-29.0)	22.1 20.8-23.4	20.0 16.6-24.0	26.5 23.5-29.7	23.1 20.1-26.4	20.6 18.2-23.3	21.1 18.8-23.5
Binge Drinking	18.3 (10.0 -25.0)	20.8 19.6 -22.1	18.4 14.9-22.7	20.8 18.0-24.0	19.6 16.8-22.7	22.1 19.6-24.8	21.1 18.8-23.7
Heavy Drinking	6.6 (3.4-9.8)	7.5 6.8-8.4	6.6 4.7-9.2	7.8 6.0-10.1	7.0 5.3-9.1	8.0 6.6-9.7	7.8 6.4-9.5
Influenza Immunization, in the Past Year (Age 65+)	61.3 (51.8 -70.2)	55.9 53.3-58.4	53.0 45.7-60.1	59.3 53.2-65.0	57.8 51.8-63.5	52.1 46.7-57.4	56.8 51.8-61.6
Ever had Pneumococcal Immunization (Age 65+)	70.0 (62.5-76.0)	69.6 67.1-72.1	65.3 57.6-72.3	70.6 64.7-75.9	69.8 63.9-75.1	71.9 66.6 -76.6	69.2 64.3-73.8

APPENDIX C

Montana BRFSS, 2011

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