



MONTANA Fact[or]s

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US Postage
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 Helena, MT 59601

► Disparities in the Health of Women Aged 18–44 by Race/Ethnicity: Montana BRFSS 2004–2009 Findings

To improve the health of women of childbearing age in Montana, it is essential to understand the current health status among these women. Social disparities in health and health care are systematically associated with different levels of underlying social advantage or position in a social hierarchy.^{1,2} Social advantage results in greater access to resources, influence, prestige, and social inclusion and is associated with indicators such as income, occupation, education, gender, sexual orientation, and racial/ethnic groups.^{3,4} Women who experience social disadvantage suffer a disproportionate disease burden, adverse health outcomes, and barriers to care, but have not been well represented in studies of behavior and health.⁵ Eliminating disparities in health status and access to health services for all U.S. populations is one of the two overarching goals of the *Healthy People 2010* national public health agenda, making it a top priority

for federal agencies such as the Centers for Disease Control and Prevention (CDC) and our public health community.⁶

Using 2004–2009 data from the Montana Behavioral Risk Factor Surveillance System with a representative sample of more than 6,000 women, this Fact[or]s report explores social disparities in health status and health care access based on race and ethnicity among women of childbearing age. These data provide new information on differences in health status, health risks, chronic conditions, and measures of health care access and screenings across three racial/ethnic groups of childbearing age women: White, non-Hispanics; American Indian/Alaska Natives; and Hispanic or other racial groupings. The findings highlight several important areas for consideration in efforts to eliminate health disparities.

► Differences in Health Status and Health Risk Behaviors

There are notable differences in health status between white women and minority women (Table 1). Minority status women (≥18%) are significantly more likely to report fair or poor health status than White, non-Hispanic women (7%). Hispanic women or women of other racial groups (19%) are more likely to report frequent mental distress than White or American Indian/Alaska Native women (≤13%). Approximately fourteen percent of all women in this age group have a self-reported disability and there are no statistically significant differences based on race and ethnicity.

Overall, prevalence estimates for individual risk factors indicate that minority women are more likely than white women to report obesity, physical inactivity and current smoking (Figure 1a). More than 23% of all women aged 18-44 report being current smokers. The percentage of American Indian/Alaska Native women of childbearing age that currently smoke (47%) is alarmingly high and

significantly higher than either White, non-Hispanics (21%) or other minority women (26%). In addition, more than 14% of women 18-44 are considered former smokers

having smoked more than 100 cigarettes in their lifetime, but no longer currently smoke. There are no significant differences in the prevalence estimates among the race/

ethnic groups of women who are former smokers. Over one in four (27%) Montana women aged 18-44 are overweight based on height and weight responses

that translate into a body mass index between 25 and 29 kg/m². However, American Indian/Alaska Native women aged 18-44 (35%) compared to White, non-Hispanics (17%)

Table 1. Differences in Health Status and Risk Factors for Montana Women 18-44 Years of Age by Race/Ethnicity, BRFSS 2004–2009

Health Indicators	All MT Women Age 18–44			White non-Hispanic		American Indian/Alaska Native*		All other Race or Hispanic**	
	UnWt. N	Wt%	95% CI	Wt%	95% CI	Wt%	95% CI	Wt%	95% CI
Self-Reported Health Statuses:									
Fair or Poor Health Status	621	8.7	7.8 - 9.8	7.2	6.3 - 8.1	19.5	15.6 - 24.0	18.3	11.0 - 28.7
Frequent Mental Distress ¹	764	11.5	10.5 - 12.7	10.9	9.9 - 12.1	13.4	10.4 - 17.2	18.5	13.2 - 25.3
Has a self-reported Disability	894	14.1	12.9 - 15.3	13.4	12.3 - 14.7	17.0	13.3 - 21.6	19.7	13.9 - 27.0
Behavioral Risk Factors:									
Current Smoker	1519	23.4	22.1 - 24.9	21.4	19.9 - 22.9	47.4	41.8 - 53.0	25.6	20.0 - 32.1
Former Smoker	818	14.4	13.2 - 15.6	14.0	12.8 - 15.3	16.4	12.2 - 21.6	17.6	11.5 - 25.9
Alcohol Risk²:									
Heavy Drinker	275	5.7	4.8 - 6.6	5.4	4.5 - 6.4	6.7	4.2 - 10.6	8.2	3.9 - 16.4
Binge Drinker	714	18.0	16.4 - 19.8	17.7	15.9 - 19.5	22.2	16.8 - 28.8	18.8	13.0 - 26.3
Overweight	1597	26.8	25.3 - 28.3	26.5	24.9 - 28.2	28.4	23.8 - 33.4	29.0	22.6 - 36.3
Obese	1219	18.9	17.6 - 20.2	17.2	15.8 - 18.6	35.3	30.1 - 40.8	25.3	19.2 - 32.6
No Exercise Past 30 days	1101	16.5	15.3 - 17.7	15.2	14.0 - 16.5	26.7	22.2 - 31.6	22.8	16.8 - 30.1
Insufficient Mod/Vig. Physical Activity	939	33.9	31.5 - 36.3	33.7	31.2 - 36.3	36.5	28.3 - 45.5	NSD	
Inadequate Fruit & Vegetables	2100	73.3	71.0 - 75.4	73.5	71.1 - 75.8	74.0	65.3 - 80.2	71.3	60.3 - 80.2
Does Not Take Folic Acid Everyday	998	50.7	47.8 - 53.6	47.8	44.6 - 50.9	61.8	52.5 - 70.3	NSD	
Does Not Always Wear Seatbelt	560	28.1	25.5 - 31.0	27.3	24.4 - 30.4	39.8	31.1 - 49.2	NSD	

* American Indian or Alaska Native only
 ** All other non-White (including multiracial) or Hispanic
¹ Frequent mental distress is defined as 14 or more self-reported "mentally unhealthy days" in the past 30 days
² Alcohol risk is calculated based on the estimates of heavy and binge drinking measures.
 Bolded estimates are significantly different from referent

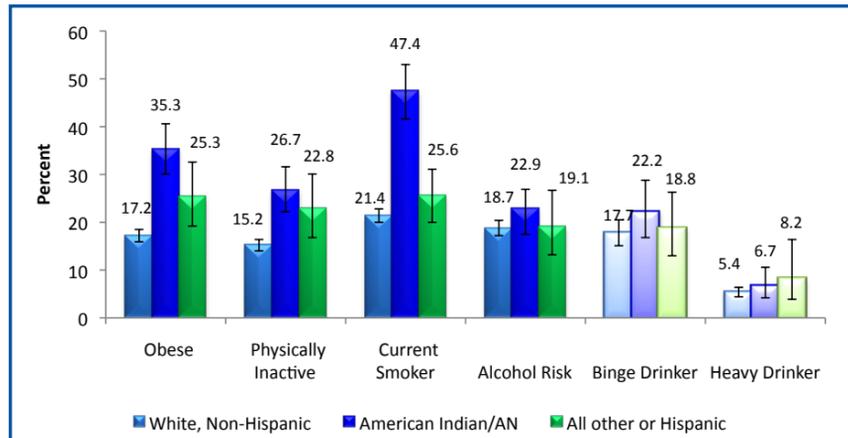


Figure 1a. Prevalence of Risk Factors of Montana Women, Aged 18-44 by Racial/Ethnic Group, BFRSS 2004-2009.

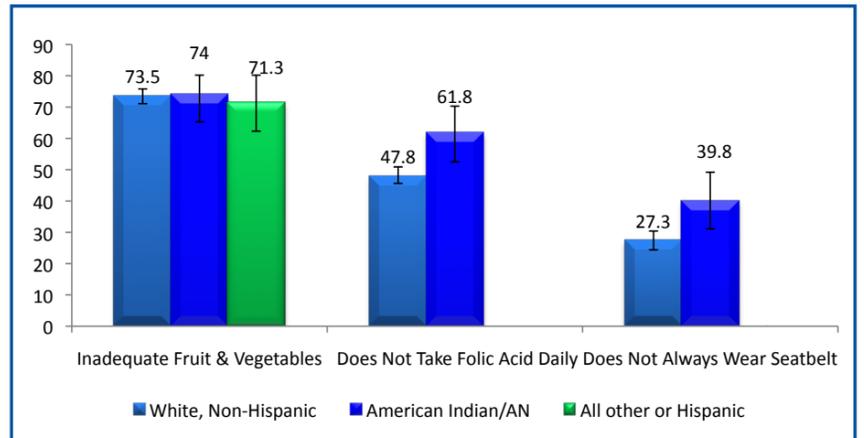


Figure 1b. Prevalence of Other Risk Factors of Montana Women, Aged 18-44 by Racial/Ethnic Group, BFRSS 2004-2009.

had significantly higher rates of obesity (BMI ≥ 30 kg/m²). In addition, more than one-quarter (27%) of American Indian/Alaska Native women report physical inactivity (other than their regular job, no participation in any physical activities or exercises such as running, calisthenics, golf, gardening or walking for exercise in the past 30 days) compared to White, non-Hispanic women (15%). On the whole about one in three women (34% to 37%) in this age group do NOT meet the

recommended guidelines in either moderate physical activity defined as 30 or more minutes per day for 5 or more days per week, or vigorous activity defined as 20 or more minutes per day on 3 or more days per week.

About one in five women aged 18-44 are at risk for alcohol misuse, that is, more than 18% reporting binge drinking (4 drinks in one sitting within the past 30 days) and about 6% report heavy drinking (more than

one drink per day). However, no statistically significant differences are found among the racial groups for heavy drinking, binge drinking or alcohol risk.

Examining other health risk behaviors for women in this age range reveals that regardless of race/ethnicity, about three-fourths (74%) of women 18-44 have inadequate fruit and vegetable consumption with the majority of women eating

less than the recommended five fruit or vegetable servings per day (see Figure 1b). Since approximately 50% of all pregnancies in the United States are unplanned⁷, the health of all women of reproductive age is of particular concern. Preconception health is important for fetal development and for giving birth to healthy babies, yet in addition to poor nutrition more than 50% of women of childbearing age report not

taking the recommended 400 mcg of folic acid per day. Further, substantially more American Indian/Alaska Native women (62%) report not meeting the recommended folic acid daily intake than White, non-Hispanic women (48%). Also, while more than one-quarter of White, non-Hispanic women do not always wear a seatbelt when in a motor vehicle, 40% of American Indian/Alaska Native women do not always wear their seatbelts.

▣ Differences in Chronic Health Conditions:

The prevalence of chronic illnesses also varies by race and ethnicity for woman of childbearing age (Table 2). More than 15% of all women in this age group report ever having asthma in their lifetimes. Women of Hispanic or other racial origins are significantly more likely to ever have asthma (22%) or to be currently asthmatic (18%) than White women (ever had asthma, 15%, and current asthmatic, 10%). Almost one in five (18%) non-pregnant women aged 18-44 report high cholesterol with no substantial differences between the racial/ethnic groups for this particular health condition.

About 10% of all women aged 18-44 report high blood pressure, 7% are hypertensive and 3% report it associated with pregnancy only. White non-Hispanic women report substantially lower prevalence estimates of high blood pressure, than American Indian/Alaska Natives (Figure 2). The prevalence of hypertension, whether including gestational HTN or not, is twice as high among American Indian/Alaska

Natives (13%) than among White non-Hispanics (6%).

For all women aged 18-44, about 5% report diabetes, evenly split between diabetes (2.5%) and gestational only diabetes (2.4%). American Indian/Alaska Native women estimates are particularly high for both diabetes (7%) and gestational only diabetes (3%). Also, for Hispanic or other racial/ethnic minorities diabetes (5%) is substantially greater than it is for White, non-Hispanic women (2%).

Table 2. Differences in Chronic Health Conditions for Montana Women 18-44 Years of Age by Race/Ethnicity, BFRSS 2004-2009

Health Indicators	All MT Women Age 18-44			White non-Hispanic		American Indian/Alaska Native*		All other Race or Hispanic**	
	UnWt. N	Wt%	95% CI	Wt%	95% CI	Wt%	95% CI	Wt%	95% CI
Chronic Diseases:									
Ever had Asthma	869	15.2	14.0 - 16.4	14.6	13.3 - 15.9	16.1	12.5 - 20.5	22.0	16.2 - 29.1
Currently have Asthma	583	10.1	9.2 - 11.2	9.5	8.5 - 10.7	10.3	7.6 - 13.8	18.2	12.7 - 25.3
Has High Cholesterol	351	17.8	15.8 - 20.1	17.6	15.4 - 20.0	16.0	10.2 - 24.1	NSD	
Hypertension	243	6.6	5.6 - 7.7	6.1	5.1 - 7.2	13.1	8.2 - 20.2	6.4	3.2 - 12.3
Gestational Hypertension only	97	3.3	2.5 4.1	3.1	2.4 4.1	4.8	2.2 9.9	3.1	1.3 7.0
Diabetes	186	2.4	2.0 - 2.8	1.8	1.4 - 2.3	7.4	5.0 - 10.8	4.5	2.5 - 7.8
Gestational Diabetes only	161	2.6	2.1 3.1	2.6	2.1 3.2	3.0	1.5 6.0	2.4	1.2 4.7

* American Indian or Alaska Native only
 ** All other non-White (including multiracial) or Hispanic
 Bolded estimates are significantly different from referent

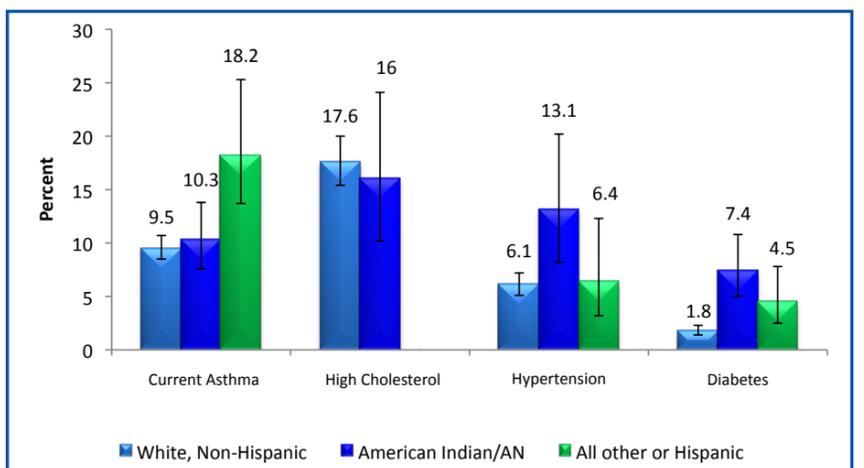


Figure 2. Prevalence of Chronic Conditions of Montana Women, Aged 18-44 by Racial/Ethnic Group, BFRSS 2004-2009.

► Differences in Health Care Access and Screenings:

One-quarter (25%) of all Montana women 18-44 years of age do NOT have health care coverage (Table 3). The percentage of uninsured women is considerably higher for American Indian women (38%) and Hispanic or other minority women (35%) compared to White, non-Hispanic women (23%). Some may assume that all American Indians/Alaska Native women can access care from the Indian Health Service, but in order to be eligible for IHS care, American Indians/Alaska Natives must be members of federally-recognized tribes or be recognized by the community in which they live as American Indian/Alaska Native.⁸ In addition, access to IHS facilities is limited due to geography, funding and staffing of health care providers. Only about 16% of American Indians/Alaska Natives rely on IHS as their sole source of health care in the United States.⁹

Additionally, more than twenty percent of women could not see a doctor due to cost in the prior year. Even for women who are insured, about one in ten (9%) could not see a doctor due to cost in the past year. This is an indication of underinsurance for a subpopulation of Montanans who are insured but still cannot cover the financial costs of services. Also, no personal doctor is reported for

more than one-quarter (28%) of all 18-44 year old women and American Indian/Alaska Native women (38%) report a significantly higher percentage of having no personal health care provider (Figure 3).

Early detection is critical for effective treatment and management of several

illnesses that affect women. Examining selected personal health screenings for 18-44 year old women does reveal that there are few differences between white and minority women. *Women of all races fall short of maximizing use of available screening tests.* Overall, two out of five women (42%) in this age group did

not have a routine check-up in the past year and more than one-third (35%) did not visit a dentist in the past year. Across all racial categories, about 7% of women never had a Pap test to test for cancer of the cervix. Though reasons for differences cannot be determined from these data, White, non-Hispanic

women (54%) are significantly more likely to have NEVER been tested for Human Immunodeficiency Virus (HIV), the virus that causes AIDS, than women of minority racial/ethnic groupings (≤49%). Overall, about 50% of 18-44 year old women have never had an HIV test.

Table 3. Differences in Health Care Access and Screenings for Montana Women 18-44 Years of Age by Race/Ethnicity, BRFSS 2004–2009

Health Indicators	All MT Women Age 18–44			White non-Hispanic		American Indian/Alaska Native*		All other Race or Hispanic**	
	UnWt. N	Wt%	95% CI	Wt%	95% CI	Wt%	95% CI	Wt%	95% CI
Health Care Access and Screenings:									
No Health Care Coverage	1426	24.7	23.2 - 26.3	22.9	21.3 - 24.5	38.4	33.1 - 44.0	34.6	26.4 - 43.8
Could not Afford to see Dr. due to Cost	1212	19.7	18.4 - 21.0	19.0	17.7 - 20.5	20.4	16.4 - 25.1	26.2	20.1 - 33.4
Underinsured	591	9.2	8.3 - 10.1	8.9	8.0 - 9.9	10.2	7.4 - 13.9	11.0	7.8 - 15.3
No Personal Doctor	1548	28.2	26.6 - 29.9	27.0	25.3 - 28.7	38.2	32.7 - 44.0	34.0	25.9 - 43.2
No Routine Check-up in Past Year	2023	41.6	39.7 - 43.5	42.3	40.3 - 44.3	35.9	29.9 - 42.2	37.3	28.6 - 47.0
No Dental Visit in Past Year	1072	34.9	32.6 - 37.1	34.1	31.7 - 36.6	34.6	27.5 - 42.4	NSD	-
Never Had a Pap Test	108	7.3	5.8 - 9.1	7.3	5.7 - 9.4	7.3	4.3 - 12.2	5.7	2.0 - 15.0
Never Tested for HIV	2912	53.1	51.4 - 54.9	54.1	52.2 - 56.0	45.5	39.6 - 51.4	48.6	40.3 - 57.0

* American Indian or Alaska Native only
 ** All other non-White (including multiracial) or Hispanic
 Bolded estimates are significantly different from referent

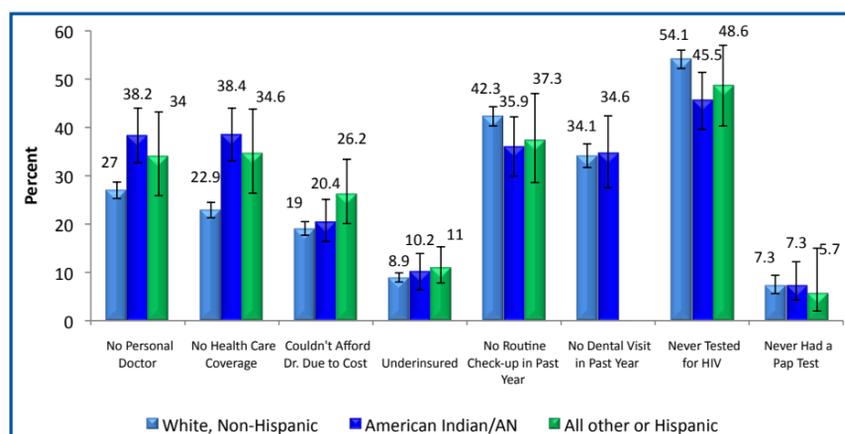


Figure 3. Prevalence of Health Care Access and Screenings of Montana Women, Aged 18–44 by Racial/Ethnic Group, BRFSS 2004–2009.

► Discussion and Implications:

Research into understanding how behavior affects health has improved dramatically in the last 20 years and many risk factors that contribute to disease and death are known to be modifiable. Preventive practices can be important safeguards against health problems and minority women have lower rates of health promoting practices. As examined in this report, minority women are *less likely* to maintain a healthy weight, not to smoke, and to engage in physical activity than White women aged 18-44.¹⁰ All of the health risk behaviors discussed in this report are associated with leading causes of death and are modifiable. Meeting the recommended guidelines in each area would substantially improve the health status of Montana women. This would reduce the risk of chronic diseases and other adverse health outcomes.

However, while these health practices are implemented at an individual level, they are often constrained or shaped by the social and physical environments.¹¹ At the community and cultural levels, strategies are being developed and improved for modifying the behavioral norms and the built environments for whole populations of people, such as women and girls, in order to improve long-term health outcomes.¹² For, example, proactive programs and policies that promote healthy environments can remove some obstacles or barriers to good health. Also, culturally-based community action plans to prevent or control disease are also proving to be effective public health policy.^{13,14} Investigators are examining key cultural forces that underlie diseases, such as attitudes towards self-determination, fatalism, or hopelessness, through visual messaging, storytelling, use of indigenous languages, and other mechanisms of emotional and education support, in order to help community coalitions create a common vision of making people healthier.¹⁵

In addition, there is also substantial evidence that the underlying racial and ethnic inequities in health and health care extend beyond individual and economic factors. In a large-scale analysis of racial and ethnic disparities, the Institute of Medicine concluded that "...evidence suggests that bias, prejudice, and stereotyping on the part of healthcare providers may contribute to the differences in care."¹⁶ While this does not account for all race/ethnic disparities that women face, cultural competency is an area that providers and other health care professionals can address to close the gap in health status and health care access. The goal of cultural competency, simply put, is to acknowledge, understand, respect, and accommodate differences between providers and consumers of health care. Diversity exists both within and across the broad categories of racial and ethnic groups. Additional research is needed to assist providers and public health workers in understanding this diversity and its implications for clinical practice and public health program planning and implementation.¹⁷ However, there are important steps that health care providers can take to improve the current and long-term health of women, regardless of their race or ethnicity, please see the recommendations inset on the following page for these action steps.

National and state initiatives to eliminate racial and ethnic disparities in health and health care continue to evolve. Initiatives that cross institutes, such as those in the National Institutes of Health are supporting research on common determinants and risk factors that underlie multiple diseases and on interventions for those determinants that will decrease the occurrence or progression of diseases in women.⁵ CDC created Racial and Ethnic Approaches to Community Health (REACH) Across the U.S. a national, multilevel program that supports 40 communities throughout the nation to

demonstrate that health disparities can be reduced and the health status of groups most affected by health inequities can be improved; several communities are beginning to see promising results.¹⁸

At the state level, expansion of health care coverage, one modifiable behavior with significant consequences for the health of women and children, is occurring through expansion of Healthy Montana Kids program—a free or low cost health coverage plan for children through the age of nineteen. The Montana Special Supplemental Nutrition Program for Women, Infants and Children (WIC) exists to meet the nutritional needs of its constituents and improve the health and well-being of Montanans. Specific health programs, such as the American Indian Screening Initiative, which is a collaborative effort

between Tribal and State/Federal governments to increase breast and cervical health screening services to American Indian women, are designed to address race and ethnic disparities in health and health care of women.

The success of these initiatives and programs will require broad-based efforts that address difficult societal, economic, and cultural issues. Regardless of approach, health data on race and ethnic minorities and women are needed to track trends and examine program and policy effects on disparities. In this regard, BRFSS continues to collect and disseminate data to help in the efforts to improve health and reduce disparities for all Montanans.

Recommended Action Steps to Improve Health:

- ▶ Health care professionals should assess patients for tobacco use, provide counseling and in many instances prescribe cessation medications. **Tobacco users should also be referred to the Montana Quit Line (1-800-QUITNOW) for support in quitting.**
- ▶ Health care professionals should recommend that patients and their children are **always appropriately restrained while driving in a motor vehicle.**
- ▶ Health care professionals treating patients with hypertension and/or diabetes should **recommend that these patients engage in lifestyle changes including diet and physical activity** to improve glycemic control, and control of blood pressure and lipid levels. Many of these patients should be referred to resources in the community (e.g. dietitian) to support these lifestyle changes. Additionally, **patients with hypertension and/or diabetes should receive self-management education** to provide them with the skills to manage these conditions and also be prescribed appropriate medications to improve glycemic and blood pressure control.
- ▶ For further information on important control measures for diabetes, hypertension, cardiovascular disease, asthma, cancer or other chronic health conditions, see the following website: <http://www.dphhs.mt.gov/PHSD/chronic-disease/chronic-disease-index.shtml>

Survey Limitations:

The BRFSS relies on self-reported data. This type of survey has certain limitations: many times, respondents have the tendency to underreport some behaviors that may be considered socially unacceptable (e.g., smoking, heavy alcohol use); conversely, respondents may over report behaviors that are desirable (e.g., physical activity, nutrition).

Background:

The Montana Behavioral Risk Factor Surveillance System (BRFSS) has been collecting and reporting state-specific, population-based estimates of health-related data since 1984. The purpose of this statewide telephone survey of Montana residents aged 18 and older is to gather information regarding personal health risk behaviors, selected medical conditions, and the prevalence of preventive health care practices among Montana adults. These BRFSS results have been used by public health agencies, academic institutions, non-profit organizations, and others to develop programs that promote the health of Montana adults and reduce risks that contribute to the leading causes of death in the state. A full set of Montana yearly questionnaires and health indicators can be found on the Department of Public Health and Human Services (DPHHS) BRFSS database query system

website at www.brfss.mt.gov. The CDC website (www.cdc.gov/brfss) also provides national, state, and some local area prevalence estimates of health indicators, as well as access to downloadable datasets for further analyses.

Acknowledgements:

The Montana BRFSS Office staff gratefully acknowledges the efforts of the Montana residents who took the time to respond to the telephone interviews conducted for this system. The Montana BRFSS is conducted through a Cooperative Agreement between the Centers for Disease Control and Prevention and the Montana Department of Public Health and Human Services. This publication was supported by CDC Cooperative Agreement #5U58DP001977-02. For questions, contact Dr. Joanne Oreskovich, MT BRFSS Director (444-2973). The contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC. XXXX copies of this public document were published at an estimated cost of \$XX per copy, for a total cost of \$XX, which includes printing and distribution.

Suggested citation:

Oreskovich J. & Zimmerman H, Disparities in the Health of Women Aged 18-44 by Race/Ethnicity: Montana BRFSS 2004-2009 Findings. *Montana Fact/ors*. No.3: 2010, DPHHS, Helena, MT.

Endnotes:

- 1 Starfield B. Improving equity in health: a research agenda. *Int J Health Serv*. 2001;31:545-566.
- 2 Braveman PA, Egerter SA, Cubbin C, Marchi KS, An approach to Studying Social Disparities in Health and Health Care, *Am J Public Health*, 2004;94:2139-2148.
- 3 Krieger N, Williams DF, Moss NE. Measuring social class in US public health research: concepts, methodologies, and guidelines. *Annu Rev Public Health*. 1997;18:341-378.
- 4 LaVeist TA (ed.) *Race, ethnicity and health: a public health reader*, John Wiley & Sons, CA: 2002.
- 5 Institute of Medicine, Committee on women's health research, *Women's Health Research: Progress, Pitfalls, and Promise*, National Academies Press, 2010.
- 6 U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With understanding and improving health and objectives for improving health. 2 vols. Washington (DC): U.S. Government Printing Office; 2000.
- 7 Finer LB, Henshaw SK, Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001, *Perspectives on Sexual Reproductive Health*, 2006;38:90-96.
- 8 U.S. Department of Health and Human Services, Indian Health Services. About IHS. (Accessed February 4, 2010 at http://www.ihs.gov/PublicInfo/PublicAffairs/Welcome_Info/IHSintro.asp).
- 9 Zuckerman S, Haley J, Roubideaux Y, Kukku-Blanton M. Health service access, use, and insurance coverage among American Indians/Alaska Natives and Whites: what role does the Indian Health Service play? *American Journal of Public Health*, 94(1),53-59, 2004.
- 10 Shi L, Stevens GD, Lebrun LA, Faed P, and Tsai J. Enhancing the measurement of health disparities for vulnerable populations. *J Public Health Management Practice*; November (Suppl), S45-S52, 2008.
- 11 Adler N, Newman K. Socioeconomic disparities in health: pathways and policies. *Health Affairs*. 21:60-76, 2002.
- 12 Babey S. et al, Designed for disease; the link between local food environments and obesity and diabetes. CA Center for public health advocacy, PolicyLink, and UCLA center for health policy research, 2008.
- 13 Ramah Band of Navajo Indians, Albuquerque Area Indian Health Board. *Healthy Navajo Women: Walk in Beauty* [video] *Prev Chronic Dis* [www.cdc.gov/pccd/issues/2006/jul/06_0052.htm] 2006 July. Accessed [October 4, 2010].
- 14 LaRowe TL, Wubben DP, Cronin Ka, Vannatter SM, Adams K. Development of a culturally appropriate, home-based nutrition and physical activity curriculum for Wisconsin American Indian Families. *Prev Chronic Dis* 2007;4(4). www.cdc.gov/pccd/issues/2007/oct/070018.htm. Accessed [October 4, 2010]
- 15 Bachar JJ, Lefler LJ, Reed L, McCoy T, Bailey R, Bell R. Cherokee choices: a diabetes prevention program for American Indians. *Prev Chronic Dis* [http://www.cdc.gov/pccd/issues/2006/jul/05_0221.htm]. 2006 July. Accessed [October 4, 2010]
- 16 Smedley B, Stith A, and Nelson A, eds. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, Washington DC: Institute of Medicine, National Academies Press, 2002.
- 17 Betancourt JR, Green AR, Carrillo JE, Park ER. Cultural competence and health care disparities: key perspectives and trends. *Health Aff (Millwood)* 2005;24(2):499-505.
- 18 U.S. Department of Health and Human Services, REACH U.S.: Finding solutions to health disparities, at a glance 2010. [Accessed October 4, 2010 at: <http://www.cdc.gov/reach/>].