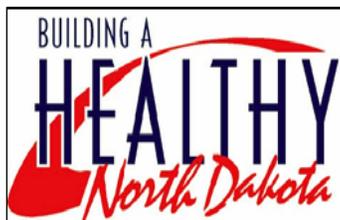




North Dakota: Williams County Behavioral Risk Factors Report: 2000-2006



July 2007

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INTRODUCTION

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey conducted across the country. It is conducted continuously throughout each year as a collaborative effort between the U.S. Centers for Disease Control and Prevention (CDC) and each state's department of health. The survey collects information on a vast array of health conditions, health-related behaviors, and risk and protective factors about individual health. A detailed description of the BRFSS survey can be found at the following website: www.cdc.gov/brfss/.

This report summarizes results from the Williams County, N.D., BRFSS survey for 2000 to 2006. For each topic discussed, the report provides a summary of the findings and graphs of selected findings. The main findings are summarized with bulleted statements that highlight data found in the graphs. The graphs for each topic draw attention to important findings that also may be mentioned in the bulleted statements. Tables on 11 county health indicators are shown detailing common demographic items and specific health topics for selected responses at the North Dakota Department of Health website: www.ndhealth.gov/brfss/CountyLevelSummaries/.

The report also compares Williams County data to the national goals and target health objectives from Healthy People 2010, the nationwide health promotion and disease prevention agenda, when available. The report notes when a topic is one of the 10 Leading Health Indicators identified in Healthy People 2010. Leading Health Indicators are described as “the major public health concerns in the United States and were chosen on their ability to motivate action, the availability of data to measure their progress, and their relevance as broad public health issues.” In addition to the 10 Leading Health Indicators, there are additional topics outlined in Healthy People 2010; each has an overall goal listed, as well as specific objectives to help achieve that goal. The Healthy People 2010 goals and objectives are reported in the graphs when applicable. The report notes when Williams County data met the national targets.

The purpose of this report is to highlight the behavioral risk characteristics of the Williams County residents in order to develop policy and measure progress toward state and national health objectives. The county-level data give estimates of health conditions and risk behaviors among Williams County adult residents.

KEY FINDINGS

Behavior and lifestyle play an important part in determining our health status and life expectancy. Almost three of four deaths in North Dakota adults were attributable to chronic disease or injury. Lifestyle and behavioral factors that affect health include tobacco and alcohol use, physical activity, nutrition, and preventive health services use. Illness and death could be decreased substantially if better control of these behaviors were achieved.

The Behavioral Risk Factor Surveillance System from 2000 to 2006 was used to determine the prevalence of certain diseases and health behaviors within Williams County, N.D. These estimates were then compared to those of the state and the country. Finally, we identified the gaps in how the county and the state are performing to achieve the Healthy People 2010 objectives.

We found that the prevalence of some conditions and behavioral risks is lower or better in Williams County than in the state of North Dakota. For example:

- Percentage who reported not having one or more individuals they would consider to be their personal doctor(s):
18.6 percent vs. 23.7 percent
- Percentage who fail to meet the recommended level of physical activity: 41.0 percent vs. 49.9 percent
- Percentage of females who have not had a mammogram in the last two years: 21.6 percent vs. 24.5 percent

On the other hand, the prevalence of some conditions and behavioral risks is higher or worse in Williams County than in the state of North Dakota:

- Percentage who are current smokers: 24.9 percent vs. 21.0 percent
- Percentage of people age 50 and older who have not never had a sigmoidoscopy or a colonoscopy: 59.6 percent vs. 44.8 percent
- Percentage of people age 65 and older who have never received a pneumococcal vaccine: 35.2 percent vs. 31.1 percent

For many behavioral risks, opportunity and resources exist to improve and reach the Healthy People 2010 objectives.

Williams County Demographic Characteristics, 2000

- **Total Population:** 19,761
- **Gender:** Approximately 49.0 percent are male and 51.0 percent are female
- **Age:** Median age is 39.8; 16.5 percent are 65 or older
- **Race:** The majority (92.9 percent) are white, 4.4 percent are American Indian, 0.2 percent are Asian, and 0.1 percent are African-American
- **Education:** The majority (82.5 percent) of people 25 or older are high school graduates, and 16.5 percent have a bachelor's degree or higher
- **Income:** Median household income is about \$31,491; 11.9 percent of residents are below the poverty level

Known Major Risk Factors: Williams County

- **Current smokers:** 24.9 percent of the residents are smokers
- **Binge drinkers:** 22.6 percent of the residents are binge drinkers
- **Obesity:** 26.1 percent of the residents are obese

North Dakota Demographic Characteristics, 2000

- **Total Population:** 634,366
- **Gender:** Approximately 49.9 percent are male and 50.1 percent are female.
- **Age:** Median age is 36.2; 14.7 percent are 65 or older.
- **Race:** The majority (92.4 percent) is white, 4.9 percent are American Indian, 0.6 percent are Asian and 0.6 percent are African-American.
- **Education:** The majority (83.9 percent) of people 25 or older are high school graduates, and 22 percent hold a bachelor's degree or higher.
- **Income:** Median household income is about \$34,604; 11.9 percent of residents are below the poverty level.

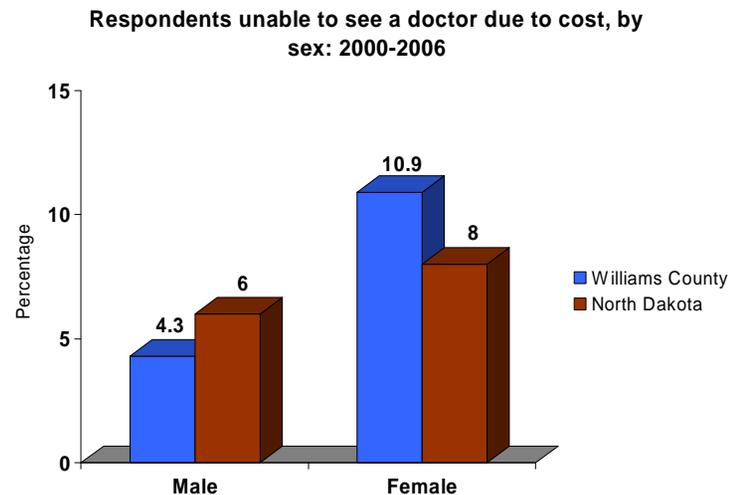
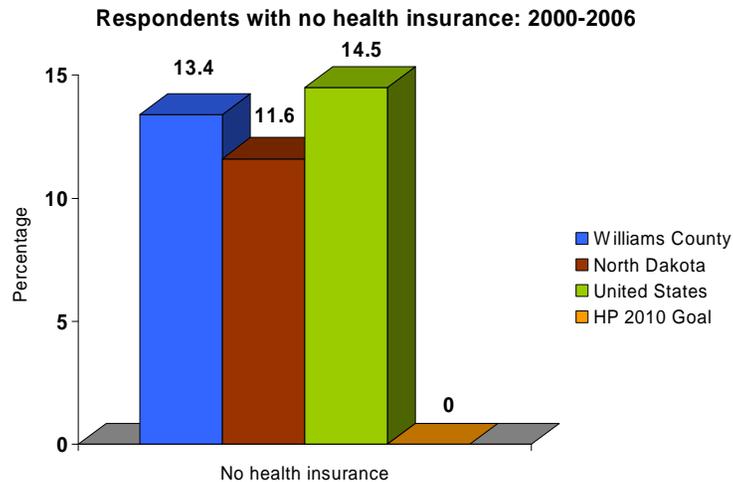
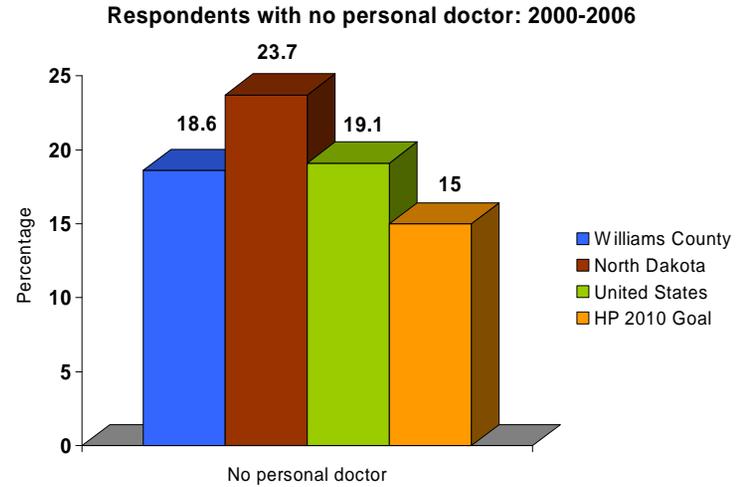
Known Major Risk Factors: North Dakota

- **Current smokers:** 20.5 percent of the residents are smokers
- **Binge drinkers:** 21.3 percent of the residents are binge drinkers
- **Obesity:** 23.8 percent of the residents are obese

Health Care Access: Insurance, Cost, and Personal

- The percentage of respondents who reported being without health insurance appears higher in Williams County than in North Dakota but lower than in the U.S.
- The percentage of respondents who reported having no personal doctor appears lower in Williams County than in North Dakota
- The percentage of respondents who reported being unable to see a doctor due to medical costs appears lower among Williams County males and higher among Williams County females than in North Dakota.

	Williams (%)	North Dakota (%)
No health insurance or other health-care coverage	13.4	11.6
Do not have one or more individuals considered to be a personal health-care provider	18.6	23.7
Unable to see a doctor due to cost one or more times during the past 12 months	7.3	7.1

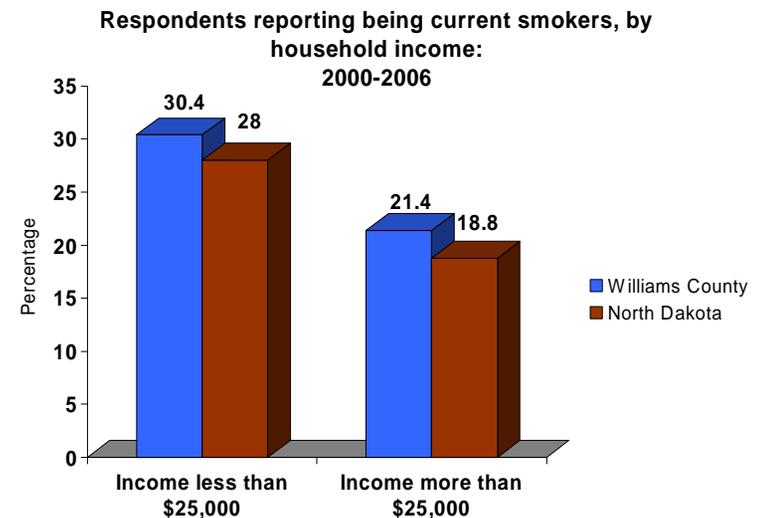
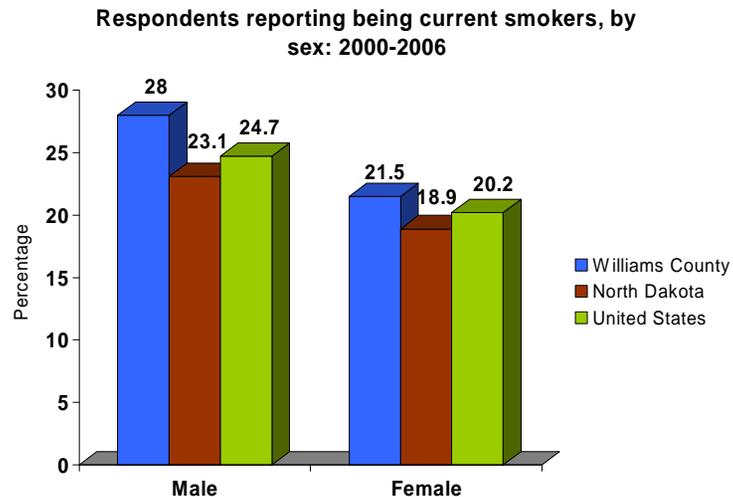
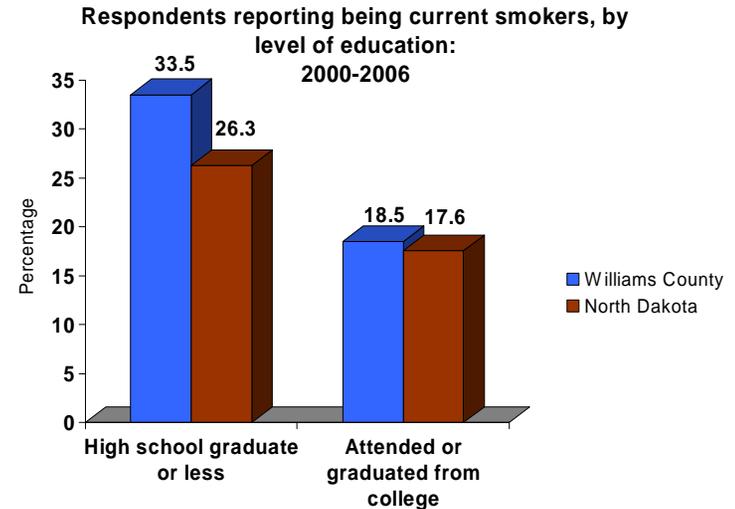


For definitions, see page 16

Current Smokers by Education, Sex, and Income

- The percentage of respondents who reported being current smokers appears to be higher among both males and females of Williams County than in North Dakota.
- The percentage of respondents who reported being current smokers among persons with high school education or less is higher in Williams County than in North Dakota.

	Williams (%)	North Dakota (%)
Prevalence of current smokers	24.9	21.0
Prevalence of smoking among high school graduates or less	33.5	26.3
Prevalence of smoking among individuals reporting household income less than \$25,000 per year	30.4	28.0



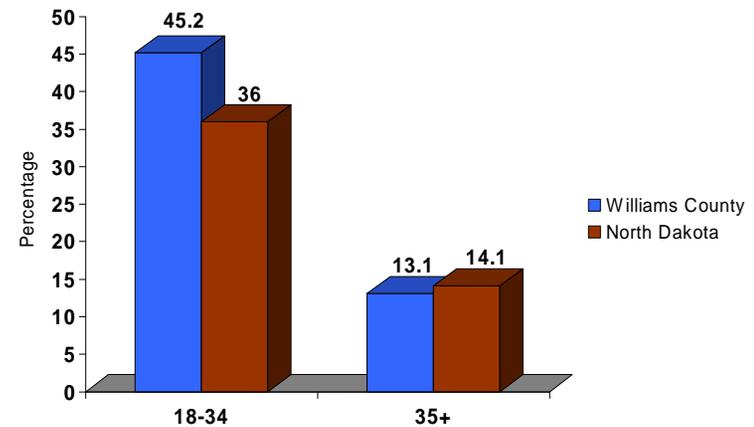
For definitions, see page 16

Binge Drinking by Age, Sex, and Income

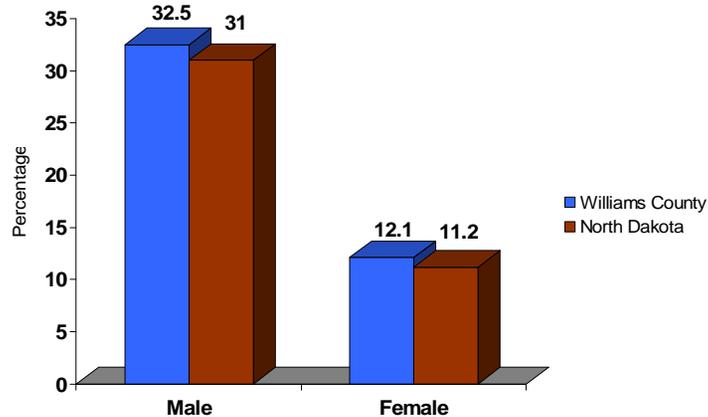
- The percentage of respondents reporting binge drinking was similar in Williams County to North Dakota for males and females.
- The percentage of respondents who reported being binge drinkers among individuals between 18 and 34 years of age appears to be higher in Williams County than in North Dakota.
- The percentage of respondents who reported being binge drinkers among individuals with incomes below \$25,000 appears lower in Williams County than in North Dakota.

	Williams (%)	North Dakota (%)
Prevalence of binge drinking	22.6	20.9
Prevalence of binge drinking among individuals between the ages of 18 and 34	45.2	36.0
Prevalence of binge drinking among individuals with incomes below \$25,000	21.8	21.4

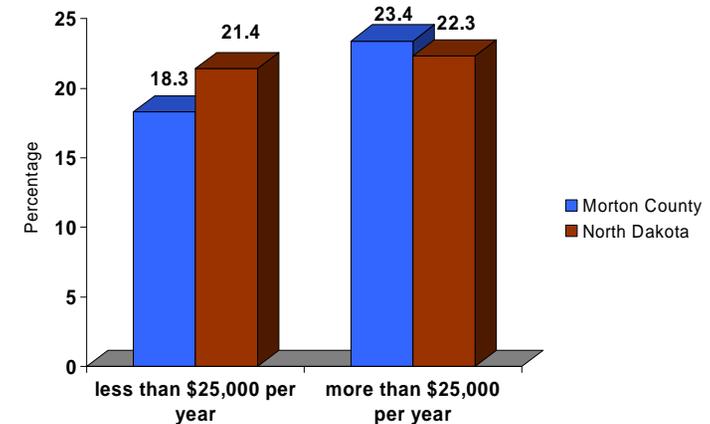
Respondents reporting binge drinking, by age:
2000-2006



Respondents reporting binge drinking, by sex:
2000-2006



Respondents reporting binge drinking, by income:
2000-2006

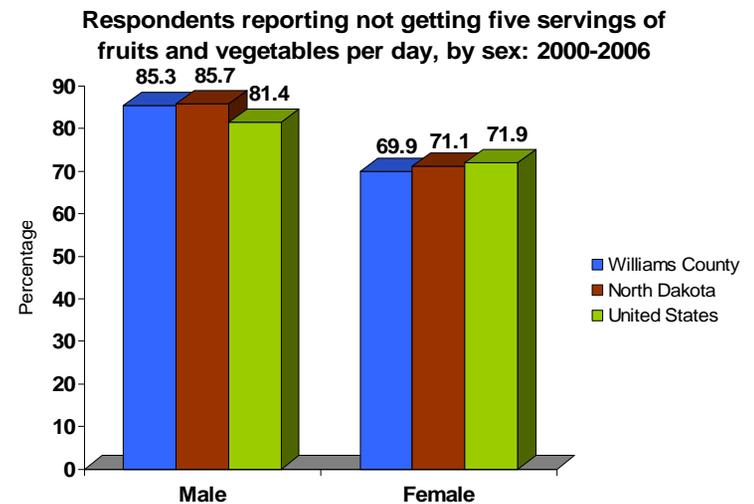
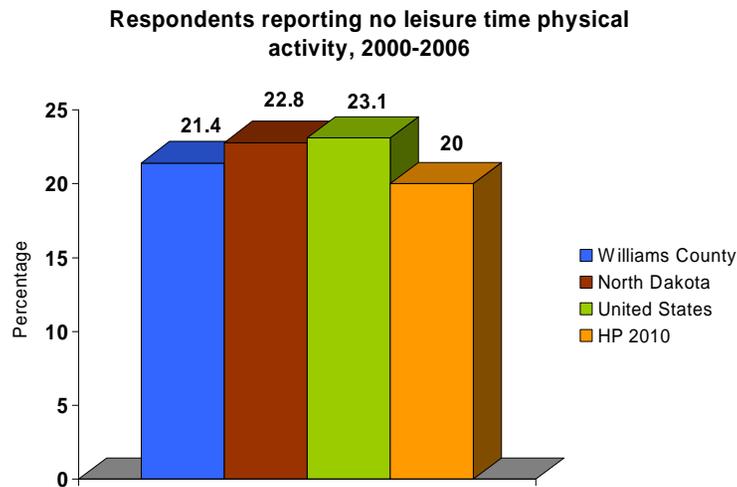
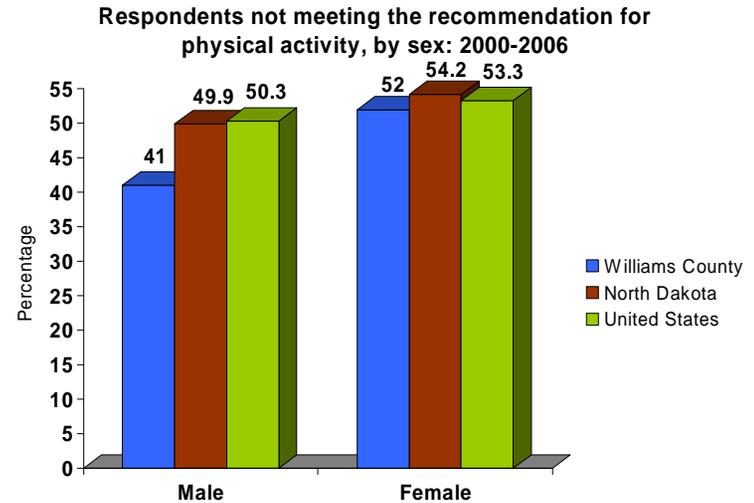


For definitions, see page 16

Physical Activity and Nutrition

- The percentage of respondents reporting no leisure time physical activity and fewer than five fruits and vegetables per day appears similar for Williams County and North Dakota.
- The percentage of male respondents who reported not meeting the recommendations for physical activity appears to be lower in Williams County than in North Dakota or the United States.

	Williams (%)	North Dakota (%)
No leisure-time physical activity	21.4	22.8
Did not meet the recommendations* for moderate or vigorous physical activity	46.4	52.1
Did not eat five or more servings of fruits and vegetables per day	77.8	78.3

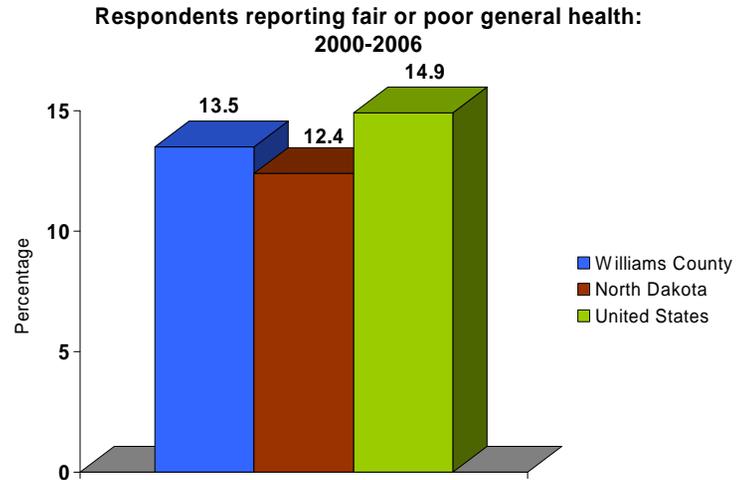
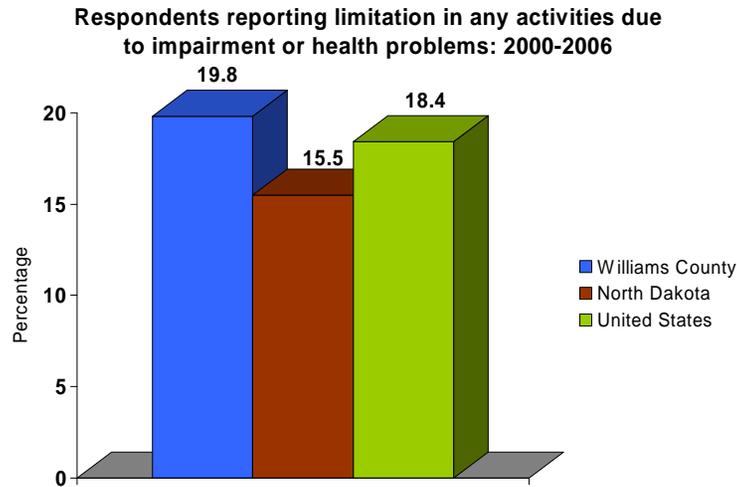
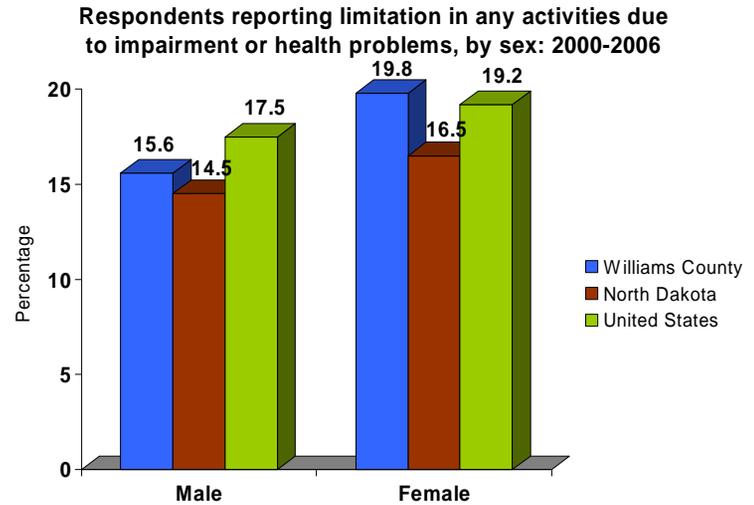


For definitions, see page 16

General Health and Quality of Life

- The percentage of respondents who reported limitations in activities due to impairment or health problems appears to be higher in Williams County than in North Dakota.
- The percentage of respondents who reported having fair or poor general health appears to be similar in Williams County to North Dakota.

	Williams (%)	North Dakota (%)
Limitation in any activities due to impairment or health problem	19.8	15.5
General health fair or poor	13.5	12.4

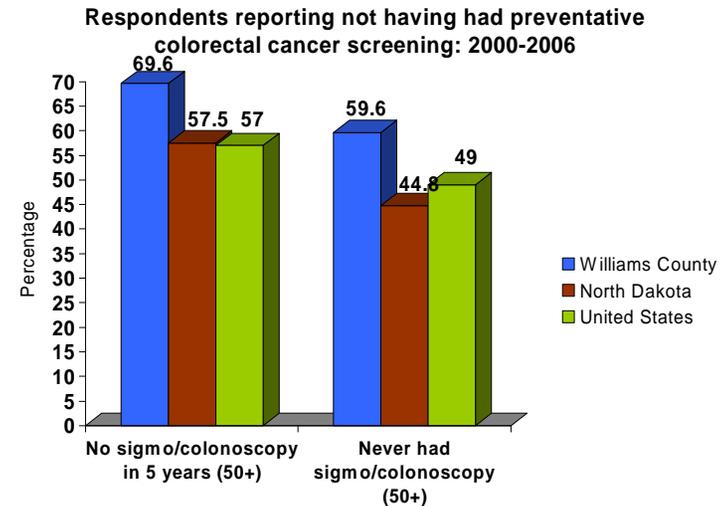
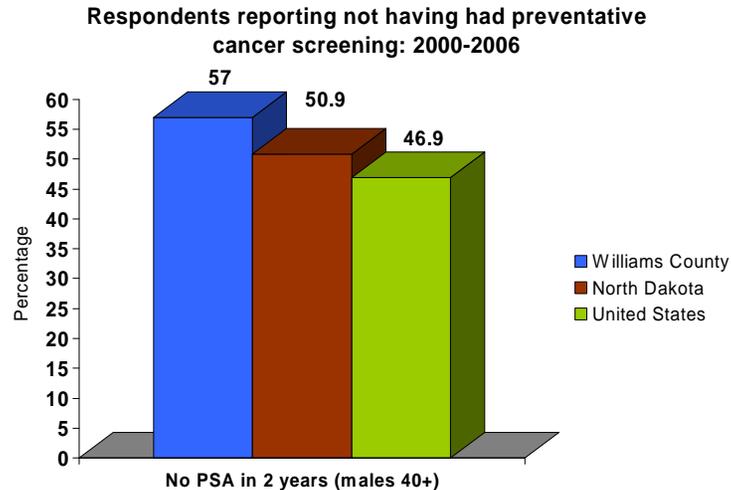
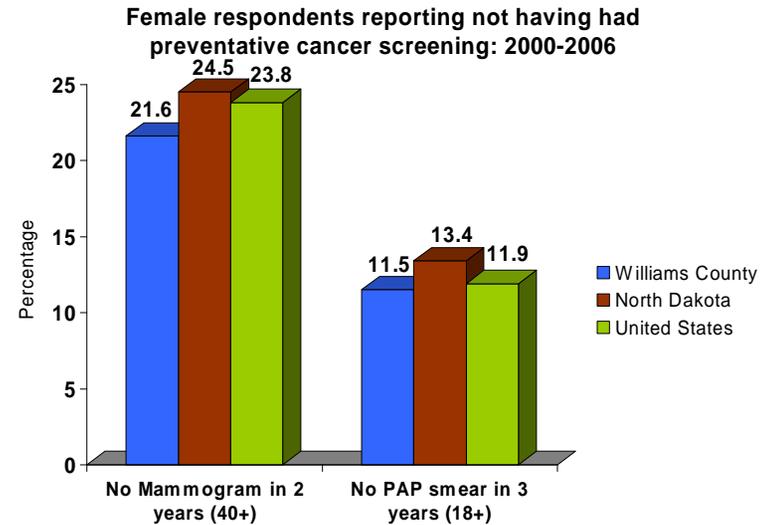


For definitions, see page 16

Preventive Cancer Screenings: Colorectal, Prostate and Cervix

- The percentage of respondents age 50 or older who reported never having had a sigmoidoscopy or colonoscopy appears to be greater in Williams County than in North Dakota.
- The percentage of male respondents age 40 or older who reported not having had a PSA in the last two years appears to be greater in Williams County than in North Dakota.

	Williams (%)	North Dakota (%)
Never had a sigmoidoscopy or colonoscopy, age 50 and older	59.6	44.8
Have not had a PSA test within the last two years, men age 40 and older	57.0	50.9
Women 18 and older who have not had a PAP smear within the last three years	11.5	13.4



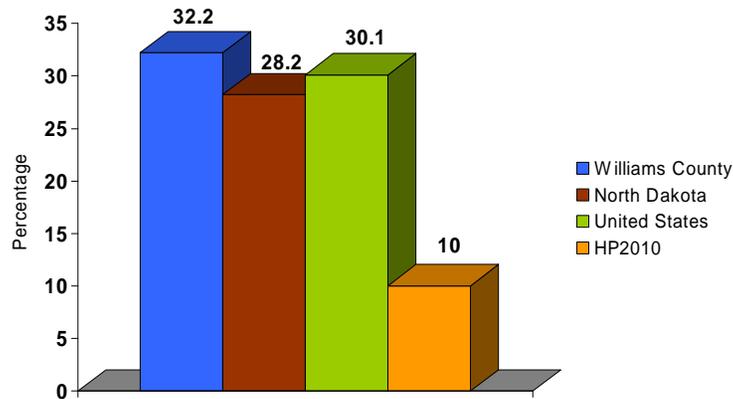
For definitions, see page 16

Immunization: Influenza and Pneumococcal Vaccines

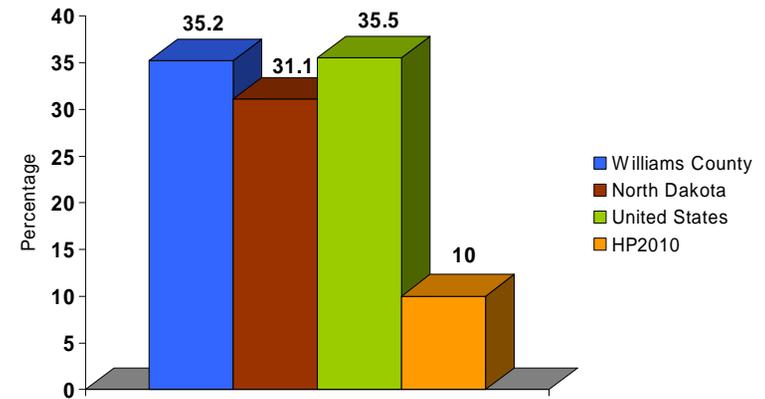
- The percentage of respondents age 65 and older who have not received an influenza vaccination within the last year appears to be higher in William County than in North Dakota.
- The percentage of respondents age 65 and older who have never received a pneumococcal vaccination appears to be higher in William County than in North Dakota.

	Williams (%)	North Dakota (%)
Adults 65 and older who did not have an influenza vaccine within the past year	32.2	28.2
Adults 65 and older who have never had a pneumococcal vaccination	35.2	31.1

Respondents ages 65+ who did not get an influenza vaccine within the past year: 2000-2006



Respondents ages 65+ who have never had a pneumococcal vaccine: 2000-2006



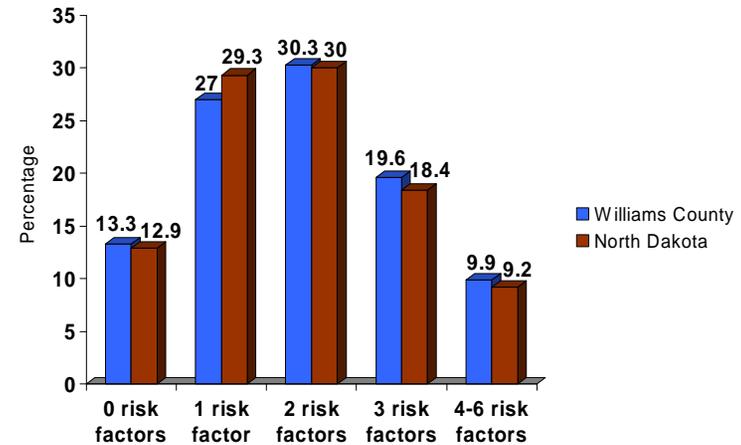
For definitions, see page 16

Risk Factors and Disease Prevalence

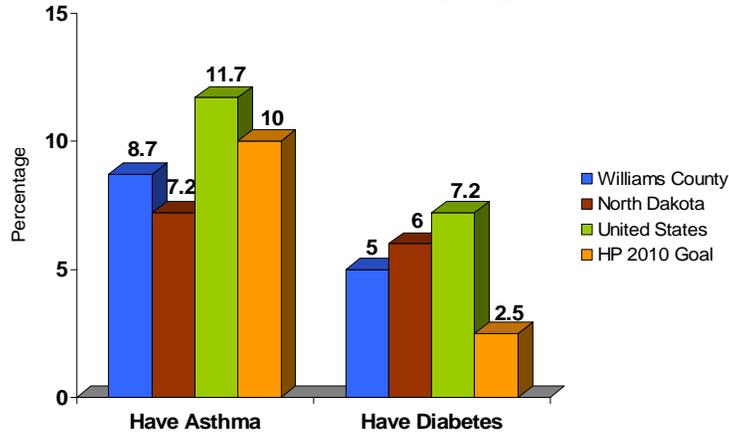
- The percentage of respondents who reported having asthma or diabetes appears to be lower in Williams County than in the United States.
- The percentage of respondents who reported having arthritis appears to be higher in Williams County than in either North Dakota or the United States

	Williams (%)	North Dakota (%)
Respondents who were told that they had diabetes – except during pregnancy	5.0	6.0
Respondents who reported heart attack, heart disease, or stroke	8.9	7.2
Respondents who were told they have some form of arthritis	32.0	27.2

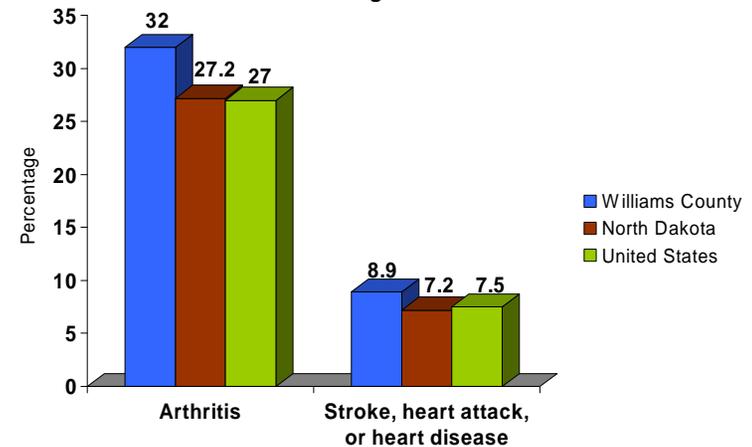
Respondents' cardiovascular risk factors*, 2000-2006



Respondents reporting current, doctor-diagnosed asthma and diabetes: 2000-2006



Respondents reporting heart attack, heart disease, and stroke and doctor diagnosed arthritis 2000-2006



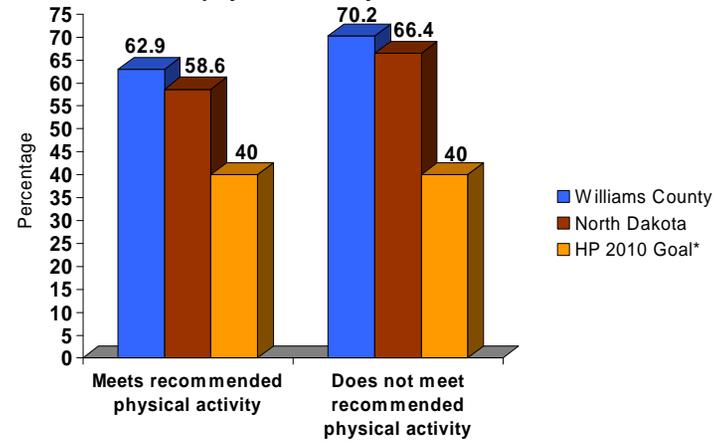
For definitions, see page 16

Body Weight: Overweight or Obese

- The percentage of male respondents who reported being overweight or appears to be lower obese in Williams County than in North Dakota.
- The percentage of people meeting the recommendations for physical activity who reported being overweight or obese appears to be higher in Williams County than in North Dakota.

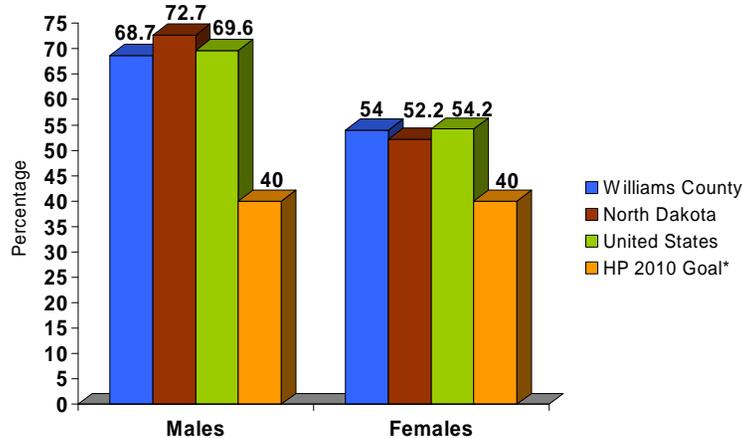
	Williams (%)	North Dakota (%)
Respondents who are obese	23.6	23.4
Respondents who overweight	38.3	39.2
Male respondents who are overweight or obese	68.7	72.7

Respondents reporting being overweight or obese, by physical activity: 2000-2006



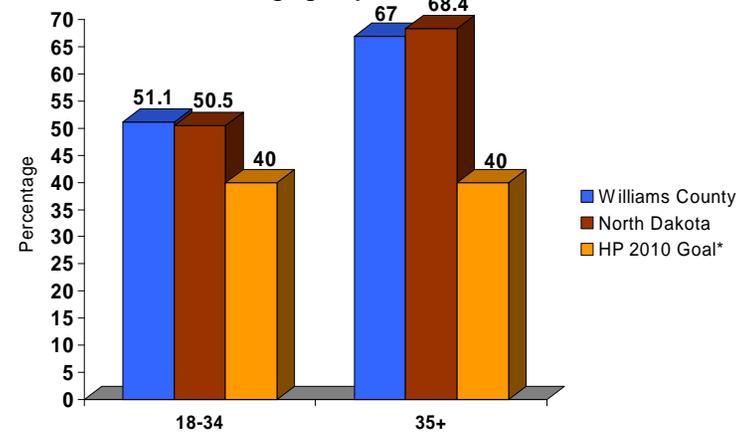
*Healthy People 2010 goal based on people of "healthy weight" which excludes not only those who are overweight and obese but also those who are underweight. Underweight individuals only make up 2-3% of the population, however, so the Healthy People 2010 goal used remains fairly accurate, though a little high, as the target for just overweight or obese individuals.

Respondents reporting being overweight or obese, by sex: 2000-2006



*Healthy People 2010 goal based on people of "healthy weight" which excludes not only those who are overweight and obese but also those who are underweight. Underweight individuals only make up 2-3% of the population, however, so the Healthy People 2010 goal used remains fairly accurate, though a little high, as the target for just overweight or obese individuals.

Respondents reporting being overweight or obese, by age group: 2000-2006



*Healthy People 2010 goal based on people of "healthy weight" which excludes not only those who are overweight and obese but also those who are underweight. Underweight individuals only make up 2-3% of the population, however, so the Healthy People 2010 goal used remains fairly accurate, though a little high, as the target for just overweight or obese individuals.

For definitions, see page 16

Risk Factor Definitions:

- No health care is defined as having no healthcare coverage, including health insurance, pre-paid plans, or government plans.
 - Unable to see doctor due to cost is defined as having a time in the last 12 months when respondent needed to see a doctor but could not because of cost.
 - No personal doctor is defined as not having one or more individuals whom the respondent thinks of as their personal doctor(s) or healthcare provider(s).
 - Current smoker is defined as having smoked more than 100 cigarettes during entire life and currently smoking every day or some days.
 - Binge drinking is defined as five drinks or more on one occasion one or more times in the last 30 days – except in 2006, when the definition changed to five or more drinks for males and four or more drinks for females on one occasion one or more times in the last 30 days.
 - No leisure-time physical activity is defined as not performing any moderate or vigorous physical activity that was not part of a job.
 - Not meeting recommended physical activity level is defined as not performing either 30 minutes of moderate physical activity five day or more a week or 20 minutes of vigorous physical activity three days or more a week.
 - Not getting five fruits and vegetables a day is defined as not consuming an average of five servings of fruits and vegetables on a usual day.
 - Limitation in activity due to impairment or health problem is defined as being limited in any way in any activities because of physical, mental or emotional problems.
 - Fair or poor general health is defined as responding to the question “Would you say that your general health is excellent, very good, good, fair, or poor?” with fair or poor.
 - Never had a sigmoidoscopy or colonoscopy is defined as being 50 or older and reporting never having had a sigmoidoscopy or colonoscopy.
 - Not had a sigmoidoscopy or colonoscopy in five years is defined as being a 50-year-old or older and not having had a sigmoidoscopy or colonoscopy within the last five years.
 - Not had a PSA test in two years is defined as being a 40-year-old or older male reporting not having a prostate specific antigen test in the last two years.
 - Not had a PAP smear in three years is defined as being a 18-year-old or older female reporting not having had a PAP smear in the last three years.
 - Not had a mammogram in two years is defined as being a 40-year-old or older female reporting not having had a mammogram in the last two years.
 - Not had an influenza shot in 12 months is defined as being a 65-year-old or older and reporting not having been administered an influenza vaccine through a shot or nasal spray in the last 12 months.
 - Not had a pneumococcal vaccine is defined as being a 65-year-old or older and reporting never having been administered a pneumococcal vaccine.
 - Doctor diagnosed diabetes is defined as the resident ever having been told by a doctor that they have diabetes except if only when pregnant.
 - Doctor diagnosed asthma is defined as the resident ever having been told by a doctor that they have asthma and reporting still having asthma.
 - Doctor diagnosed arthritis is defined as the resident ever having been told by a doctor that they have arthritis.
 - Reported heart disease, heart attack, or stroke is defined as reporting ever having had a heart attack or stroke or been told by a doctor to have heart disease.
 - Cardiovascular risk factors are defined as having diabetes, having high blood pressure, having high cholesterol, not getting enough physical activity, being overweight, and being a smoker.
- Overweight or obese is defined as having a body mass index above 24.9, as calculated by respondents’ self-reported heights and weights.

SURVEY CHARACTERISTICS

This sampling methodology produces scientifically valid and reproducible results, but must be interpreted in light of the limitations characteristic of this survey method. The survey was conducted by random telephone number selection; consequently, residents living in households without a telephone were not included. Cellular telephone numbers were not in the survey sampling, so households using only cellular service were not included. Potential respondents were not always available or willing to participate in the survey. This is a self-reporting survey, subject to recall and reporting biases. The data is weighted to account for sampling characteristics in order to make results more representative of the county population.

Data collected from the North Dakota statewide BRFSS surveys of Williams County residents between 2000 and 2006 were included. Despite the fact that analysis was conducted on six years of accumulated data, not all issues covered in the state survey could be presented for Williams County due the small sample size for those questions. It should be understood that each value presented is an estimate of the true percentage based on a scientific sample of the population.