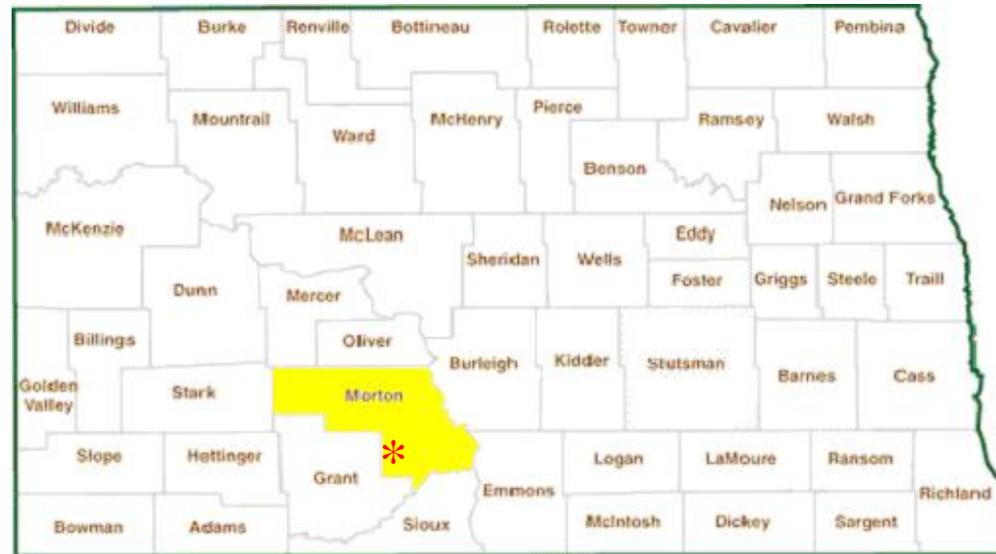




North Dakota: Morton County

Behavioral Risk Factors Report: 2000-2006



July 2007

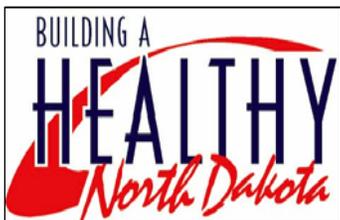


TABLE OF CONTENTS

Table of contents	1
Introduction	2-3
Key findings	4-5
Findings	6-16
Demographic characteristics of Morton County and North Dakota	6
Known major risk factors Morton County and North Dakota	6
Access to health care	7
Smoking	8
Binge drinking	9
Physical activity and nutrition	10
General health and quality of life	11
Preventive cancer screenings	12
Immunization	13
Risk factors and disease prevalence	14
Obesity	15
Risk factor definitions	16
Survey characteristics	17

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 Morton 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 Morton 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 Health People 2010 goals and objectives are reported in the graphs when applicable. The report notes when Morton County data met the national targets.

The purpose of this report is to highlight the behavioral risk characteristics of the Morton 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 Morton 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 Morton 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 Morton 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):
20.2 percent vs. 23.7 percent
- Percentage of people age 65 and older who have never had a pneumococcal vaccine: 23.4 percent vs. 31.1 percent
- Percentage of females who have not had a mammogram in the last two years: 18.1 percent vs. 24.5 percent

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

- Percentage of females who are current smokers: 22.5 percent vs. 18.9 percent
- Percentage of people age 50 and older who have never had a sigmoidoscopy or colonoscopy: 48.6 percent vs. 44.8 percent
- Percentage of people age 65 and older who have not received an influenza vaccine within the last 12 months: 32.4 percent vs. 28.2 percent

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

Morton County Demographic Characteristics, 2000

- **Total Population:** 25,303
- **Gender:** Approximately 49.8 percent are male and 50.2 percent are female
- **Age:** Median age is 37.4; 14.6 percent are 65 or older
- **Race:** The majority (95.8 percent) are white, 2.4 percent are American Indian, 0.3 percent are Asian, and 0.2 percent are African-American
- **Education:** The majority (80.2 percent) of people 25 or older are high school graduates, and 17.0 percent have a bachelor's degree or higher
- **Income:** Median household income is about \$37,028; 9.6 percent of residents are below the poverty level

Known Major Risk Factors: Morton County

- **Current smokers:** 22.8 percent of the residents are smokers
- **Binge drinkers:** 22.8 percent of the residents are binge drinkers
- **Obesity:** 26.0 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

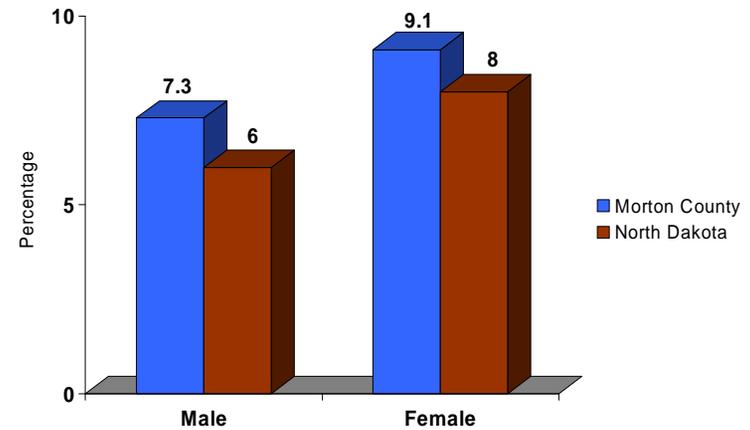
- **Current smokers:** 20.5 percent of the residents are smokers.
- **Binge drinkers:** 21.3 percent of the residents are binge drinkers.
- **Obesity:** 23.8 percent of the residents are obese.

Health Care Access: Insurance, Cost, and Personal

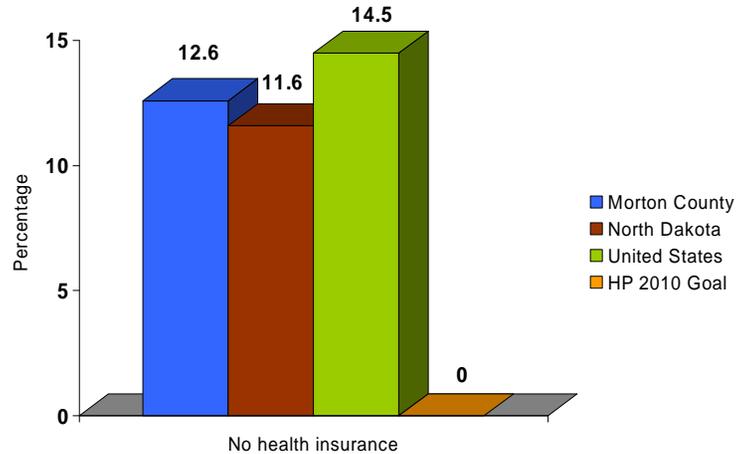
- The percentage of respondents who reported being without health insurance appears similar to North Dakota and lower than in the U.S.
- The percentage of respondents who reported having no personal doctor appears to be lower in Morton County than in North Dakota

	Morton (%)	North Dakota (%)
No health insurance or other health-care coverage	12.6	11.6
Unable to see a doctor due to cost one or more times during the past 12 months	8.2	7.1
Do not have one or more persons they consider to be their personal health-care provider	20.2	23.7

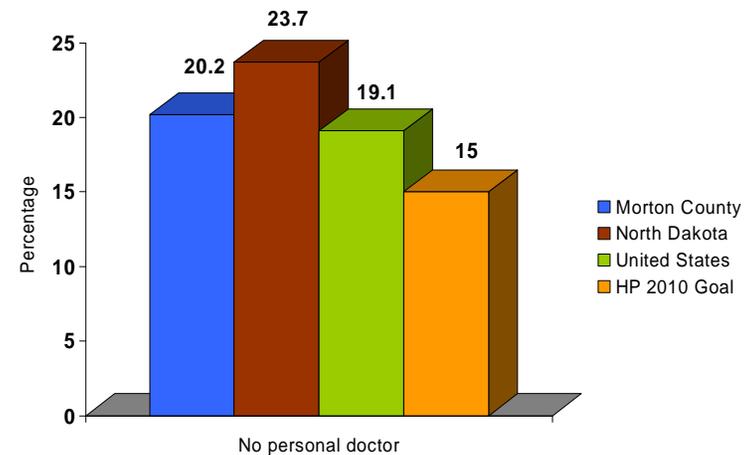
Respondents unable to see a doctor due to cost, by sex: 2000-2006



Respondents with no health insurance: 2000-2006



Respondents with no personal doctor: 2000-2006

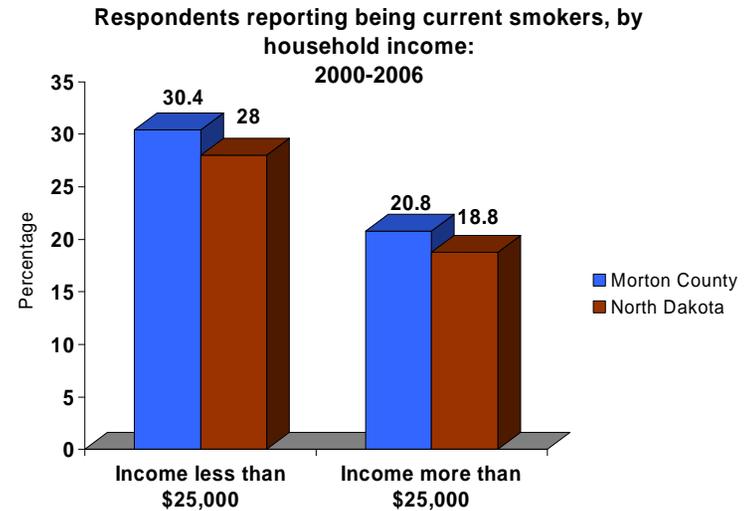
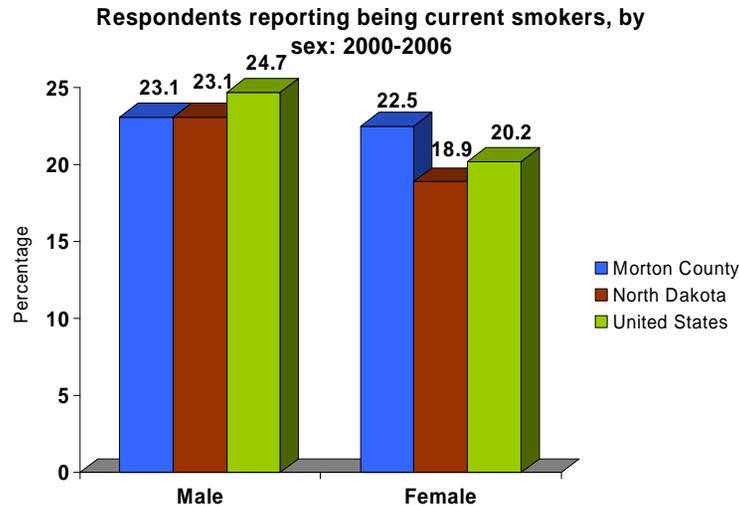
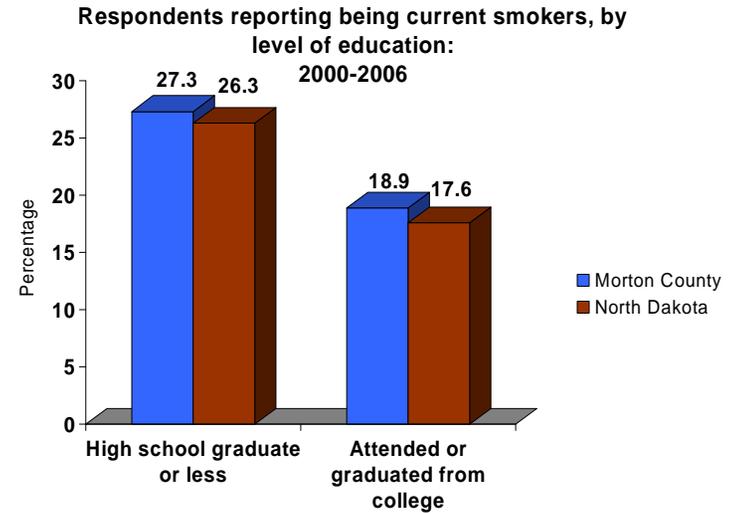


For definitions, see page 16

Current Smokers by Education, Sex and Income

- The percentage of female respondents who reported being smokers in Morton County appears to be slightly higher than in North Dakota.
- The percentage of respondents who reported being current smokers in Morton County appears higher than in North Dakota, regardless of income.

	Morton (%)	North Dakota (%)
Prevalence of current smokers	22.8	21.0
Prevalence of smoking among high school graduates or less	27.3	26.3
Prevalence of smoking among individuals reporting household income less than \$25,000 per year	30.4	28.0



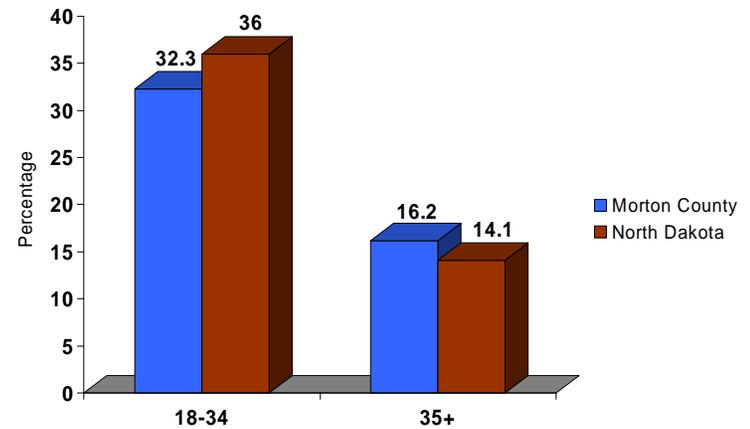
For definitions, see page 16

Binge Drinking by Age, Sex, and Income

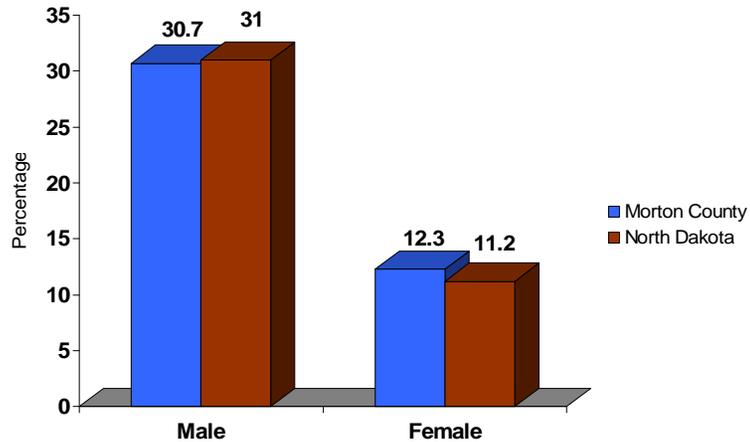
- The percentage of respondents between 18 and 34 years of age in Morton County who reported binge drinking appears to be lower than in North Dakota but slightly higher in Morton County among respondents age 35 and older.
- The percentage of respondents who reported being binge drinkers in Morton County appears similar to North Dakota, regardless of income category.

	Morton (%)	North Dakota (%)
Prevalence of binge drinking	22.8	20.9
Prevalence of binge drinking among individuals between the ages of 18 and 34	32.3	36.0
Prevalence of binge drinking among individuals with incomes below \$25,000	18.3	21.4

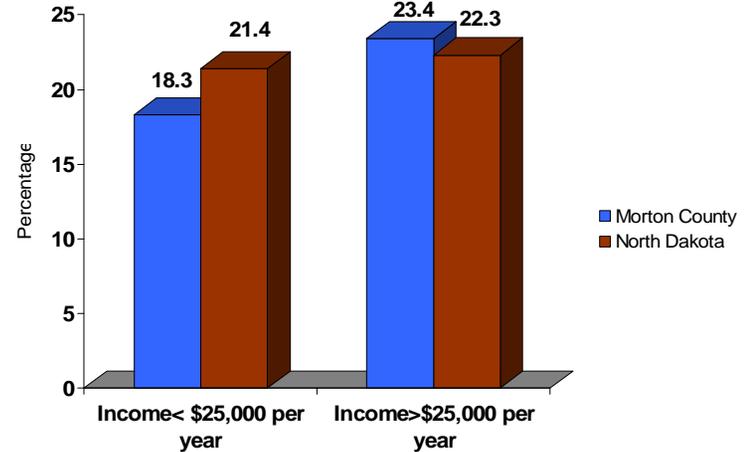
Respondents reporting binge drinking, by age: 2000-2006



Respondents reporting binge drinking, by sex: 2000-2006



Respondents reporting binge drinking, by income: 2000-2006

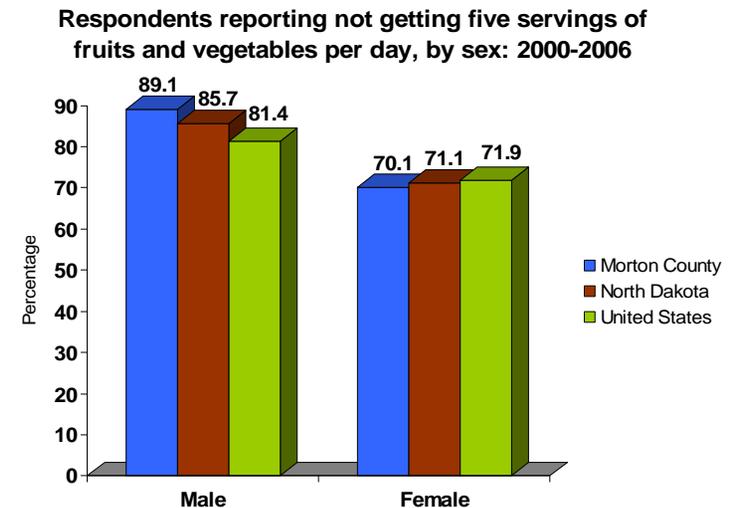
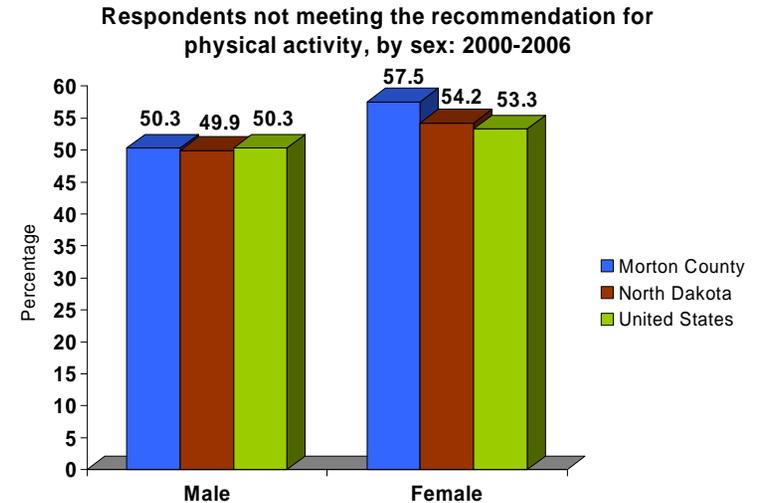
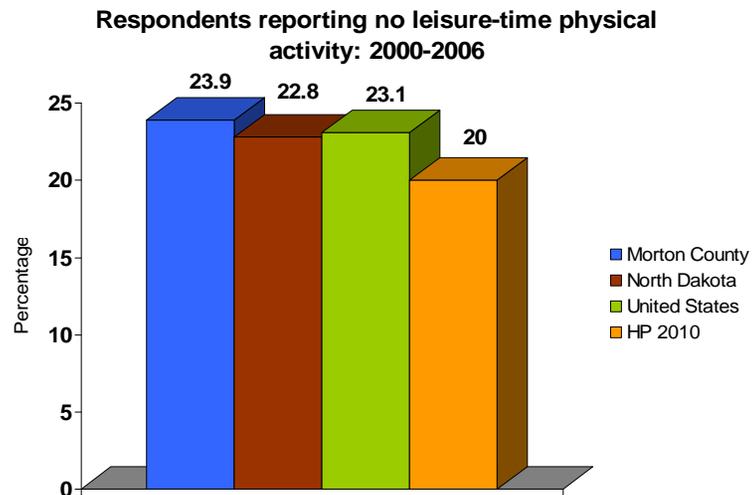


For definitions, see page 16

Physical Activity and Nutrition

- The percentage of female respondents in Morton County who reported not meeting recommendations for physical activity appears to be greater than in North Dakota.
- The percentage of male respondents in Morton County who reported not consuming five fruits and vegetables per day appears to be higher than in either North Dakota or the United States.

	Morton (%)	North Dakota (%)
No leisure-time physical activity	23.9	22.8
Did not meet recommendations for moderate or vigorous physical activity	54.1	52.1
Did not eat five or more servings of fruits and vegetables per day	79.3	78.3

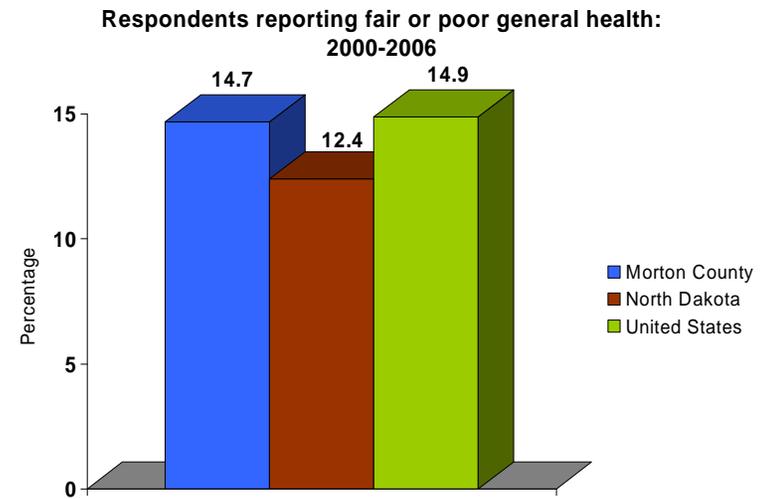
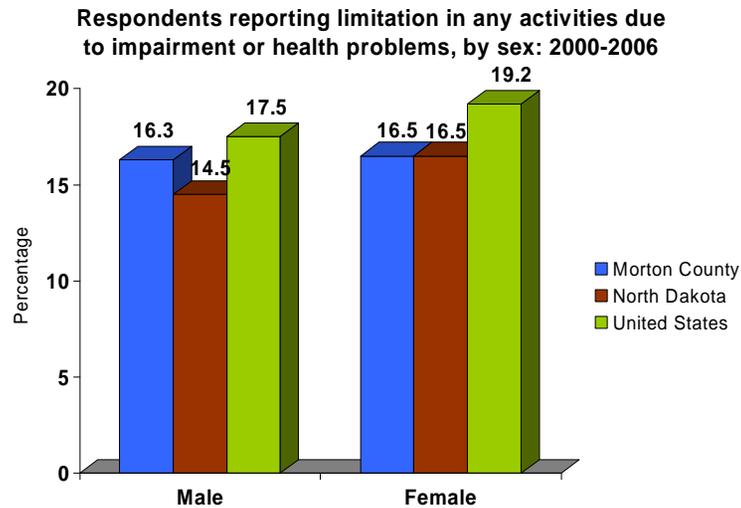


For definitions, see page 16

General Health and Quality of Life

- The percentage of respondents who reported limitation in activities due to impairment or disability appears to be similar in Morton County to North Dakota.
- The percentage of respondents reporting fair or poor general health appears to be higher in Morton County than in North Dakota

	Morton (%)	North Dakota (%)
Limitation in any activities due to impairment or health problem	16.4	15.5
Any days in the previous month during which pain made it hard to do usual activities	34.3	22.3
General health fair or poor	14.7	12.4

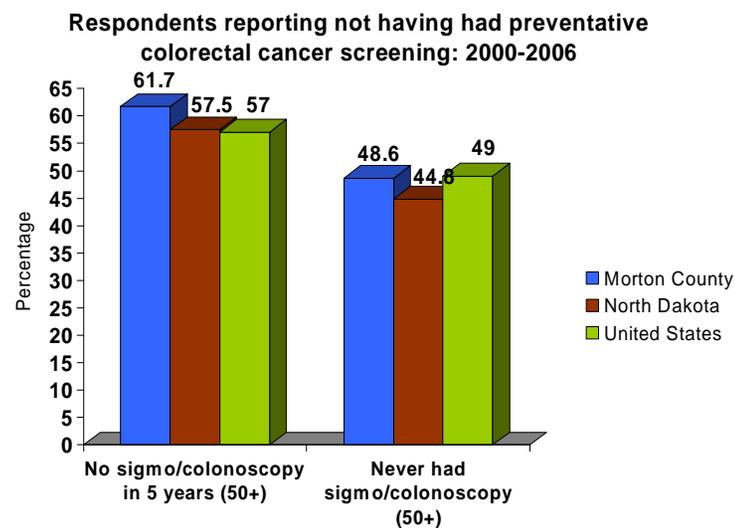
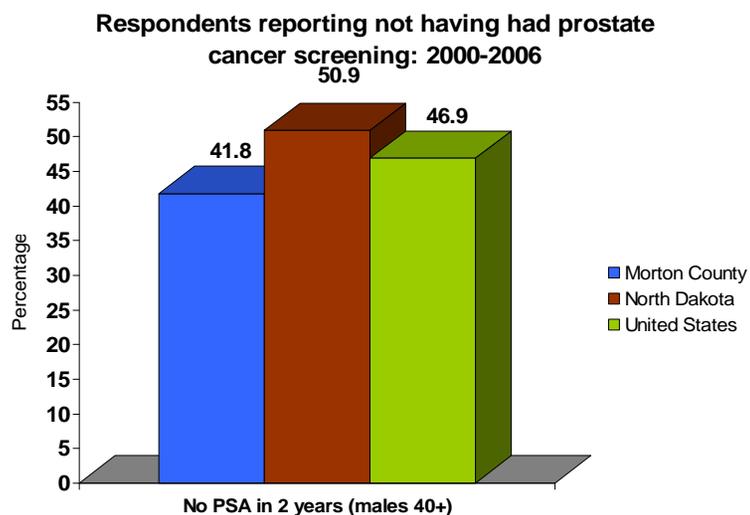
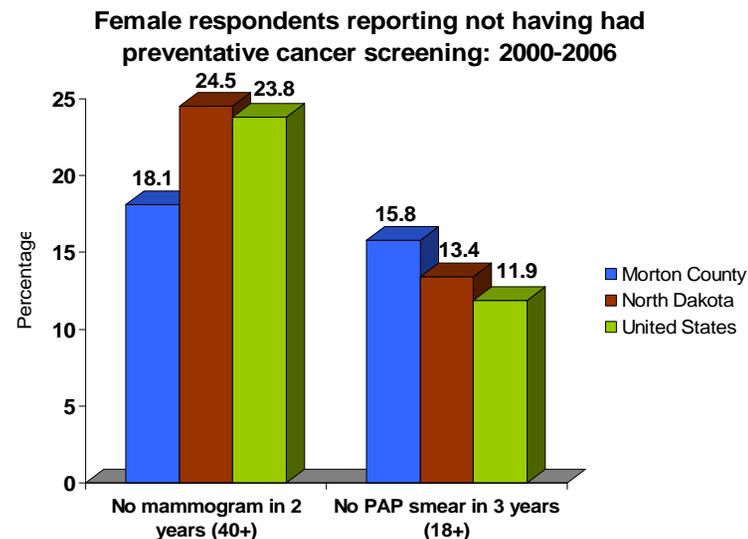


For definitions, see page 16

Preventive Cancer Screenings: Colorectal, Prostate and Cervix

- The percentage of male respondents age 40 or older who reported not having had a PSA test in the last two years appears to be lower in Morton County than in either North Dakota or the United States.
- The percentage of female respondents age 40 and older who reported not having had a mammogram in the last two years appears to be lower in Morton County than either North Dakota or the United States.

	Morton (%)	North Dakota (%)
Never had a sigmoidoscopy or colonoscopy, age 50 and older	48.6	44.8
Have not had a PSA test within the last two years, men age 40 and older	41.8	50.9
Women 18 and older who have not had a PAP smear within the last three years	15.8	13.4

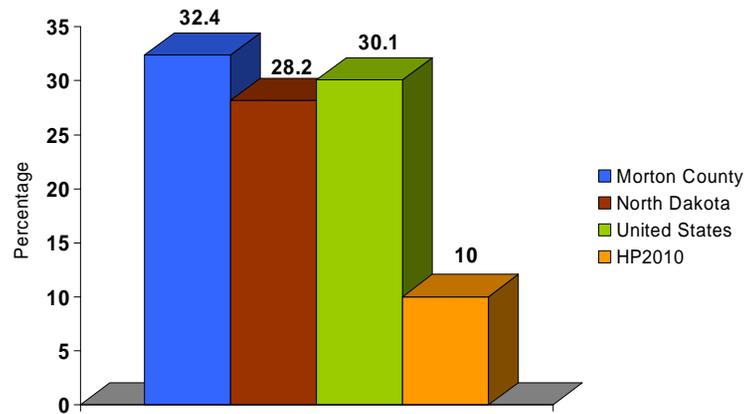


Immunization: Influenza and Pneumococcal Vaccines

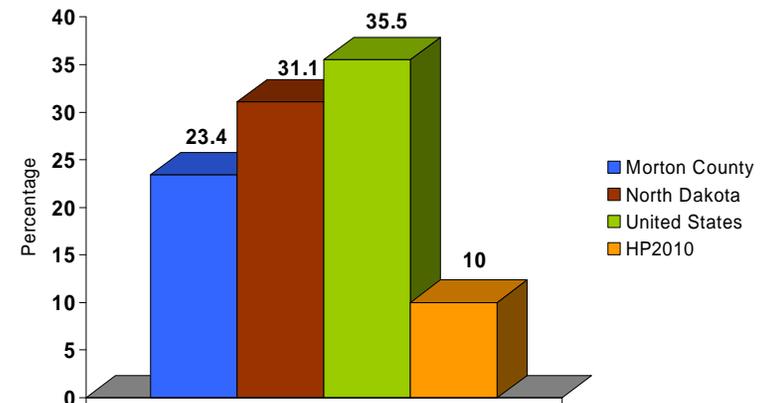
- The percentage of respondents age 65 or older who reported not receiving an influenza vaccination within the last year appears to be higher in Morton County than in North Dakota.
- The percentage of respondents age 65 and older who reported having never received a pneumococcal vaccination appears to be lower in Morton County than in either North Dakota or in the United States.

	Morton (%)	North Dakota (%)
Adults 65 and older who did not have an influenza vaccine within the past year	32.4	28.2
Adults 65 and older who have never had a pneumococcal vaccination	23.4	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



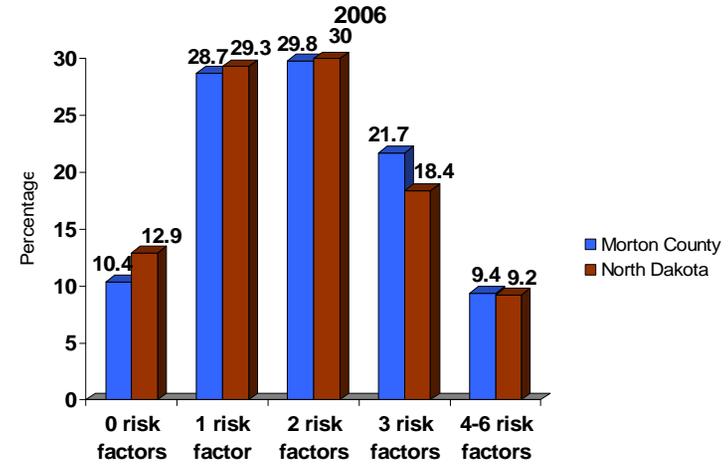
For definitions, see page 16

Risk Factors and Disease Prevalence

- The percentage of respondents who have asthma and diabetes appears to be lower in Morton County than in the United States.
- The percentage of respondents who reported having a stroke, a heart attack, or heart disease or having arthritis appears to be similar in Morton County to North Dakota.

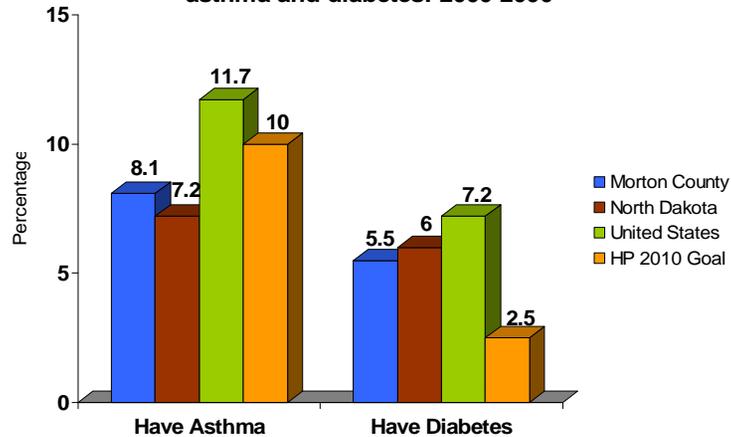
	Morton (%)	North Dakota (%)
Respondents who were told that they had diabetes – except during pregnancy	5.5	6.0
Respondents who reported heart attack, heart disease, or stroke	7.6	7.2
Respondents who were told they have some form of arthritis	27.4	27.2

Respondents' cardiovascular risk factors, 2000-2006

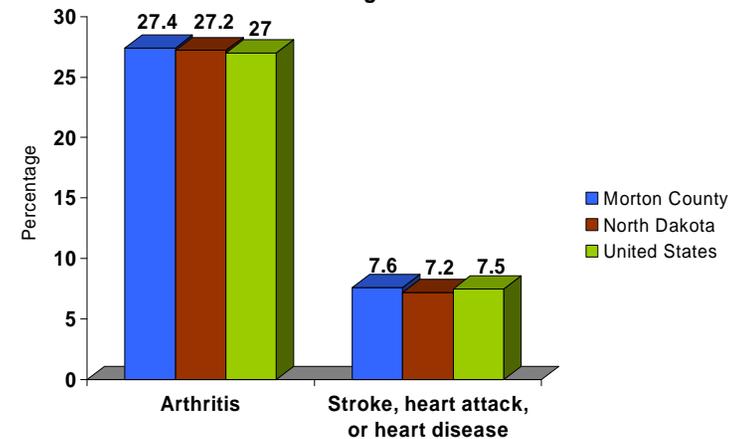


*Risk factors defined as: diabetes, obesity, insufficient physical activity, high cholesterol, smoking, and high blood pressure

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



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

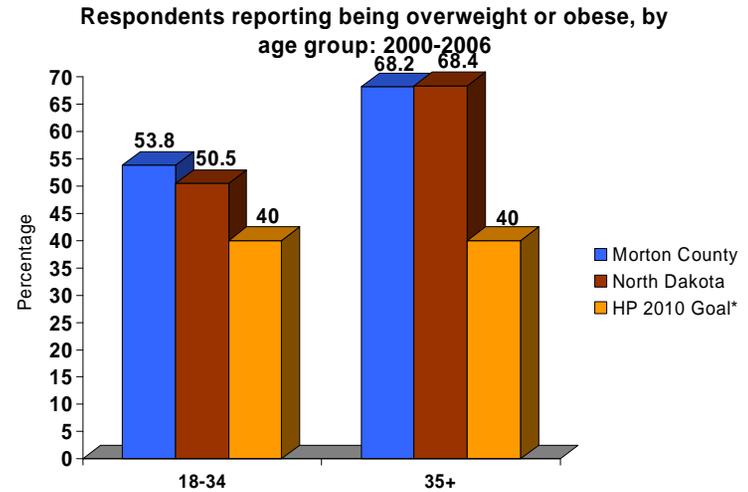
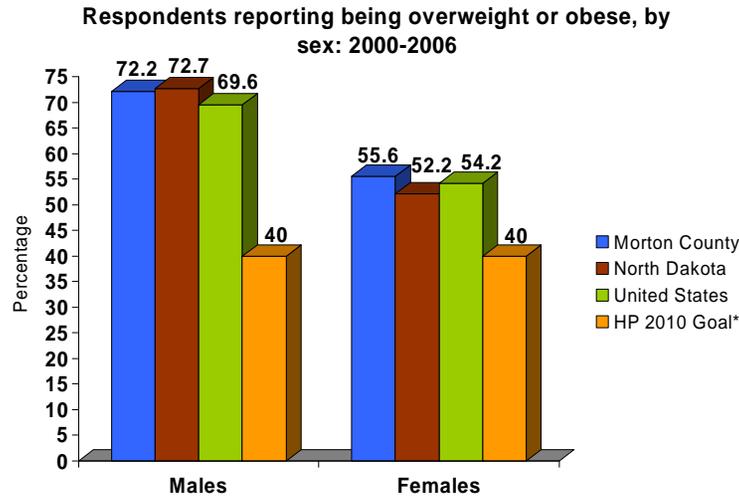
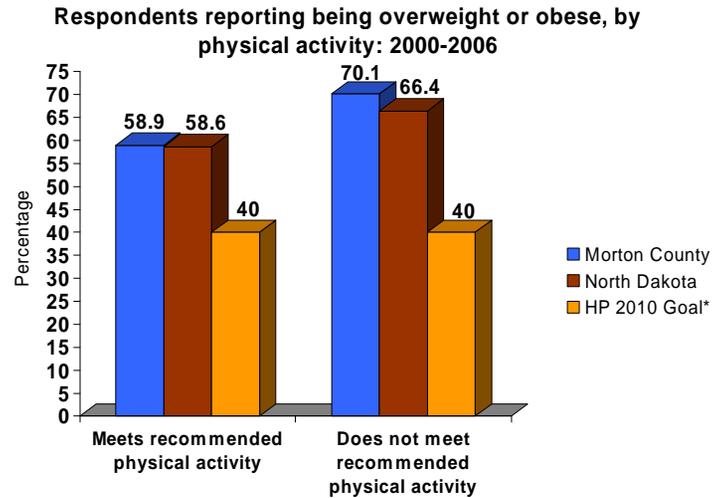


For definitions, see page 16

Body Weight: Overweight and Obese

- The percentage of female respondents who reported being overweight or obese appears to be slightly higher in Morton County than in North Dakota.
- The percentage of respondents ages 18 to 34 who reported being overweight or obese appears to be slightly higher in Morton County than in North Dakota.

	Morton (%)	North Dakota (%)
Respondents who are obese	26.0	23.4
Respondents who overweight	37.7	39.2
Male respondents who are overweight or obese	72.2	72.7



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 Morton 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 Morton 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.