

2008-2009

Division *of*
Chronic Disease
Indicator Report



NORTH DAKOTA
DEPARTMENT *of* HEALTH

John Hoeven, Governor

Dr. Terry Dwelle, State Health Officer



North Dakota Department of Health
Community Health Section
Division of Chronic Disease
600 E. Boulevard Ave., Dept. 301
Bismarck, N.D. 58505-0200

August 2008

Acknowledgments:

This report is a product of the Division of Chronic Disease's North Dakota Diabetes Prevention and Control Program (NDDPCP) and the North Dakota Heart Disease and Stroke Prevention Program (NDHDSPP). Located within the North Dakota Department of Health, the NDDPCP and the NDHDSPP are funded by cooperative agreements from the U.S. Centers for Disease Control and Prevention, Division of Diabetes Translation and Division of Heart Disease and Stroke Prevention.

Suggested Citation:

Kathleen R. Moum, MA; Sherri L. Paxon, MSPH, MT/BB; Susan M. Mormann, BA 2008-2009
Division of Chronic Disease Indicator Report, The Division of Chronic Disease, North Dakota
Department of Health, Bismarck, ND, 2007.

This publication was prepared by:

Division of Chronic Disease
Community Health Section
North Dakota Department of Health
600 E. Boulevard Ave., Dept. 301
Bismarck, ND 58505-0200
Telephone: 701.328.2367
Fax: 701.328.2036
www.ndhealth.gov/chronicdisease

This publication was supported by Cooperative Agreement numbers U32/CCU822706 and 1/U50/DP-000716 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

Copyright information:

All material in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

Table of Contents

Indicator Number		Page Number
	Introduction	5
	Prevalence	6
1	<u>Prevalence of Cardiovascular Disease</u>	7
2	<u>History of Heart Attack</u>	8
3	<u>History of Heart Disease</u>	8
4	<u>History of Stroke</u>	8
5	<u>Prevalence of Diabetes in Adults</u>	9
6	<u>Prevalence of Diabetes in Children</u>	10
7	<u>Gestational Diabetes-Incidence</u>	11
8	<u>New Cases of Diabetes</u>	12
	Adults by Diabetes and Heart Disease Status	13
9	<u>Regular Physical Activity</u>	14
10	<u>Fruit and Vegetable Intake</u>	15
11	<u>Smoking</u>	16
12	<u>Overweight or Obese</u>	17
13	<u>Obesity</u>	18
14	<u>Influenza Vaccination</u>	19
15	<u>Pneumococcal Vaccination</u>	20
16	<u>Blood Cholesterol Screening</u>	21
17	<u>High Blood Cholesterol Levels</u>	22
18	<u>High Blood Pressure</u>	23
19	<u>Use of Blood Pressure Medication</u>	24
20	<u>Dental Exam</u>	25
21	<u>Aspirin Therapy</u>	26
22	<u>Unhealthy Days</u>	27
	Adolescents	28
23	<u>Moderate Physical Activity in Adolescents</u>	29
24	<u>Vigorous Physical Activity in Adolescents</u>	30
25	<u>Adolescent Tobacco Use</u>	31
26	<u>Overweight or Obesity in Children and Adolescents</u>	32
27	<u>Television Viewing</u>	33
	Adults With Diabetes	34
28	<u>Office Visit to Health Professional for Diabetes Care</u>	35
29	<u>Diabetes Education</u>	36
30	<u>Hemoglobin A1c Test</u>	37
31	<u>Dilated Eye Exam</u>	38
32	<u>Foot Exam-Conducted by Medical Provider</u>	39
33	<u>Foot Exam-Conducted by Self or Someone Other Than Health Professional</u>	40
34	<u>Self-Monitoring of Blood Glucose</u>	41
	Mortality	42
35	<u>Coronary Heart Disease Deaths</u>	43
36	<u>Stroke Deaths</u>	44
37	<u>Diabetes Deaths</u>	45
38	<u>Mortality Related to Diabetes</u>	46
39	<u>Cardiovascular Deaths of People With Diabetes</u>	47
	Definitions	48

Introduction

The Division of Chronic Disease is located in the Community Health Section of the North Dakota Department of Health. Two programs are administered in this division: the Diabetes Prevention and Control Program, and the Heart Disease and Stroke Prevention Program.

The mission of the Division of Chronic Disease is:

To improve the health and quality of life for North Dakotans who have chronic diseases by promoting healthy behaviors, supporting health-care improvement measures, developing community policies and practices, and increasing disease risk awareness.

This report presents data on indicators that provide information about how well people in North Dakota are doing regarding diabetes and cardiovascular disease risk factors, as well as the care people with these diseases are receiving. Indicators are used to guide program activities and to measure progress over time.

Data in this report are for the years 2000 through 2007. For some indicators, the data are not available for every year. In those instances, the year is still represented in the chart and/or table and labeled NA to indicate not available. Many of the indicators are presented with statewide data, as well as a breakdown by gender. In some cases, more than one year of data is combined in order to present the gender breakdown. This is done because survey sample sizes are not always large enough to present one year of data alone.

Division of Chronic Disease Staff

Division Director and Diabetes Prevention and Control Program Director

Sherri Paxon

Heart Disease and Stroke Prevention Program Director

Susan Mormann

Senior Epidemiologist

Melissa Parsons

Epidemiologist

Kathy Moum

Contact Information

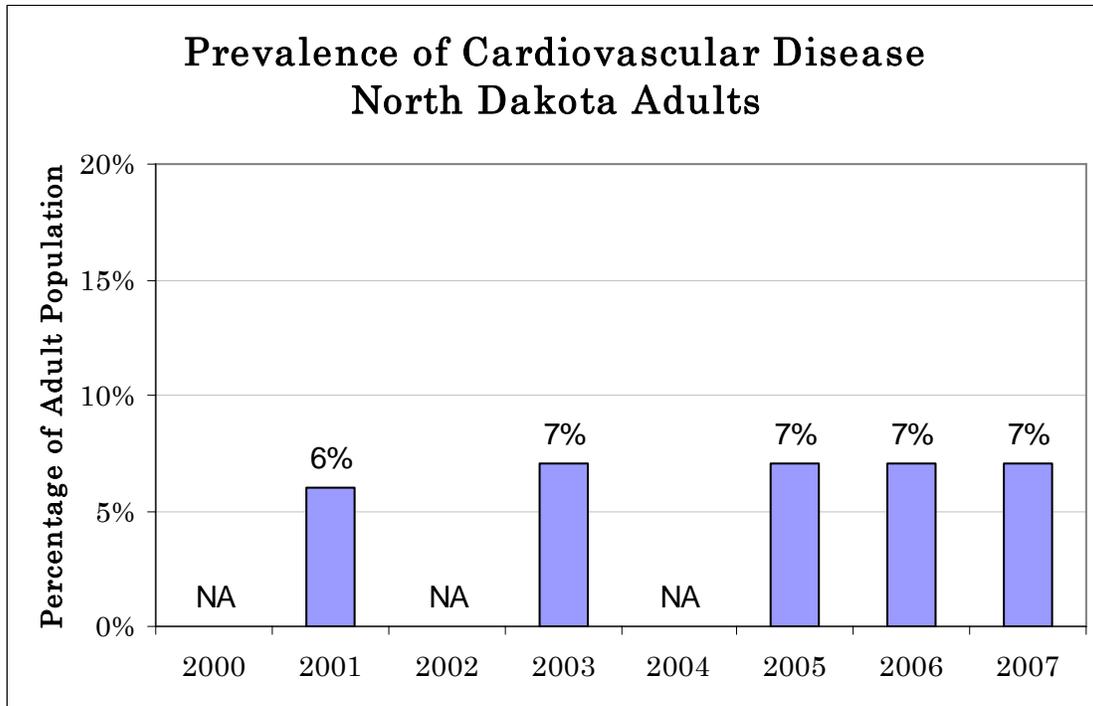
Division of Chronic Disease
Community Health Section
North Dakota Department of Health
600 E. Boulevard Ave., Dept. 301
Bismarck, ND 58505-0200
Phone 701.328.2367
Fax 701.328.2036
www.ndhealth.gov/chronicdisease

Prevalence



Indicator 1 – Prevalence of Cardiovascular Disease

Cardiovascular disease prevalence reflects the percentage of adults who responded yes to at least one of three questions in the Behavioral Risk Factor Surveillance Survey (BRFSS) asking about a history of heart attack, angina or coronary heart disease, or stroke.



<i>By Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	7%	NA	8%	NA	9%	8%	8%
Female	NA	6%	NA	6%	NA	6%	6%	6%

NA = data not available

Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: *none*

[Return to List](#)

Indicator 2 – History of Heart Attack

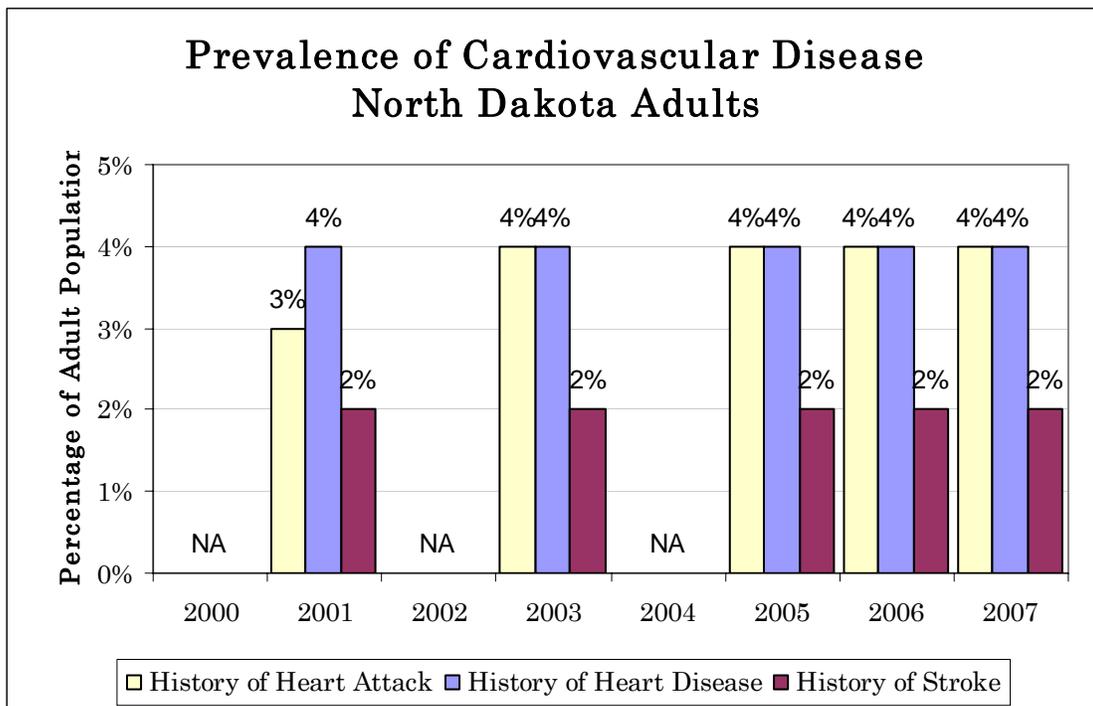
History of heart attack indicates the percentage of adults who have ever been told by a doctor, nurse or other health professional that they had a heart attack, also called a myocardial infarction.

Indicator 3 – History of Heart Disease

History of heart disease indicates the percentage of adults who have ever been told by a doctor, nurse or other health professional that they had angina or coronary heart disease.

Indicator 4 – History of Stroke

History of stroke indicates the percentage of adults who have ever been told by a doctor, nurse or other health professional that they had a stroke.



By Gender	2000	2001	2002	2003	2004	2005	2006	2007
History of Heart Attack								
Male	NA	4%	NA	6%	NA	6%	5%	5%
Female	NA	2%	NA	3%	NA	3%	4%	3%
History of Heart Disease								
Male	NA	5%	NA	5%	NA	5%	5%	5%
Female	NA	3%	NA	3%	NA	3%	3%	3%
History of Stroke								
Male	NA	2%	NA	2%	NA	2%	2%	2%
Female	NA	2%	NA	2%	NA	2%	2%	2%

NA = data not available

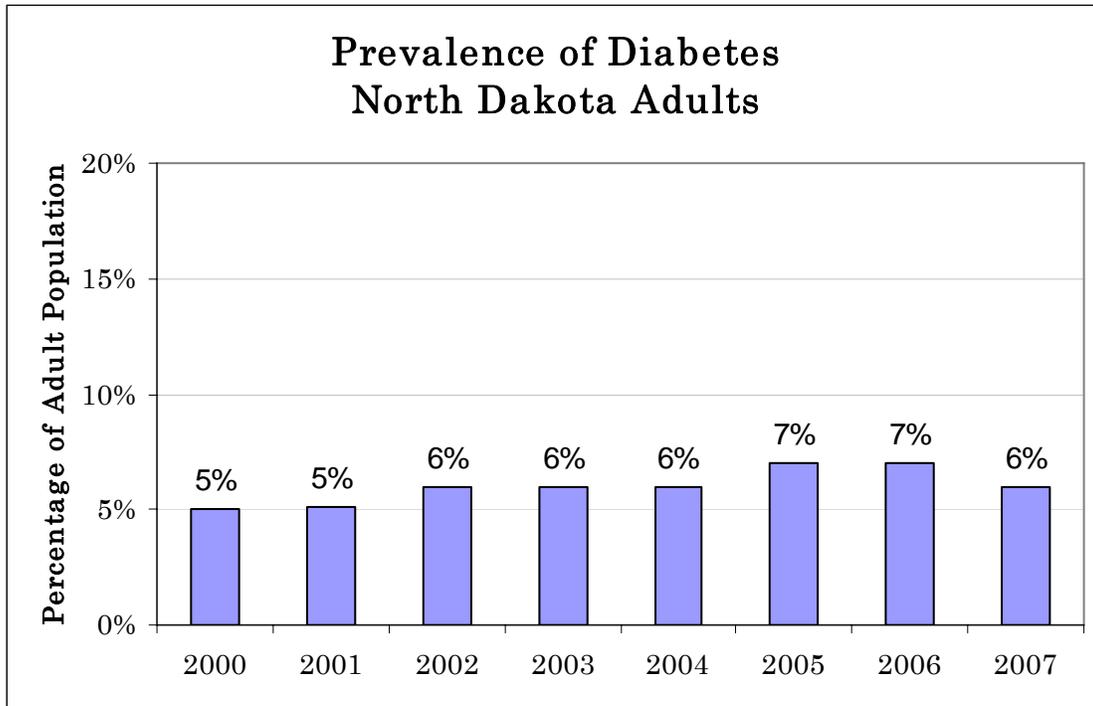
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: *none*

[Return to List](#)

Indicator 5 – Prevalence of Diabetes in Adults

Prevalence of diabetes is the percentage of adults who responded yes to a question in the BRFSS asking if they have ever been told by a doctor that they have diabetes. Diabetes only during pregnancy is excluded.



<i>By Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	5%	5%	6%	6%	6%	7%	8%	6%
Female	5%	6%	6%	6%	6%	7%	6%	6%

Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

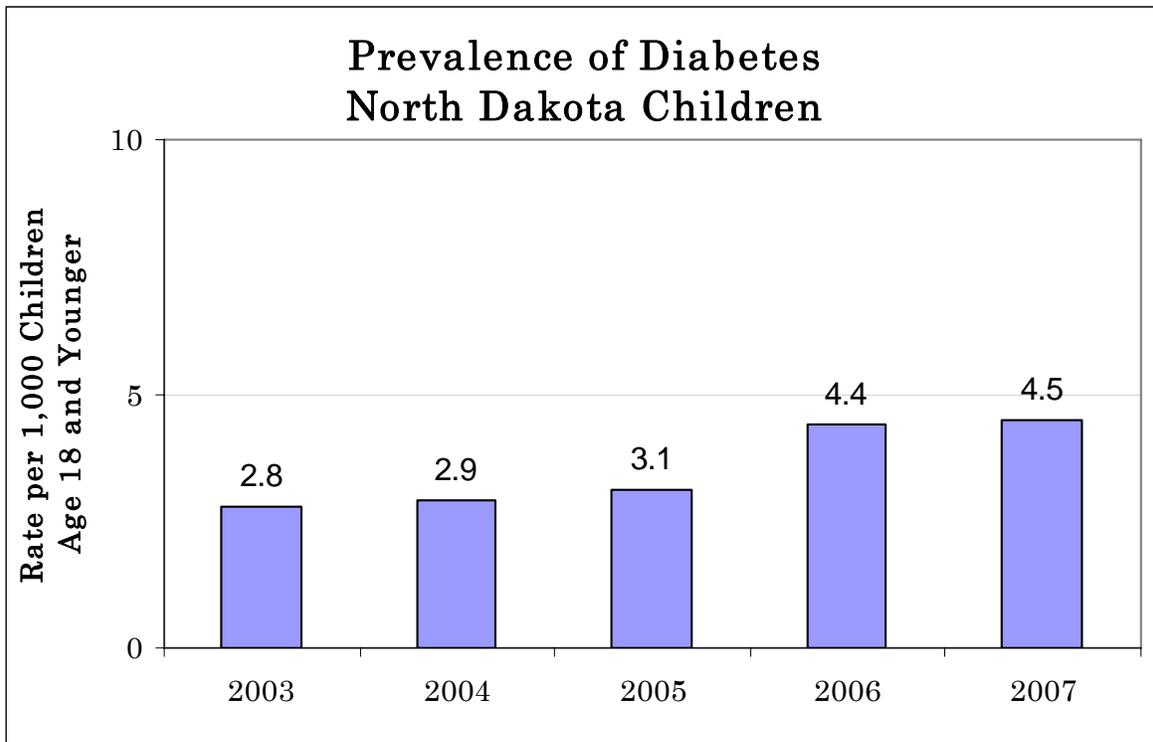
Healthy People 2010 Objective: 5-3. *Reduce the overall rate of diabetes that is clinically diagnosed.*

[Return to List](#)

Indicator 6 – Prevalence of Diabetes in Children

Prevalence of diabetes in children is estimated by health claims records at Blue Cross Blue Shield of North Dakota, a company that insures more than 50 percent of the children in North Dakota.

This indicator is measured as a rate per 1,000 children and adolescents age 18 and younger. A rate of 4.5 per thousand children in 2007 indicates that more than 700 children in North Dakota have diabetes.



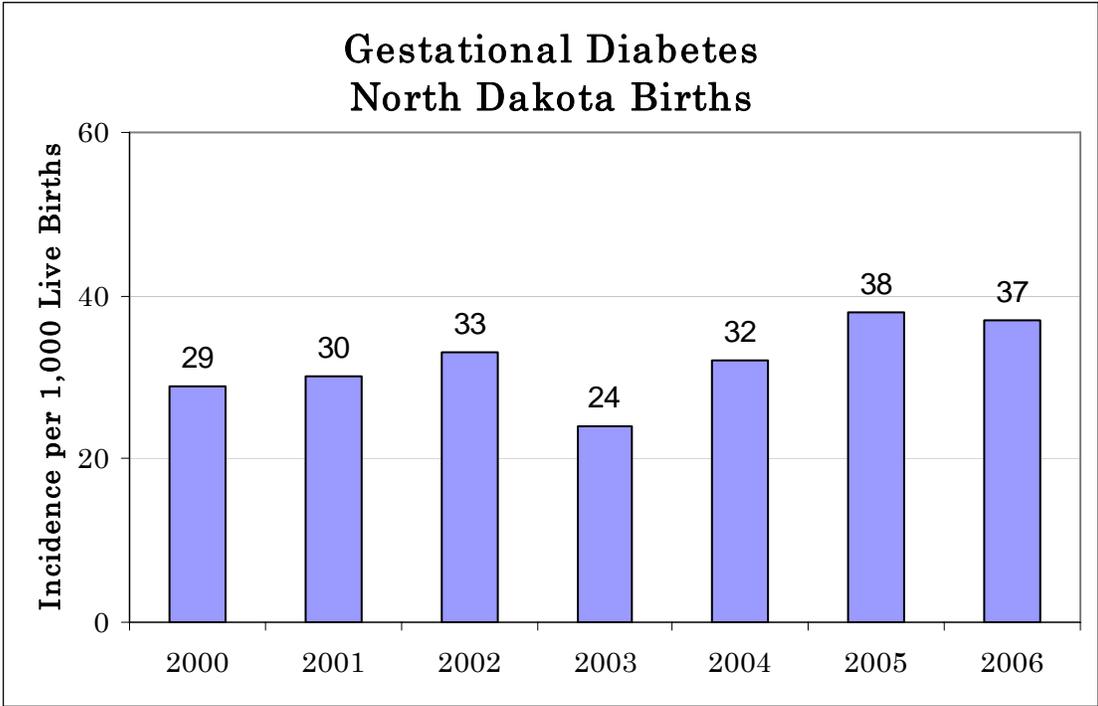
Data Source: *Blue Cross Blue Shield of North Dakota*

Healthy People 2010 Objective: *none*

[Return to List](#)

Indicator 7 – Gestational Diabetes – Incidence

Gestational diabetes incidence reflects the number of births per 1,000 live births in North Dakota in which the mother experienced gestational diabetes during pregnancy.



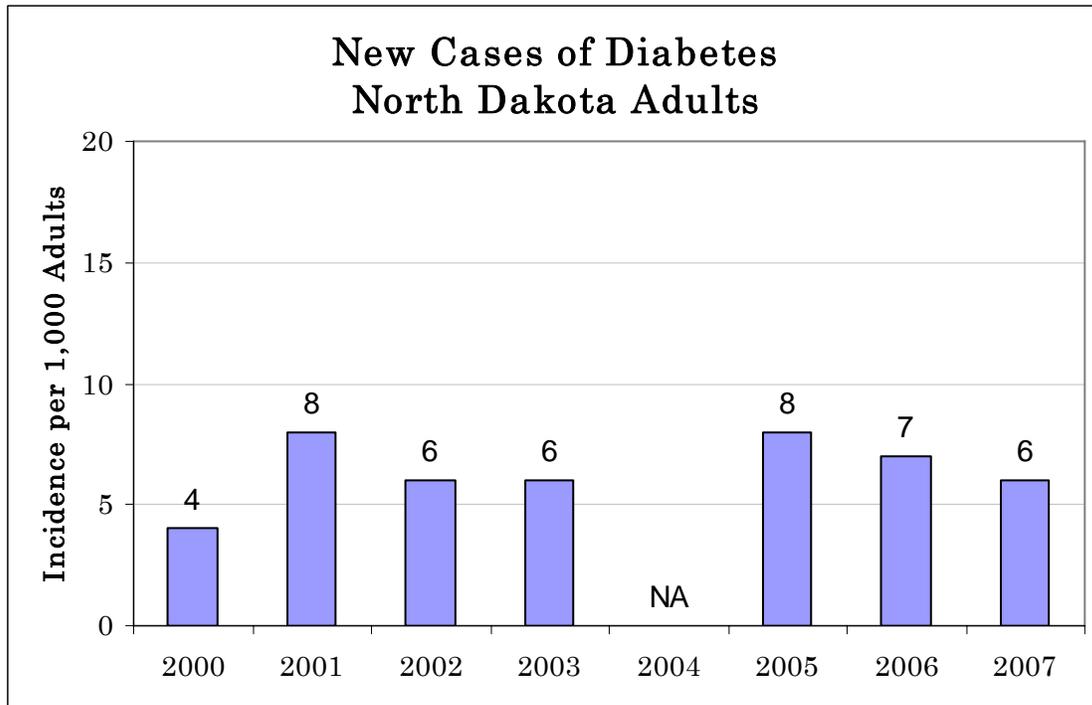
Data Source: *Vital Statistics*

Healthy People 2010 Objective: 5-8. *Decrease the proportion of pregnant women with gestational diabetes.*

[Return to List](#)

Indicator 8 – New Cases of Diabetes

New cases of diabetes are cases that have been diagnosed within the previous year. In 2007, six new cases of diabetes were diagnosed per 1,000 adults in North Dakota. This means that about 3,000 people were diagnosed with diabetes in 2007.



NA = data not available

Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

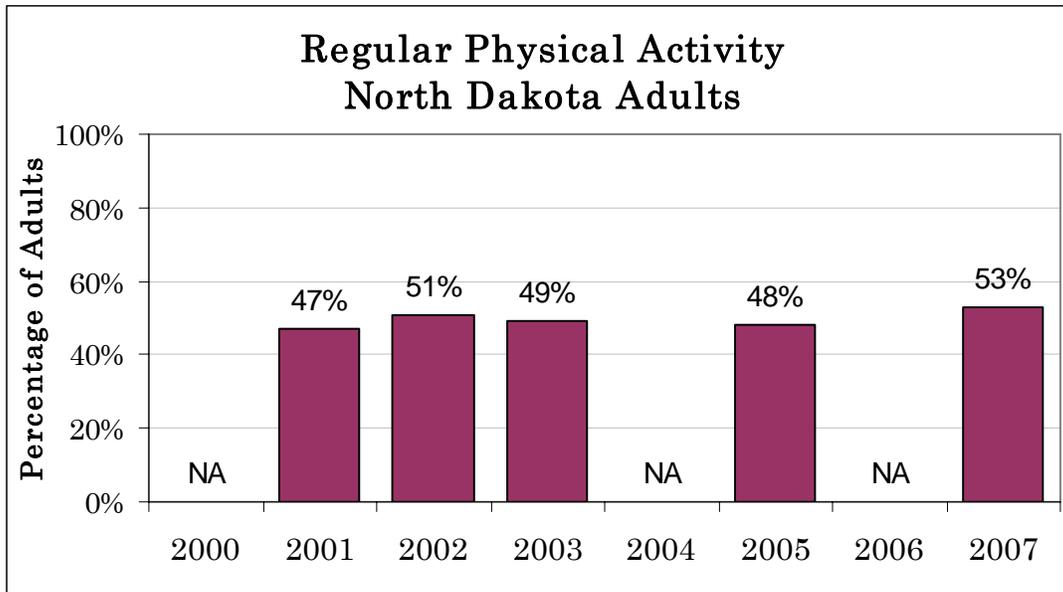
Healthy People 2010 Objective: 5-2. *Prevent diabetes.*

[Return to List](#)

Adults by Diabetes & Heart Disease Status

Indicator 9 – Regular Physical Activity

Regular physical activity is defined as either moderate physical activity for 30 or more minutes per day for five or more days per week **or** vigorous activity for 20 or more minutes per day on three or more days per week. Moderate physical activity is activity that does not cause a person to sweat or breathe hard. Vigorous physical activity is activity that causes a person to sweat and breathe hard.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	49%	56%	52%	NA	49%	NA	52%
Female	NA	45%	47%	46%	NA	48%	NA	53%

<i>Adults With Diabetes</i>	2001-2003*	2002, 2003 & 2005*	2003, 2005 & 2007*
Total	36%	37%	35%
Male	38%	39%	37%
Female	34%	35%	32%

<i>Adults With Cardiovascular Disease</i>	2001 & 2003*	2003 & 2005*	2005 & 2007*
Total	37%	36%	38%
Male	40%	41%	42%
Female	33%	29%	33%

NA = data not available

***Years are combined because the survey sample size in one year is too small for the results to be reliable.**

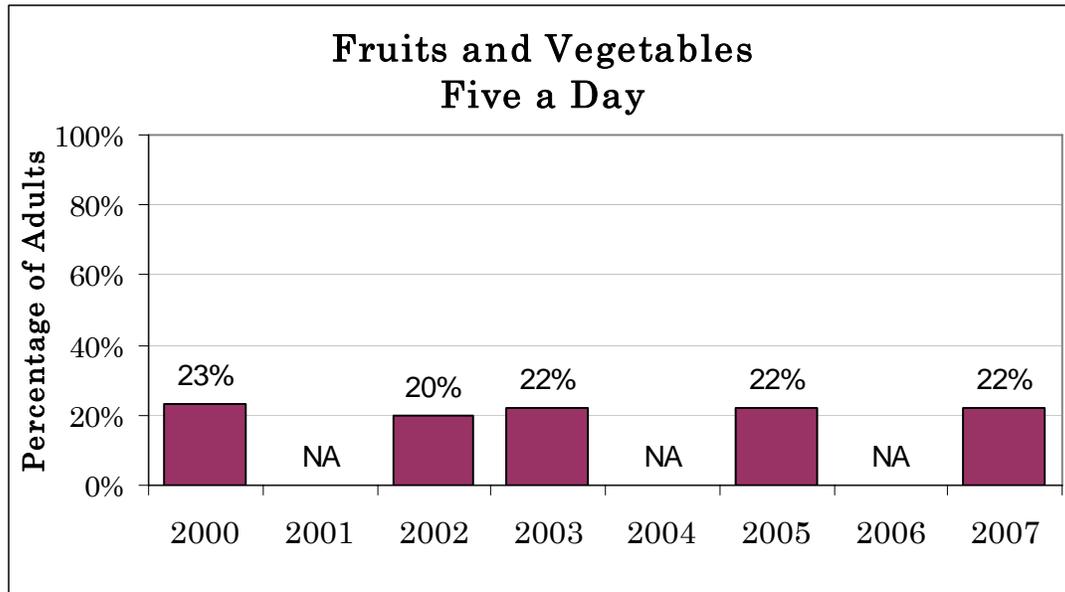
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 22-2. Increase the proportion of adults who engage regularly in moderate physical activity for at least 30 minutes per day; and 22-3. Increase the proportion of adults who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness three or more days per week for 20 or more minutes per occasion.

[Return to List](#)

Indicator 10 – Fruit and Vegetable Intake

This indicator reflects the percentage of adults who report that they consume five or more servings of fruits and vegetables every day.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	18%	NA	12%	14%	NA	14%	NA	15%
Female	29%	NA	29%	29%	NA	30%	NA	29%

<i>Adults With Diabetes</i>	2000, 2002-2003*	2002, 2003 & 2005*	2003, 2005 & 2007*
Total	30%	30%	29%
Male	21%	20%	20%
Female	39%	38%	38%

<i>Adults With Cardiovascular Disease</i>	2003	2005	2007
Total	28%	24%	27%
Male	23%	21%	19%
Female	36%	28%	38%

NA = data not available

* Years are combined because the survey sample size in one year is too small for the results to be reliable.

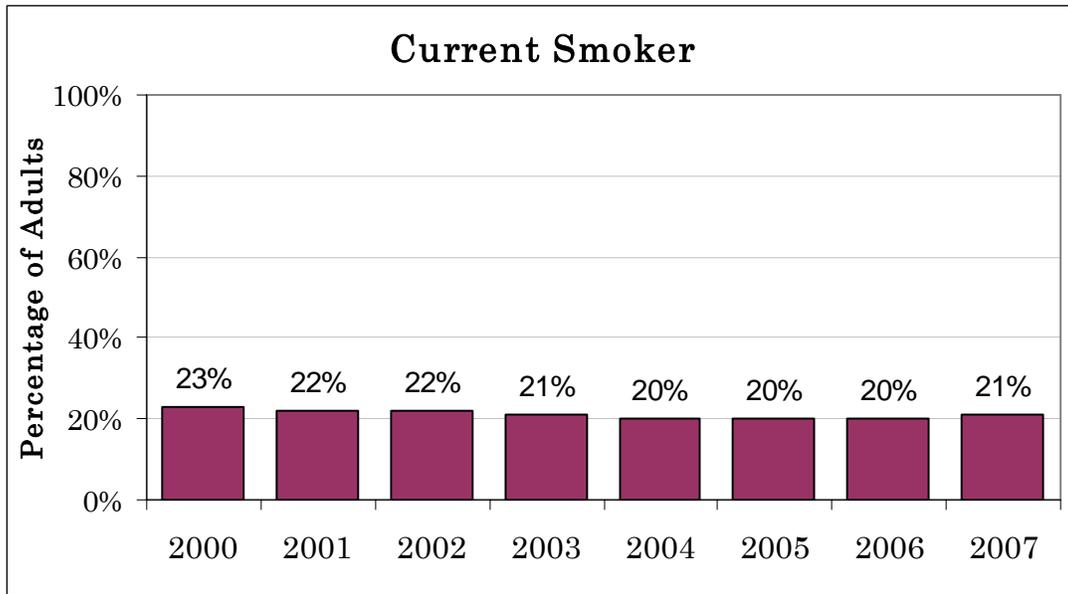
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 19-5. Increase the proportion of persons who consume at least two daily servings of fruit. 19-6. Increase the proportion of persons who consume at least three daily servings of vegetables.

[Return to List](#)

Indicator 11 – Smoking

Current smoker is defined as someone who has smoked at least 100 cigarettes in their lifetime and who now smokes on some days.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	26%	25%	23%	22%	24%	22%	21%	22%
Female	21%	20%	20%	19%	16%	19%	18%	20%

<i>Adults With Diabetes</i>	2000-2004*	2004-2006*	2005-2007*
Total	15%	13%	14%
Male	17%	16%	15%
Female	13%	11%	12%

<i>Adults With Cardiovascular Disease</i>	2001 & 2003*	2003 & 2005*	2005-2007*
Total	19%	19%	15%
Male	15%	19%	15%
Female	23%	18%	16%

***Years are combined because the survey sample size in one year was too small for the results to be reliable.**

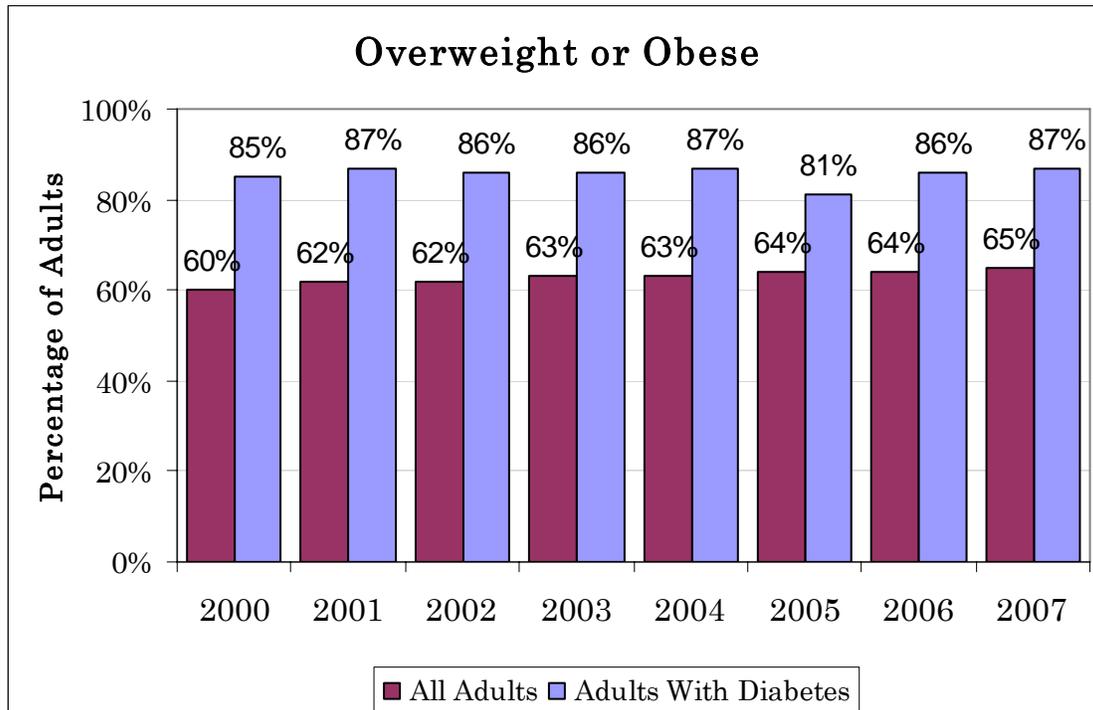
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 27-1a. *Reduce tobacco use by adults. Cigarette smoking.*

[Return to List](#)

Indicator 12 – Overweight or Obese

This chart reflects the percentage of adults who are overweight or obese. A body mass index (BMI) greater than or equal to 25 indicates that a person is overweight. A BMI greater than or equal to 30 indicates obesity.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	71%	73%	72%	74%	71%	73%	75%	75%
Female	50%	49%	52%	52%	54%	55%	54%	55%

<i>Adults With Diabetes</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	84%	91%	93%	90%	90%	83%	88%	91%
Female	86%	84%	79%	82%	83%	79%	84%	83%

<i>Adults With Cardiovascular Disease</i>	2001 & 2003*	2003 & 2005*	2006 & 2007*
Total	76%	74%	75%
Male	80%	77%	81%
Female	69%	69%	66%

***Years are combined because the survey sample size in one year was too small for the results to be reliable.**

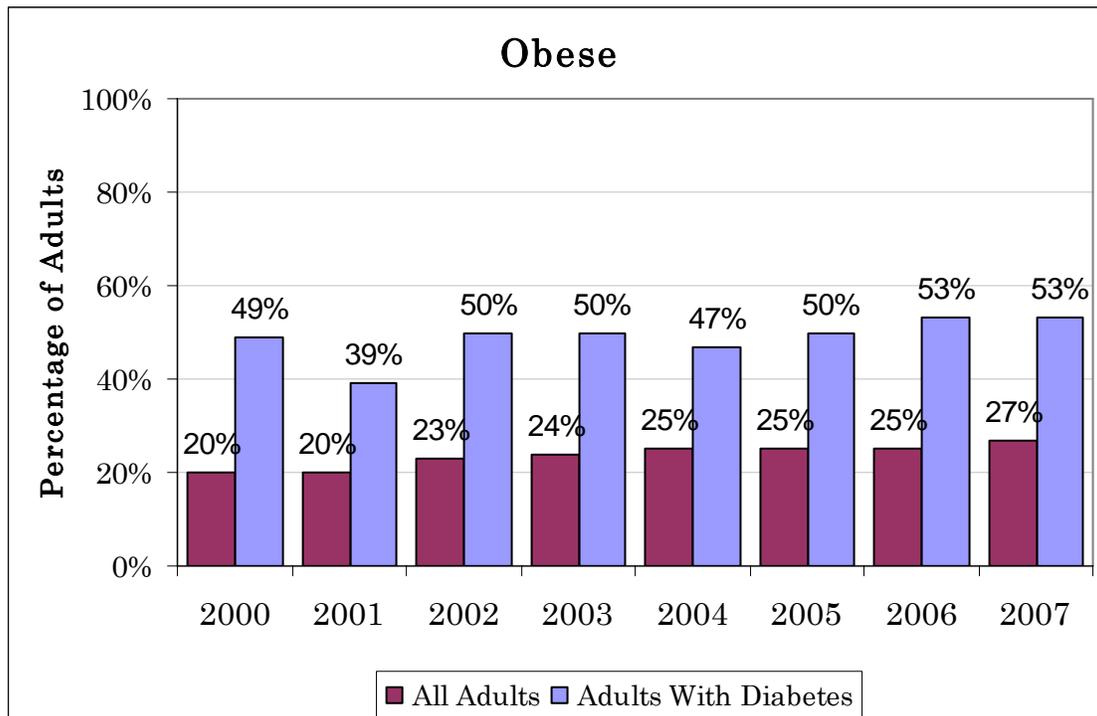
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 19-1. Increase the proportion of adults who are at a healthy weight.

[Return to List](#)

Indicator 13 – Obesity

This chart reflects the percentage of adults who are obese. A body mass index (BMI) greater than or equal to 30 indicates obesity.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	21%	22%	25%	27%	27%	27%	29%	31%
Female	19%	19%	22%	21%	23%	23%	22%	23%

<i>Adults With Diabetes</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	34%	38%	52%	51%	48%	45%	51%	54%
Female	65%	39%	48%	50%	46%	54%	56%	51%

<i>Adults With Cardiovascular Disease</i>	2001 & 2003*	2003 & 2005*	2006 & 2007*
Total	31%	32%	32%
Male	30%	30%	33%
Female	32%	34%	30%

***Years are combined because the survey sample size in one year was too small for the results to be reliable.**

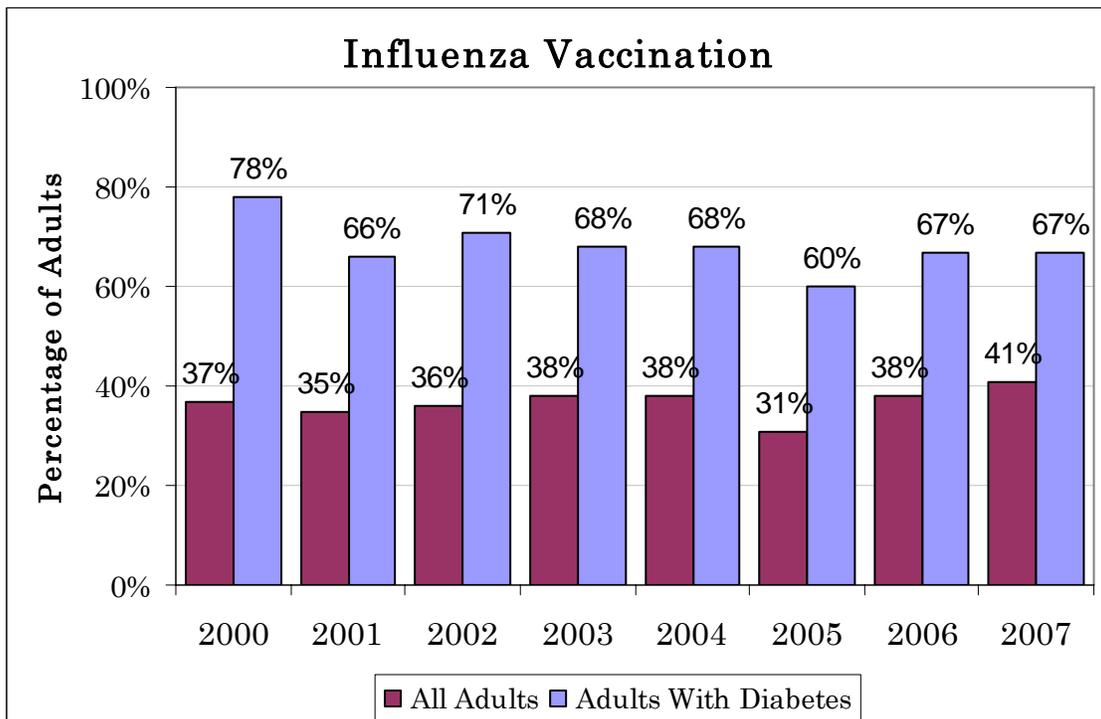
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 19-2. *Reduce the proportion of adults who are obese.*

[Return to List](#)

Indicator 14 – Influenza Vaccination

This indicator reflects the percentage of adults who report that they received an influenza vaccination (flu shot or spray) during the past 12 months.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	34%	31%	33%	35%	35%	26%	34%	37%
Female	40%	39%	39%	40%	42%	36%	42%	45%

<i>Adults With Diabetes</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	84%	66%	69%	64%	70%	53%	66%	69%
Female	72%	66%	73%	72%	65%	66%	67%	65%

<i>Adults With Cardiovascular Disease</i>	2000	2001	2002	2003	2004	2005	2006	2007
Total	NA	63%	NA	71%	NA	65%	72%	71%
Male	NA	65%	NA	70%	NA	59%	71%	73%
Female	NA	61%	NA	72%	NA	73%	72%	67%

NA = data not available

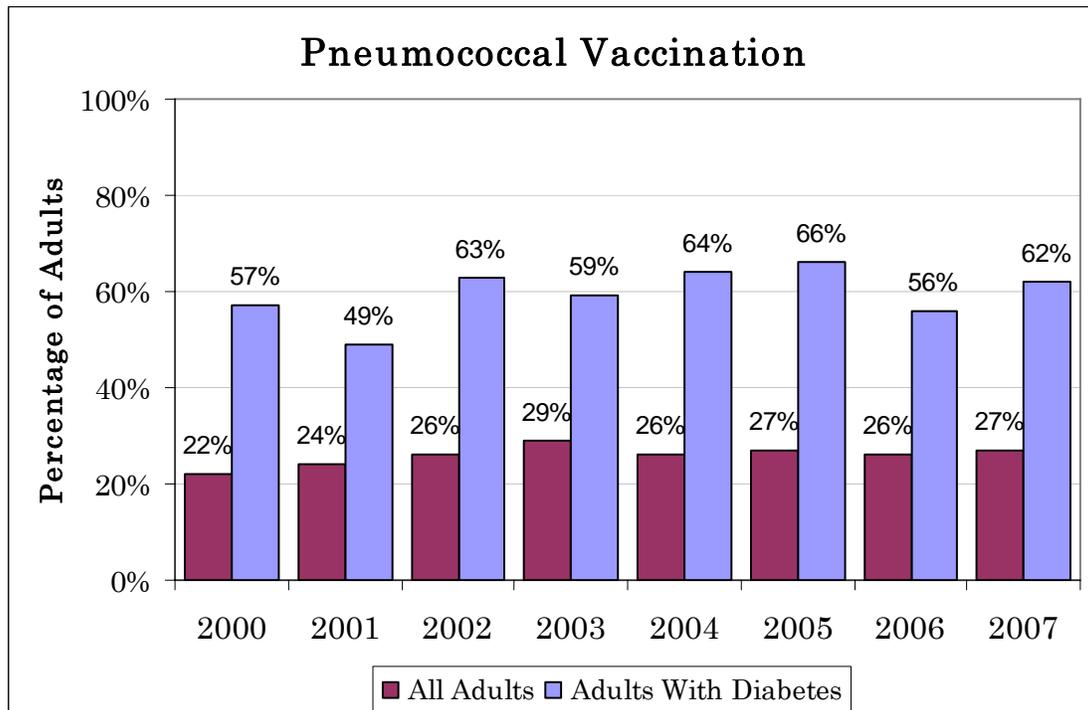
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 14-29. *Increase the proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.*

[Return to List](#)

Indicator 15 – Pneumococcal Vaccination

This indicator reflects the percentage of adults who report that they have ever had a pneumonia shot in their lifetime.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	21%	27%	26%	30%	25%	25%	26%	27%
Female	23%	22%	26%	27%	26%	28%	27%	27%

<i>Adults With Diabetes</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	54%	51%	57%	57%	59%	63%	52%	62%
Female	60%	47%	67%	61%	69%	70%	61%	63%

<i>Adults With Cardiovascular Disease</i>	2000	2001	2002	2003	2004	2005	2006	2007
Total	NA	55%	NA	69%	NA	66%	68%	68%
Male	NA	55%	NA	65%	NA	59%	70%	70%
Female	NA	54%	NA	74%	NA	76%	66%	66%

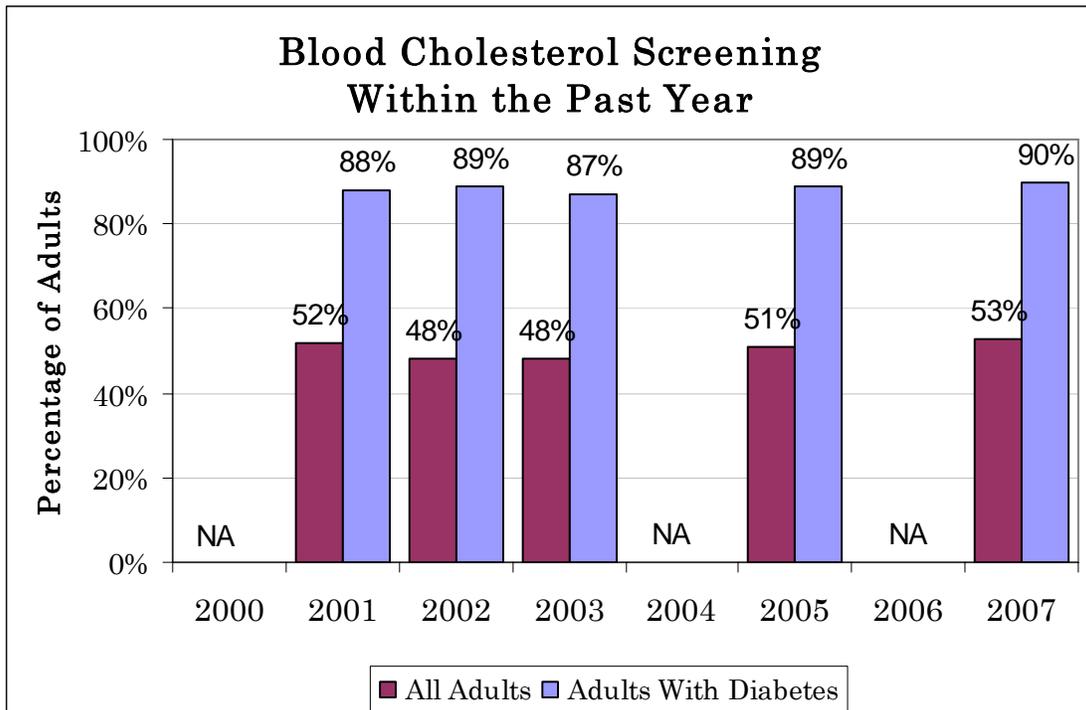
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 14-29. *Increase the proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.*

[Return to List](#)

Indicator 16 – Blood Cholesterol Screening – Within the Past Year

This indicator shows the percentage of adults who report that they had their blood cholesterol checked within the past year.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	49%	45%	45%	NA	47%	NA	47%
Female	NA	55%	51%	51%	NA	54%	NA	59%

<i>Adults With Diabetes</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	86%	90%	87%	NA	90%	NA	87%
Female	NA	89%	88%	86%	NA	89%	NA	92%

<i>Adults With Cardiovascular Disease</i>	2000	2001	2002	2003	2004	2005	2006	2007
Total	NA	85%	NA	88%	NA	86%	NA	90%
Male	NA	82%	NA	89%	NA	88%	NA	92%
Female	NA	89%	NA	85%	NA	83%	NA	87%

NA = data not available

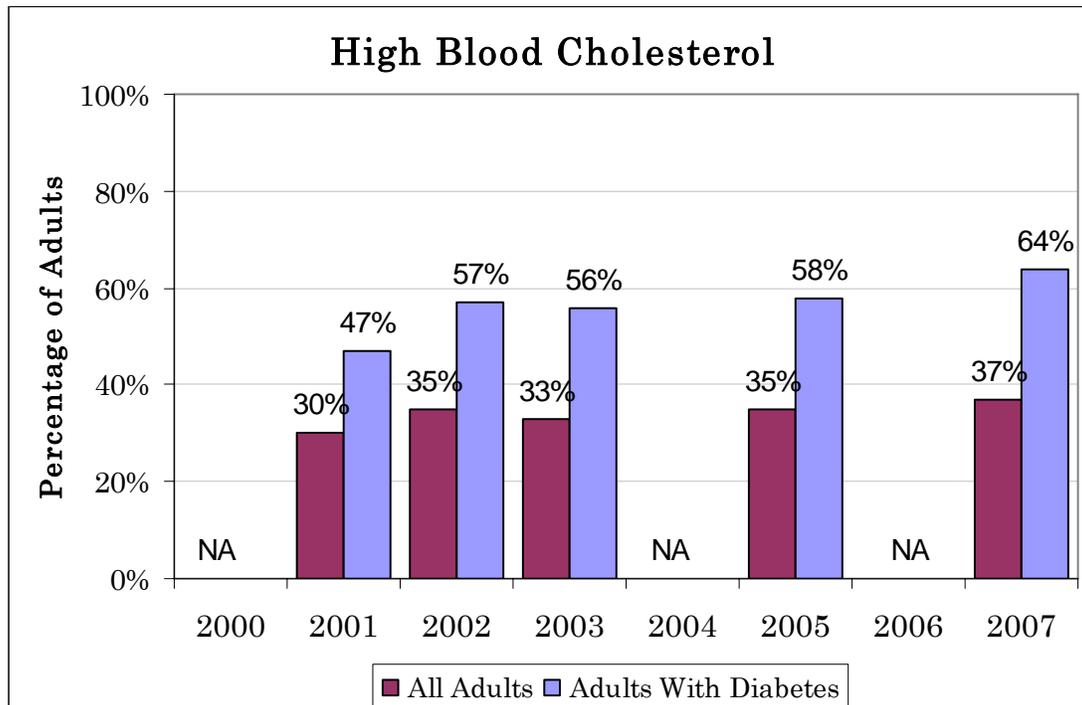
Data Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Healthy People 2010 Objective: 12-15. Increase the proportion of adults who have had their blood cholesterol checked within the preceding five years.

[Return to List](#)

Indicator 17 – High Blood Cholesterol Levels

This indicator reflects the percentage of adults (who have ever had their blood cholesterol checked) who responded yes to a question in the BRFSS asking whether they have ever been told by a doctor, nurse or other health professional that their blood cholesterol is high.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	28%	35%	32%	NA	35%	NA	37%
Female	NA	31%	34%	34%	NA	35%	NA	37%

<i>Adults With Diabetes</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	51%	50%	51%	NA	58%	NA	58%
Female	NA	44%	64%	61%	NA	59%	NA	69%

<i>Adults With Cardiovascular Disease</i>	2000	2001	2002	2003	2004	2005	2006	2007
Total	NA	65%	NA	62%	NA	64%	NA	65%
Male	NA	67%	NA	62%	NA	68%	NA	67%
Female	NA	63%	NA	63%	NA	57%	NA	63%

NA = data not available

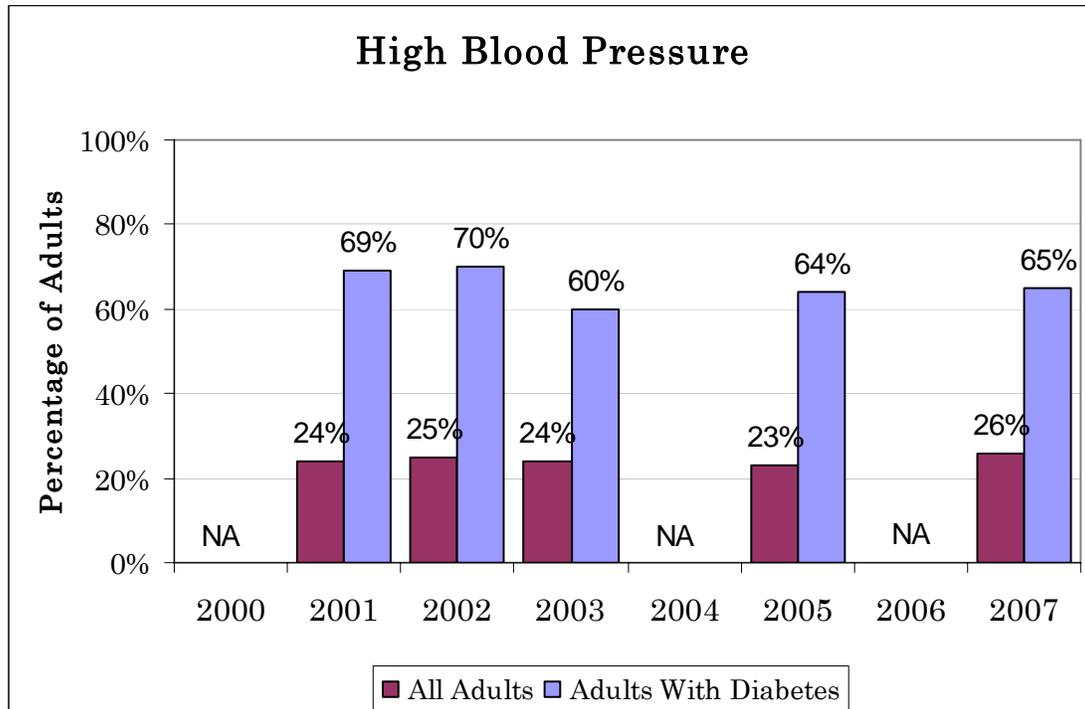
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 12-14. *Reduce the proportion of adults with high total blood cholesterol levels.*

[Return to List](#)

Indicator 18 – High Blood Pressure

This indicator reflects the percentage of adults who responded yes to a question in the BRFSS asking whether they have ever been told by a doctor, nurse or other health professional that they have high blood pressure.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	24%	25%	24%	NA	22%	NA	26%
Female	NA	25%	25%	25%	NA	25%	NA	26%

<i>Adults With Diabetes</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	65%	75%	55%	NA	60%	NA	62%
Female	NA	72%	66%	64%	NA	68%	NA	67%

<i>Adults With Cardiovascular Disease</i>	2000	2001	2002	2003	2004	2005	2006	2007
Total	NA	59%	NA	58%	NA	65%	NA	69%
Male	NA	53%	NA	56%	NA	60%	NA	65%
Female	NA	66%	NA	62%	NA	71%	NA	75%

NA = data not available

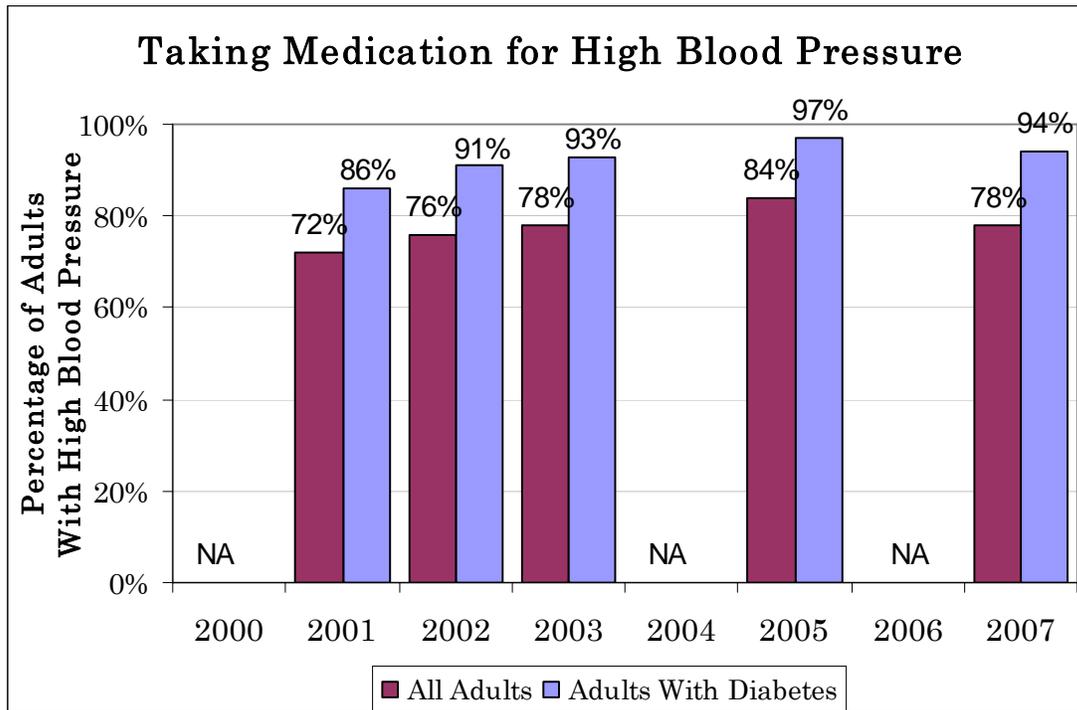
Data Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Healthy People 2010 Objective: 12-9. Reduce the proportion of adults with high blood pressure.

[Return to List](#)

Indicator 19 – Use of Blood Pressure Medication

This indicator reflects the percentage of adults (who have ever been told that they have high blood pressure) who are currently taking medicine for their high blood pressure.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	62%	70%	70%	NA	81%	NA	70%
Female	NA	81%	82%	86%	NA	88%	NA	86%

<i>Adults With Diabetes</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	82%	90%	95%	NA	95%	NA	91%
Female	NA	90%	93%	91%	NA	98%	NA	96%

<i>Adults With Cardiovascular Disease</i>	2000	2001	2002	2003	2004	2005	2006	2007
Total	NA	84%	NA	94%	NA	96%	NA	94%
Male	NA	76%	NA	93%	NA	94%	NA	94%
Female	NA	92%	NA	96%	NA	97%	NA	95%

NA = data not available

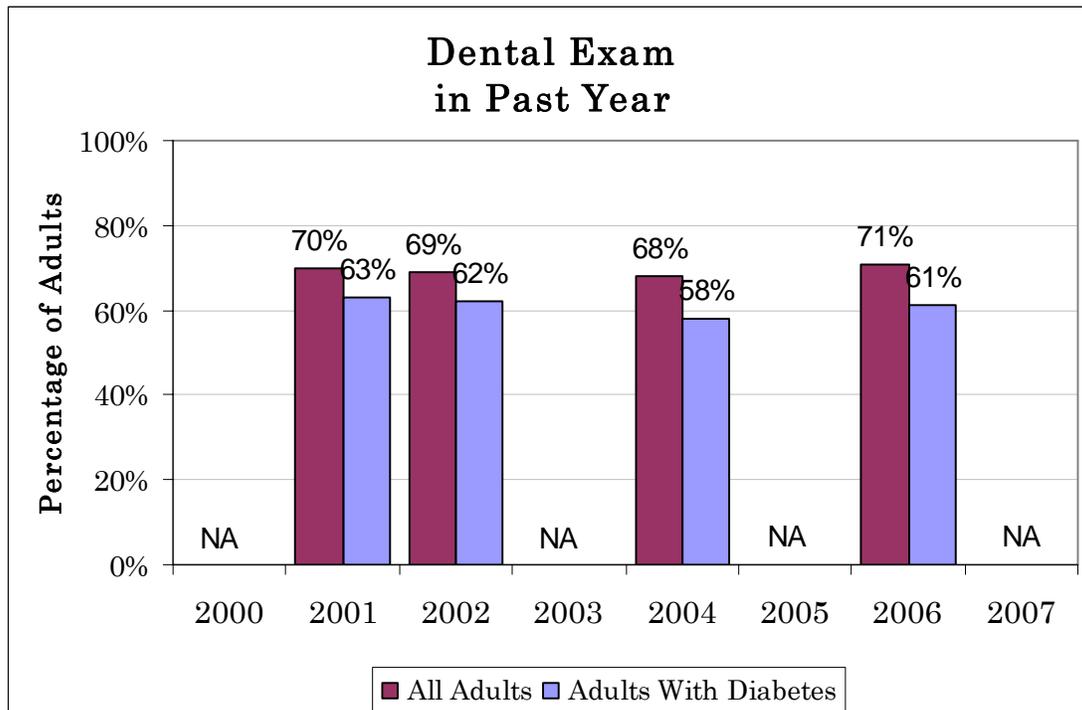
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: *none*

[Return to List](#)

Indicator 20 – Dental Exam

This indicator shows the percentage of adults who have visited a dentist or dental clinic for any reason in the past year.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	69%	66%	NA	65%	NA	68%	NA
Female	NA	72%	72%	NA	72%	NA	74%	NA

<i>Adults With Diabetes</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	61%	65%	NA	59%	NA	57%	NA
Female	NA	64%	59%	NA	58%	NA	67%	NA

<i>Adults With Cardiovascular Disease</i>	2000	2001	2002	2003	2004	2005	2006	2007
Total	NA	58%	NA	NA	NA	NA	62%	NA
Male	NA	58%	NA	NA	NA	NA	63%	NA
Female	NA	58%	NA	NA	NA	NA	60%	NA

NA = data not available

Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

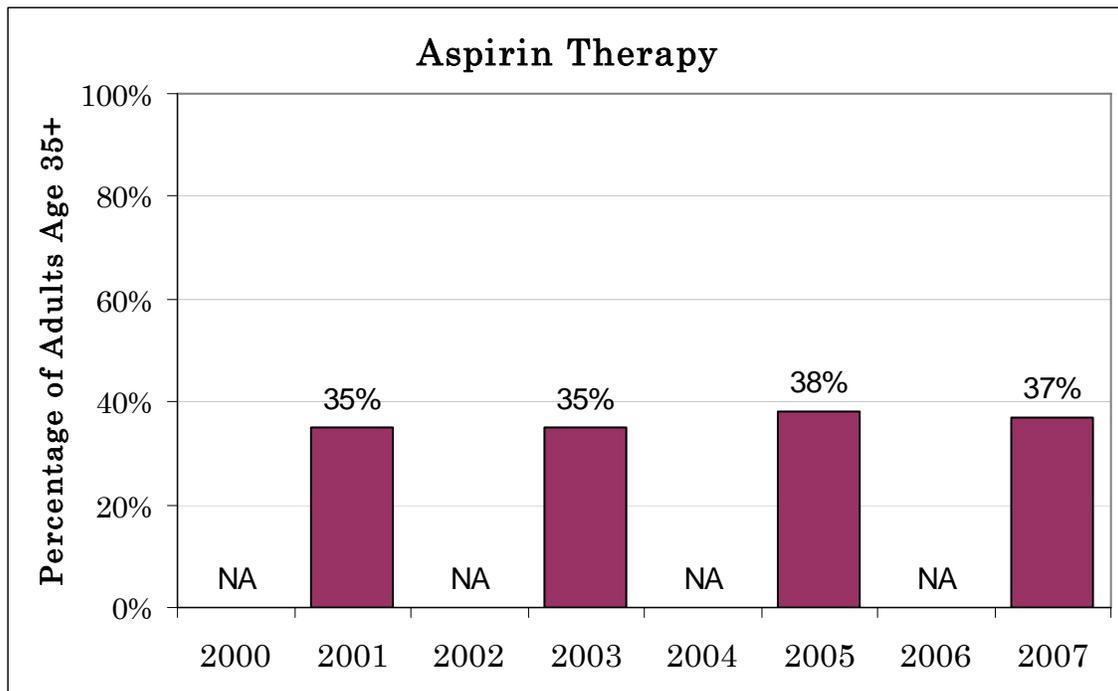
Healthy People 2010 Objective: 21-10. Increase the proportion of children and adults who use the oral health care system each year. (North Dakota indicator is adults only.)

5-15. Increase the proportion of persons with diabetes who have at least an annual dental examination.

[Return to List](#)

Indicator 21 – Aspirin Therapy

This indicator shows the percentage of adults age 35 and older who take aspirin daily or every other day.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	NA	36%	NA	37%	NA	43%	NA	39%
Female	NA	33%	NA	34%	NA	34%	NA	35%

<i>Adults With Diabetes</i>	2001 & 2003*	2003 & 2005*	2005 & 2007*
Total	64%	65%	69%
Male	65%	73%	77%
Female	64%	57%	62%

<i>Adults With Cardiovascular Disease</i>	2001 & 2003*	2003 & 2005*	2005 & 2007*
Total	77%	75%	77%
Male	83%	81%	83%
Female	69%	66%	67%

NA = data not available

***Years are combined because the survey sample size in one year was too small for the results to be reliable.**

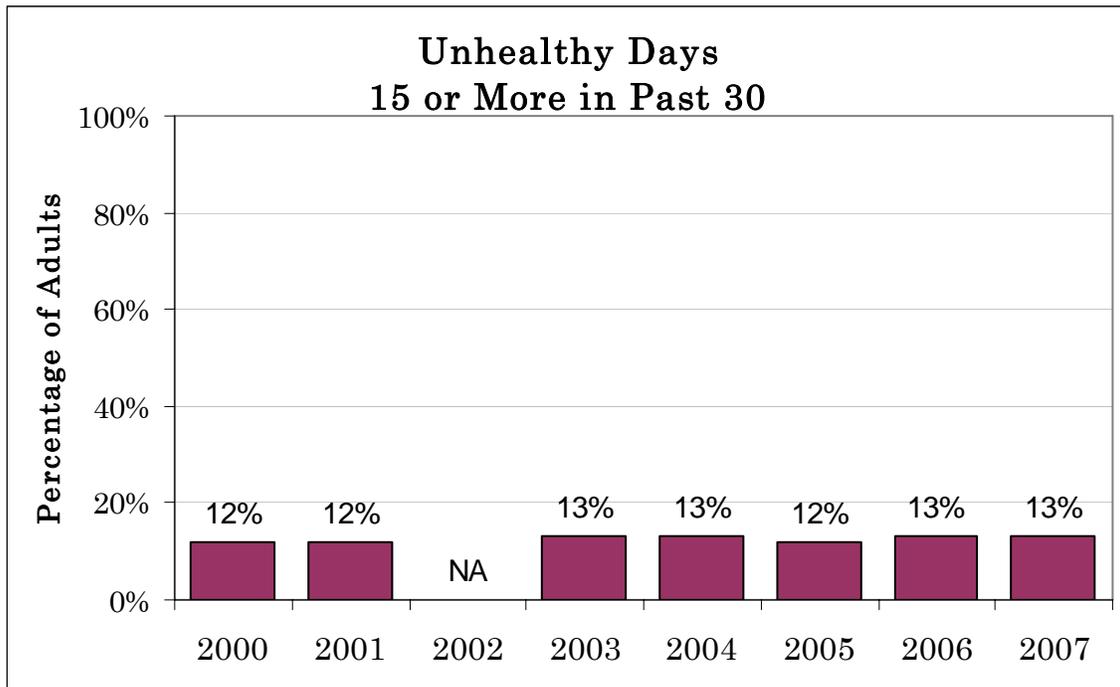
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 5-16. *Increase the proportion of persons with diabetes who take aspirin at least 15 times per month.*

[Return to List](#)

Indicator 22 – Unhealthy Days

This indicator presents the percentage of adults who indicated that their physical or mental health was not good for 15 or more days in the past 30 days.



<i>All Adults by Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	10%	11%	NA	12%	11%	10%	11%	10%
Female	14%	14%	NA	15%	15%	15%	14%	15%

<i>Adults With Diabetes</i>	2000-2001 & 2003-2004*	2001 & 2003-2005*	2005-2007*
Total	27%	25%	26%
Male	25%	24%	23%
Female	28%	27%	29%

<i>Adults With Cardiovascular Disease</i>	2001 & 2003*	2003 & 2005*	2005-2007*
Total	34%	33%	26%
Male	33%	30%	21%
Female	37%	37%	33%

NA = data not available

*Years are combined because the survey sample size in one year was too small for the results to be reliable.

Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: *none*

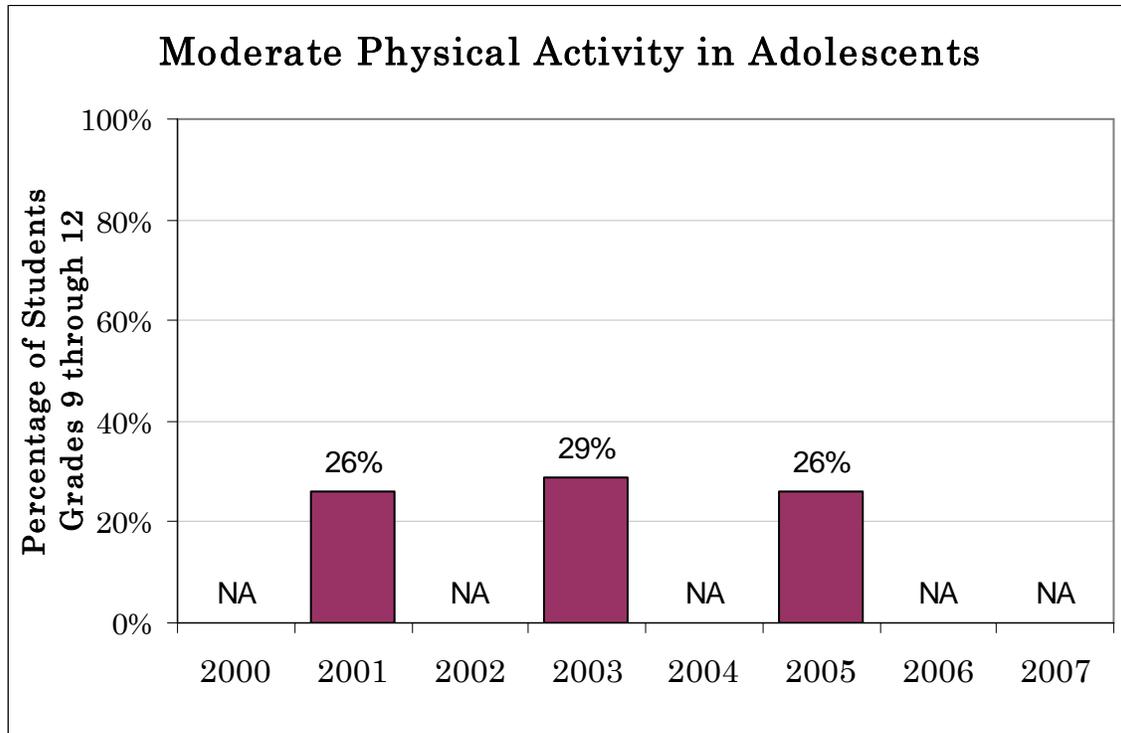
[Return to List](#)

Adolescents



Indicator 23 – Moderate Physical Activity in Adolescents

Moderate physical activity is defined as physical activity for 30 or more minutes per day for five or more days per week that does not cause a person to sweat or breathe hard.



NA = data not available

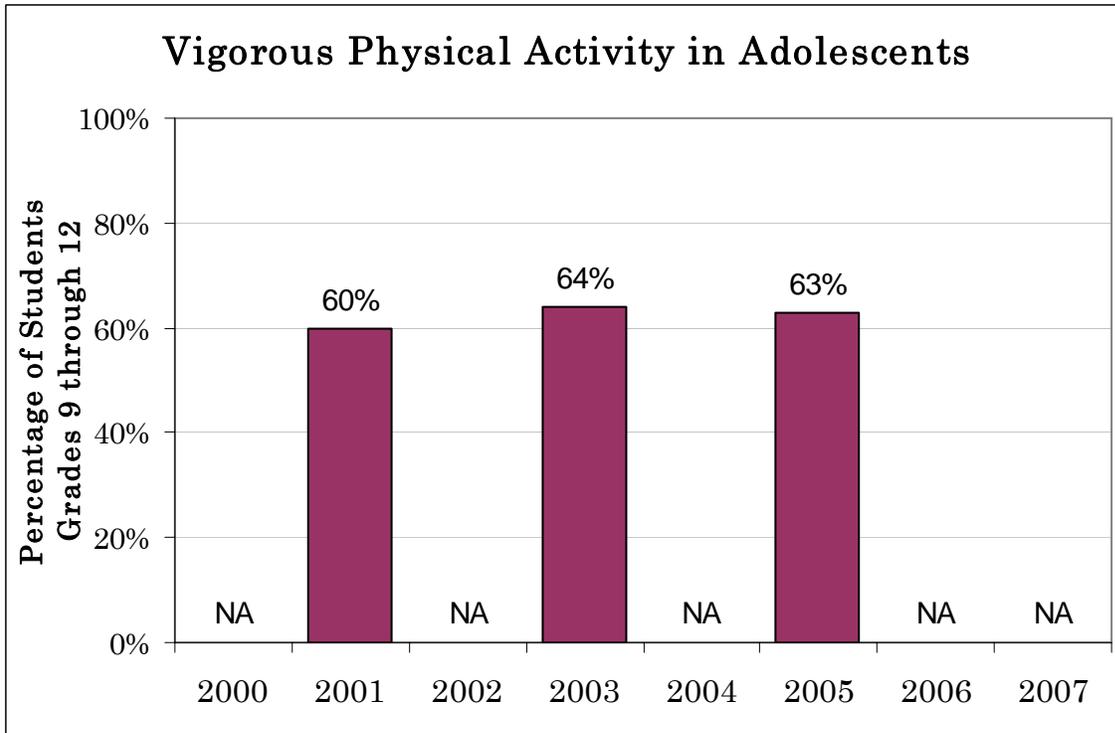
Data Source: *Youth Risk Behavior Survey (YRBS)*

Healthy People 2010 Objective: 22-6. *Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes on five or more of the previous seven days.*

[Return to List](#)

Indicator 24 – Vigorous Physical Activity in Adolescents

Vigorous physical activity is defined as activity for 20 or more minutes per day on three or more days that causes a person to sweat and breathe hard.



NA = data not available

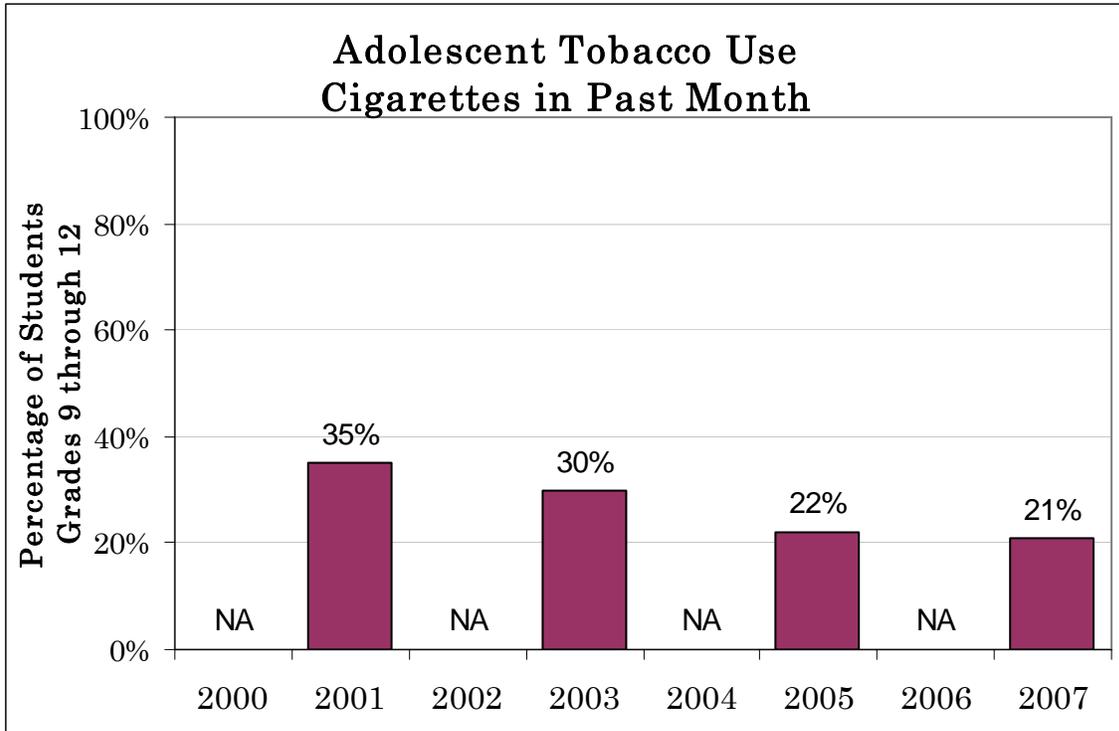
Data Source: *Youth Risk Behavior Survey (YRBS)*

Healthy People 2010 Objective: 22-7. *Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness three or more days per week for 20 or more minutes per occasion. Vigorous physical activity is activity that causes a person to sweat and breathe hard.*

[Return to List](#)

Indicator 25 – Adolescent Tobacco Use

This indicator reflects the percentage of students in grades nine through 12 who smoked cigarettes at all, even one, in the past month.



NA = data not available

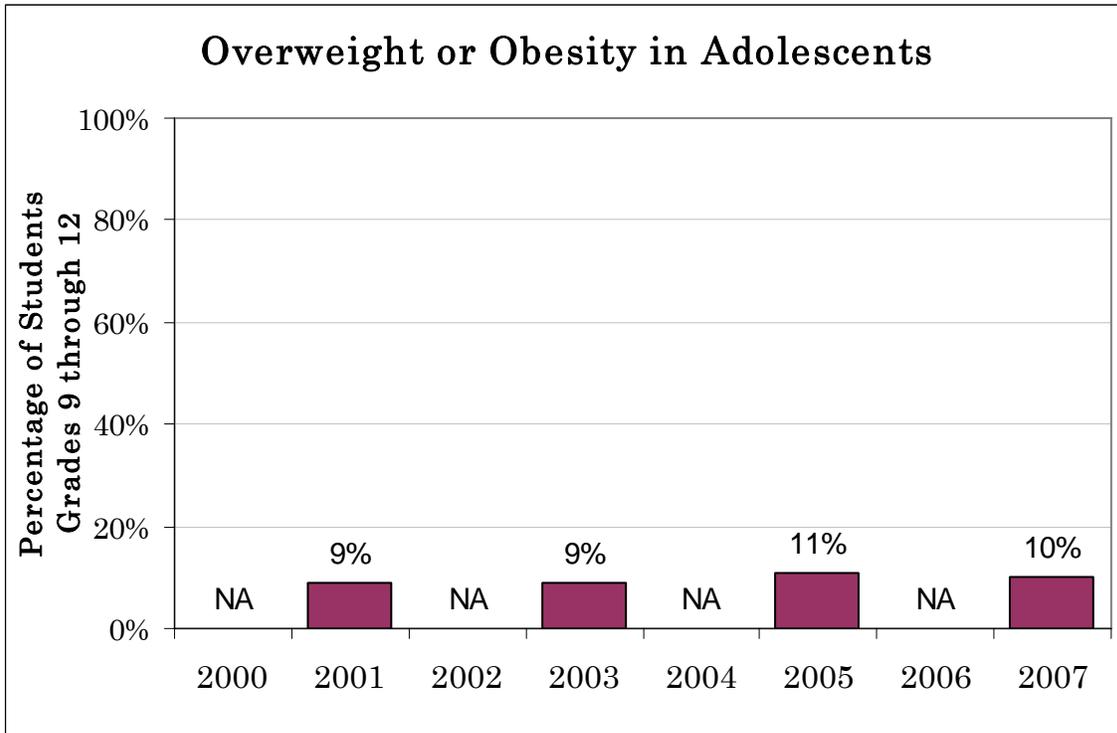
Data Source: *Youth Risk Behavior Survey (YRBS)*

Healthy People 2010 Objective: 27-2b. *Reduce tobacco use by adolescents. Any cigarette smoking in the past month.*

[Return to List](#)

Indicator 26 – Overweight or Obesity in Children and Adolescents

This indicator reflects the percentage of students in grades nine through 12 who are overweight. For YRBS data, overweight is defined as having a body mass index (BMI) greater than or equal to the 95th percentile by age and sex.



NA = data not available

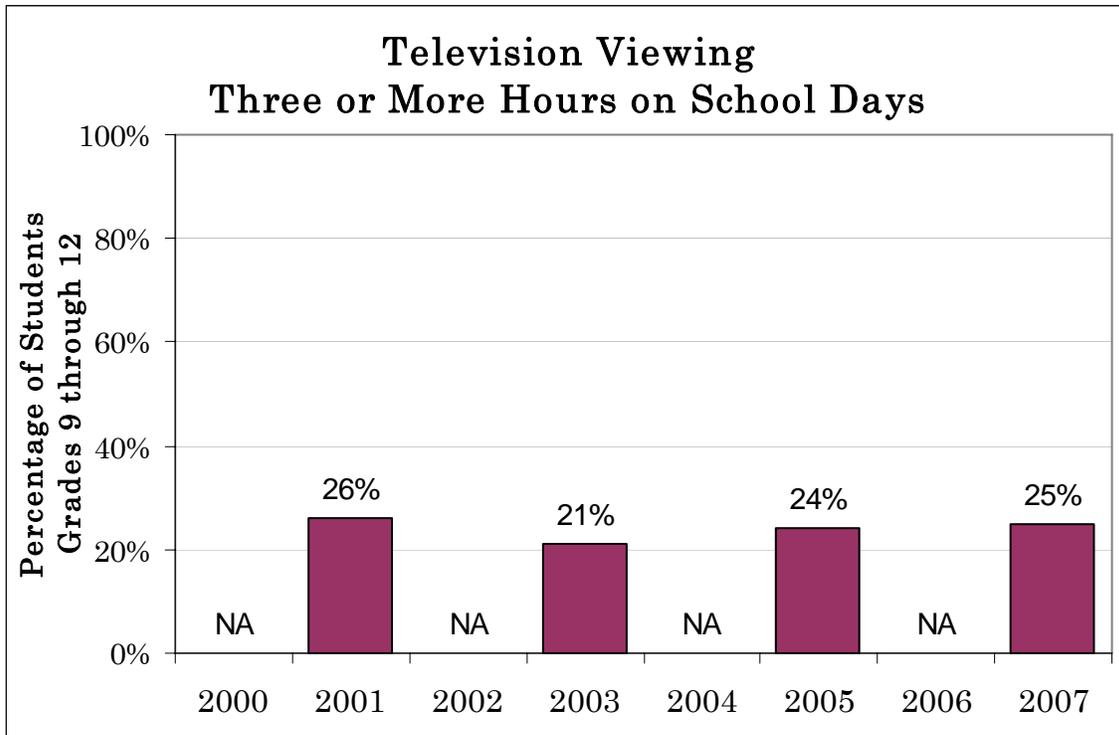
Data Source: *Youth Risk Behavior Survey (YRBS)*

Healthy People 2010 Objective: 19-3b. *Reduce the proportion of children and adolescents who are overweight or obese. Adolescents age 12 to 19 years. (North Dakota indicator is high school students.)*

[Return to List](#)

Indicator 27 – Television Viewing

This indicator shows the percentage of students in grades nine through 12 who report watching television for three or more hours on an average school day.



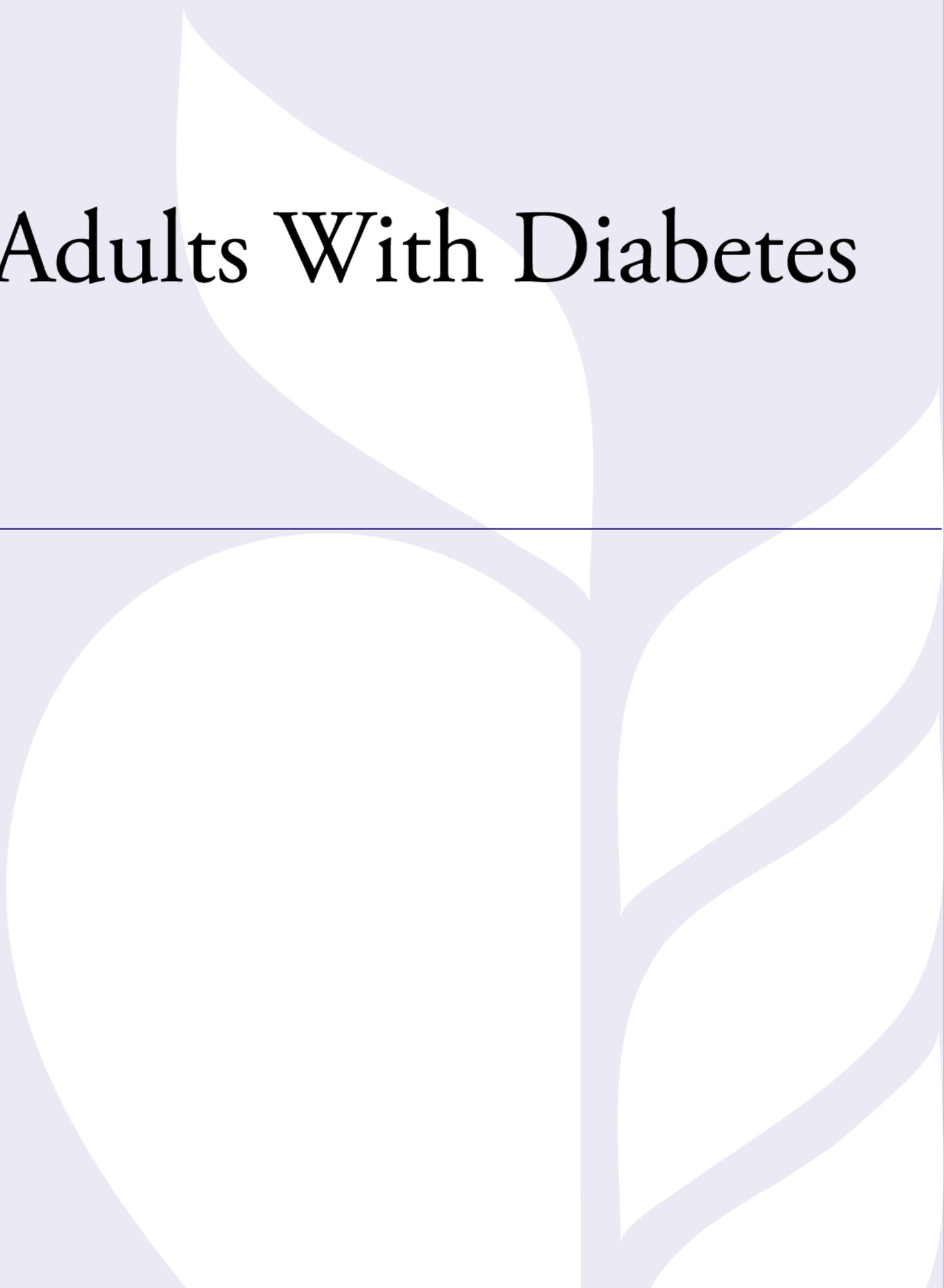
NA = data not available

Data Source: *Youth Risk Behavior Survey (YRBS)*

Healthy People 2010 Objective: 22-11. *Increase the proportion of adolescents who view television two or fewer hours on a school day.*

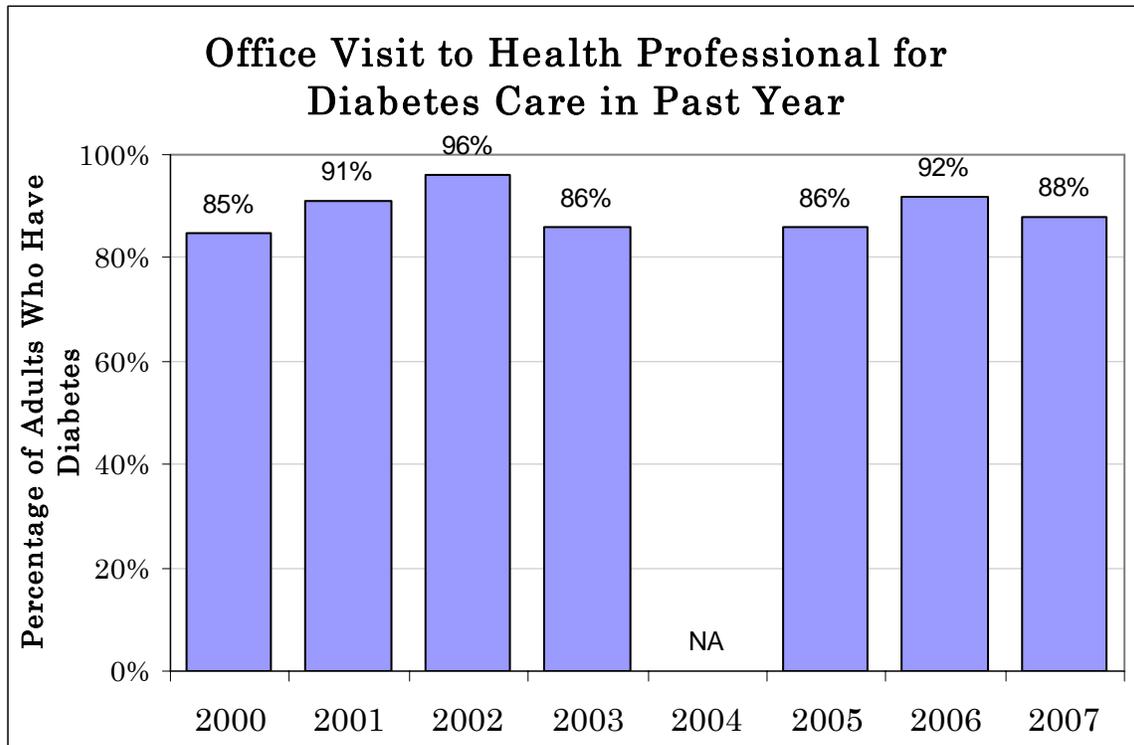
[Return to List](#)

Adults With Diabetes



Indicator 28 – Office Visit to Health Professional for Diabetes Care

This indicator shows the percentage of adults who have diabetes who saw a doctor, nurse or other health professional at least once in the past year for diabetes care.



<i>By Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	80%	96%	94%	84%	NA	84%	92%	89%
Female	89%	86%	98%	88%	NA	88%	92%	88%

NA = data not available

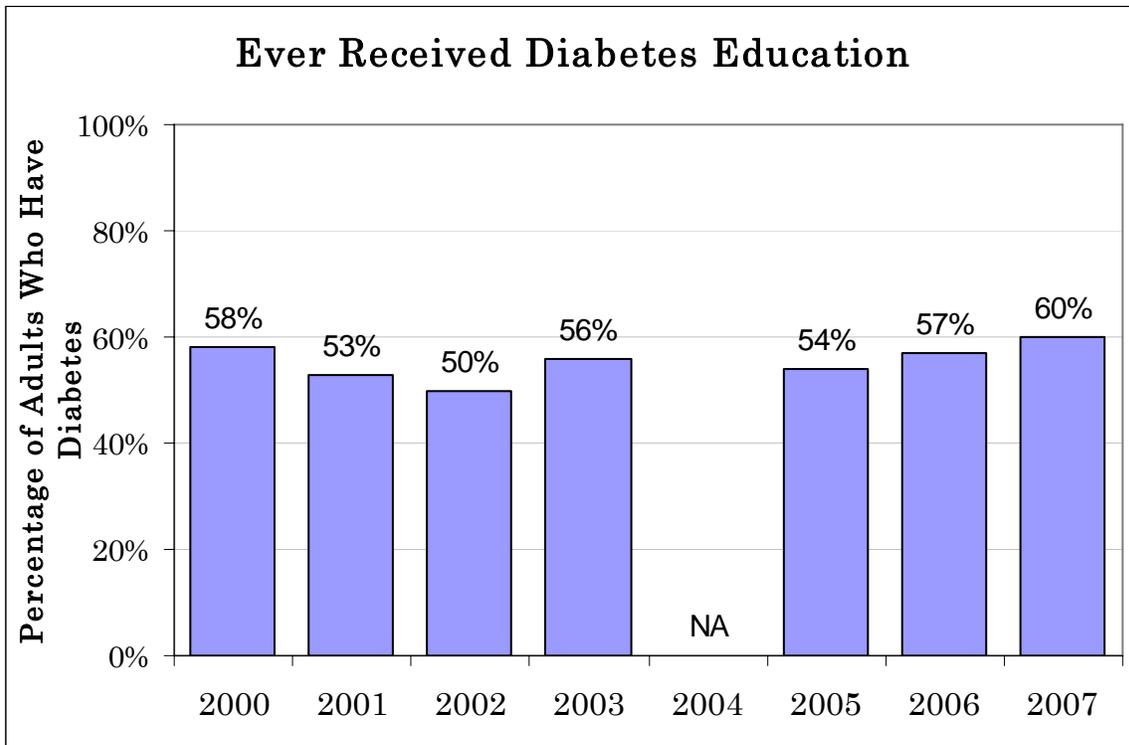
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: *none*

[Return to List](#)

Indicator 29 – Diabetes Education

This indicator shows the percentage of adults who have diabetes who have ever taken a course or class in how to manage their diabetes themselves.



<i>By Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	48%	46%	50%	54%	NA	50%	54%	55%
Female	67%	58%	50%	57%	NA	58%	61%	65%

NA = data not available

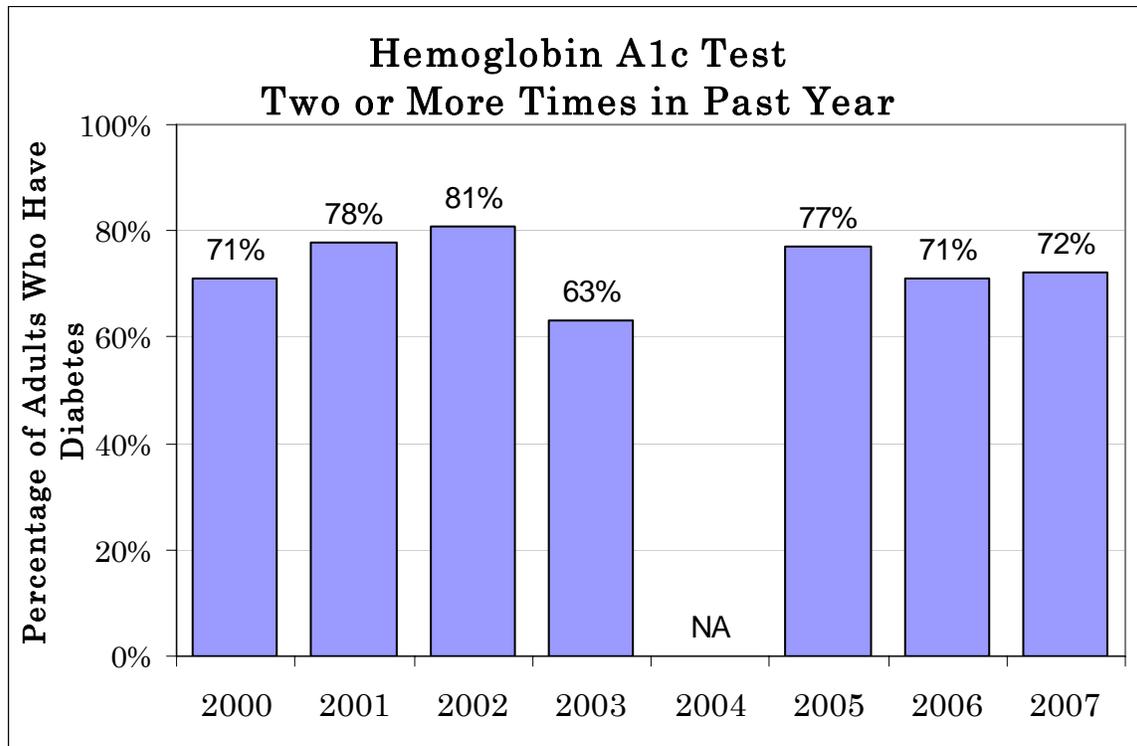
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 5-1. *Increase the proportion of persons with diabetes who receive formal diabetes education.*

[Return to List](#)

Indicator 30 – Hemoglobin A1c Test

This indicator shows the percentage of adults who have diabetes who had a hemoglobin A1c test two or more times in the past year.



<i>By Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	62%	83%	78%	64%	NA	71%	69%	74%
Female	79%	74%	84%	62%	NA	81%	73%	70%

NA = data not available

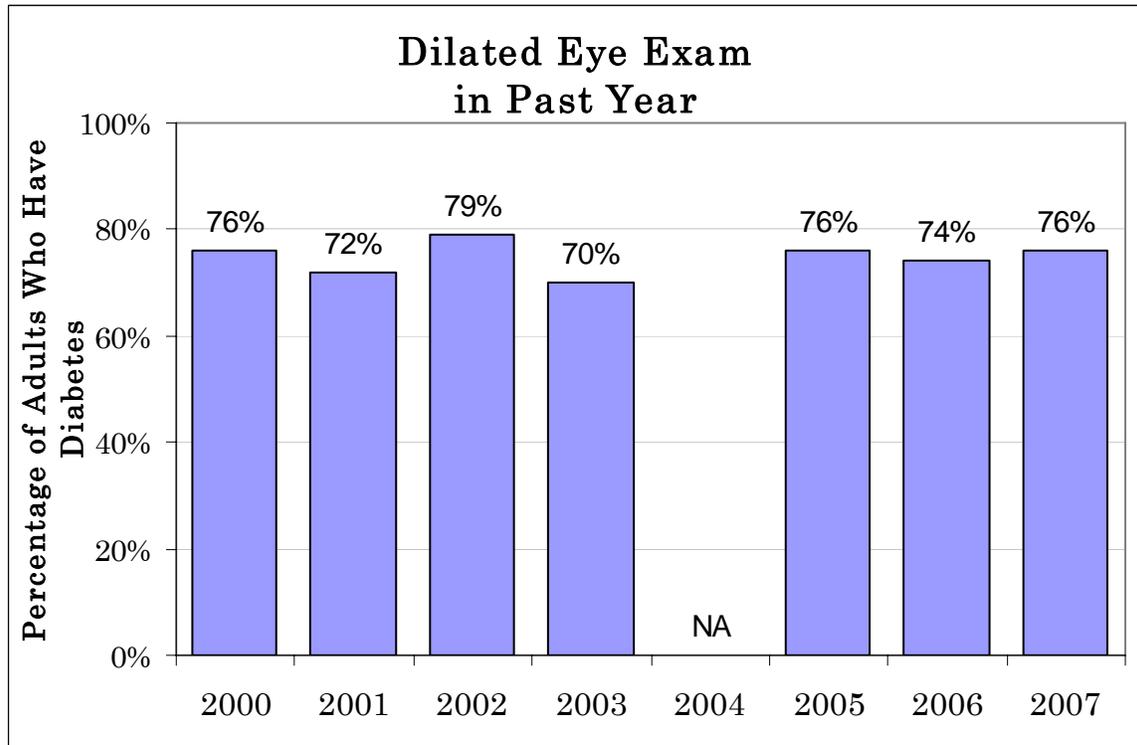
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 5-12: *Increase the proportion of adults with diabetes who have a glycosylated hemoglobin measurement at least once a year.*

[Return to List](#)

Indicator 31 – Dilated Eye Exam

This indicator shows the percentage of adults who have diabetes who had a dilated eye exam within the past year.



<i>By Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	64%	69%	78%	69%	NA	74%	70%	74%
Female	87%	74%	80%	71%	NA	78%	79%	78%

NA = data not available

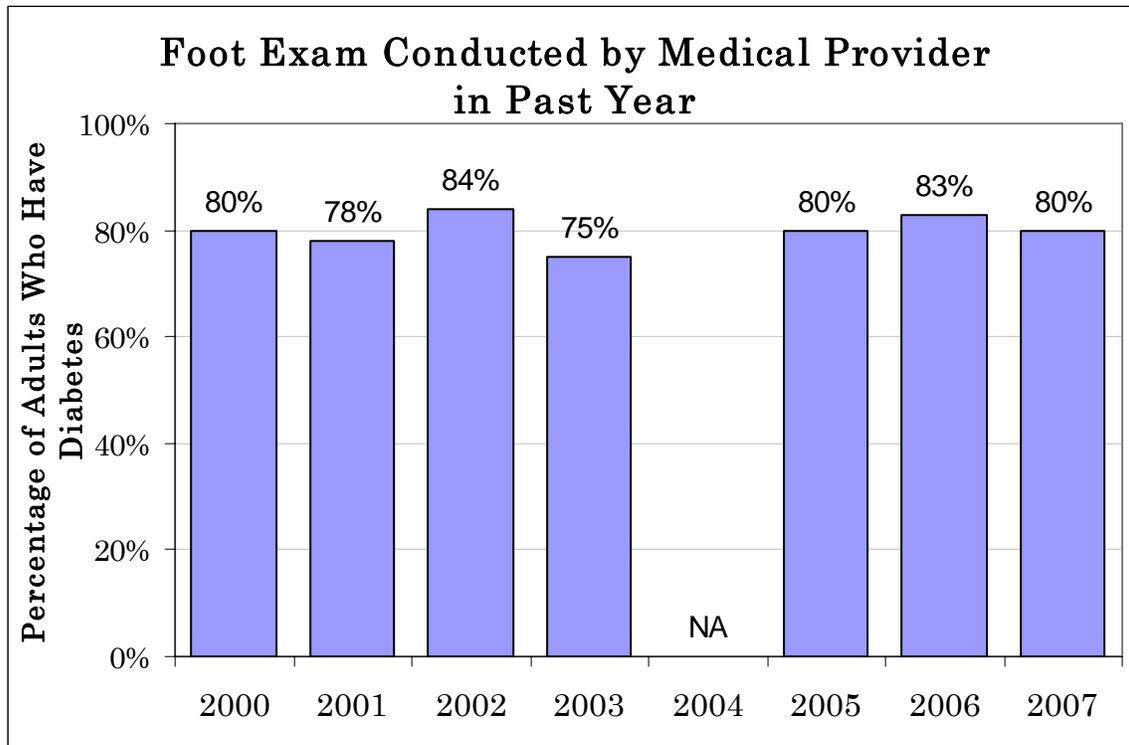
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 5-13. *Increase the proportion of adults with diabetes who have an annual dilated eye examination.*

[Return to List](#)

Indicator 32 – Foot Exam – Conducted by Medical Provider

This indicator shows the percentage of adults who have diabetes who had their feet checked by a health professional for any sores or irritations at least once in the past year.



<i>By Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	80%	84%	88%	78%	NA	82%	85%	83%
Female	79%	72%	81%	72%	NA	79%	79%	76%

NA = data not available

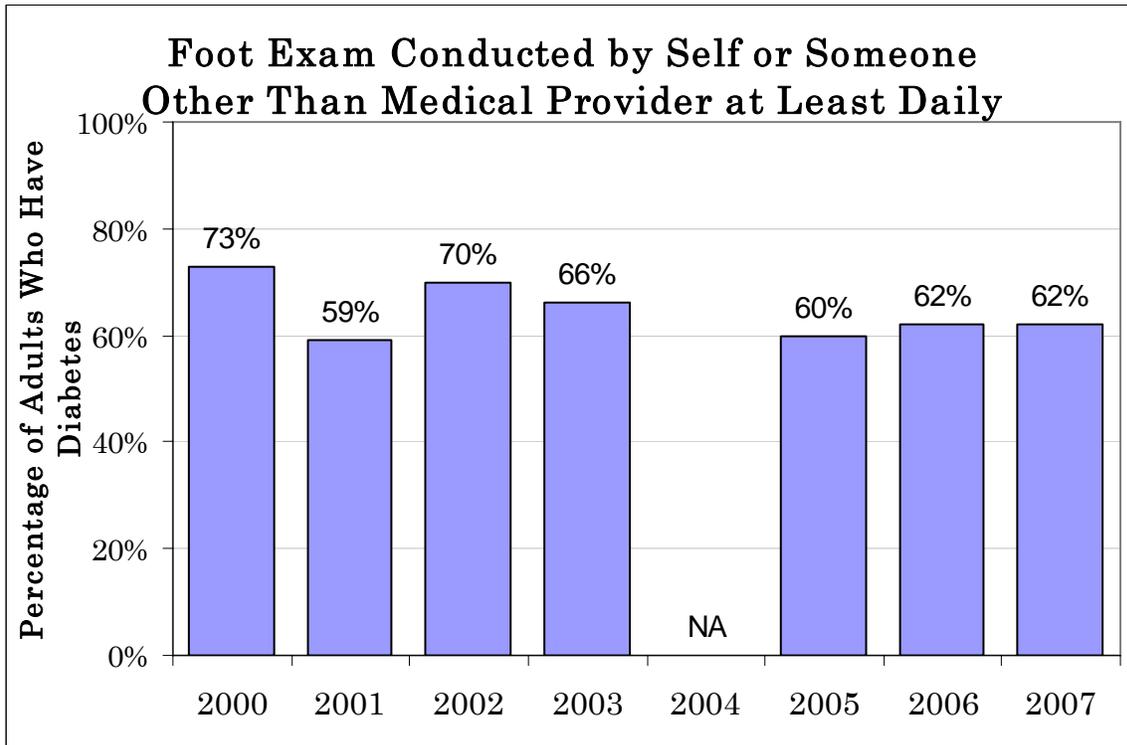
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 5-14. *Increase the proportion of adults with diabetes who have at least an annual foot examination.*

[Return to List](#)

Indicator 33 – Foot Exam – Conducted by Self or Someone Other Than Health Professional

This indicator shows the percentage of adults who have diabetes who check their own feet for any sores or irritations at least once daily. Checks conducted by family members or friends also are included; however, checks conducted by a health professional are not.



<i>By Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	74%	57%	68%	64%	NA	56%	61%	62%
Female	72%	60%	71%	69%	NA	64%	62%	62%

NA = data not available

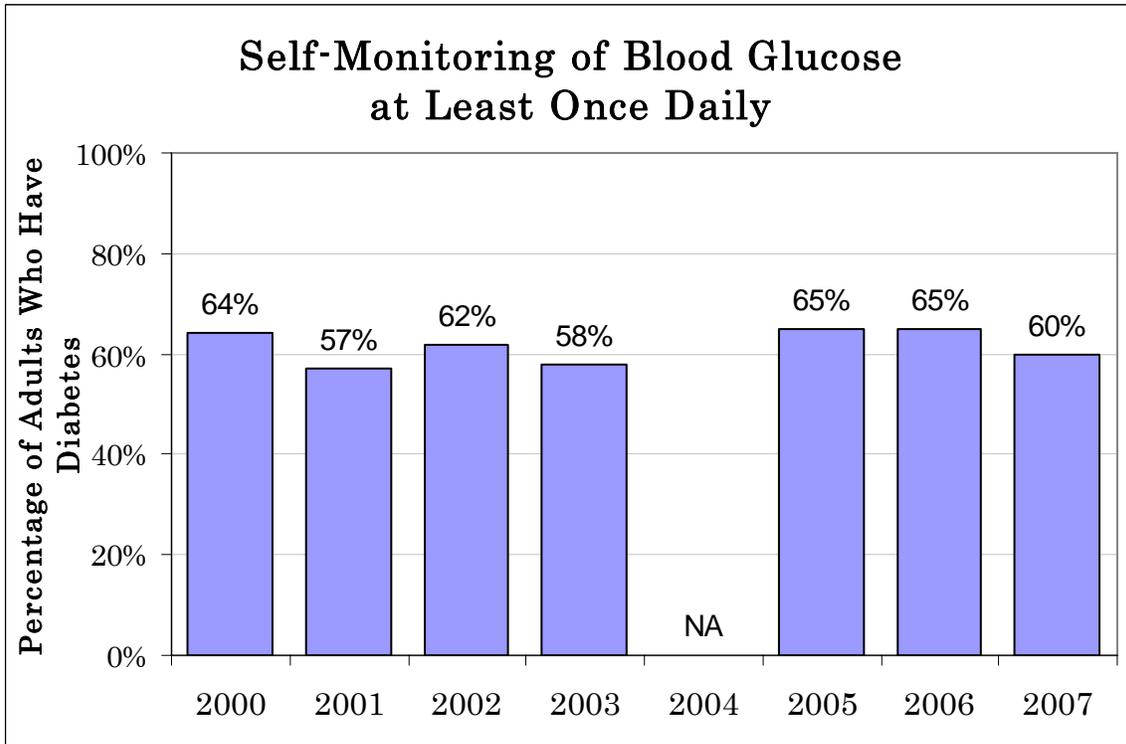
Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: *none*

[Return to List](#)

Indicator 34 – Self-Monitoring of Blood Glucose

This indicator shows the percentage of adults who have diabetes who check their blood for glucose at least once daily. Checks conducted by family members or friends also are included; however, checks conducted by a health professional are not.



<i>By Gender</i>	2000	2001	2002	2003	2004	2005	2006	2007
Male	63%	55%	53%	57%	NA	56%	64%	60%
Female	66%	58%	70%	59%	NA	73%	65%	60%

NA = data not available

Data Source: *Behavioral Risk Factor Surveillance Survey (BRFSS)*

Healthy People 2010 Objective: 5-17. *Increase the proportion of adults with diabetes who perform self-blood-glucose-monitoring at least once daily.*

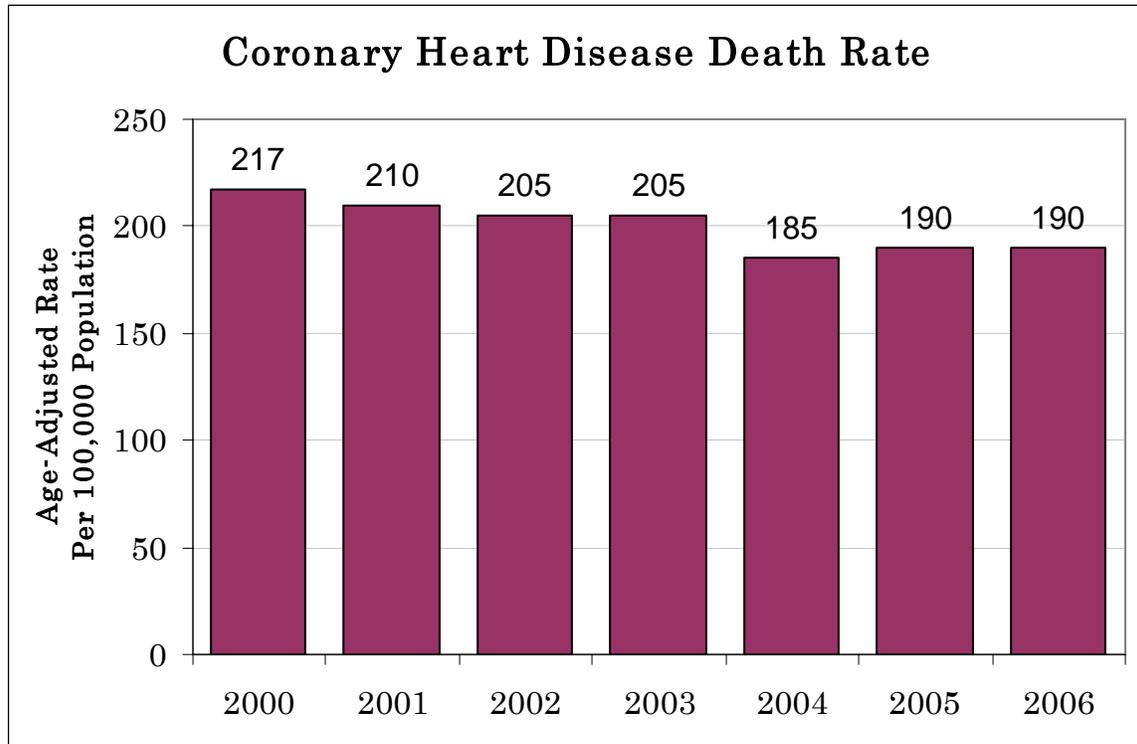
[Return to List](#)

Mortality



Indicator 35 – Coronary Heart Disease Deaths

The death rate for coronary heart disease (ICD-10 codes I11, I20-I25) is calculated as an age-adjusted rate (see Definitions, page 48) per 100,000 population.



<i>By Gender*</i>	2000	2001	2002	2003	2004	2005	2006
Male	287	278	265	277	242	249	250
Female	163	156	156	149	143	144	143

*Per 100,000 population

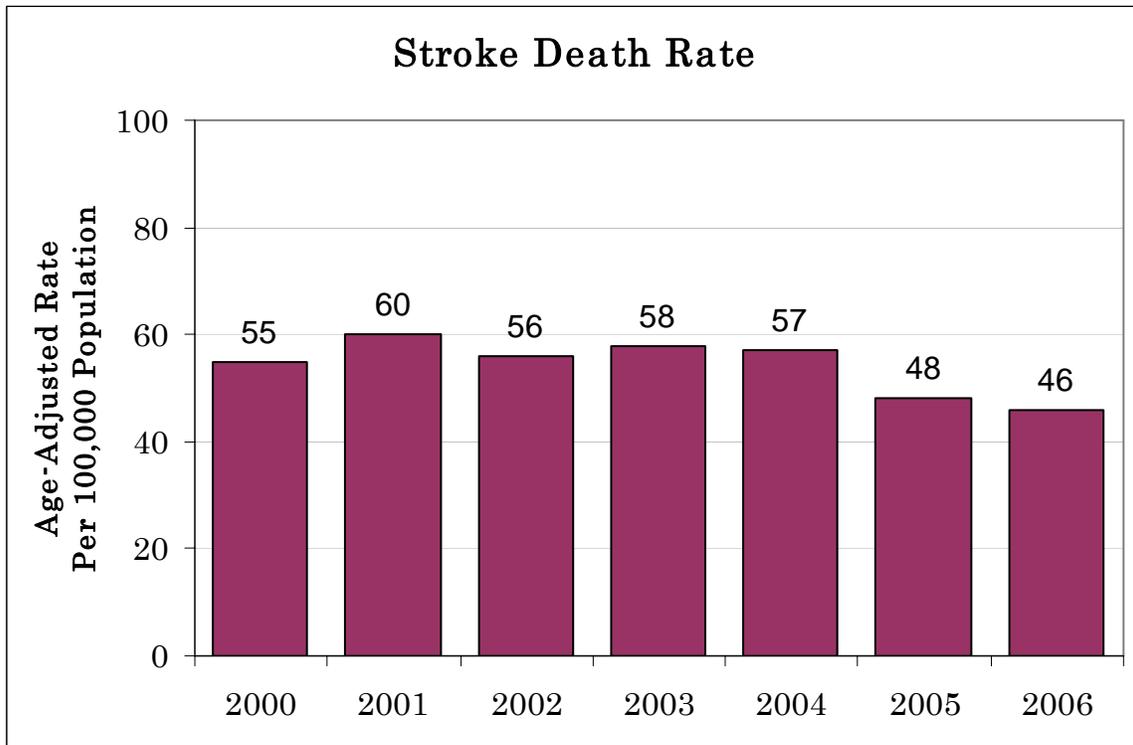
Data Source: *Vital Statistics*

Healthy People 2010 Objective: 12-1. *Reduce coronary heart disease deaths.*

[Return to List](#)

Indicator 36 – Stroke Deaths

The death rate for stroke (ICD-10 codes I60-I69) is calculated as an age-adjusted rate (see Definitions, page 48) per 100,000 population.



<i>By Gender*</i>	2000	2001	2002	2003	2004	2005	2006
Male	57	67	56	64	59	50	52
Female	52	57	55	53	55	46	42

*Per 100,000 population

Data Source: *Vital Statistics*

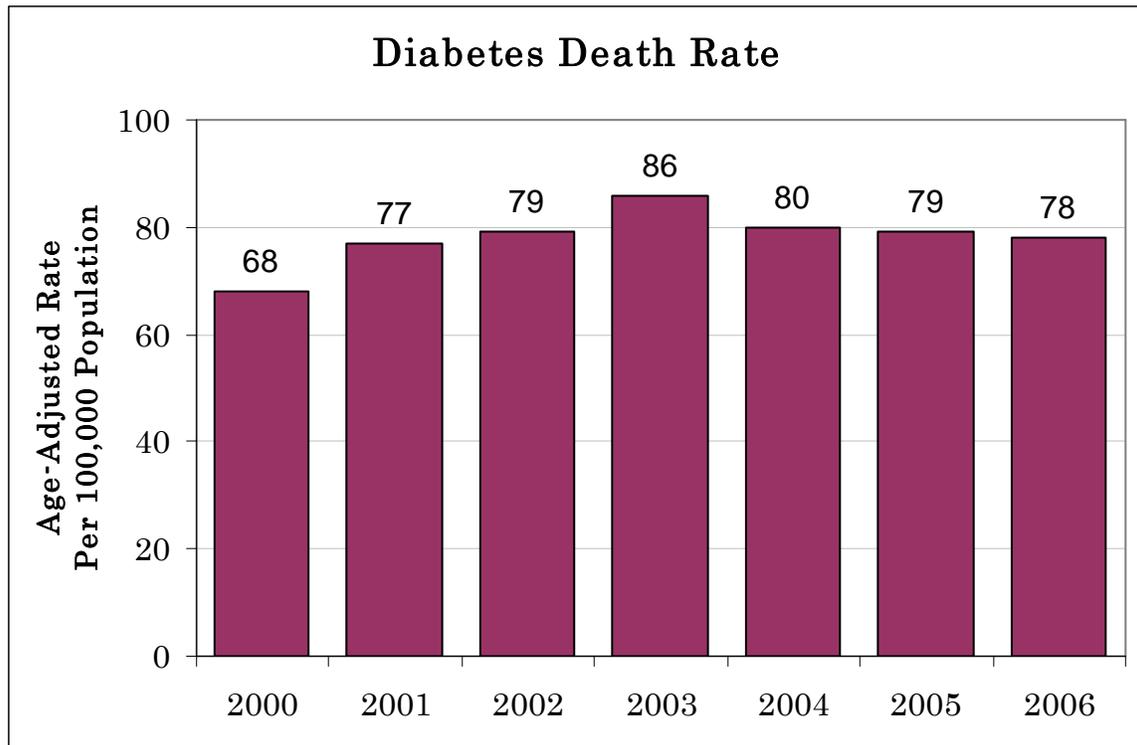
Healthy People 2010 Objective: 12-7. *Reduce stroke deaths.*

[Return to List](#)

Indicator 37 – Diabetes Deaths

The death rate for diabetes (ICD-10 codes E10-E14) is calculated as an age-adjusted rate (see Definitions, page 48) per 100,000 population.

Deaths where diabetes is an underlying or contributing cause of death are included.



<i>By Gender*</i>	2000	2001	2002	2003	2004	2005	2006
Male	80	97	102	107	103	102	97
Female	58	64	63	70	64	63	64

*Per 100,000 population

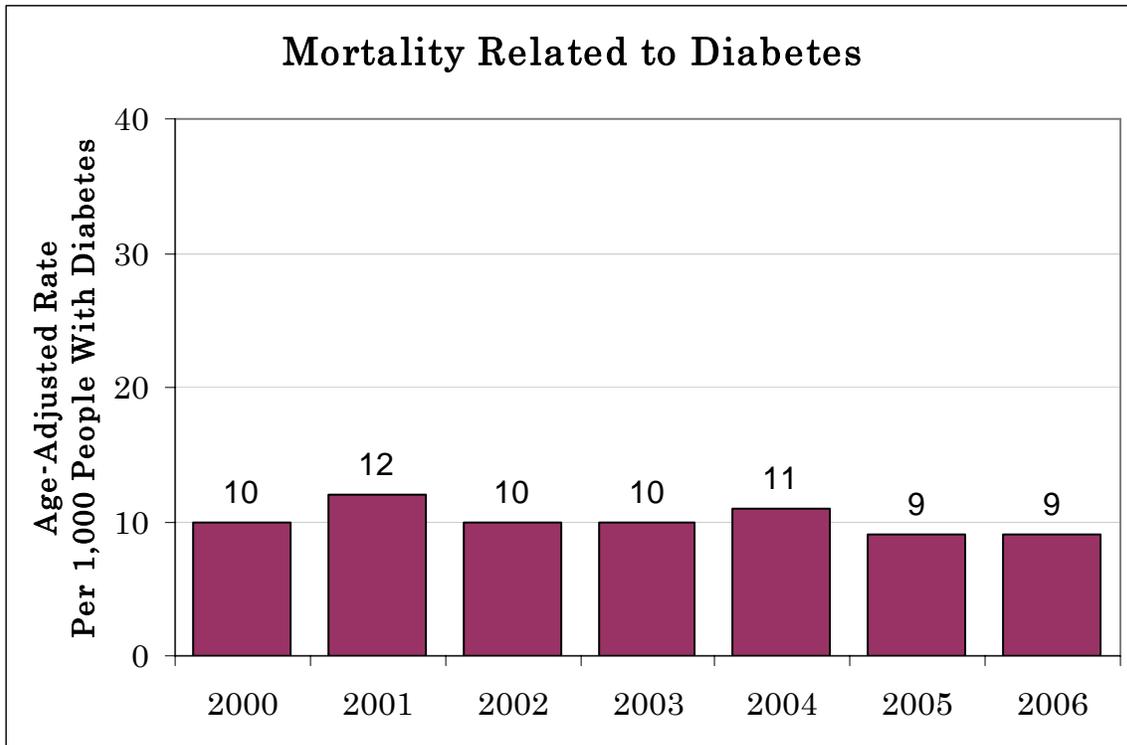
Data Source: *Vital Statistics*

Healthy People 2010 Objective: 5-5. *Reduce the diabetes death rate.*

[Return to List](#)

Indicator 38 – Mortality Related to Diabetes

Death related to diabetes is the age-adjusted rate (see Definitions, page 48) of death (by any cause) among people who have diabetes. It is calculated as the number of deaths per 1,000 people diagnosed with diabetes in the population.



<i>By Gender*</i>	2000	2001	2002	2003	2004	2005	2006
Male	10	15	10	12	11	10	8
Female	9	11	9	8	11	8	9

*Per 1,000 people with diabetes

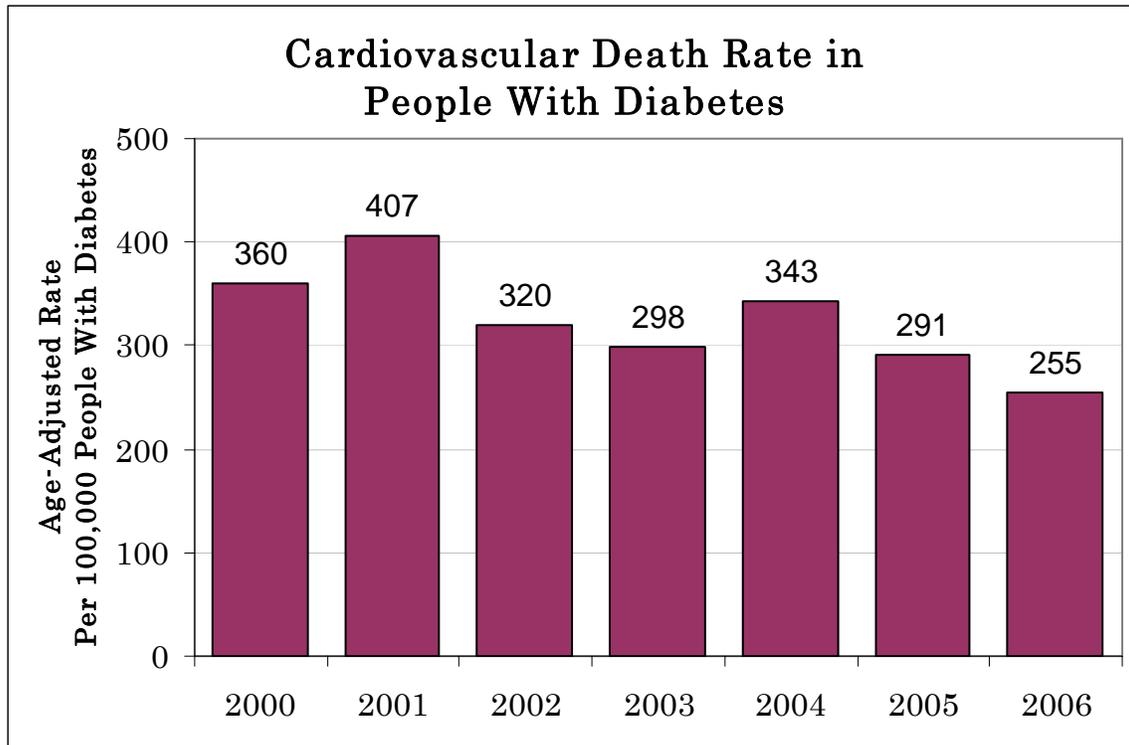
Data Source: *Vital Statistics*

Healthy People 2010 Objective: 5-6. *Reduce diabetes-related deaths among persons with diabetes.*

[Return to List](#)

Indicator 39 – Cardiovascular Deaths in People With Diabetes

Cardiovascular deaths in people with diabetes is the age-adjusted rate (see Definitions, page 48) of death caused by cardiovascular disease (ICD-10 codes I00-I78) among people who have diabetes. It is calculated as the number of deaths per 100,000 people diagnosed with diabetes in the population.



<i>By Gender*</i>	2000	2001	2002	2003	2004	2005	2006
Male	389	550	324	331	405	330	222
Female	315	349	317	269	281	258	276

*Per 100,000 people with diabetes

Data Source: *Vital Statistics*

Healthy People 2010 Objective: 5-7. *Reduce deaths from cardiovascular disease in persons with diabetes.*

[Return to List](#)

Definitions

Age-Adjusted Rate A rate is modified to take into account the ages of a group of individuals so that rates from different populations can be compared and the effect of the ages of the people in the population is removed. All age-adjusted death rates are adjusted to the United States 2000 population standard.

Body Mass Index or BMI The BODY MASS INDEX (BMI) is used to define weight status and is derived from the formula:

$\text{WEIGHT(kg)} / \text{HEIGHT(m)}^2$ (Weight in kilograms divided by the square of your height in meters).

A body mass index (BMI) greater than or equal to 25 indicates that a person is overweight. A BMI greater than or equal to 30 indicates obesity. The standards are the same for men and women.

BRFSS Behavioral Risk Factor Surveillance System. A random-sample, statewide survey of adults.

Healthy People 2010 Healthy People 2010 is a set of health objectives for the United States to achieve over the first decade of the new century.

Hemoglobin A1c A blood test that measures the average level of blood sugar over the past three months.

ICD-10 The 10th version of the International Statistical Classification of Diseases and Related Health Problems.

YRBS Youth Risk Behavior Survey. A random-sample, statewide survey of high school students.
