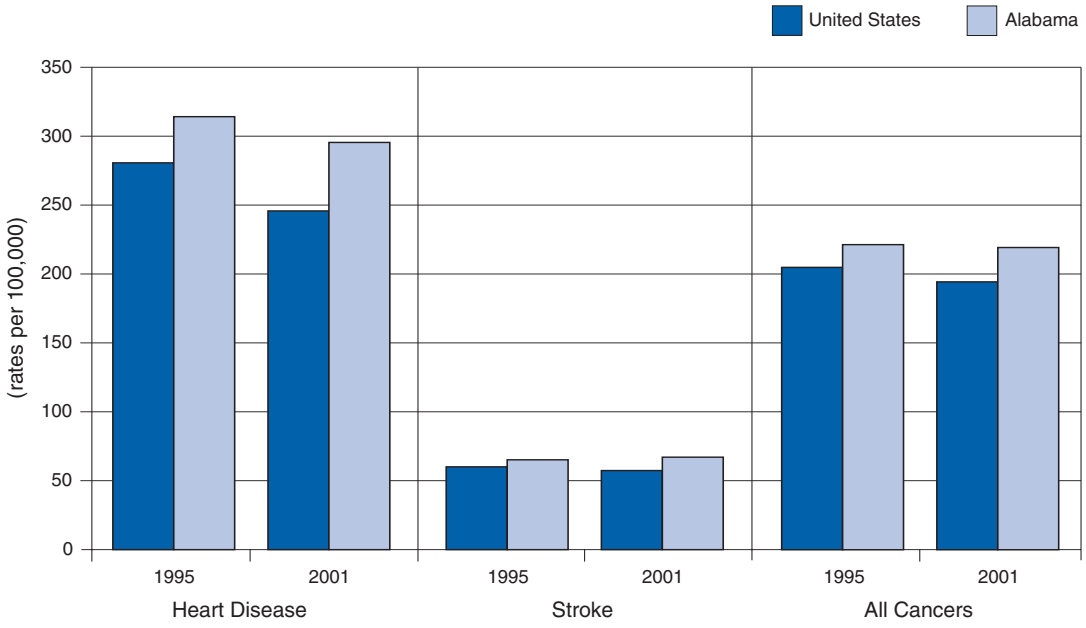
Alabama

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Alabama, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

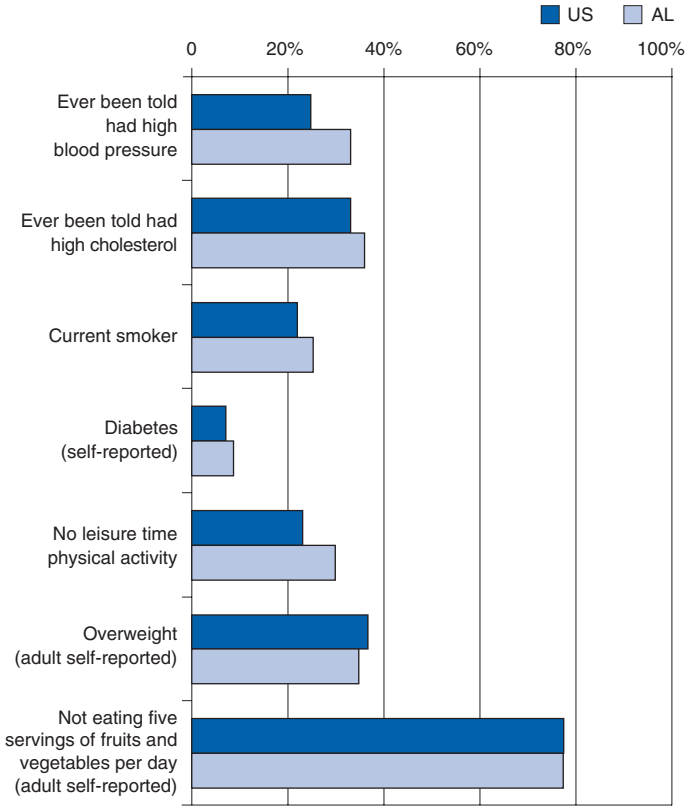
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Alabama, accounting for 13,207 deaths or approximately 29% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,998 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 10,000 are expected in Alabama. About 1.4 million new cases of cancer will be diagnosed nationally in 2004. This figure includes 24,270 new cases that are likely to be diagnosed in Alabama.

Estimated Cancer Deaths, 2004

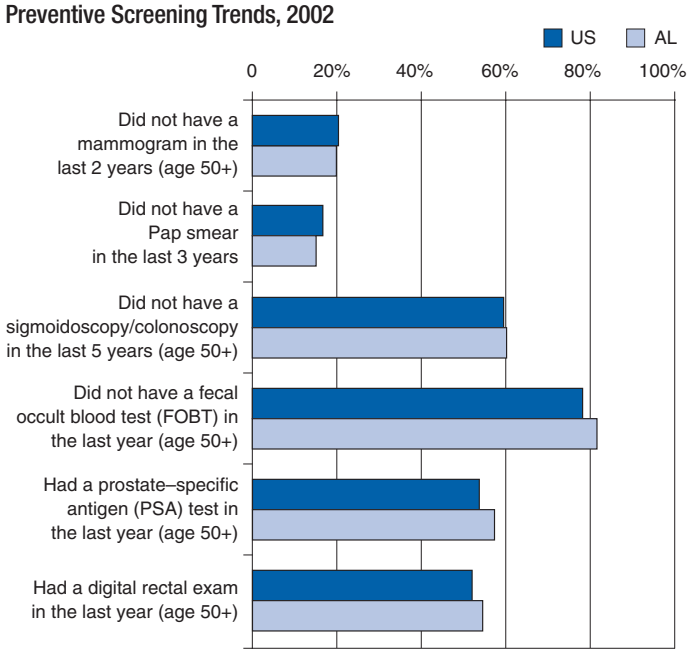
Cause of death	US	AL
All Cancers	563,700	10,000
Breast (female)	40,110	740
Colorectal	56,730	900
Lung and Bronchus	160,440	3,090
Prostate	29,900	630

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Alabama's Chronic Disease Program Accomplishments

Examples of Alabama's Prevention Successes

- Statistically significant decreases in cancer deaths among African American women from 200.3 per 100,000 in 1990 to 175.8 per 100,000 in 2000.
- A 13% decrease in the number of women older than age 50 who reported not having had a mammogram (from 33.2% in 1992 to 19.9% in 2002).
- Prevalence rates that were lower than corresponding national rates for self-reported overweight (34.8% in Alabama versus 36.7% nationally) and for women older than age 18 who reported not having had a Pap smear (15.1% in Alabama versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Alabama in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Alabama, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Alabama BRFSS*	$186,244
National Program of Cancer Registries *Alabama Statewide Cancer Registry*	$745,219
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Alabama Cardiovascular Health Coalition* *Alabama Stroke Task Force* *Delta States Stroke Consortium*	$696,000
Diabetes Control Program *Alabama Diabetes Prevention and Control Program*	$300,000
National Breast and Cervical Cancer Early Detection Program *Alabama Department of Public Health Breast and Cervical Cancer Early Detection Program*	$3,243,390
National Comprehensive Cancer Control Program *Alabama Comprehensive Cancer Control Program*	$671,955
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Alabama Tobacco Prevention and Control Program*	$1,118,560
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010) *University of Alabama at Birmingham*	$933,277
Total	**$7,894,645**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Alabama that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Obesity and Overweight

Alabama is among the top seven most obese states in the nation. Data from the 2003 CDC Behavioral Risk Factor Surveillance System (BRFSS) indicate that approximately 28.4% of adults in Alabama are obese (BMI of 30 or higher), and an additional 34.8% of adults are overweight. In Alabama, obesity and overweight are prevalent among all races, all adult age groups, and both genders. White males have the highest percentage of overweight in Alabama (42.9%), however African Americans in Alabama have the highest percentage of obesity (37.9% compared to 26.5% for whites). After adjusting for age, the death rate rankings for obesity-related diseases in Alabama are among the highest in the nation. Alabama ranks 6th for heart disease, 9th for stoke, and 10th for diabetes.

Several factors cause obesity and overweight: food and nutrient consumption patterns, a lack of physical activity, and socioeconomic factors. In Alabama, the prevalence of obesity among persons with annual incomes at or below $15,000 is 30.9%. In comparison, among persons with incomes at or above $75,000, 20.8% are obese. Looking at education, obesity occurs in 26.3% of adults with less than a high school education, compared to 18.5% among college graduates. Geographically, counties in the lower third of the state are more likely to have high percentages of adults at risk for obesity and obesity-related health problems.

These data indicate that obesity and overweight together create a significant public health challenge in Alabama. In a bold step, Alabama has targeted obesity and overweight in its *Healthy Alabama 2010* plan as well as in the *Alabama Cardiovascular Health State Plan*.

Text adapted from *Obesity and Overweight in Alabama, 2003* and the *2001 Alabama Cardiovascular Health State Plan.*

Healthy People 2010 Goals: Obesity and Overweight

Health Indicators	Baseline for Alabama (1997)	Alabama 2010 Target
Increase the proportion of adults who are physically active	17%	25%
Reduce the prevalence of overweight adults	35%	20%
Increase consumption of fruits and vegetables	17%	40%

Source: Healthy Alabama 2010

Disparities in Health

African Americans comprise approximately 12% of the U.S. population—roughly about 35 million people—and are dispersed throughout the country, with high concentrations in the Southeastern United States. African Americans experience health disparities in significant proportions. They tend to have higher rates of behavioral risk factors for chronic diseases as well as higher heart disease, stroke and cancer mortality rates.

African Americans make up approximately 25% of Alabama's population and experience high rates of risk factors for heart disease and cancer and high heart disease and cancer death rates. Data from CDC's 2003 BRFSS indicate that African Americans are less likely than whites to consume 5 or more servings of fruits and vegetables per day (21.1% versus 23.0%) and are less likely to participate in leisure-time physical activity than whites (61.9% versus 73.0%). African Americans are also more likely to be obese than whites (37.9% versus 26.5%), more likely to have high blood pressure than whites (38.3% versus 32.2%), and more likely to report having been told that they have diabetes than whites (13.6% versus 7.1%).

Given the prevalence rates of the above risk factors for heart disease and stroke, it is not surprising that African Americans also have higher heart disease and stroke death rates than whites. From 1996 to 2000, African Americans in Alabama had a heart disease death rate of 670 per 100,000 compared to whites' heart disease death rate of 593 per 100,000. From 1991 to 1998, African Americans in Alabama had a stroke death rate of 180 per 100,000 compared to 124 per 100,000 for whites.

Other Disparities

- **Breast Cancer:** In 2002, BRFSS data indicate that African American women had higher rates of breast cancer screening in the last 2 years (85.4%) than whites (78,8%); however in 2000, they had a higher breast cancer death rate than whites (29.9 per 100,000 compared to 25.9 per 100,000).
- **Cervical Cancer:** Like breast cancer, 2002 BRFSS data indicate that African American women were more likely to report having had a Pap smear in the last 3 years (90.9%) than white women (83.2%), but from 1997 to 2001, African American women in Alabama had a higher cervical cancer death rate than white women (6.1 per 100,000 compared to 2.5 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

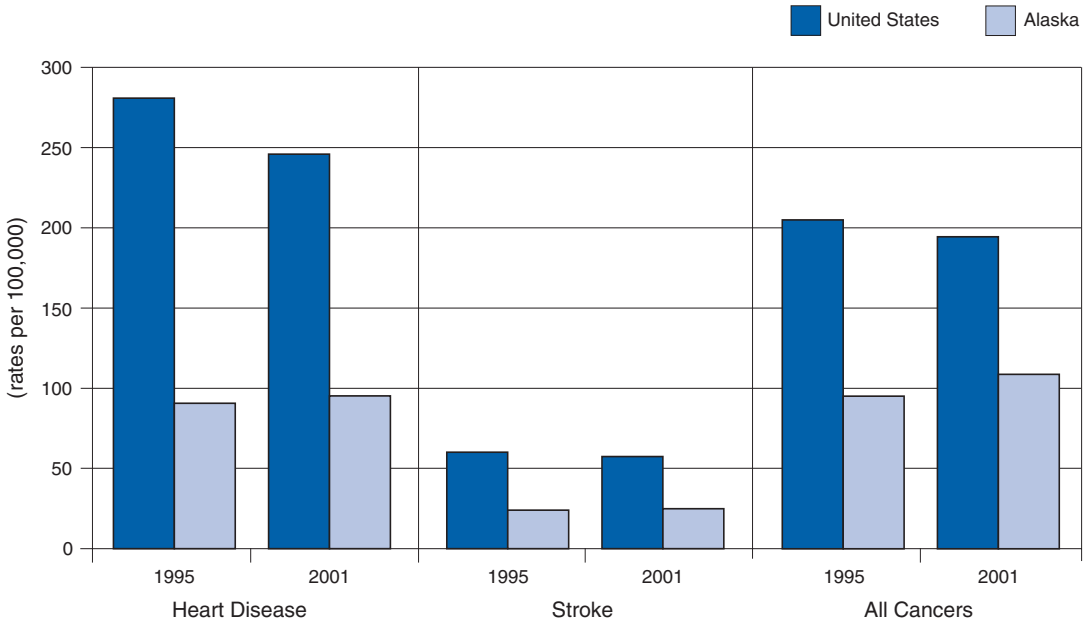
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Alaska

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Alaska, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

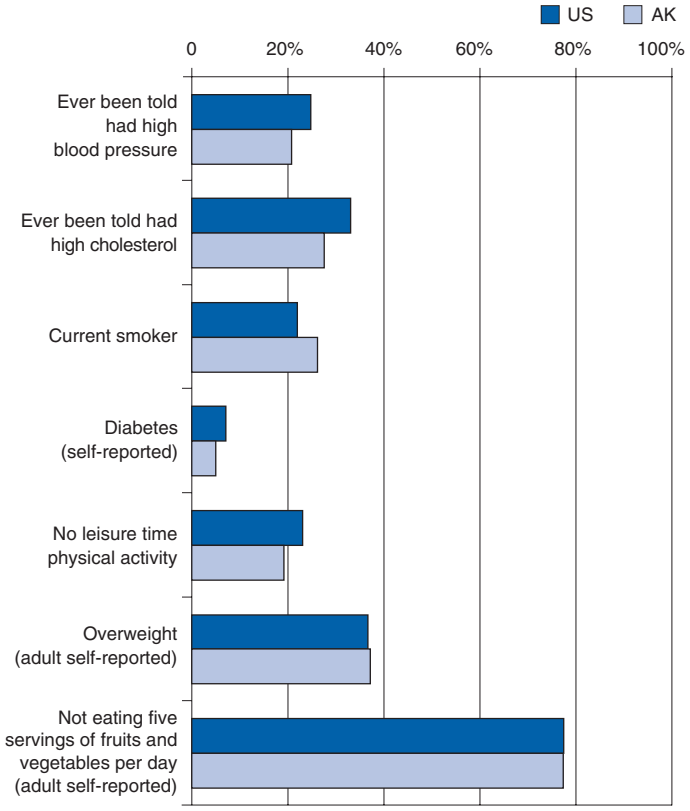
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the second leading cause of death in Alaska, accounting for 603 deaths or approximately 20% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fourth leading cause of death, accounting for 158 deaths or approximately 5% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 780 are expected in Alaska. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 1,800 new cases that are likely to be diagnosed in Alaska.

Estimated Cancer Deaths, 2004

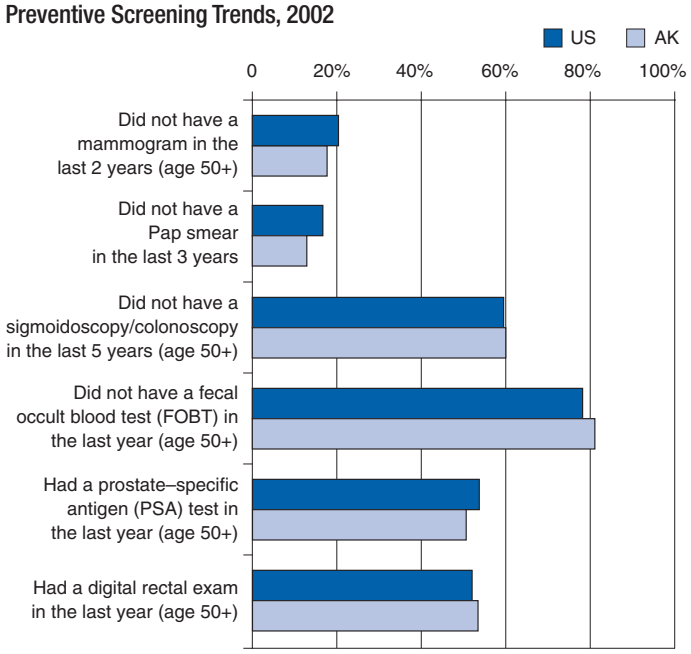
Cause of death	US	AK
All Cancers	563,700	780
Breast (female)	40,110	+
Colorectal	56,730	80
Lung and Bronchus	160,440	220
Prostate	29,900	+

+ Represents fewer than 50 deaths. *Source: American Cancer Society, 2004*

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Alaska's Chronic Disease Program Accomplishments

Examples of Alaska's Prevention Successes

- Lower mortality rates for heart disease, cancer, and stroke compared with national rates.
- A 14.0% decrease in the number of Alaska women older than age 50 who reported not having had a breast exam, from 31.4% in 1992 to 17.7% in 2002.
- Lower prevalence rates than the corresponding national rates for self-reported high blood cholesterol (27.6% in Alaska versus 33.1% nationally), high blood pressure risk (20.8% versus 24.8%), and diabetes (5.0% versus 7.1%).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Alaska in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Alaska, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Alaska BRFSS*	$217,936
National Program of Cancer Registries *Alaska Cancer Registry*	$549,900
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Take Heart Alaska*	$300,000
Diabetes Control Program *Alaska Diabetes Prevention and Control Program*	$450,000
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Health Check*	$1,683,924
National Comprehensive Cancer Control Program *Alaska Comprehensive Cancer Control Program*	$296,889
WISEWOMAN *Southeast Alaska Regional Health Consortium* *Southcentral Foundation in Alaska*	$948,370
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Alaska Tobacco Prevention and Control Program*	$1,099,712
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010) *Chugachmiut, Inc.*	$300,000
Total	**$5,846,731**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Alaska that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Alaska, in comparison with other states, has one of the lowest death rates for cardiovascular disease (CVD), including heart disease and stroke. Alaska also is the only state for which heart disease is not the leading cause of death. However, of the approximately 3,000 Alaskans who will die this year, 800 to 900 are likely to die of CVD.

Heart disease and stroke affect men differently than women in Alaska. In addition, American Indian/Alaska Natives (AI/ANs) and African Americans experience CVD disparities in Alaska. From 1996 to 2000, men in Alaska had a heart disease death rate of 487 per 100,000, compared with 333 per 100,000 for women. AI/AN men had the highest heart disease death rate (569 per 100,000) among men, and African American women had the highest heart disease death rate among women (434 per 100,000). Unlike heart disease, women have higher stroke death rates than men. Between 1991 and 1998, women had a stroke death rate of 131 per 100,000, compared with 116 per 100,000 for men. Among men and women, AI/ANs had the highest stroke death rate (133 per 100,000 for men and 177 per 100,000 for women).

Of the more than 46,600 hospitalizations in Alaska in 2001, about 11% were primarily for heart disease and stroke. In 2001 in Alaska, the mean length of stay in the hospital for heart disease was 4.4 days, and for stroke it was 7.4 days. The average charge per hospital stay in Alaska in 2001 was approximately $37,174 for heart disease and $29,807 for stroke.

The Alaska Department of Health began receiving funds from CDC in 2002 to support a state heart disease and stroke prevention program. Alaska initiatives to reduce CVD prevalence include the Alaskan Cardiovascular Disease Prevention Plan, which encourages Alaskans to adopt healthy lifestyle choices such as physical activity and a low-fat diet. The program also coordinates the state-level Take Heart Alaska Coalition, which works to increase heart health among all Alaskans by advocating for individual, worksite, community-based commitment to healthy lifestyles and improving access to preventive services. Additionally, the program has partnered with the Rural Health Program to develop prevention and follow-up protocols for cholesterol and blood pressure in rural clinics.

Text adapted from *The Burden of Cardiovascular Disease in Alaska: Mortality, Hospitalization and Risk Factors* (2004).

Disparities in Health

American Indians and Alaska Natives make up 14% of Alaska's population. In addition to having higher prevalence rates for risk factors for heart disease and stroke—poor nutrition, physical inactivity, obesity, and smoking—more AI/ANs in Alaska die from heart disease and stroke than whites.

A 2001 report from the Alaska Department of Health and Social Services, Division of Public Health provided data from CDC's Behavioral Risk Factor Surveillance System that highlighted the health disparities experienced by the state's AI/AN population. From 1991 to 1998, AI/ANs in Alaska were more likely than whites to report inadequate leisure time physical activity (59% of AI/ANs, compared with 49% of whites) and were less likely to consume 5 or more servings of fruits and vegetables per day (19% of AI/ANs, compared with 24% of whites). Based on these two risk factors, AI/ANs in Alaska were also more likely to be overweight than whites (36% versus 29%). From 1991 to 1998, AI/ANs also had higher smoking rates than whites (42% versus 25%).

Given the above disparities in risk factors for chronic diseases, the differences between whites and AI/ANs in heart disease and stroke death rates are not surprising. From 1996 to 2000, AI/ANs in Alaska had a heart disease death rate of 468 per 100,000, compared with 408 per 100,000 for whites. This heart disease death rate was also higher than the national heart disease death rate for AI/ANs (352 per 100,000). From 1991 to 1998, the stroke death rate for AI/ANs (158 per 100,000) was higher than the rate for whites (118 per 100,000). As with heart disease, the stroke death rate for AI/ANs in Alaska was also higher than the stroke death rate for AI/ANs nationally (79 per 100,000).

The AI/AN population in Alaska also experiences higher cancer death rates than their white counterparts. From 1990 to 1998, AI/ANs had a cancer death rate of 204 per 100,000, compared with the rate for whites, 163 per 100,000.

Other Disparities

- **Diabetes:** From 1991 to 1998, African Americans in Alaska had higher rates of diabetes (6.1%) than Hispanics (3.7%), AI/ANs (3.5%), whites (3.3%) and Asian/Pacific Islanders (1.6%).
- **Prostate Cancer:** From 1990 to 1998, African American men had a prostate cancer death rate that was more than twice as high as the rate for white men (48 per 100,000 versus 22 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

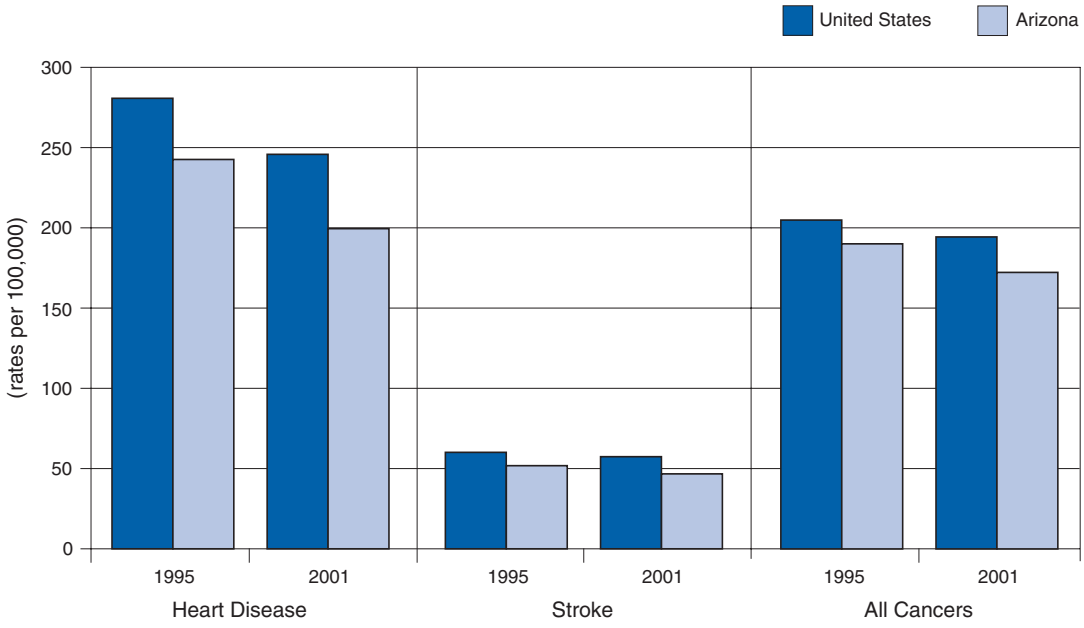
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Arizona

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Arizona, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

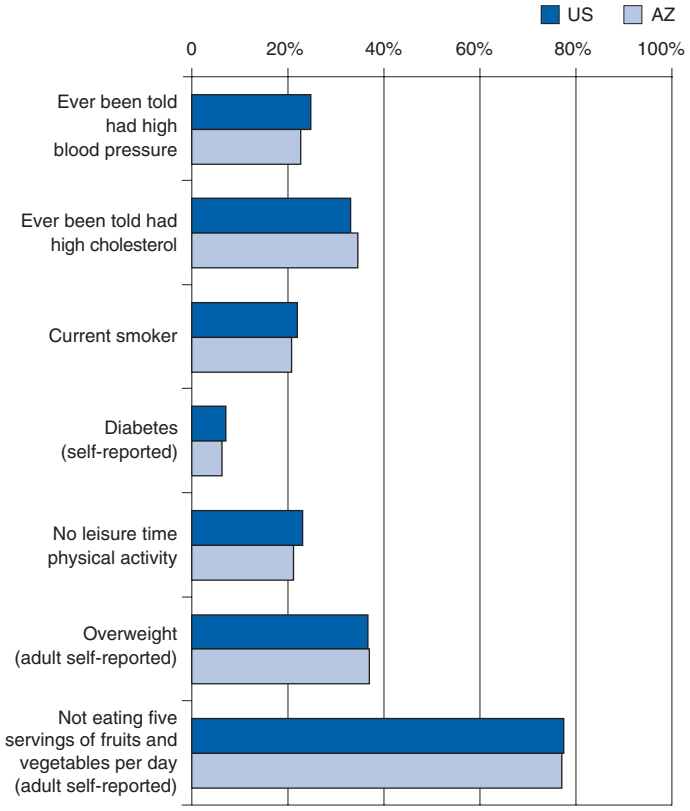
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Arizona, accounting for 10,588 deaths or approximately 26% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fourth leading cause of death, accounting for 2,480 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 9,710 are expected in Arizona. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 23,560 new cases that are likely to be diagnosed in Arizona.

Estimated Cancer Deaths, 2004

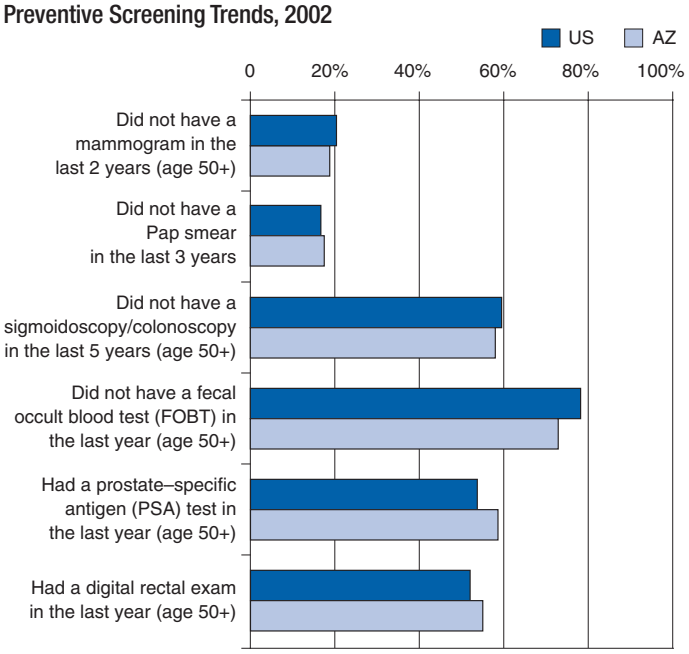
Cause of death	US	AZ
All Cancers	563,700	9,710
Breast (female)	40,110	740
Colorectal	56,730	960
Lung and Bronchus	160,440	2,550
Prostate	29,900	510

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Arizona's Chronic Disease Program Accomplishments

Examples of Arizona's Prevention Successes

- Statistically significant decreases in cancer deaths across all races from 1990 to 2000 (247.4 per 100,000 in 1990 versus 213.1 per 100,000 in 2000 for men; 161.7 per 100,000 in 1990 versus 151.8 per 100,000 in 2000 for women).
- A 14.5% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 33.3% in 1992 to 18.8% in 2002).
- A lower prevalence rate than the corresponding national rate for individuals who had been told they are at risk for high blood pressure (22.7% in Arizona versus 24.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Arizona in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Arizona, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Arizona BRFSS*	$159,239
National Program of Cancer Registries *Arizona Cancer Registry*	$324,980
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Arizona Diabetes Council*	$243,927
National Breast and Cervical Cancer Early Detection Program *Well Woman Health Check*	$2,108,851
National Comprehensive Cancer Control Program *Arizona Comprehensive Cancer Control*	$148,834
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Arizona Tobacco Prevention and Control*	$101,031
State Nutrition and Physical Activity/Obesity Prevention Program *Arizona Promoting Lifetime Activity for Youth (PLAY)* *Awards Program* *WELL AZ* *Eat and Play the Native Way*	$321,253
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$3,408,115**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Arizona that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cancer

After heart disease, cancer is the second leading cause of death in Arizona. Most cancer cases affect adults in middle age; about 80% of all cases in Arizona are diagnosed at age 55 and older. The rates for breast, colon, lung and bronchus, rectal, and prostate cancer are similar to national trends—they account for more than half of Arizona's cancer burden. Between 1995 and 2000, these cancers accounted for 60% of the 19,716 new cases diagnosed in Arizona and 40% of the 8,503 cancer deaths in the state. The overall cancer incidence rate in Arizona is 409.2 per 100,000, and the overall death rate in Arizona is 177.3 per 100,000. The American Cancer Society estimates that about one third of the cancer deaths expected to occur in 2004 will be related to nutrition, physical inactivity, obesity, and other preventable lifestyle factors. For the majority of Americans who do not use tobacco products, nutrition and physical activity are the most important modifiable determinants of cancer risk.

Cancer Risks

Physical Activity: Arizona has experienced success in increasing rates of physical activity. According to 2003 data from the Behavioral Risk Factor Surveillance System (BRFSS), 21.2% of Arizonans reported that they engage in no leisure time physical activity, compared with 51.3% in 1998. To continue this trend, Arizona has implemented several programs to further encourage physical activity, including *P.L.A.Y.* (*Promoting Lifetime Activity for Youth*), a teacher-directed program that encourages fourth through eighth graders to participate in 60 minutes of daily, independent physical activity. Another program, *W.E.L.L.* (*Walk Everyday & Live Longer*), is a 4-week community-based intervention aimed at increasing physical activity among sedentary residents.

Nutrition: Data indicate that the nutritional status of Arizonans is also a significant concern. For example, 2003 BRFSS data indicate that 37.0% of Arizonans had a body mass index greater than 25, which is considered overweight, and only 22.9% of Arizona residents report eating 5 or more fruits and vegetables per day. To reverse these trends, Arizona has formed the *Arizona Nutrition Network*, a group of public and private organizations that is using a social marketing campaign to promote healthy eating habits to lower-income Arizonans.

Text adapted from *Arizona Cancer Facts and Figures 2004-2005: A Source Book for Planning and Implementing Programs for Cancer Prevention and Control.*

Disparities in Health

Across the country, American Indians and Alaska Natives (AI/ANs) comprise more than 500 federally recognized tribes and represent 1% of the U.S. population. Compared with other racial and ethnic minorities, AI/ANs have the highest poverty rate, 26%, which is twice the national rate. In addition to high poverty levels, AI/ANs are experiencing increasing health disparities.

Arizona's AI/ANs, who represent 5% of the state's population, also experience significant disparities in comparison with other ethnic groups. In Arizona, the average age at death for AI/ANs is 55, compared with 72 for whites. The leading causes of death for AI/ANs are heart disease and cancer, the same as for other populations. According to data from the Indian Health Service, in Arizona, heart disease was the cause of death for between 15.4% and 16.7% of AI/ANs in the Navajo, Phoenix, and Tucson areas between 1994 and 1996, followed by cancer (between 12.2% and 10.4%), diabetes (between 7.6% and 5.6%), and alcohol-related illnesses (between 9.1% and 7.2%).

While these death rates for AI/ANs in Arizona are similar to national rates, Arizona's AI/ANs are experiencing increasing death rates for these chronic diseases as other populations are seeing improvements.

Text adapted from "Indian Health Care: Separate, Unequal," *The Arizona Republic,* April 14, 2002.

Other Disparities

- **Diabetes:** Hispanics (7.3%) are more likely to report having been told they have diabetes than whites (6.0%).
- **Physical Activity:** Hispanics (57.9%) are more likely to report not meeting the recommended guidelines for moderate physical activity than whites (49.3%).
- **Heart Disease:** The heart disease death rate for AI/ANs in Arizona is higher than the national rate of heart disease deaths for AI/ANs (403 per 100,000 in Arizona versus 352 per 100,000 nationally). The heart disease death rate for Hispanics in Arizona is higher than the national rate of heart disease deaths for Hispanics (401 per 100,000 in Arizona versus 348 per 100,000 nationally).
- **Cervical Cancer:** In Arizona, AI/ANs and Hispanics have higher cervical cancer death rates than whites (5.2 per 100,000 for AI/AN women and 3.4 per 100,000 for Hispanic women, compared with 2.4 per 100,000 for white women).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
Safer • Healthier • People™

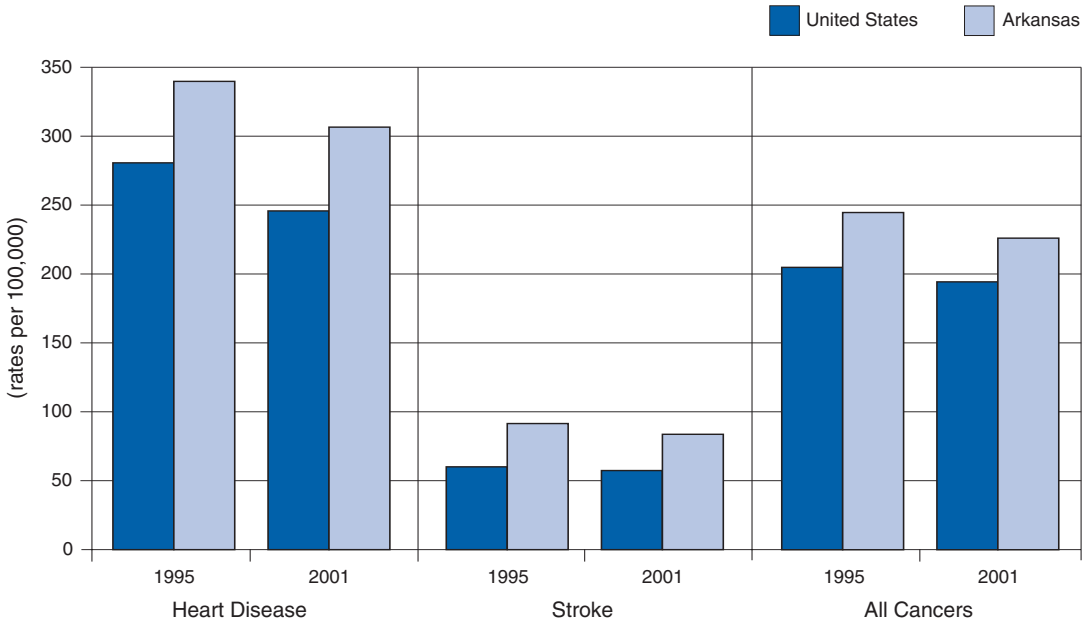
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Arkansas

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Arkansas, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

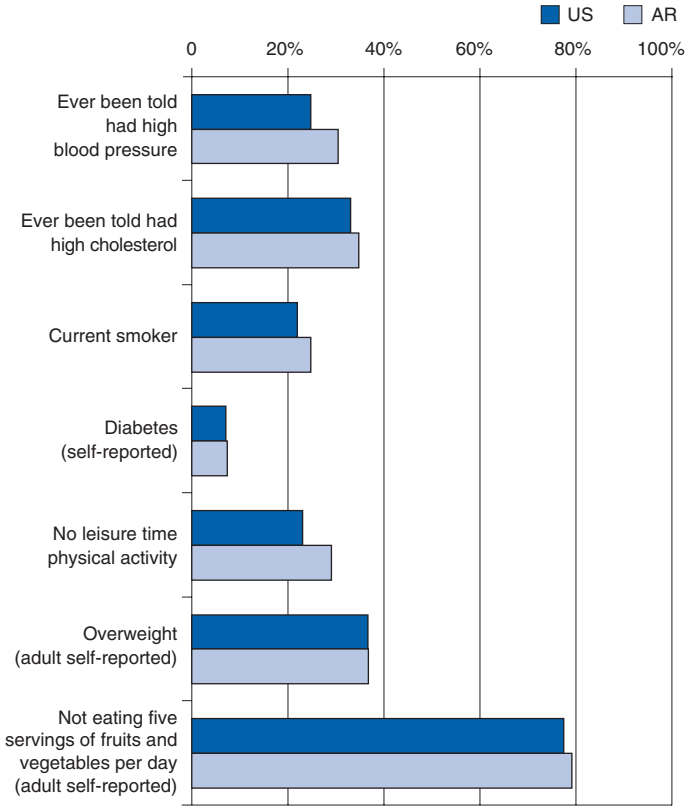
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Arkansas, accounting for 8,263 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,256 deaths or approximately 8% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 6,100 are expected in Arkansas. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 14,800 new cases that are likely to be diagnosed in Arkansas.

Estimated Cancer Deaths, 2004

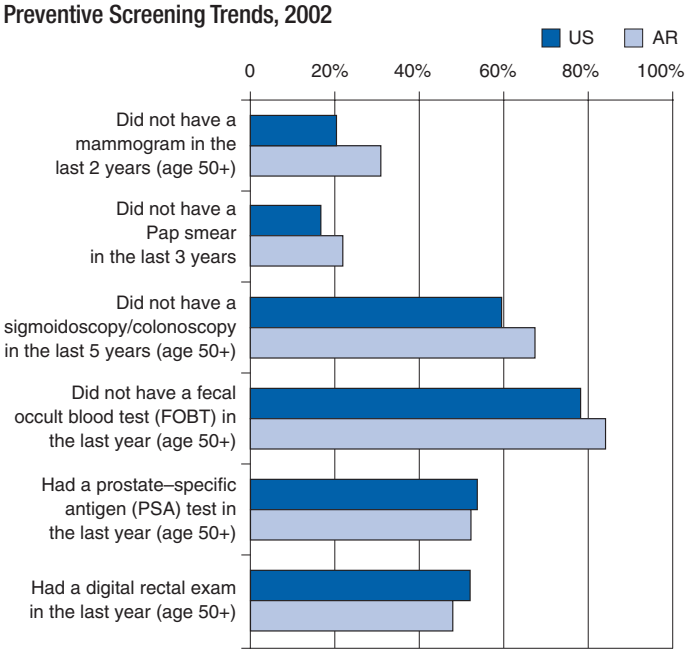
Cause of death	US	AR
All Cancers	563,700	6,100
Breast (female)	40,110	380
Colorectal	56,730	630
Lung and Bronchus	160,440	2,060
Prostate	29,900	280

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Arkansas' Chronic Disease Program Accomplishments

Examples of Arkansas' Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among African Americans (436.6 per 100,000 in 1990 versus 380.1 per 100,000 in 2000).
- A 10% decrease in the number of individuals age 18 and older who reported having no leisure time activity (37.4% in 1996 versus 27.4% in 2002).
- Prevalence rates for nonsmoking among African Americans and Hispanics that were higher than the corresponding national rate (61.0% for African Americans and 61.5% for Hispanics in Arkansas versus 52.0% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Arkansas in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Arkansas, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Arkansas BRFSS*	$117,882
National Program of Cancer Registries *Arkansas Cancer Registry*	$687,319
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Arkansas Chronic Illness Collaborative* *Arkansas Wellness Coalition* *The Delta States Stroke Consortium*	$300,000
Diabetes Control Program *Arkansas Diabetes Prevention and Control Program*	$306,133
National Breast and Cervical Cancer Early Detection Program *Arkansas Breast and Cervical Cancer Early Detection Program*	$2,390,475
National Comprehensive Cancer Control Program *Cancer Control Team*	$409,509
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Arkansas Tobacco Prevention & Control Program*	$970,397
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$5,181,715**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Arkansas that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease and Preventable Risk Factors

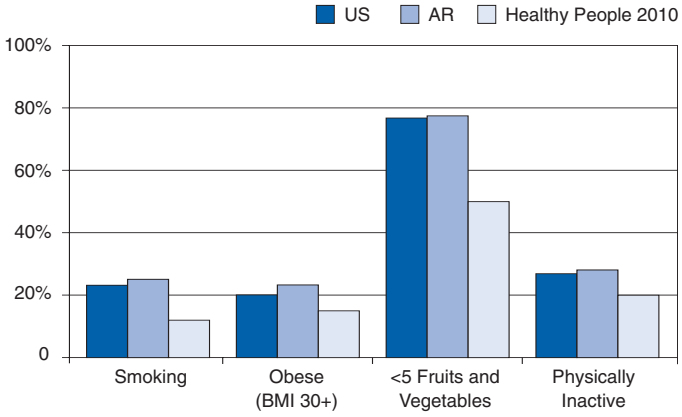
In 2001, Arkansas had the 9th highest heart disease death rate in the nation and the highest stroke death rate. From 1996 to 2000, the heart disease death rate in Arkansas was 583 per 100,000, compared with the national rate of 536 per 100,000. From 1991 to 1998, the stroke death rate was 163 per 100,000, compared with the national rate of 121 per 100,000.

This increased burden of disease is most probably explained by the higher prevalence of cardiovascular risk factors in the state's population. Data from the Behavioral Risk Factor Surveillance System (BRFSS) for 2003 show that obesity rates doubled from 13.2% in 1991 to 25.2% in 2003. In 2003 the percentage of adult obesity in Arkansas (25.2%) was higher than the rate of adult obesity for the entire United States (22.8%). Data from the BRFSS for 2003 indicate that when compared with the United States as a whole, more adults in Arkansas were at risk for high blood pressure (30.5% in Arkansas versus 24.8% nationally) and more were physically inactive (29.1% in Arkansas versus 23.1% nationally).

In addition to overweight and obesity, diet can affect the level of blood cholesterol, a major risk factor for heart disease. To reduce the prevalence of these risk factors, Arkansas has created initiatives such as the *Arkansas 5-A-Day Coalition's Worksite Challenge* and has established the *Child Health Advisory Committee* to encourage healthy eating and physical activity, and to combat childhood obesity.

Text adapted from *Cardiovascular Disease in Arkansas: Mortality, Costs, Disparity, and Risk Factors* (June 2002)

Prevelance of Cardiovascular Disease Behavior Risk Factors BRFSS, 2000



Source: Arkansas Bureau of Vital Statistics

Disparities in Health

African Americans make up approximately 15.7% of Arkansas' population and, as do most African Americans in the United States, experience health disparities in significant proportions. Nationally, and in Arkansas, African American women, in particular, have higher rates of death attributed to breast and cervical cancer than other racial and ethnic groups.

Although African American women in Arkansas are more likely than white women to have had a mammogram in the last 2 years (82.0% for African Americans versus 79.7% for whites), in 2000, the breast cancer death rate was higher for African American women than for white women (38.3 per 100,000 versus 21.2 per 100,000 for white women). The same holds true for cervical cancer screening and cervical cancer death rates. African American women are more likely to report having had a Pap smear in the last 3 years (86.5% of African American women versus 79.7% of white women), but they have higher rates of death from cervical cancer. From 1990 to 2000, the cervical cancer death rate for African American women in Arkansas was 136% higher than the cervical cancer death rate for white women (7.8 per 100,000 for African American women versus 3.3 per 100,000 for white women).

Between 1996 and 2000, African American women in Arkansas also had a higher heart disease death rate than white women (601 per 100,000 for African American women versus 455 per 100,000 for white women). In addition, the death rate for stroke between 1991 and 1998 was higher among African American women than among white women (207 per 100,000 for African American women versus 151 per 100,000 for white women).

Other Disparities

- **Diabetes:** African Americans have the highest rates of diabetes in Arkansas. Almost 10% of African Americans have been told they have diabetes, compared with 7.1% of whites and 6.7% of Hispanics.
- **Physical Activity:** In Arkansas, more African Americans report not meeting the recommended guidelines for moderate physical activity than whites (64.2% for African Americans versus 53.4% for whites).
- **Obesity:** African Americans report higher rates of obesity than whites (35.5% for African Americans versus 24.1% for whites).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

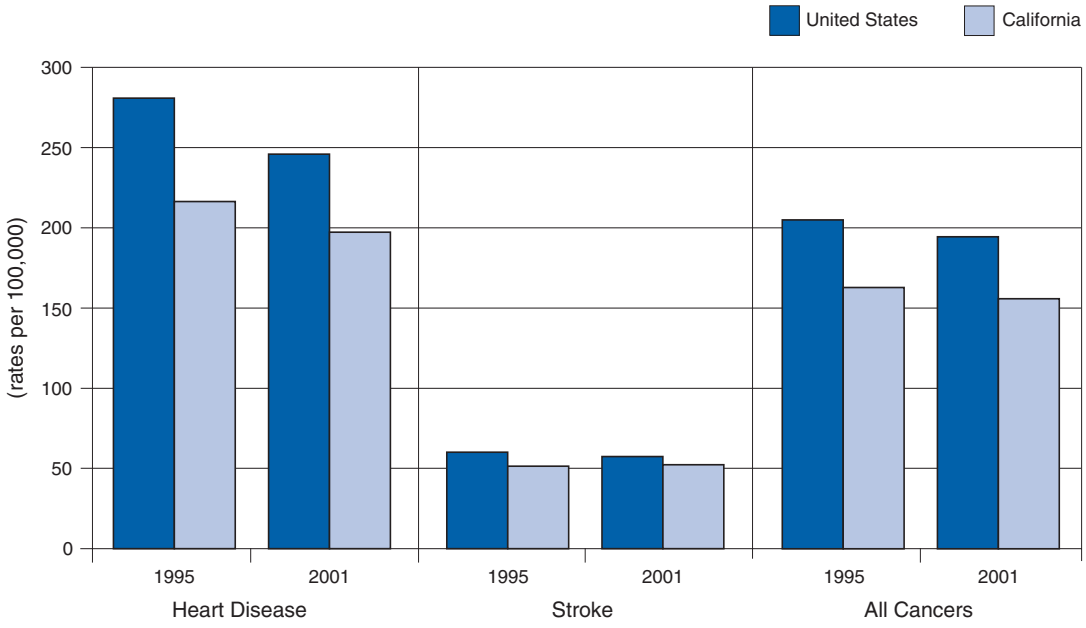
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

California

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and California, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

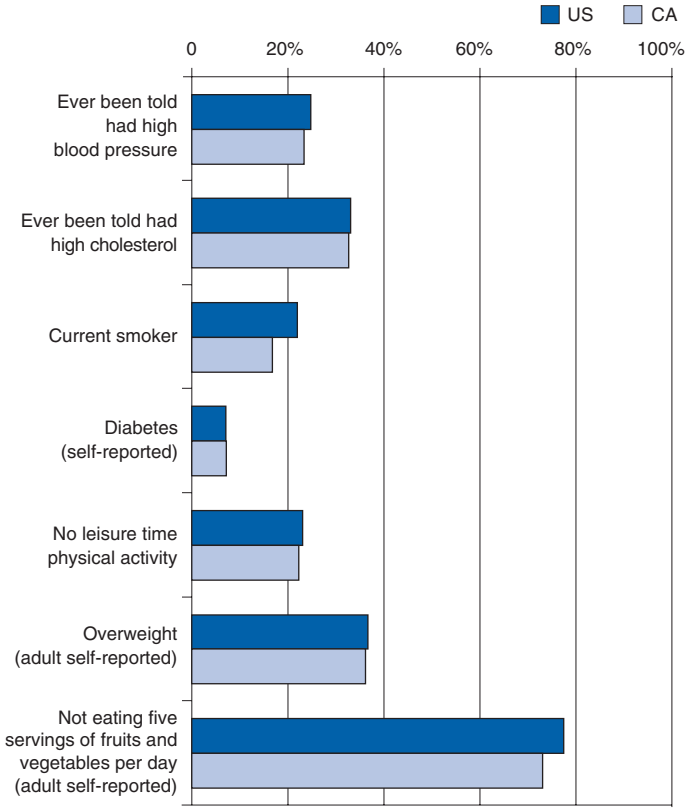
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in California, accounting for 68,234 deaths or approximately 29% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 18,088 deaths or approximately 8% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 55,340 are expected in California. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 134,300 new cases that are likely to be diagnosed in California.

Estimated Cancer Deaths, 2004

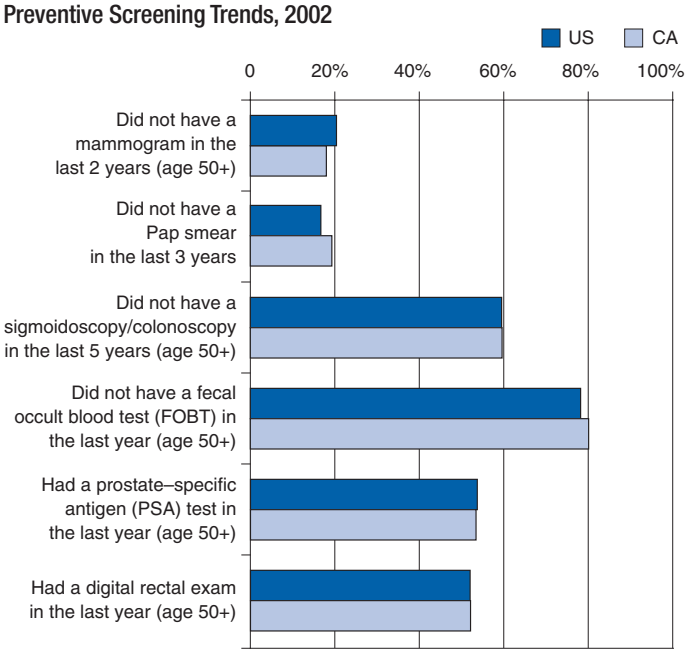
Cause of death	US	CA
All Cancers	563,700	55,340
Breast (female)	40,110	4,060
Colorectal	56,730	5,360
Lung and Bronchus	160,440	14,450
Prostate	29,900	3,010

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

California's Chronic Disease Program Accomplishments

Examples of California's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women of all races, with the greatest decrease occurring among African American men (355.9 per 100,000 in 1990 versus 300.6 per 100,000 in 2000).
- A 10% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 28% in 1992 to 18% in 2002).
- A lower prevalence rate than the corresponding national rate for individuals who currently smoke (16.8% in California versus 22.0% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to California in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for California, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *California BRFSS*	$267,679
National Program of Cancer Registries *California Cancer Registry*	$3,982,898
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Regents of the University of California, SF (Not verified)	$790,000
Diabetes Control Program *Diabetes Coalition of California*	$990,320
National Breast and Cervical Cancer Early Detection Program *Every Woman Counts*	$8,397,307
National Comprehensive Cancer Control Program *Cancer Control Planning and Research*	$150,000
WISEWOMAN *California WISEWOMAN Program*	$1,001,265
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *California Tobacco Control Program*	$330,711
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	
Community Health Councils of Los Angeles, Inc.	$914,451
Harbor-UCLA Research and Education Institute	$895,588
University of California, San Francisco	$915,697
San Francisco Department of Public Health	$885,000
Special Services for Groups, Inc.	$250,000
Total	**$19,770,916**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in California that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Obesity and Healthy Weight

As in the rest of the country, obesity is a problem in California. According to CDC's Behavioral Risk Factor Surveillance System (BRFSS) data, in 1990, less than 10% of adults in the state were obese (9.8%). By 2003, that rate had more than doubled to 23.2%. In addition, 36.2% of adults were overweight.

Risk factors for obesity include poor nutrition and physical inactivity, areas in which adults in California could improve. In 2003, BRFSS data indicate that 22.3% of adults did not participate in any leisure time physical activity in the month prior to the survey. In addition, 73.1% of adults in the state did not consume more than 5 servings of fruits and vegetables per day.

The obesity problem, however, is not limited to adults. A study by the California Center for Public Health Advocacy analyzed 2001 fitness data for the state's youth (kindergarten through 12th grade) and found that over one quarter of the youth were overweight (26.5%). The study also found that 39.6% of youth in California were not physically fit. Hispanic and African American children were the most likely to be affected by childhood obesity. Over one third of Hispanic youth (33.7%) were overweight and 44.5% were not physically fit, compared with 28.6% of African American youth who were overweight and 46.0% who were not physically fit. About one fifth of white youth were overweight (20.2%) and over one third (33.5%) were not physically fit.

The California Department of Health Services works to prevent and reduce obesity and has identified seven strategies as the most promising for reducing obesity and overweight. These strategies are to:

- Increase rates of physical activity;
- Decrease physical inactivity, especially television watching by children;
- Increase the consumption of fruits and vegetables;
- Increase the initiation of breastfeeding, and prolong its duration;
- Decrease the consumption of high calorie, low nutrient foods;
- Decrease rates of food insecurity and hunger; and
- Improve access to prevention, early intervention, and treatment strategies for overweight and obesity in the health care system.

Text adapted from *The Prevalence of Obesity and Healthy Weight in California Counties, 2001.*

Disparities in Health

African Americans, who comprise approximately 12% of the U.S. population—about 35 million people—experience health disparities in significant proportions. They have higher stroke death rates than other groups as well as a higher prevalence of the risk factors for heart disease. Compared with other racial and ethnic minority groups, African Americans are more likely to develop lung, cervical, colorectal, and prostate cancer at disproportionate levels.

African Americans make up approximately 7% of California's population. The leading causes of death among African Americans in California are heart disease and cancer. Between 1996 and 2000, the rate for heart disease among African Americans was higher than the heart disease death rate of their white counterparts (678 per 100,000 compared with 513 per 100,000). Additionally, in 2000, both African American men and women were more likely to die from cancer than their white counterparts. The cancer death rate for African American men was 300.6 per 100,000, compared with 220.9 per 100,000 for white men; the cancer death rate for African American women was 196.6 per 100,000, compared with 164.1 per 100,000 for white women.

Data from the Behavioral Risk Factor Surveillance System show that African Americans in California are more likely than whites to be smokers (28.4% versus 16.2%). Compared with white Californians, African Americans are also more likely to be diagnosed with high blood pressure (45.6% versus 25.9%), more likely to report inadequate physical activity (33.1% versus 15.9%), and are more likely to report a diagnosis of diabetes (15.3% versus 6.0%). Additionally, the diabetes death rate for African Americans in California (42.3 per 100,000) is twice as high as the rate for whites (20.6 per 100,000).

Other Disparities

- **Obesity:** African Americans are more likely to classify themselves as obese (41.6%) than their white counterparts (20.0%).
- **Prostate Cancer:** Prostate cancer death rates are higher among African American men (60.0 per 100,000) than among white men (27.7 per 100,000).
- **Breast Cancer:** African American women are less likely to have a mammogram and are more likely to die from breast cancer (35.6 per 100,000) than white women (26.7 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

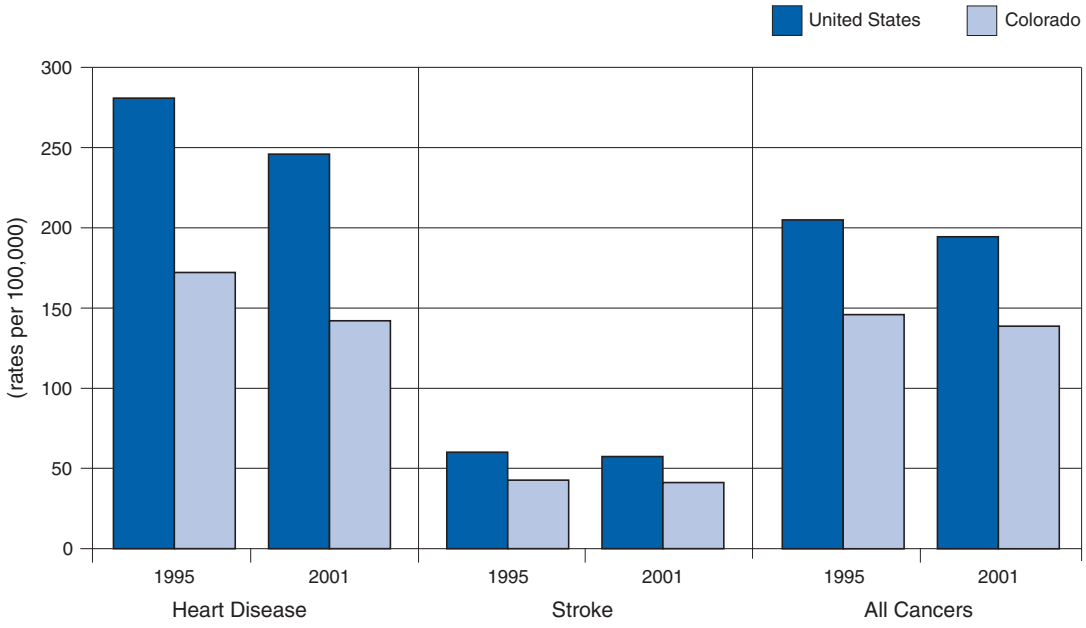
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Colorado

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Colorado, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

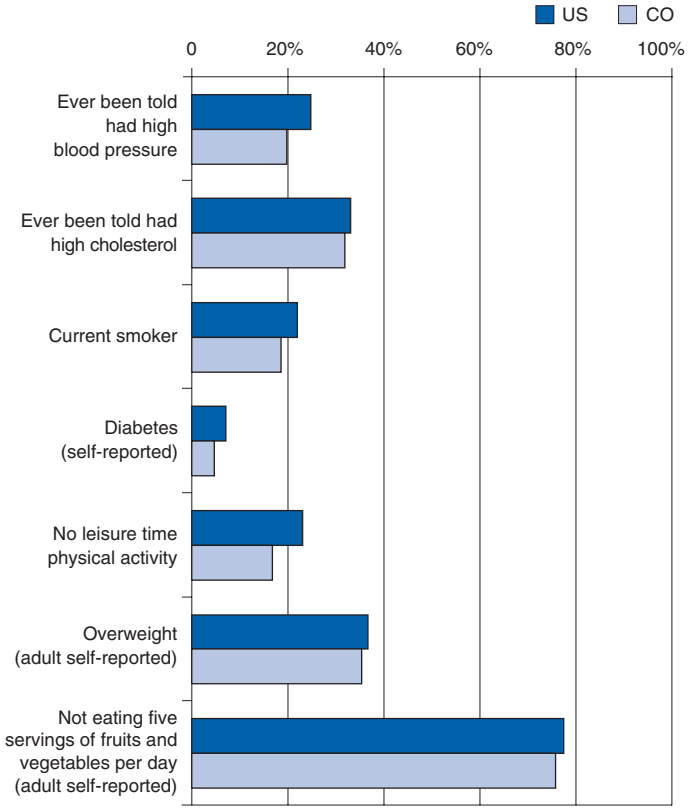
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Colorado, accounting for 6,293 deaths or approximately 22% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fourth leading cause of death, accounting for 1,825 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 6,390 are expected in Colorado. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 15,510 new cases that are likely to be diagnosed in Colorado.

Estimated Cancer Deaths, 2004

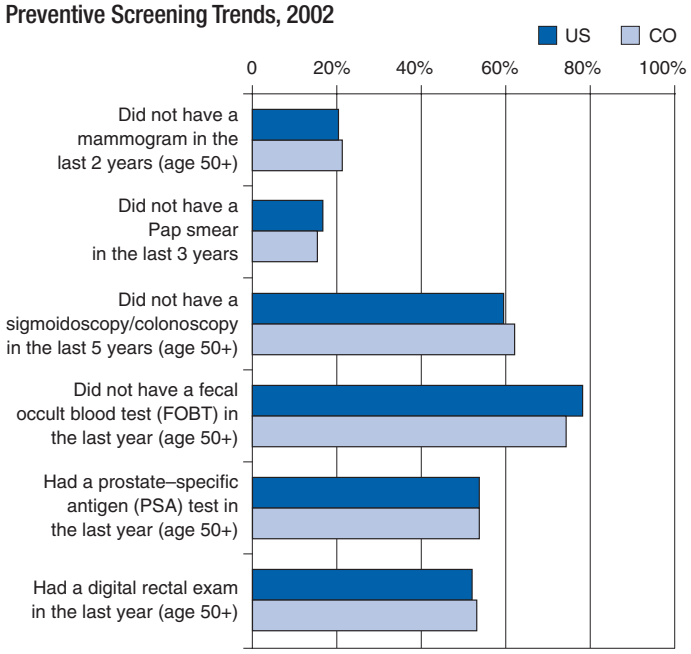
Cause of death	US	CO
All Cancers	563,700	6,390
Breast (female)	40,110	480
Colorectal	56,730	620
Lung and Bronchus	160,440	1,610
Prostate	29,900	330

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Colorado's Chronic Disease Program Accomplishments

Examples of Colorado's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decrease occurring among Hispanic men (240.2 per 100,000 in 1990 versus 183.7 per 100,000 in 2000) and Hispanic women (133.2 per 100,000 in 1990 versus 119.1 per 100,000 in 2000).
- A 6.8% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years, from 28.1% in 1992 to 21.3% in 2002.
- A lower prevalence rate than the corresponding national rate for women older than age 18 who reported not having had a Pap smear in the last 3 years (15.4% in Colorado versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Colorado in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Colorado, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Colorado BRFSS*	$228,488
National Program of Cancer Registries *Colorado Cancer Registry*	$676,914
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Colorado Cardiovascular Coalition* *Cardiovascular Disease and Stroke Prevention Program* *Stroke Advisory Board* *Colorado Cardiovascular Health State Plan 2010*	$298,102
Diabetes Control Program *Colorado Diabetes Prevention and Control Program* *Buddy System*	$1,274,098
National Breast and Cervical Cancer Early Detection Program *Colorado Women's Cancer Control Initiative*	$4,142,290
National Comprehensive Cancer Control Program *Colorado Comprehensive Cancer Prevention and Control Program*	$711,246
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Colorado State Tobacco Education and Prevention Partnership (STEPP)*	$835,474
State Nutrition and Physical Activity/Obesity Prevention Program *Shape Up Across Colorado* *National Employee Health & Fitness Month* *Walk to School Colorado* *Colorado On The Move*	$421,044
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$8,587,656**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Colorado that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Although 2001 CDC mortality data indicate that Colorado had the 3rd lowest heart disease death rate in the nation and the 15th lowest stroke death rate, cardiovascular disease (CVD), including heart disease and stroke, was the leading cause of death in the state. From 1996 to 2000, Colorado had a heart disease death rate of 403 per 100,000, compared with the national average of 536 per 100,000. From 1991 to 1998, Colorado had a stroke death rate of 112 per 100,00, compared with the national average of 121 per 100,000. While the death rates in Colorado have been declining over the last 2 decades, the number of lives lost to CVD has increased due to Colorado's aging population.

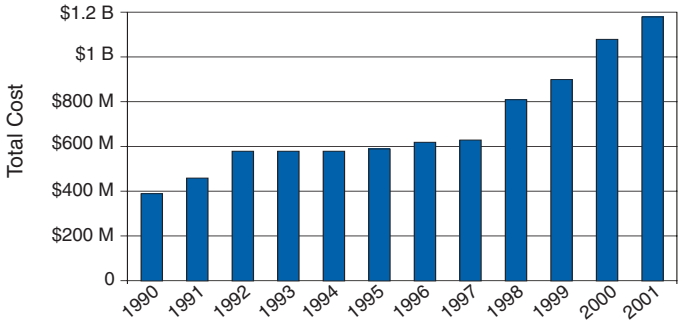
Each year between 1990 and 2001, there were more than 20,000 CVD hospitalizations for men and 17,000 CVD hospitalizations for women in Colorado. Hospitalizations increase with age, peaking for 65- to 74-year-olds.

In Colorado, the fiscal impact of CVD hospitalizations is high—and has been rising. The cost per hospitalization for CVD rose from about $11,000 in 1990 to more than $25,000 in 2001. The total cost of all hospitalizations for which CVD was the primary diagnosis was nearly $400 million in 1990, and this cost rose to nearly $1.2 billion by 2001 (see figure below).

The *Colorado Cardiovascular Health Program* seeks to decrease the mortality and morbidity of CVD. The program aims to reduce CVD risk factors such as high blood cholesterol, high blood pressure, obesity, and diabetes and strives to encourage physical activity, fruit and vegetable consumption, and the cessation of tobacco use.

Text adapted from *Colorado Cardiovascular Health State Plan 2010* (November 2002).

Total Cost* for All Hospital Discharges That Listed Major CVD as Primary Diagnosis: Colorado Residents, 1990-2001



**Not adjusted for inflation.*
Source: Colorado Hospital Association, 2002

Disparities in Health

Nationally, the health disparities that exist within the African American, Hispanic, and American Indian/Alaska Native (AI/AN) populations, when compared with other racial/ethnic groups, are strikingly apparent in life expectancy, deaths from chronic diseases, and other measures of health status. Many factors contribute to health disparities within these three populations, such as socioeconomic factors, discrimination, cultural barriers, and the lack of access to health care.

In Colorado, these groups comprise 25% of the state's population. Although the state's data on health status indicate that overall, Colorado is a healthy state, African Americans, Hispanics, and AI/ANs are disproportionately affected by disease, injury, disability, and death. In contrast, whites and Asian/Pacific Islanders in Colorado have many positive health indicators.

From 1996 to 2000, Colorado's African Americans had a higher death rate from heart disease than whites (466 per 100,000 for African Americans versus 405 per 100,000 for whites). An examination of cancer data over a 5-year period during the 1990s indicate that African Americans had the lowest percentage of early detection for cancer (48.8%), compared with Hispanics (50.8%) and whites (57.6%).

Other Disparities

- **Life Expectancy:** In 1999, Colorado's African Americans had a life expectancy that was 5 fewer years than the life expectancy for whites (73.1 years versus 78.1 years).
- **Cancer Deaths:** In Colorado, from 1995 to 1999 incidence rates were statistically highest among whites, but death rates were statistically higher for African Americans. The death rate for African American men was 286.1 per 100,000 compared with 226.1 per 100,000 for white men. The death rate for African American women was 176.3 per 100,000 compared with 155.6 per 100,000 for white women.
- **Cervical Cancer:** The cervical cancer incidence rate among Colorado's Hispanic women (16.2 per 100,000) is more than twice as high as the rate for white women (7.4 per 100,000).
- **Diabetes:** In Colorado, the diabetes death rate for African Americans is more than twice that of whites (34.0 per 100,000 versus 16.0 per 100,000), but Hispanics have the highest diabetes death rate (35.9 per 100,000), which is almost 2.5 times the rate for whites. The death rate for AI/ANs (27.7 per 100,000) is approximately 1.7 times that of whites.

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

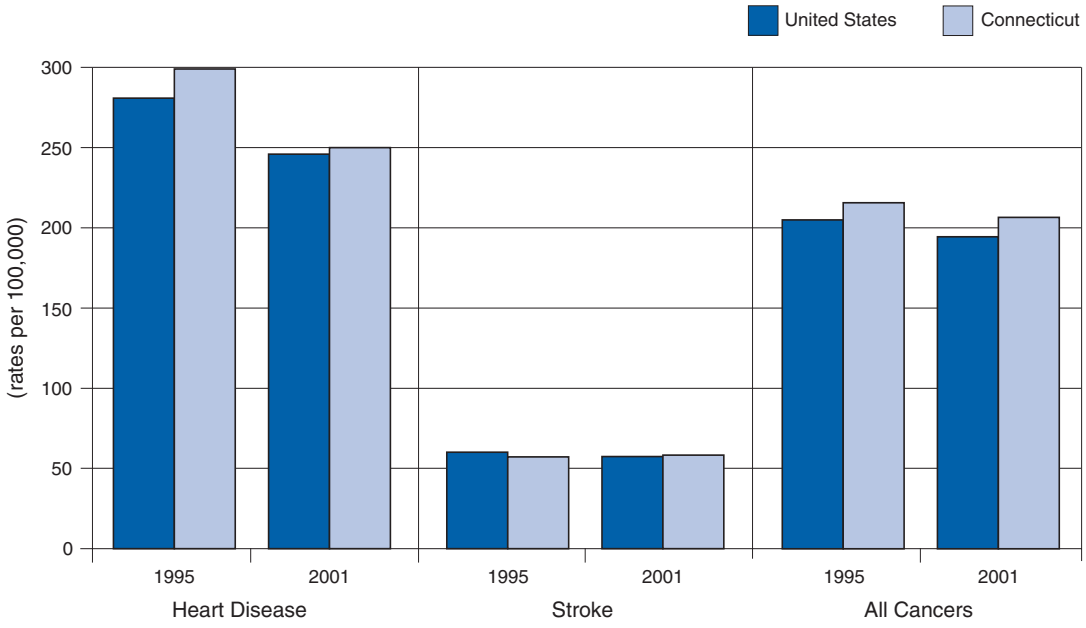
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Connecticut

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Connecticut, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

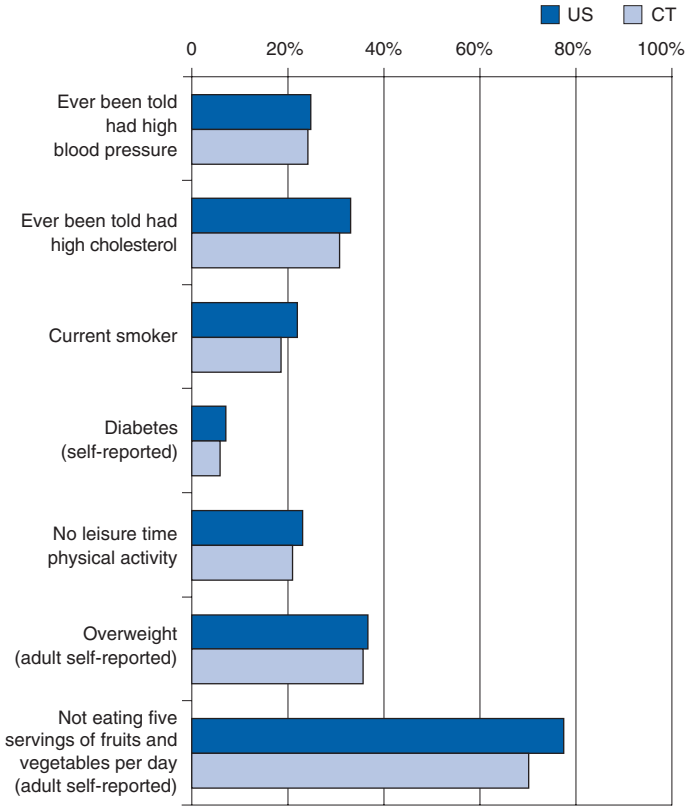
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Connecticut, accounting for 8,582 deaths or approximately 29% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,003 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 7,010 are expected in Connecticut. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 17,010 new cases that are likely to be diagnosed in Connecticut.

Estimated Cancer Deaths, 2004

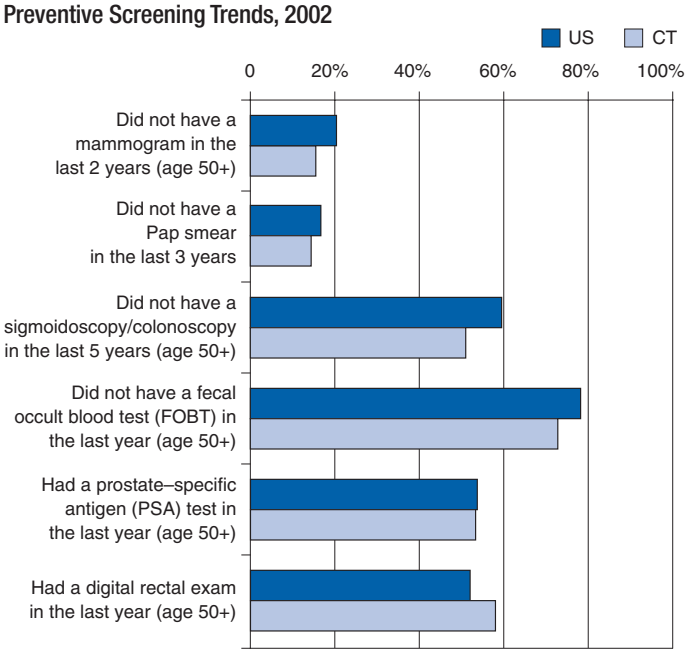
Cause of death	US	CT
All Cancers	563,700	7,010
Breast (female)	40,110	530
Colorectal	56,730	660
Lung and Bronchus	160,440	1,850
Prostate	29,900	430

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Connecticut's Chronic Disease Program Accomplishments

Examples of Connecticut's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decrease occurring among African Americans (368.7 per 100,000 in 1990 versus 343.9 per 100,000 in 2000).
- A 13.4% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 28.9% in 1992 to 15.5% in 2002).
- A prevalence rate that was lower than the corresponding national rate for women older than age 18 who reported not having had a Pap smear in the last 3 years (14.4% in Connecticut versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Connecticut in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Connecticut, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Connecticut BRFSS*	$244,376
National Program of Cancer Registries	$0
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Connecticut Cardiovascular Health Program*	$215,000
Diabetes Control Program *Connecticut Diabetes Prevention and Control Program*	$378,513
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Cancer Program*	$1,327,206
National Comprehensive Cancer Control Program *Division of Health Education Intervention*	$150,000
WISEWOMAN *Stay Healthy For Life*	$725,332
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Connecticut Tobacco Prevention and Control Program*	$883,111
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$3,923,538**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Connecticut that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD), including heart disease and stroke, is a serious public health concern in Connecticut. In 2001, approximately 72% of all heart disease deaths occurred among people over the age of 75, and factoring in stroke deaths increases this number to slightly above 90%. However, CVD does not affect only the elderly; it is also the second leading cause of premature death in adults between the ages of 45 and 75. Although CVD is presumed to primarily affect men, 53% of Connecticut's total CVD deaths are among women.

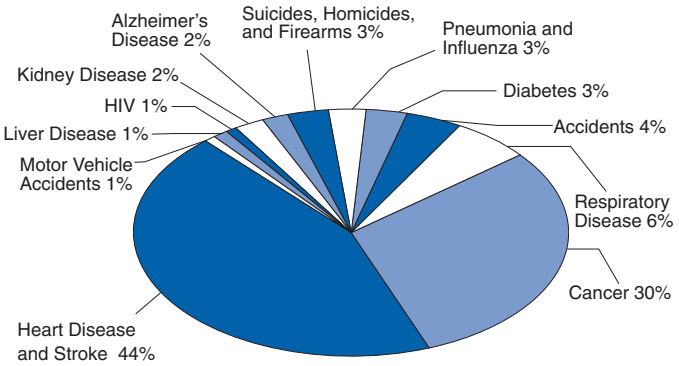
CVD poses a significant economic burden on the state. It is the most expensive medical condition, accounting for one seventh of the state's total health care spending. The state's estimated annual cost for coronary heart disease is $1.2 billion; for stroke, $500 million; and for congestive heart failure, $500 million.

To address these problems, the staff of the Connecticut Department of Public Health's CVD program provides technical assistance to, and oversight of, more than 30 local health departments and other community agencies that receive funding for programs to reduce CVD risk factors in their residents.

In addition, the state has set several *Healthy People 2010* goals related to cardiovascular disease, including reducing the age-adjusted death rate for coronary heart disease from 177 to 166 per 100,000 by 2010, and reducing the age-adjusted death rate for stroke from 50 to 48 per 100,000 by 2010.

Text adapted from *Connecticut Department of Public Health Issue Brief #2002-1: Cardiovascular Disease, Connecticut's Leading Killer* (February 2002).

Major Causes of Death in Connecticut, 2001



Source: American Heart Association, 2004 Connecticut State Fact Sheet

Disparities in Health

African Americans, who make up about 9% of the population in Connecticut, have high risk factor prevalence rates for heart disease, stroke, and cancer—and high death rates for these diseases.

Risk factors for heart disease, stroke, and cancer include poor nutrition, physical inactivity, obesity, smoking, high blood pressure, and diabetes. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, only 24.0% of African Americans in Connecticut reported consuming 5 or more servings of fruits or vegetables per day, compared with 30.5% of whites. In addition, 30.3% of the state's African Americans reported that they did not participate in any leisure time physical activity during the past month, compared with 18.4% of whites. As a result of these behaviors, Connecticut's African Americans have higher rates of obesity than whites (32.5% versus 18.0%). African Americans are also more likely to smoke (20.9%, compared with 18.1% of whites), and are more likely to report having been told by a doctor that they have high blood pressure (35.6%, compared with 25.4% of whites).

Given the high prevalence rates of the above risk factors, it is not surprising that African Americans in Connecticut have higher heart disease and stroke death rates than whites. From 1996 to 2000, African Americans had a heart disease death rate of 575 per 100,000, compared with 494 per 100,000 for whites. From 1991 to 1998, African Americans also had a higher stroke death rate (121 per 100,000) than whites (101 per 100,000).

African Americans in Connecticut also have higher cancer death rates than whites. In 2000, the cancer death rate among African American men in Connecticut was 343.9 per 100,000, compared with 227.8 per 100,000 for white men. That same year, Connecticut's African American women had a cancer death rate of 184.3 per 100,000, compared with 162.8 per 100,000 for white women.

Other Disparities

- **Diabetes:** In 2001, African Americans in Connecticut had a higher diabetes death rate than whites (46.5 per 100,000 versus 18.1 per 100,000).
- **Cervical Cancer:** Although 2002 data indicate that African American women were more likely to have had a mammogram in the last 3 years than white women (11.9% versus 13.3%), from 1997 to 2001, African American women had a higher cervical cancer death rate than white women (3.4 per 100,000 versus 1.8 per 100,0000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

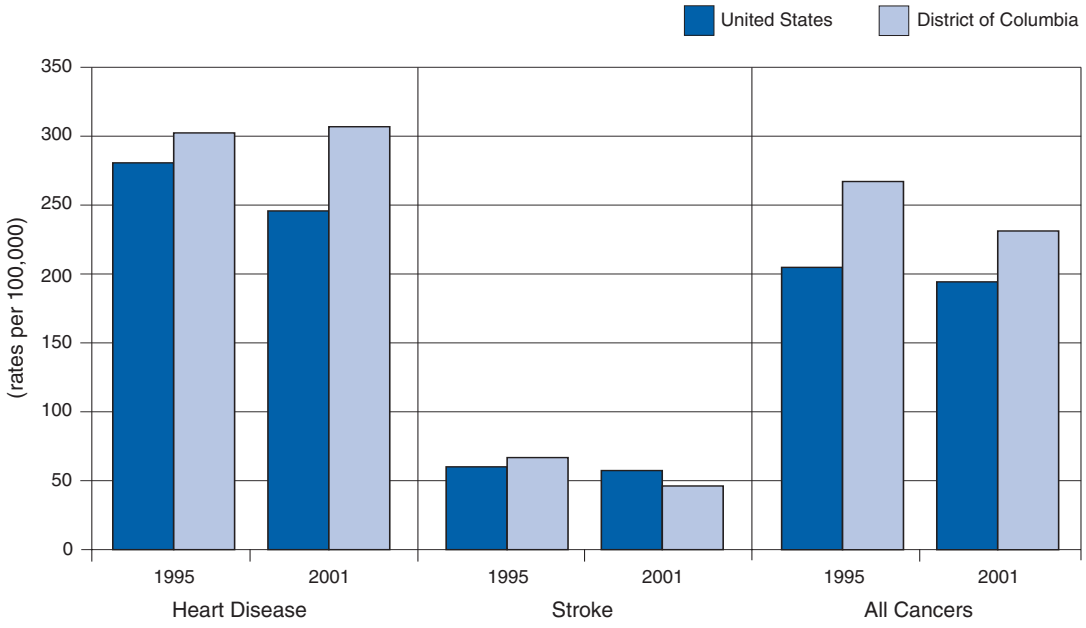
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

District of Columbia

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and District of Columbia, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

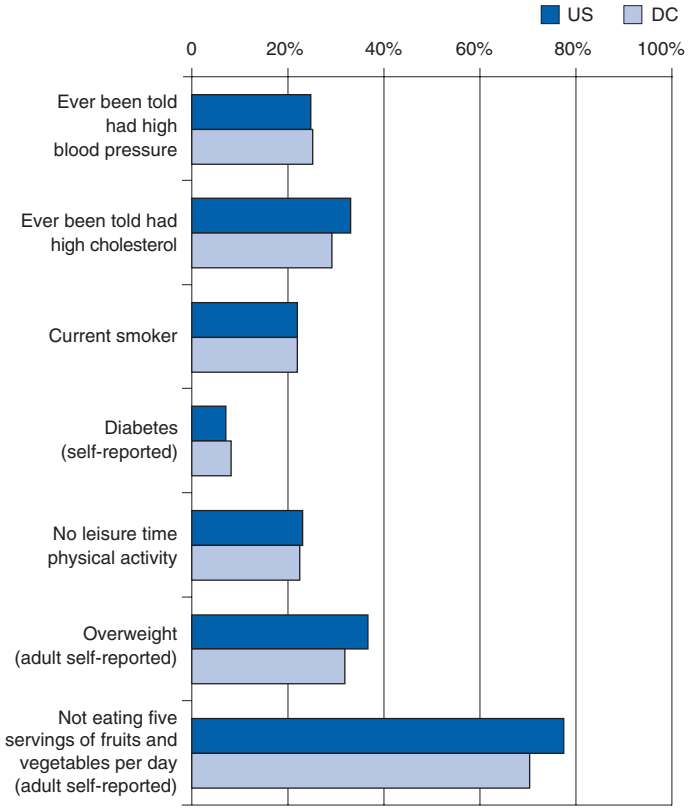
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in the District of Columbia, accounting for 1,761 deaths or approximately 30% of the District's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 265 deaths or approximately 4% of the District's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 1,180 are expected in the District of Columbia. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 2,860 new cases that are likely to be diagnosed in District of Columbia.

Estimated Cancer Deaths, 2004

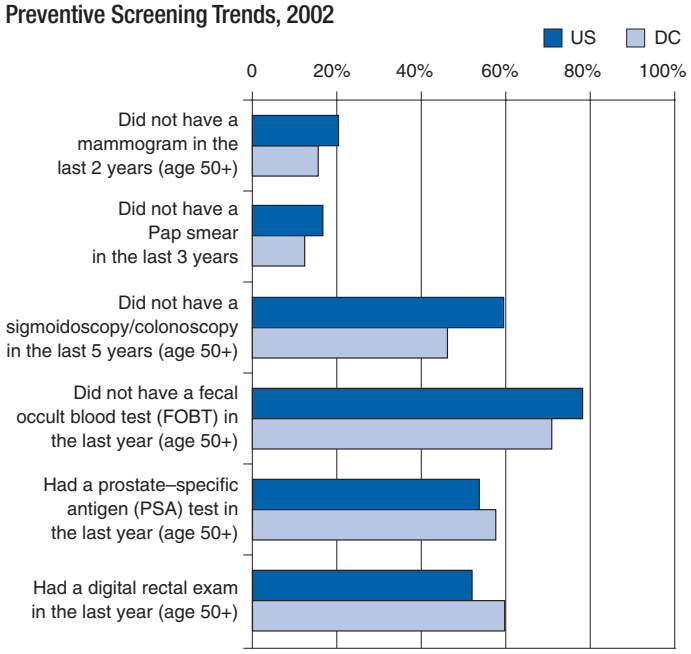
Cause of death	US	DC
All Cancers	563,700	1,180
Breast (female)	40,110	110
Colorectal	56,730	130
Lung and Bronchus	160,440	280
Prostate	29,900	80

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

District of Columbia's Chronic Disease Program Accomplishments

Examples of the District of Columbia's Prevention Successes

- Statistically significant decreases in cancer deaths among African American men (425.9 per 100,000 in 1990 versus 378.7 per 100,000 in 2000).
- A 7.7% decrease in the number of women in DC older than age 50 who reported not having had a mammogram in the last 2 years, from 23.3% in 1992 to 15.6% in 2002.
- Lower prevalence rates than the corresponding national rates for self-reported overweight (31.9% in the District of Columbia versus 36.7% nationally) and for women older than age 18 who reported not having had a Pap smear in the last 3 years (12.4% in the District of Columbia versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to the District of Columbia in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for District of Columbia, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *DC BRFSS*	$208,587
National Program of Cancer Registries *DC Cancer Registry*	$300,000
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *DC Cardiovascular Health Program*	$300,000
Diabetes Control Program *DC Diabetes Prevention and Control Program*	$400,000
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Cancer Early Detection Program*	$1,107,356
National Comprehensive Cancer Control Program *Comprehensive Cancer Control Program*	$95,061
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *DC Tobacco Prevention and Control Program*	$354,774
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010) *National Black Women's Health Project*	$936,535
Total	**$3,702,313**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in District of Columbia that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

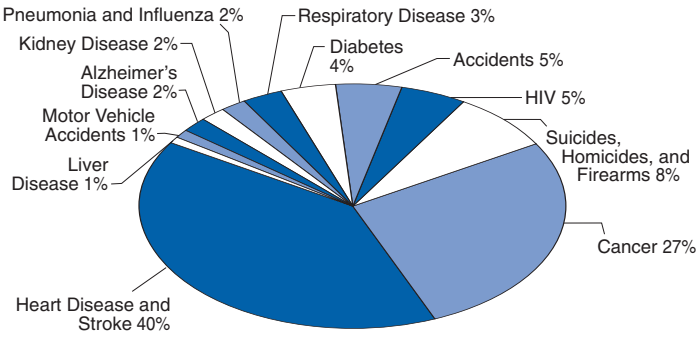
Chronic Disease Highlight: Heart Disease and Stroke

Heart disease and stroke pose serious public health concerns for residents of the District of Columbia. In 2001, total heart disease and stroke death rates were above the national rates for these diseases. Mortality data from the CDC indicate that in 2001 the District of Columbia had the 2nd highest heart disease death rate in the nation (308.5 per 100,000 in D.C. versus 246.8 per 100,000 nationally), but was among the lowest in the nation for stroke deaths (46.4 per 100,000 versus 57.7 nationally). Heart disease remains the leading cause of death in the District of Columbia, particularly for African Americans. The graph below illustrates the major causes of death in the District of Columbia.

Data from the CDC indicate that a disproportionate number of heart disease deaths occur among African Americans, a trend that is consistent with national trends. CDC data indicate that from 1996 to 2000, the District's African American residents had an age-adjusted death rate for total cardiovascular diseases of 625 per 100,000, compared with 395 per 100,000 for their white counterparts.

The District of Columbia has taken steps to increase awareness among residents of the importance of healthy lifestyle choices and has set several objectives to reduce heart disease and stroke. The District's *Healthy People 2010* plan emphasizes reducing the prevalence of preventable behaviors such as promoting healthy eating habits and exercise, controlling blood pressure and blood cholesterol, and reducing tobacco use.

Major Causes of Death in the District of Columbia, 2001



Adapted from *The District of Columbia Healthy People 2010 Plan: A Strategy for Better Health* (September 2000)

Disparities in Health

African Americans, who comprise approximately 12% of the U.S. population—about 35 million people—experience health disparities in significant proportions. Even with a strong focus by the District of Columbia health department on preventing racial and ethnic health disparities in the District of Columbia, 2003 data from the Behavioral Risk Factor Surveillance System show that the city is still experiencing health disparities, especially between African Americans and whites. In the District of Columbia, when compared with other groups, African Americans are more likely to report physical inactivity, poor nutrition, high blood pressure, and smoking—all of which are risk factors for developing chronic diseases such as cardiovascular disease, cancer, and diabetes.

In 2003, only 26.4% of the District's African Americans consumed 5 or more servings of fruits and vegetables per day, compared with 35.7% of whites. In addition, African Americans in the District were more likely to report not meeting the recommended guidelines for moderate physical activity (57.5% of African Americans, versus 33.4% of whites). The percentage of African Americans who have been told that they had high blood pressure is more than double that of their white counterparts (33.5% versus 15.0%).

Smoking is also more prevalent among African Americans than among whites in the District of Columbia. In 2003, 19.0% of African Americans smoked daily, in comparison with 7.3% of whites. This disparity in smoking rates is associated with the disparities in cancer death rates—in the District of Columbia in 2000, the cancer death rate was higher among African Americans (378.7 for men and 216.4 for women per 100,000) than among whites (202.9 for men and 136.9 for women per 100,000).

Other Disparities

- **Heart Disease:** In the District of Columbia, heart disease death rates from 1996 to 2000 were higher for African Americans (625 per 100,000) than for whites (395 per 100,000) and Hispanics (102 per 100,000).
- **Stroke:** From 1991 to 1998, the death rate for stroke was higher for the District of Columbia's African Americans than for whites (132 per 100,000 versus 93 per 100,000).
- **Lung Cancer:** In the District of Columbia in 2000, the lung cancer death rate was more than twice as high for African Americans men in the District of Columbia (94.2 per 100,000) than for white men (37.8 per 100,000 for whites).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

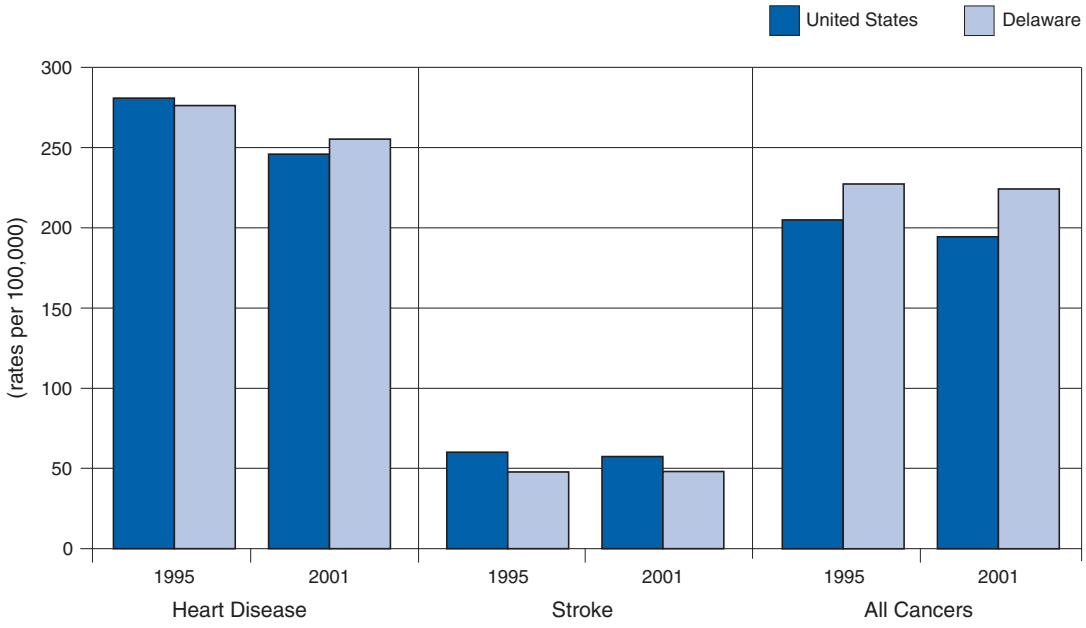
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Delaware

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Delaware, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

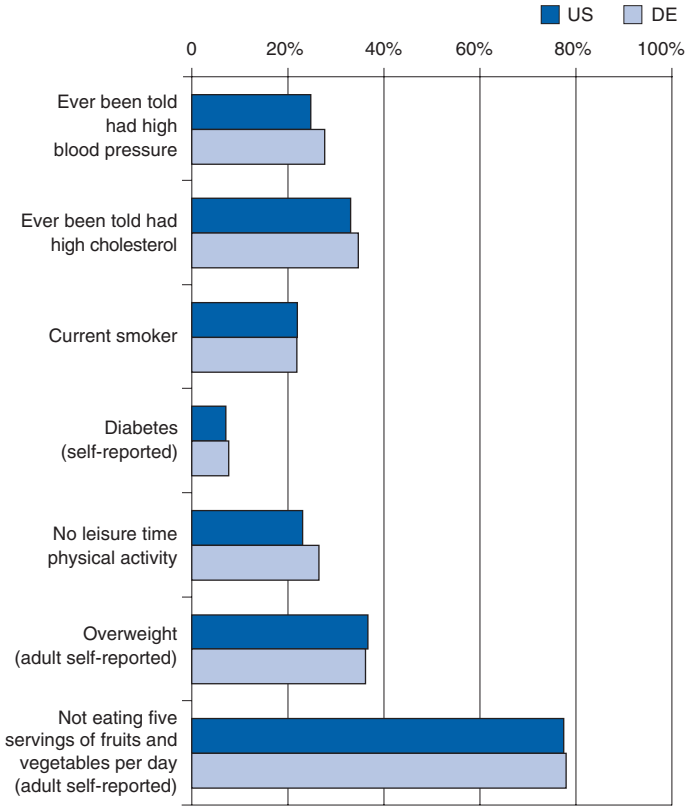
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Delaware, accounting for 2,033 deaths or approximately 29% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 383 deaths or approximately 5% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 1,810 are expected in Delaware. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 4,390 new cases that are likely to be diagnosed in Delaware.

Estimated Cancer Deaths, 2004

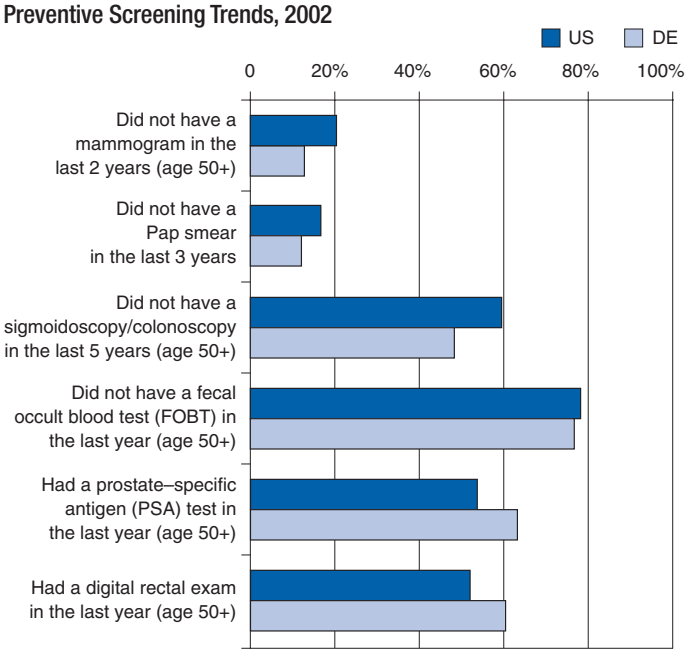
Cause of death	US	DE
All Cancers	563,700	1,810
Breast (female)	40,110	130
Colorectal	56,730	160
Lung and Bronchus	160,440	510
Prostate	29,900	90

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Delaware's Chronic Disease Program Accomplishments

Examples of Delaware's Prevention Successes

- Statistically significant decreases in cancer deaths for men across all races and for white women, with the greatest decrease occurring among African American men (496.1 per 100,000 in 1990 versus 292.2 per 100,000 in 2000).
- A 19.5% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 32.3% in 1992 to 12.8% in 2002).
- A lower prevalence rate than the corresponding national rate for women older than age 18 who reported not having had a Pap smear in the last 3 years (12.1% in Delaware versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Delaware in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Delaware, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Delaware BRFSS*	$111,972
National Program of Cancer Registries *Delaware Cancer Registry*	$271,288
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Delaware Diabetes Prevention and Control Program*	$410,000
National Breast and Cervical Cancer Early Detection Program *Screening For Life*	$834,138
National Comprehensive Cancer Control Program *Cancer Prevention and Control Program*	$125,000
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Delaware Tobacco Prevention and Control Program*	$794,493
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$2,546,891**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Delaware that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Diabetes

Diabetes, a serious disease requiring extensive medical monitoring and lifelong treatment, is a common cause of disability and death in Delaware. Data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) and the National Health Interview Survey show that in 1998 approximately 45,000 people in Delaware had diabetes—30,000 who had been diagnosed and 15,000 who were unaware that they had the disease. Data from the BRFSS for 2003 indicate that in Delaware, adults age 55 and over have higher rates of diabetes (15.2% to 16.2%) than the general population (7.7%). In addition, African Americans (10.7%) and Hispanics (10.3%) have higher rates of diabetes than whites (6.9%). More than 2,500 Delaware women aged 18 to 44 were estimated to have had diabetes during pregnancy in 1998. Between 1995 and 1999, approximately 300 infants each year were born to mothers who had diabetes during pregnancy.

Many adults in Delaware do not receive the appropriate testing and treatment for diabetes. For example, one quarter of Medicare beneficiaries with diabetes aged 65 to 74 did not receive glucose tests or dilated eye exams between 1998 and 1999, and 40% did not have tests for hyperlipidemia, even though Medicare covered all of these tests for people with diabetes. One third of Delaware residents with diabetes over age 18 did not have foot exams between 1997 and 1998. These treatments and tests can decrease the risk of serious complications from diabetes, including blindness, heart attacks, and foot and leg amputations.

From 1994 to 1999, diabetes was directly responsible for more than 5,000 hospitalizations in Delaware and it was implicated as a secondary diagnosis in almost 10 times as many cases. In 1998, almost 10,000 Delawareans experienced diabetes-related disabilities and made more than 300,000 physician visits related to the disease.

Caring for people with diabetes is expensive. In the late 1990s, the total economic burden attributed to diabetes in Delaware was immense. Between 1995 and 1999, payments to Delaware hospitals for diabetes care were more than $100 million per year. During the same time, the average payment per hospitalization for diabetes patients was between $2,000 and $3,000 greater than the average payment for patients without the disease. In 1997, the annual total economic cost of diabetes in Delaware was estimated to be almost $300 million.

Text adapted from *The Burden of Diabetes in Delaware* (2002).

Disparities in Health

Although Delaware is the one of the nation's smallest states, it has very definite rural and urban populations. Sussex County, which is primarily rural, accounts for almost half of the state's area and is one of the largest counties east of the Mississippi River. The total population for the county is 141,000.

According to CDC mortality data, in 2001, Delaware had the 4th highest cancer death rate (219.3 per 100,000) in the United States. In rural Sussex County, African Americans had higher cancer death rates than whites (280.9 per 100,000 compared with 205.1 per 100,000), and from 1995 to 1999, cancer death rates for the county's whites declined, while the rates for African Americans remained stable. According to the 2001 *Delaware Vital Statistics Annual Report,* the three leading causes of death in Sussex County were all preventable diseases. They include: heart disease, which accounted for 30.7% of deaths in Sussex County; cancer, which accounted for 25.7%; and stroke, which accounted for 4.7%.

In rural Sussex County, death rates for congestive heart failure exceed those of the entire state, and heart disease is the county's most frequent cause for hospitalization. According to 2001 CDC mortality data, diabetes death rates for all racial and ethnic groups in Delaware exceeded diabetes death rates for the United States (27.1 per 100,000 compared with 25.2 per 100,000), although the diabetes death rate in Sussex County was lower than the rate in Delaware (27.1 per 100,000 compared with 29.5 per 100,000).

Other Disparities

- **Physical Activity:** Delaware's Hispanics and African Americans are less likely to meet the recommended guidelines for moderate physical activity than whites (34.5% for Hispanics and 37.0% for African Americans, compared with 45.9% for whites).
- **Obesity:** African Americans are more likely to be obese (32.8%) than whites (22.4%) or Hispanics (28.1%).
- **Cervical Cancer:** In Delaware in 2002, African American women were more likely to have had a Pap smear in the last 3 years (95.1%) than white women (91.0%); however, in 2001 African American women in Delaware had a higher cervical cancer death rate (7.0 per 100,000) than white women (4.0 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

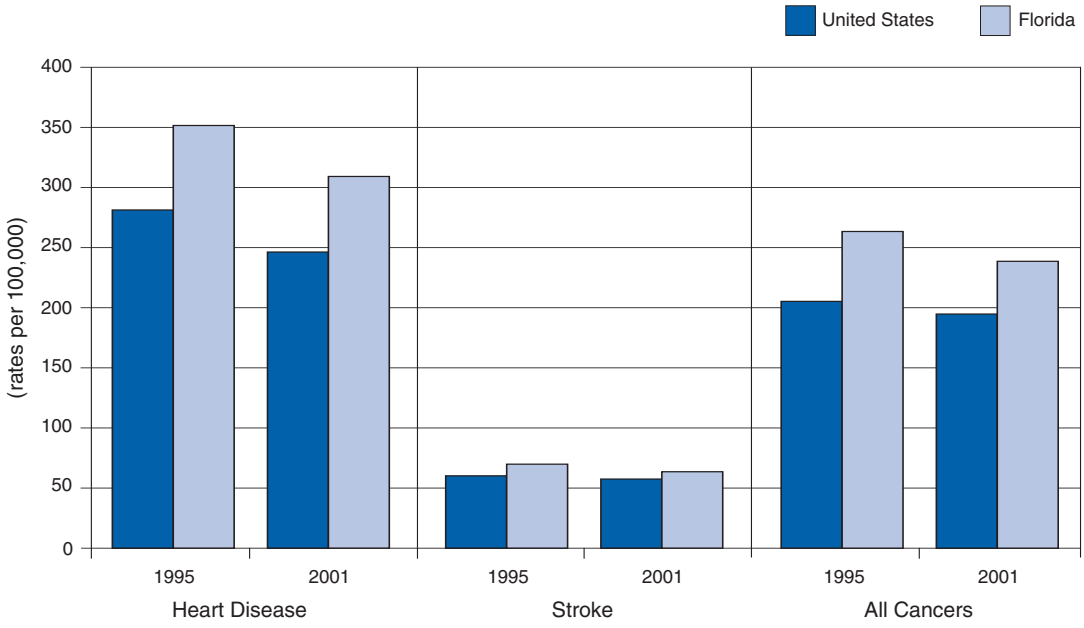
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Florida

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Florida, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

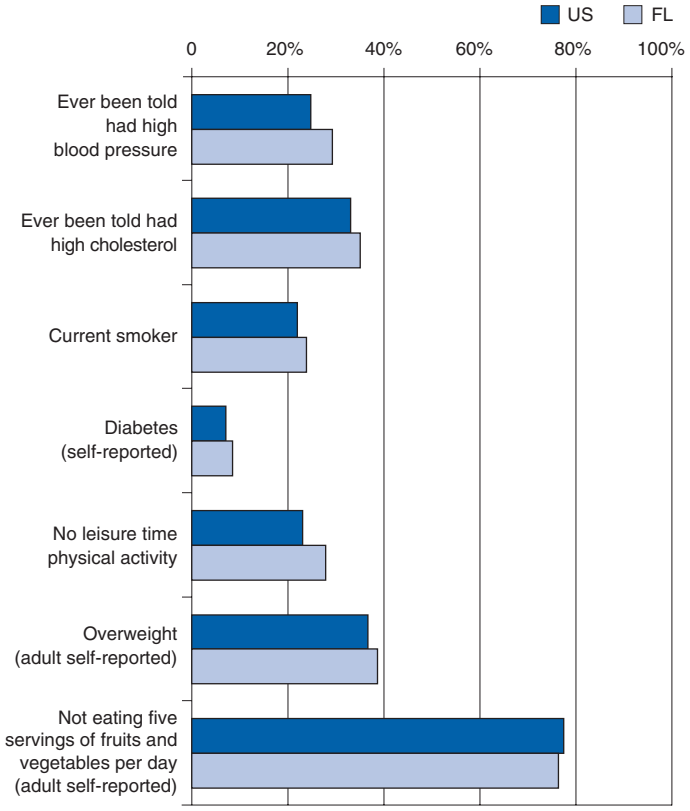
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Florida, accounting for 50,629 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 10,414 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 40,090 are expected in Florida. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 97,290 new cases that are likely to be diagnosed in Florida.

Estimated Cancer Deaths, 2004

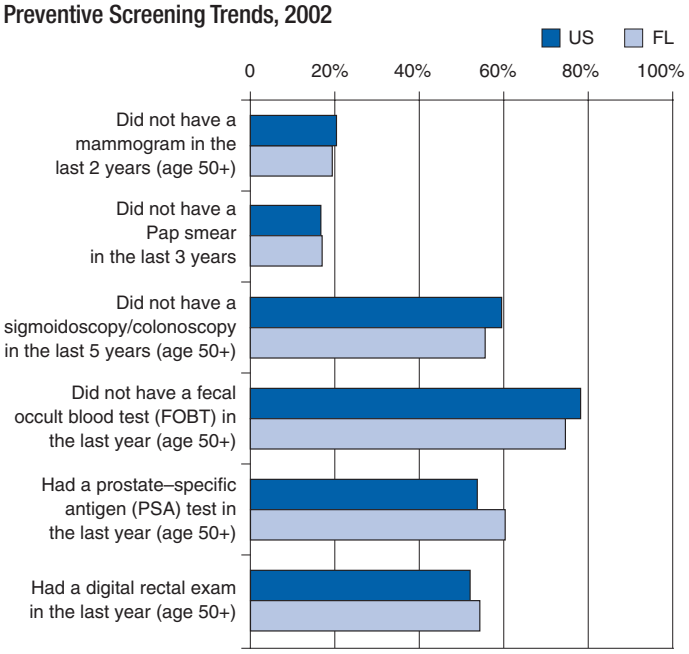
Cause of death	US	FL
All Cancers	563,700	40,090
Breast (female)	40,110	2,480
Colorectal	56,730	3,840
Lung and Bronchus	160,440	12,360
Prostate	29,900	2,220

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Florida's Chronic Disease Program Accomplishments

Examples of Florida's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decrease occurring among African American men (414.5 per 100,000 in 1990 versus 312.3 per 100,000 in 2000).
- A 16.9% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 36.3% in 1992 to 19.4% in 2002); for African American women older than age 50, the number decreased 29.3% (from 50.5% in 1992 to 21.2% in 2002).
- A 2.8% decrease in the number of women older than age 18 who reported not having had a Pap smear in the last 3 years (from 19.8% in 1992 to 17.0% in 2002).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Florida in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Florida, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Florida BRFSS*	$153,968
National Program of Cancer Registries *Florida Cancer Data System (FCDS)*	$1,343,710
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Florida Cardiovascular Health Council*	$1,268,984
Diabetes Control Program *Closing the Gap* *Indigent Insulin Program*	$647,183
National Breast and Cervical Cancer Early Detection Program *Florida Breast and Cervical Cancer Early Detection Program*	$4,045,728
National Comprehensive Cancer Control Program *Cancer Control and Research Advisory Council* *Florida Cancer Plan*	$187,331
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Florida Tobacco Prevention and Control Program*	$661,526
State Nutrition and Physical Activity/Obesity Prevention Program *Pedometer Loan Program* *PACE (Patient-centered Assessment nnd Counseling on Exercise)*	$400,000
Racial and Ethnic Approaches to Community Health (REACH 2010) *Florida International University*	$915,089
Total	**$9,623,519**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Florida that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Coronary Heart Disease, Stroke, and Diabetes

Despite more than 3 decades of declining cardiovascular disease (CVD) death rates, and despite rates of heart disease and stroke deaths that are lower than the national average, CVD remains the leading cause of death for men and women of all racial and ethnic groups in Florida. From 1996 to 2000, Florida had a heart disease death rate of 493 per 100,000, compared with the national rate of 536 per 100,000. From 1991 to 1998, Florida had one of the lowest stroke death rates in the nation, at 102 per 100,000, compared with 121 per 100,000 nationwide.

The elderly are not the only Florida residents affected by CVD. In 2000, there were nearly 5,000 heart attack deaths and more than 1,100 stroke deaths among Florida residents under the age of 65, and more than 71,000 hospital discharges for heart disease and stroke among those under the age of 65. During the same year, the age-adjusted stroke death rate for women was 44.9 per 100,000 population; for men, the rate was 51.2 per 100,000. However, more women than men died of stroke each year in Florida (for example, 6,001 women versus 4,380 men in 2000). The lower age-adjusted stroke death rate and higher number of stroke deaths for Florida women reflect the state's larger population of older women.

Diabetes is an important modifiable risk factor for both coronary heart disease and stroke because the risk of CVD-related death is 2 to 4 times greater for persons with the disease. In Florida, an estimated 1 million adults have diabetes that has been diagnosed and an estimated 300,000 have diabetes and are unaware of their disease status. Florida's diabetes prevalence remained stable from 1987 to 1997 (at approximately 5.6%), but increased to 6.9% in 2000.

The Florida Department of Health began receiving funds from CDC in 2002 to support a state heart disease and stroke prevention program. In addition to developing a state plan for action, the Florida Department of Health's *Cardiovascular Health Program* competitively provides funds for county health departments to implement community-based intervention programs. The program also promotes statewide public/private partnerships that address cardiovascular health, women and heart disease, physical activity, nutrition, obesity prevention, tobacco avoidance, and diabetes.

Text adapted from *Florida Cardiovascular Surveillance Summary and State Plan for Action* (2001).

Disparities in Health

Hispanics are the fastest growing minority population in the country; in 2000 they comprised almost 17% of Florida's population. Like other racial and ethnic minorities, Hispanics in Florida experience health disparities for some critical risk factors and chronic diseases, such as nutrition, physical activity, overweight and obesity, and heart disease. In other areas, such as diabetes, high blood pressure and stroke, Hispanics have better health status than other groups.

In 2003, CDC Behavioral Risk Factor Surveillance System (BRFSS) data indicate that African Americans (20.6%) and Hispanics (20.7%) were less likely to consume 5 servings of fruits and vegetables per day than whites (24.4%). Hispanics also had lower rates of participation in leisure time physical activity (61.8%, compared with 67.6% for African Americans and 75.4% of whites). Based on these risk factors, Hispanics were also more likely to be overweight than whites (41.7% versus 38.5%) and more likely to be obese than whites (21.6% versus 19.1%). From 1996 to 2000, Hispanics in Florida had a higher heart disease death rate than Hispanics nationally (369 per 100,000 versus 348 per 100,000).

However, from 1991 to 1998, Hispanics had a lower stroke death rate (66 per 100,000) than whites (97 per 100,000) or African Americans (102 per 100,000). In addition, Hispanics in Florida had a lower stroke death rate than Hispanics nationally (66 per 100,000 versus 79 per 100,000). BRFSS data from 2003 also indicate that Hispanics in Florida were less likely than whites to report having been told that they have diabetes (6.0%, compared to 8.6% for whites).

The state of Florida passed a law in 2000 that provided funding for a grant program to begin to address disparities in health. Grants are provided to local counties and organizations with the intent to increase community-based health promotion and disease prevention activities.

Other Disparities

- **Diabetes:** African Americans in Florida are more likely than whites to report having been told that they have diabetes (10.3% versus 8.6%).
- **Cervical Cancer:** Although 2002 BRFSS data indicate that African American women were more likely to report having had a Pap smear in the last 3 years (13.4% versus 16.6%), from 1997 to 2001 African American women had a cervical cancer death rate that was more than twice that of white women (6.8 per 100,000 versus 2.9 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

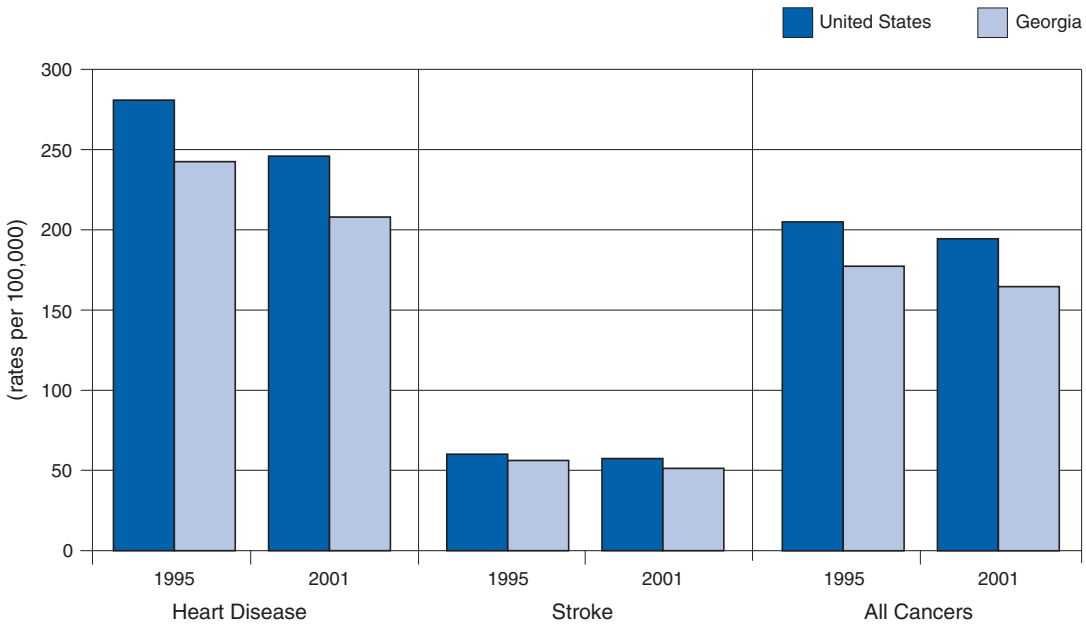
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Georgia

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Georgia, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

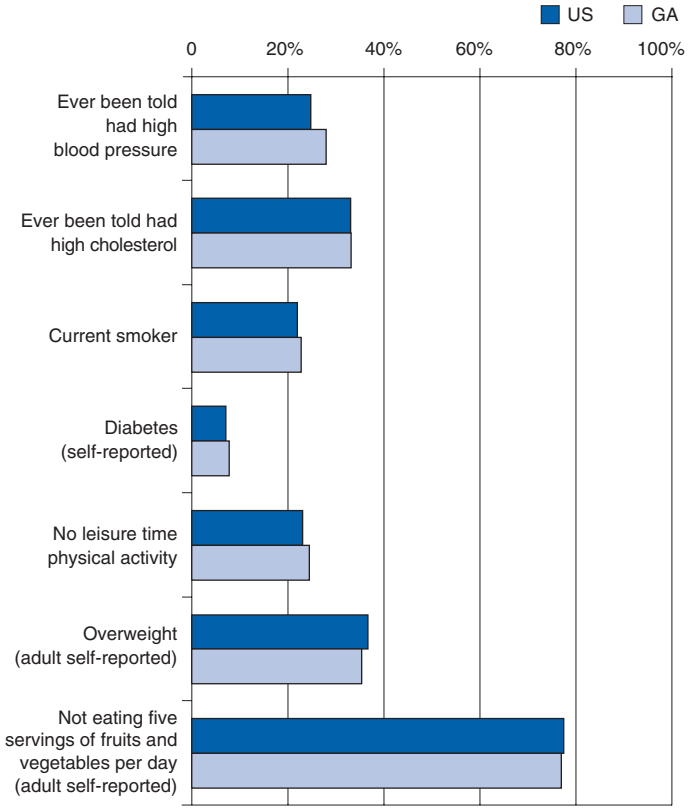
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Georgia, accounting for 17,478 deaths or approximately 27% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 4,312 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 14,600 are expected in Georgia. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 35,430 new cases that are likely to be diagnosed in Georgia.

Estimated Cancer Deaths, 2004

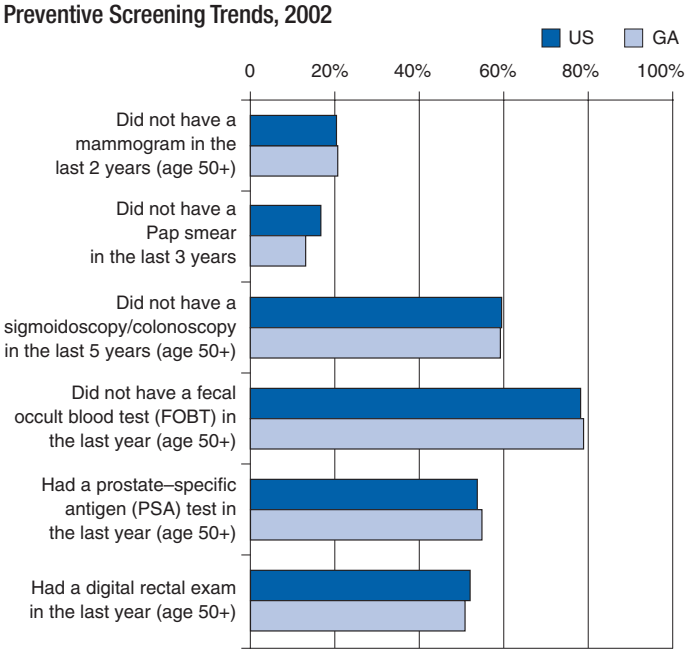
Cause of death	US	GA
All Cancers	563,700	14,600
Breast (female)	40,110	1,130
Colorectal	56,730	1,320
Lung and Bronchus	160,440	4,660
Prostate	29,900	740

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Georgia's Chronic Disease Program Accomplishments

Examples of Georgia's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among African Americans (397.7 per 100,000 in 1990 versus 339.2 per 100,000 in 2000).
- A 21.2% decrease in the number of women older than age 50 who reported not having had a mammogram (from 41.9% in 1992 to 20.7% in 2002).
- Lower prevalence rates than the corresponding national rates for women older than age 18 who reported not having had a Pap smear in the last 3 years (13.1% in Georgia versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Georgia in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Georgia, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Georgia BRFSS*	$194,501
National Program of Cancer Registries *Georgia Comprehensive Cancer Registry*	$906,121
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Georgia Cardiovascular Health Program*	$1,000,000
Diabetes Control Program *Georgia Diabetes Advisory Council* *Diabetes Today Program*	$350,000
National Breast and Cervical Cancer Early Detection Program *Comprehensive Breast and Cervical Screening Program*	$4,305,057
National Comprehensive Cancer Control Program *Georgia Cancer Coalition*	$881,442
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Georgia Tobacco Prevention and Control Program*	$1,431,023
State Nutrition and Physical Activity/Obesity Prevention Program *Georgia Golden Olympics* *Georgia Striders Program* *Mayor's Walk* *Osteoporosis Prevention* *Park Promotion* *Take Charge of Your Health* *Take Charge Challenge* *Kids Walk to School Day*	$407,956
Racial and Ethnic Approaches to Community Health (REACH 2010) *Fulton County Department of Health and Wellness*	$903,949
Total	**$10,380,049**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Georgia that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Overweight and Obesity

The rising prevalence of overweight and obesity in adults and children is an increasing health concern in Georgia and across the United States. Contributing factors to the recent rise in overweight and obesity rates are poor diet and lack of physical activity. Data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) indicate that between 1990 and 2003 the prevalence of overweight and obesity in Georgia increased 14.5%, from 45.6% to 60.1%.

The 2003 BRFSS data indicate that there is a relationship between the prevalence of overweight and obesity and the income and education levels of Georgia's residents. In 2003, the percentage of obesity and overweight for Georgians earning less than $15,000 was 63.4% (26.9% were overweight and 36.5% were obese); the percentage for those earning $50,000 or more was 58.6% (36.8% were overweight and 21.8% were obese). Similarly, the percentage of obesity and overweight for Georgians with less than a high school diploma was 64.0% (32.3% were overweight and 31.7% were obese), and the percentage for Georgians who received a high school diploma or General Equivalency Diploma was 63.0% (36.2% were overweight and 26.8% were obese). In contrast, the percentage for Georgians with a college degree was 56.3% (36.7% were overweight and 19.6% were obese).

In 2001, among Georgia's youth, 29.7% of middle school students aged 11 to 14 were at risk for becoming overweight or were already overweight, while high school students aged 14 to 18 had a slightly lower percentage of risk (26.7%). In both middle and high school, boys were more likely to be at risk for overweight or obesity than girls. Boys in middle school had the highest percentage of overweight and at risk for overweight (36.7%), compared with middle school girls (22.0%), high school girls (20.9%), and high school boys (32.7%).

In addition to being a risk factor for heart disease and stroke, overweight and obesity are also leading risk factors for diabetes. BRFSS data indicate that in 2003, 7.8% of adults in Georgia reported having been told that they have diabetes, compared with the national average of 7.1%.

Georgia has addressed the problem of overweight and obesity in the state by launching the Take Charge of Your Health Campaign to reduce the incidence of chronic disease by promoting healthy nutrition choices and increased physical activity.

Text adapted from *Overweight among Middle and High School Students in Georgia* (2001).

Disparities in Health

African Americans, who comprise approximately 27% of Georgia's population experience disproportionate health disparities. Nationally, African Americans have higher stroke mortality rates than other groups as well as higher prevalence of the risk factors for heart disease, stroke, and cancer.

From 1996 to 2000, the heart disease death rate for African Americans in Georgia was 665 per 100,000, compared with 559 per 100,000 for whites. The stroke death rate for the state's African Americans was 191 per 100,000, compared with 134 per 100,000 for whites.

African Americans in Georgia also have higher cancer death rates. According to the Georgia Cancer Data Report 2000, African Americans were 27% more likely to die of cancer than their white counterparts. In 2000, the cancer death rate for African Americans in Georgia was 234.3 per 100,000, compared with 194.8 per 100,000 for whites. African American men had higher prostate and colorectal cancer death rates (81.0 per 100,000 and 34.0 per 100,000, respectively) than their white counterparts (94.0 per 100,000, 36.8 per 100,000, and 21.7 per 100,000, respectively). Similarly, African American women had higher breast and colorectal cancer death rates (31.1 per 100,000 and 23.6 per 100,000, respectively) than white women (24.4 per 100,000 and 15.1 per 100,000, respectively).

These higher death rates for chronic diseases are influenced by high rates of behavioral risk factors as described below.

Other Disparities

- **Overweight and Obesity:** In Georgia, 68.2% of African Americans are either overweight (35.8%) or obese (32.4%), compared with whites (35.2% are overweight and 22.4% are obese).
- **Physical Activity:** Hispanics in Georgia are least likely to engage in physical activity (33.1%), compared with African Americans (27.6%) and whites (23.2%).
- **High Blood Pressure:** In Georgia, African Americans are more likely to report having been told that they have high blood pressure (31.3%) than whites (27.4%) or Hispanics (15.7%).
- **Diabetes:** African Americans are more likely to have been told that they have diabetes (9.5%), compared with whites (7.1%) and Hispanics (3.9%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

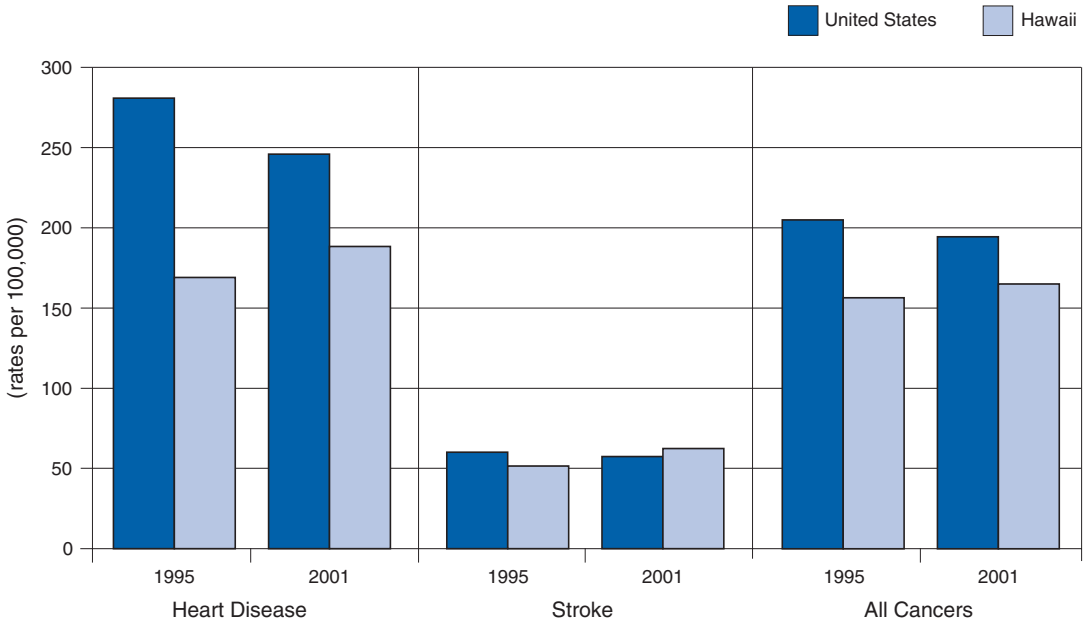
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Hawaii

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Hawaii, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

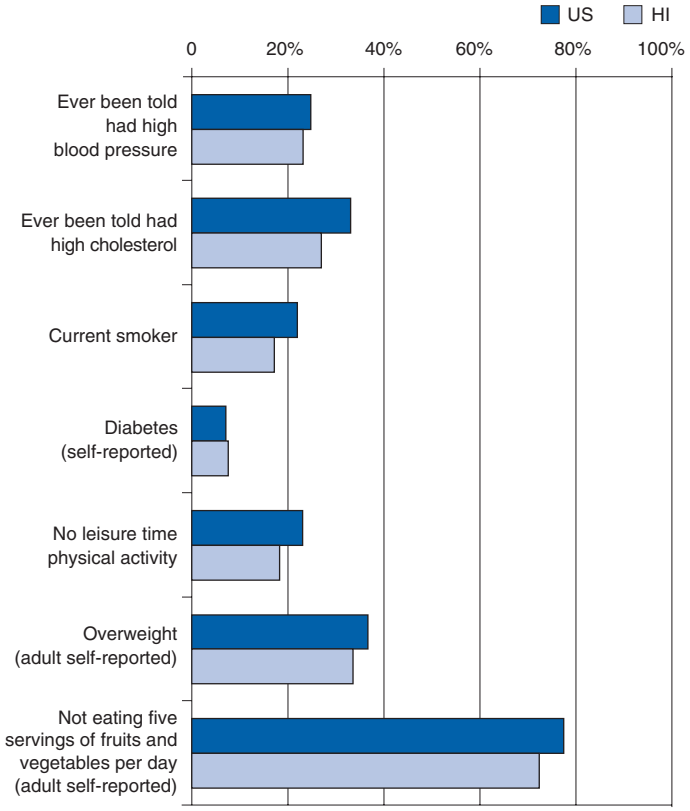
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Hawaii, accounting for 2,310 deaths or approximately 28% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 766 deaths or approximately 9% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 2,090 are expected in Hawaii. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 5,070 new cases that are likely to be diagnosed in Hawaii.

Estimated Cancer Deaths, 2004

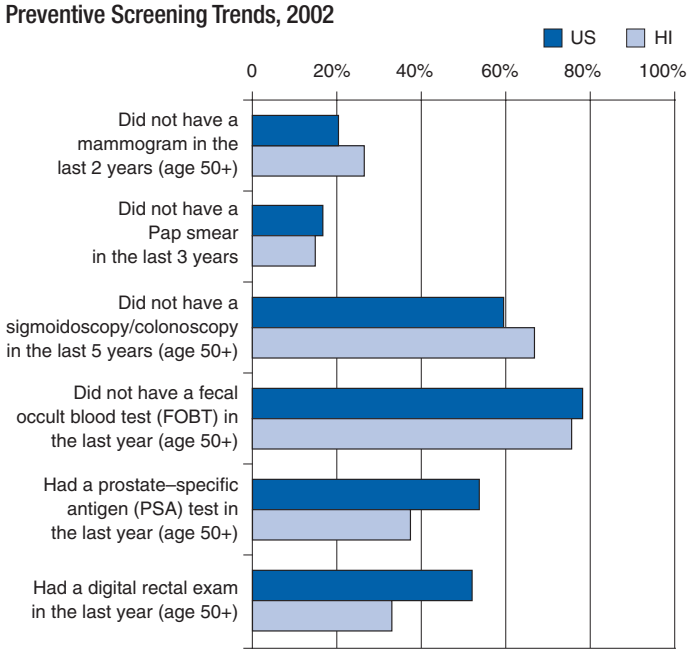
Cause of death	US	HI
All Cancers	563,700	2,090
Breast (female)	40,110	140
Colorectal	56,730	200
Lung and Bronchus	160,440	530
Prostate	29,900	130

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Hawaii's Chronic Disease Program Accomplishments

Examples of Hawaii's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decreases occurring among white males (262.1 per 100,000 in 1990 versus 243.7 per 100,000 in 2000) and white females (187.9 per 100,000 in 1990 versus 149.8 per 100,000 in 2000).
- A 3.2% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 29.7% in 1992 to 26.5% in 2002).
- A lower prevalence rate than the corresponding national rate for self-reported obesity (16.4% in Hawaii versus 22.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Hawaii in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Hawaii, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Hawaii BRFSS*	$90,579
National Program of Cancer Registries	$0
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Hawaii Diabetes Control and Prevention Program*	$355,414
National Breast and Cervical Cancer Early Detection Program *Hawaii Breast and Cervical Cancer Control Program*	$1,014,518
National Comprehensive Cancer Control Program *Hawaii Comprehensive Cancer Control Program*	$103,408
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Hawaii Tobacco Prevention and Education Project*	$745,339
State Nutrition and Physical Activity/Obesity Prevention Program *(No CDC Funding)*	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$2,309,258**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Hawaii that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Heart disease continues to be the leading cause of death in the United States and in Hawaii. CDC mortality data for Hawaii indicate that in 2001, more than 2,300 people died of heart disease and more than 750 people died of stroke. That year, these conditions accounted for over 38% of all deaths in the state.

Although Hawaii's heart disease mortality rates are below the national average (404 per 100,000 versus 535 per 100,000), not all segments of the population have benefited equally from recent improvements in death rates. Analysis of cardiovascular disease mortality data in Hawaii from 1996 to 2000 shows that heart disease death rates for Asian/Pacific Islander men (530 per 100,000), American Indian/Alaska Native men (707 per 100,000) and Hispanic men (548 per 100,000) were higher than the rate for white men (473 per 100,000).

In Hawaii, the stroke death rate from 1996 to 2000 (116 per 100,000) was lower than the national average (121 per 100,000). However, the stroke death rate for the state's Asian/Pacific Islanders during that period (129 per 100,000), which was higher than the national rate for all races and higher than the national rate for Asian and Pacific Islanders (105 per 100,000), has not shown any improvement since the early 1980s.

Although the prevalence of elevated cholesterol, high blood pressure, and smoking has decreased since the mid 1980s, they remain serious risk factors for much of the adult population in Hawaii. Data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) indicate that 27% of adults in Hawaii have been told they have high blood cholesterol, 23.2% have been told they have high blood pressure, and 17.2% are smokers. In addition, half of the adults in Hawaii (50.2%) do not meet the recommended guidelines for moderate physical activity and only 27.6% consume 5 or more servings of fruits and vegetables per day. Because of these risk factors, more than half of the adult Hawaiian population is either overweight (36.0%) or obese (17.1%).

The Hawaii Department of Health recently implemented *Start. Living. Healthy.* This multimedia, public education campaign is designed to provide the people of Hawaii with information on how to adopt a healthy lifestyle, become physically active, eat nutritious foods, and live tobacco-free.

Disparities in Health

About 3.7% of the U.S. population consider themselves to be of Asian or Pacific Island descent, according to the 2000 U.S. Census. These data also indicate that Asian/Pacific Islanders (which include Native Hawaiians) represented 51% of the population in Hawaii, making it the state with the highest population of Asian/Pacific Islanders in the United States.

According to CDC's Behavioral Risk Factor Surveillance System 2003 data, Hawaiians are less likely to be diagnosed with high blood pressure (23.2%), less likely to be diagnosed with high cholesterol (27.0%), less likely to smoke (17.2%), and are more likely to engage in leisure time physical activity (81.7%). Despite these healthy indicators, Asian/Pacific Islanders generally experience poorer health than the general U.S. population. Asian/Pacific Islanders are more at risk for developing and dying from cancer, heart disease, diabetes, and other diseases. The leading causes of death among Asian/Pacific Islanders are heart disease, cancer, and stroke. Asian/Pacific Islanders in Hawaii have higher death rates for heart disease when compared with their white counterparts (414 per 100,000 versus 387 per 100,000) and higher death rates for stroke when compared with their white counterparts (129 per 100,000 for Asian/Pacific Islanders versus 87 per 100,000 for whites).

According to 2002 BRFSS data, Asian/Pacific Islander women aged 50 years or older are less likely than their white counterparts to report having had a mammogram in the last 2 years (28.6% for Asian/Pacific Islander women versus 24.3% for white women). Moreover, Asian/Pacific Islander women aged 18 years or older are less likely than their white counterparts to report having had a Pap smear in the last 3 years (19.1% for Asian Pacific Islander women versus 12.5% for white women).

Other Disparities

- **Smoking:** In 2002, Asian/Pacific Islanders had higher rates of smoking (18.2%) than Asian/Pacific Islanders in the general U.S. population (13.7%); although their smoking rates were lower than whites (20.0%) and African Americans (21.9%) in Hawaii.
- **Overweight and Obesity:** In 2002, Asian/Pacific Islanders in Hawaii were least likely to be overweight or obese (47.9%) as compared to African Americans (66.5%), Whites (50.1%), and Hispanics (49.1%) in Hawaii; although they were more likely to be overweight or obese when compared to Asian/Pacific Islanders in the general U.S. population (35.9%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

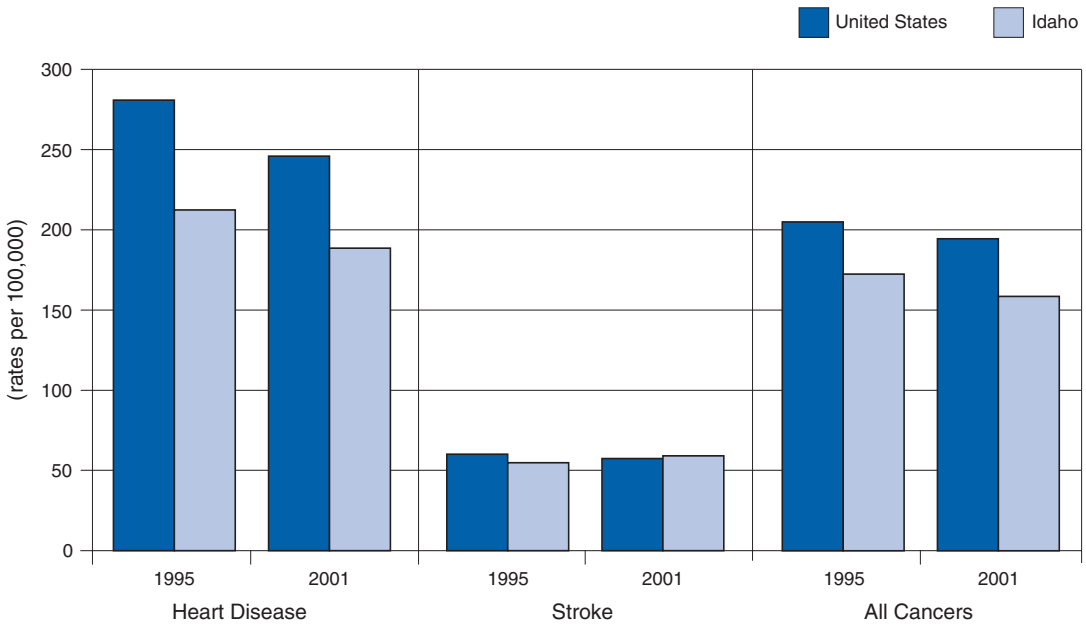
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Idaho

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Idaho, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

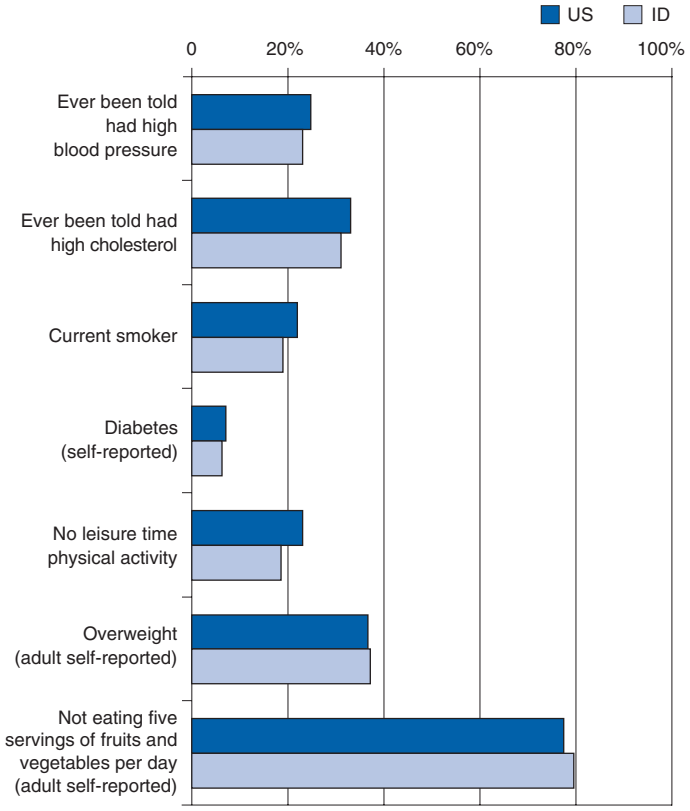
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Idaho, accounting for 2,489 deaths or approximately 26% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 781 deaths or approximately 8% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 2,250 are expected in Idaho. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 5,460 new cases that are likely to be diagnosed in Idaho.

Estimated Cancer Deaths, 2004

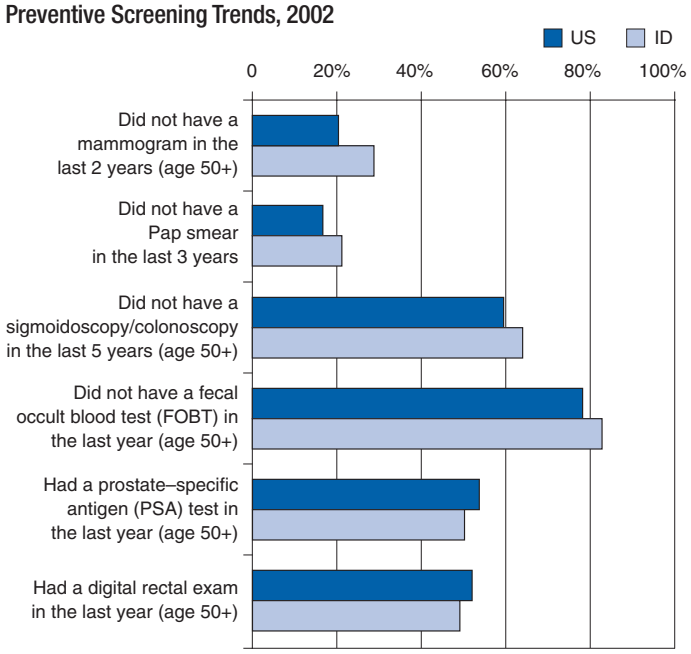
Cause of death	US	ID
All Cancers	563,700	2,250
Breast (female)	40,110	170
Colorectal	56,730	210
Lung and Bronchus	160,440	610
Prostate	29,900	140

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Idaho's Chronic Disease Program Accomplishments

Examples of Idaho's Prevention Successes

- A lower prevalence rate than the corresponding national rate for current smokers (19% in Idaho versus 22% nationally) and lower lung cancer death rates for men (59.7 per 100,000 in 2000) and women (34.5 per 100,000) than the national rates (76.9 per 100,000 for men nationally and 41.2 per 100,000 for women nationally).
- A 17.5% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 46.3% in 1992 to 28.8% in 2002).
- A higher prevalence rate than the corresponding national rate for self-reported participation in leisure time physical activity (81.4% in Idaho versus 76.9% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Idaho in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Idaho, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Idaho BRFSS*	$159,813
National Program of Cancer Registries *Cancer Data Registry of Idaho*	$155,366
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Diabetes Alliance of Idaho*	$350,000
National Breast and Cervical Cancer Early Detection Program *Women's Health Check*	$1,463,132
National Comprehensive Cancer Control Program	$0
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Idaho Tobacco Prevention and Control Program*	$1,020,418
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$3,148,729**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Idaho that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Obesity

Idaho's adults are becoming increasingly overweight and obese. In 2003, 59.0% of adults in the state were either overweight (37.2%) or obese (21.8%). The percentage of Idaho adults who were obese rose 6.8% (from 15.0% in 1994 to 21.8% in 2003). Similarly, the number of Idahoans who reported being diagnosed with diabetes increased 2.7% (from 3.6% in 1994 to 6.3% in 2003). According to the Idaho Department of Health and Welfare, overweight individuals with and without diabetes tend to suffer more health problems than those who are of normal weight.

The prevalence of overweight, obesity, and diabetes increases with age. In Idaho, the obesity prevalence rate in 2003 was higher for each successive age group until age 64: for adults aged 18 to 24, the rate was 12.5%; for those aged 25 to 34, the rate increased to 18.8%. For adults aged 35 to 44, the rate was 24.2%; for those aged 45 to 54, 26.4%; for those aged 55 to 65, 27.4%; and among those aged 65 and older, the rate dropped to 21.5%. According to 2003 data from the Behavioral Risk Factor Surveillance System, 7.2% of Idahoans aged 45 to 54 reported that they had been diagnosed with diabetes, compared with 11.6% of those aged 55 to 64, and 13.6% of those aged 65 and over. In addition, CDC mortality data from 2001 indicate that the death rate from diabetes was higher in Idaho (26.2 per 100,000) than it was nationally (25.2 per 100,000).

There were also gender disparities for these conditions. Men in Idaho are more likely to have been diagnosed with diabetes than women (7.0% of men, compared with 5.6% of women). Obesity rates in Idaho also mirror this trend: men are more likely to be overweight than women (45.0% of men are overweight, compared with 28.8% of women), and they are slightly more likely to be obese than women (the obesity rate for men is 22.7%, compared with 20.8% for women).

In an effort to reduce the risk associated with diabetes and other chronic diseases caused by overweight, obesity, and diabetes, the Idaho Diabetes Prevention and Control Program, in conjunction with the CDC and the National Diabetes Education Program, is launching programs to provide support to health care providers and their overweight patients.

Text adapted from *Overweight, Obesity, and Diabetes in Idaho,* Winter 2004.

Disparities in Health

Almost 20% of the U.S. population resides in rural areas. People in these areas have a higher risk of heart disease, diabetes, and cancer, which is attributable in part to a population that is older, sicker, poorer, and less educated. There are disparities in health status between rural and urban populations; in addition, there are disparities in infrastructure or professional capacity to address these health needs. For residents of rural areas, these disparities include a lack of access to health care professionals and health care services.

Rural areas comprise 88.3% of the state of Idaho. These areas are home to 36.2% of the total population of the state. Throughout most of the 1990s, most rural areas in the state experienced growth, but substantial growth took place in areas that were adjacent to urban areas. The demographic makeup of the state is changing in two significant ways: youth are moving from rural areas and Hispanic populations are migrating to these areas. From 1997 to 1998, 15 counties in Idaho experienced population losses, which have resulted in an aging rural population that lives in areas that lack adequate health care facilities and support. The state may also face new disparities in the future—Idaho is approximately 88% white, however, at 9%, Hispanics are the state's largest minority group, and this percentage is expected to grow. Data from CDC's 2003 Behavioral Risk Factor Surveillance System indicate that almost 5.9% of Hispanics reported having been diagnosed with diabetes and 17.4% reported having been told that they have high blood pressure. While these rates are lower than the corresponding rates for whites (6.2% and 23.2%, respectively), they still represent potential health problems within the growing Hispanic population in Idaho.

Other Disparities

- **Colorectal Cancer Screening:** In 2002, 48.1% of women in Idaho reported that they used a fecal occult blood test to screen for colorectal cancer, compared with 42.5% of men.
- **Diabetes:** In Idaho, percentage of men who report they have been diagnosed with diabetes (6.4%) is higher than the percentage for women (5.8%).
- **Nutrition:** In Idaho, 25.4% of women consume 5 or more servings of fruits and vegetables, compared with 15.3% of men.
- **Obesity:** Hispanics have higher obesity rates (27.4%) than whites (21.5%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

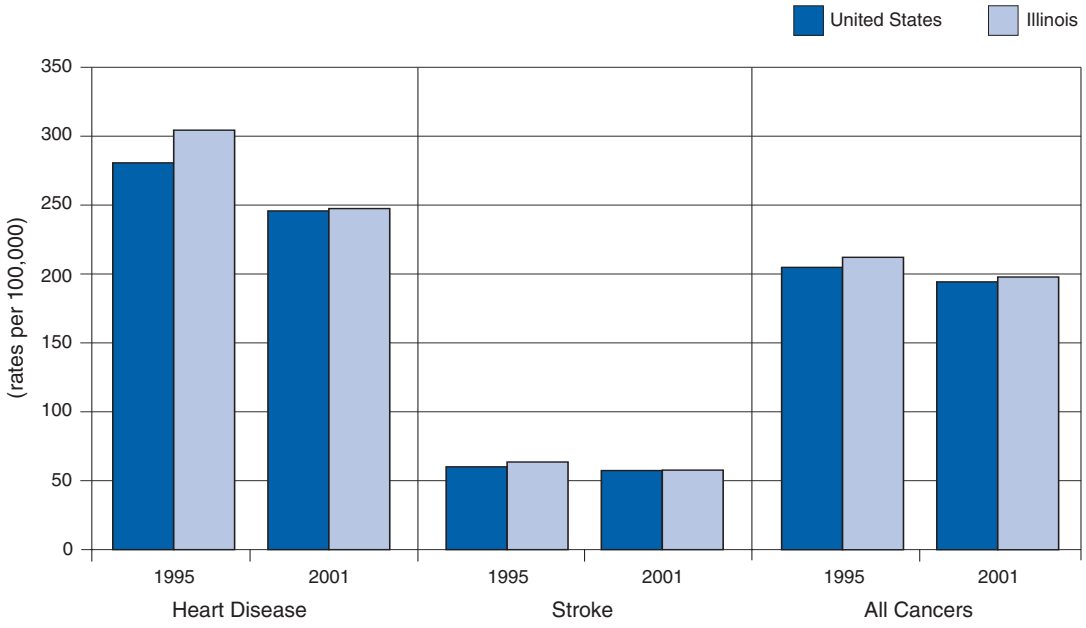
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Illinois

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Illinois, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

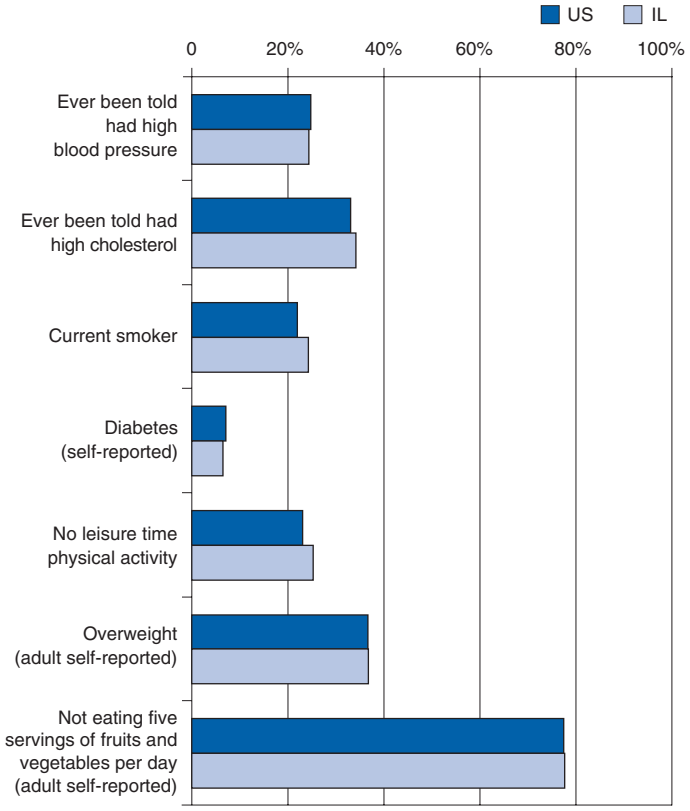
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Illinois, accounting for 30,990 deaths or approximately 29% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 7,230 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 24,840 are expected in Illinois. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 60,280 new cases that are likely to be diagnosed in Illinois.

Estimated Cancer Deaths, 2004

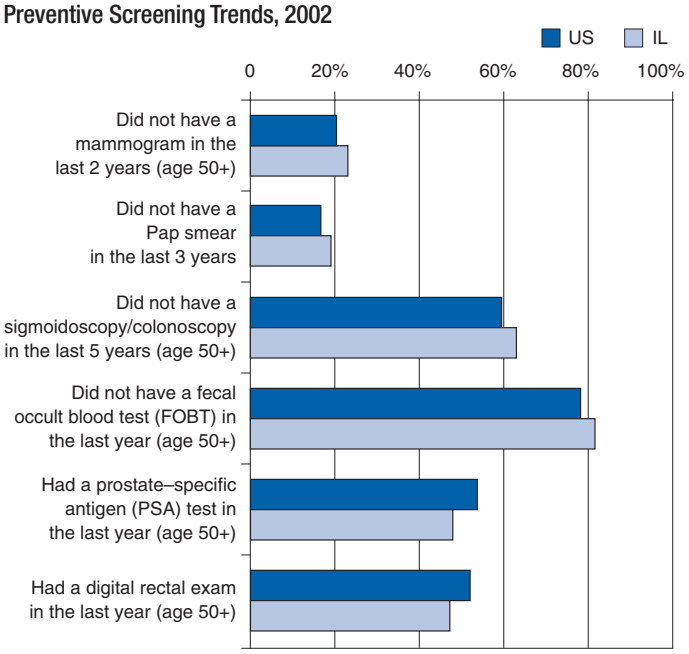
Cause of death	US	IL
All Cancers	563,700	24,840
Breast (female)	40,110	1,790
Colorectal	56,730	2,580
Lung and Bronchus	160,440	6,760
Prostate	29,900	1,290

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Illinois' Chronic Disease Program Accomplishments

Examples of Illinois' Prevention Successes

- Statistically significant decreases in cancer deaths among African American men (437 per 100,000 in 1990 versus 368.8 per 100,000 in 2000).
- A 12.2% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 35.3% in 1992 to 23.1% in 2002).
- A prevalence rate that was lower than the corresponding national rate for African American women older than age 18 who reported not having had a Pap smear in the last 3 years (9.2% in Illinois versus 11.0% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Illinois in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Illinois, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Illinois BRFSS*	$191,983
National Program of Cancer Registries *Illinois State Cancer Registry*	$1,405,621
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *RUSH Presbyterian St. Luke's Medical Center* *Illinois Cardiovascular Health Partnership*	$300,000
Diabetes Control Program *Community Health and Diabetes Awareness Program*	$837,825
National Breast and Cervical Cancer Early Detection Program *Illinois Breast and Cervical Cancer Early Detection Program*	$3,232,605
National Comprehensive Cancer Control Program *Illinois Comprehensive Cancer Control Program*	$150,000
WISEWOMAN *Women With Heart*	$1,000,000
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Illinois Tobacco Prevention and Control Program*	$1,618,423
State Nutrition and Physical Activity/Obesity Prevention Program *Legislative Fitness Day* *PE Curriculum Improvement/Equipment Distribution (Program Un-named)* *Women's Health Grants Program* *Well Workplace Award Illinois Achievement Award Well City, USA Award Educational Programs*	$409,357
Racial and Ethnic Approaches to Community Health (REACH 2010) *Access Community Health Network* *Chicago Department of Health* *University of Illinois at Chicago*	 $900,425 $908,806 $915,913
Total	**$11,870,958**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Illinois that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease and Obesity

More than 42,000 Illinois residents die annually from cardiovascular disease (CVD). Each year, more Illinois residents die from CVD than from the next six leading causes of death—cancer, unintentional injuries, lung disease, pneumonia, influenza, and diabetes—combined. Unfortunately, this trend does not appear to be reversing, as the number of annual deaths from CVD in Illinois has remained virtually unchanged for the last 10 years.

Like much of the United States, in Illinois there is a disparity between whites and other racial and ethnic groups in CVD death rates. In Illinois, members of these groups die from CVD at a higher rate than their white counterparts. The death rates for these groups also consistently exceed the U.S. average for nonwhite CVD deaths.

In addition, 88% of all Illinois residents possess at least one risk factor for CVD. Almost one third have two risk factors and 12% have three risk factors. One particularly damaging risk factor, obesity, is prominent in the state, and is related to the rates of physical inactivity and poor nutrition. At least 3.6 million adult Illinois residents—66% of men and 57% of women—are mildly, moderately, or severely obese. Data from CDC's 2003 Behavioral Risk Factor Surveillance System indicate that only 22.3% of adults in Illinois consumed 5 or more servings of fruits and vegetables per day and 25.3% of adults in Illinois were physically inactive.

In Illinois, the financial costs of CVD and obesity are enormous. The state's total inpatient hospital charges for CVD approach $4 billion annually. The annual cost to taxpayers under the Medicaid program for CVD totals more than $240 million. In addition, health care costs attributed to obesity approach $700 million annually, with the highest costs among those with type 2 diabetes (a risk factor for cardiovascular disease that often coincides with obesity).

Illinois has created the Illinois Cardiovascular Disease Prevention Task Force to reverse these trends. The task force will focus on promoting secondary prevention through surveillance and the monitoring of blood cholesterol and blood pressure levels. It also will encourage education for Illinois residents about how to reduce CVD risk factors, with emphasis on the importance of maintaining physical activity and proper nutrition to reduce obesity rates.

Text adapted from *The Burden of Cardiovascular Disease and Obesity in the State of Illinois* (June 30, 2000).

Disparities in Health

The racial and ethnic demographics of Illinois mirror those of the United States, with whites representing approximately 73% of the state's population, African Americans, 15%, and Hispanics, 12%. As with the United States in general, minority populations in Illinois have higher prevalence rates of chronic diseases, including heart disease, diabetes, and cancer, and of the risk factors for these diseases.

Data from CDC's 2003 Behavioral Risk Factor Surveillance System indicate that African Americans in Illinois are more likely to report having been told by a doctor that they have diabetes (12.0%, compared with 6.6% of Hispanics and 6.2% of whites) and Hispanics are more likely to report not meeting the recommended guidelines for moderate physical activity (63.4% of Hispanics, compared with 59.6% of African Americans and 55.5% of whites). African Americans and Hispanics are also more likely to report being obese than whites (27.1% of African Americans and 27.8% of Hispanics, compared with 22.5% of whites). All of these risk factors contribute to higher rates of death due to heart disease, stroke, and cancer.

In addition, CDC mortality data indicate that African Americans in Illinois are more likely to die from cancer than whites or Hispanics. In 2000, more African American men died from cancer (368.8 per 100,000) than white men (254.7 per 100,000) or Hispanic men (155.5 per 100,000). That same year, the rate of cancer deaths among African American women (226.1 per 100,000) was higher than the rate among white women (175.2 per 100,000) and among Hispanic women (94 per 100,000).

In February 2004, the governor of Illinois announced the creation of new statewide initiatives to begin to address these health disparities. The plan proposes $3 million for Health Vision for Illinois, which will focus on prevention, promotion, protection, and the provision of more effective health care services.

Other Disparities

- **Breast Cancer:** Even though African American women in Illinois are as likely to report having had a mammogram in the last 2 years as white women are, they have higher rates of death from breast cancer than white women (40.4 per 100,000 for African American women versus 28.5 for white women).
- **Heart Disease:** From 1996 to 2000, African Americans in Illinois have higher rates of death due to heart disease (709 per 100,000 for African Americans, compared with 531 per 100,000 for whites).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

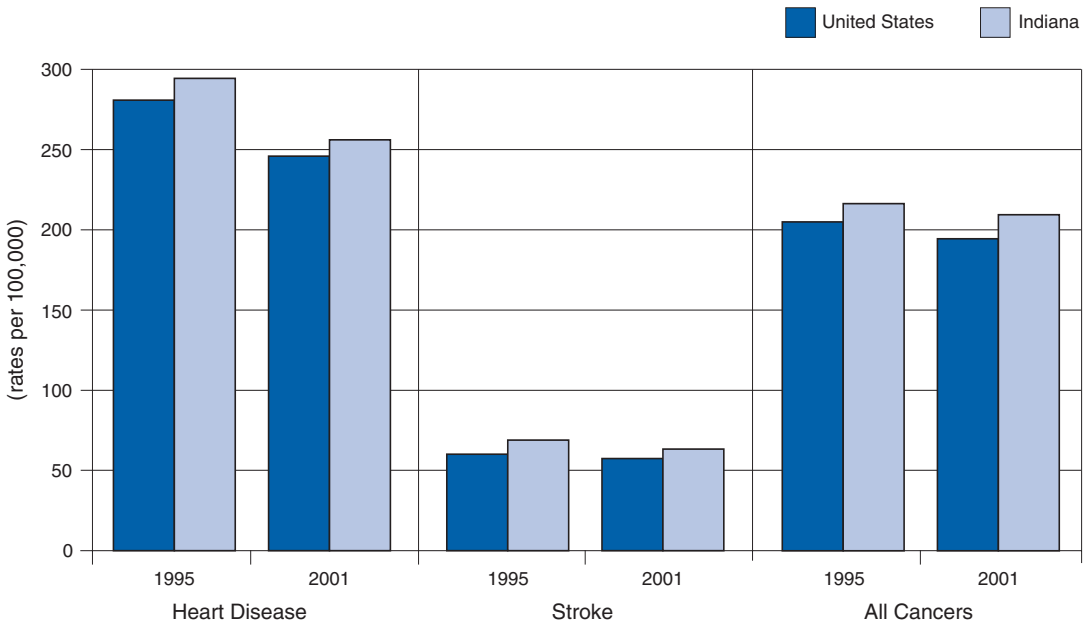
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Indiana

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Indiana, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

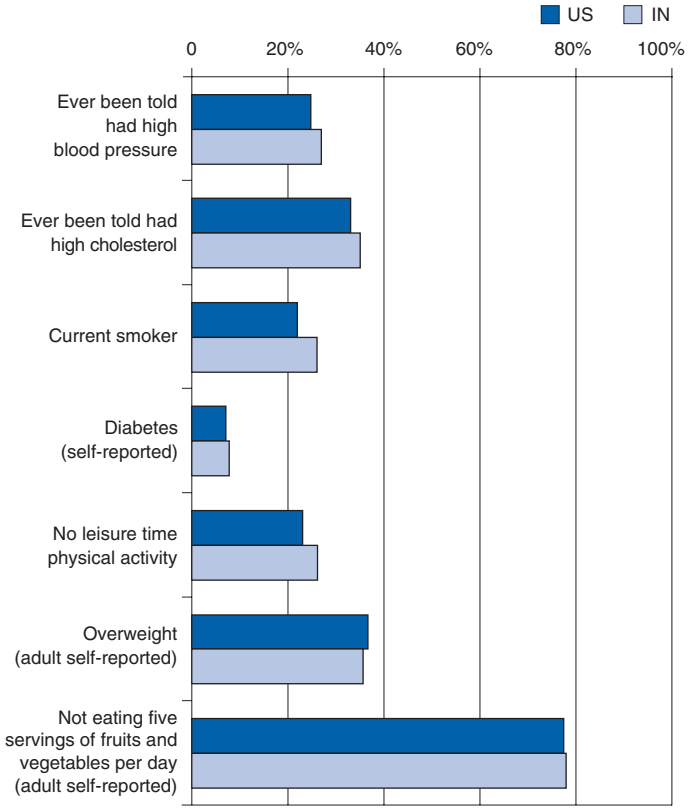
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Indiana, accounting for 15,682 deaths or approximately 28% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 3,877 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 13,250 are expected in Indiana. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 32,160 new cases that are likely to be diagnosed in Indiana.

Estimated Cancer Deaths, 2004

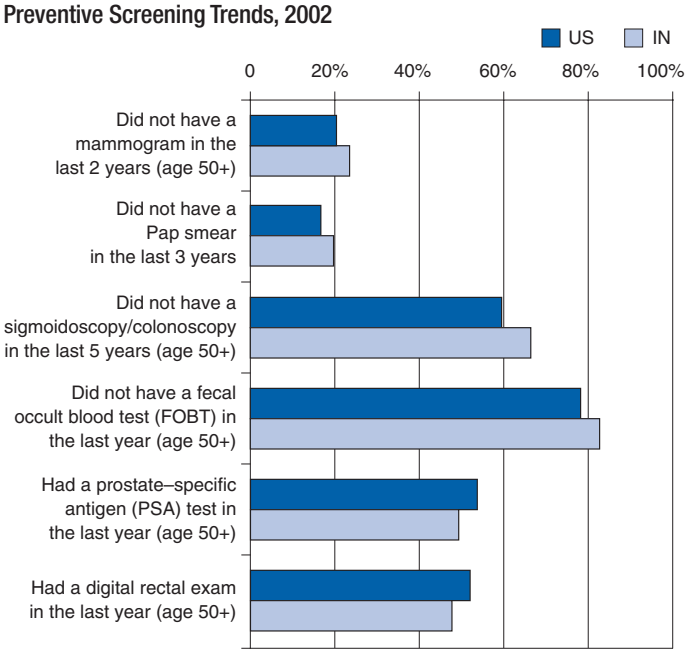
Cause of death	US	IN
All Cancers	563,700	13,250
Breast (female)	40,110	890
Colorectal	56,730	1,360
Lung and Bronchus	160,440	4,150
Prostate	29,900	700

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Indiana's Chronic Disease Program Accomplishments

Examples of Indiana's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among African American men (426.7 per 100,000 in 1990 versus 355.5 per 100,000 in 2000).
- An 18.8% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 42.3% in 1992 to 23.5% in 2002).
- A lower prevalence rate than the corresponding national rate for self-reported overweight (35.7% in Indiana versus 36.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Indiana in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Indiana, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Indiana BRFSS*	$154,016
National Program of Cancer Registries *Indiana State Cancer Registry*	$988,351
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Indiana Diabetes Prevention and Control Program*	$335,404
National Breast and Cervical Cancer Early Detection Program *Indiana Breast and Cervical Cancer Early Detection Program*	$1,926,397
National Comprehensive Cancer Control Program *Indiana Comprehensive Cancer Control Program*	$125,000
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Indiana Tobacco Prevention and Control Program*	$1,399,979
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$4,929,147**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Indiana that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD), including heart disease and stroke, is the leading cause of death in Indiana. In 2001, the state had the 15th highest heart disease death rate and the 15th highest stroke death rate in the United States. From 1996 to 2000, the heart disease death rate for Indiana was 560 per 100,000, compared with the national heart disease death rate of 536 per 100,000. From 1991 to 1998 Indiana's stroke death rate was also higher than the national average (138 per 100,000 versus 121 per 100,000).

Several major risk factors put individuals at an increased risk of developing CVD: smoking, hypertension (high blood pressure), high blood cholesterol, overweight and obesity, physical inactivity, and diabetes. Indiana has one of the nation's highest percentages of current smokers (26.1% compared to the national rate of 22.1%). Indiana also has a high hypertension rate (27.0% compared to 24.8% nationally). Indiana's rate for self-reported high blood cholesterol (35.1%) is also higher than the national rate (33.1%).

In 2001, Indiana ranked among the top 10 states for obesity prevalence. In 2003, over 61% of adults in Indiana were either overweight or obese. Approximately 74.0% of Indiana residents reported participating in leisure time physical activity, while the national rate was 76.9%. In Indiana, the prevalence rate for diabetes was higher than the national average in 2003 (7.4% compared to 7.1%) and the state's diabetes death rate in 2001 (27.7 per 100,000) was higher than the national diabetes death rate of 25.2 per 100,000. To address these issues, the state developed the Healthy People 2010 goals listed below.

Healthy People 2010 Goals for Indiana: Reducing Cardiovascular Disease Risk Factors

Health Indicators	Indiana 2001	Indiana 2010 Target
Increase the proportion of adults who are at a healthy weight	38.7%	60.0%
Reduce the prevalence of adults who smoke cigarettes regularly	27.6%	12.0%
Reduce the proportion of adults who do not engage in leisure time physical activity	27.5%	20.0%

Behavioral Risk Factor Surveillance System Indiana Statewide Survey Data, 2002

Disparities in Health

Heart disease is the leading cause of death in the United States. Among racial and ethnic groups, African American men and women have the highest rates of heart disease. In 2001, the rate of death for heart disease was 31% higher among African Americans than among whites, and 49% higher among men of all races than women of all races.

The African American population is the largest racial minority group in Indiana, comprising 8.4% of the state's population. African Americans have high rates of the leading risk factors for heart disease. The obesity rate among African Americans in Indiana (36.6%) is higher than the obesity rate for whites (25.6%). African Americans are less likely to particpate in lesiure time physical activity (67.2%) than whites (75.1%). In addition, African Americans are more likely to report having been told that they have high blood pressure (36.8%) than whites (27.0%). African Americans also are more likely to smoke (31.8%) than whites (25.3%).

Given the disparities in behavioral risk factors described above, it is not surprising that the leading cause of death among African Americans in Indiana is heart disease. From 1996 to 2000, the age-adjusted heart disease death rate for African Americans was 667 per 100,000, compared with 555 per 100,000 for whites. From 1991 to 1998, African Americans in Indiana also had a higher stroke death rate than whites (162 per 100,000 versus 136 per 100,000). African Americans also had a higher cancer death rate than whites in 2000 (355.5 per 100,000 for African American men versus 254.7 per 100,000 for white men, and 202.7 per 100,000 for African American women versus 178.1 per 100,000 for white women).

Other Disparities

- **Cholesterol:** In Indiana, 68.5% of African Americans report having had their blood cholesterol checked in the past 5 years, in comparison with 73.7% of whites.
- **Diabetes:** In Indiana, 11.5% of African Americans report having been told by a doctor that they have diabetes, compared with only 7.6% of their white counterparts. The diabetes prevalence rate for African Americans in Indiana (12%) is also higher than the national rate for African Americans (10%).
- **Prostate Cancer:** In Indiana, African American men in 2000 had a prostate cancer death rate that was more than twice the rate for white men (71.2 per 100,000 versus 28.5 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

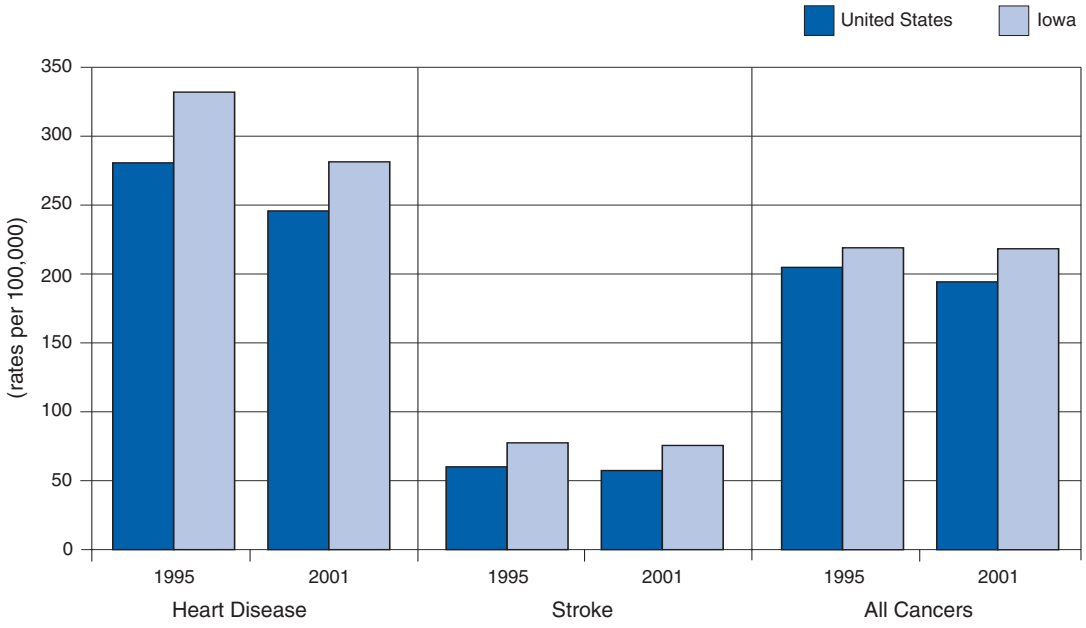
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Iowa

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Iowa, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

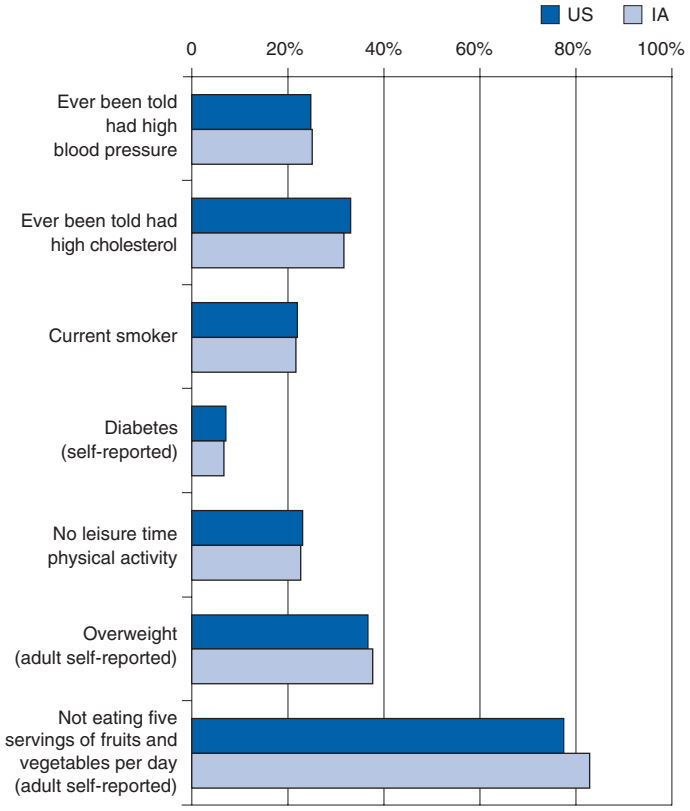
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Iowa, accounting for 8,250 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,218 deaths or 8% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 6,570 are expected in Iowa. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 15,940 new cases that are likely to be diagnosed in Iowa.

Estimated Cancer Deaths, 2004

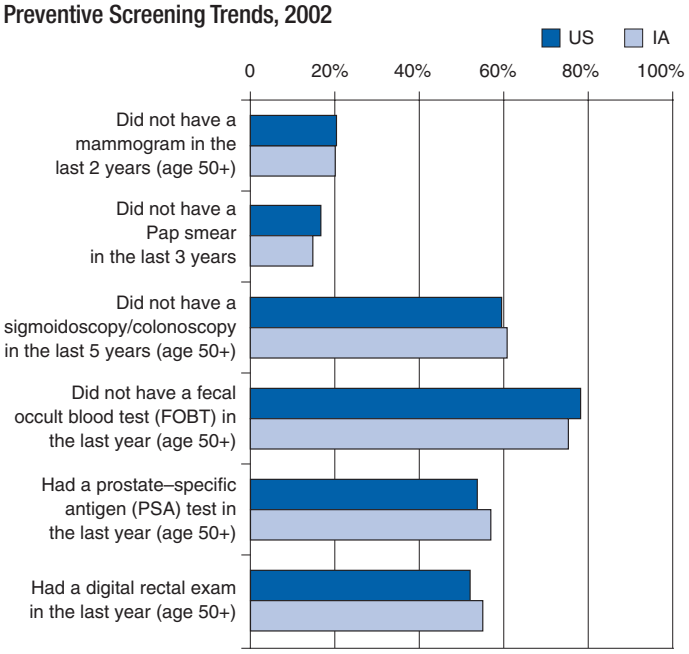
Cause of death	US	IA
All Cancers	563,700	6,570
Breast (female)	40,110	430
Colorectal	56,730	710
Lung and Bronchus	160,440	1,680
Prostate	29,900	410

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Iowa's Chronic Disease Program Accomplishments

Examples of Iowa's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among African American men (422.6 per 100,000 in 1990 versus 336.8 per 100,000 in 2000).
- A 20.3% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 40.4% in 1992 to 20.1% in 2002).
- Lower prevalence rates than corresponding national rates for self-reported diabetes (6.7% in Iowa versus 7.1% nationally) and for self-reported high cholesterol (31.7% in Iowa versus 33.1% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Iowa in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Iowa, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Iowa BRFSS*	$116,017
National Program of Cancer Registries	$0
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Iowa Diabetes Prevention and Control Program*	$243,170
National Breast and Cervical Cancer Early Detection Program *Iowa Breast and Cervical Cancer Early Detection Program*	$3,052,191
National Comprehensive Cancer Control Program *The Face of Cancer in Iowa*	$401,500
WISEWOMAN *Iowa Care for Yourself*	$1,094,956
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Iowa Tobacco Prevention and Control Program*	$669,837
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$5,577,671**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Iowa that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD), including heart disease and stroke, has been the leading cause of death in Iowa for the past 10 years, and in 2001 accounted for almost 38% of the state's total deaths. Between 1996 and 2000, the heart disease death rate was 493 per 100,000, and the stroke death rate between 1991 and 1998 was 119 per 100,000. While these death rates are lower than the national averages for these diseases (536 per 100,000 nationally for heart disease and 121 per 100,000 nationally for stroke), heart disease and stroke are largely preventable with behavioral modifications such as improved nutrition and physical activity. High blood pressure and smoking are also preventable risk factors for cardiovascular disease.

According to 2003 data from CDC's Behavioral Risk Factor Surveillance System (BRFSS), the percentage of adults in Iowa who reported participating in physical activities during a given month was slightly higher than the national rate (77.3% in Iowa versus 76.9% nationally). However, the percentage of Iowans who reported consuming 5 or more servings of fruits and vegetables per day was slightly lower than the national rate (17.1% in Iowa versus 22.5% nationally). In addition, the percentage of adults in Iowa who have been told that they have high blood pressure was slightly higher than the national rate (25.1% in Iowa, compared with 24.8% nationally); however, the percentage of smokers in Iowa was slightly lower than the national rate (21.7% in Iowa, compared with 22.0% nationally).

BRFSS data from 2003 indicate that based on body mass index, 37.7% of Iowans were overweight and 23.9% were obese—rates that are slightly higher than the national rates for overweight and obesity (36.7% and 22.8% respectively).

Iowa has established several programs to address the risk factors for CVD. One of these programs is the Iowa Diabetes Network, a statewide coalition of health care professionals, voluntary organizations, state governmental agencies, insurers, and other groups. The Network has established several educational opportunities and resources for local use, and works with health care providers to promote adherence to national standards of care for diabetes. Another program, "Lighten Up Iowa," is a 5-month competition that encourages Iowans to develop healthy activity and eating habits. This statewide program, which began in 2003, has had more than 20,000 participants.

Disparities in Health

African Americans, who comprise approximately 12% of the U.S. population—about 35 million people—experience health disparities in significant proportions. African Americans have higher stroke mortality rates than other groups as well as a higher prevalence of the risk factors for heart disease. Compared with other racial and ethnic groups, African Americans are more likely to develop lung, cervical, colorectal, and prostate cancer at disproportionate levels.

The African American population in Iowa is about 61,000, making up approximately 2% of the state's population. The leading cause of death among African Americans in Iowa (and throughout the United States) is heart disease. From 1996 to 2001, the age-adjusted death rate for heart disease among African Americans in Iowa (633 per 100,000) was higher than the rate for whites (492 per 100,000). Between 1991 and 1998, African Americans in Iowa also experienced a higher stroke death rate than their white counterparts (162 per 100,000 versus 118 per 100,000).

In 2001, African American men in Iowa had higher incidence rates for prostate cancer than white men (198.9 per 100,000 compared with 148.3 per 100,000) and from 1997 to 2001, they had a prostate cancer death rate that was more than double the death rate for white men (79.6 per 100,000, compared with 31 per 100,000).

In Iowa, African Americans also suffer disproportionately from diabetes. The age-adjusted death rate for diabetes in 2001 was not only higher for Iowa's African Americans (74.3 per 100,000) than for whites (19.5 per 100,000); it was also higher than the national diabetes death rate for African Americans (49.1 per 100,000). The obesity rate for African Americans in Iowa in 2003 (39.6%) was also higher than the rate for whites (23.8%). Consequently, in Iowa the percentage of risk for health problems related to being overweight is greater for African Americans (67.9%) than for whites (62.0%).

Other Disparities

- **Lung Cancer:** In 2000, African American men had a higher lung cancer death rate (114.9 per 100,000) than white men (76.7 per 100,000).
- **Smoking:** Hispanics in Iowa are more likely to smoke (24.8%) than whites (22.9%). Insufficient data were available to compare the rate of smoking for African Americans.

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

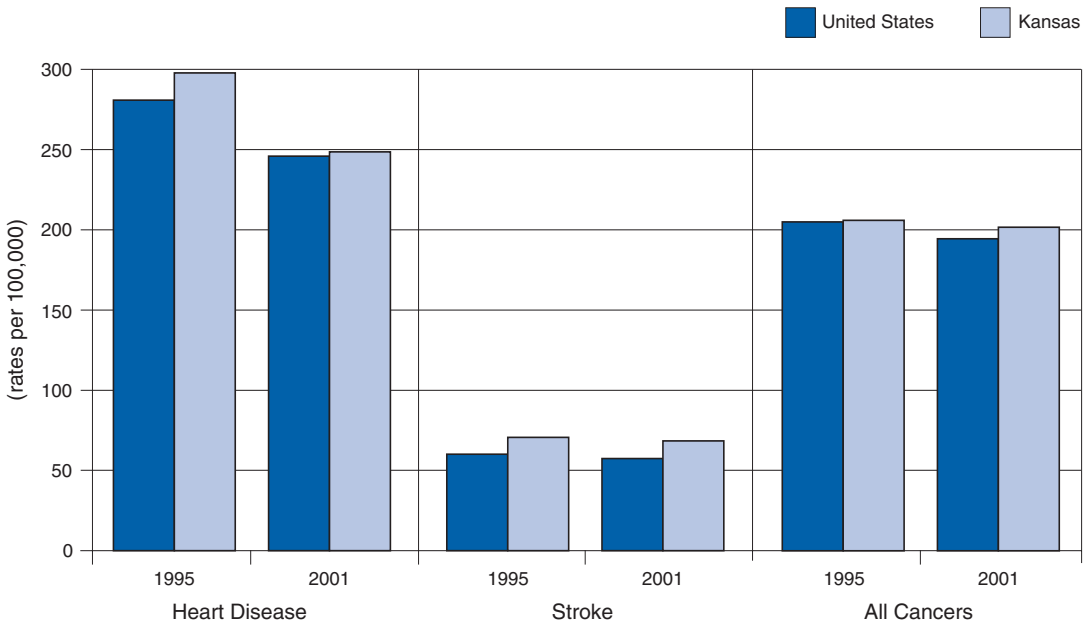
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Kansas

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Kansas, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

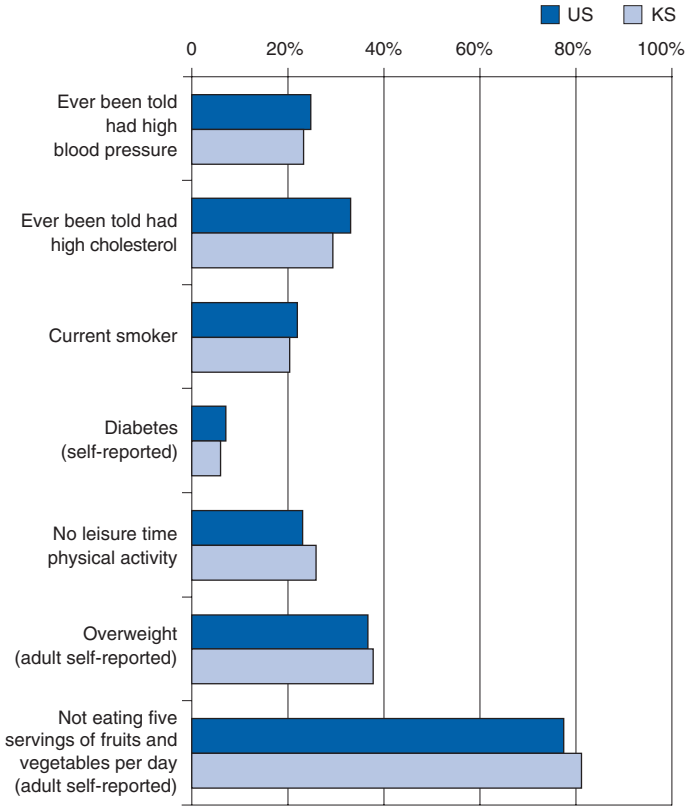
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Kansas, accounting for 6,716 deaths or approximately 27% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 1,848 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 5,330 are expected in Kansas. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 12,940 new cases that are likely to be diagnosed in Kansas.

Estimated Cancer Deaths, 2004

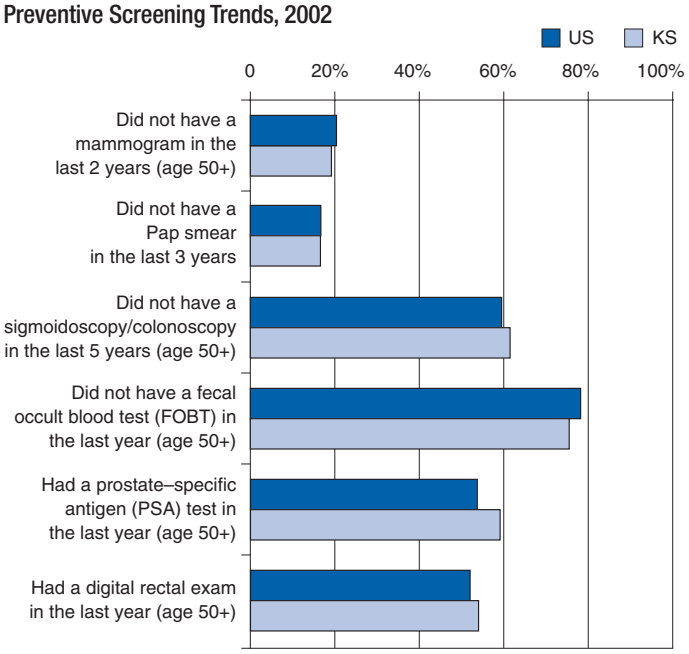
Cause of death	US	KS
All Cancers	563,700	5,330
Breast (female)	40,110	350
Colorectal	56,730	570
Lung and Bronchus	160,440	1,560
Prostate	29,900	350

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Kansas' Chronic Disease Program Accomplishments

Examples of Kansas' Prevention Successes

- Statistically significant decreases in cancer deaths among white men (258.9 per 100,000 in 1990 versus 226.5 per 100,000 in 2000).
- An 18.7% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 37.9% in 1992 to 19.2% in 2002).
- A higher prevalence rate than the corresponding national rate for nonsmokers (79.6% in Kansas versus 78.0% nationally) and a lower prevalence rate than the corresponding national rate for African American women older than age 18 who reported not having had a Pap smear in the last 3 years (4.4% in Kansas versus 11.0% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Kansas in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Kansas for FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Kansas BRFSS*	$178,807
National Program of Cancer Registries *Kansas Cancer Registry*	$665,122
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$262,691
Diabetes Control Program *Kansas Diabetes Prevention and Control Program*	$518,016
National Breast and Cervical Cancer Early Detection Program *Free to Know*	$2,176,983
National Comprehensive Cancer Control Program *Bureau of Health Promotion, Cancer Prevention and Control Program*	$150,000
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Kansas Tobacco Prevention and Control Program*	$1,166,012
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$5,117,631**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Kansas that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Although cardiovascular disease (CVD), including heart disease and stroke, is the leading cause of death in Kansas, CDC mortality data indicate that from 1996 to 2000 the heart disease death rate in Kansas was below the national rate for heart disease deaths (481 per 100,000 in Kansas, compared with 536 per 100,000 nationally). African American women had the highest heart disease death rate among women in Kansas (516 per 100,000). African American men had the highest heart disease death rate among men in Kansas (669 per 100,000), but American Indian/Alaska Native (AI/AN) men in the state had a higher heart disease death rate than the national rate for AI/AN men (588 per 100,000 versus 444 per 100,000).

In Kansas, the overall death rate for stroke was also slightly lower than the national rate (120 per 100,000 in Kansas, compared with 121 per 100,000 nationally). Among women, African American women had the highest stroke death rate in Kansas (174 per 100,000); this rate was higher than the national stroke death rate for African American women (153 per 100,000). Among men, African American men had the highest stroke death rate in Kansas (197 per 100,000). As with heart disease, the stroke death rate for AI/ANs in Kansas was higher than the national rate for AI/AN men (109 per 100,000 versus 80 per 100,000).

Risk factors for CVD include poor nutrition and physical inactivity, overweight and obesity, smoking, and high blood pressure. According to CDC's Behavioral Risk Factor Surveillance System data, Kansas has room for improvement for each of these risk factors. Data from 2003 indicate that 81.2% of adults in Kansas did not consume 5 or more servings of fruits and vegetables per day (compared with 77.5% nationally) and 56.3% of adults in Kansas did not meet the recommended guidelines for moderate physical activity (compared with 52.8% of adults nationally). Because of these behaviors, more than 60.0% of adults in Kansas were overweight (37.4%) or obese (22.8%). In addition, almost one quarter of adults in Kansas reported having been diagnosed with high blood pressure (23.3%) and one fifth of adults in Kansas (20.4%) reported that they smoked.

Kansas has recently received a Heart Disease and Stroke Prevention Grant from CDC to address the disease's major risk factors as well as to improve prevention, treatment, and emergency response to heart attack and stroke.

Disparities in Health

Almost 20% of the U.S. population lives in rural areas. People in these areas have a higher risk of heart disease, diabetes, and cancer, which is attributable in part to a population that is older, sicker, poorer, and less educated. However, there are rural and urban disparities in health care that are associated with infrastructure or professional capacity to address such health needs, which include disparities in access to health care professionals and health care services.

There are 105 counties in Kansas. Of this number, 38 counties are designated as rural (6.0 to 19.9 residents per square mile) and 31 are designated as frontier (<6.0 residents per square mile). These counties tend to have lower incomes and less education than statewide averages. In 2000, the median family income in 67 of these 69 frontier and rural counties was below the state average for family income. In addition, twelve frontier and rural counties have elderly populations of 25% or greater. The state's geography has a direct influence on transportation, health care workforce availability, and other areas of health service delivery.

In addition to rural and urban disparities, Kansas is also faced with disparities in its minority populations. The state's population is approximately 69% white, 12% African American, and 13% Hispanic. The remaining 5% includes Asian/Pacific Islanders and American Indians/Alaska Natives. Kansas, like other states, faces challenges in measuring the extent of existing racial and ethnic disparities due to limitations in data collection tools, however some racial and ethnic health disparities are reported below.

Other Disparities

- **Cancer:** A 2003 report on a survey conducted by the Kansas Health Institute cited disparities in cancer rates among the state's racial and ethnic groups. African American men, in comparison to the state's general population, had the highest rates for certain types of cancers. The survey also found that lung cancer is especially high among the AI/AN population.
- **Diabetes:** In Kansas, 8% of African Americans and 8% of AI/ANs reported that they had diabetes, compared to 5% of the general population.
- **Obesity:** African Americans in Kansas are more likely to be obese (34.9%) than their white counterparts (22.3%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

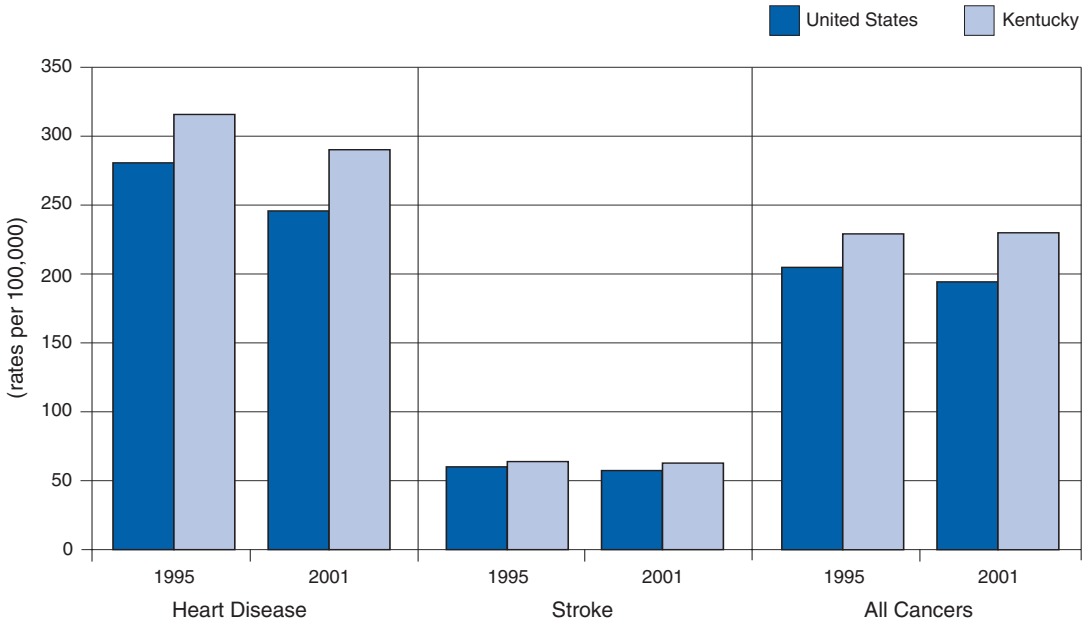
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Kentucky

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Kentucky, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

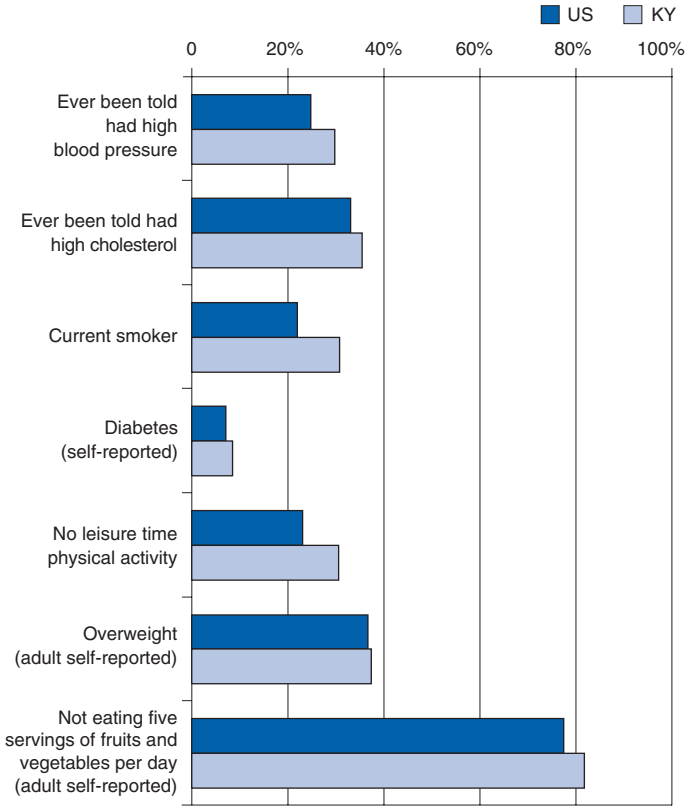
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Kentucky, accounting for 11,808 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,557 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 9,360 are expected in Kentucky. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 22,720 new cases that are likely to be diagnosed in Kentucky.

Estimated Cancer Deaths, 2004

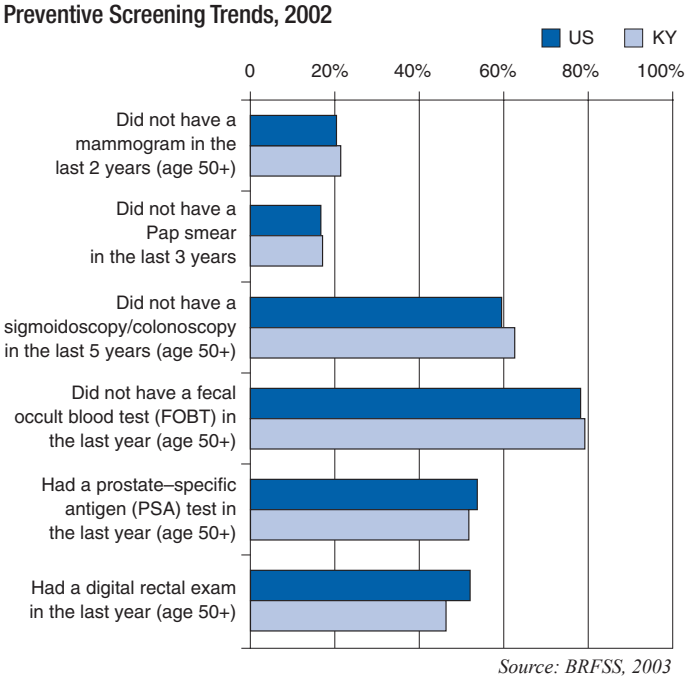
Cause of death	US	KY
All Cancers	563,700	9,360
Breast (female)	40,110	620
Colorectal	56,730	890
Lung and Bronchus	160,440	3,380
Prostate	29,900	340

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Kentucky's Chronic Disease Program Accomplishments

Examples of Kentucky's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among African American men (441.6 per 100,000 in 1990 versus 378.4 per 100,000 in 2000).
- A 27.9% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 49.3% in 1992 to 21.4% in 2002).
- A prevalence rate that was lower than the corresponding national rate for African American women older than age 18 who reported not having had a Pap smear in the last 3 years (4.7% in Kentucky versus 11% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Kentucky in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Kentucky, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Kentucky BRFSS*	$182,296
National Program of Cancer Registries *Kentucky Cancer Registry*	$619,972
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Get With the Guidelines*	$415,000
Diabetes Control Program *Kentucky Diabetes Prevention and Control Program*	$639,820
National Breast and Cervical Cancer Early Detection Program *Kentucky Women's Cancer Screening Project*	$2,516,239
National Comprehensive Cancer Control Program *University of Kentucky Markey Cancer Control Program*	$299,859
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Kentucky Tobacco Prevention and Control Program*	$994,147
State Nutrition and Physical Activity/Obesity Prevention Program *Gentle Fitness* *Nutrition & Physical Activity Program*	$413,847
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$6,081,180**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Kentucky that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

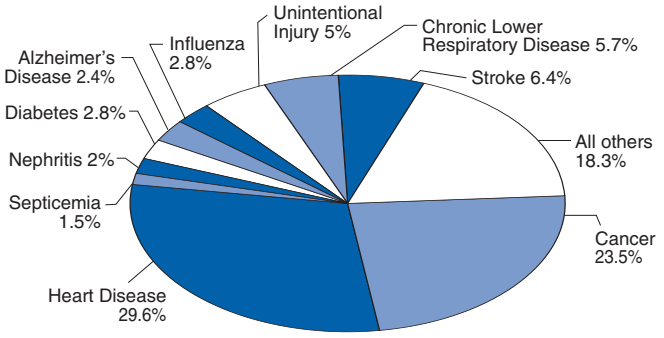
In Kentucky, cardiovascular disease (CVD) is the leading cause of death in every county. Seventy-three of Kentucky's 120 counties have CVD mortality rates above the national average, and 20 counties that exceed the national average by 25%. In 2000, the American Heart Association ranked Kentucky 48th in the nation for its age-adjusted CVD death rate. Nationwide death rates from CVD have declined significantly in the past 2 decades. From 1980 to 1985, Kentucky's CVD death rates declined by 2.2% per year, and from 1985 to 1990, they declined by 2.5% per year. However, from 1995 to 1997, this decline had slowed—during that period, the state's CVD deaths dropped by only 1.5% per year.

One of the most common and damaging myths about CVD is that it is primarily a "man's disease." In 2001, 6,085 women in Kentucky died from CVD compared with 5,723 men. Statewide, women comprise 53% of all CVD deaths. The risk of heart disease and stroke for women increases steadily with age, particularly after menopause, when protective estrogen levels are diminished.

Kentucky is using the *Healthy People 2010* program as an opportunity to reverse these trends in CVD death rates. The state has set relevant *Healthy People 2010* objectives such as reducing CVD deaths to no more than 200 deaths per 100,000 people. Kentucky also aims to reduce the prevalence of CVD risk factors and to increase awareness about CVD and its high death rate for women.

Text adapted from *Kentucky State of the Heart* (2000).

Major Causes of Death in Kentucky, 2001



Source: 2001 CDC Mortality Data

Disparities in Health

Cardiovascular disease, which includes heart disease and stroke, is the leading cause of death among women in the United States and in Kentucky. In 1999, CVD accounted for 32.4% of all female deaths in Kentucky; in that same year, women represented 53.6% of all CVD deaths in Kentucky. In Kentucky, women who die from CVD tend to be older than men who die from CVD; 44.6% of female CVD deaths were among women age 85 and older, versus only 21.2% of men age 85 and older.

Women who have heart attacks are more than twice as likely as men to die from them within the first year of the heart attack. In addition, in Kentucky, when compared with white women, African American women have a higher death rate for heart disease (606 per 100,000 for African American women versus 496 per 100,000 for white women) and for stroke (158 per 100,000 for African American women versus 127 per 100,000 for white women).

In Kentucky, the rates of women who died from heart disease (501 per 100,000) and stroke (128 per 100,000) are higher than the national rates for both diseases (438 per 100,000 for heart disease and 117 per 100,000 for stroke). Although both rates are declining, in 2000, Kentucky ranked as the 6th highest state in the nation for age-adjusted heart disease death rates among women.

Other Disparities

- **Diabetes:** African Americans are more likely than any other group in Kentucky to report that they have been told by a doctor that they have diabetes (14.2% for African Americans, compared with 8.3% for whites and 5.0% for Hispanics).
- **Overweight and Obesity:** In Kentucky, 67.1% of African Americans are either overweight or obese (34.1% are overweight and 33% are obese), compared with 63.1% of their white counterparts (37% are overweight and 25.6% are obese).
- **Prostate Cancer:** Rates of death from prostate cancer are higher for African American men than for white men (54.5 per 100,000 versus 31.8 per 100,000).
- **Cervical Cancer:** In 2002, African American women were more likely than white women to have had a Pap smear in the last 3 years (97.2% versus 89.1%); however, CDC mortality data from 1997 to 2001 indicate that African American women had a higher cervical cancer death rate than white women (6.3 per 100,000 versus 3.4 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

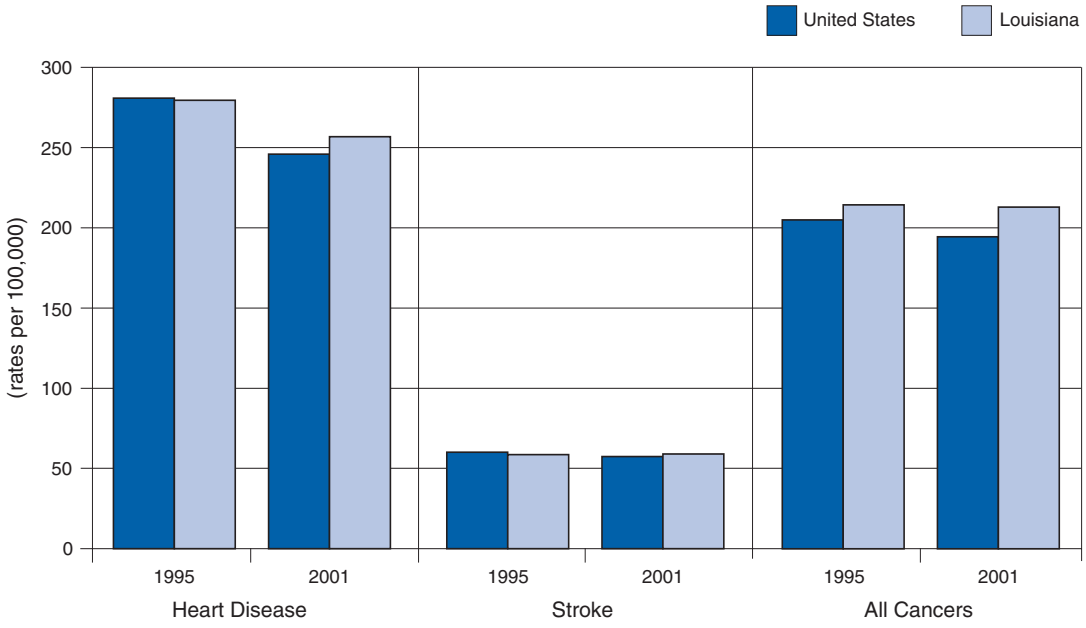
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Louisiana

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Louisiana, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

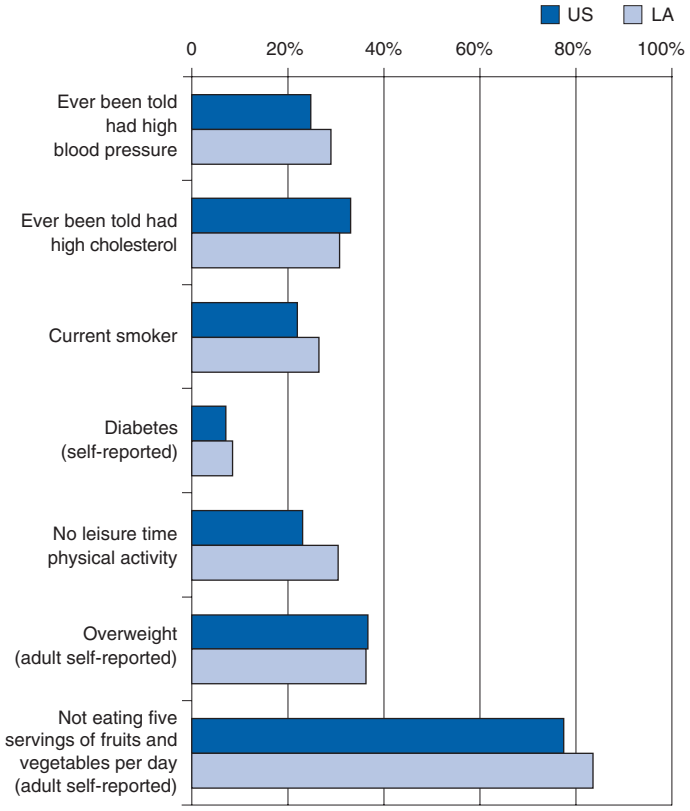
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Louisiana, accounting for 11,474 deaths or approximately 27% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,638 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 9,700 are expected in Louisiana. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 23,540 new cases that are likely to be diagnosed in Louisiana.

Estimated Cancer Deaths, 2004

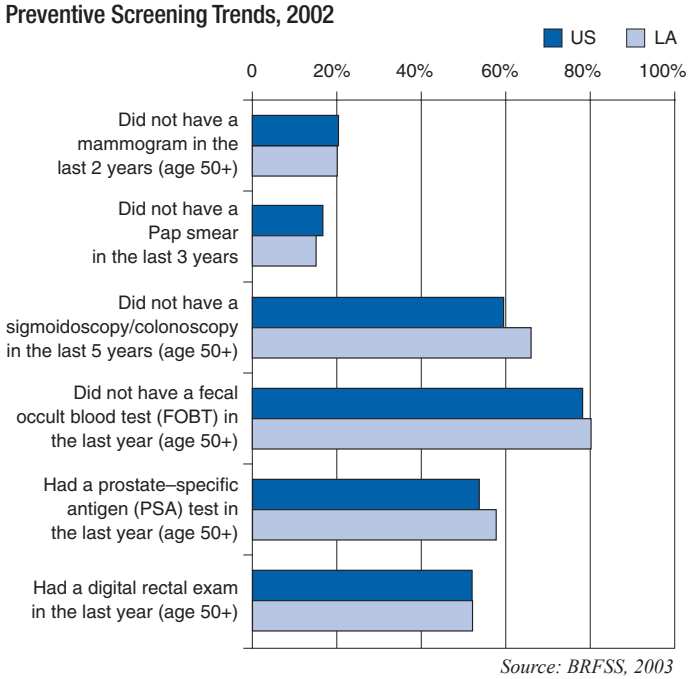
Cause of death	US	LA
All cancers	563,700	9,700
Breast (female)	40,110	730
Colorectal	56,730	990
Lung and Bronchus	160,440	2,920
Prostate	29,900	480

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Louisiana's Chronic Disease Program Accomplishments

Examples of Louisiana's Prevention Successes

- Statistically significant decreases in cancer deaths for men across all races (329.6 per 100,000 in 1990 versus 296.6 per 100,000 in 2000).
- A 19.8% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 39.9% in 1992 to 20.1% in 2002).
- A prevalence rate that was lower than the corresponding national rate for women older than age 18 who reported not having had a Pap smear in the last 3 years (15.1% in Louisiana versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Louisiana in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Louisiana, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Louisiana BRFSS*	$155,763
National Program of Cancer Registries *Louisiana Tumor Registry*	$620,070
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Louisiana Stroke Education Consortium* *Delta States Stroke Consortium* *Heart Disease and Stroke Coalition* *Healthy Communities* *National Black Women's Health Project*	$279,550
Diabetes Control Program *Louisiana Statewide Diabetes Advisory Council* *Defeat Diabetes Through Education Project*	$107,000
National Breast and Cervical Cancer Early Detection Program *Louisiana Breast and Cervical Health Program*	$1,076,140
National Comprehensive Cancer Control Program *Louisiana Cancer and Lung Trust Fund Board* *Louisiana Cancer Control Strategic Plan*	$150,000
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Louisiana Tobacco Prevention and Control Program*	$1,106,410
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$3,494,933**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Louisiana that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD) is a serious public health concern in Louisiana. In 2001, CDC mortality data indicated that Louisiana had the nation's 8th highest heart disease death rate and the 12th highest stroke death rate. Although heart disease is the leading cause of death in Louisiana for both men and women ages 65 and over, it does not only affect the elderly—it is also the second leading cause of premature death in adults between the ages of 45 and 64. In addition, heart disease is the second leading cause of death among women ages 35 to 44.

Gender, more than race, is a predictor of heart disease in Louisiana. In 2000, the age-adjusted death rate for heart disease was 40% higher for men than for women (241.2 per 100,000 versus 141.7 per 100,000). During that same period, however, death rates from stroke were much higher for both African American men and women (84.6 per 100,000 and 78.1 per 100,000, respectively) than for white men and women (55.9 per 100,000 and 55.1 per 100,000, respectively).

CVD also poses a significant economic burden on the state. In 1999, more than 76,000 hospitalizations (approximately 14.2% of all hospitalizations) in Louisiana were attributed to CVD. That same year, CVD accounted for more than $1.4 billion dollars in hospital costs. The average hospitalization for CVD lasted 5 days and cost $17,368.

The Louisiana Cardiovascular Health Program has identified the following strategies to address the problem of CVD in the state:

- Develop and coordinate partnerships with professional associations, medical schools and universities, the Governor's Council on Physical Fitness and Sports, the Cooperative Extension Program, the Primary Care Association, and the State Department of Education.
- Develop scientific capacity to define the CVD problem by developing and maintaining a surveillance system, and identifying and accessing existing sources of cardiovascular data.
- Develop an inventory of policy and environmental strategies.
- Develop a state plan of action.
- Provide training and technical assistance for program staff.
- Develop population-based prevention intervention strategies.
- Develop culturally competent strategies for priority populations.

Text adapted from *2002 Louisiana State of the Heart and Stroke Report.*

Disparities in Health

African Americans, Louisiana's largest minority group, make up 32% of the state's population, more than twice the national percentage. Individual parishes in Louisiana range from 5% to 67% African American. The leading causes of death for African Americans in Louisiana are cardiovascular disease —including heart disease and stroke—and cancer.

Between 1996 and 2000, African Americans in Louisiana had a higher heart disease death rate (669 per 100,000) than whites (577 per 100,000), Asian/Pacific Islanders (252 per 100,000), American Indian/Alaska Natives (AI/ANs; 240 per 100,000) and Hispanics (224 per 100,000). Between 1991 and 1998, African Americans also had a higher stroke death rate than any other group (172 per 100,000, compared with 121 per 100,000 for whites, 88 per 100,000 for Asian/Pacific Islanders, 79 per 100,000 for AI/ANs, and 55 per 100,000 for Hispanics).

African Americans also experience a disproportionate number of cancer deaths. In 2000, African American men had a cancer death rate of 383.3 per 100,000, compared with 272 per 100,000 for white men. African American women also had a higher cancer death rate than white women (209.0 per 100,000, compared with 175.4 per 100,000). For some types of cancer, the disparities are even more noticeable. For example, African American men have a prostate cancer death rate that is more than twice the rate for white men (61.6 per 100,000, compared with 25.1 per 100,000).

Data indicate that lifestyle factors within the African American community contribute to the risk factors associated with chronic disease. Such factors include the following:

- **High Blood Pressure:** More African Americans reported having high blood pressure than other racial and ethnic groups in the state (34.1%, compared with 27.5% of whites and 20.5% of Hispanics).
- **Inactivity and Obesity:** More than a third of African Americans (36.6%) reported having a sedentary lifestyle—no exercise in a 1-month period—compared with 27.5% of whites and 30.2% of Hispanics. In addition, 35.1% of African Americans reported that they were obese, compared with 21.6% of whites.
- **Diabetes:** More African Americans reported that they had been diagnosed with diabetes (11.9%) than Hispanics (7.1%) or whites (7.2%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

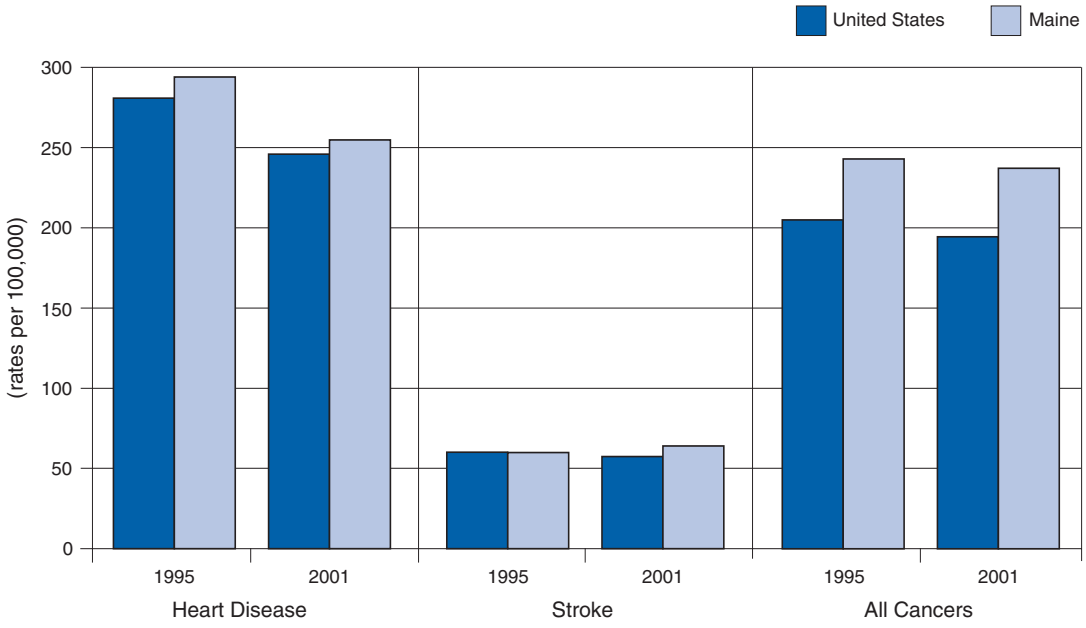
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Maine

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Maine, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

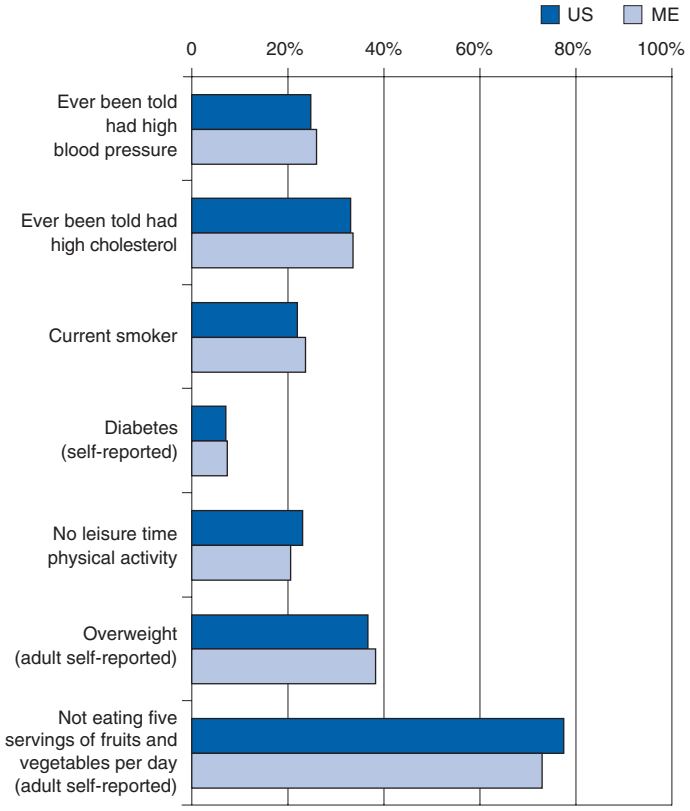
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Maine, accounting for 3,272 deaths or approximately 26% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 822 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 3,100 are expected in Maine. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 7,500 new cases that are likely to be diagnosed in Maine.

Estimated Cancer Deaths, 2004

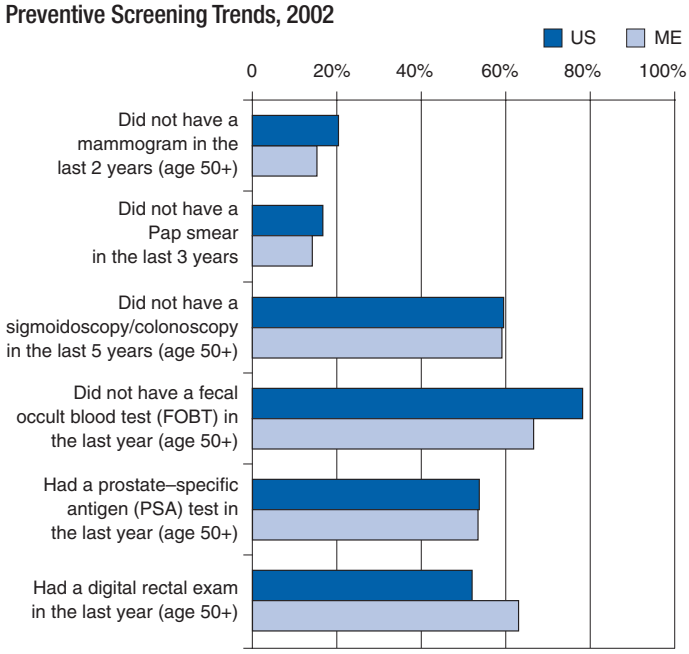
Cause of death	US	ME
All Cancers	563,700	3,100
Breast (female)	40,110	170
Colorectal	56,730	310
Lung and Bronchus	160,440	880
Prostate	29,900	150

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Maine's Chronic Disease Program Accomplishments

Examples of Maine's Prevention Successes

- Statistically significant decreases in cancer deaths among white men (301.4 per 100,000 in 1990 versus 259.3 per 100,000 in 2000).
- A 17.5% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 32.8% in 1992 to 15.3% in 2002).
- A prevalence rate that is higher than the corresponding national rate for individuals who reported that they were neither overweight nor obese (41.8% in Maine versus 40% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Maine in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Maine, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Maine BFRSS*	$201,296
National Program of Cancer Registries *Maine Cancer Registry*	$393,612
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Heart Healthy and Stroke-Free in Maine*	$1,155,913
Diabetes Control Program *Ambulatory Diabetes Education and Follow-up Program* *Maine Consortium for Clinical Office System Improvement (COSI)* *Maine Diabetes Cooperative* *Quality Assurance/Professional Education*	$360,000
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Health Program*	$1,527,658
National Comprehensive Cancer Control Program *Maine Cancer Consortium* *The Maine Comprehensive Cancer Control Plan 2001-2005*	$245,406
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Maine Tobacco Prevention and Control Program*	$784,598
State Nutrition and Physical Activity/Obesity Prevention Program *All Children Exercising Simultaneously (ACES)*	$450,000
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$5,118,483**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Maine that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD) is a serious public health concern in Maine. Although heart disease is the leading cause of death for both men and women age 65 and over, heart disease does not only affect the elderly—it is also the second leading cause of premature death in adults between the ages of 45 and 64. Although it is assumed that heart disease is a condition that primarily affects men, in 2001, 51.8% of Maine's total heart disease deaths were among women.

CVD is also a significant economic burden on the state. In 2000, there were over 29,000 hospitalizations in Maine attributed to CVD. The cost of CVD—which accounts for 25% of all Maine hospital costs—totaled $437 million in 2000. In addition, Medicare or Medicaid payments cover 72% of Maine's CVD-related hospital charges.

To address these problems, the Maine Cardiovascular Health Program is working with a network of community, government, and health partners to explore prevention opportunities in neighborhood, school, work site, and health care settings. Together, these organizations are conducting programs, changing policies, and changing the environment to support children and adults in maintaining a tobacco-free lifestyle, eating healthy foods, being physically active, and maintaining a healthy weight. The Program and its network are working to ensure that health care organizations provide heart disease risk factor screening and treatment, that health care professionals are able to identify and treat heart disease, and that the unique needs of disparate populations are addressed. The components of the Maine Cardiovascular Health Program include:

- Assisting the 31 Healthy Maine Community Partnerships and other community groups to address physical inactivity, poor nutrition, tobacco use, high blood pressure, and high cholesterol.
- Assisting businesses in implementing low- or no-cost strategies to improve employee health.
- Developing and conducting a statewide media and public awareness campaign on physical activity and nutrition.
- Developing state-level policies that support individuals making healthy choices.

Data are from the *Maine Cardiovascular Health Program Fact Sheet.*

Disparities in Health

In 2000, the number of Hispanics living in Maine was 9,360, or 0.7% of the state's population, an increase of 37% from 1990. Since 97% of the state's population is white, data on health disparities are limited; however, the state is working to clarify health data for the Hispanic population.

A 2002 state Bureau of Health review of health data for the Hispanic population poses some inconsistencies regarding the health disparities that affect Maine's Hispanics. While clinic data from the Maine Migrant Health Program clearly indicate that Hispanic seasonal and migrant farmworkers are at a socioeconomic and health disadvantage, an analysis of data that is primarily focused on nonmigrant Hispanic populations in Maine paints a different picture. For instance, data from the U.S. Census, the Behavioral Risk Factor Surveillance System (BRFSS), the Bureau of Vital Statistics, and the Pregnancy Risk Assessment Monitoring System (PRAMS) suggest higher rates of health risk factors (physical inactivity, obesity, and hypertension) among Maine's Hispanics, but mortality data suggest that the state's Hispanics have lower age-adjusted death rates from chronic disease than whites and other racial and ethnic groups. Likewise, some data suggest that Hispanics in Maine have poor health status (shorter life expectancy and higher rates of domestic violence during pregnancy), while other data suggest the opposite (low infant mortality rates and higher rates of mammogram screening).

Socioeconomic data also suggest some inconsistencies. Census data regarding per capita income and education attainment, and data from PRAMS that identify childcare, transportation, and lack of insurance as barriers to health care services for Hispanics suggest that this population is at a socioeconomic disadvantage. However, low unemployment levels and BRFSS data on income levels and health insurance for this population suggest that the socioeconomic status of Maine's Hispanics is similar to that of other Maine residents.

These inconsistencies may be due to multiple factors, including:

- Possible undercounting by the Census and by other surveys;
- Possible inaccuracies and misclassifications in the collection of ethnicity data in health data sets;
- Statistical analyses problems, such as variant outcomes encountered when working with small sample sizes; and
- Cultural and socioeconomic diversity within Maine's Hispanic population.

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

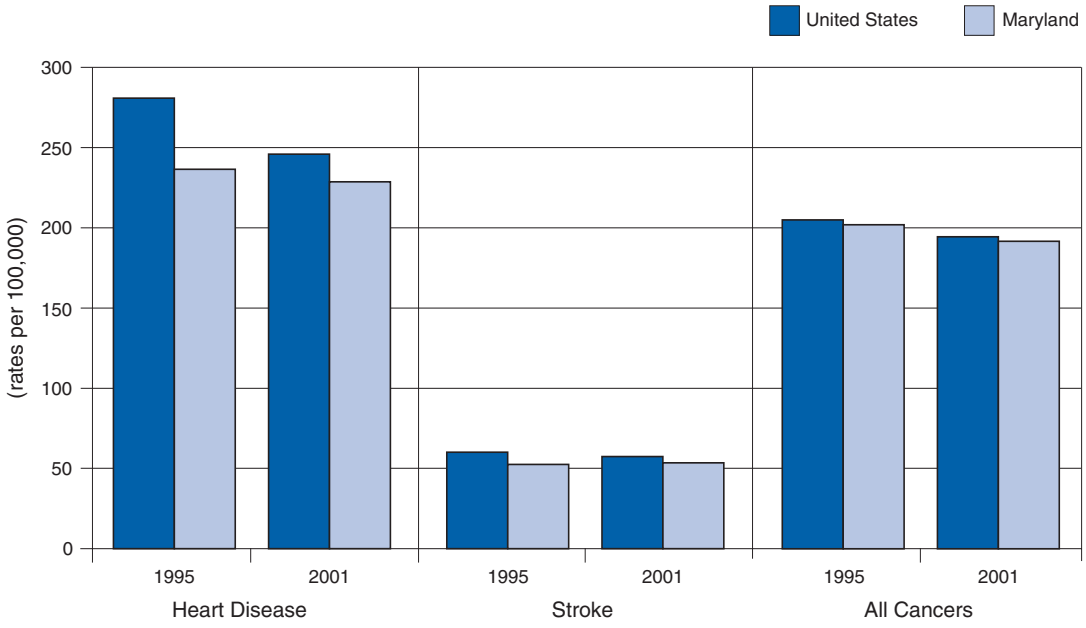
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Maryland

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Maryland, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

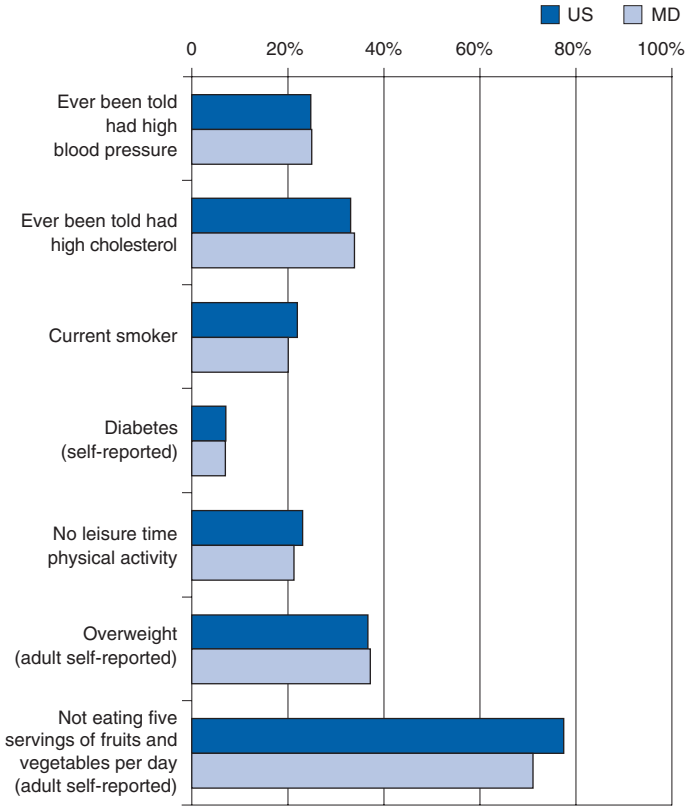
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Maryland, accounting for 12,310 deaths or approximately 28% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,882 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 10,430 are expected in Maryland. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 25,310 new cases that are likely to be diagnosed in Maryland.

Estimated Cancer Deaths, 2004

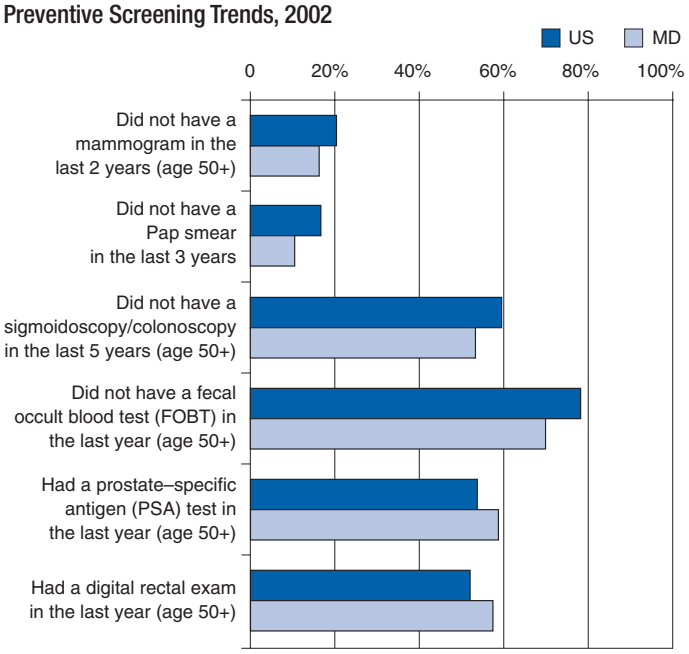
Cause of death	US	MD
All Cancers	563,700	10,430
Breast (female)	40,110	760
Colorectal	56,730	1,090
Lung and Bronchus	160,440	2,940
Prostate	29,900	530

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Maryland's Chronic Disease Program Accomplishments

Examples of Maryland's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among African American men (449.9 per 100,000 in 1990 versus 335.4 per 100,000 in 2000).
- A 10.8% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 27.1% in 1992 to 16.3% in 2002).
- Lower prevalence rates than the corresponding national rates for self-reported current smokers (20.1% in Maryland versus 22.0% nationally) and for self-reported obesity (21.9% in Maryland versus 22.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Maryland in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Maryland, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Maryland BRFSS*	$149,566
National Program of Cancer Registries *Maryland Cancer Registry*	$186,503
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Maryland Diabetes Prevention and Control Coalition* *Maryland Diabetes Awareness Partnership Network*	$291,386
National Breast and Cervical Cancer Early Detection Program *Center for Cancer Surveillance and Control*	$3,929,848
National Comprehensive Cancer Control Program *Maryland State Council on Cancer Control* *Maryland Comprehensive Cancer Control Plan 2004-2008*	$388,705
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Maryland Tobacco Prevention and Control Program*	$1,025,555
State Nutrition and Physical Activity/Obesity Prevention Program *GET ACTIVE. GET HEALTHY!* *Legislative Fitness Day* *Maryland High School Dance Showcase* *Maryland Senior Olympics* *Project Superfit* *Seniors Celebrate for Health and Fitness* *Physical Activity Speakers Bureau* *Walk in Maryland* *Maryland is for Movers Conference*	$398,964
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$6,370,527**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Maryland that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

In 2001, cardiovascular disease (CVD), including heart disease and stroke, was the primary cause of death for all Marylanders. Many believe that CVD is a man's disease, but a greater number of women die from CVD than men. CDC heart disease mortality data from 1996 to 2000 indicate that the heart disease death rate for women in Maryland was 430 per 100,000. Although this was lower than national rate for women, 438 per 100,000, the data also show that in 2001, heart disease was the leading cause of death for women age 65 and over and was the second leading cause of death for women age 35 to 44, 45 to 54, and 55 to 64.

Tobacco use, physical inactivity, poor nutrition, obesity, hypertension, high blood cholesterol, and diabetes are known and modifiable risk factors for CVD. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System (BRFSS), the overall rate of adult smokers in Maryland was 20.1%. In addition, about one fifth of Maryland's adult population was estimated to be physically inactive, 71.1% were consuming fewer than 5 servings of fruits and vegetables a day, 21.9% were obese, and 7.0% reported that they had been told they have diabetes. Twenty five percent of the state's adult population had high blood pressure and 33.9% had high blood cholesterol. African Americans, those in lower-income populations, and those with lower levels of education tended to have higher rates of smoking, physical inactivity, high blood pressure, obesity, and diabetes.

In Maryland, there were 448,729 days of hospitalization in 1999 attributed to CVD. Hospital charges alone for these hospital stays were more than $890 million. Of this amount, $140 million represents the charges for stroke hospitalizations.

In order to address the issue of CVD in Maryland, the state has developed several CVD prevention initiatives. The Office of Chronic Disease Prevention, through its Diabetes Control Program, and the Division of Cardiovascular Health and Nutrition provide grants and technical assistance to local jurisdictions in the state for community-level outreach and education. Other CVD prevention efforts include partnering with state agencies throughout the state, such as the Governor's Office on Smart Growth, the Department of Natural Resources and the Department of Transportation. The state also obtained a grant to implement the Smart Step Forward coalition to revise local codes and to make other changes aimed at encouraging walking in three Maryland communities.

Text adapted from *Preventing Cardiovascular Disease in Maryland: Public Health Strategies,* (2003).

Disparities in Health

African Americans comprise approximately 12% of the U.S. population and tend to have higher rates of behavioral risk factors for chronic diseases as well as higher heart disease, stroke, and cancer mortality rates.

African Americans, who make up approximately 27.9% of Maryland's population, experience high rates of risk factors for heart disease and cancer—and high heart disease and cancer death rates. Data from CDC's Behavioral Risk Factor Survaillance System for 2003 indicate that African Americans are less likely than whites to consume 5 or more servings of fruits and vegetables per day (27.5% versus 28.6%) and are less likely to participate in leisure time physical activity than whites (72.6% versus 82.7%). African Americans are also more likely to be obese than whites (30.5% versus 19.7%), more likely to have high blood pressure than whites (28.3% versus 26.0%), and more likely to report having been told that they have diabetes than whites (9.9% versus 6.6%).

Given the prevalence rates of the above risk factors for heart disease and stroke, it is not surprising that African Americans also have higher heart disease and stroke death rates than whites. From 1996 to 2000, African Americans in Maryland had a heart disease death rate of 620 per 100,000, compared with 500 per 100,000 for whites. From 1991 to 1998, African Americans in Maryland had a stroke death rate of 145 per 100,000, compared with 110 per 100,000 for whites.

Other Disparities

- **Breast Cancer:** In 2002, BRFSS data indicate that African American women had higher rates of breast cancer screening in the last 2 years (85.1%) than whites (83.3%); however, in 2000, they had a higher breast cancer death rate than whites (34.1 per 100,000, compared with 26.0 per 100,000).
- **Cervical Cancer:** Like breast cancer, 2002 BRFSS data indicate that African American women were more likely to report having had a Pap smear in the last 3 years (90.7%) than white women (89.2%), but from 1997 to 2001, African American women in Maryland had a higher cervical cancer death rate than white women (4.6 per 100,000, compared with 2.3 per 100,000).
- **Prostate Cancer:** African American men in Maryland in 2000 had a prostate cancer death rate that was more than twice as high as the rate for white men (62.7 per 100,000, compared with 27.1 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

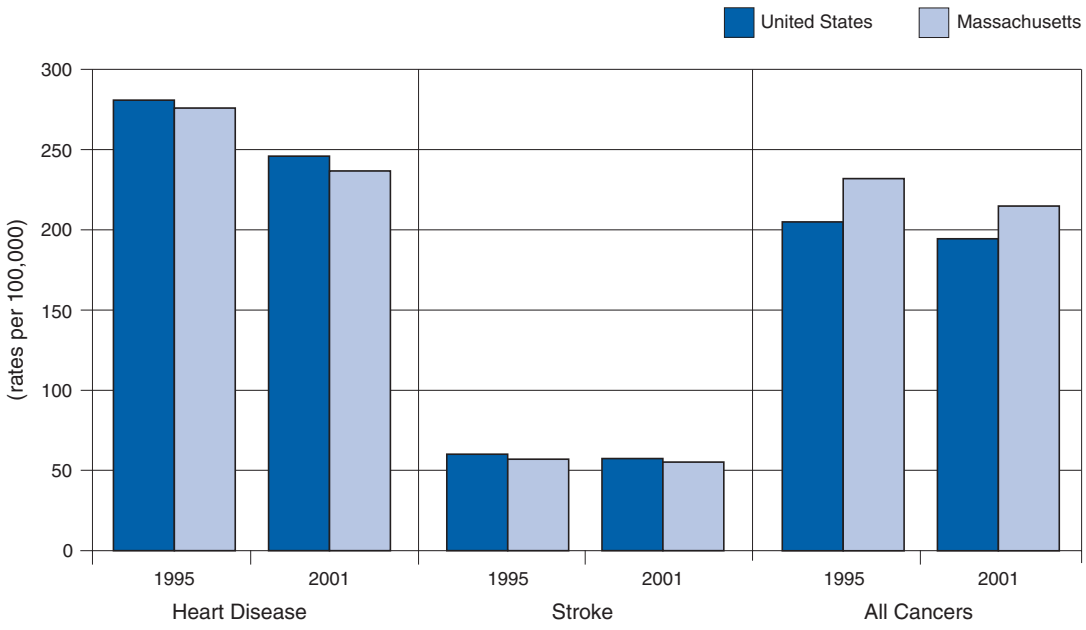
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Massachusetts

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Massachusetts, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

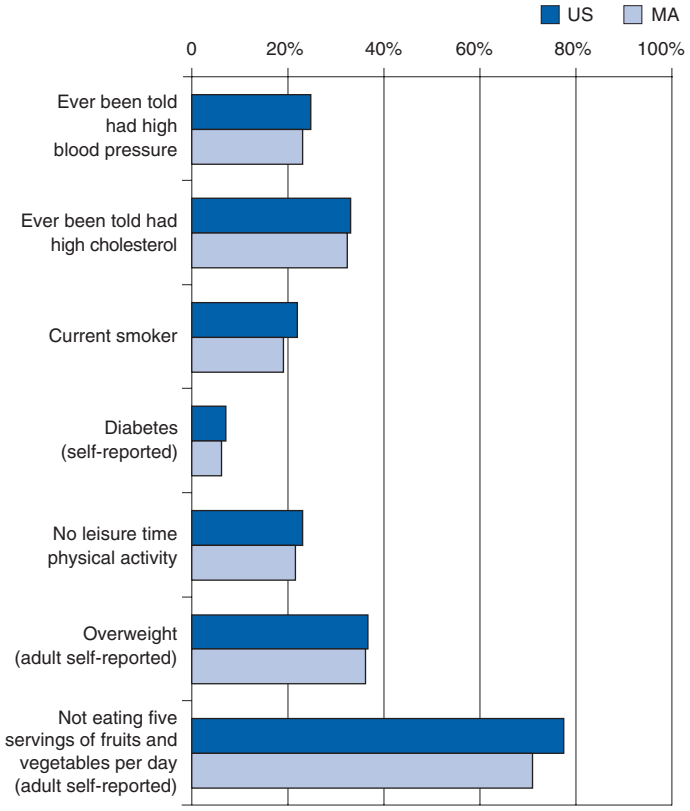
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Massachusetts, accounting for 15,144 deaths or approximately 27% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 3,535 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 13,620 are expected in Massachusetts. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 33,050 new cases that are likely to be diagnosed in Massachusetts.

Estimated Cancer Deaths, 2004

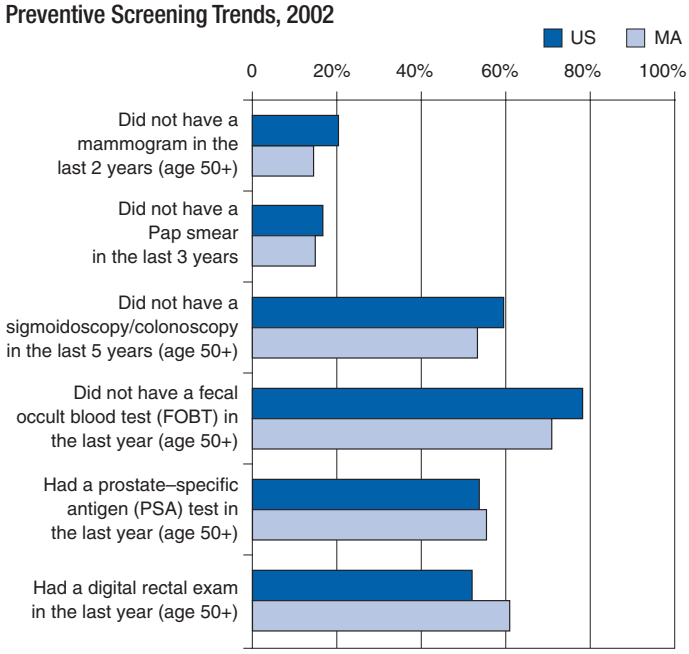
Cause of death	US	MA
All Cancers	563,700	13,620
Breast (female)	40,110	960
Colorectal	56,730	1,360
Lung and Bronchus	160,440	3,740
Prostate	29,900	740

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Massachusetts' Chronic Disease Program Accomplishments

Examples of Massachusetts' Prevention Successes

- A decrease in the rate of heart disease, stroke, and all cancers for all races occurred between 1995 and 2001. Rates for heart disease and stroke in 2001 were lower than the national average.
- A 17.3% decrease in the number of women older than age 50 who reported not having had a mammogram (from 31.8% in 1992 to 14.5% in 2002).
- A prevalence rate that was lower than the corresponding national rate for self-reported obesity (16.8% in Massachusetts versus 22.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Massachusetts in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Massachusetts, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Massachusetts BRFSS*	$232,759
National Program of Cancer Registries *Massachusetts Cancer Registry*	$1,333,485
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Massachusetts Coalition for Cardiovascular Health Stroke Task Force*	$360,000
Diabetes Control Program *Diabetes y Usted Program* *Diabetes Today Coalition*	$859,266
National Breast and Cervical Cancer Early Detection Program *Women's Health Unit*	$3,687,766
National Comprehensive Cancer Control Program *Cancer Prevention and Control Initiative* *Massachusetts Comprehensive Cancer Control Plan*	$717,181
WISEWOMAN *Massachusetts Department of Public Health*	$1,250,354
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Massachusetts Tobacco Control Program*	$1,717,484
State Nutrition and Physical Activity/Obesity Prevention Program	$1,000,000
Racial and Ethnic Approaches to Community Health (REACH 2010)	
Boston Public Health Commission	$984,692
Boston Public Health Commission (AOA)	$249,959
Center for Community Health Education & Research, Inc.	$905,000
Greater Lawrence Family Health Center, Inc.	$905,360
Lowell Community Health Center	$905,000
Total	**$15,108,306**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Massachusetts that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Overweight and Obesity

One of every two Massachusetts adults is either overweight or obese. Although Massachusetts has the 4th lowest percentage of overweight adults in the United States, the percentage of adults who are overweight or obese increased from 40.1% in 1990 to 53.0% in 2003. According to CDC's 2003 Behavioral Risk Factor Surveillance System data, the percentage of overweight or obese men in the state was higher than the percentage for overweight women (63.1% for men versus 43.2% for women). The percentage of obese adults also increases with age until age 64, then decreases.

Several factors cause obesity and overweight: food and nutrient consumption patterns, a lack of physical activity, and socioeconomic factors. According to 2003 data from the BRFSS, adults with less than a high school education had an obesity rate that was 2 times greater (26.9%) than the obesity rate for adults with a college degree (12.1%). Findings were similar among Massachusetts residents with different income levels; 22.1% of adults with annual incomes of $25,000 or less were obese, while only 14.2% of adults with annual incomes of $50,000 or greater were obese.

Overweight and obesity are also problems for infants and children in Massachusetts. More than one third of children ages 2 to 5 are either at risk of being overweight or are already overweight. The prevalence rate of risk for overweight among children ages 2 and older in Massachusetts is 33%, compared with the national prevalence rate of 28%. The prevalence of risk for overweight is highest among Hispanic children; it is lowest among Asian/Pacific Islander children.

Overweight and obesity are also risk factors for diabetes. The prevalence rate of diabetes in Massachusetts in 2003 was lower than the national rate (6.2% versus 7.1%); however, the diabetes death rate in Massachusetts in 2001 was higher than the national rate (25.7 per 100,000, compared with 25.2 per 100,000).

As part of the Healthy People 2010 Initiative, Massachusetts has established objectives for reducing the prevalence of overweight and obesity. These objectives include reducing the proportion of children and adolescents who are overweight (from 10% to 5%), and reducing the proportion of adults who are obese (from 17% to 15%).

Text adapted from *Healthy People 2010—Leading Health Indicators for Massachusetts.*

Disparities in Health

African Americans and Hispanics comprise approximately 25% of the U.S. population. In Massachusetts, Hispanics make up approximately 7% of the state's population; African Americans make up approximately 5%. African Americans and Hispanics in the United States experience disproportionate socioeconomic hardships and health disparities. African Americans have higher stroke death rates than other population groups and a higher prevalence of the risk factors for heart disease. Hispanics, who are almost twice as likely to die from diabetes as non-Hispanic whites, also have higher rates of high blood pressure and obesity than their white counterparts.

In Massachusetts, the leading cause of death is heart disease. The state's African Americans and Hispanics are at the greatest risk for health problems related to overweight and obesity, which are risk factors for heart disease. Data from CDC's 2003 Behavioral Risk Factor Surveillance System indicate that rates of obesity in Massachusetts are highest among African Americans and Hispanics (27.6% and 22.0%, respectively). Of all racial and ethnic groups, Hispanics are the least likely to participate in regular physical activity (42.3%, in comparison with the 28.3% of African Americans and 19.1% of whites).

As mentioned previously, several socioeconomic factors such as household income and education appear to be directly related to obesity and overweight. In Massachusetts, Hispanics and African Americans have the state's lowest per capita incomes; in 2003, more than 50% of Hispanics and 40% of African Americans had an annual income of less than $25,000. The Hispanic population in Massachusetts has the highest percentage of adults with less than a high school education (37.7%), in comparison with African Americans (14.8%) and whites (5.6%).

Other Disparities

- **Diabetes:** In Massachusetts, the percentage of Hispanic adults who report being told by a doctor that they have diabetes is 8.7%, (a rate higher than that of any other racial or ethnic group), followed by African American adults (7.1%) and whites (6.0%). However, these rates decrease with increasing education and annual income.
- **Cholesterol Screening:** Whites in Massachusetts are the most likely to have had their blood cholesterol checked (83.5%), followed by African Americans (75.5%); Hispanics are the least likely to have had their blood cholesterol checked (69.3%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

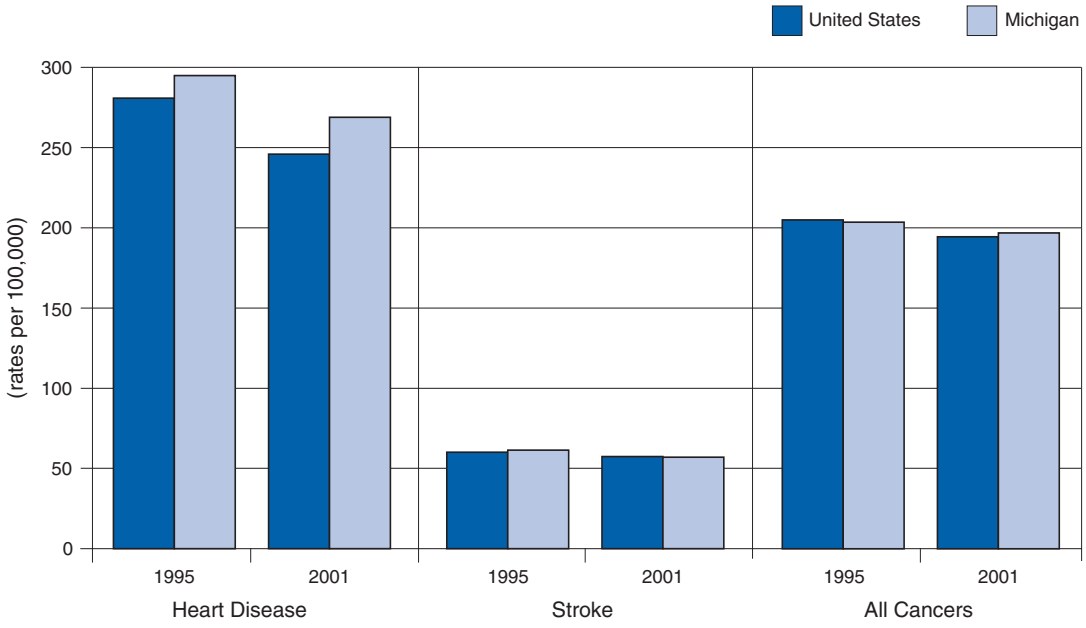
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Michigan

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Michigan, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

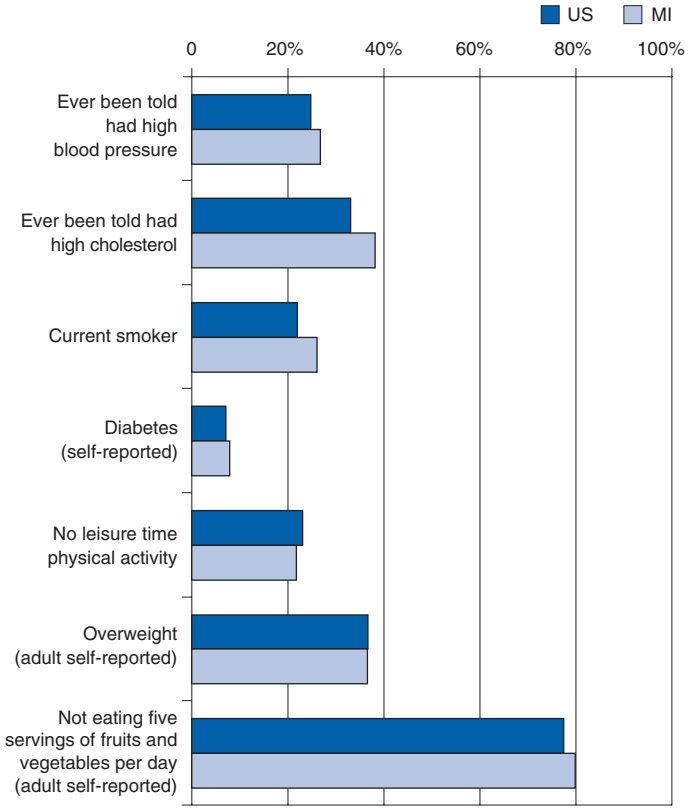
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Michigan, accounting for 26,896 deaths or approximately 31% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 5,701 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 19,870 are expected in Michigan. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 48,220 new cases that are likely to be diagnosed in Michigan.

Estimated Cancer Deaths, 2004

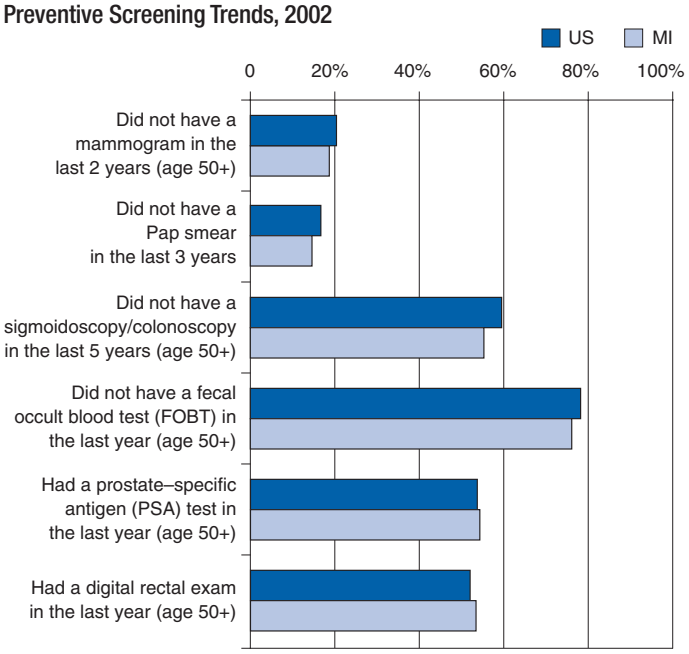
Cause of death	US	MI
All Cancers	563,700	19,870
Breast (female)	40,110	1,350
Colorectal	56,730	1,900
Lung and Bronchus	160,440	5,690
Prostate	29,900	1,110

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Michigan's Chronic Disease Program Accomplishments

Examples of Michigan's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decrease among African American men (373.7 per 100,000 in 1990 versus 314.3 per 100,000 in 2000).
- An 11.7% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 30.4% in 1992 to 18.7% in 2002).
- A lower prevalence rate than the corresponding national rate for women older than age 18 who reported not having had a Pap smear in the last 3 years (14.6% in Michigan versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Michigan in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Michigan, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Michigan BRFSS*	$225,000
National Program of Cancer Registries *Michigan Department of Community Health*	$500,529
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Upper Peninsula Diabetes Outreach Network* *Certified Diabetes Outpatient Education Program* *Local Health Department Diabetes Project*	$864,960
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Cancer Control Program*	$8,273,828
National Comprehensive Cancer Control Program *Michigan Cancer Consortium Initiative* *Michigan Plan for Action*	$1,229,173
WISEWOMAN *Michigan Department of Community Health*	$750,000
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Michigan Tobacco Prevention and Control Program*	$1,700,000
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010) *Community Health and Social Services Center* *Genesee County Health Department* *Migrant Health Promotion, Inc.*	 $911,467 $930,391 $904,900
Total	**$16,290,248**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Michigan that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Obesity and Diabetes

Michigan has the third highest obesity rate in the nation. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System (BRFSS), 25.2% of adults are obese in Michigan, compared to the national average of 22.8%. Contributing to the problem of obesity are the risk factors of poor nutrition and physical inactivity. In 2003, 21.8% of adults in Michigan reported having no leisure time physical activity at all; the corresponding rate for adults in the United States was 23.1%. In addition, one third of Michigan students in grades 9 through 12 did not participate in the recommended amount of both moderate and vigorous physical activity during the week. Nearly 80% of adults in Michigan reported consuming less than 5 servings of fruits and vegetables per day, compared to the national rate of 77.5%.

Diabetes is a chronic disease that is strongly related to obesity. In 2002, 560,000 adults reported that they had diabetes, giving Michigan the 8th highest adult diabetes incidence rate in the nation. Although the incidence of diabetes in Michigan is high, the state's diabetes death rate—26.9 per 100,000—is close to the national average of 25.2 per 100,000. BRFSS data from 2000 indicated that over a quarter of Michiganders with diabetes reported that they were currently taking insulin to treat their diabetes.

A 2003 report by the Michigan Fitness Foundation showed that the 4 million adults in Michigan who were physically inactive generated costs of nearly $8.9 billion in 2002. Employees—through health insurance premiums, lost productivity, and Medicaid payments—bore most of these costs. In addition, a report from the Michigan Department of Community Health revealed that in 2002 estimated diabetes-related medical expenditures in Michigan exceeded $4.7 billion, with an additional $5.7 billion a year in lost productivity due to premature death, disability, and illness.

To address the issues of obesity and diabetes, the Michigan Department of Health developed the Michigan Diabetes Strategic Plan. The state's efforts to combat these diseases include expanding diabetes primary prevention activities, developing an ongoing public awareness campaign, developing a statewide diabetes consumer advisory group, reducing diabetes-related health disparities among minority populations, and providing quality diabetes pregnancy-related care and education to women.

Text adapted from *Michigan Surgeon General's Health Status Report: Healthy Michigan 2010* (2004).

Disparities in Health

According to the 2000 Census, Michigan had the 8th largest population in the United States, with over three quarters of its residents living in metropolitan areas. The state's minority populations are increasing in proportion to the population as a whole. Cardiovascular disease (CVD) has been the number one cause of death in Michigan since the early 1900's; 4 out of every 10 deaths in Michigan is attributed to CVD. From 1996 to 2000, the heart disease death rate among Michigan's African Americans, who comprise about 13% of the state's population, was 709 per 100,000, compared with the national rate for African Americans of 662 per 100,000. The heart disease death rate among Michigan's African Americans is also higher than the rate among whites in the state (709 per 100,000 versus 561 per 100,000).

According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, the rate of obesity among African Americans in Michigan (34.8%) was higher than the rate among whites (23.7%). Approximately 66.0% of African Americans in Michigan were at risk for health problems related to being overweight, putting them more at risk than either whites (61.4%) or Hispanics (60.4%). Although 72.2% of African Americans in Michigan report participating in physical activity, the percentage is lower than that of their white counterparts (79.4%). In addition, African Americans were less likely to report consuming 5 or more servings of fruits and vegetables per day than whites (16.3%, compared with 20.0%).

The increase in diabetes prevalence in Michigan has been higher than the increase in other states. Approximately 11% of African Americans in Michigan report that they have been diagnosed with diabetes, compared with approximately 7% of whites. The diabetes death rate for African Americans in Michigan is significantly higher than the rate for whites (40.8 per 100,000 versus 25.2 per 100,000).

Other Disparities

- **Smoking:** In Michigan, 29.6% of African Americans were smokers in 2003, compared with 25.5% of whites.
- **Stroke:** Between 1991 and 1998 in Michigan, the stroke death rate among African Americans (151 per 100,000) was higher than the rate among whites (121 per 100,000).
- **High Blood Pressure:** African Americans in Michigan were more likely to report having been told that they have high blood pressure than whites (38.9% versus 26.0%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

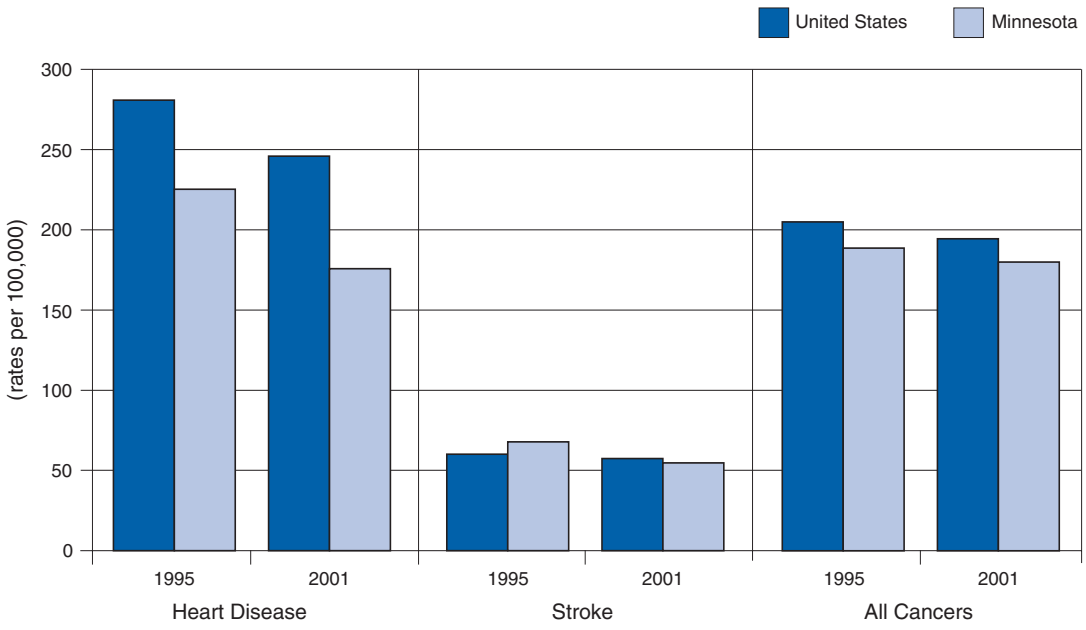
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Minnesota

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Minnesota, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

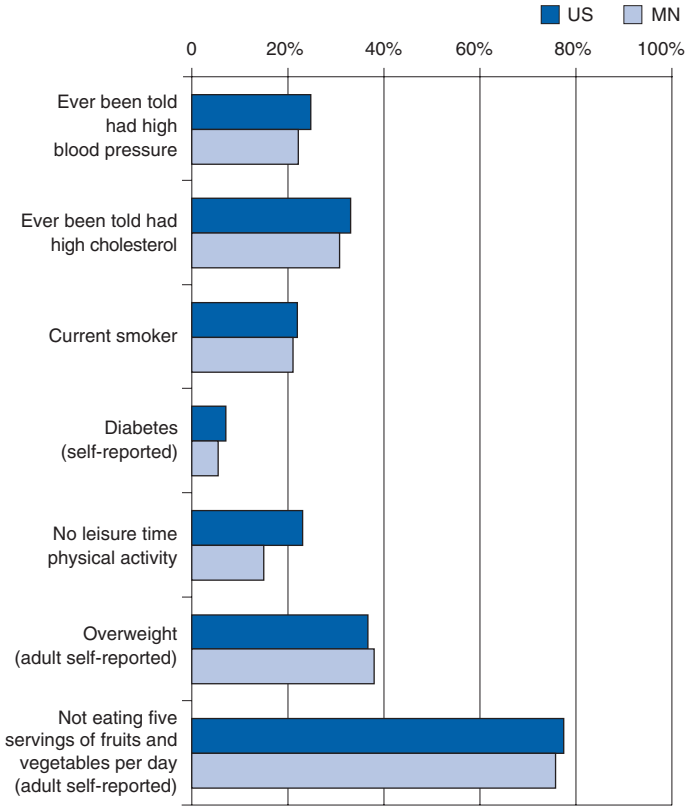
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the second leading cause of death in Minnesota, accounting for 8,760 deaths or approximately 23% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,727 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 9,360 are expected in Minnesota. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 22,720 new cases that are likely to be diagnosed in Minnesota.

Estimated Cancer Deaths, 2004

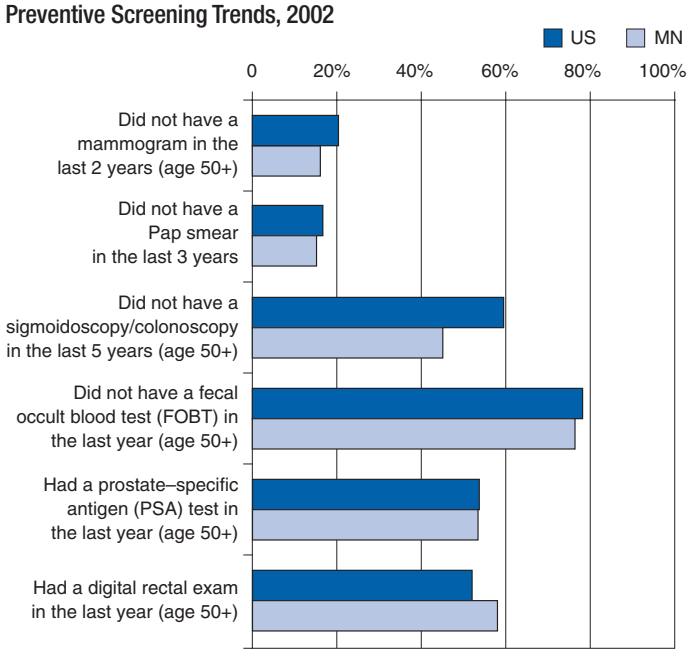
Cause of death	US	MN
All Cancers	563,700	9,360
Breast (female)	40,110	670
Colorectal	56,730	850
Lung and Bronchus	160,440	2,380
Prostate	29,900	550

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Minnesota's Chronic Disease Program Accomplishments

Examples of Minnesota's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among African American men (490.1 per 100,000 in 1990 versus 339.0 per 100,000 in 2000).
- A 13.9% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 30.0% in 1992 to 16.1% in 2002).
- Prevalence rates that were lower than corresponding national rates for smoking (21.1% in Minnesota versus 22.0% nationally); and for women older than age 18 who reported not having had a Pap smear (15.2% in Minnesota versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Minnesota in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Minnesota, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Minnesota BRFSS*	$253,888
National Program of Cancer Registries *Minnesota Cancer Surveillance System*	$904,262
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Minnesota Heart Disease and Stroke Prevention Initiative* *Cardiovascular Health State Plan*	$335,869
Diabetes Control Program *The Impact of Diabetes in Minnesota*	$900,000
National Breast and Cervical Cancer Early Detection Program *SAGE Screening Program*	$3,619,999
National Comprehensive Cancer Control Program *Comprehensive Cancer Control Planning*	$149,999
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Minnesota Tobacco Prevention and Control Program*	$1,030,395
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$7,194,412**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Minnesota that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

According to CDC mortality data, between 1996 and 2000, Minnesota had a heart disease death rate that was lower than the national average (384 per 100,000, compared with 536 per 100,000). Between 1991 and 1998, however, Minnesota had a stroke death rate that was higher than the national average (125 per 100,000, compared with 121 per 100,000). In 2001, there were more than 70,000 hospital discharges in Minnesota, with a primary diagnosis of cardiovascular disease (CVD) representing more than 11% of all of the discharges. These CVD patients incurred total inpatient costs of more than $1.4 billion. Of these charges, $626 million were due to heart disease and $205 million were due to stroke.

Although Minnesota has low heart disease and stroke death rates, the state has focused its attention on lowering the prevalence of modifiable risk factors associated with these and other chronic conditions. According to 2003 data from the Behavioral Risk Factor Surveillance System, 38% of Minnesota adults reported being overweight. Of great concern is the rising percentage of obese individuals in the state; in 1990, 10% of individuals were obese, and by 2003, the percentage had grown to 23%. Physical inactivity is also a serious problem for children and adolescents. According to the 2001 Minnesota Student Survey, 12% of 6th graders, 14% of 9th graders, and 21% of 12th graders reported having no physical activity within a given week. Poor nutrition is also a concern. In 2003, 24% of Minnesota adults reported eating at least 5 fruits and vegetables per day. Among youth, approximately 22% of 6th graders, 15% of 9th graders, and 12% of 12th graders reported consuming 5 or more fruits, fruit juices, or vegetables per day. In 2003, approximately 22% of adults in Minnesota reported that they had been diagnosed with high blood pressure—a percentage that has remained constant throughout the last decade.

The *Minnesota Heart Disease and Stroke Prevention Plan 2004-2010* was developed to provide a blueprint for collaboration among individuals, communities, and organizations that implement strategies to reduce CVD risk factors, incidence, complications, and mortality rates. The plan outlines intervention strategies that address environmental and policy change at multiple levels of society in addition to strategies aimed at improving medical treatment.

Text adapted from *Cardiovascular Disease in Minnesota, 2003 Report and the Minnesota Heart Disease and Stroke Prevention Plan* 2004-2010.

Disparities in Health

Across the country, American Indians and Alaska Natives (AI/ANs) comprise more than 500 federally recognized tribes and represent 1% of the U.S. population. Compared with other racial and ethnic minorities, AI/ANs have the highest poverty rate, 26%, which is 2 times the national rate. In addition to high poverty levels, AI/ANs are experiencing growing health disparities.

Minnesota's AI/ANs make up 1.1% of the state's population. Although they live in one of the healthiest states in the country, they experience marked health disparities, and due to high poverty rates and economic insecurity, are less likely to have continuous health insurance and access to health care resources. The 2001 *Minnesota Health Access Survey* revealed that Minnesota's AI/ANs were more than 3 times more likely to be uninsured than whites (16.2% for AI/ANs versus 4.6% for whites). Age-adjusted cardiovascular disease death rates for Minnesota AI/ANs were considerably higher than all other ethnic/racial populations in the state. Between 1998 and 2002, the heart disease death rate for AI/ANs was 36% higher than the same death rate for non-Hispanic whites.

Diabetes, a major risk factor for CVD, affects a larger percentage of AI/ANs than whites. In 1997, the Indian Health Service reported that the age-adjusted prevalence of diagnosed diabetes among AI/ANs aged 20 and older among tribes in Michigan, Minnesota, and Wisconsin was 15.2%.

Other Disparities

- **Women and Cardiovascular Disease:** In Minnesota, from 1996 to 2000, Asian/Pacific Islander women aged 35 and older had the lowest heart disease death rate (150 per 100,000) compared with African American (313 per 100,000), AI/AN (378 per 100,000), and white women (290 per 100,000) in the same age group. Hispanic women aged 35 and older had the second lowest heart disease death rate (199 per 100,000).
- **Stroke:** Minnesota's stroke death rates are 50% higher for African Americans and 24% higher for Asian/Pacific Islanders than for non-Hispanic whites. Between 1998 and 2002, African American men had a 53% higher stroke death rate than non-Hispanic white men.
- **Diabetes:** In Minnesota, Hispanics, who make up 2.9% of the population, are 1.7 times as likely as whites to die from diabetes.

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

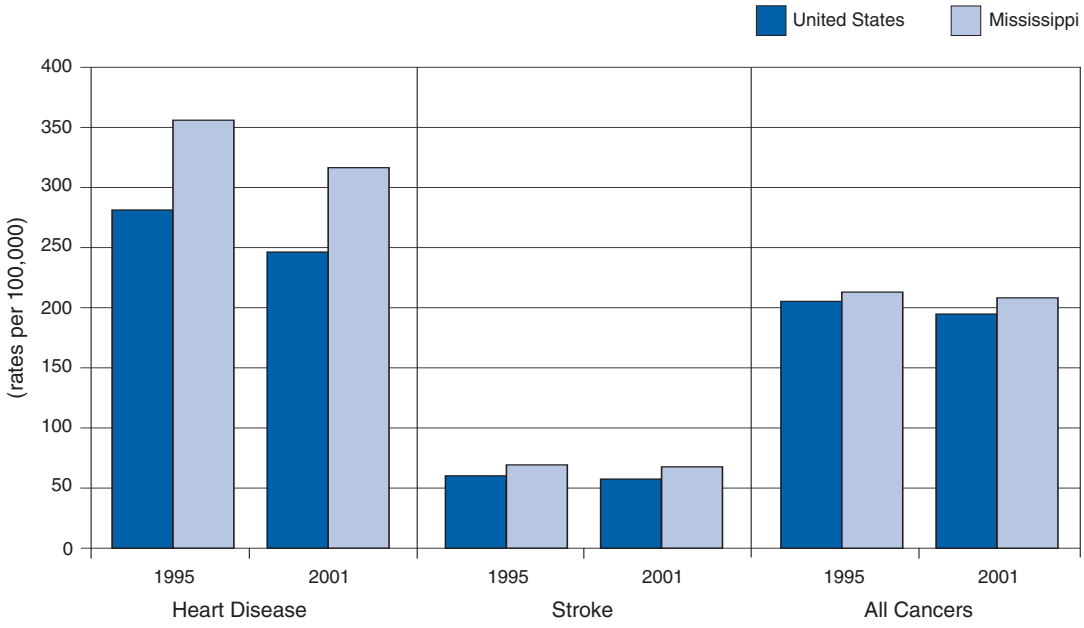
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Mississippi

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Mississippi, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

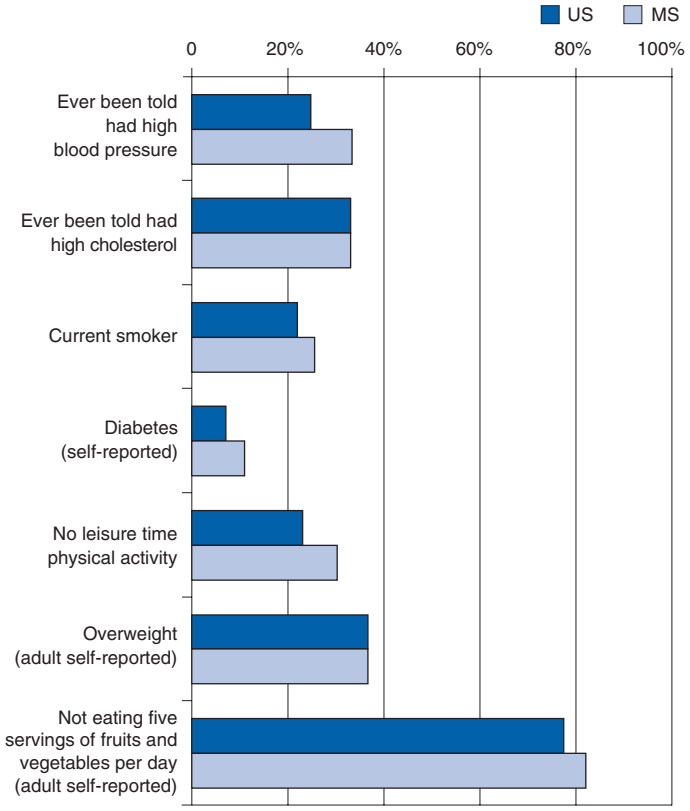
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Mississippi, accounting for 9,050 deaths or approximately 32% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 1,935 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 6,230 are expected in Mississippi. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 15,120 new cases that are likely to be diagnosed in Mississippi.

Estimated Cancer Deaths, 2004

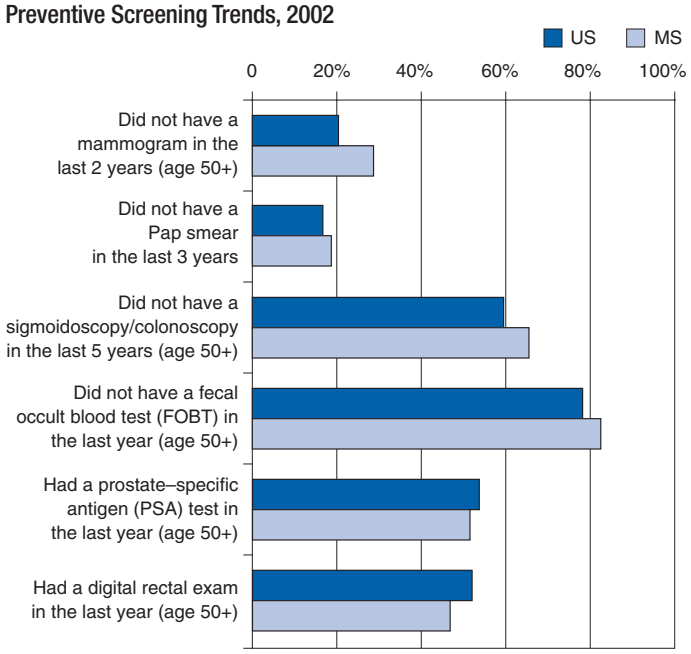
Cause of death	US	MS
All Cancers	563,700	6,230
Breast (female)	40,110	460
Colorectal	56,730	620
Lung and Bronchus	160,440	2,060
Prostate	29,900	440

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Mississippi's Chronic Disease Program Accomplishments

Examples of Mississippi's Prevention Successes

- A 25.3% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 54.0% in 1992 to 28.7% in 2002).
- A decrease in the percent of women who reported not having had a Pap smear in the last 3 years from 19.9% in 1992 to 18.7% in 2002 and a 2.1% change in the cervical cancer death rate from 1997 to 2001.
- A lower mortality rate than the corresponding national rate for prostate cancer among white non-Hispanic men (27.9% in Mississippi versus 28.1% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Mississippi in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Mississippi, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Mississippi BRFSS*	$174,364
National Program of Cancer Registries *Mississippi Central Cancer Registry*	$343,367
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Know Your Numbers (KYN) Campaign* *Task Force on Heart Disease and Stroke Prevention* *Mississippi Council on Obesity Prevention and Management*	$394,991
Diabetes Control Program *Diabetes Advisory Council*	$300,000
National Breast and Cervical Cancer Early Detection Program *Mississippi Breast and Cervical Cancer Early Detection Program*	$786,881
National Comprehensive Cancer Control Program *Mississippi Comprehensive Cancer Control Program*	$150,000
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Mississippi Tobacco Prevention and Control Program*	$172,818
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$2,322,421**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Mississippi that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Mississippi's cardiovascular disease (CVD) mortality rate is the highest in the nation; in 2000, the state's CVD mortality rate was 29% higher than that of the United States. More Mississippians die each year from CVD than from all types of cancer, traffic injuries, suicides, and AIDS combined. In addition, 1 in 5 Mississippians under 65 died of CVD.

In 2001, Mississippi had the highest heart disease death rate in the nation and the 5th highest stroke death rate. Between 1996 and 2000, Mississippi had a heart disease rate that was higher than the national average (707 per 100,000, compared with 536 per 100,000). In addition, between 1991 and 1998, Mississippi had a stroke death rate that was higher than the national average (140 per 100,000 compared with 121 per 100,000).

As the state's population ages, the economic impact of CVD on Mississippi's health care system continues to grow. In 2001, the estimated cost of CVD in Mississippi was about $3.7 billion.

Smoking, obesity and physical activity are three risk factors that are modifiable through behavior change. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, more than a quarter of adults and almost a quarter of high school students in Mississippi smoked. In addition, Mississippi had one of the highest obesity rates in the nation (28.1% compared with 22.1% nationally). Almost one third of adults (30.3%) in Mississippi also reported that they did not participate in any leisure time physical activity during the past month, compared with the national average of 23.1%.

Mississippi has created several programs to address CVD. The Mississippi Cardiovascular Health Program (MCVH) and the Mississippi Chronic Illness Coalition (MCIC) developed and implemented the Know Your Numbers (KYN) media campaign, which encourages Mississippians to monitor their blood pressure, cholesterol, glucose, and body mass index. The state's Task Force on Heart Disease and Stroke Prevention and the Mississippi Council on Obesity Prevention and Management, created through passage of legislation developed by MCIC partners, were organized to develop a comprehensive statewide plan to address these critical public health problems.

Text adapted from the Mississippi Department of Health Web site: http://www.msdh.state.ms.us/msdhsite/index.cfm/43,0,91,149,html.

Disparities in Health

African Americans make up approximately 38% of Mississippi's population. They have a higher stroke mortality rate than other groups, as well as a higher prevalence of the risk factors for heart disease. Historically, Mississippi has reported the lowest per capita income and median family income of any state in the nation, with corresponding high unemployment and low educational levels. Nationally, African Americans tend to have higher poverty rates and Mississippi is no different. These economic disparities translate into health disparities for Mississippi's African Americans.

Heart disease has been the leading cause of death for African Americans in Mississippi for many years, followed by cancer and stroke. Between 1996 and 2000, African Americans had a higher heart disease death rate than their white counterparts (823 per 100,000, compared with 667 per 100,000). In 2000, African American men had a cancer death rate that was higher than white men (366.6 per 100,000, compared with 282.0 per 100,000) and African American women had a higher cancer death rate than white women (186.3 per 100,000, compared with 167.5 per 100,000). Stoke death rates in Mississippi between 1991 and 1998 also were higher among African Americans (183 per 100,000) than whites (125 per 100,000).

African Americans in Mississippi also have higher rates of the risk factors for CVD and cancer, including obesity, physical inactivity, and hypertension. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, African Americans were more likely to be obese (36.6%), compared with whites (24.1%). In addition, African Americans were less likely to report having participated in leisure time physical activity during the last month (34.4% versus 27.8%). African Americans in Mississippi also were more likely to report having been told that they had high blood pressure than whites (39.7%, compared with 30.4%).

Other Disparities

- **Diabetes:** In Mississippi, African Americans are almost twice as likely as their white counterparts to have been told by a doctor that they have diabetes (15% for African Americans versus 9% for whites).
- **Cholesterol Screening:** Approximately 29% of African Americans in Mississippi report that they have never had their blood cholesterol checked, compared with 24% of their white counterparts.

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

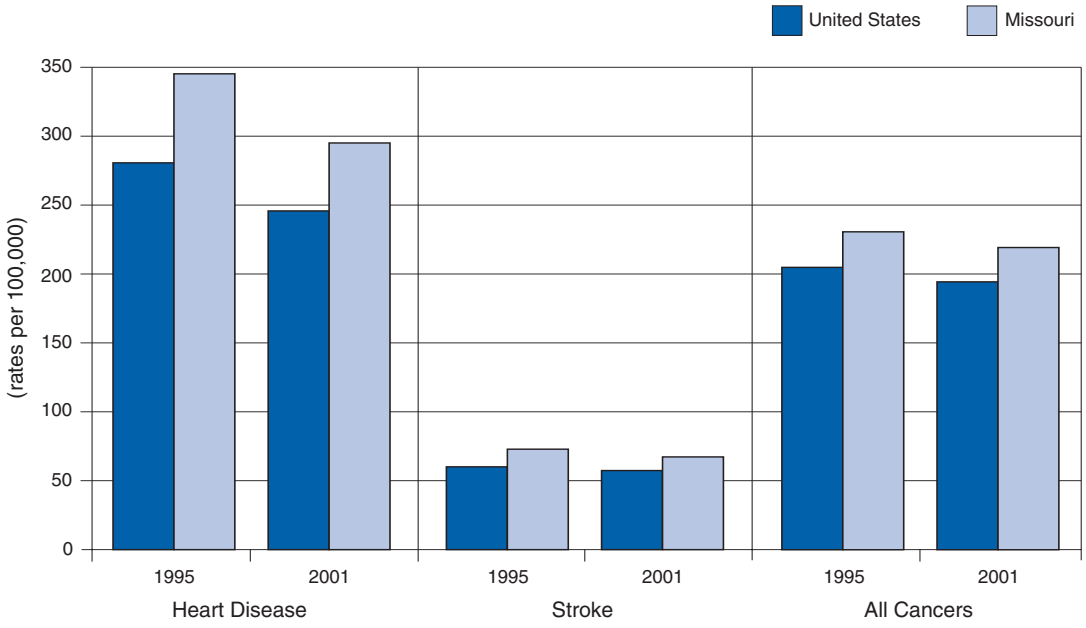
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Missouri

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Missouri, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

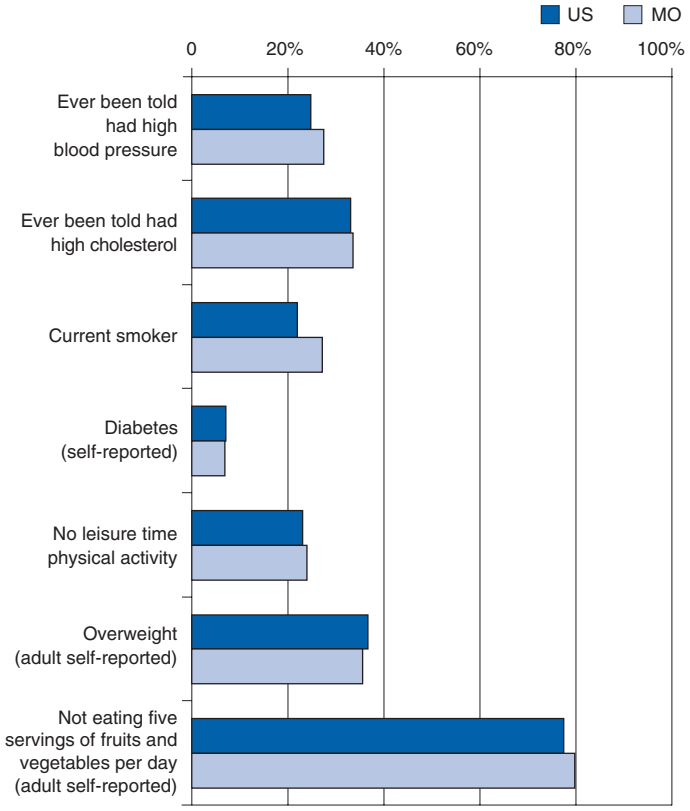
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Missouri, accounting for 16,633 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 3,796 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 12,480 are expected in Missouri. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 30,290 new cases that are likely to be diagnosed in Missouri.

Estimated Cancer Deaths, 2004

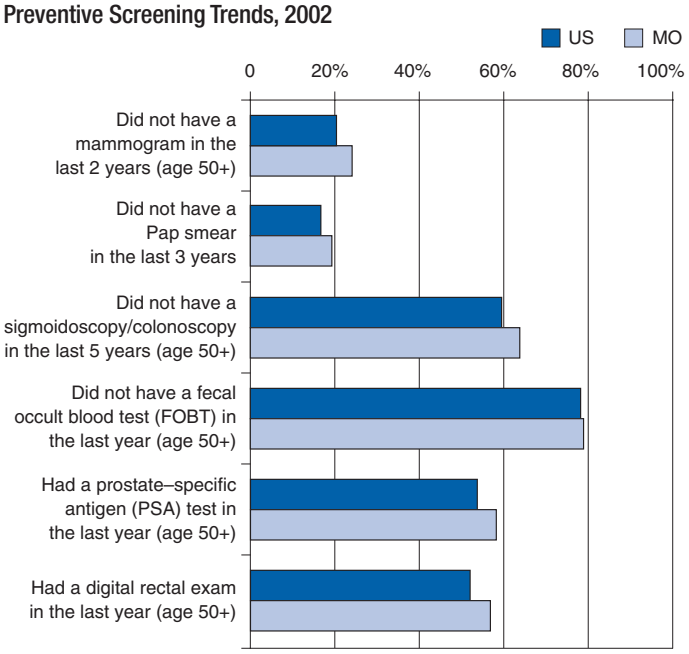
Cause of death	US	MO
All Cancers	563,700	12,480
Breast (female)	40,110	870
Colorectal	56,730	1,250
Lung and Bronchus	160,440	3,780
Prostate	29,900	450

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Missouri's Chronic Disease Program Accomplishments

Examples of Missouri's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decreases occurring among African American men (433.6 per 100,000 in 1990 versus 371.5 per 100,000 in 2000).
- A 14.8% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 38.9% in 1992 to 24.1% in 2002).
- Lower prevalence rates than the corresponding national rates for self-reported overweight (35.6% in Missouri versus 36.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Missouri in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Missouri, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Missouri BRFSS*	$213,352
National Program of Cancer Registries *Missouri Cancer Registry*	$1,287,204
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Work Site Inventory Program* *Community Policy and Environmental Change Program* *Hearts N' Parks*	$1,250,001
Diabetes Control Program *Missouri DPCP Diabetes Workgroup* *Missouri DPCP Task Force* *Missouri DPCP Advisory Committee*	$450,000
National Breast and Cervical Cancer Early Detection Program *Missouri Department of Health and Senior Services*	$3,089,531
National Comprehensive Cancer Control Program *Bureau of Cancer Control*	$134,605
WISEWOMAN *New Leaf…Choices for Healthy Living* *Show Me Healthy Women*	$239,788
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Missouri Tobacco Prevention and Control Program*	$1,207,523
State Nutrition and Physical Activity/Obesity Prevention Program *Move For Your Youth* *PACE Training* *SHAPE UP Missouri/Walk Across Missouri*	$441,035
Racial and Ethnic Approaches to Community Health (REACH 2010) *Missouri Coalition for Primary Care*	$891,641
Total	**$9,204,680**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Missouri that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD) is the leading cause of death in Missouri among all racial and ethnic groups and for both men and women. CDC mortality data indicate that in 2001, Missouri had the 12th highest heart disease death rate in the nation and the 18th highest stroke death rate. In addition to the cost in lives, the Missouri Department of Health reports that CVD also costs more than $1 billion in hospitalizations per year.

The largely preventable nature of this disease makes the deaths associated with CVD even more tragic. Behavioral modifications, such as participating in physical activity, practicing good nutritional habits, quitting smoking, and maintaining a healthy weight substantially reduce one's risk of suffering from CVD. Behavioral Risk Factor Surveillance System data from 2003 indicate that in Missouri, only 20.2% of adults consumed 5 or more servings of fruits and vegetables per day and 54.9% did not meet the recommended guidelines for moderate physical activity. Almost 60% of Missouri adults were overweight (35.6%) or obese (23.6%), and more than a quarter of adults in the state were smokers (27.2%). More than 33.0% of adults in Missouri reported that they been told that they have high blood cholesterol, and 27.5% reported having been told that they have high blood pressure.

Despite remarkable declines in Missouri's overall CVD mortality rates since 1950, certain segments of the population have not benefited equally. Of particular concern are African Americans who experience considerably higher rates of heart disease and stroke than whites. According to CDC's Cardiovascular Health Program data, from 1996 to 2000, the heart disease death rate for African Americans in Missouri (745 per 100,000) was higher than the heart disease death rate for whites (585 per 100,000). In addition, the stroke death rate for African Americans (156 per 100,000) was also higher than the corresponding rate for whites (124 per 100,000).

To address the problem of CVD in Missouri, the state implemented the Mississippi Cardiovascular Health Program, which has received funding from the CDC since 1998. The program works to develop and coordinate partnerships, develop an inventory of policy and environmental strategies, provide training and technical assistance to local communities, develop population-based strategies, and develop culturally competent strategies for priority populations.

Text adapted from *The Missouri Cardiovascular Health State Plan 2000-2010.*

Disparities in Health

Heart disease is the leading cause of death among women in the United States. According to CDC's Cardiovascular Health (CVH) data, Missouri's overall cardiovascular disease death rate is declining. However, for women in Missouri aged 35 and older, the heart disease death rate increased—from 430 per 100,000 between 1991 and 1995 to 488 per 100,000 between 1996 and 2000). This increase particularly affected African American women (whose rates rose from 585 per 100,000 to 641 per 100,000 during the same periods) and Hispanic women, (whose rates rose from 248 per 100,000 to 328 per 100,000).

According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, in Missouri, 74.4% of women consume less than 5 servings of fruits and vegetables per day. Additionally, 55.9% of women in Missouri report not engaging in moderate physical activity, while 81.7% report not engaging in vigorous physical activity. More than 23% of Missouri's women are smokers, and 28% have high blood pressure. According to the Missouri Department of Health and Senior Services' Office of Women's Health, in 2002, more than half of the state's nonwhite women (55%) were overweight and slightly more than one third (38%) of white women were overweight.

Other Disparities

- **Colorectal Cancer:** In Missouri in 2000, African American women had higher colorectal cancer death rates (23.1%) than white women (17.8%).
- **Cervical Cancer:** In 2002, African American women were more likely to report having had a Pap smear in the last 3 years than white women (92.2% compared with 80.1%), however, between 1997 and 2001, African American women in Missouri had a higher cervical cancer death rate than white women (6.3 per 100,000 compared with 2.4 per 100,000).
- **Mammography Screening:** In 2002, Missouri had a higher prevalence rate than the corresponding national rate for women over the age of 50 who reported not having had a mammogram in the last 2 years (24.1% in Missouri versus 20.4% nationally). However, for the same year, the prevalence rate for African American women over the age of 50 who reported not having had a mammogram in the last 2 years was lower than the corresponding national rate for African Amercan women (14.8% in Missouri versus 18.2% nationally).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
Safer • Healthier • People™

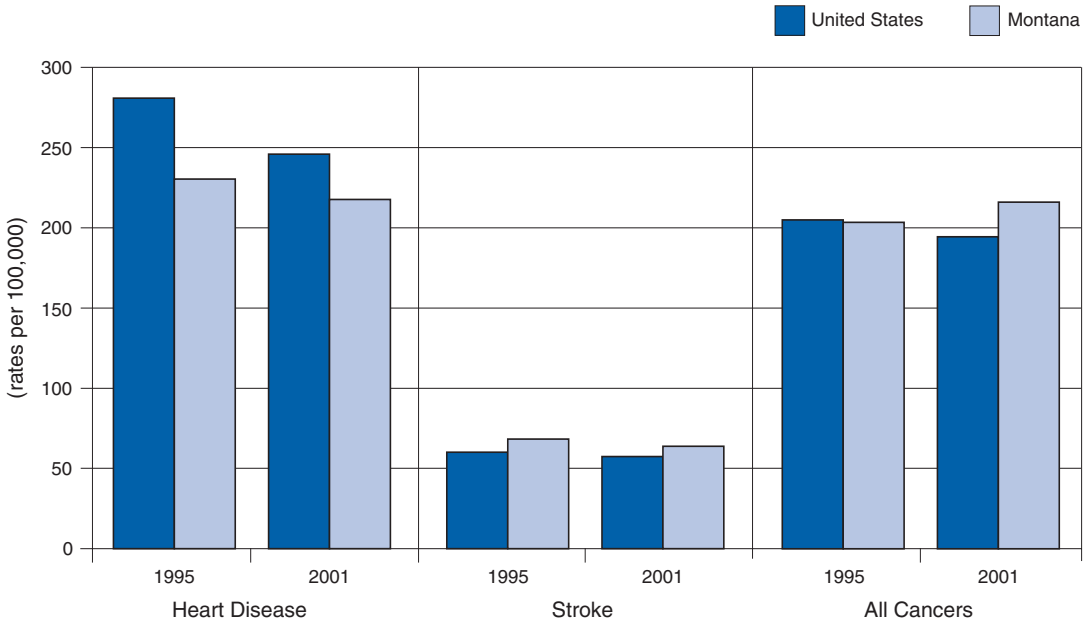
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Montana

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Montana, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

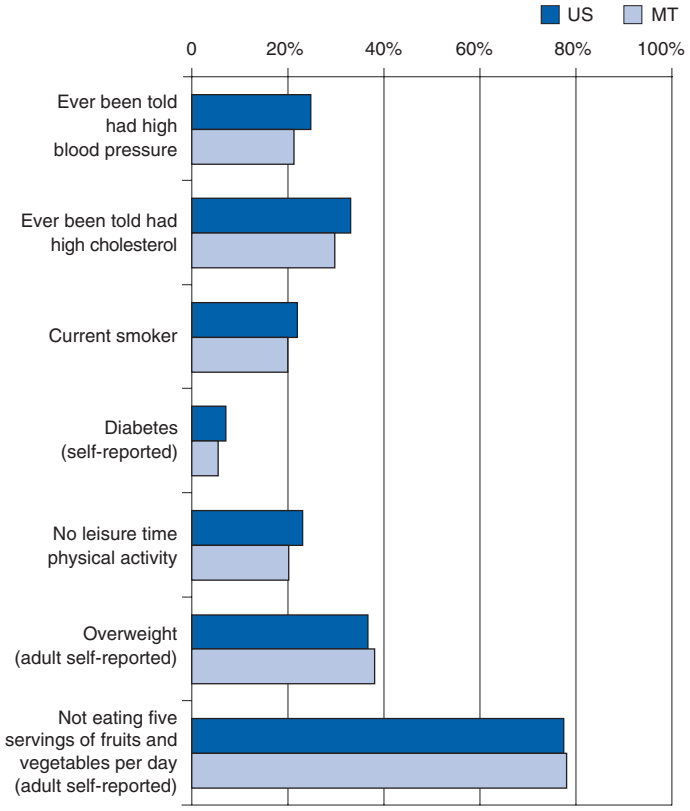
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Montana, accounting for 1,970 deaths or approximately 24% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fourth leading cause of death, accounting for 578 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 2,060 are projected for Montana. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 5,000 new cases that are likely to be diagnosed in Montana.

Estimated Cancer Deaths, 2004

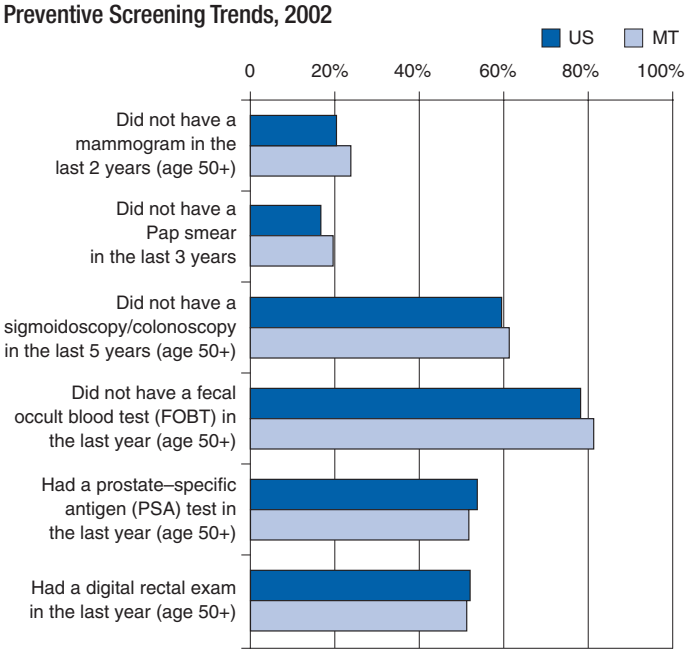
Cause of death	US	MT
All Cancers	563,700	2,060
Breast (female)	40,110	110
Colorectal	56,730	180
Lung and Bronchus	160,440	600
Prostate	29,900	140

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Montana's Chronic Disease Program Accomplishments

Examples of Montana's Prevention Successes

- Stastically significant decreases in cancer deaths among women across all races (173.0 per 100,000 in 1990 versus 160.6 per 100,000 in 2000). Among men across all races, there was a decrease in cancer deaths, although the decrease was not statistically significant (250.5 per 100,000 in 1990 versus 242.2 per 100,000 in 2000).
- A 13.5% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 37.3% in 1992 to 23.8% in 2002).
- Lower prevalence rates than the corresponding national rates for self-reported diabetes (5.5% in Montana versus 7.1% nationally) and for self-reported obesity (18.8% in Montana versus 22.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Montana in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Montana, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Montana BRFSS*	$209,204
National Program of Cancer Registries *Montana Cancer Registry*	$239,844
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Montana Cardiovascular Disease Prevention and Control Plan 2000* *Cardiovascular Disease/Obesity Prevention Task Force* *Cardiovascular Health Summit*	$913,797
Diabetes Control Program *Chronic Disease Prevention and Health Promotion Programs*	$616,997
National Breast and Cervical Cancer Early Detection Program *Health Policy and Services Division*	$1,751,293
National Comprehensive Cancer Control Program	$0
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Montana Tobacco Prevention Information*	$825,415
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$4,556,550**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Montana that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD), including coronary heart disease and stroke, is the number one cause of death in the state of Montana and accounted for 30.8% of all the state's deaths in 2001. The age-adjusted death rate for heart disease in Montana from 1996 to 2000 was 431 per 100,000. The age-adjusted death rate for stroke in Montana from 1996 to 2000 was 124 per 100,000, which was higher than the national rate of 121 per 100,000. In Montana, the number of hospitalizations for heart attacks increased slightly, from 2,512 in 1995 to 2,642 in 2000.

According to data from CDC's 2003 Behavioral Risk Factor Surveillance System, 21.3% of the population reported that they had been diagnosed with high blood pressure, and 29.8% reported that they had high blood cholesterol. More than 20.0% of Montanans did not consume 5 or more servings of fruits and vegetables per day and 41.5% of adults in Montana did not meet the recommended guidelines for moderate physical activity. As a result, more than half of Montana's residents were overweight (37.9%) or obese (18.7%). In addition, 20% of Montana adults were smokers. A 2003 report by the Montana Cardiovascular Health Program indicated that Montanans aged 65 and older were at higher risk for a heart attack or stroke, but were less likely than younger adults to recognize all the symptoms of heart attack and stroke.

In an effort to address Montana's CVD problem, the Montana Cardiovascular Health Program conducts statewide activities to promote cardiovascular health and to prevent cardiovascular disease and its associated risk factors, such as physical inactivity, obesity, hypertension, and high blood cholesterol. The program has assessed existing policies and environmental supports that promote cardiovascular health in a variety of settings, including schools, worksites, health care institutions, and communities. The program has formed a statewide Cardiovascular Disease and Obesity Prevention Task Force, has provided resources for Montana elementary schools to participate in "Walk to School Day," and sponsored the Cardiovascular Health Summit conference for health professionals. The program also promoted healthy eating and active lifestyles by co-chairing Eat Right Montana, a statewide nutrition and physical activity coalition; by implementing a multiyear "Healthy Families" media campaign; and by participating in the State Advisory Council on Food and Nutrition.

Text adapted from *The Burden of Cardiovascular Disease in the State of Montana* (2003).

Disparities in Health

Across the country, American Indians and Alaska Natives (AI/ANs) comprise more than 500 federally recognized tribes and represent 1% of the U.S. population. Compared with other racial and ethnic minorities, AI/ANs have the highest poverty rate, 26%, which is twice the national rate. AI/ANs also are experiencing increasing health disparities.

According to the U.S. Census, AI/ANs are Montana's largest minority group and accounted for approximately 6.2% of the state's population in 2000. Data from the Indian Health Service on regional trends in Indian health show that, nationally, the life expectancy of AI/ANs born today is 70.6 years—almost 6 years less than the life expectancy of the U.S. population for all races (76.5 years). In the Billings Indian Health Service area, which includes Montana and Wyoming, the AI/AN life expectancy is 67.9 years—more than 8 years lower than the life expectancy of the U.S. population as a whole.

In 2001, Montana's AI/ANs had higher death rates than whites for heart disease and stroke. That year, AI/ANs had the highest heart disease death rate in the state (550 per 100,000); this rate was also higher than the national average for all races (536 per 100,000). During the same period, the AI/AN population also had the highest stroke death rate (149 per 100,000), a rate that was also higher than the stroke death rate for the entire U.S. population (121 per 100,000).

Montana's AI/AN men had a heart disease death rate that was almost twice the rate for AI/AN men nationwide (879 per 100,000 for AI/AN men in Montana compared with 444 per 100,000 nationally). Discrepancies in heart disease death rates for AI/AN women in Montana and in the United States were not as large, but were still higher for AI/AN women in Montana (336 per 100,000, compared with 278 per 100,000 nationally).

Other Disparities

- **Overweight and High Blood Pressure:** A 1999 survey of AI/ANs living on or near Montana reservations found that more than 60% of respondents age 45 and older were overweight and more than 40% had high blood pressure.
- **Diabetes:** The 1999 survey found that 13% of AI/ANs age 18 and older living on or near Montana's reservations had diabetes, compared to 3% for all Montanans.
- **Smoking:** In 1998, Montana AI/ANs under age 45 were more likely to smoke (42%) than AI/ANs aged 45 and older (32%); these rates were higher than the rate for all white Montanans (21%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

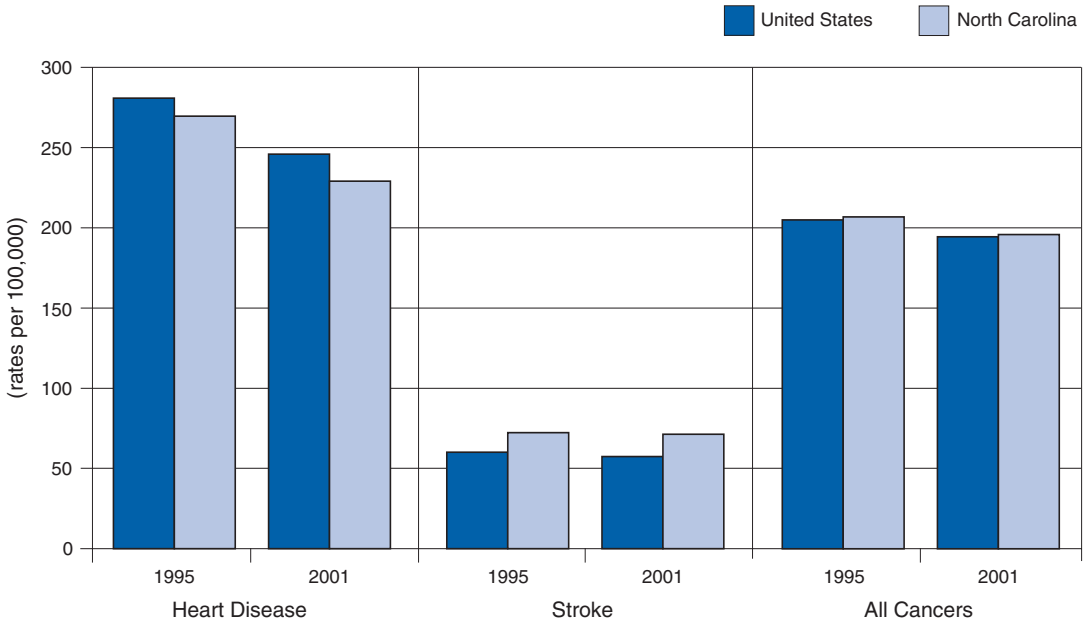
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

North Carolina

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and North Carolina, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

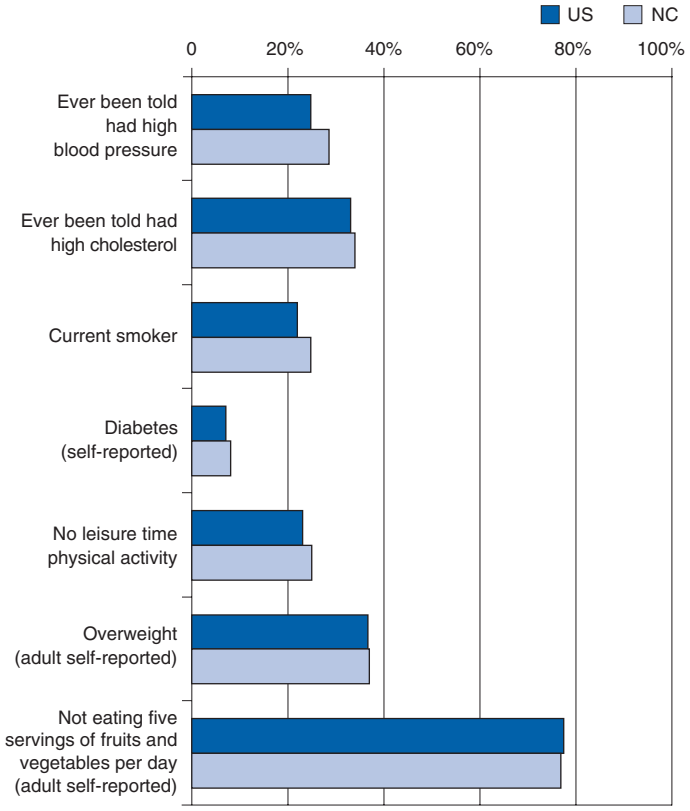
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in North Carolina, accounting for 18,792 deaths or approximately 26% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 5,401 deaths or approximately 8% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 16,580 are expected in North Carolina. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 40,240 new cases that are likely to be diagnosed in North Carolina.

Estimated Cancer Deaths, 2004

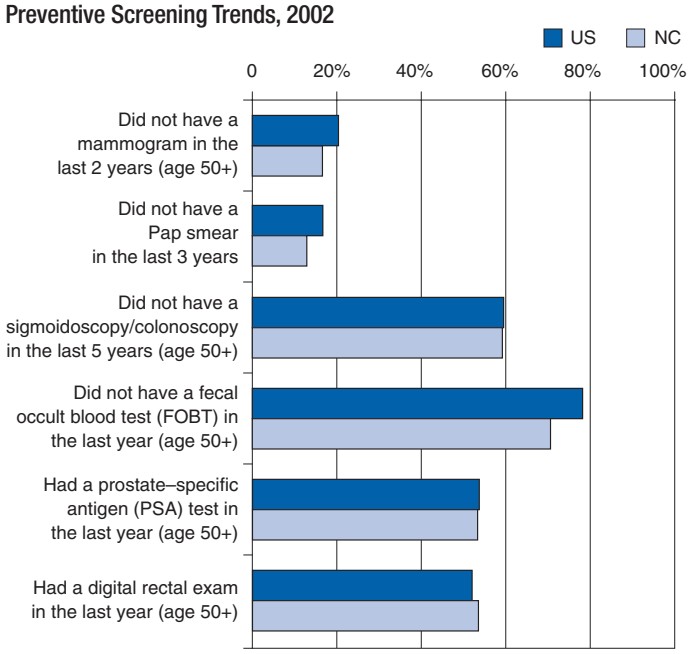
Cause of death	US	NC
All Cancers	563,700	16,580
Breast (female)	40,110	1,090
Colorectal	56,730	1,590
Lung and Bronchus	160,440	5,270
Prostate	29,900	930

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

North Carolina's Chronic Disease Program Accomplishments

Examples of North Carolina's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among white men (280.6 per 100,000 in 1990 versus 256.0 per 100,000 in 2000).
- A 20.4% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 37.0% in 1992 to 16.6% in 2002).
- Lower mortality rates than the corresponding national rates for female breast cancer deaths among all races (24.3% in North Carolina versus 26.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to North Carolina in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for North Carolina, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *North Carolina BRFSS*	$284,325
National Program of Cancer Registries *North Carolina Central Cancer Registry*	$700,757
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$1,540,000
Paul Coverdell National Acute Stroke Registry	$755,999
Diabetes Control Program *North Carolina Diabetes Prevention and Control Program*	$876,721
National Breast and Cervical Cancer Early Detection Program *Health Promotion and Disease Prevention*	$3,227,933
National Comprehensive Cancer Control Program *North Carolina Advisory Committee on Cancer Coordination and Control*	$300,000
WISEWOMAN *A New Leaf...Choices for Healthy Living*	$1,250,000
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *North Carolina Tobacco Prevention and Control Program*	$1,672,557
State Nutrition and Physical Activity/Obesity Prevention Program *Local Physical Activity & Nutrition Coalitions (LPAN's)* *Physical Activity and Nutrition (PAN) Grant Program* *Start With Your Heart NC Cardiovascular Health Program* *Statewide Health Promotion Program* *Sybershop* *Color Me Healthy*	$449,813
Racial and Ethnic Approaches to Community Health (REACH 2010) *Carolinas Medical Center (Charlotte Mecklenburg Hospital Authority)* *Eastern Band of Cherokee Indians*	 $924,640 $774,720
Total	**$12,757,465**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in North Carolina that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Diabetes

Diabetes is a chronic disease, that affects the body's ability to produce or respond to insulin. Insulin allows glucose (sugar) to enter cells and to be converted to energy. In uncontrolled diabetes, glucose and fats remain in the blood, damaging vital organs. The number of people with diabetes in North Carolina has surpassed one half million and continues to increase. At the same time, modifiable risk factors for the disease, such as lack of exercise, obesity and overweight, and unhealthy diet, have increased in the last decade.

Adult obesity in North Carolina almost doubled from 11.6% in 1990 to 24.0% in 2003. From 1995 to 2000, the prevalence of diagnosed diabetes among adults in North Carolina increased 42%. In 2000, diabetes was the 5th leading cause of death in North Carolina, resulting in 2,078 deaths and, from 1994 to 2000, a 30% increase in mortality rates. In 2001, CDC mortality data indicate that African Americans had a higher diabetes death rate than whites (55.5 per 100,000 for African Americans, compared with 22.0 per 100,000 for whites). In addition, in 2001 men had higher diabetes death rates than women (30 per 100,000 for men, compared with 26 per 100,000 for women).

Physical activity and nutrition are factors that can be modified to reduce the risk of developing diabetes. From 1994 to 2003, the number of adults in North Carolina who reported consuming 5 or more servings of fruits and vegetables increased from 18.9% to 23.1%. The number of North Carolinians who reported engaging in leisure time physical activity increased 10.9%; however, in 2003, 25.0% still did not engage in leisure time physical activity during the past month.

In North Carolina, diabetes is responsible for approximately 14,000 hospitalizations per year and 3,000 lower extremity amputations per year. In 1998, the estimated hospitalization cost for diabetes and related complications in the state totaled more than $1.5 billion.

The North Carolina Diabetes Prevention and Control Program was developed to address the increased modifiable risk factors among the state's residents. The program works to increase awareness of diabetes and its complications, to monitor the burden of the disease, to help health care providers improve the quality of diabetes education, and to enhance community-based efforts to reduce the burden of diabetes through education and capacity building.

Text adapted from *Diabetes in North Carolina: A Summary Report* 2002.

Disparities in Health

North Carolina's Hispanic population has experienced rapid growth during the past 10 years. Most of this growth can be attributed to high levels of migration due to economic opportunities in agriculture, construction, and food industries; this growth can also be attributed to high Hispanic birth rates. Estimates of the Hispanic population in North Carolina vary, but data from the 2000 U.S. Census indicated that people of Hispanic origin represented 4.7% of the state's population—378,963 people.

As is the case with other racial and ethnic minorities, Hispanics are disproportionately affected by certain health problems. Although injury and homicide are leading causes of death for Hispanics, chronic disease disparities also exist, especially for diabetes and cardiovascular disease.

Although state-specific data on diabetes and cancer among Hispanics are limited, national data indicate that the rate of diabetes is increasing. In the United States, diabetes increased among the general population from 28 cases per 1,000 in 1986 to 30 cases per 1,000 in 1994. During the same period, the increase among Mexican Americans was much higher, increasing from 54 cases per 1,000 to 66 cases per 1,000.

Risk factors for cardiovascular disease include high blood pressure, diabetes, obesity, and high blood cholesterol. In 2003, according to CDC's Behavioral Risk Factor Surveillance data, over one quarter of Hispanics in North Carolina reported that they had been told they had high blood cholesterol and 8.5% had been told they had high blood pressure. These data also indicate that 40.2% of Hispanics are overweight and 21.5% are obese.

Other Disparities

- **Obesity:** African Americans in North Carolina are more likely to be obese than whites (35.0% versus 21.6%).
- **Breast and Cervical Cancer:** In 2002, African American women were more likely to have had a mammogram in the last 2 years than white women (86.7% versus 83.0%); however, in 2000, African American women in North Carolina had a higher breast cancer death rate (31.4 per 100,000) than white women (22.6 per 100,000). In 2002, African American women also were more likely to report having had a Pap smear in the last 3 years than white women (93.1% versus 85.3%); however, in 2000, African American women had a higher cervical cancer death rate (6.7 per 100,000) than white women (2.6 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

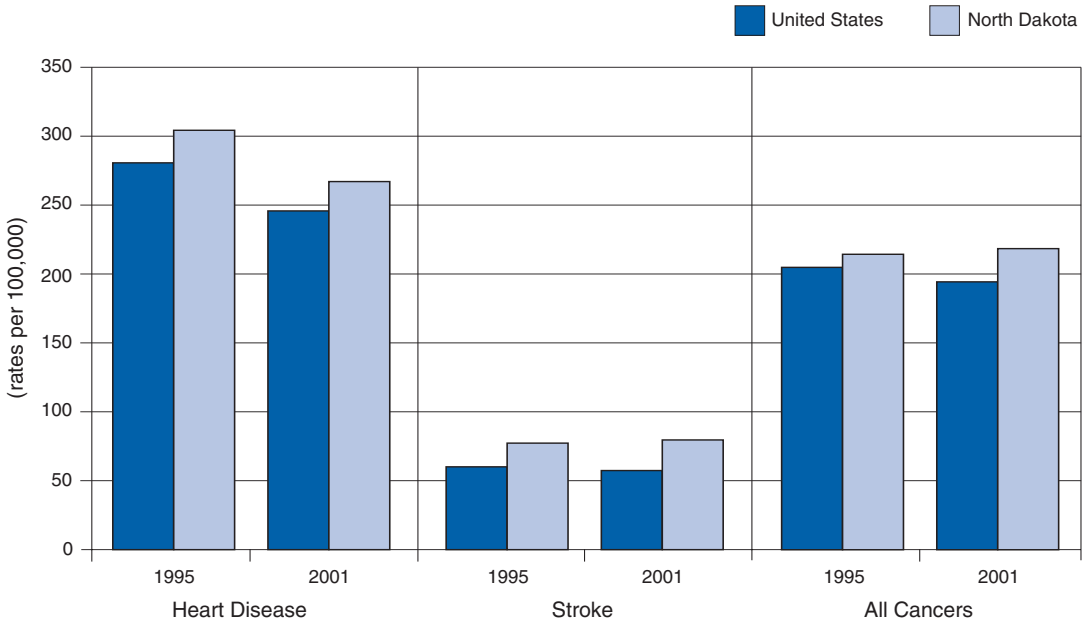
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

North Dakota

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and North Dakota, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

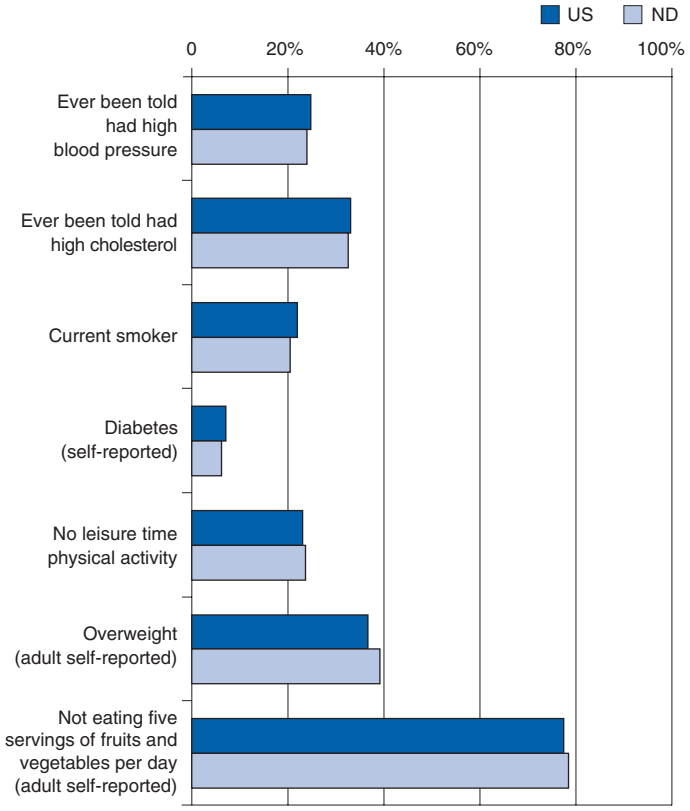
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in North Dakota, accounting for 1,700 deaths or approximately 28% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 507 deaths or approximately 8% of the state's deaths in 2001

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 1,340 are expected in North Dakota. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 3,250 new cases that are likely to be diagnosed in North Dakota.

Estimated Cancer Deaths, 2004

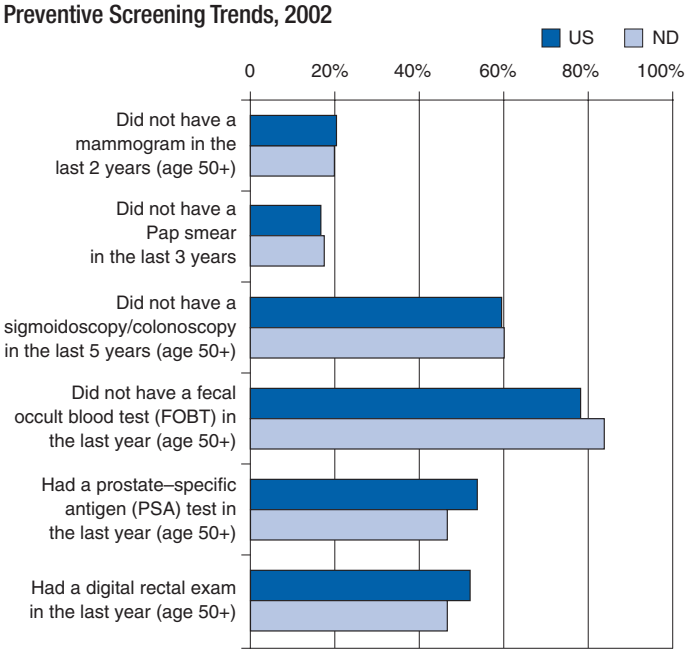
Cause of death	US	ND
All Cancers	563,700	1,340
Breast (female)	40,110	100
Colorectal	56,730	140
Lung and Bronchus	160,440	330
Prostate	29,900	70

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

North Dakota's Chronic Disease Program Accomplishments

Examples of North Dakota's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women of all races. Cancer deaths among men decreased from 257.0 per 100,000 in 1990 to 241.4 per 100,000 in 2000. Among women, cancer deaths decreased from 160.8 per 100,000 in 1990 to 142.5 per 100,000 in 2000.
- A 23.4% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 43.3% in 1992 to 19.9% in 2002).
- Lower prevalence rates than the corresponding national rates for individuals who reported being told by a doctor that they had diabetes (6.2% in North Dakota versus 7.1% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to North Dakota in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for North Dakota, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *North Dakota BRFSS*	$163,866
National Program of Cancer Registries *North Dakota Cancer Registry*	$196,567
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$300,000
Diabetes Control Program *Diabetes Collaborative* *Diabetes Today*	$269,500
National Breast and Cervical Cancer Early Detection Program *Women's Way*	$1,053,359
National Comprehensive Cancer Control Program	$150,000
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *North Dakota Tobacco Prevention and Control Program*	$1,129,745
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$3,263,037**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in North Dakota that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Child and Adult Obesity

Many young children, adolescents, and young adults in North Dakota are overweight because today's lifestyles promote poor eating habits and physical inactivity. In 1999, about 8% of North Dakotan children ages 3 to 4 in the Women, Infants, and Children (WIC) program were overweight (greater than the 95th percentile in weight for height). Between 1993 and 1999, the percentage of overweight American Indian/Alaska Native children in this age group was almost double the percentage for their white counterparts.

Data from CDC's Youth Risk Behavior Survey show that in 1999, about 20% of teens in North Dakota were overweight or were at risk of becoming overweight (greater than the 85th percentile body mass index [BMI]); in contrast, more than 40% of the state's teen girls thought they were overweight and more than 60% were trying to lose weight. A perception of being overweight and dieting to lose weight put many of these teens at risk of developing an eating disorder. Only 45% of young adults in North Dakota aged 20 to 24 had a BMI of 20 to 24.9, which is considered a healthy weight. Adults in North Dakota also have weight problems. Data from CDC's 2002 Behavioral Risk Factor Surveillance System indicate that 38.2% of adults in North Dakota were overweight (compared with 37.0% of adults nationally), and 23.4% were obese (compared with 22.2% of adults nationally).

In response to this problem, the North Dakota Department of Health's Division of Maternal and Child Health (MCH) provides a number of collaborative activities to promote healthy weight and a healthy lifestyle to North Dakota's residents. An MCH staff member leads an Obesity Prevention Work Group (OPWG) comprising programs from several public and private agencies. Among its many activities, the OPWG sponsors conferences such as the 2001 Eat Well, Play More: Promoting Healthy Weight in North Dakota Children. MCH also supports the development of the 5 Plus 5 Communities through the North Dakota Health Heart Council. The 5 Plus 5 Communities work to encourage North Dakotans to eat 5 servings of fruits and vegetables per day, and to increase physical activity to 30 minutes per day, 5 days per week. In addition to the OPWG, staff members from the Special Nutrition Program for WIC are promoting behaviors that prevent obesity.

Text adapted from *Promoting Healthy Weight: Maternal and Child Health Fact Sheet* (n.d.).

Disparities in Health

Across the country, American Indians and Alaska Natives (AI/ANs) comprise more than 500 federally recognized tribes and represent 1% of the U.S. population. In North Dakota, almost 5% of the population is AI/AN. Compared with other racial and ethnic minorities AI/ANs have the highest poverty rate, 26%, which is 2 times the national rate. In addition to high poverty levels, AI/ANs are experiencing increasing health disparities.

American Indians/Alaska Natives in North Dakota and the surrounding region have the shortest average life span of AI/ANs in the United States. Many believe this is due to inadequate health care for this population. According to the Center for Rural Health, on average, AI/ANs in North Dakota live to be 64 years old—12 years less than the average life span of 76 years for the AI/AN population in California, and 13 years less than the national average of 77 years.

In 2001, the leading causes of death for AI/ANs in North Dakota were cancer, heart disease, accidents, diabetes, and chronic liver disease. Cancer accounted for 20% of all AI/AN deaths, and heart disease accounted for 19% of all AI/AN deaths. AI/ANs in North Dakota have a heart disease death rate that is considerably higher than the rate for whites (792 per 100,000 versus 449 per 100,000), and they have a stroke death rate that is also higher than that of whites (141 per 100,000 versus 121 per 100,000). Diabetes is a preventable cause of death that accounted for 7.6% of AI/AN deaths in North Dakota in 2001, compared with only 3.1% of deaths among whites in North Dakota. In addition, chronic liver disease, the fifth leading cause of death for the state's AI/ANs, accounted for 6.6% of AI/AN deaths in North Dakota in 2001. Among whites in North Dakota, chronic liver disease was not among the top 10 causes of death in 2001.

Data on other disparities in North Dakota are limited, but other disparities affecting AI/ANs in the United States are provided below.

Other Disparities

- **Exercise:** AI/AN women are less likely to exercise than their male counterparts (43% of AI/AN women and 34% of AI/AN men do not exercise).
- **Obesity:** AI/AN women are more likely to be obese (42%) than their male counterparts (36%).
- **Smoking:** AI/AN men are more likely to smoke (30%) than their female counterparts (24%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

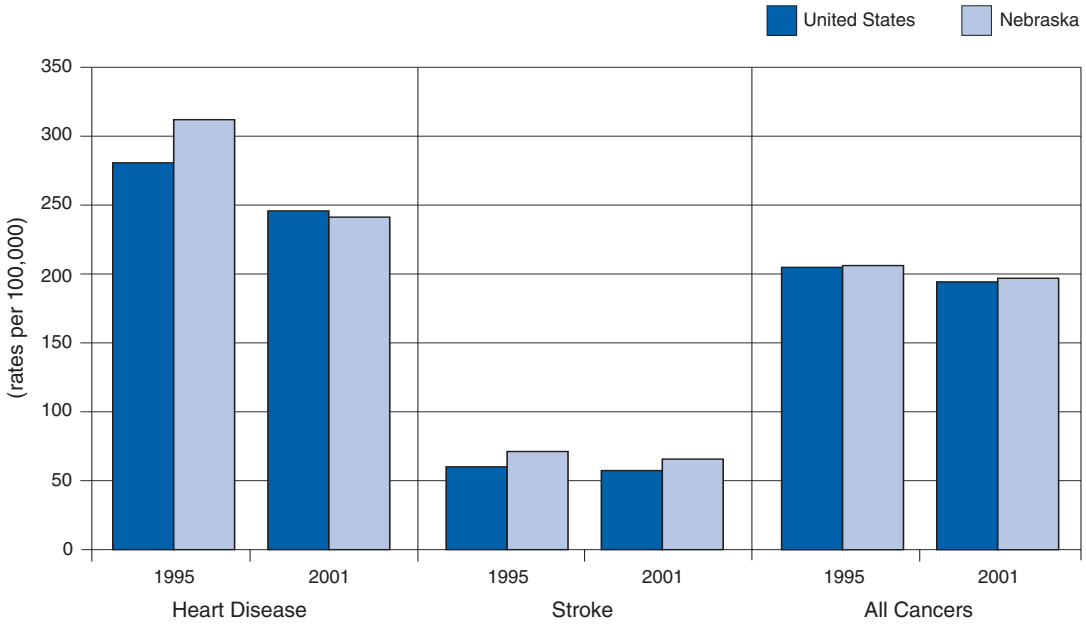
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Nebraska

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Nebraska, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

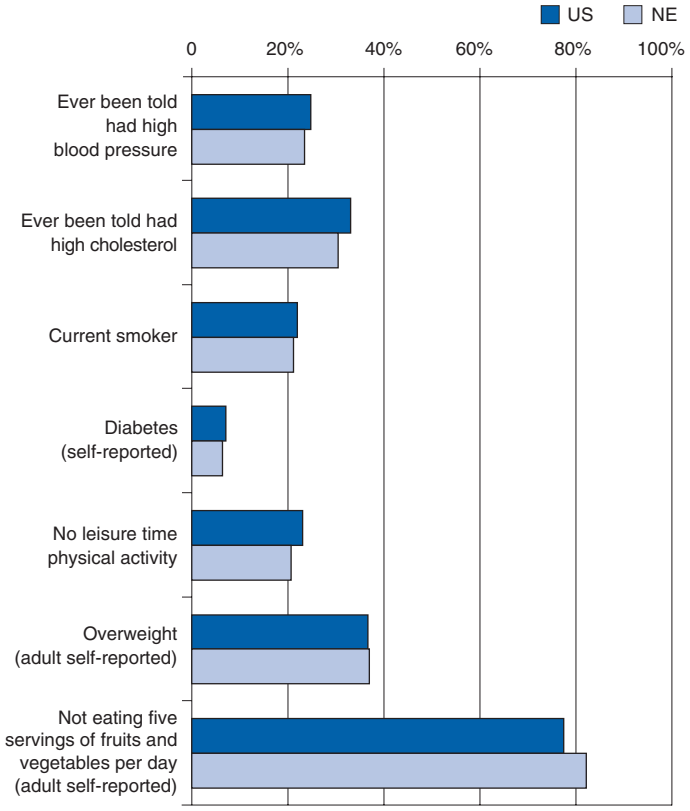
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Nebraska, accounting for 4,150 deaths or approximately 27% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death in Nebraska, accounting for 1,130 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 3,410 are expected in Nebraska. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 8,280 new cases that are likely to be diagnosed in Nebraska.

Estimated Cancer Deaths, 2004

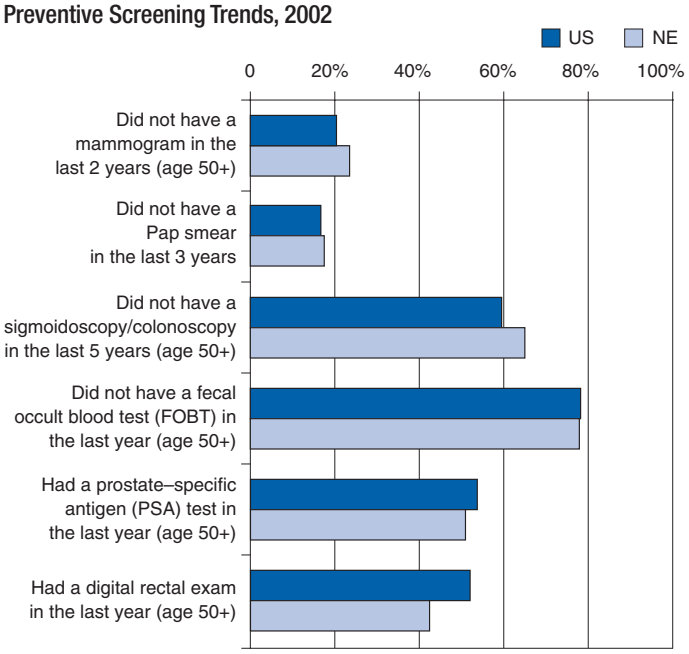
Cause of death	US	NE
All Cancers	563,700	3,410
Breast (female)	40,110	240
Colorectal	56,730	390
Lung and Bronchus	160,440	960
Prostate	29,900	190

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Nebraska's Chronic Disease Program Accomplishments

Examples of Nebraska's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races (256.3.0 per 100,000 in 1990 versus 231.2 per 100,000 in 2000).
- A 25.6% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 49.1% in 1992 to 23.5% in 2002).
- A mortality rate that was lower than the corresponding national rate for female breast cancer deaths for all races (22.2% in Nebraska versus 26.7% nationally), and a higher prevalence rate than the corresponding national rate for leisure time physical activity (79.3% in Nebraska versus 76.9% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Nebraska in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Nebraska, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Nebraska BRFSS*	$190,340
National Program of Cancer Registries *Nebraska Department of Health and Human Services*	$218,083
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *S.T.E.P.S. (Strategies Toward Environment and Policy Success) for a Healthy Heart*	$337,373
Diabetes Control Program *Be Smart About Your Heart: Control the ABCs of Diabetes* *Small Steps, Big Rewards* *Control Your Diabetes for Life*	$297,181
National Breast and Cervical Cancer Early Detection Program *Every Woman Matters*	$2,909,048
National Comprehensive Cancer Control Program *Comprehensive Cancer Control Program*	$142,683
WISEWOMAN *ABCs for Good Health* *Be a WISEWOMAN - Get Heart Smart!*	$874,580
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Nebraska Tobacco Prevention and Control Program*	$1,199,489
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$6,168,777**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Nebraska that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Obesity and Physical Activity

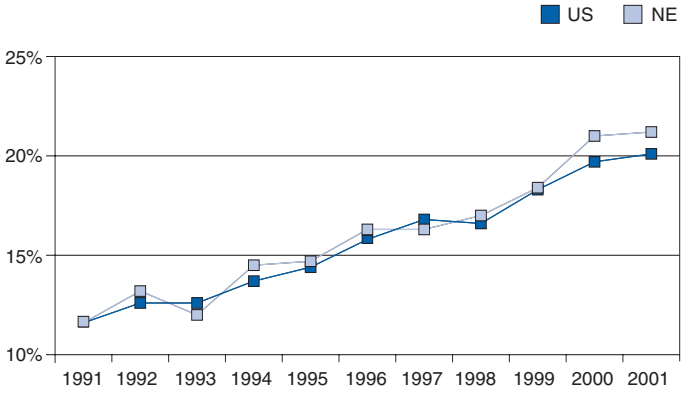
Between 1990 and 2000, obesity among Nebraska's adults increased 83%. During that time, in addition to the 21% of Nebraska adults who were obese, 38% were identified as overweight, making approximately 3 of every 5 Nebraskans—nearly 750,000 adults—either overweight or obese.

Obesity is a risk factor for four of Nebraska's six leading causes of death—heart disease, diabetes, stroke, and cancer. Obesity is also associated with conditions such as hypertension, gallbladder disease, osteoarthritis, sleep apnea, asthma, and high blood cholesterol.

The number of Nebraskans affected by cardiovascular disease, cancer, and diabetes is growing and has serious financial ramifications for the state. The total estimated costs in Nebraska for these diseases were $2.1 billion for cardiovascular disease in 2002, $972 million for cancer in 2001, and $610 million per year for diabetes in 2001.

To reverse these trends, Nebraska has adopted several initiatives to encourage physical activity. These initiatives include the *Governor's Council on Health Promotion and Physical Fitness* and a *Physical Activity Program* to encourage Nebraskans to be physically active for at least 30 minutes a day.

Obesity Trend Among NE and U.S. Adults Based on BMI*, 1990-2000



**Body Mass Index (weight in kilograms divided by height in meters squared) of 30 or greater.*

Source: BRFSS

Text and figure adapted from *Governor's Report: Promoting Better Health for Young People in Nebraska through Physical Activity* (May 2003).

Disparities in Health

The Hispanic population in Nebraska is the largest and most rapidly expanding minority group in the state. According to the U.S. Census, from 1990 to 2000, Nebraska's Hispanic population increased by 155.4% and now represents 5.5% of the state's population. Nebraska's African American population, which grew by 19.4% during the same time, represents 4.0% of the population, and the American Indian/Alaska Native (AI/AN) population, which grew by 20%, represents approximately 1% of the state's population. According to the 2000 U.S. Census, Nebraska's AI/AN population has the state's highest poverty rates (33.0%), followed by African Americans (27.4%).

A 2003 report by the Nebraska Department of Health and Human Services, Office of Minority Health and Human Services, indicates that heart disease is the leading cause of death among African Americans and AI/ANs in Nebraska. The state's AI/ANs have the highest heart disease death rate (435.7 per 100,000) and are 1.9 times as likely to die of heart disease as whites; African Americans, who have the second highest heart disease death rate (280.4 per 100,000), are 1.2 times as likely to die of heart disease as whites. The stroke death rate in Nebraska is 1.6 times higher for African Americans than for whites; for AI/ANs, the rate is 1.3 times higher than that of whites. According to CDC mortality data, in 2000, African American men in Nebraska also had a higher cancer death rate than white men (297.5 per 100,000, compared with 257.7 per 100,000).

Smoking is a risk factor for cancer, heart disease, and stroke. According to the CDCs Behavioral Risk Factor Surveillance System 2003 data for Nebraska, African Americans (22.6%) are more likely to smoke than whites (21.1%) or Hispanics (16.2%).

Other Disparities

- **Diabetes:** In Nebraska, AI/ANs are 4.9 times more likely to die of diabetes-related causes than whites. The state's diabetes-related death rate for African Americans is 2.4 times greater than the rate for whites and the rate for Hispanics is 1.6 times greater than the rate for whites.
- **Cirrhosis:** Nebraska's AI/ANs are more likely to die from liver disease than whites. Liver disease is the 4th leading cause of death among AI/ANs in Nebraska and the 16th leading cause of death for whites.
- **Obesity:** AI/ANs (50.9%), African Americans (33.4%), and Hispanics (27.2%) are more likely to be obese than whites (23.2%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

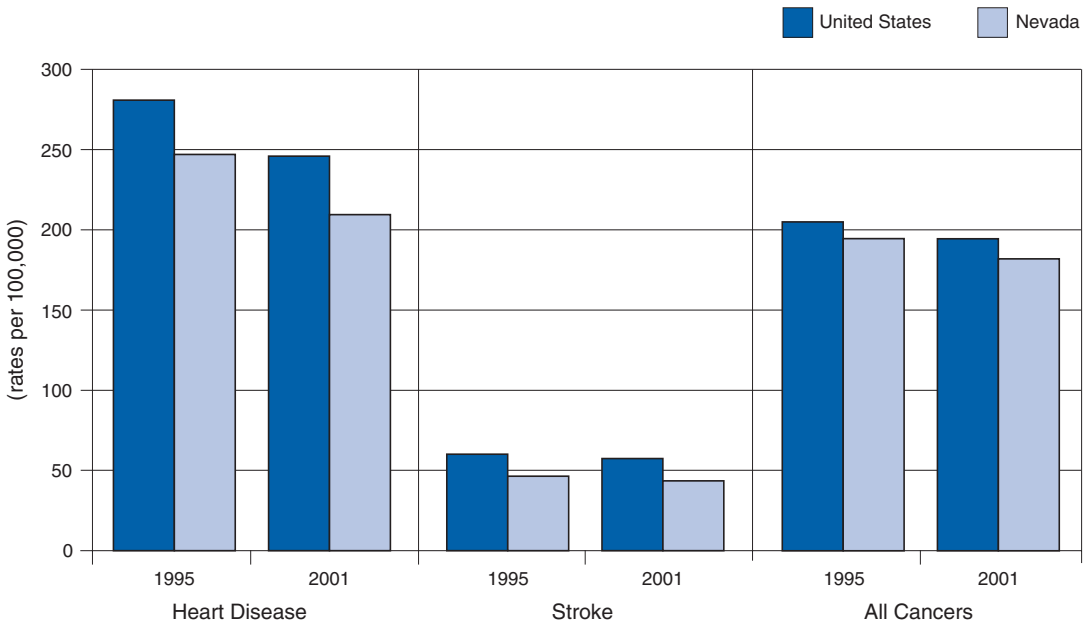
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Nevada

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Nevada, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

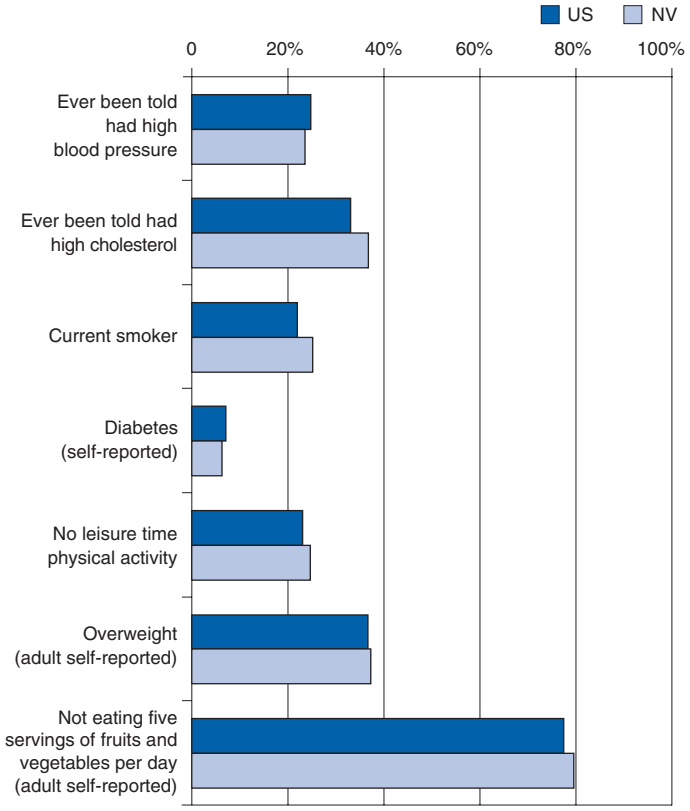
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Nevada, accounting for 4,393 deaths or approximately 27% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fourth leading cause of death, accounting for 913 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 4,530 are expected in Nevada. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 10,990 new cases that are likely to be diagnosed in Nevada.

Estimated Cancer Deaths, 2004

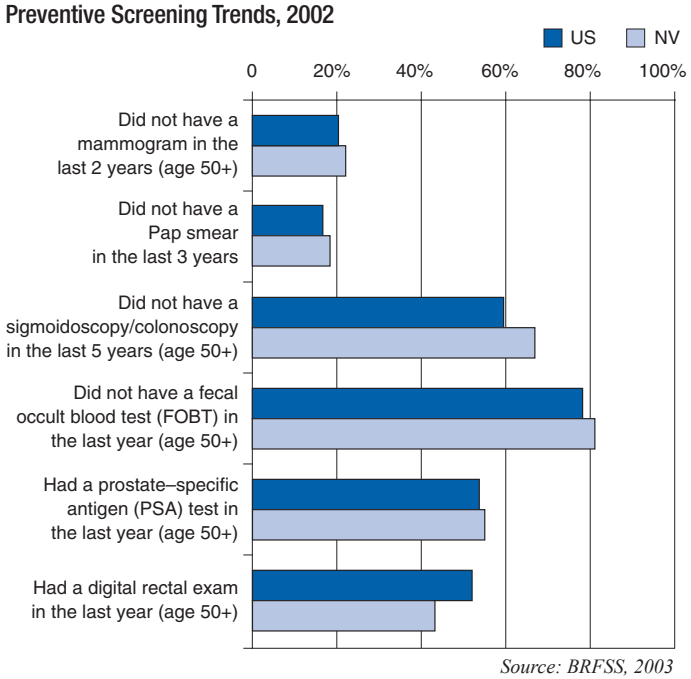
Cause of death	US	NV
All Cancers	563,700	4,530
Breast (female)	40,110	300
Colorectal	56,730	480
Lung and Bronchus	160,440	1,450
Prostate	29,900	260

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Nevada's Chronic Disease Program Accomplishments

Examples of Nevada's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decreases occurring among African American men (336.4 per 100,000 in 1990 to 318.3 per 100,000 in 2000).
- An 18.3% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 40.4% in 1992 to 22.1% in 2002).
- Lower prevalence rates than the corresponding national rates for individuals who reported having been told by a health care provider that they had high blood pressure (23.6% in Nevada versus 24.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Nevada in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Nevada, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Nevada BRFSS*	$221,376
National Program of Cancer Registries *Nevada Central Cancer Registry*	$647,325
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Nevada Diabetes Prevention and Control Program*	$457,970
National Breast and Cervical Cancer Early Detection Program *Women's Health Connection*	$2,654,762
National Comprehensive Cancer Control Program *Nevada Comprehensive Cancer Program*	$143,336
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Nevada Tobacco Prevention and Control Program*	$697,562
State Nutrition and Physical Activity/Obesity Prevention Program *(No CDC Funding)*	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
University of Nevada, Reno	$857,404
Total	**$5,679,735**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Nevada that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Diabetes

Diabetes is a common disease in Nevada. In 2002, 104,466 adults, or 6.2% of adults, in the state had diabetes that had been diagnosed; however, an estimated 430,000 people in Nevada were at increased risk for undiagnosed diabetes due to risk factors such as age, obesity, and sedentary lifestyle.

People with diabetes suffer from many diabetes-related complications. In 2002, there were 3,272 diabetes-related hospitalizations, and 267 lower extremity amputations were performed in Nevada. In addition, diabetes was listed as the leading cause of death for 319 residents of Nevada in 2001. The cost of diabetes in Nevada is staggering: in 2002, the direct cost of diabetes hospitalizations was about $82 million.

Diabetes also is more prevalent among racial and ethnic minorities. Data from CDC's 2003 Behavioral Risk Factor Surveillance System (BRFSS) indicate that more than 10.0% of African Americans in Nevada reported that they have been diagnosed with diabetes, compared with only 6.6% of whites and 5.6% of Hispanics. However, BRFSS data from 1996 to 2001 on diabetes prevention activities found that the state's African Americans were obtaining necessary care. Over 80% received a foot exam each year (the Healthy People 2010 objective is 75%) and 78.8% received an eye exam (the Healthy People 2010 objective is 75%). In contrast, the Hispanic population was less likely to obtain this care: only 70.8% of Hispanics with diabetes had at least one foot exam and only 63.3% had an eye exam.

The Nevada Diabetes Council was created in 1997 by the State of Nevada's Division of Health to address state concerns about diabetes. The council's purpose is to serve as a voluntary, nongovernmental body of concerned citizens, private and public organizations, agencies, business leaders and consumers working together to formulate a cohesive plan for reducing the burden of diabetes in Nevada and to provide guidance to the Nevada Diabetes Prevention and Control Program. The goals of the council are to increase public awareness of the impact of diabetes, improve the quality of life for those affected by diabetes, and reduce the burdens imposed by the disease.

Text adapted from *African Americans & Diabetes in Nevada* (n.d.), and *Diabetes Control Program, Information* (n.d.), available on the Nevada State Health Division Web site at http://health2k.state.nv.us/diabetes/information.htm.

Disparities in Health

Women represent just under half of Nevada's population (49.1% according to the 2000 U.S. Census). Nevada pays special attention to women in public health planning, not only because of their individual health concerns, but also because they most often act as the primary caregivers for children. Nationally, and in Nevada, heart attack, stroke, and other cardiovascular diseases are women's primary health issues**.**

Nationally, more women die from heart disease each year than from breast, ovarian, and uterine cancer combined. Lung cancer is the leading cancer killer of women, taking the lives of approximately 62,000 women each year, and colorectal cancer is the third leading cause of cancer deaths in women, killing almost 30,000 women each year.

In Nevada from 1996 to 2000, women had higher rates of heart disease (449 per 100,000) than the national rates for women (438 per 100,000). Women in Nevada in 2000 also had higher lung cancer death rates (56.1 per 100,000) than the national rates of lung cancer death for women (41.2 per 100,000).

Risk factors for heart disease and cancer include poor nutrition, physical inactivity, high blood pressure, and smoking. Data from CDC's Behavioral Risk Factor Surveillance System indicate that in 2003, women in Nevada were less likely to consume 5 or more servings of fruits and vegetables per day (24.5%), compared to the national rate for women (27.0%) and were more likely to smoke (21.3% for women in Nevada versus the national rate for women, 20.3%). Women in Nevada were more likely to report that they had been diagnosed with high blood pressure than men (24.3% for women versus 22.9% for men) and were less likely to meet the recommended guidelines for moderate physical activity than men (48.7% for women versus 52.9% for men).

Other Disparities

- **Stroke:** In Nevada, from 1991 to 1998, African Americans had a higher stroke death rate than whites (154 per 100,000 versus 117 per 100,000).
- **High Blood Pressure:** African Americans in Nevada are more likely to report that they have been diagnosed with high blood pressure than whites (35% versus 27%).
- **Cancer:** In Nevada, in 2000, African American men had higher cancer death rates than their white counterparts (318.3 per 100,000 for African American men versus 257.7 per 100,000 for white men).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

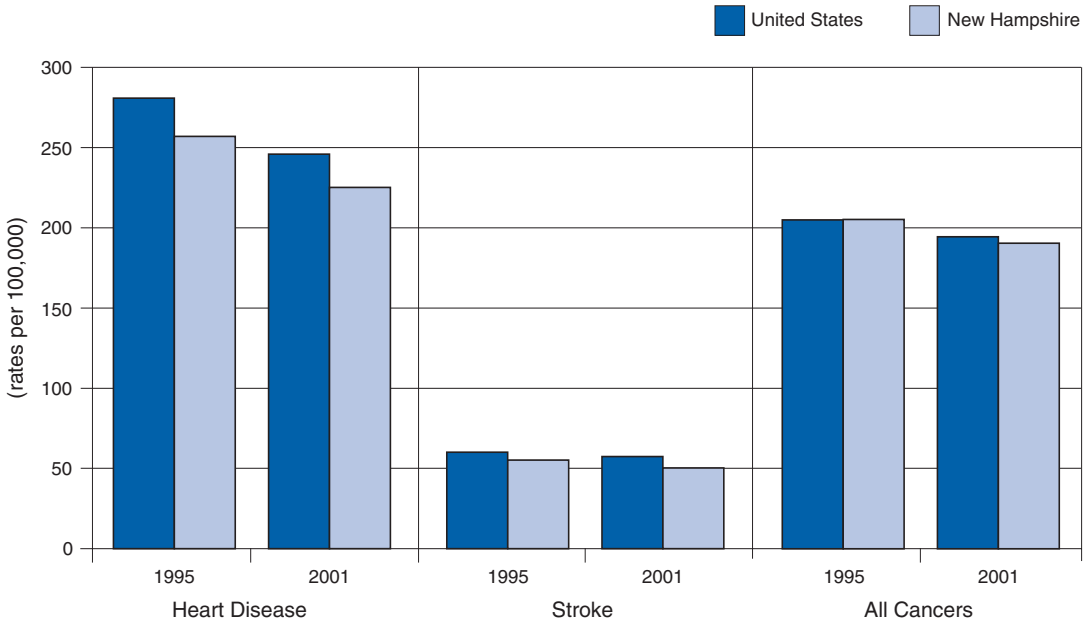
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

New Hampshire

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and New Hampshire, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

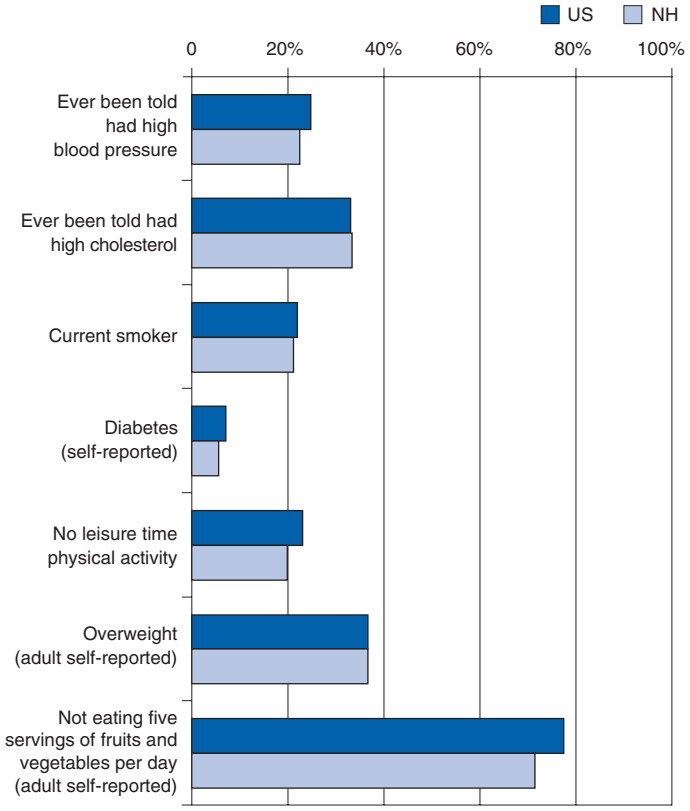
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in New Hampshire, accounting for 2,835 deaths or approximately 29% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 633 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 2,590 are expected in New Hampshire. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 6,290 new cases that are likely to be diagnosed in New Hampshire.

Estimated Cancer Deaths, 2004

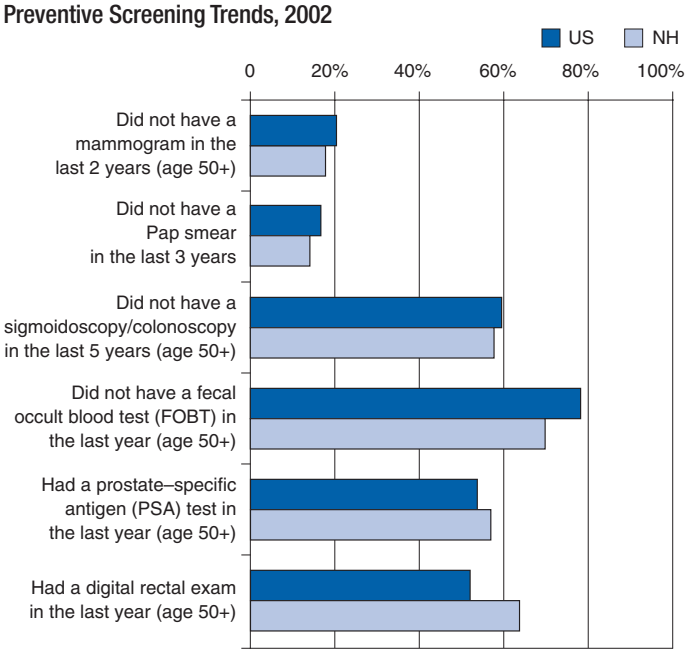
Cause of death	US	NH
All Cancers	563,700	2,590
Breast (female)	40,110	170
Colorectal	56,730	260
Lung and Bronchus	160,440	740
Prostate	29,900	130

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

New Hampshire's Chronic Disease Program Accomplishments

Examples of New Hampshire's Prevention Successes

- Statistically significant decreases in cancer deaths among white men (285.9 per 100,000 in 1990 versus 258.5 per 100,000 in 2000).
- A 12.5% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 30.3% in 1992 to 17.8% in 2002), and a statistically significant decrease in the breast cancer death rate from 39.6 per 100,000 in 1990 to 26.2 per 100,000 in 2000.
- A lower prevalence rate than the corresponding national rate for self-reported diabetes (5.6% in New Hampshire versus 7.1% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to New Hampshire in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for New Hampshire, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *New Hampshire BRFSS*	$221,900
National Program of Cancer Registries *New Hampshire State Cancer Registry*	$614,930
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *New Hampshire Diabetes Advisory Group* *Diabetes Education Program* *Diabetes Lending Library* *Professional Education Conference* *Statewide Public Information Campaign* *New Hampshire Guidelines for Diabetes Care*	$326,077
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Cancer Program*	$1,523,288
National Comprehensive Cancer Control Program *Comprehensive Cancer Control Program*	$125,794
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *New Hampshire Tobacco Prevention and Control Program*	$871,372
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$947,217
Total	**$4,630,578**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in New Hampshire that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Diabetes

According to the CDC's mortality data, diabetes, the 7th leading cause of death in New Hampshire, is also a leading cause of blindness, kidney failure, and lower limb amputation. In 2002, 6.2% of New Hampshire's population—58,000 adults—reported that they had been diagnosed with diabetes. This figure is likely to be an underestimate, because it only counts adults who have been diagnosed with the disease. It is estimated that up to one third of people with diabetes in New Hampshire are not aware that they have the disease.

The three main risk factors for diabetes are age, weight, and physical inactivity. Data from the CDC's Behavioral Risk Factor Surveillance System indicate that the percent of adults in New Hampshire who are overweight has increased from 32.8% in 1990 to 36.7% in 2003, and the percent of adults who are obese has increased from 11.1% in 1990 to 20.2% in 2003. These trends are similar to the national trends for overweight and obesity. In 2003, almost 20% of New Hampshire adults reported having no leisure time physical activity in a given month.

People with diabetes also are more likely to have risk factors for heart disease. In 2001, data collected by the New Hampshire Diabetes Education Program found that 64% of New Hampshire adults with diabetes reported a history of high blood pressure and 57% reported having high blood cholesterol. In addition, 17% of New Hampshire adults with diabetes were smokers.

In 2001, there were 15,163 hospitalizations in New Hampshire among people with diabetes. In the same year, there were 82 people with diabetes who had kidney failure and 243 people who had a lower extremity amputation.

There are measures people with diabetes can take to prevent diabetes complications, such as obtaining regular eye and foot exams. In 2002, 80% of adults with diabetes in New Hampshire reported that they had received an eye exam in the past year. During the same year, 78% of adults with diabetes reported having had at least one foot exam in the past year.

The Diabetes Education Program works to address the issue of diabetes in New Hampshire. The mission of the program is to prevent or delay the onset of diabetes-related health problems by improving quality of care in the systems through which most New Hampshire residents receive their health care. Activities are targeted primarily at community health centers and primary care providers.

Text adapted from *Diabetes in New Hampshire, Issue Brief,* June 2004.

Disparities in Health

New Hampshire is a fairly homogenous state—only 4% of its population is not white. However, almost 40% of the state's population lives in rural areas where access to and use of preventive health services is often low. A 2004 report released by the Rural Health and Primary Care Unit of the New Hampshire Department of Health and Human Services examined the differences in health between rural and urban residents. In terms of health outcomes, the overall age-adjusted mortality rate of rural residents was comparable to that of nonrural residents. The actual mortality rate, however, was higher among rural populations, primarily because these populations tend to be older. For example, the actual (non-age-adjusted) heart disease death rate in New Hampshire was 259.1 per 100,000 in rural areas and 202.5 per 100,000 in nonrural areas. Actual cancer death rates also were higher among the state's rural population (226.6 per 100,000 versus 178.9 per 100,000). The age-adjusted rate of hospitalizations for heart disease in New Hampshire was higher among the state's rural residents than among nonrural residents (1,104.5 per 100,000 versus 1,015.1 per 100,000).

In areas of chronic disease prevention, there were not many significant differences between the rural and nonrural populations, although the rural population reported slightly higher percentages of risk factors. For instance, 24.3% of rural residents reported that they had been told they have high blood pressure, compared with 22.2% of nonrural residents. The proportion of study respondents that reported having diabetes was higher in rural areas, but the difference was not statistically significant (6.8% for rural residents versus 4.6% for nonrural residents). Rural respondents also were more likely to be current smokers than nonrural respondents (25.5% versus 22.9%).

Data on health disparities among racial and ethnic minority populations in New Hampshire are limited. For instance, CDC's Behavioral Risk Factor Surveillance System data do not provide enough cases among African American and Hispanic populations to make conclusions about risk factors related to chronic disease prevention.

Other Disparities

- **Heart Disease:** From 1996 to 2000, African Americans (306 per 100,000) and Hispanics (131 per 100,000) in New Hampshire had lower heart disease death rates than whites (496 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

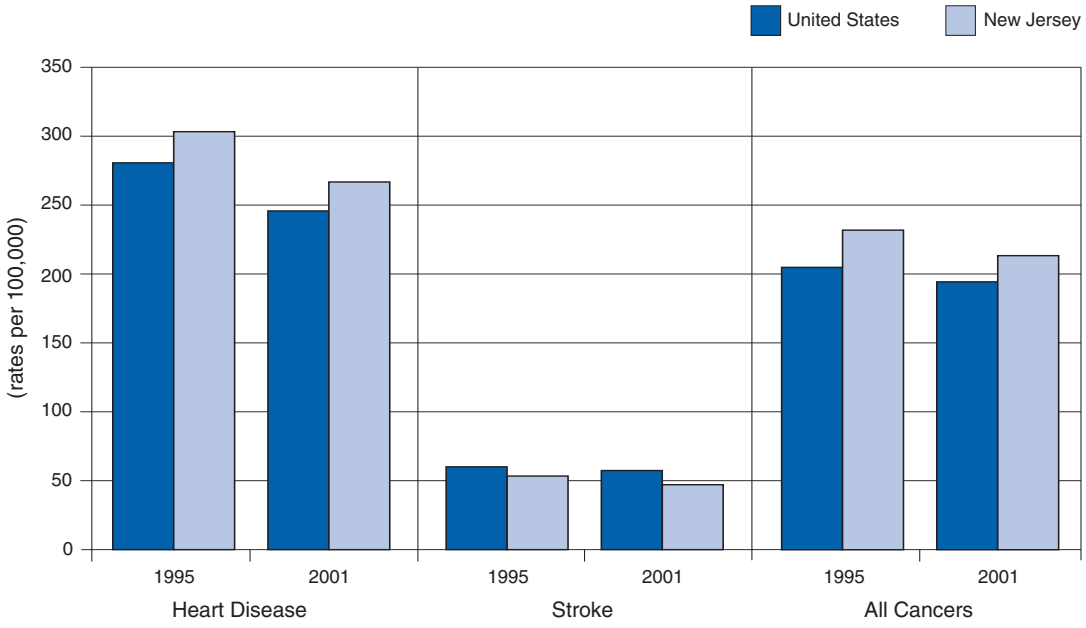
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

New Jersey

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and New Jersey, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

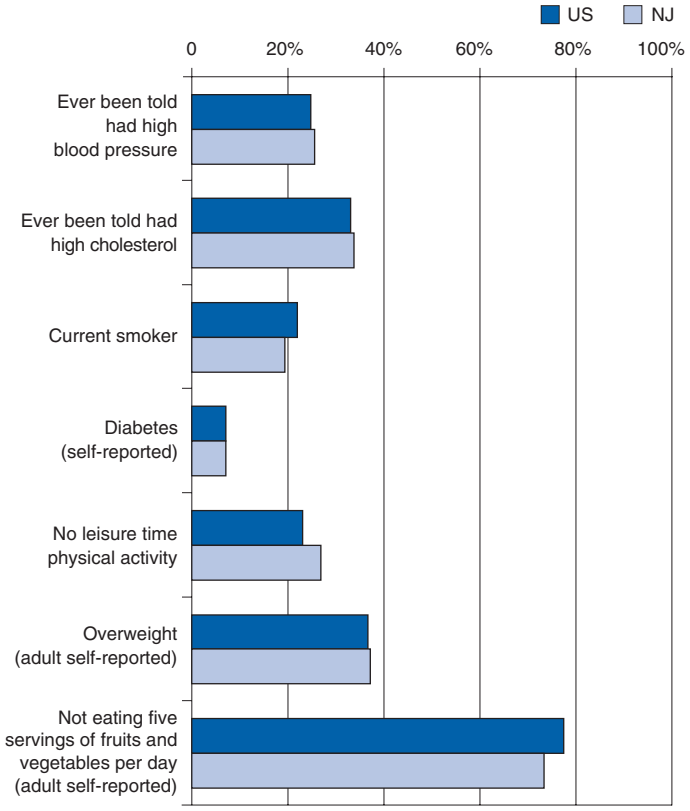
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in New Jersey, accounting for 22,704 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 4,007 deaths or approximately 5% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 18,060 are expected in New Jersey. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 43,800 new cases that are likely to be diagnosed in New Jersey.

Estimated Cancer Deaths, 2004

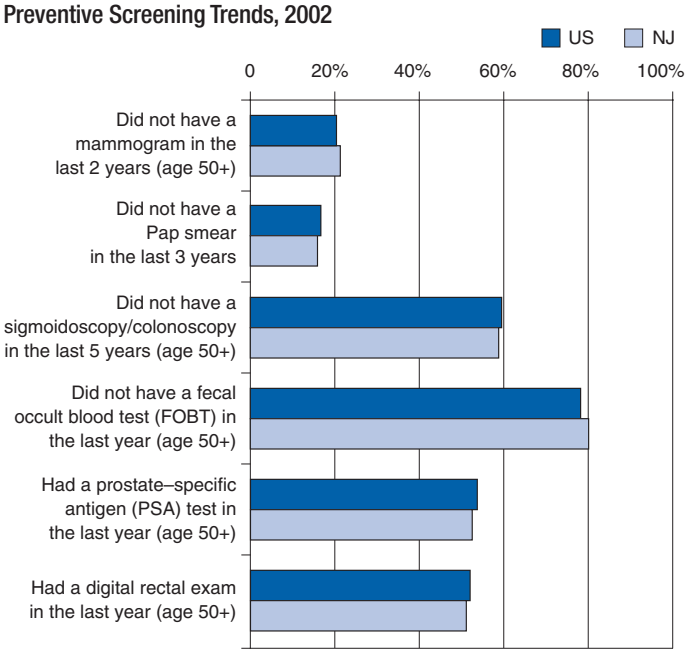
Cause of death	US	NJ
All Cancers	563,700	18,060
Breast (female)	40,110	1,480
Colorectal	56,730	1,840
Lung and Bronchus	160,440	4,720
Prostate	29,900	1,030

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

New Jersey's Chronic Disease Program Accomplishments

Examples of New Jersey's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among Hispanic men (222.9 per 100,000 in 1990 versus 161.3 per 100,000 in 2000).
- A 21.6% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 42.9% in 1992 to 21.3% in 2002).
- A lower prevalence rate than the corresponding national rate for self-reported obesity (20.1% in New Jersey versus 22.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to New Jersey in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for New Jersey, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *New Jersey BRFSS*	$191,919
National Program of Cancer Registries *New Jersey State Cancer Registry*	$1,044,697
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *New Jersey Diabetes Prevention and Control Program*	$311,548
National Breast and Cervical Cancer Early Detection Program *New Jersey Breast and Cervical Cancer Control Initiative*	$2,962,215
National Comprehensive Cancer Control Program *Office of Cancer Control and Prevention*	
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *New Jersey Tobacco Prevention and Control Program*	$1,328,173
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$5,838,552**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in New Jeresy that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Diabetes

Diabetes is a disease with a prevalence that is closely related to age and racial/ethnic background. In New Jersey, the trend toward an aging and a more diverse population places a greater percentage of the state's residents at risk for diabetes. Using data from the National Health Interview Survey and CDC's Behavioral Risk Factor Surveillance System (BRFSS), the estimated number of diabetes cases in New Jersey in 1994 was between 378,244 and 393,240. CDC data from 2002 continued to show an increase in the prevalence of diabetes. These data indicate that New Jersey had the 11th highest prevalence rate of diabetes, with 426,000 cases of diabetes reported. The highest diabetes prevalence in the state was among individuals aged 45 to 64, who represented 41% of all diabetes cases.

Data from the 2003 BRFSS indicate that just over 7% of the population in New Jersey reported that they had been diagnosed with diabetes, an increase from 4.2% in 1995. According to CDC mortality data, in 2001, New Jersey had the 12th highest age and race-adjusted diabetes death rate in the nation, 28.5 per 100,000.

There are preventive measures people with diabetes can take to prevent complications from the disease, such as obtaining regular eye and foot exams. According to BRFSS data, of the people in New Jersey who reported having diabetes between 1994 and 1996, only 68.6% reported seeing a health care professional 2 or more times during the past year. Of this same group, 85% checked their blood glucose levels and 85% reported having a foot exam at least once in the last year. In addition, over 60% reported having an eye exam in the last year.

Diabetes is also more prevalent among racial and ethnic minorities. According to CDC data from 2001, New Jersey's African American population had a higher age-adjusted diabetes death rate than whites (59.1 per 100,000 versus 25.4 per 100,000). In 2003, African Americans were almost twice as likely as whites to report that they had been diagnosed with diabetes (12.3% versus 6.6%). In addition, in 2002, Hispanics and African Americans with diabetes were more likely than whites to report that they were currently taking insulin to treat their diabetes (34.6% of Hispanics and 31.8% of African Americans, compared with 17.9% of whites).

Text adapted from *The Burden of Diabetes in New Jersey: A Surveillance Report* (1999).

Disparities in Health

According to 2000 U.S. Census data, New Jersey is a relatively diverse state, with African Americans representing 13.6% of the population, Hispanics representing 13.3% of the population, and Asian/Pacific Islanders representing 5.7% of the population.

Risk factors for a variety of chronic diseases include high blood pressure, poor nutrition, physical inactivity, overweight and obesity, and smoking. In almost all of these areas, data from the Behavioral Risk Factor Surveillance System indicate that in New Jersey, African Americans and Hispanics have higher rates of chronic disease risk factors than whites. For example, 67.1% of Hispanics and 58.8% of African Americans in New Jersey report not meeting the recommended guidelines for moderate physical activity, compared with 51.0% of whites. African Americans (26.4%) and Hispanics (22.7%) are less likely to report consuming 5 or more servings of fruits and vegetables per day, compared with whites (27.2%). Because of these two risk factors, African Americans and Hispanics are more likely to be overweight or obese than whites (68.3% of African Americans and 61.1% of Hispanics are overweight or obese, compared with 56.5% of whites).

From 1996 to 2000, African Americans in New Jersey had a higher heart disease death rate (measured per 100,000) than any other group (587 for African Americans, compared with 549 for whites, 257 for Hispanics, and 194 for Asian/Pacific Islanders). Stroke death rates (measured per 100,000) during the same period were also higher for African Americans than for other groups (141 for African Americans, compared with 97 for whites, 59 for Asian/Pacific Islanders, and 54 for Hispanics).

Other Disparities

- **Breast Cancer:** African American women are more likely to report having had a mammogram in the last 2 years than whites (95.2% versus 85.3%), but they have higher breast cancer death rates (38.0 per 100,000 for African American women versus 30.8 per 100,000 for white women).
- **Prostate Cancer:** African American men have a death rate from prostate cancer that is more than twice as the rate for white men (71.0 per 100,000 versus 26.8 per 100,000).
- **Lung Cancer:** African American men have a higher lung cancer death rate than white men (97.4 per 100,000 versus 70.0 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
Safer • Healthier • People™

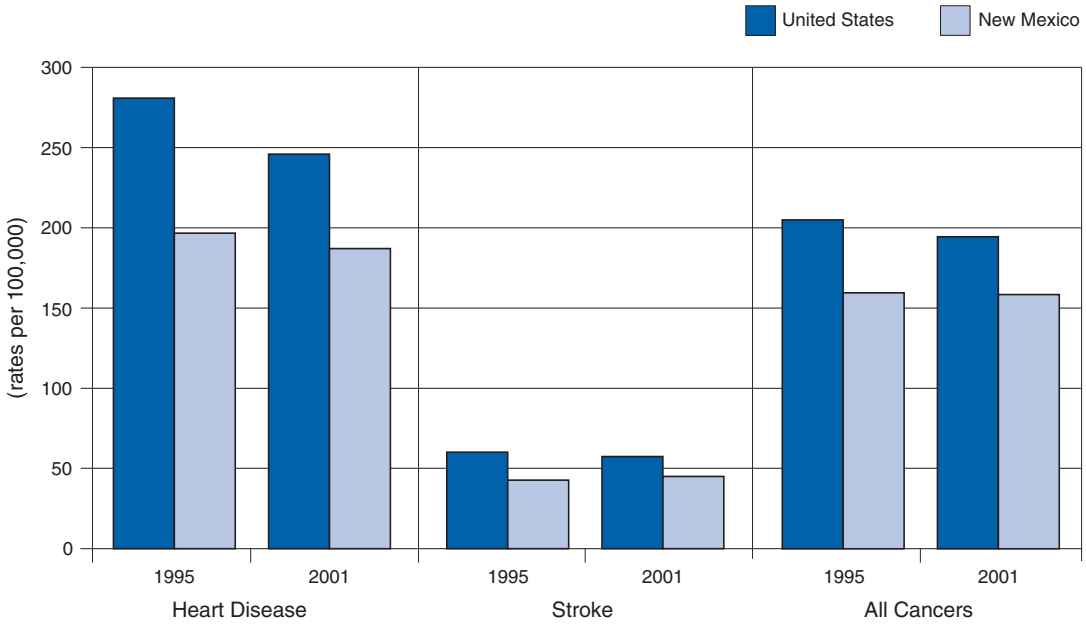
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

New Mexico

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and New Mexico, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

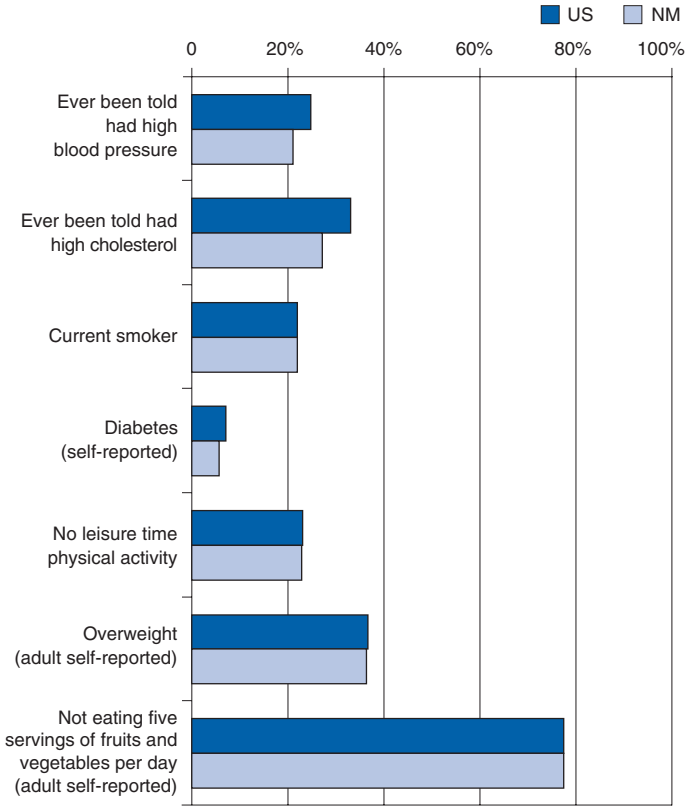
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in New Mexico, accounting for 3,423 deaths or approximately 24% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fourth leading cause of death, accounting for 824 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 3,110 are expected in New Mexico. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 7,500 new cases that are likely to be diagnosed in New Mexico.

Estimated Cancer Deaths, 2004

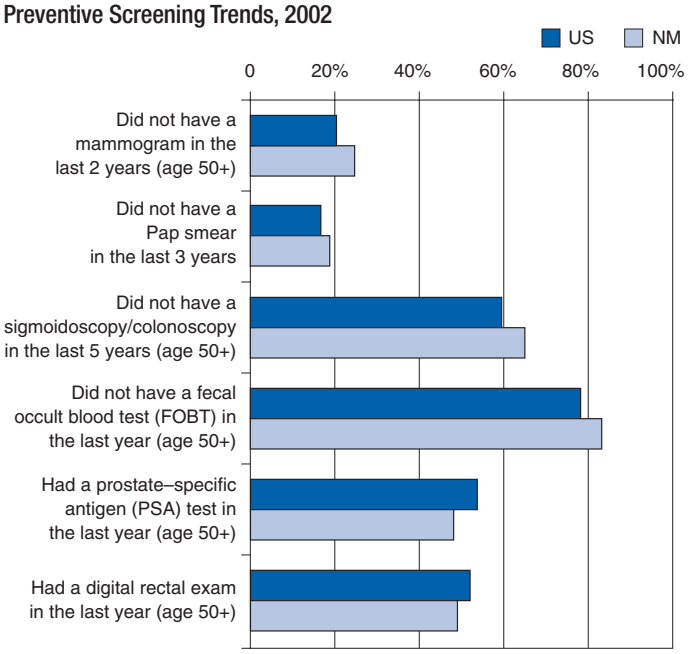
Cause of death	US	NM
All Cancers	563,700	3,110
Breast (female)	40,110	190
Colorectal	56,730	320
Lung and Bronchus	160,440	690
Prostate	29,900	220

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

New Mexico's Chronic Disease Program Accomplishments

Examples of New Mexico's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decreases occurring among white, non-Hispanic men (251.2 per 100,000 in 1990 versus 216.7 per 100,000 in 2000).
- A 9.3% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 34.0% in 1992 to 24.7% in 2002).
- Lower prevalence rates than the corresponding national rates for self-reported hypertension (21.1% in New Mexico versus 24.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to New Mexico in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for New Mexico, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *New Mexico BRFSS*	$263,310
National Program of Cancer Registries	$0
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Coordinated Approach to Child Health (CATCH)* *Project to Prevent Diabetes Among Hispanic Women* *Diabetes Advisory Council* *Bi-National US/Mexican Border Diabetes Project* *Clinic Support for Indigent Diabetes Care* *Kitchen Creations Cooking School* *Grant County Project*	$450,000
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Cancer Screening Program*	$4,016,832
National Comprehensive Cancer Control Program *Comprehensive Cancer Program*	
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *New Mexico Tobacco Prevention and Control Program*	$1,196,889
State Nutrition and Physical Activity/Obesity Prevention Program	$408,003
Racial and Ethnic Approaches to Community Health (REACH 2010) *Albuquerque Area Indian Health Board, Inc* *Hidalgo Medical Services* *National Indian Council on Aging, Inc.*	 $285,806 $905,000 $209,754
Total	**$7,735,594**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in New Mexico that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Obesity

Obesity is one of the most serious risk factors for a variety of chronic diseases, such as heart disease, diabetes, and hypertension. In New Mexico, like other states, the prevalence of obesity has been increasing. Behavioral Risk Factor Surveillance System (BRFSS) data for New Mexico show that in 1990 the rate of adult obesity (defined as a body mass index of 30 or greater) was 9.8%; by 2003, the rate had increased to 20.2%. On a positive note, adults in New Mexico also were more likely to have a healthy weight than the national average. In 2003, 43.4% of adults in New Mexico were neither overweight nor obese, compared with 40.0% of adults nationally. In addition, in 2003, African Americans (33.9%) and Hispanics (23.3%) were more likely to be obese than whites (17.3%).

Poor nutrition and physical inactivity are risk factors for obesity. BRFSS data from 2003 indicate that 48.7% of people in New Mexico, regardless of whether they were obese or not, did not meet the recommended guidelines for moderate physical activity (the corresponding national rate was 52.8%). In addition, only 22.4% of people in New Mexico reported consuming 5 or more servings of fruits and vegetables per day; the rate for Hispanics was even lower (18.1%).

According to the 2001 New Mexico Youth Risk and Resiliency Survey, 24% of high school students were overweight (defined as a body mass index between 25 and 29.9) or at risk for being overweight (defined as between the 85th and 95th percentile for body mass index). Even young children in New Mexico are increasingly prone to becoming overweight. Data from the 2002 CDC Pediatric Nutrition Surveillance System revealed that 22% of low-income children in New Mexico between the ages of 2 and 5 who participated in federally-funded nutrition programs were overweight or at risk for being overweight.

To address the problems of overweight and obesity in New Mexico, the state received CDC funding in 2003 for the Obesity, Physical Activity & Nutrition program to help support the development of a comprehensive New Mexico Plan for Obesity Control and Prevention. The goal of the program is to prevent and control obesity and related chronic diseases such as diabetes, heart disease, arthritis, and some cancers. Most recently, the program has formed an obesity Physical Activity and Nutrition Forum Planning Group and held the second annual obesity symposium for health care providers.

Youth data from the New Mexico Department of Health Web site: www.health.state.nm.us/obesity.html.

Disparities in Health

Hispanics represent approximately 13% of the U.S. population. According to the 2000 Census, this population, which increased by more than 50% from 1990 to 2000, is the fastest growing ethnic group in the United States. Data from the 2000 Census indicate that almost half (42.1%) of New Mexico's population is of Hispanic origin.

The health status of Hispanics in New Mexico mirrors the population's health status trends throughout the United States. In 2001, the leading causes of death for Hispanics, nationally, were heart disease and cancer. During this same period, 27.1% of all deaths among Hispanic men and 32.6% of deaths among Hispanic women were attributed to cardiovascular disease. According to the American Cancer Society, Hispanics in the United States experience lower incidence and death rates for all cancers combined but also experience a higher burden of certain types of cancers, such as cervical cancer.

Cancer mortality data from 2000 indicate that New Mexico's Hispanics have the lowest mortality rates for cancer; 200.9 per 100,000 for Hispanic men versus 212.6 per 100,000 for white men and 136.7 per 100,000 for Hispanic women versus 149.9 per 100,000 for white women. In addition, between 1997 and 2001, death rates for breast, cervical, and prostate cancers have been stable among Hispanics, but during the same time period, they have been decreasing among non-Hispanic whites.

Diabetes prevalence is high within the Hispanic population, both in New Mexico and nationally. Data from CDC's 2003 Behavioral Risk Factor Surveillance System (BRFSS) indicate that Hispanics in New Mexico had a higher diabetes incidence rate (6.2%) than whites (4.8%) and African Americans (3.6%).

Other Disparities

- **Physical Activity:** Hispanics have the lowest rates of physical activity (69.3%), compared with African Americans (82.6%) and whites (80.8%).
- **Cervical Cancer:** Although BRFSS data from 2002 indicate that Hispanic women in New Mexico were more likely to have had a Pap smear in the last 3 years (83.7% versus 78.8%), from 1997 to 2001, Hispanic women had a higher cervical cancer death rate than white women (3.2 per 100,000 versus 2.5 per 100,000).
- **Colorectal Cancer Screening:** In 2002, Hispanics had the lowest rates of screening for colorectal cancer—61.8% had never had a sigmoidoscopy or colonoscopy, compared with African Americans (46.2%) and whites (52.9%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

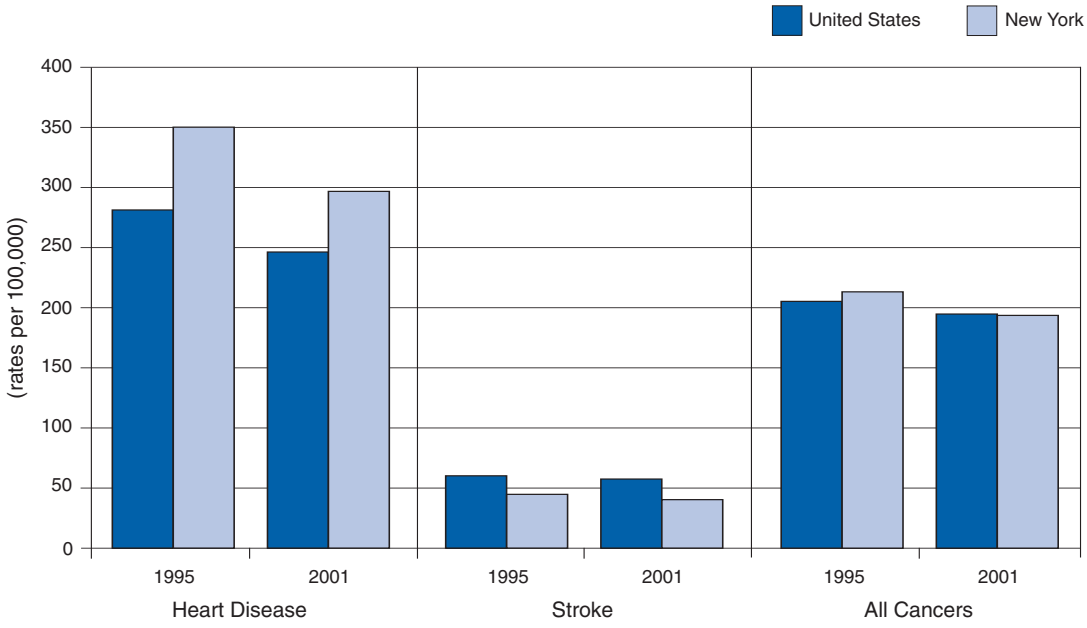
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

New York

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and New York, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

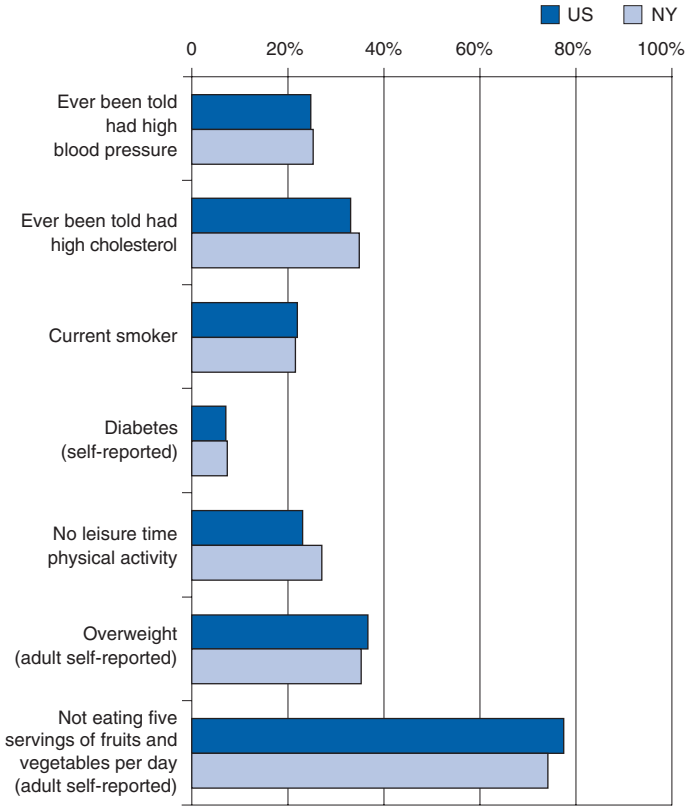
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in New York, accounting for 56,643 deaths or approximately 36% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 7,706 deaths or approximately 5% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 36,340 are expected in New York. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 88,190 new cases that are likely to be diagnosed in New York.

Estimated Cancer Deaths, 2004

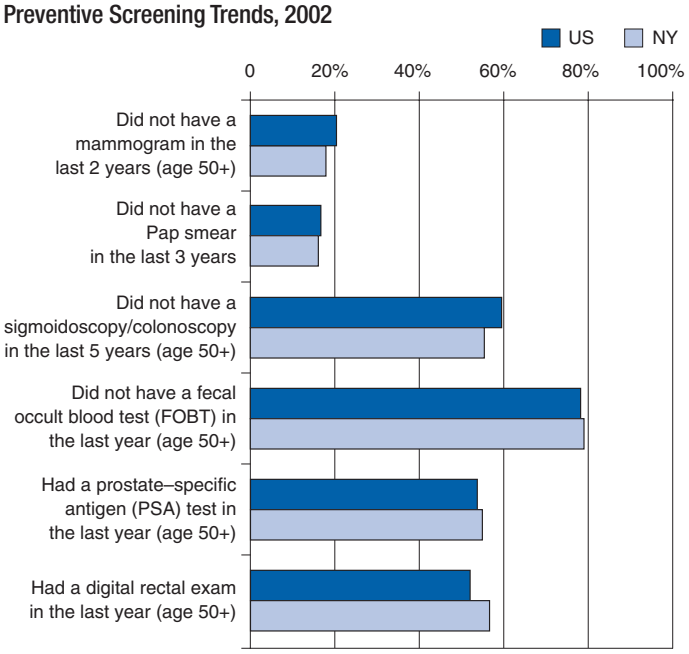
Cause of death	US	NY
All Cancers	563,700	36,340
Breast (female)	40,110	2,820
Colorectal	56,730	3,820
Lung and Bronchus	160,440	9,250
Prostate	29,900	1,880

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

New York's Chronic Disease Program Accomplishments

Examples of New York's Prevention Successes

- Statistically significant decreases in cancer deaths among African American men (345.0 per 100,000 in 1990 versus 269.2 per 100,000 in 2000) and African American women (192.1 per 100,000 in 1990 and 163.6 per 100,000 in 2000).
- A 19.3% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 37.2% in 1992 to 17.9% in 2002).
- A higher prevalence rate than the corresponding national rate for individuals who reported that they were neither overweight nor obese (43.7% in New York versus 40.0% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to New York in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for New York, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *New York BRFSS*	$178,192
National Program of Cancer Registries *New York State Cancer Registry*	$1,965,877
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *New York's Healthy Heart Program* *Cardiac Advisory Committee*	$1,340,000
Diabetes Control Program *Diabetes Control and Prevention Program*	$900,000
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Cancer Early Detection Program*	$6,784,816
National Comprehensive Cancer Control Program *Comprehensive Cancer Control Program*	
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *New York Tobacco Prevention and Control Program*	$2,086,892
State Nutrition and Physical Activity/Obesity Prevention Program *Commissioner's Physical Activity Challenge* *Eat Well Play Hard* *Healthy Heart Coalitions* *Move for Life* *Pedestrian Road Shows* *Worksite Wellness Programs* *Mini Grants for Faith Based Communities* *Healthy Heart Projects for Growing Healthy Communities* *BC Walks*	$397,222
Racial and Ethnic Approaches to Community Health (REACH 2010) *Institute for Urban Family Health* *Trustees of Columbia University*	 $924,706 $885,000
Total	**$15,462,705**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in New York that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

In 1999, cardiovascular disease (CVD) was the primary cause of death for all New Yorkers. Although CVD is a problem for all adults, in 1999 mortality was especially high for older age groups. However, disparities in CVD mortality are most obvious when examining rates of premature mortality (death before the age of 75); African Americans in New York in 1999 were almost 30% more likely than whites to die prematurely from CVD and were 48% more likely to die specifically from stroke than their white counterparts.

Many believe that CVD is a man's disease, but a greater number of women die from CVD than men. This is partly explained by the large number of women in older age groups in New York where CVD deaths are concentrated. CDC heart disease mortality data from 1996 to 2000 indicate that the heart disease death rate for women in New York was 529 per 100,000, compared with the rate for women in the United States, 438 per 100,000. These data also show that in 2001, heart disease was the leading cause of death for women age 65 and over and was the second leading cause of death for women in the 45 to 54 age group and the 55 to 64 age group.

Tobacco use, physical inactivity, poor nutrition, obesity, hypertension, high blood cholesterol, and diabetes are known and modifiable risk factors for CVD. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, the overall rate of adult smokers in New York was 22%. Almost one third of New York's adult population was estimated to be physically inactive, 74.2% were consuming fewer than 5 servings of fruits and vegetables a day, 20.9% were obese, and 7.4% were reported to have diabetes. In 2003, 25.3% of the state's adult population had high blood pressure, and 34.9% had high blood cholesterol. African Americans, those in lower-income populations, and those with lower levels of education tended to have higher rates of smoking, physical inactivity, high blood pressure, obesity, and diabetes.

Hospital expenditure data provide an indication of the direct costs of CVD in New York State. CVD hospitalization costs in 2000 were in excess of $6.8 billion. Sixty-one percent of these costs were for people under age 75. Seventy-five percent of all CVD hospitalizations were paid for with public funds. Direct and indirect expenditures for CVD in New York were estimated to be approximately $16 billion in 2002.

Text adapted from *The Burden of Cardiovascular Disease in New York: Mortality, Prevalence, Risk Factors, Costs, and Selected Populations* (no date).

Disparities in Health

Over one third of New York's population is composed of racial and ethnic minorities, predominantly African Americans (15.9%) and Hispanics (15.1%). Health disparities among these populations are evident in many risk factors, in behavioral factors, and in certain mortality rates.

In 2000, Hispanics in New York tended to have a lower death rate for cancer (179.3 for men and 105.0 for women per 100,000) than whites (235.8 per 100,000 for men and 169.0 per 100,000 for women). From 1996 to 2000, Hispanics also tended to have lower death rates for heart disease (397 per 100,000) and stroke (54 per 100,000) than whites (627 per 100,000 for heart disease and 87 per 100,000 for stroke). Despite these lower death rates, Hispanics still have higher rates for many of the risk factors for these diseases. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, Hispanics were less likely to consume 5 servings of fruits and vegetables per day than whites (22.4% versus 26.1%) and were less likely to meet the recommended guidelines for moderate physical activity than whites (34.8% versus 49.8%). When compared with whites, Hispanics also were more likely to be overweight (36.1%, compared with 34.9% of whites) or obese (22.2%, compared with 20.1% of whites).

In New York, not only do African Americans have higher rates of various risk factors than Hispanics, but they also have higher rates of cancer, heart disease, and stroke deaths. In comparison with whites, African Americans were more likely to be overweight (37.5%, compared with 34.9% of whites) or obese (29.9%, compared with 20.1% of whites). African Americans were also more likely to have been told they have high blood pressure (33.0%) than whites (26.0%) and less likely to meet the recommended guidelines for moderate physical activity (34.4%) than their white counterparts (49.8%).

Other Disparities

- **Cervical Cancer:** Although in 2002 African American women in New York were more likely to report having had a Pap smear in the last 3 years (12.7%, compared with 15.8% for white women), from 1997 to 2000 African American women had higher cervical cancer death rates (5.2 per 100,000) than white women (3.2 per 100,000).
- **Prostate Cancer:** In 2000, African American men had prostate cancer death rates more than twice that of white men (61.2 per 100,000 for African American men versus 27.2 per 100,000 for white men).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

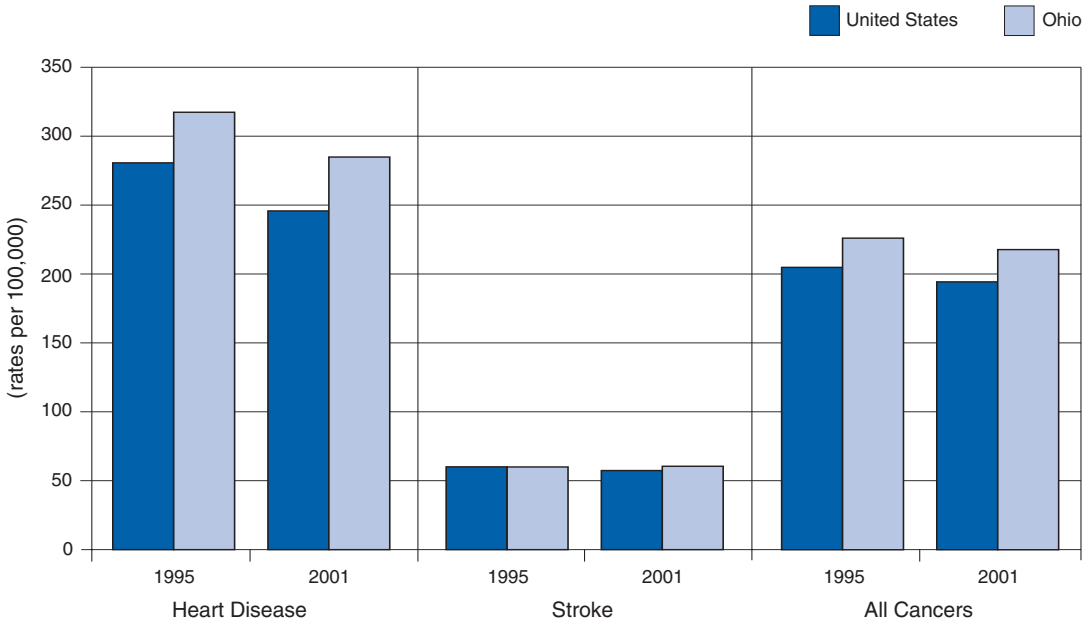
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Ohio

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Ohio, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

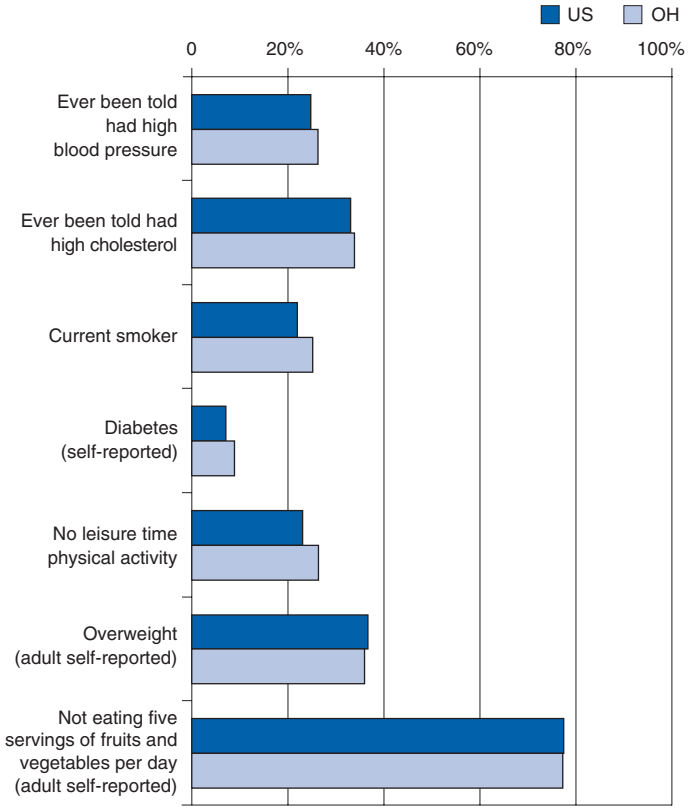
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Ohio, accounting for 32,453 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 6,891 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 24,480 are expected in Ohio. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 59,410 new cases that are likely to be diagnosed in Ohio.

Estimated Cancer Deaths, 2004

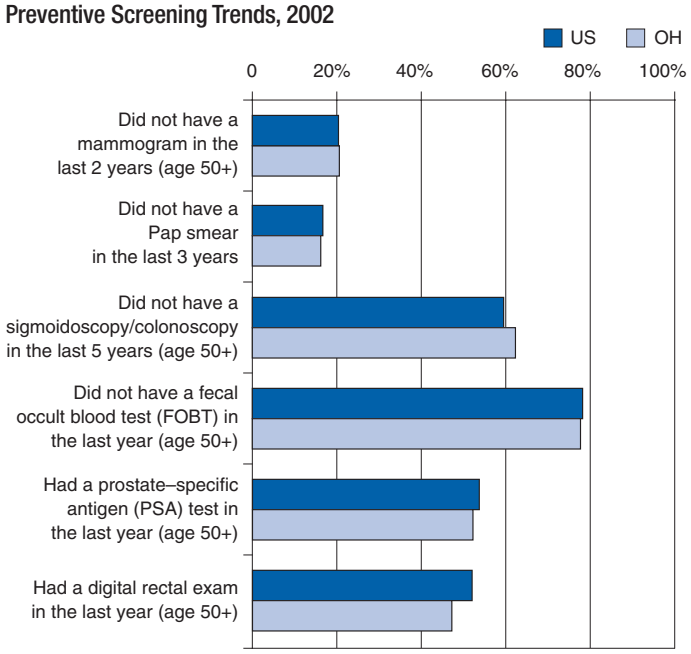
Cause of death	US	OH
All Cancers	563,700	24,480
Breast (female)	40,110	1,870
Colorectal	56,730	2,610
Lung and Bronchus	160,440	7,130
Prostate	29,900	1,120

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Ohio's Chronic Disease Program Accomplishments

Examples of Ohio's Prevention Successes

- Statistically significant decreases in cancer deaths among African American men (404.4 per 100,000 in 1990 versus 379.1 per 100,000 in 2000).
- A 22.2% decrease in the number of women in Ohio older than age 50 who reported not having a mammogram in the last 2 years (from 42.8% in 1992 to 20.6% in 2002).
- Lower prevalence rates than the corresponding national rates of self-reported weight classification as overweight (35.8% in Ohio versus 37.0% nationally), and for Hispanic women older than age 18 who reported not having had a Pap smear in the last 3 years (8.1% for Hispanic women in Ohio versus 17.3% for Hispanic women nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Ohio in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Ohio, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Ohio BRFSS*	$216,594
National Program of Cancer Registries *Ohio Cancer Incidence Surveillance System*	$1,358,521
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Great Lakes Stroke Regional Network* *Ohio Cardiovascular Health Alliance*	$356,165
Diabetes Control Program *Diabetes Prevention and Education Program*	$708,668
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Cancer Project*	$4,363,333
National Comprehensive Cancer Control Program *Ohio Cancer Program*	$300,000
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Ohio Tobacco Prevention and Control Program*	$1,395,373
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$8,698,654**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Ohio that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD), which includes heart disease and stroke, is the nation's leading killer among both men and women and affects all racial and ethnic groups. In 2001, CVD was the number one cause of death in Ohio, particularly for people aged 65 and older; however, it is the second leading cause of death among people aged 35 to 64. Both heart disease and stroke account for more deaths in every Ohio county than any other cause of death, including cancer.

In 2001, CDC mortality data indicate that the heart disease death rate in Ohio was the 13th highest in the United States and exceeded the national heart disease death rate by almost 10% (271 per 100,000 versus 246.8 per 100,000 nationally). Although the stroke rate in Ohio is close to the national average (57.4 per 100,000 in Ohio compared with 57.5 nationally), stroke still ranked as the third leading cause of death in 2001, according to CDC mortality data.

In the 1990s, CVD death rates declined for both African Americans and whites in Ohio, but the gap between the two groups did not narrow. From 1990 to 1998, overall CVD death rates in the state declined 17.2% among white men and 10.2% among white women, but decreased only about 8.7% among African American men and 8.4% among African American women.

Modifiable risk factors for CVD include obesity, cigarette smoking, high blood pressure, high blood cholesterol, and diabetes. Adults in Ohio have higher rates of each of these risk factors than the corresponding national average. Data from CDC's Behavioral Risk Factor Surveillance System indicate that in 2003, 24.9% of adults in Ohio were obese, compared with 22.8% nationally. In addition, 25.2% of adults in Ohio smoked, compared with 22.0% of adults nationally. Over 26% of adults in Ohio reported having been told that they have high blood pressure, compared with 24.8% nationally, and 33.9% reported having been told that they have high blood cholesterol, compared with 33.1% nationally. Diabetes is a chronic disease; however, it is also a risk factor for CVD. In Ohio, 8.9% of adults reported having been told that they have diabetes, compared with 7.1% nationally. In 1999, 95% of adults reported having at least one risk factor for CVD and almost 80% reported having two or more CVD risk factors.

Text adapted from *Cardiovascular Disease in Ohio 2001: A Profile of Cardiovascular Disease Mortality and Related Behavioral Risk Factors.*

Disparities in Health

Almost 20% of the US population lives in rural areas. People in these rural areas have a higher risk of heart disease, diabetes, and cancer, attributable in part to a population that is older, poorer, and less educated. More than one half of Ohio's 88 counties are considered rural, and approximately 2,807,706 people (26%) live in these areas. The majority of this population lives in the Appalachian region, which includes a 29-county area located in southeast Ohio.

Appalachia has the third highest overall death rate in the United States (25% of these deaths could have been prevented by the adoption of healthier lifestyles). The Appalachian population also has high rates of risk factors; people living in this region are the most inactive population in the United States and have the ninth highest obesity rate in the nation. The rate of cigarette smoking among the Appalachian population is 29% (the national rate is 25%). Appalachia also has the highest lung cancer death rate in the nation and the second highest cervical cancer death rate in the United States.

Heart disease death rates for Appalachian whites aged 35 to 64 were consistently higher than those for the entire United States. In 1993, heart disease death rates for Appalachian white men aged 35 to 64 were 19% higher than the national rates for white men of all ages. Similarly, in 1993, heart disease death rates for Appalachian white women aged 35-64 were 21% higher than the national rates for white women of all ages.

Other Disparities

- **Obesity:** African Americans in Ohio are more likely to be obese (36.4%) than whites (24.0%).
- **Physical Activity and Nutrition:** Hispanics (54.6%) and African Americans (57.0%) are more likely to report not meeting the recommended guidelines for moderate physical activity than whites (52.5%); however, African Americans (24.0%) are more likely to report consuming 5 or more servings of fruits and vegetables per day than whites (22.0%) or Hispanics (19.4%).
- **Cervical Cancer:** Although data from CDC's 2002 Behavioral Risk Factor Surveillance System indicate that African American women were more likely to report having had a Pap smear in the last 3 years (94.6%) than white women (87.3%), African American women had cervical cancer death rates in 2001 almost twice as high as white women (5.0 per 100,000, compared with 2.6 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

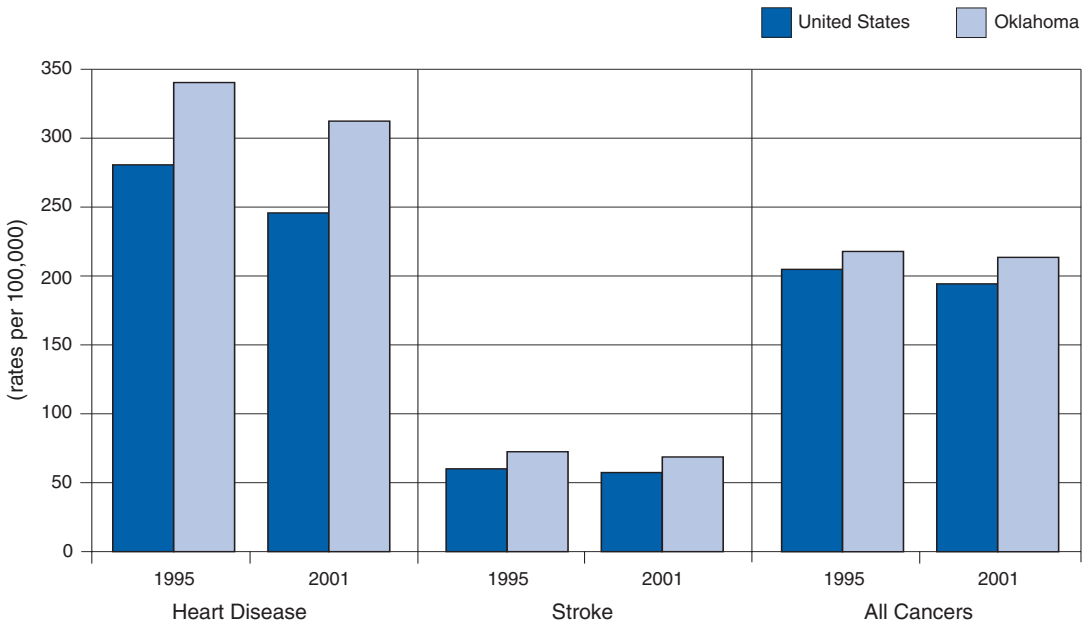
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Oklahoma

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Oklahoma, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

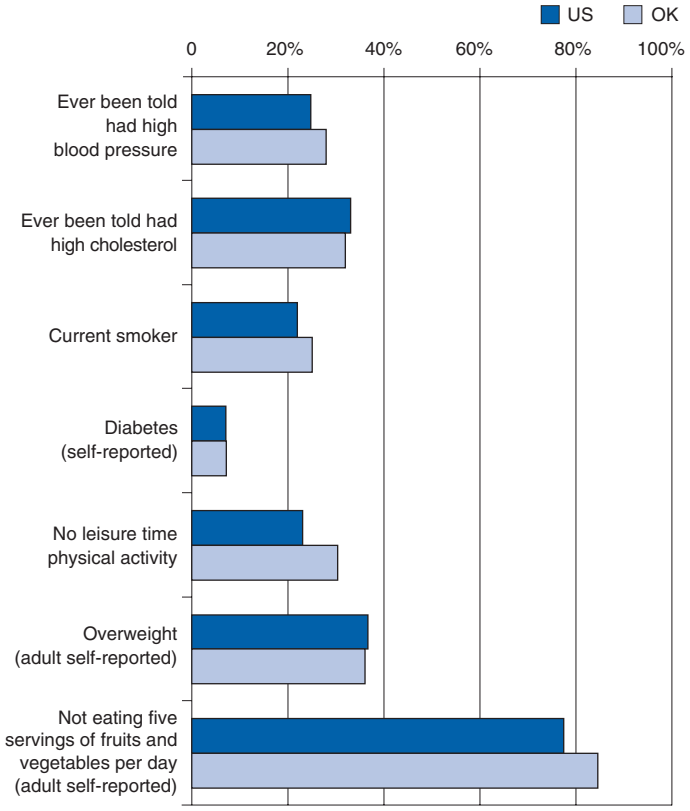
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Oklahoma, accounting for 10,840 deaths or approximately 31% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,384 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 7,640 are expected in Oklahoma. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 18,540 new cases that are likely to be diagnosed in Oklahoma.

Estimated Cancer Deaths, 2004

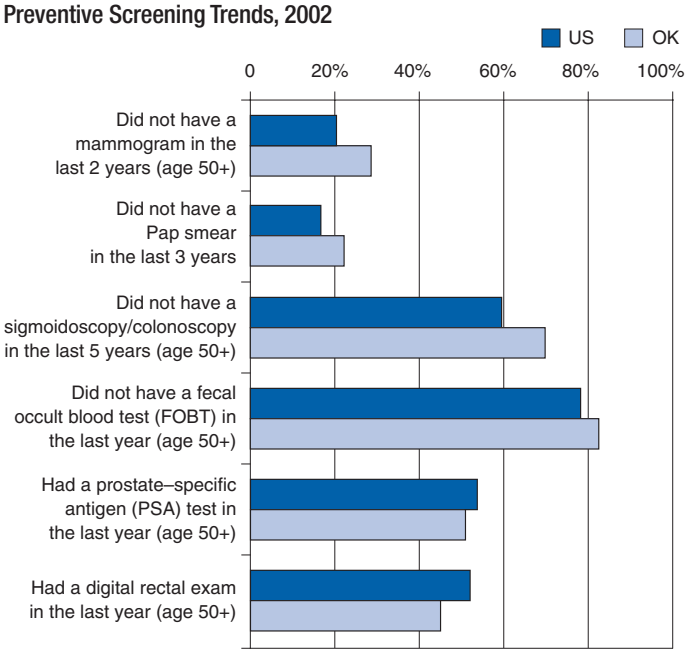
Cause of death	US	OK
All Cancers	563,700	7,640
Breast (female)	40,110	540
Colorectal	56,730	800
Lung and Bronchus	160,440	2,370
Prostate	29,900	340

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Oklahoma's Chronic Disease Program Accomplishments

Examples of Oklahoma's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among white men (278.7 per 100,000 in 1990 versus 263.5 per 100,000 in 2000).
- A 16.7% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 45.3% in 1992 to 28.6% in 2002).
- A lower mortality rate than the corresponding national rate for female breast cancer among women of all races (25.6% in Oklahoma versus 26.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Oklahoma in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Oklahoma, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Oklahoma BRFSS*	$141,259
National Program of Cancer Registries *Oklahoma Central Cancer Registry*	$296,739
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Worksite Risk Reduction and Disease Management Pilot Project*	$300,000
Diabetes Control Program *Diabetes Control and Prevention Program*	$248,580
National Breast and Cervical Cancer Early Detection Program *Oklahoma's Breast and Cervical Cancer Early Detection Program*	$1,546,000
National Comprehensive Cancer Control Program *Oklahoma Comprehensive Cancer Control Program*	$129,118
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Oklahoma Tobacco Prevention and Control Program*	$1,408,160
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010) *Association of American Indian Physicians* *Oklahoma State Department of Health* *The Choctaw Nation of Oklahoma*	 $283,725 $905,008 $270,285
Total	**$5,528,874**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Oklahoma that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD), primarily heart disease and stroke, are the nation's leading causes of death among both men and women of all racial and ethnic groups.

2001 CDC mortality data indicate that Oklahoma had the third highest heart disease death rate and the 10th highest stroke death rate in the nation. From 1996 to 2000, Oklahoma had heart disease death rates that were higher than the national average (629 per 100,000 versus 536 per 100,000). Oklahoma also had higher stroke death rates than the national average (131 per 100,000 versus 121 per 100,000).

CVD is easily prevented by modifying behavioral risk factors such as nutrition, high blood pressure, physical inactivity, and smoking. Oklahoma's residents, however, have high rates for all of these risk factors. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, only 15.4% of Oklahomans reported consuming 5 or more servings of fruits and vegetables per day, compared to 22.5% nationally. Almost 60% of people in the state did not meet the recommended guidelines for moderate physical activity, compared to 52.5% nationally, and the percentage of smokers in Oklahoma was higher than the national rate (25.1% versus 22.0%). In addition, 28.0% of Oklahomans reported having been told that they had high blood pressure, compared to the national rate of 24.8%.

Disparities also exist for CVD death rates among racial and ethnic minorities and women. African Americans in Oklahoma have the highest heart disease and stroke rates (741 per 100,000 and 165 per 100,000, respectively); these rates are also higher than the national death rates for these diseases among African Americans (662 per 100,000 for heart disease and 166 per 100,000 for stroke). Women in Oklahoma also have higher than average CVD death rates, with heart disease death rates of 513 per 100,000 (versus 438 per 100,000 nationally) and stroke death rates of 128 per 100,000 (versus 117 per 100,000 nationally).

The Oklahoma State Department of Health began receiving funds from CDC in 2000 to support a state heart disease and stroke prevention program, the Oklahoma Heart Disease and Stroke Health Program. One of the program's achievements has been to provide funding to rural communities to purchase automated external defibrillators (AEDs) and to train potential users. The program is also addressing health systems improvements for stroke and heart attack response and care in selected rural areas.

Text adapted from *Cardiovascular Disease in Oklahoma: An Overview* (2001).

Disparities in Health

Across the country, American Indians and Alaska Natives (AI/ANs) comprise more than 500 federally recognized tribes and represent 1% of the U.S. population. Compared with other racial and ethnic minorities, AI/ANs have the highest poverty rate, 26%, which is 2 times the national rate. In addition to high poverty levels, AI/ANs are experiencing growing health disparities. Much of the data on health disparities among the AI/AN population are from the Indian Health Service (IHS). The Oklahoma IHS office is the agency's largest regional office and provides health care to over 281,000 AI/ANs throughout Oklahoma, northeastern Kansas, and Eagle Pass, Texas.

Preventable diseases—heart disease, cancer, accidents, diabetes, and cerebrovascular diseases—are the leading causes of death among AI/ANs in the IHS Oklahoma area. These diseases accounted for the top five causes of death among AI/ANs between 1994 and 1996. Heart disease represented almost 30% of these deaths. From 1996 to 2000, heart disease death rates among AI/ANs in Oklahoma were above the national average (402 per 100,000 versus 352 per 100,000). Cancer accounted for nearly 20% of the deaths in the Oklahoma area during the same period.

Throughout the nation, IHS data indicate that diabetes is the second leading cause of outpatient visits and the eighth leading cause of death. In the Oklahoma City area, from 1994 to 1996, IHS data indicate that diabetes was the 5th leading cause of death for AI/ANs, with a mortality rate of 24.6 per 1,000 and accounted for approximately 6% of all deaths among AI/ANs.

Other Disparities

- **Breast Cancer:** The percentage of African American women in Oklahoma who have not had a mammogram in the last 2 years (32.0%) is higher than the percentage for white women (28.9%), and more African American women die from breast cancer (35 per 100,000) than white women (25.8 per 100,000).
- **Obesity:** Hispanics and African Americans in Oklahoma are more likely to be obese than whites: 32.6% of Hispanics are obese compared with 28.3% of African Americans, and 22.6% of whites.
- **High Blood Pressure:** African Americans in Oklahoma are more likely to report having been told that they have high blood pressure than whites (34.2% of African Americans have high blood pressure, compared with 28.5% of whites).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

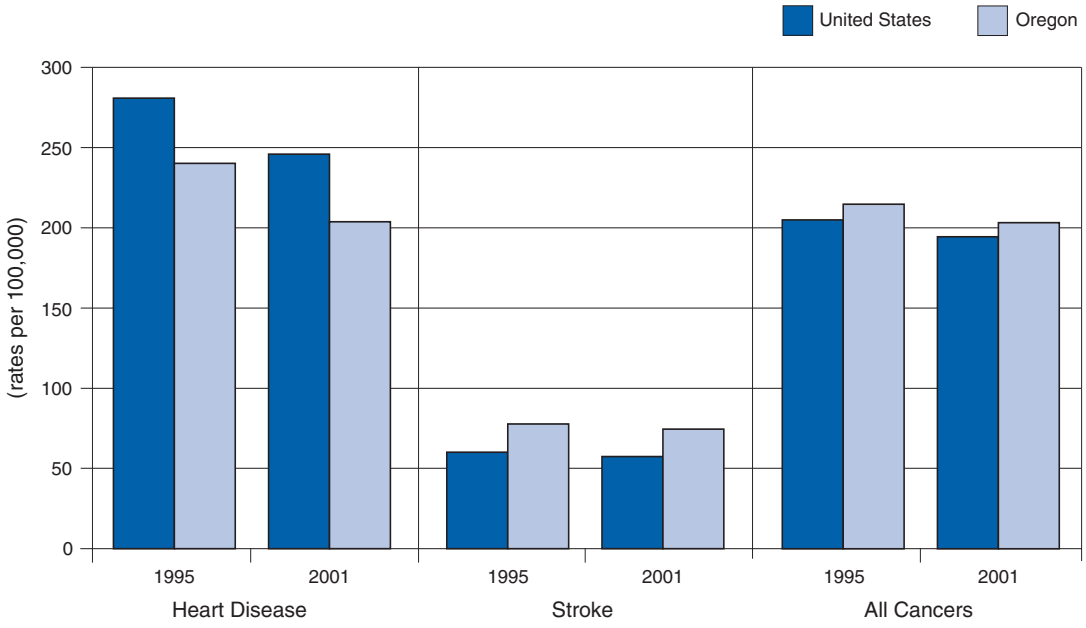
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Oregon

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Oregon, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

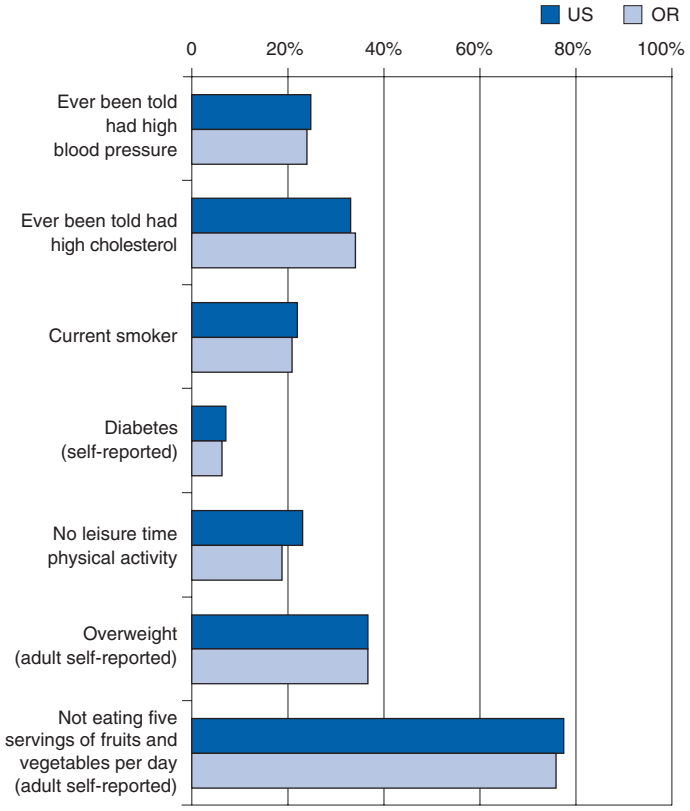
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Oregon, accounting for 7,075 deaths or approximately 23% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,558 deaths or approximately 9% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 7,120 are expected in Oregon. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 17,280 new cases that are likely to be diagnosed in Oregon.

Estimated Cancer Deaths, 2004

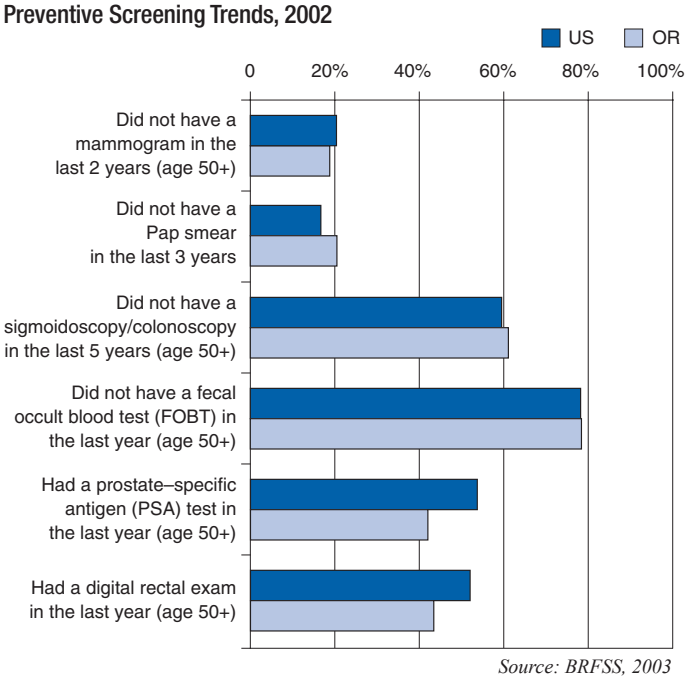
Cause of death	US	OR
All Cancers	563,700	7,120
Breast (female)	40,110	510
Colorectal	56,730	690
Lung and Bronchus	160,440	1,980
Prostate	29,900	380

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Oregon's Chronic Disease Program Accomplishments

Examples of Oregon's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, from 274.0 per 100,000 in 1990 to 265.9 per 100,000 in 2000.
- An 11.8% decrease in the number of women older than age 50 who reported not having a mammogram in the last 2 years (from 30.6% in 1992 to 18.8% in 2002).
- A higher prevalence rate than the corresponding national rate for individuals who reported that they were neither overweight nor obese (41.7% in Oregon versus 40.0% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Oregon in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Oregon, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Oregon BRFSS*	$257,723
National Program of Cancer Registries *Oregon State Cancer Registry*	$782,347
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Providence St. Vincent Medical Center (Paul Coverdell Stroke Registry)*	$299,919 $699,031
Diabetes Control Program *Oregon Diabetes Control and Prevention Program*	$809,770
National Breast and Cervical Cancer Early Detection Program *Oregon Breast and Cervical Cancer Program*	$3,407,028
National Comprehensive Cancer Control Program *Health Promotion and Chronic Disease Prevention Program*	$135,317
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Oregon Tobacco Prevention and Control Program*	$1,408,160
State Nutrition and Physical Activity/Obesity Prevention Program *Shape Up Across Oregon* *Walk to School Day*	$449,471
Racial and Ethnic Approaches to Community Health (REACH 2010) *African American Health Coalition, Inc.*	$903,920
Total	**$9,152,686**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Oregon that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

In 2001, cardiovascular disease (CVD) was the leading cause of death in Oregon, accounting for over one third of all deaths. CVD is also a major cause of costly hospitalization and disability. In 2001, there were 50,423 CVD-related hospitalizations in the Oregon; of these hospitalizations, 34,306 were for heart disease and 8,676 were for stroke. These hospitalizations resulted in hospital charges of $652 million (approximately $549 million for heart disease and $103 million for stroke). The average charge for a CVD-associated hospitalization was $15,500; heart disease hospitalizations averaged $15,888, and the average stroke-associated hospitalization was $11,851.

In 2001, the age-adjusted death rates for CVD in Oregon were 42% higher for men (350.5 per 100,000) than women (249.5 per 100,000), but in absolute numbers, more deaths occurred among women (5,592) than among men (5,031). In addition, in Oregon, premature deaths (deaths that occurred in persons younger than age 65) from heart disease were highest among men (21%, compared with 9% for women). Premature deaths from stroke were also highest among men (11%, compared with 6% for women). In addition to the gender disparity in the risk associated with CVD death rates, there is also a racial disparity. African Americans in Oregon have the highest risk for death due to heart disease and stroke; from 1996 to 2000, African Americans in the state had a heart disease death rate of 495 per 100,000, compared with 421 per 100,000 for their white counterparts, although this death rate was lower than the national heart disease death rate for African Americans (662 per 100,000). From 1991 to 1998, the stroke death rate for African Americans was higher than the rate for whites (209 per 100,000 for African Americans compared with 145 per 100,000 for whites). Unlike heart disease, African Americans in Oregon had a higher stroke death rate than the national stroke death rate for African Americans (209 per 100,000 versus 166 per 100,000).

In 2003, Oregon launched its Heart Disease & Stroke Prevention Program, which is funded through a cooperative agreement with the Centers for Disease Control and Prevention. The purpose of the program is to improve cardiovascular health statewide through changes in both the policy and the community environments.

Text adapted from the *Oregon Heart Disease and Stroke Report* (2001).

Disparities in Health

People of Hispanic origin represent approximately 13% of the U.S. population. According to the 2000 Census, the Hispanic population, which increased by more than 50% from 1990 to 2000, is the fastest growing ethnic group in the United States. Hispanics are Oregon's largest minority population, making up approximately 8% of the state's population. In addition to these residents, the state also has approximately 128,000 migrant and seasonal farm workers.

Compared with other racial and ethnic groups across the state, Hispanics in Oregon have the lowest death rates for heart disease and stroke. From 1996 to 2000, the heart disease death rate for Hispanics in Oregon was 190 per 100,000, compared with 421 per 100,000 for whites, 495 per 100,000 for African Americans, 347 per 100,000 for American Indians/Alaska Natives and 239 per 100,000 for Asian/Pacific Islanders. From 1991 to 1998, the stroke death rate for Hispanics was 75 per 100,000, compared with 129 per 100,000 for Asian/Pacific Islanders, 209 per 100,000 for African Americans, and 145 per 100,000 for whites.

Although Hispanics have low rates of chronic disease compared with whites and other racial and ethnic minorities, they have high rates of risk factors for chronic diseases, such as inactivity, poor nutrition and overweight. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, Hispanics in Oregon had high levels of physical inactivity (37.8%, compared with 16.4% of whites) and low fruit and vegetable consumption (80.9% of Hispanics consumed less than 5 fruits and vegetables per day, compared with 75.7% of whites). Oregon's Hispanics also reported high levels of overweight; in 2003, 42.9% of Hispanics were overweight, compared with 36.2% of whites.

Other Disparities

- **Breast Cancer:** Although the incidence of breast cancer among African American women was lower than among white women in Oregon from 1998 to 2000 (125.2 per 100,000, compared with 147.8 per 100,000), African American women had a higher breast cancer death rate in 2000 (32.2 per 100,000, compared with 26.4 per 100,000).
- **Prostate Cancer:** In Oregon between 1997 and 2001, African American men had a higher prostate cancer death rate than white men (56.7 per 100,000 compared with 32.5 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

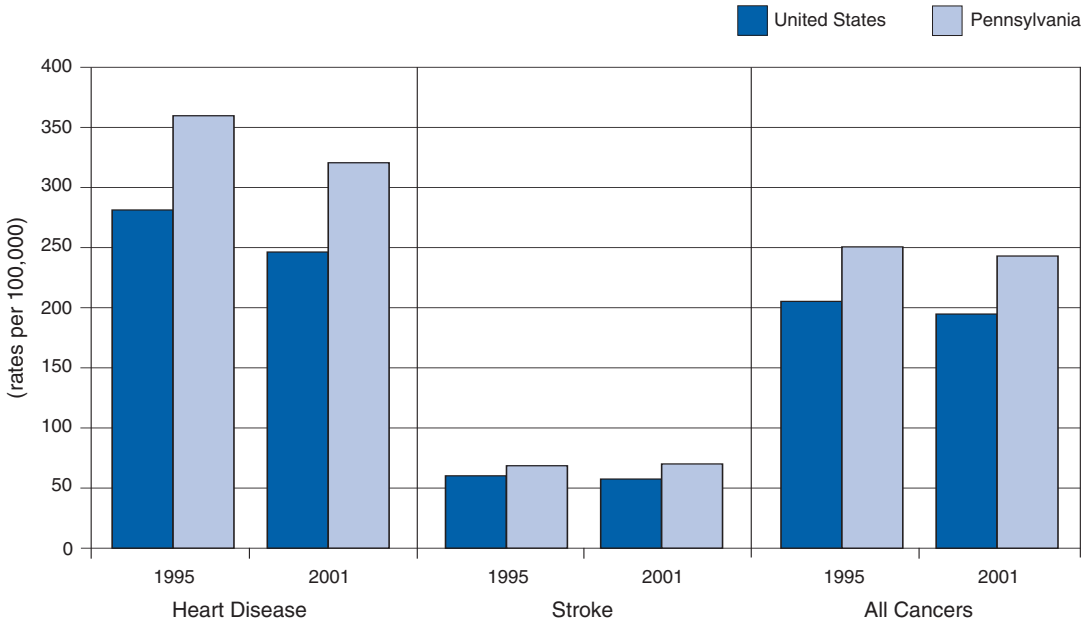
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Pennsylvania

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Pennsylvania, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

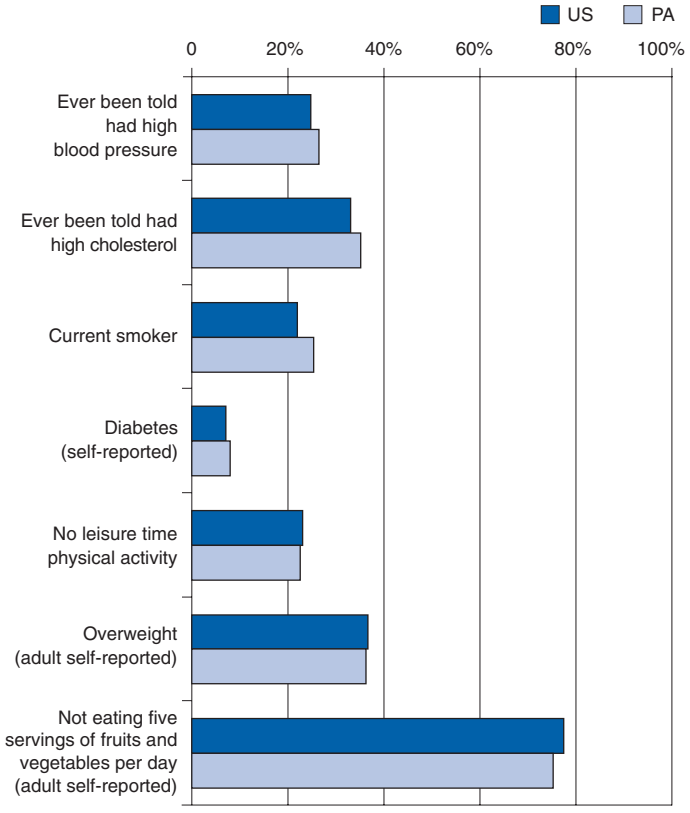
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Pennsylvania, accounting for 38,291 deaths or approximately 30% of the state's deaths in 2002 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 8,442 deaths or approximately 7% of the state's deaths in 2002.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 29,910 are expected in Pennsylvania. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 72,590 new cases that are likely to be diagnosed in Pennsylvania.

Estimated Cancer Deaths, 2004

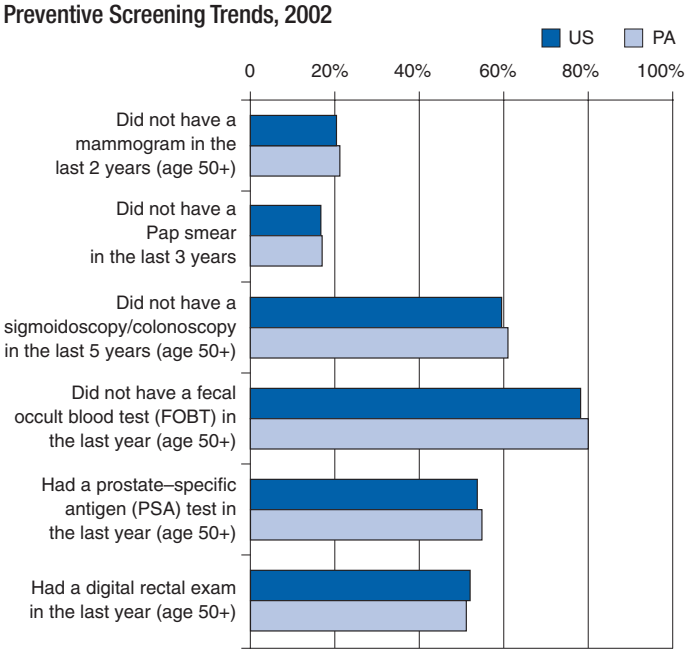
Cause of death	US	PA
All Cancers	563,700	29,910
Breast (female)	40,110	2,080
Colorectal	56,730	3,310
Lung and Bronchus	160,440	7,900
Prostate	29,900	1,560

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Pennsylvania's Chronic Disease Program Accomplishments

Examples of Pennsylvania's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decrease occurring among African American men (433.9 per 100,000 in 1990 versus 365.8 per 100,000 in 2000).
- A 17.1% decrease in the number of women older than age 50 who reported not having a mammogram in the last 2 years (from 38.2% in 1992 to 21.1% in 2002).
- A lower prevalence rate than the corresponding national rate for Hispanic women older than age 18 who reported not having had a Pap smear in the last 3 years (16.0% in Pennsylvania versus 17.3% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Pennsylvania in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Pennsylvania, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Pennsylvania BRFSS*	$97,342
National Program of Cancer Registries *Pennsylvania Cancer Registry*	$431,689
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *The Taking Control Program* *Living Well With Diabetes*	$557,967
National Breast and Cervical Cancer Early Detection Program *Healthy Woman Project*	$2,020,290
National Comprehensive Cancer Control Program *Pennsylvania Cancer Control Program*	$149,722
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Pennsylvania Tobacco Prevention and Control Program*	$1,087,980
State Nutrition and Physical Activity/Obesity Prevention Program *Governor's Keystone Ride* *Great Pennsylvania Workout* *Keystone Athletes Mentoring Pennsylvanians (KAMP)* *Keystone State Games, Inc.* *KidsWalk to School* *Pennsylvania Senior Games* *OPANAC - Osteoporosis, Physical Activity, Nutrition and Cardiovascular Programs* *Safe Routes to School/Walking School Bus*	$649,262
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$4,994,252**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Pennsylvania that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD), including heart disease and stroke, is the leading cause of death in Pennsylvania, accounting for about 34% of all deaths in the state. From 1996 to 2001, the state's heart disease death rate was 567 per 100,000, which was higher than the national rate of 536 per 100,000. The stroke death rate, however, was lower than the national rate. From 1991 to 1998 the stroke rate in Pennsylvania was 116 per 100,000, compared with the national rate of 121 per 100,000.

Risk factors for CVD include poor nutrition, physical inactivity, overweight and obesity, and high blood pressure. Data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) indicate that in 2003 only one quarter (24.7%) of adults in Pennsylvania reported consuming 5 or more servings of fruits and vegetables per day. In addition, 22.6% did not participate in any leisure time physical activity during the past month. As a result of these behaviors, approximately 60% of Pennsylvania adults were overweight (36.3%) or obese (23.8%). Over one quarter (26.5%) of adults in Pennsylvania reported having been told that they have high blood pressure.

Diabetes also is a risk factor for CVD and is the sixth leading cause of death in Pennsylvania. CDC mortality data from 2001 indicate that the diabetes death rate in the state (25.7 per 100,000) was higher than the national diabetes death rate (25.2 per 100,000). In 2003, 8.0% of Pennsylvanians reported having been told by a doctor that they have diabetes, compared with the national rate of 7.1%.

In order to address the risk factors associated with heart disease and stroke, the Pennsylvania Nutrition and Physical Activity Plan (PaNPA Plan) was developed by the Pennsylvania Department of Health and its stakeholders. Pennsylvania Advocates for Nutrition and Activity is funded by the Department of Health to improve nutrition and physical activity statewide through policy and environment interventions. The mission of the PaNPA Plan is to create a Pennsylvania where individuals, communities and public and private entities share the responsibility for developing an environment to support and promote active lifestyles and access to healthy food choices. The plan presents strategies and activities necessary for community-based interventions to increase healthy eating and physical activity opportunities.

Text adapted from *State Health Improvement Plan Special Report on the Health Status of Minorities in Pennsylvania* (2002).

Disparities in Health

African Americans, who comprise approximately 12% of the U.S. population—roughly 35 million people—experience disproportionate health disparities. They have higher stroke death rates than other groups as well as a higher prevalence of the risk factors for chronic diseases. They suffer higher death rates for cancer and heart disease as well. In addition, approximately 2.7 million African Americans in the United States have diabetes; however, one third of them do not know it. African American communities throughout the United States experience hardships due to these health disparities.

In Pennsylvania, African Americans constitute about 9% of the state's population. Heart disease is the leading cause of death among African Americans in the state. The heart disease death rate for African Americans in Pennsylvania is 298.5 per 100,000; the rate for their white counterparts is 255.1 per 100,000. According to CDC's 2003 Behavioral Risk Factor Surveillance (BRFSS) data, African Americans also had higher prevalence rates for high blood pressure than whites or Hispanics in the state (33.1% of African Americans in Pennsylvania reported having been told they had high blood pressure versus 26.1% of whites and 24.2% of Hispanics).

Data from the 2003 BRFSS also indicate that in Pennsylvania, the rate of overweight and obesity was highest among African Americans (76.4%). The rate of obesity (based on body mass index) for African Americans was 35.1%, compared with the rate for whites, 23.1%. The rate of obesity among African Americans in Pennsylvania also was higher than the rate of obesity among African Americans in the United States (32.6%). African Americans in Pennsylvania were less likely to participate in regular leisure time physical activity (71.7%) than whites (78.6%).

Approximately 14% of African Americans in Pennsylvania were diagnosed with diabetes in 2003, in comparison to 7.6% of whites. The diabetes death rate in 2002 for African Americans in the state (42.0 per 100,000) was also significantly higher than the rate for whites (24.5 per 100,000).

Other Disparities

- **Stroke:** In Pennsylvania from 1991 to 1998, the stroke death rate for African Americans was 74.7 per 100,000, compared with the rate for whites, 54 per 100,000.
- **Smoking:** African Americans (35.4%) and Hispanics (33.4%) are more likely to be smokers than whites (23.9%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

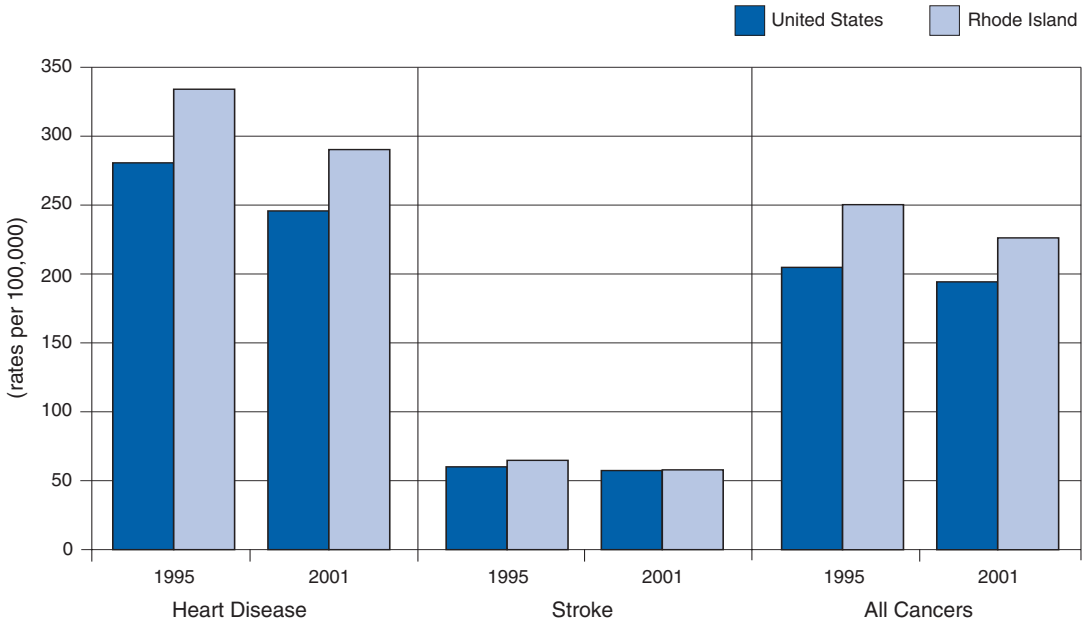
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Rhode Island

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Rhode Island, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

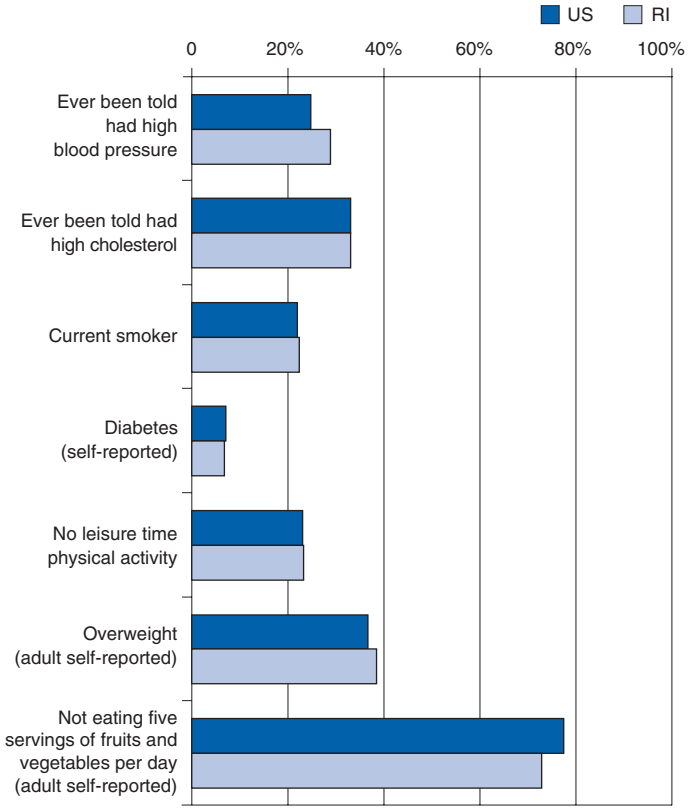
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death of death in Rhode Island, accounting for 3,076 deaths or approximately 31% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 614 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 2,450 are expected in Rhode Island. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 5,950 new cases that are likely to be diagnosed in Rhode Island.

Estimated Cancer Deaths, 2004

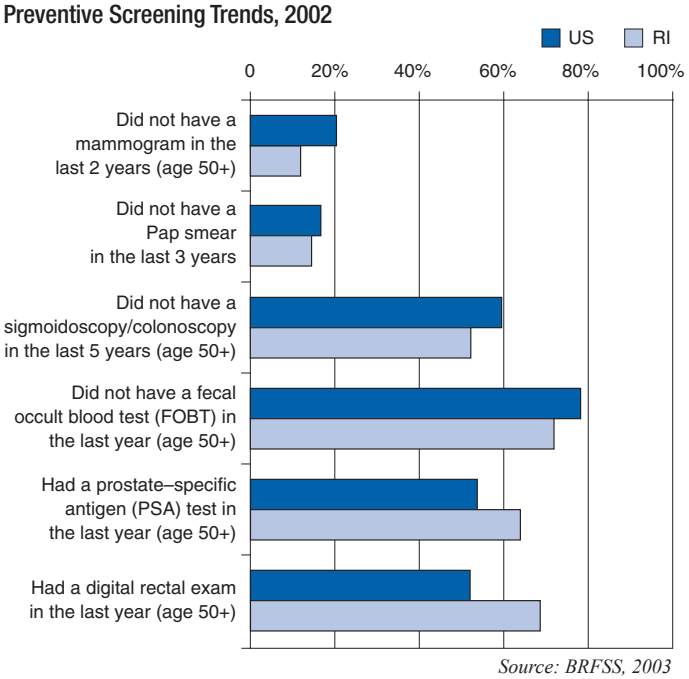
Cause of death	US	RI
All Cancers	563,700	2,450
Breast (female)	40,110	160
Colorectal	56,730	250
Lung and Bronchus	160,440	700
Prostate	29,900	130

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Rhode Island's Chronic Disease Program Accomplishments

Examples of Rhode Island's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decrease occurring among African American men (474.1 per 100,000 in 1990 versus 365.4 per 100,000 in 2000).
- A 19.7% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 31.6% in 1992 to 11.9% in 2002).
- Lower prevalence rates than the corresponding national rates for self-reported obesity (18.4% in Rhode Island versus 22.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Rhode Island in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Rhode Island, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Rhode Island BRFSS*	$169,925
National Program of Cancer Registries *Rhode Island Cancer Registry*	$303,833
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Diabetes Resource Center (DRC)* *Diabetes Outpatient Education (DOE) Board and DOE Educators* *Statewide "Eureka" Initiative* *Rhode Island Cooperative Eye Care Project* *Diabetes Multicultural Coalition (DMC)* *Teamworks* *Diabetes Community Health Improvement Project (Diabetes CHIP)*	$787,398
National Breast and Cervical Cancer Early Detection Program *Women's Cancer Screening Program*	$1,528,829
National Comprehensive Cancer Control Program *Comprehensive Cancer Control* *Rhode Island Cancer Control Plan*	$194,525
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Rhode Island Tobacco Prevention and Control Program*	$1,179,875
State Nutrition and Physical Activity/Obesity Prevention Program	$88,060
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$4,252,445**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Rhode Island that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Obesity and Overweight

Overweight and obesity have reached epidemic proportions in the United States. Obesity-related health problems and associated costs are soon expected to surpass those associated with tobacco. Obesity rates among adults have steadily increased for all states including Rhode Island, where the obesity rate has almost doubled in the past 10 years. Rhode Island's Hispanics have experienced the sharpest relative increase in overweight and obesity (from 48% between 1991 and 1994 to 61% between 1998 and 2000). Over this same period, the prevalence of overweight and obesity remained highest among the state's African American adults.

Data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) indicate that in 2003, 38.5% of Rhode Island's population were overweight and an additional 18.4% were obese. The percentage of Rhode Island men who were overweight (48.1%) was higher than that of Rhode Island women (29.5%). The percentage of overweight whites in the state (39.3%) is slightly higher than the percentages for Hispanics (39.0%) and African Americans (37.9%). Several factors cause overweight and obesity: food and nutrient consumption patterns, a lack of physical activity, and socioeconomic factors. In Rhode Island, approximately 73% of the population consumes less than 5 servings of fruits and vegetables per day. In 2003, 23.3% of Rhode Islanders reported having no leisure time physical activity and almost 50% reported not meeting recommended guidelines for moderate physical activity.

Although overweight and obesity are problems on their own, they are also risk factors for diabetes. In 2002, 49,000 adult Rhode Islanders were diagnosed with diabetes or 5.8 per 100. The overall death rate in 2001 due to diabetes was 21.7 per 100,000. In Rhode Island, diabetes also seems to affect men more than women. The death rate for diabetes was higher among men (25.2 per 100,000) in Rhode Island than women (19.3 per 100,000).

In order to help combat the obesity problem in Rhode Island, the Rhode Island Department of Health is working with state and community partners on a 3-year obesity prevention and control program, "Initiative for a Healthy Weight."

Text adapted from *Rhode Island Obesity Control Program: A Public Health Approach to Addressing Overweight and Obesity Among Children and Adults,* 2002.

Disparities in Health

Hispanics represent approximately 13% of the U.S. population. According to the 2000 Census, this population, which increased by more than 50% from 1990 to 2000, is the fastest growing ethnic group in the United States. The greatest concentration of Hispanic populations is in the southwestern states. Hispanics make up nearly 9% of the population in Rhode Island, a percentage that is almost double that of the state's Hispanic population in 1990. In 2001, the poverty rate for Hispanics in Rhode Island was 43%, more than twice the rate for African Americans (20%) and 4 times the rate for whites in the state (10%). In 2003, 35.0% of Hispanics in Rhode Island had less than a high school diploma and 14.2% had a college degree. Approximately 63.0% of the Hispanic population in the state has an annual income of less than $25,000. These socioeconomic factors contribute to the health disparities prevalent among Hispanics in Rhode Island.

Data from the Behavioral Risk Factor Surveillance System indicate that in 2003 Hispanics in Rhode Island had a higher rate of obesity (20.9%) than whites (18.4%). Hispanics are also at greater risk of developing health problems related to being overweight (59.9%) than whites (57.7%). BRFSS data from 2003 show that Hispanic Rhode Islanders had higher prevalence rates of diabetes (11.2%) than their African American (6.8%) and white (6.5%) counterparts. In addition, 67% of Hispanics in Rhode Island reported not meeting recommended guidelines for moderate physical activity. This percentage is higher than the percentage of whites in Rhode Island who report not meeting recommended guidelines for moderate physical activity (47.5%).

Other Disparities

- **Breast Cancer Screening:** In 2002, only 50% of Hispanic women in Rhode Island reported ever having had a mammogram, compared with 70% of white women.
- **Colorectal Cancer Screening:** In 2002, 56% of Hispanic men in Rhode Island reported never having had a sigmoidoscopy or colonoscopy, compared with 45% of white men.
- **Cholesterol Screening:** In Rhode Island, 31.0% of Hispanics reported never having had their blood cholesterol checked; in contrast, only 12.2% of whites reported never having had their blood cholesterol checked.

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

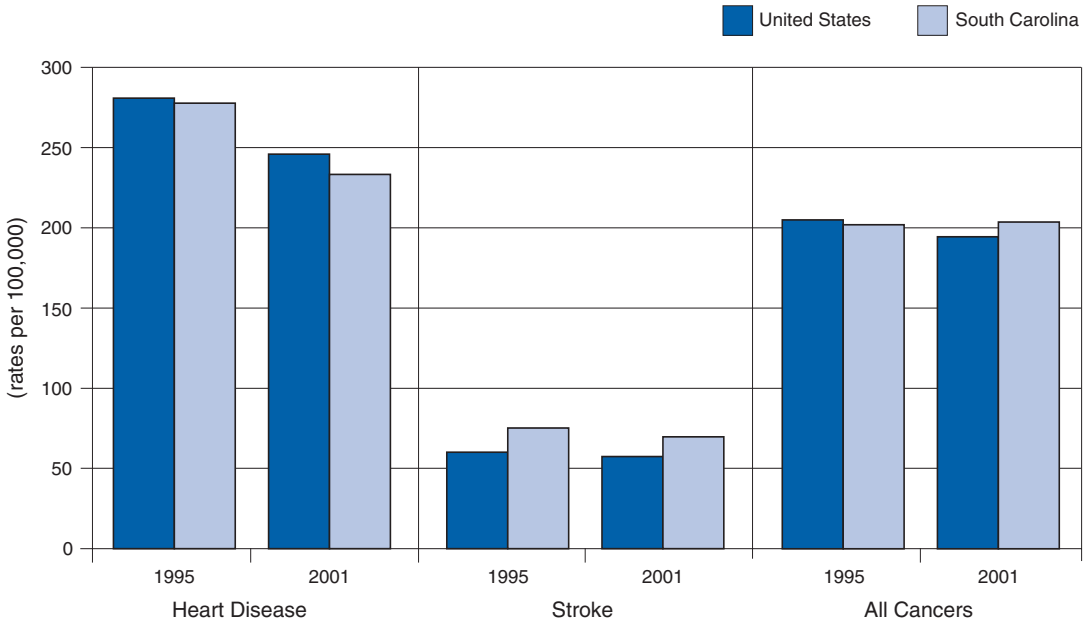
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

South Carolina

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and South Carolina, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

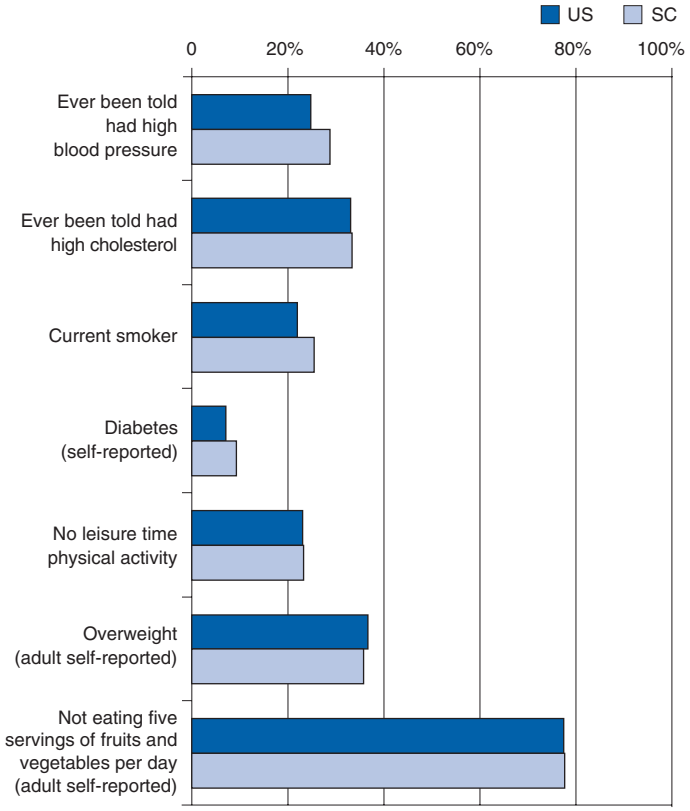
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in South Carolina, accounting for 9,471 deaths or approximately 26% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,832 deaths or approximately 8% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 8,860 are expected in South Carolina. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 21,500 new cases that are likely to be diagnosed in South Carolina.

Estimated Cancer Deaths, 2004

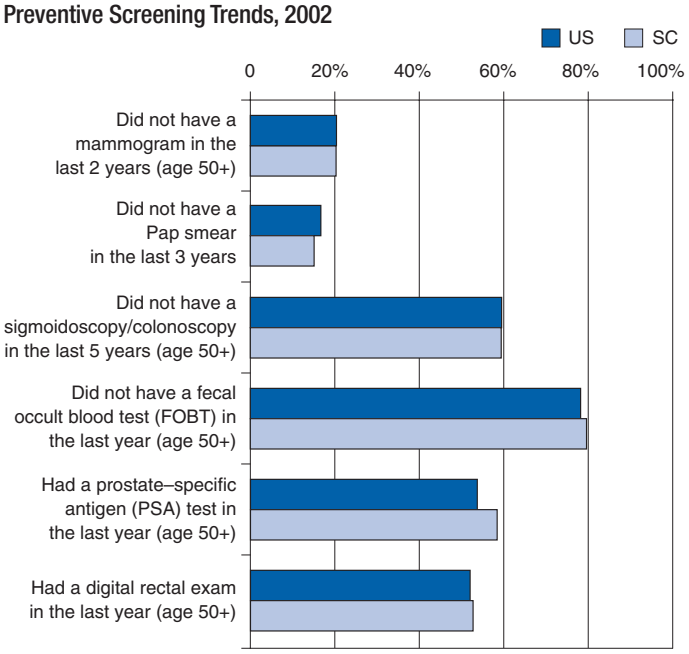
Cause of death	US	SC
All Cancers	563,700	8,860
Breast (female)	40,110	610
Colorectal	56,730	880
Lung and Bronchus	160,440	2,720
Prostate	29,900	620

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

South Carolina's Chronic Disease Program Accomplishments

Examples of South Carolina's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among African Americans (424.5 per 100,000 in 1990 versus 375.7 per 100,000 in 2000).
- A 19.2% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 39.5% in 1992 to 20.3% in 2002).
- Lower prevalence rates than the corresponding national rates for women older than age 18 who reported not having had a Pap smear in the last 3 years (15.1% in South Carolina versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to South Carolina in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for South Carolina, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *South Carolina BRFSS*	$203,056
National Program of Cancer Registries *South Carolina Central Cancer Registry*	$903,768
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Tri-State Stroke Network*	$1,100,000
Diabetes Control Program *South Carolina Diabetes Prevention and Control Program*	$750,035
National Breast and Cervical Cancer Early Detection Program *Division of Cancer Prevention and Control*	$3,312,674
National Comprehensive Cancer Control Program *Division of Cancer Prevention and Control*	$150,000
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *South Carolina Tobacco Prevention and Control Program*	$1,189,479
State Nutrition and Physical Activity/Obesity Prevention Program *Award Program* *Discover and Understand Carolina, Kids (DUCK) Walking Program* *Heart Smart* *It's Everywhere You Go!* *Walk Our Children to School Day*	$367,372
Racial and Ethnic Approaches to Community Health (REACH 2010) *Medical University of South Carolina*	$1,017,488
Total	**$8,993,872**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in South Carolina that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD) is the leading cause of death and disability in South Carolina. In 2001, CVD accounted for approximately 34% of deaths in South Carolina. Although known as a primary cause of death in older adults, it is also the leading cause of death of South Carolinians aged 35-44 and one of the top five causes of death in children (1-4 years) and young adults (15-24 years). Together, heart disease and stroke account for over 90% of all CVD deaths.

According to the 2001 CDC mortality data, South Carolina had the 23rd highest heart disease death rate in the nation and the 2nd highest stroke disease death rate. Due to these rankings and the geographic proximity of other states with high numbers of stroke deaths, South Carolina, North Carolina, and Georgia are known as the "stroke belt." High stroke death rates in the Pee Dee and Coastal regions of South Carolina have earned this area the dubious distinction of being the "stroke buckle" of the "stroke belt." The economic costs of CVD in South Carolina are staggering. In 1999, the cost of CVD in South Carolina was almost $1.4 billion in direct costs (hospital charges). Of these charges, $629 million (45%) was for coronary heart disease and $15 million (15%) was for stroke. The total hospital charges for treatment of cardiovascular disease patients increased by 330% from 1987 to 1999.

The state has adopted a comprehensive approach to reduce CVD deaths. One of the primary objectives of *South Carolina Cardiovascular Health State Plan* is to strengthen the state's core capacity by focusing on promoting policy and environmental change in the areas of physical inactivity, poor nutrition, tobacco use, hypertension, and high blood cholesterol. Sites for primary intervention correspond to organizational and community-level needs such as school, worksites, and faith communities. Secondary prevention focuses on the health care system to ensure that screening, detection, and follow-up care include appropriate and standardized management of clinical risk factors for CVD. In design, the plan seeks to ensure that systemic remedies for CVD care and prevention are in place, available, and accessible to all South Carolinians, with emphasis on the priority populations—African Americans, the indigent and underserved, and residents in rural areas.

Adapted from *South Carolina Cardiovascular Health State Plan 2000-2007*.

Disparities in Health

African Americans, who comprise over 30% of South Carolina's population, have heart disease and stroke death rates that are approximately 1½ to 2 times higher than the state's white population. This difference is most prominent among African American women in South Carolina who, in 2000, were 1.3 times more likely to die of heart disease than white women.

Risk factors for heart disease and stroke include high blood pressure, poor nutrition, and lack of exercise. In South Carolina, African Americans are at a higher risk for these factors than whites. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, over one third of African Americans report having been told they have high blood pressure (35.3%), compared with only one quarter of whites (26.7%). In addition, 63.3% of African Americans report not meeting the recommended guidelines for moderate physical activity, compared with 51.1% of whites, and only 19.8% of African Americans report consuming 5 or more servings of fruits and vegetables per day.

According to CDC's 2000 cancer mortality data, African Americans also had higher death rates from cancer (375.7 per 100,000 for men and 189 for women per 100,000) than whites (265.3 per 100,000 for men and 158.5 per 100,000 for women). Although African American women are more likely to report having had a mammogram in the last 2 years (82.9%, compared with 78.1% of white women), in 2000 they were more likely to die from breast cancer than their white counterparts (37.9 per 100,000 African American women, compared with 25.6 per 100,000 white women). Prostate cancer screening rates are not available for South Carolina, but in 2000 the state's African American men had a prostate cancer death rate that was more than twice the rate for white men (81.1 per 100,000 compared to 28.9 per 100,000).

Other Disparities

- **Diabetes:** African Americans (15.0%) and Hispanics (9.9%) are more likely to report having been told they have diabetes than whites (7.3%). South Carolina's racial and ethnic groups are 3 times more likely to die from the disease than whites.
- **Obesity:** South Carolina's African Americans (36.9%) are more likely to be obese than whites (21.5%).
- **Lung Cancer:** In South Carolina in 2000, African American men (102.3 per 100,000) had a higher lung cancer death rate than white men (89.8 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

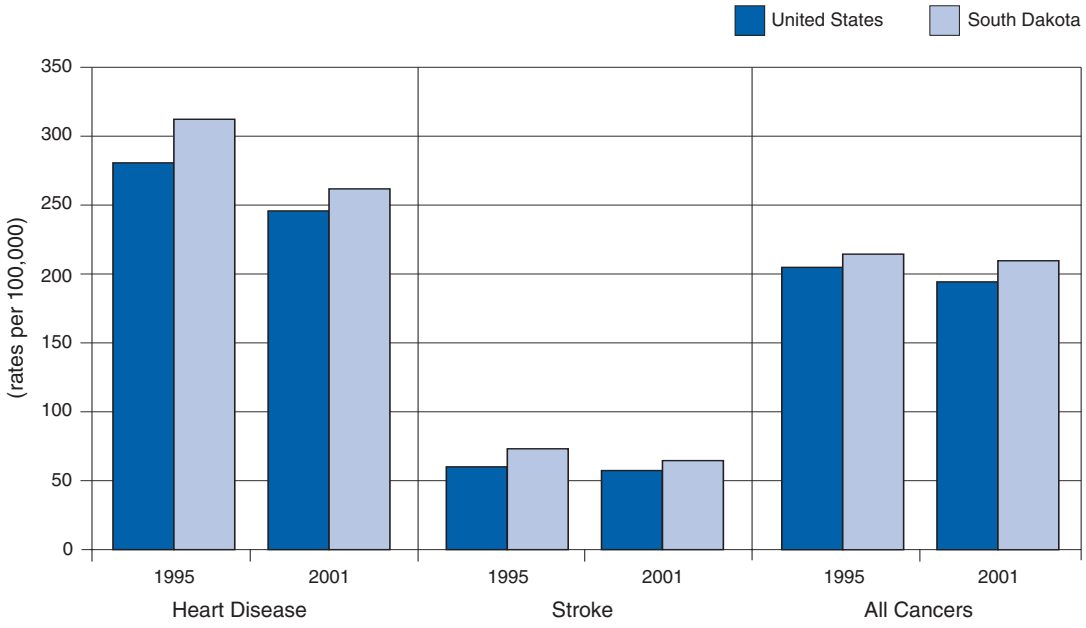
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: cdcinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

South Dakota

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and South Dakota, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

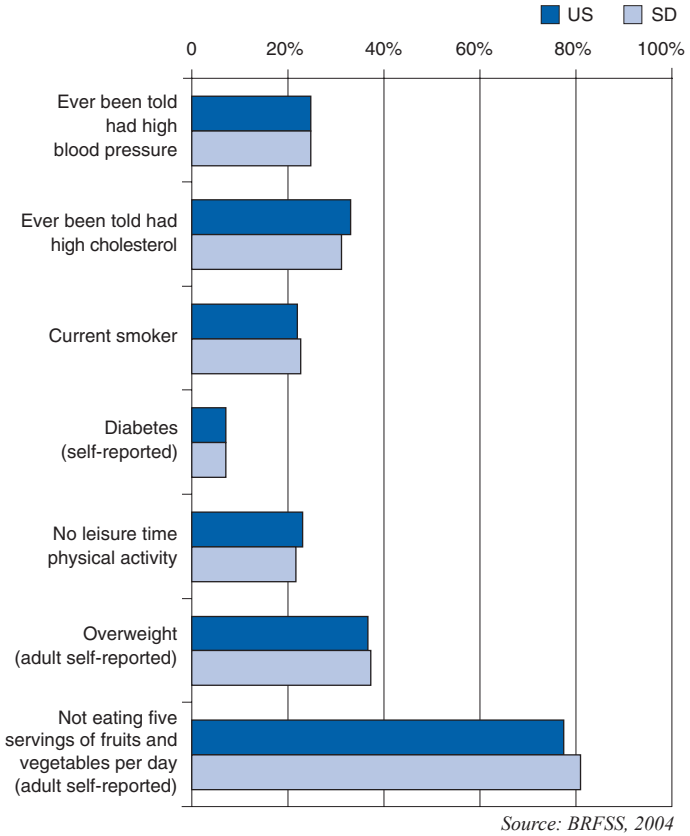
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in South Dakota, accounting for 1,985 deaths or approximately 29% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 490 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 1,650 are expected in South Dakota. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 4,000 new cases that are likely to be diagnosed in South Dakota.

Estimated Cancer Deaths, 2004

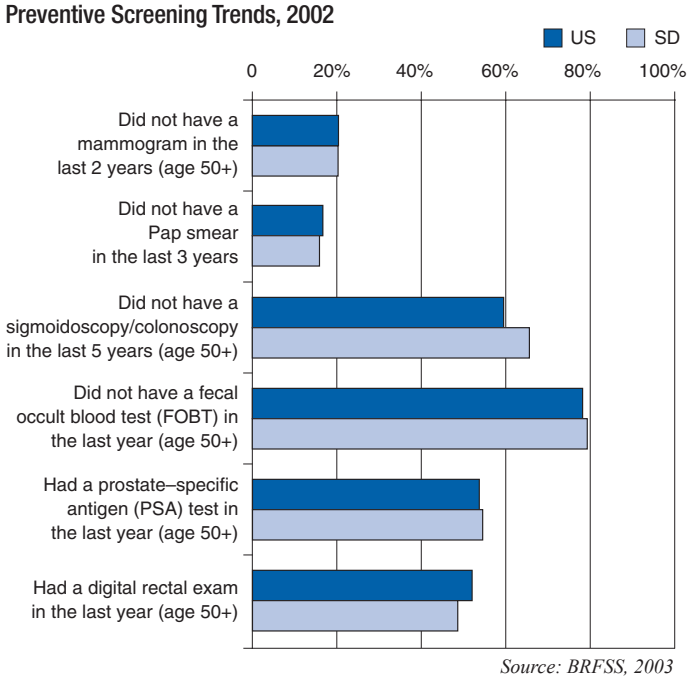
Cause of death	US	SD
All Cancers	563,700	1,650
Breast (female)	40,110	100
Colorectal	56,730	190
Lung and Bronchus	160,440	420
Prostate	29,900	120

+ Represents fewer than 50 deaths. *Source: American Cancer Society, 2004*

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

South Dakota's Chronic Disease Program Accomplishments

Examples of South Dakota's Prevention Successes

- A diabetes death rate that is lower than the national average (24.2 per 100,000 versus 25.2 per 100,000).
- An 18.4% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 38.7% in 1992 to 20.3% in 2002).
- Prevalence rates lower than the corresponding national rates for self-reported high blood cholesterol (31.2% in South Dakota versus 33.1% nationally) and for women older than age 18 who reported not having had a Pap smear in the last 3 years (15.9% in South Dakota versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to South Dakota in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for South Dakota, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *South Dakota BRFSS*	$92,721
National Program of Cancer Registries *South Dakota Cancer Registry*	$280,430
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Diabetes Education Recognition Program* *The Link Program*	$300,000
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Cancer Program*	$819,322
National Comprehensive Cancer Control Program	$0
WISEWOMAN *A New Leaf…Choices for Healthy Living* *Active Living Every Day*	$681,373
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *South Dakota Tobacco Prevention and Control Program*	$793,593
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$2,967,439**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in South Dakota that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Childhood Overweight

Childhood overweight is a risk factor for adult conditions such as obesity, cardiovascular disease, hypertension, diabetes, and other health problems. Research from a national study published in *Pediatrics* concluded that 60% of overweight 5- to 10-year olds already have at least one risk factor for heart disease.

In South Dakota, childhood overweight is a growing problem. Data from the *Height and Weight Report for South Dakota Students* for school year 2002-2003 showed an increase in the numbers of elementary and middle school children aged 12 and older who were at risk for overweight, and indicated slight decreases in the number of at-risk children aged 12 and younger. The data also showed that 16.2% of whites and 17.6% of American Indians/Alaska Natives (AI/ANs) were at risk for overweight (see table below). During the 2002-2003 school year, the numbers of children considered overweight increased in all age groups, with the exception of children aged 15 to 19. The data also provided evidence of racial disparities in the prevalence of childhood overweight: approximately 14.5% of whites and 23.6% of AI/ANs were overweight. Compared with data from the 2001-2002 school year, these figures represent a slight increase for whites (+0.2), but a noticeable increase for AI/ANs (+3.5%).

South Dakota has developed several approaches to address the problem of childhood overweight. For example, the state is tracking the prevalence of the problem through its *School Height and Weight Reports*, and is working to coordinate obesity prevention efforts among parents, teachers and coaches, and school administrators.

Text adapted from *School Height and Weight Report for South Dakota Students, 2002-2003 School Year* (2003).

Students at Risk for Overweight and Currently Overweight by Race, School Year 2002-2003

	Race				Total
	White	AI/ANs	Other Races	Race Unknown	
Number of Students	14,005	2,785	581	1,991	19,362
At Risk for Overweight	16.2%	17.6%	20.5%	17.2%	16.7%
Currently Overweight	14.5%	23.6%	17.9%	20.4%	16.6%
At Risk for Overweight and Currently Overweight Combined	30.7%	41.2%	38.4%	37.6%	33.3%

Source: South Dakota Department of Health

Disparities in Health

The five leading causes of death in 1998 for all South Dakota residents were heart disease, cancer, cerebrovascular diseases, accidents, and chronic obstructive pulmonary diseases. Heart disease accounted for 31% of South Dakota's deaths in 1998. Since 1980, women have accounted for over 40% of South Dakota's heart disease deaths; since 1992, this death rate has been nearing 50%. The American Heart Association (AHA) reports that after menopause women are at greater risk for heart disease than men. The AHA also reports the controllable risk factors that can reduce the risk of heart disease for both men and women include avoiding tobacco, maintaining a low-fat diet, and engaging in regular physical activity.

AI/ANs, who comprise more than 500 federally recognized tribes across the country, represent 1% of the U.S. population. Compared with other racial and ethnic minorities, AI/ANs have the highest poverty rate, 26%, which is 2 times the national rate. Like AI/ANs in the United States, South Dakota's AI/ANs are experiencing increasing health disparities.

In South Dakota, AI/ANs represent the state's largest minority population (7.3%). The leading causes of death for AI/ANs in South Dakota are heart disease, cancer, accidents, chronic liver disease, and diabetes. According to the Indian Health Service, approximately 25.4% of the adult population on South Dakota's Indian reservations has been diagnosed with diabetes. American Indians in South Dakota have heart disease death rates that are considerably higher than the rates for whites (819 per 100,000 versus 467 per 100,000). Stroke rates for South Dakota's AI/ANs are also higher than the rates for whites (165 per 100,000 versus 115 per 100,000).

To begin to address the issues of heart disease and diabetes, the South Dakota Department of Health has implemented both a Cardiovascular Health Program and a Diabetes Prevention and Control Program, working with populations throughout the state who are at risk for these diseases.

Other Disparities

- **Smoking:** Individuals who indicated that they were of "other race" were more likely to report being current smokers (37%) than whites (21.2%).
- **Nutrition:** Individuals who indicated that they were of "other race" were more likely to report not consuming 5 or more servings of fruits and vegetables per day (82.3%) than whites (80.9%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

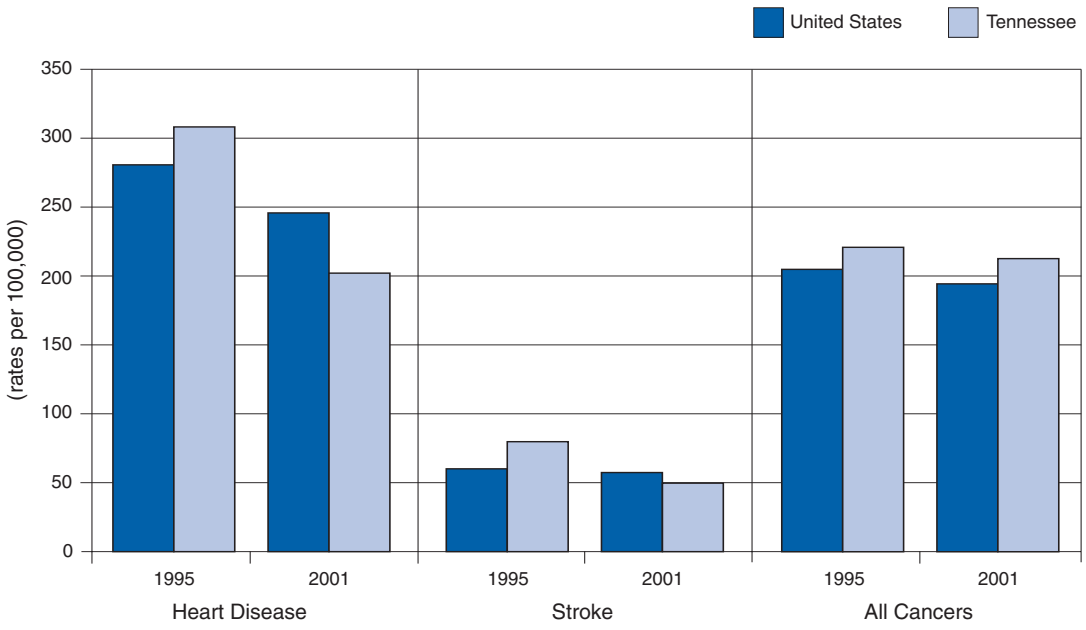
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Tennessee

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Tennessee, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

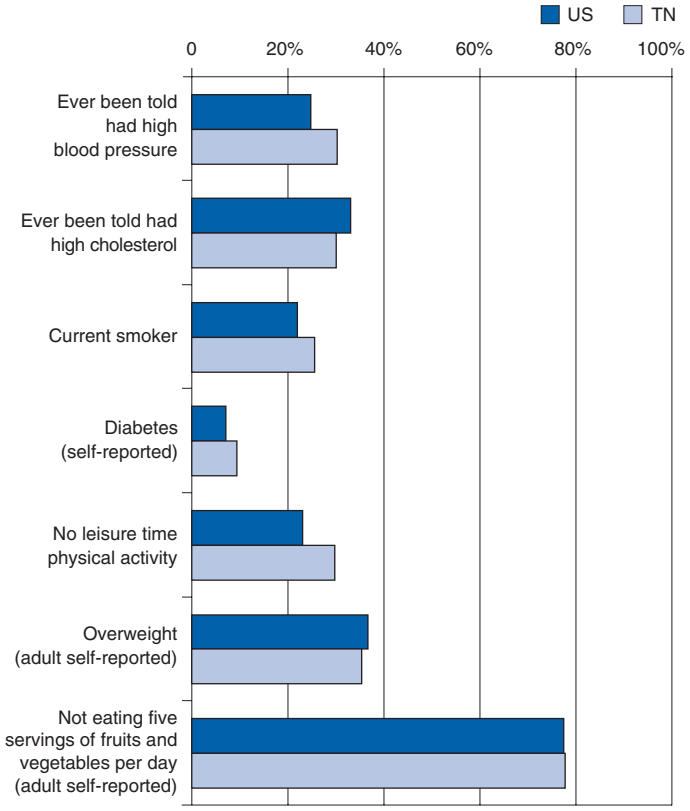
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Tennessee, accounting for 15,688 deaths or approximately 28% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 4,037 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 12,710 are expected in Tennessee. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 30,850 new cases that are likely to be diagnosed in Tennessee.

Estimated Cancer Deaths, 2004

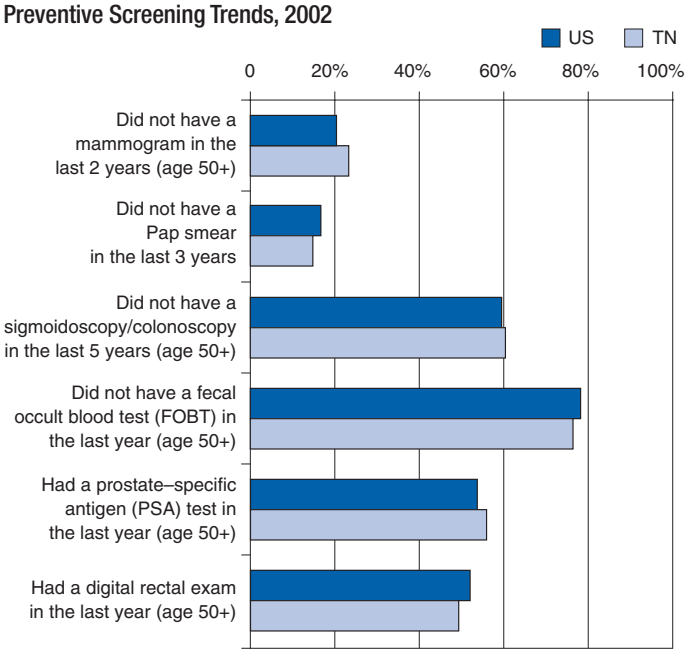
Cause of death	US	TN
All Cancers	563,700	12,710
Breast (female)	40,110	800
Colorectal	56,730	1,340
Lung and Bronchus	160,440	4,320
Prostate	29,900	590

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Tennessee's Chronic Disease Program Accomplishments

Examples of Tennessee's Prevention Successes

- Statistically significant decreases in cancer deaths among men of all races, most notably among African American men (425.0 per 100,000 in 1990, 392.3 per 100,000 in 2000).
- A 21.3% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 44.6% in 1992 to 23.3% in 2002).
- Lower prevalence rates than the corresponding national rates for women older than age 18 who reported not having had a Pap smear in the last 3 years (14.8% in Tennessee, 16.7% nationally) and for individuals who were told by a doctor that they had high blood cholesterol (30.1% in Tennessee, 33.1% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Tennessee in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Tennessee, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Tennessee BRFSS*	$82,070
National Program of Cancer Registries *Tennessee Cancer Registry*	$373,117
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Center for Stroke Care Excellence* *Count On Me! Heart Health is a Numbers Game Campaign* *Middle TN State University's Healthy Living Inventory*	$300,000
Diabetes Control Program *Tennessee Diabetes Prevention and Control Coalition*	$300,000
National Breast and Cervical Cancer Early Detection Program *Tennessee Department of Health Breast and Cervical Cancer Early Detection Program*	$946,257
National Comprehensive Cancer Control Program *Comprehensive Cancer Control Program*	$130,542
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Tennessee Health Promotion and Disease Prevention*	$1,154,195
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010) *United South and Eastern Tribes, Inc.*	$947,103
Total	**$4,233,284**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Tennessee that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

CDC mortality data from 2001 indicate that Tennessee had the 10th highest heart disease death rate in the nation and the 3rd highest stroke death rate. Cardiovascular disease (CVD), including heart disease and stroke, is the leading cause of death in Tennessee.

Tennessee's heart disease and stroke death rates are both above the national death rates for these diseases. According to CDC mortality data, from 1996 to 2000, the heart disease death rate in Tennessee was 607 per 100,000, compared with the national rate of 536 per 100,000. From 1991 to 1998, the stroke death rate in Tennessee was 156 per 100,000, compared with the national rate of 121 per 100,000.

Risk factors for heart disease and stroke include high blood pressure, high blood cholesterol, diabetes, obesity, and smoking. According to data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) for 2003, almost one third of adults in Tennessee had high blood pressure (30.3%), and almost one third had high blood cholesterol (30.1%). In addition, 9.4% had diabetes. More than one quarter of adults in Tennessee reported that they were current smokers in 2003 (25.6%). Data from the BRFSS for the same year indicate that more than half of the adults in Tennessee were overweight (36.8%) or obese (24.5%). In addition, approximately 80% of adults in Tennessee had one or more of these five risk factors.

Tennessee applied for and received funding from the CDC in 2001 to support a state heart disease and stroke prevention program. The Tennessee Cardiovascular Health Program seeks to lessen the burden of cardiovascular disease and improve the cardiovascular health of Tennesseans through changes in policy and environment. The program promotes heart healthy lifestyles and addresses individuals, targeted risk groups, and whole populations. One of the specific successes of the program has been its work with the Office of Minority Health—Regional Minority Health Coalitions to implement cardiovascular health awareness and health literacy projects for African American and Hispanic communities across Tennessee. In addition, the program allocates resources to sustain and expand partnerships between the state's Diabetes/Cardiovascular Health Disparities Collaboratives and Federally Funded Health Centers to improve the quality of care for persons with CVD.

Text adapted from *Tennessee Department of Health, Tennessee Cardiovascular Health Program* http://www2.state.tn.us/health/healthpromotion/index.html

Disparities in Health

African Americans, who comprise approximately 12% of the U.S. population experience disproportionate health disparities. African Americans have higher stroke mortality rates than other groups as well as higher prevalence of the risk factors for heart disease. Compared with other racial and ethnic minority groups, African Americans are more likely to develop lung, cervical, colorectal, and prostate cancer at disproportionate levels.

African Americans make up 18% of Tennessee's population. Heart disease is the leading cause of death for African Americans in Tennessee. In 2001, the state's total death rate for cardiovascular disease was 330 per 100,000. The CVD death rate for African American men was approximately 511 per 100,000 (compared with approximately 384 per 100,000 for white men). In 2001, the age-adjusted heart disease rate for African American men was 423 per 100,000, while the rate for white men was 347 per 100,000.

Of all other racial and ethnic groups in Tennessee, African Americans are more likely to be at risk for heart problems related to being overweight. African Americans also have the highest rate of obesity (36.8%) when compared with whites (23.2%) and Hispanics (24.1%).

African Americans in Tennessee also have higher rates of cancer death than whites. CDC mortality data from 2000 indicate that African American men had an overall cancer death rate of 392.3 per 100,000, compared with 278.1 per 100,000 for white men. African American women also have higher cancer death rates than white women. In 2000, the cancer death rate was 210.2 per 100,000 for African American women, compared with 169.8 for white women.

Other Disparities

- **Diabetes:** In Tennessee, the diabetes death rate for African American men rose from 17 per 100,000 in 1990 to 38 per 100,000 in 2001—a 124% increase. The death rate for African American women rose 69%.
- **Physical Activity:** In Tennessee, 75.2% of Hispanics and 71.2% of whites report that they participated in leisure time physical activity during the past month, compared with 62.4% of African Americans.
- **Cholesterol Screening:** In Tennessee, 73.0% of African Americans report having had their blood cholesterol checked, compared with 81.3% of whites.

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

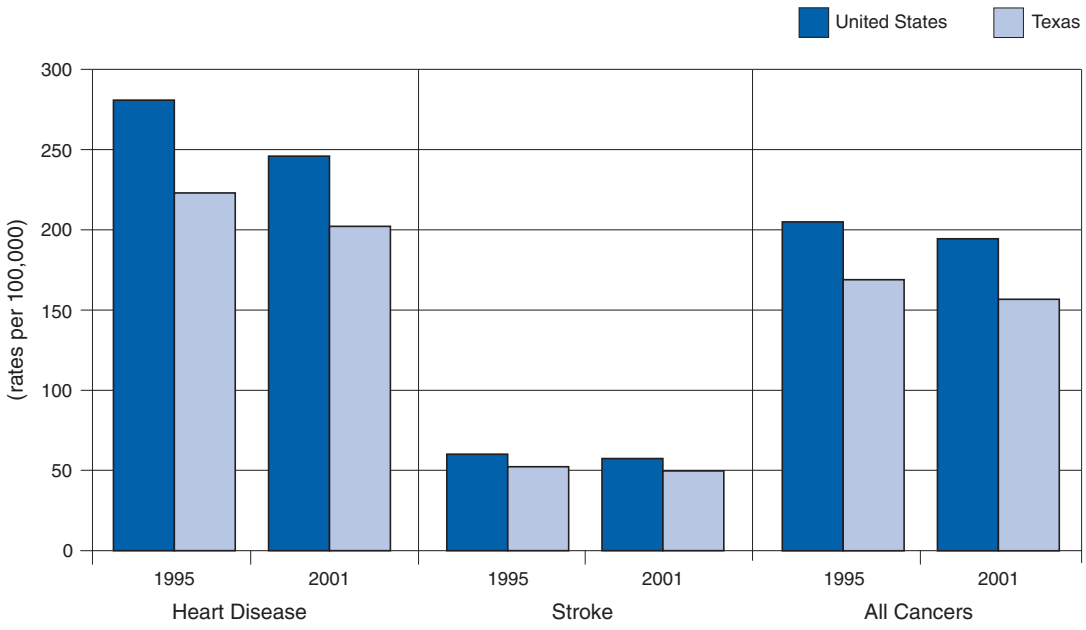
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Texas

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Texas, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

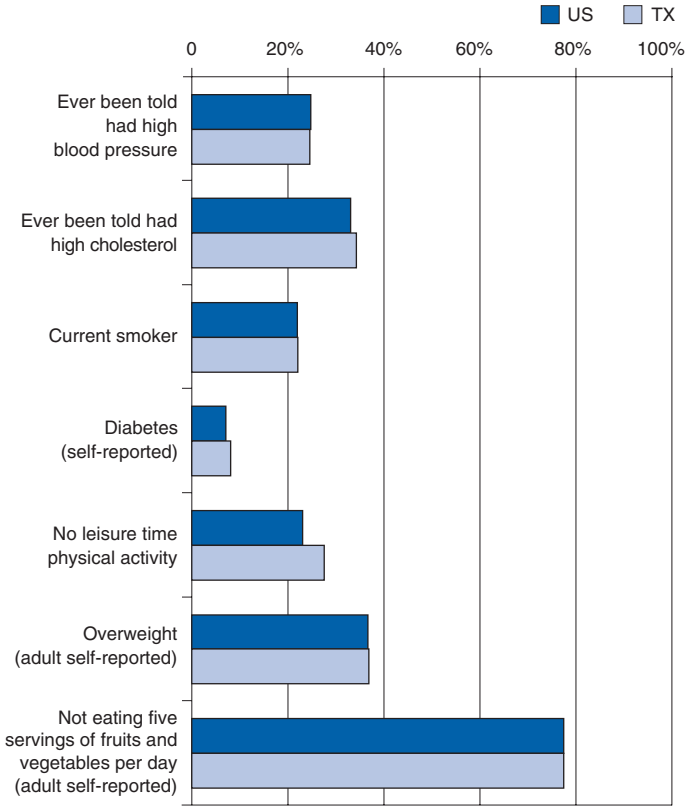
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Texas, accounting for 43,199 deaths or approximately 28% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 10,612 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 34,830 are expected in Texas. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 84,530 new cases that are likely to be diagnosed in Texas.

Estimated Cancer Deaths, 2004

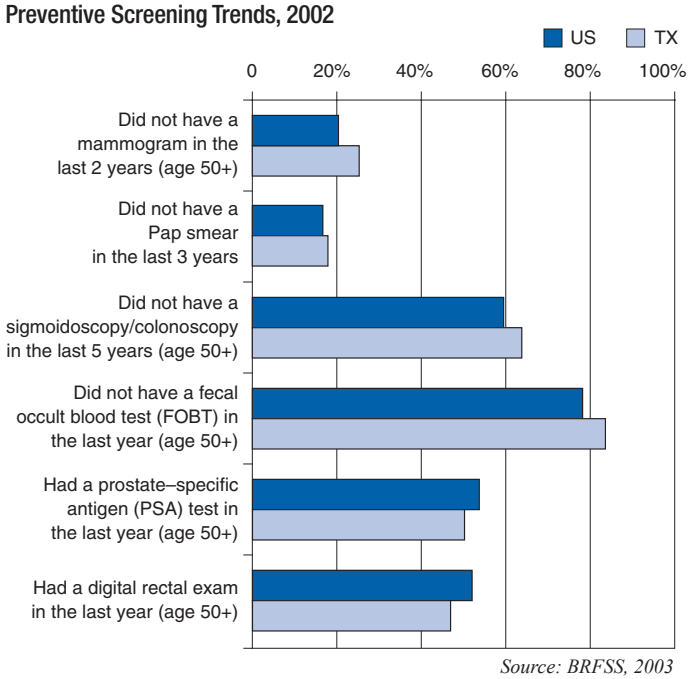
Cause of death	US	TX
All Cancers	563,700	34,830
Breast (female)	40,110	2,410
Colorectal	56,730	3,560
Lung and Bronchus	160,440	9,670
Prostate	29,900	1,760

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Texas' Chronic Disease Program Accomplishments

Examples of Texas' Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, from 284.2 per 100,000 in 1990 to 250.0 per 100,000 in 2000 for men and from 166.2 per 100,000 in 1990 to 162.1 per 100,000 in 2000 for women.
- A 14.9% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 40.2% in 1992 to 25.3% in 2002).
- A prevalence rate that was lower than the corresponding national rate for African American women older than age 18 who reported not having had a Pap smear in the last 3 years (10.1% in Texas versus 11.0% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Texas in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Texas, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Texas BRFSS*	$158,523
National Program of Cancer Registries *Texas Cancer Registry*	$2,372,058
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Texas Cardiovascular Quality Improvement Program*	$326,820
Diabetes Control Program *Walk Texas!* *Coordinated Approach to Child Health (CATCH)*	$1,364,132
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Cancer Control Program*	$6,242,251
National Comprehensive Cancer Control Program *Texas Cancer Council* *Texas Cancer Plan: A Guide For Action*	$300,000
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Texas Tobacco Prevention and Control Program*	$952,908
State Nutrition and Physical Activity/Obesity Prevention Program *All Communities Exercise Day*	$447,589
Racial and Ethnic Approaches to Community Health (REACH 2010) *Latino Education Project, Inc.* *Migrant Health Promotion*	$250,000
Total	**$12,414,281**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Texas that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD) has been the leading cause of death in Texas since 1940. In 2001, CVD claimed close to 54,000 lives, which accounts for 2 out of every 5 deaths in the state. According to Texas hospitalization data, in 2001, heart attack, congestive heart failure, and hardening of the heart arteries are among the 10 most frequent causes of hospitalization of people 45 years and older. The economic burden of cardiovascular disease is a major concern: 2 of the 10 most expensive conditions treated in Texas hospitals are heart-related, with charges averaging $65,000.

Cardiovascular disease is the major cause of death among minority populations in Texas. The highest mortality rate is in the African American population. In 2002, the death rate for ischemic heart disease for African Americans was 353 per 100,000 population, compared with 254.7 per 100,000 for whites and 209.6 per 100,000 for Hispanics. Additionally, the 2002 death rate for stroke among African Americans was 90.4 per 100,000, compared to 61.9 per 100,000 for whites and 50.5 per 100,000 for Hispanics.

State initiatives to reduce the prevalence of CVD include the formation of the Texas Council on Cardiovascular Disease and Stroke, which has set goals to reduce CVD mortality by promoting healthy lifestyle choices.

Text adapted from *Cardiovascular Disease in Texas: A State Plan with Disease Indicators and Strategies for Action* (2000) and *Texas Plan to Reduce Cardiovascular Disease and Stroke* (2002).

Healthy Texans 2010 Goals: Reducing Cardiovascular Disease

Risk Factors for Cardiovascular Disease (18 years and older)	Baseline for Texas	Texas 2010 Target
Reduce the proportion of adults with high blood pressure	23.7%	16%
Reduce the proportion of adults with high blood cholesterol	30.8%	17%
Reduce the number of adults who smoke cigarettes	22.0%	12%
Reduce the proportion of adults who are physically inactive	27.8%	20%
Reduce the proportion of obese adults	25.3%	15%

Source: Healthy Texans 2010

Disparities in Health

Hispanics represent approximately 13% of the U.S. population. According to the 2000 Census, this population, which increased by more than 50% from 1990 to 2000, is the fastest growing ethnic group in the nation. Approximately half of the Hispanic population in the United States resides in Texas. The health status of Hispanics in Texas mirrors the health status trends for the Hispanic population throughout the United States.

Nationally, heart disease and cancer were the leading causes of death for Hispanics in 2001. During this period, cardiovascular disease accounted for 27.1% of all deaths among men and 32.6% of deaths among women within this population. According to the American Cancer Society, nationally, Hispanics experience lower rates of cancer incidence and death for all cancers combined**.** Diabetes prevalence is high within the Hispanic population. According to the American Diabetes Association, 2 million, or 8.2% of all Hispanics in the United States have diabetes, compared with the overall national figure, 7.2%.

In Texas, Hispanics have the lowest mortality rates for lung cancer and colorectal cancers, a higher incidence of cervical cancer, and a higher incidence of diabetes, compared with other racial and ethnic groups in the state.

Other Disparities

- **Physical Activity:** Compared with other racial and ethnic groups, Hispanics in Texas had the highest rate of physical inactivity (37.3%), compared with their African American (33.7%) and white (22.3%) counterparts. This number represents an increase of more than 10% from 2002 data.
- **Colorectal Cancer Screening:** In Texas, 69.9% of Hispanics have never had a sigmoidoscopy or colonoscopy, compared with 59.9% of African Americans and 50% of whites.
- **Breast Cancer Screening:** In 2001, Hispanic women in Texas were among the least likely to have had a mammogram in the last year (58.2%, compared with 61.8% of African Americans and 60.5% of whites).
- **Cervical Cancer Screening:** Hispanic women in 2001 were more likely than white women to have had a Pap test in the last 3 years (91.1% of Hispanic women, compared with 85.6% of white women).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

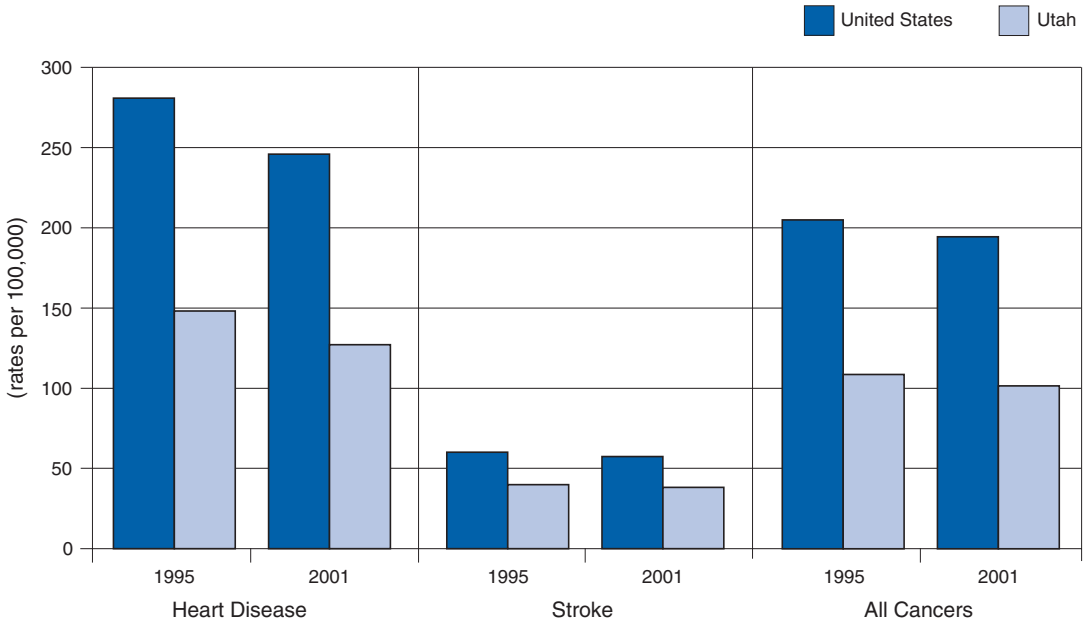
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Utah

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Utah, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

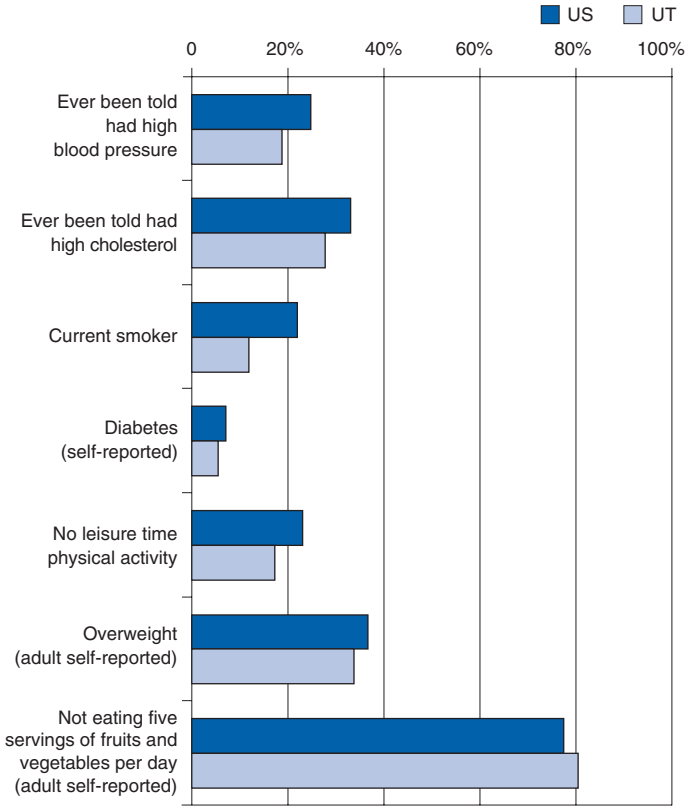
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Utah, accounting for 2,896 deaths or approximately 23% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 870 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 2,620 are expected in Utah. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 6,360 new cases that are likely to be diagnosed in Utah.

Estimated Cancer Deaths, 2004

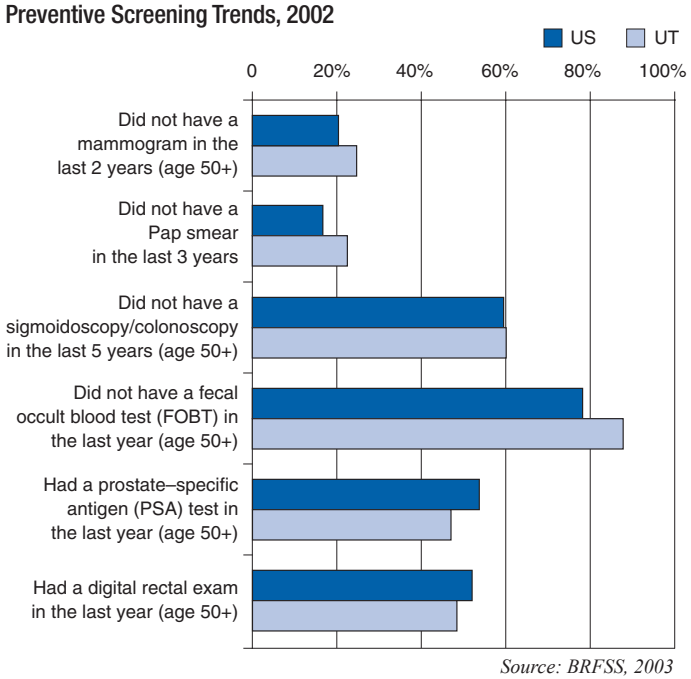
Cause of death	US	UT
All cancers	563,700	2,620
Breast (female)	40,110	200
Colorectal	56,730	260
Lung and Bronchus	160,440	440
Prostate	29,900	140

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Utah's Chronic Disease Program Accomplishments

Examples of Utah's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races (from 192.9 per 100,000 in 1990 to 183.6 per 100,000 in 2000), and in cancer deaths among white Hispanic women (183.6 per 100,000 in 1990 versus 69.8 per 100,000 in 2000).
- An 11.9% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 36.6% in 1992 to 24.7% in 2002).
- Lower prevalence rates than the corresponding national rates for individuals who reported they had a diagnosis of hypertension (18.8% in Utah versus 24.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Utah in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Utah, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Utah BRFSS*	$180,920
National Program of Cancer Registries	$0
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Gold Medal School Initiative*	$948,335
Diabetes Control Program *Utah Diabetes Prevention and Control Program*	$881,520
National Breast and Cervical Cancer Early Detection Program *Utah Cancer Control Program*	$2,032,209
National Comprehensive Cancer Control Program *Utah Cancer Control Program*	$659,483
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Utah Tobacco Prevention and Control Program*	$1,196,502
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$5,898,969**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Utah that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

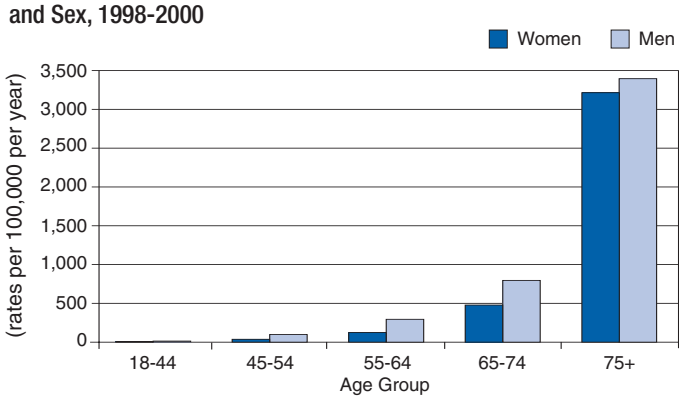
From 1996 through 1998, Utah's age-adjusted death rate for cardiovascular disease (CVD) was the second lowest in the nation. Over time, age-adjusted death rates for CVD for both men and women have been decreasing in Utah and across the country. This decline is likely due to improved medical treatment and greater emphasis on reducing the major controllable cardiovascular risk factors.

However, CVD is still Utah's leading cause of death and disability, accounting for approximately 4,000 deaths each year. Despite the common belief that CVD is a disease that primarily affects men, in actuality, it is a serious problem affecting both men and women alike. From 1998 to 2000, the percentage of all CVD deaths was higher for women than for men (35% compared with 31%). Age was also a risk factor for death for CVD. The death rates for men increased dramatically after age 44, while the death rates for women increased gradually. Thirty-nine percent of male CVD deaths occurred under age 75, compared with only 20% of female CVD deaths. The figure below illustrates Utah's CVD death rates for men and women at different ages.

Utah addresses CVD as a public health concern through its *Alliance for Cardiovascular Health*. The Alliance is the state's primary vehicle for implementing the state's plan to reduce the burden of CVD. Member organizations include county and local governments, private businesses, nonprofit agencies, schools, health care organizations, and other groups.

Text adapted from *Milestones Report 2002: Cardiovascular Disease in Utah* and *Cruising the Heart Highway, Heart Disease & Stroke Prevention Program.*

Age-Adjusted Rates of Death from Heart Disease by Age and Sex, 1998-2000



Source: Utah death certificate data; Utah population estimates from the Utah Governor's Office of Planning and Budget UPED Model, January 2000

Disparities in Health

Despite the numerous interventions developed specifically to address health issues for all underserved populations, racial and ethnic disparities in health continue to be a compelling public health problem. In Utah, Hispanics are the largest minority group. The size of Utah's Hispanic population more than doubled during the 1990s, growing by 138%—a trend that is projected to continue. In 2000, there were over 200,000 Hispanic residents, comprising more than 9% of the state's population. Data from the 2001 Utah Hispanic Health Survey, conducted by the Utah Department of Health's Bureau of Health Promotion, indicate that the Hispanic population is at a higher risk for many factors that lead to heart disease and other chronic diseases.

Three out of five Hispanic adults in Utah (60.7%) were overweight or obese, compared to 52.6% of all Utah adults. Utah's Hispanic adults were slightly less likely to participate in regular physical activity than non-Hispanic adults (47.2% and 52.1%, respectively). Nationally, Hispanic adults are less likely to report that they smoke than non-Hispanic adults. In Utah, the trend is reversed: nearly 1 out of 5 Hispanic adults smoke (19.3%), compared with the national rate for Hispanics (13.3%). In addition, Utah's Hispanic men are much more likely to smoke than non-Hispanic men (25.7% for Hispanic men, compared with 14.4% for non-Hispanic men).

Rates of death from stroke are higher in Utah for Hispanics (98 per 100,000) than they are for Hispanics nationally (79 per 100,000). Data from the 2001 Utah Hispanic Health Survey indicate that only 46.2% of Utah Hispanic adults reported that they had changed their behavior to lower their risk of heart disease or stroke.

Other Disparities

- **Smoking:** College graduates (5.1%) are less likely to smoke than those with a high school diploma (17.2%) or less (30.4%).
- **High Blood Pressure:** Utah residents who are college graduates are less likely to report having been told that they have high blood pressure (15.7%) than those who have less than a high school education (23.1%).
- **Nutrition:** Utah residents with annual incomes of more than $50,000 are more likely to report that they consume 5 or more servings of fruits and vegetables per day (22.6%) than those with annual incomes of less than $15,000 (16.3%).

Text adapted from *Hispanic Health in Utah Report, Utah Department of Health, 2002.*

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

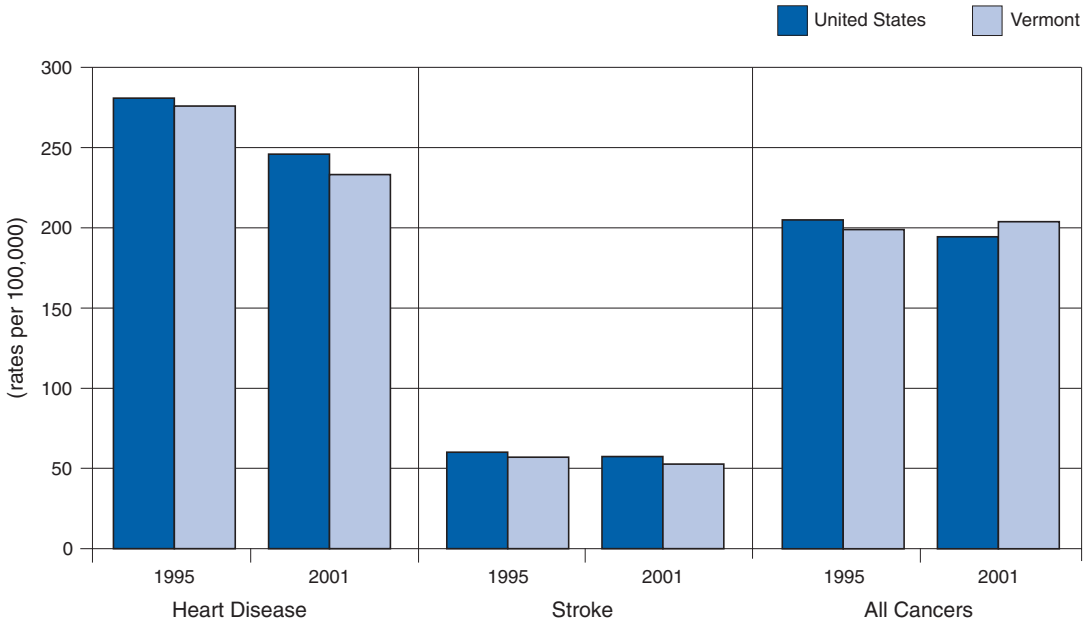
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Vermont

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Vermont, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

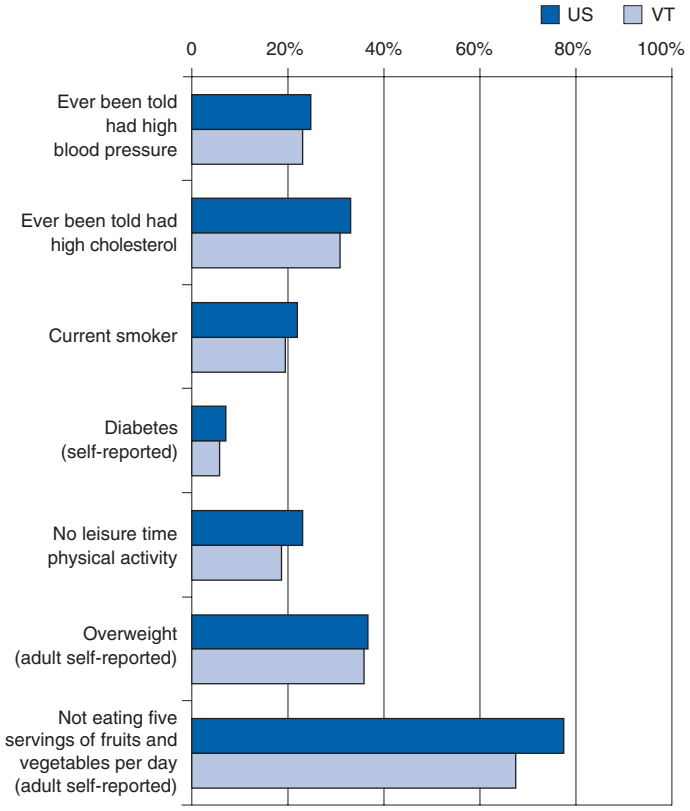
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Vermont, accounting for 1,370 deaths or approximately 27% of the state's deaths in 2002 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 333 deaths or approximately 7% of the state's deaths in 2002.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 1,300 are expected in Vermont. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 3,150 new cases that are likely to be diagnosed in Vermont.

Estimated Cancer Deaths, 2004

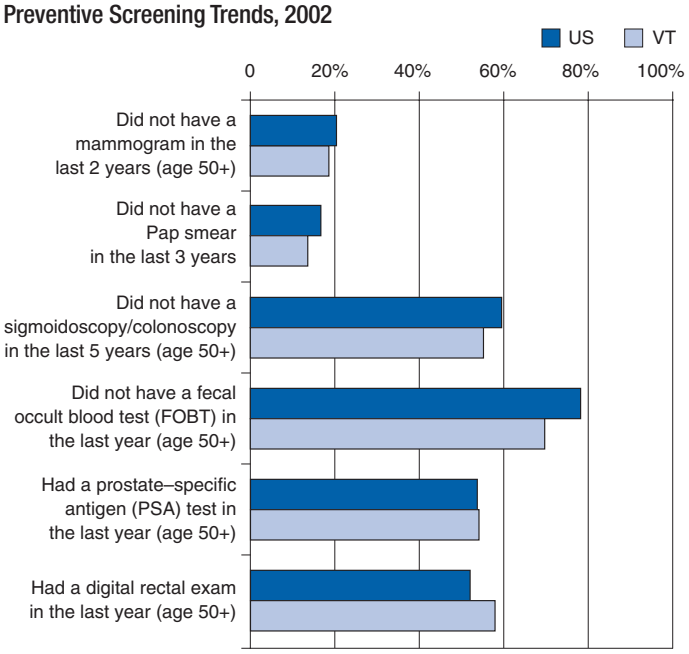
Cause of death	US	VT
All Cancers	563,700	1,300
Breast (female)	40,110	110
Colorectal	56,730	130
Lung and Bronchus	160,440	370
Prostate	29,900	60

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Vermont's Chronic Disease Program Accomplishments

Examples of Vermont's Prevention Successes

- Statistically significant decreases in cancer deaths among white men (296.1 per 100,000 in 1990 versus 240.3 per 100,000 in 2000) and white women (173.0 per 100,000 in 1990 versus 171.7 per 100,000 in 2000).
- A 15.6% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 34.2% in 1992 to 18.6% in 2002)
- A lower prevalence rate than the corresponding national rate for self-reported diabetes (5.8% in Vermont versus 7.1% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Vermont in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Vermont, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Vermont BRFSS*	$180,185
National Program of Cancer Registries *Vermont Cancer Registry*	$344,534
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Vermont Diabetes Control and Prevention Program*	$259,220
National Breast and Cervical Cancer Early Detection Program *Ladies First*	$1,192,362
National Comprehensive Cancer Control Program *Division of Health Surveillance* *Chronic Disease Program*	$129,536
WISEWOMAN *A New Leaf…Choices for Healthy Living* *Active Living Every Day*	$521,644
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Vermont Tobacco Prevention and Control Program*	$1,090,563
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$3,718,044**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Vermont that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Stroke

Stroke is the third leading cause of death in Vermont and in the United States. According to CDC's Cardiovascular Health Program, from 1996 to 2000, the Vermont age-adjusted death rate for stroke was 115 per 100,000. Since 1990, mortality rates have not declined significantly; however, stroke hospitalization has increased 2.9% per year. This increase was not evenly distributed across all age groups: stroke hospitalizations increased 4.0% for Vermonters ages 55 to 74, while the rate for those ages 75 and older increased 1.9% per year.

Modifiable risk factors for stroke include high blood pressure, cirgarette smoking, and obesity. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, nearly one quarter of Vermont adults (23.1%) reported that they had been told that they had high blood pressure. Almost 20% of adults in Vermont smoked and more than half of all Vermont adults were overweight (35.6%) or obese (18.9%). In 1997, three quarters of the state's adults had at least one of these risk factors, 29.0% had at least two of these risk factors, and 3.0% of Vermont adults had all three of these risk factors.

Two other important risk factors for stroke are high blood cholesterol and diabetes. In 2003, 30.9% of Vermonters reported that they had been told that they have high blood cholesterol. In addition, 5.8% reported that they had been told that they have diabetes. Physical inactivity and poor nutrition are risk factors for stroke, diabetes, and high blood pressure. More than two thirds (67.5%) of Vermont adults consumed less than 5 servings of fruits and vegetables per day and 18.7% did not participate in any leisure time physical activity during the past month.

The current plateau in Vermont's stroke mortality rates, the state's increase in stroke hospitalizations, and the large number of older Vermonters with risk factors for stroke suggest that additional strategies are needed to further reduce the occurrence of stroke. Currently, the Vermont Department of Health supports a variety of programs designed to reduce risk factors for stroke. One of these programs is the Strong Living Program, a comprehensive exercise program for adults age 50 and older that incorporates strength, balance, and flexibility exercises and general information about physical activity. The Department of Health also supports a cardiovascular disease education program, a diabetes control program, and a tobacco control program.

Text adapted from *Chronic Disease in Vermont: Stroke,* Vermont Department of Health, Disease Control Bulletin (Volume 1, Issue 2, 1999).

Disparities in Health

Nationally, heart disease is the number one killer of women, accounting for approximately one third of all deaths among women in the United States. Lung, breast, and colorectal cancers are the leading causes of cancer deaths in both men and women. Cancer death rates have begun to decline for men, but they have increased for women. Breast cancer continues to be the most commonly diagnosed cancer among women in the United States. White women have a higher incidence of breast cancer after age 40, while African American women have a slightly higher incidence rate before age 40; however, African American women are more likely to die from the disease at any age.

Death rates for women in Vermont mirror these national trends. In 2001, the three leading causes of death for the state's women—heart disease, followed by cancer and stroke—together accounted for approximately 58% of all deaths among Vermont women. More men in Vermont die of heart disease than women (595 per 100,000 men, compared with 393 per 100,000 women), but more women of all ages die from stroke than men. Of the three leading causes of cancer death among women in Vermont—lung cancer, breast cancer, and colorectal cancer—breast cancer is the most frequently diagnosed cancer, and representing 30% of all newly diagnosed cancers affecting women in the state. Colorectal cancer is the second most frequently newly diagnosed cancer among women in Vermont (13%, compared with 11% among men).

In Vermont, from 1995 to 1999, 36% of breast cancers were detected by mammography (compared with the 2% that were detected from 1974 to 1984). In 2002, only 53.9% of women aged 50 and older with household incomes of below $15,000 received screening, compared with 66.3% of women of the same age group with incomes of more than $50,000. Data from the National Cancer Institute's Surveillance, Epidemiology, and End Results Program system indicated that Vermont's cervical cancer incidence rate was 10.4 per 100,000, which was slightly higher than the national average of 8.1 per 100,000.

Other Disparities

- **Physical Activity:** Women in Vermont are slightly less likely to be physically active than their male counterparts (80.6% versus 82.0%).
- **Overweight:** Women in Vermont are less likely to be overweight or obese than men (46.5% versus 64.6%).
- **Nutrition:** Women are more likely to consume 5 or more fruits and vegetables per day than men (38.4% versus 26.2%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

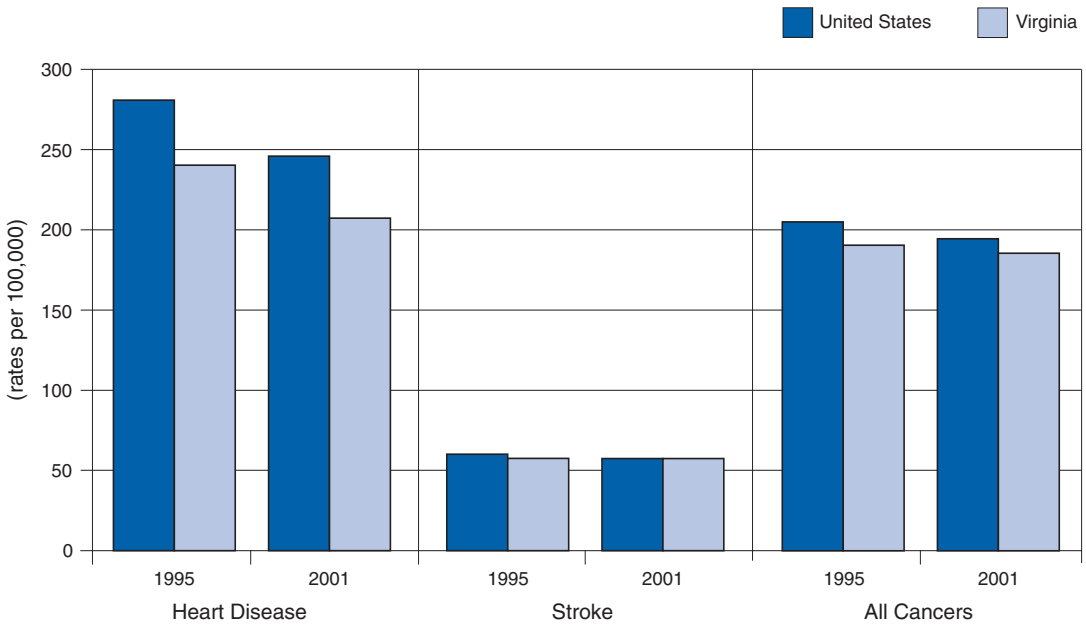
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Virginia

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Virginia, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

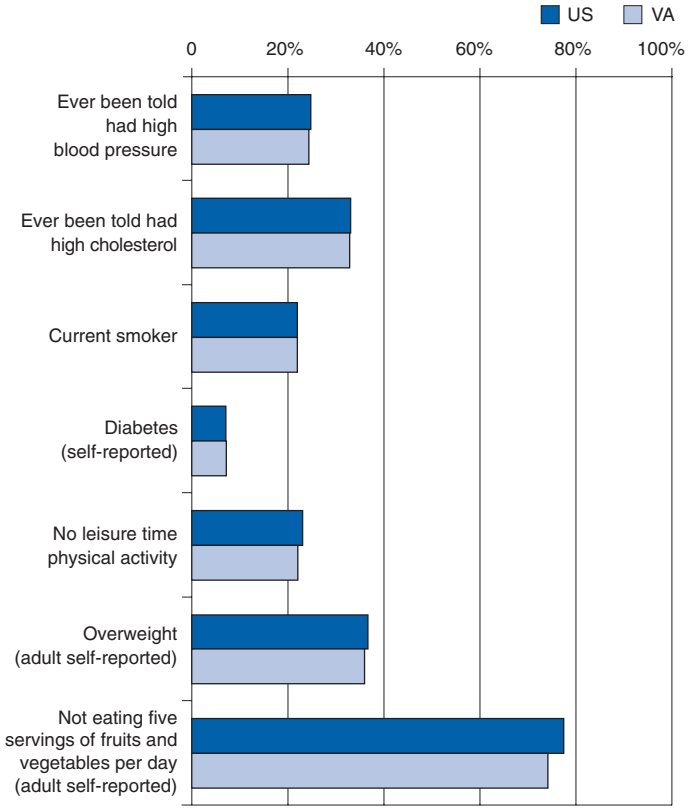
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Virginia, accounting for 14,913 deaths or approximately 26% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 4,129 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 12,850 are expected in Virginia. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 31,190 new cases that are likely to be diagnosed in Virginia.

Estimated Cancer Deaths, 2004

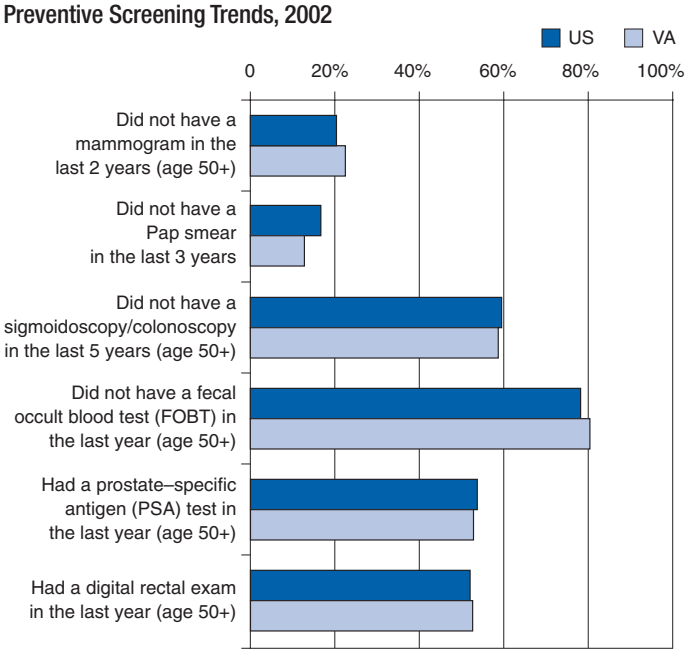
Cause of death	US	VA
All Cancers	563,700	12,850
Breast (female)	40,110	1,180
Colorectal	56,730	1,370
Lung and Bronchus	160,440	3,740
Prostate	29,900	660

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Virginia's Chronic Disease Program Accomplishments

Examples of Virginia's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decrease occurring among Hispanic women (152.0 per 100,000 in 1990 versus 101.4 per 100,000 in 2000).
- A 12.4% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 34.9% in 1992 to 22.5% in 2002).
- A prevalence rate that was lower than the national corresponding rate for women older than age 18 who reported not having had a Pap smear in the last 3 years (12.8% in Virginia versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Virginia in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Virginia, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Virginia BRFSS*	$217,034
National Program of Cancer Registries *Virginia Cancer Registry*	$560,436
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Healthy Pathways*	$1,200,000
Diabetes Control Program *Virginia Diabetes Control and Prevention Program*	$350,000
National Breast and Cervical Cancer Early Detection Program *Virginia Breast and Cervical Cancer Early Detection Program*	$2,345,015
National Comprehensive Cancer Control Program *Cancer Prevention and Control*	$290,000
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Virginia Tobacco Prevention and Control Program*	$889,735
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$5,852,220**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Virginia that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease and Diabetes

In 2001, CDC mortality data indicated that Virginia had the nation's 27th highest heart disease death rate and the 11th highest stroke death rate. From 1996 to 2000, Virginia had a heart disease death rate of 520 per 100,000, slightly lower than the national rate of 536 per 100,000. However, from 1991 to 1998, the state had a stroke death rate that was higher than the national rate (137 per 100,000 compared with 121 per 100,000). Behavioral Risk Factor Surveillance System data from 2000 show that in Virginia, 50% of respondents who were told by a doctor that they had suffered a heart attack or myocardial infarction were under age 65, and 30% of respondents who were told by a doctor that they had suffered a stroke were under age 65. African Americans in Virginia under age 65 had the highest CVD death rate of all racial and ethnic groups.

Heart disease is the leading cause of diabetes-related deaths in Virginia. According to *Diabetes in Virginia 2000*, adults with diabetes have higher rates of heart disease and are more likely to suffer a stroke than adults without diabetes. According to Virginia hospitalization data from 1999, persons with diabetes are 8 times more likely to be hospitalized for a major cardiovascular disease than nondiabetics are. Diabetes mortality data from 1995 to 1999 show that more diabetes-related deaths were due directly to major cardiovascular diseases (1,757) than were due to diabetes.

The Virginia Department of Health began receiving funds from CDC in 1999 to support a state heart disease and stroke prevention program, entitled the Cardiovascular Health Project. The program has worked to establish a statewide coalition, "Healthy Pathways," that represents over 75 organizations from universities, businesses, nonprofit groups, and government. The coalition is writing a "Call to Action Plan" to accompany the State Cardiovascular Risk Reduction Plan, which will outline partnerships and resources that coalition members will commit to implement the plan. In addition, the project has promoted the development of a statewide network of faith initiative partners focused on increasing the cardiovascular health of African American church congregation members. Strategies emphasize supportive policies, physical and social environments, and education.

Text adapted from *Chronic Disease Prevention and Control in Virginia: Data Highlights* (2003) and the Cardiovascular Health Project Web site: www.vahealth.org/cvd.

Disparities in Health

African Americans comprise approximately 12% of the U.S. population and experience disproportionate health disparities. They tend to have higher rates of behavioral risk factors for chronic diseases as well as higher heart disease, stroke, and cancer mortality rates.

African Americans, who make up approximately 19.6% of Virginia's population, experience high rates of risk factors for heart disease and cancer, and consequently high heart disease and cancer death rates. Data from CDC's 2003 Behavioral Risk Factor Surveillance System (BRFSS) indicate that African Americans were less likely than whites to consume 5 or more servings of fruits and vegetables per day (22.8% versus 25.9%) and were less likely to participate in leisure time physical activity than whites (69.9% versus 79.4%). African Americans also were more likely to be obese than whites (34.1% versus 20.3%), more likely to have high blood pressure than whites (29.3% versus 23.8%), and more likely to report having been told that they had diabetes than whites (9.3% versus 6.8%).

Given the prevalence rates of the above risk factors for heart disease and stroke, it is not surprising that African Americans also have higher heart disease and stroke death rates than whites. From 1996 to 2000, African Americans in Virginia had a heart disease death rate of 639 per 100,000, compared with the heart disease death rate for whites, 504 per 100,000. From 1991 to 1998, African Americans in Virginia had a stroke death rate of 188 per 100,000, compared with 128 per 100,000 for whites.

Other Disparities

- **Breast Cancer Screening:** 2002 BRFSS data indicate that African American women in Virginia were more likely to report having had a mammogram in the last 2 years (86.7%) than Hispanic women (84.3%) or white women (79.9%).
- **Cervical Cancer:** Although 2002 BRFSS data indicate that African American women in Virginia (93.1%) were more likely to report having had a Pap smear in the last 3 years than white women (89.7%), from 1997 to 2001, African American women had a cervical cancer death rate that was more than twice as high as the rate for white women (5.1 per 100,000 versus 2.2 per 100,000).
- **Prostate Cancer:** African American men in Virginia in 2000 had a prostate cancer death rate that was more than 3 times as high as the rate for white men (81.9 per 100,000 compared to 26.7 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

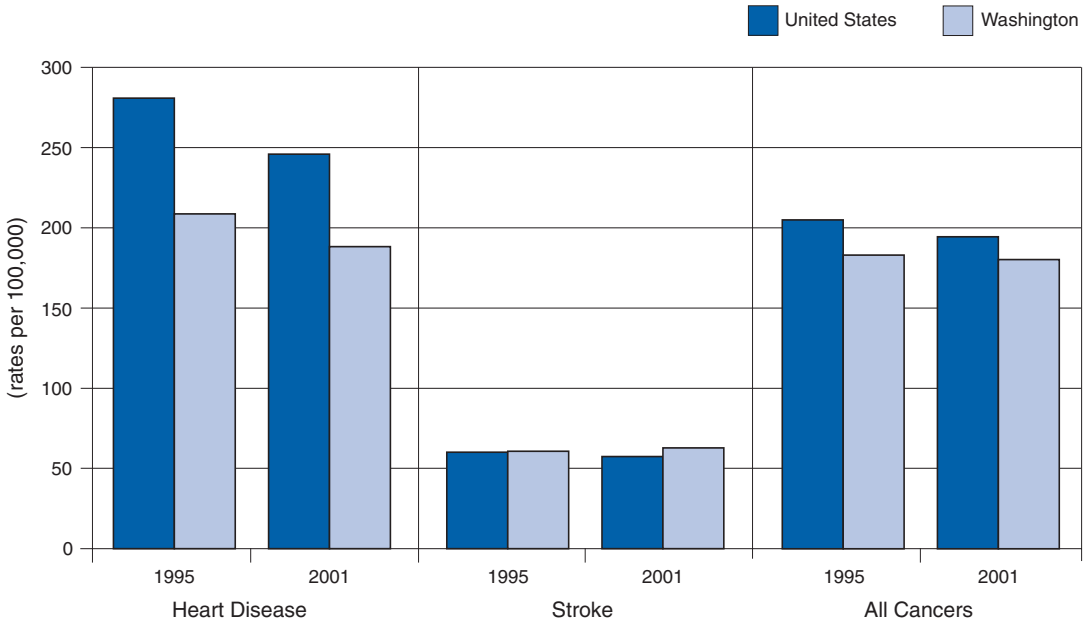
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Washington

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Washington, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

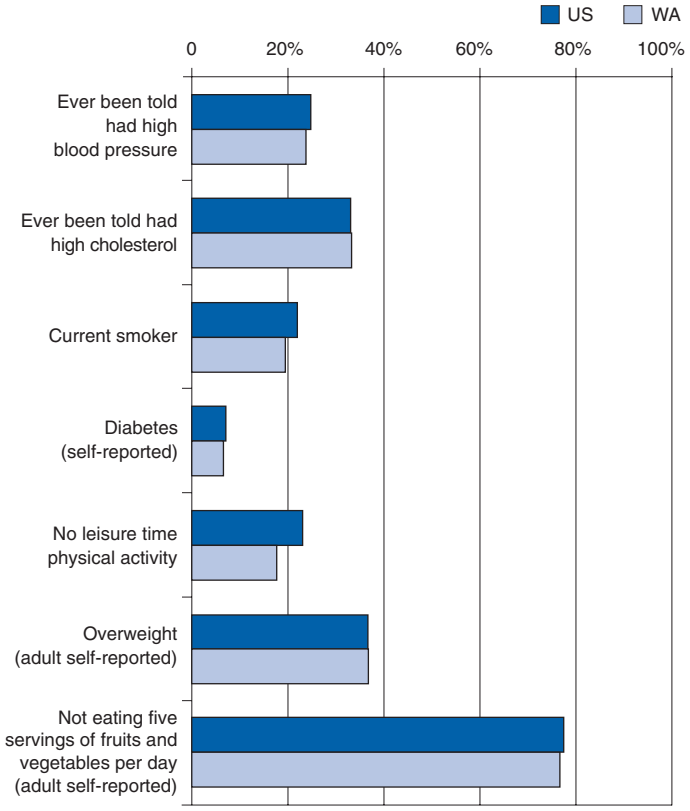
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Washington, accounting for 11,281 deaths or approximately 25% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 3,765 deaths or approximately 8% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 11,280 are expected in Washington. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 27,380 new cases that are likely to be diagnosed in Washington.

Estimated Cancer Deaths, 2004

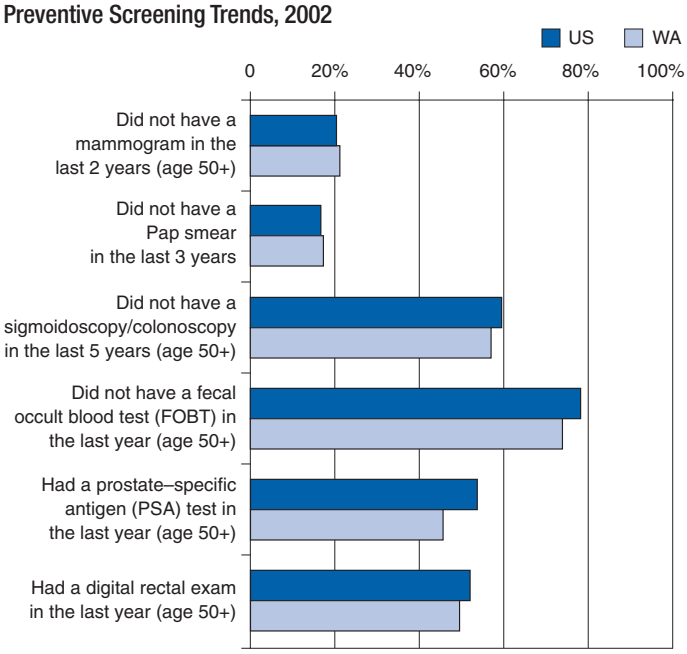
Cause of death	US	WA
All Cancers	563,700	11,280
Breast (female)	40,110	750
Colorectal	56,730	1,050
Lung and Bronchus	160,440	3,250
Prostate	29,900	630

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Washington's Chronic Disease Program Accomplishments

Examples of Washington's Prevention Successes

- Statistically significant decreases in cancer deaths among men of all races (257.3 per 100,000 in 1990 versus 235.3 per 100,000 in 2000) and among women of all races (172.7 per 100,000 in 1990 compared with 169.8 per 100,000) in 2000.
- A 9.9% decrease in the number of women older than age 50 who reported not having a mammogram in the last 2 years (from 31.1% in 1992 to 21.2% in 2002).
- A higher prevalence rate than the corresponding national rate for self-reported participation in leisure time physical activity (82.3% in Washington versus 76.9% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Washington in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Washington, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Washington BRFSS*	$293,854
National Program of Cancer Registries *Washington State Cancer Registry*	$728,016
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *No program identified*	$350,000
Diabetes Control Program *Diabetes Electronic Management Systems (DEMS)* *National Diabetes Education Program* *Chronic Disease Self-Management Support Network*	$898,905
National Breast and Cervical Cancer Early Detection Program *Washington Breast and Cervical Health Program*	$3,939,831
National Comprehensive Cancer Control Program *Comprehensive Cancer Control Program*	$848,915
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Washington Tobacco Prevention and Control Program*	$1,239,602
State Nutrition and Physical Activity/Obesity Prevention Program *Be Healthy. Be Active.* *Healthy Communities Moses Lake Trails/Path Systems*	$800,000
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$9,099,123**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Washington that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Obesity

Obesity is a serious problem in the United States and in Washington state. Obese and overweight individuals are more prone to develop hypertension, elevated blood cholesterol, and diabetes, each of which increases the risk of heart disease. More than half of the adult population, both nationally and in Washington state, is either overweight or obese, and these figures increase each year. The prevalence of obesity in Washington has doubled in the past decade: data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) indicate that in 1990, 9.4% of adults in Washington were obese; by 2003, 21.7% were obese.

Obesity is not only a problem for adults. In the United States, the percentage of young people who are overweight has more than doubled in the last 20 years. In 1999, approximately 7% of Washington youth in grades 9 through 12 were overweight and 14% were at risk of being overweight (between the 85th and 95th percentile for body mass index). In addition, in 2000, 26% of Washington children participating in WIC were above the 90th percentile of weight for height.

The social and financial costs of obesity are not distributed evenly among Washington's residents. African Americans and American Indians/Alaska Natives have the highest prevalence of obesity. Data from the BRFSS indicate that in 2003, 30.5% of African Americans, 23.7% of Hispanics, and 20.9% of whites were obese.

Adults who did not graduate from college have a higher prevalence of obesity than those who did graduate from college (15.2% of college graduates are obese, compared with 25.0% of those with a high school degree or less).

Poor nutrition and physical inactivity are risk factors associated with obesity. Data from the BRFSS for 2003 indicate that only 23.3% of Washington's residents consumed more than 5 servings of fruits and vegetables per day and that 45.6% did not meet the recommended guidelines for moderate physical activity.

In order to address the issue of obesity, the Washington State Nutrition and Physical Activity Advisory Group was formed. This collaborative group is working to develop policy and environmental approaches to slow the increasing proportion of adults who are obese, reduce rates of chronic disease, and improve the quality of life in Washington.

Text adapted from *Washington State Nutrition and Physical Activity Plan; Policy and Environment Approaches* (2003).

Disparities in Health

About 3.7% of the U.S. population consider themselves to be of Asian or Pacific Island descent, according to the 2000 U.S. Census. These data also indicate that Asian/Pacific Islanders represented 5.9% of population in Washington, which gives Washington the third highest population of Asian American/ Pacific Islanders in the United States, following Hawaii (51%) and California (11.2%).

Asian/Pacific Islander populations in the United States tend to be healthy. According to the American Cancer Society, this population has lower rates of death from breast cancer (12.5 per 100,000) and colorectal cancer (13.1 per 100,000) than any other racial or ethnic group. According to Behavioral Risk Factor Surveillance System data from 1998 to 2000, in Washington state, the Asian/Pacific Islander population is less likely to smoke than whites (15.8% versus 21.3%). These data also indicate that in comparison with other racial and ethnic groups in Washington, Asian/Pacific Islanders are less likely to be obese than whites (9.6% versus 18.5%).

Although chronic disease rates are low among Asian/Pacific Islanders, this population is underrepresented in the health care workforce, leading to potential disparities in the provision of health care because of language and cultural barriers. The State Board of Health convened a Health Disparities committee to begin to address the health disparities in Washington state. The committee is working to improve the diversity of the health care workforce in order to build a more diverse health care system.

Other Disparities

- **Physical Activity:** Hispanics (42.9%) and African Americans (55.0%) in Washington are less likely to meet the recommended guidelines for moderate physical activity than whites (55.6%).
- **High Blood Pressure:** African Americans in Washington (28.1%) are more likely to report having been diagnosed with high blood pressure than whites (24.8%).
- **Diabetes:** African Americans are also more likely to report having been diagnosed with diabetes (9.0%) than whites (6.5%) or Hispanics (4.7%).
- **Breast Cancer:** Although African American women are more likely to report having had a mammogram in the last 2 years (83.2%) than white women (78.8%), African American women have higher breast cancer death rates (34 per 100,000) than white women (25.4 per 100,000).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

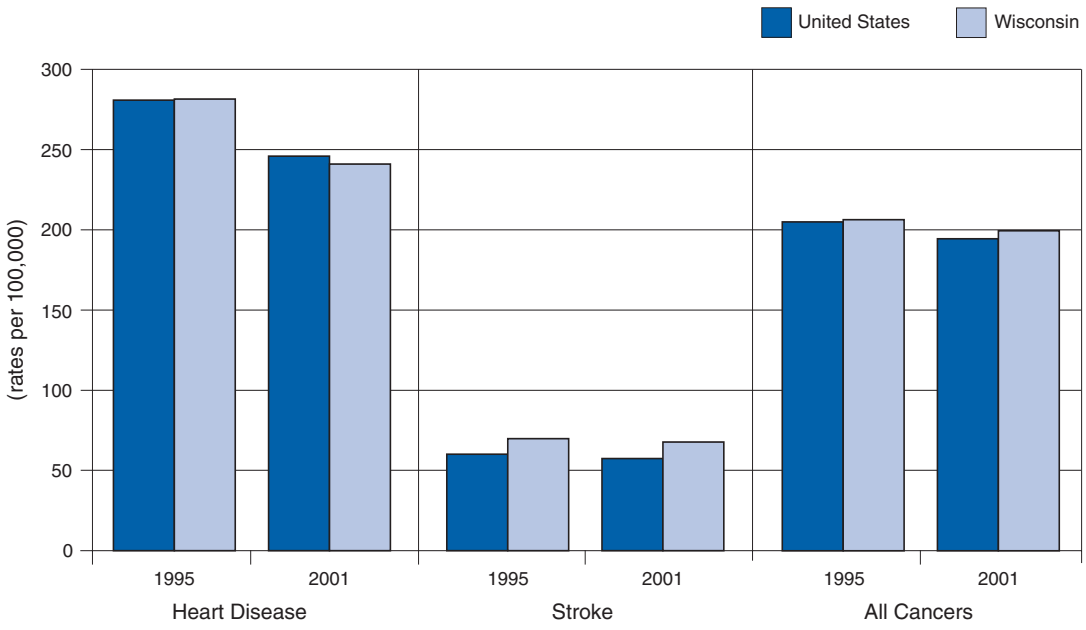
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Wisconsin

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Wisconsin, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

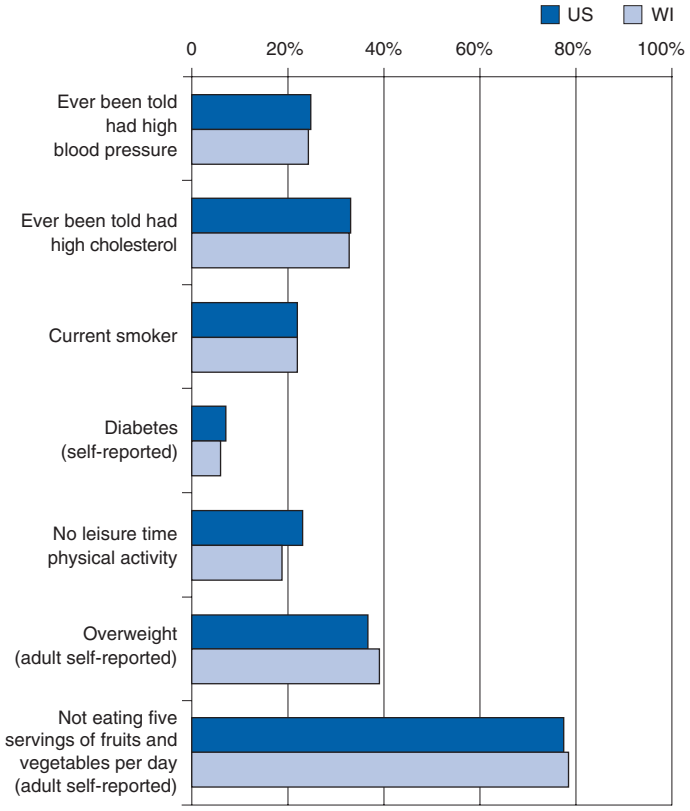
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Wisconsin, accounting for 13,023 deaths or approximately 28% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 3,658 deaths or approximately 8% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 10,780 are expected in Wisconsin. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 26,160 new cases that are likely to be diagnosed in Wisconsin.

Estimated Cancer Deaths, 2004

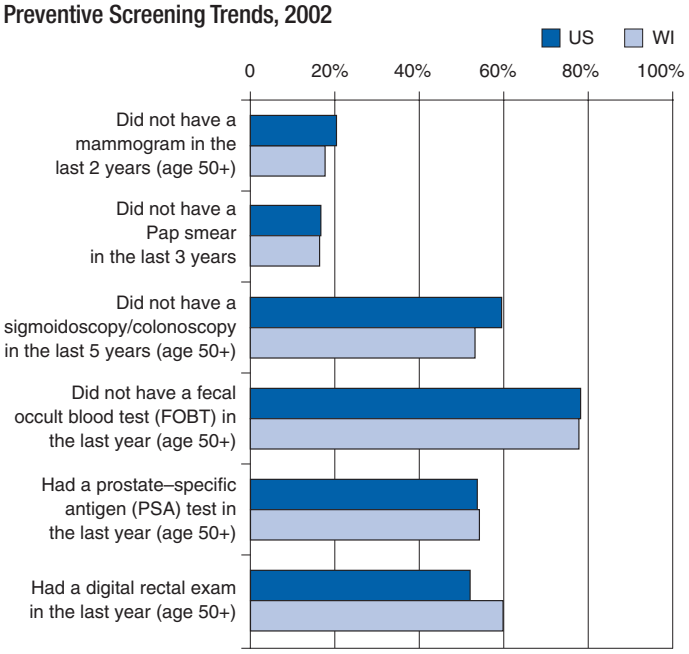
Cause of death	US	WI
All Cancers	563,700	10,780
Breast (female)	40,110	750
Colorectal	56,730	1,120
Lung and Bronchus	160,440	2,820
Prostate	29,900	500

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Wisconsin's Chronic Disease Program Accomplishments

Examples of Wisconsin's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, from 272.7 per 100,000 in 1990 to 240.6 per 100,000 in 2000.
- A 19.0% decrease in the number of women older than age 50 who reported not having a mammogram in the last 2 years (from 36.7% in 1992 to 17.7% in 2002).
- A higher prevalence rate than the corresponding national rate for self-reported participation in leisure time physical activity (81.2% in Wisconsin versus 76.9% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Wisconsin in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Wisconsin, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Wisconsin BRFSS*	$185,583
National Program of Cancer Registries *Wisconsin Cancer Reporting System*	$472,881
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Great Lakes Regional Stroke Network* *Lipid Management Project* *Epidemiology Task Force* *Wisconsin Cardiovascular Health Alliance*	$350,000
Diabetes Control Program *The Wisconsin Collaborative Diabetes Quality Improvement Project* *Wisconsin Primary Health Care Diabetes Collaborative* *Wisconsin Diabetes Advisory Group (DAG)*	$765,527
National Breast and Cervical Cancer Early Detection Program *Wisconsin Well Woman Program*	$3,151,995
National Comprehensive Cancer Control Program *Wisconsin Department of Health and Family Services*	$422,958
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Wisconsin Tobacco Control Program*	$1,141,265
State Nutrition and Physical Activity/Obesity Prevention Program *Eat Well Play Hard* *Prevention Projects* *Walk to School Day*	$443,005
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$6,933,214**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Wisconsin that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

In 2001, about 35% of all deaths in Wisconsin (16,681) were due to cardiovascular disease (CVD). CVD is the leading cause of death among men and women of all racial and ethnic groups in Wisconsin. Annually, CVD causes more deaths than cancer, AIDS, automobile crashes, domestic abuse, and alcohol abuse combined.

The *2002 Cardiovascular Disease Surveillance Summary* published by the Wisconsin Bureau of Chronic Disease Prevention and Health Promotion reported that the estimated annual total cost of CVD to the state was $5.2 billion—or more than $1,000 for every man, woman, and child. In 2000, there were almost 94,000 hospitalizations for CVD, accounting for over $1.6 billion in charges. Total costs included direct costs (health care, provider visits, hospital and nursing home services, medications, home care) and indirect costs (lost productivity).

Much of the health and economic burden of CVD can be prevented. Data from the 2003 CDC Behavioral Risk Factor Surveillance System indicate that Wisconsin residents have a variety of risk factors for CVD, including high rates of physical inactivity, obesity, and high blood pressure. Twenty-four percent of Wisconsin's residents reported having been told by a health care provider that they have high blood pressure and 45.3% reported that they do not meet the recommended guidelines for moderate physical activity. In addition, only 21.5% reported consuming 5 or more servings of fruits and vegetables per day. Consequently, 36.3% of the population is overweight and 21.6% is obese. Smoking, another risk factor for CVD, is prevalent in Wisconsin—more than one fifth of adults in Wisconsin reported that they were current smokers (22.0%).

Heart disease can be prevented by increasing physical activity, maintaining a normal body weight, and eating a healthy diet. The Wisconsin Department of Health began receiving funds from CDC in 2000 to support a state heart disease and stroke prevention program. The Cardiovascular Health Program in Wisconsin is working to create environments that support or encourage healthier lifestyles, so that Wisconsin residents can help to reduce the state's CVD burden. In addition, the program is building partnerships with residents, advocacy groups, health organizations, health professionals, local health departments, and other governmental and nongovernmental agencies to decrease risk factors for heart disease and stroke.

Text adapted from *Wisconsin Cardiovascular Disease Surveillance Summary* (2002).

Disparities in Health

About 4.2% of the US population considers themselves to be of Asian or Pacific Island descent. Only about 2% of Wisconsin's residents are Asian, however, over 70% of the state's Asian/Pacific Islander population are Hmong refugees from Laos and their descendants, who emigrated to Wisconsin beginning in the 1970s. From 1990 to 2000, the Hmong population more than doubled from 16,373 to 33,791. The Hmong population tends to be concentrated in selected counties across the state, especially in Milwaukee, Dane, Waukesha, Brown, La Crosse, Marathon, Sheboygan, Eau Claire, Outagamie, and Winnebago counties.

Asian/Pacific Islander populations in the United States tend to be healthy; according to the American Cancer Society, this population has lower rates of death from breast cancer (12.5 per 100,000) and colorectal cancer (13.1 per 100,000) than any other racial or ethnic group. In Wisconsin, between 1996 and 2000, data from the Wisconsin Behavioral Risk Factor Surveillance System indicate that Asian/Pacific Islander adults had almost the same smoking rate as whites (22% compared to 23%). Asian/Pacific Islander youth were also as likely as white youth to smoke (10% compared with 9%). Asian/Pacific Islanders were less likely to be overweight or obese than whites (35% compared with 56%).

However, language and cultural issues present barriers to accessing health care. In a report published by the University of Wisconsin Extension program, Hmong families indicated that the high cost of health insurance prevented some Hmong families from seeking health care. In addition, the Hmong families wanted to use providers that considered using traditional Hmong medical practices, including herbal remedies.

Other Disparities

- **High Blood Pressure:** African Americans were more likely to report having been told that they have high blood pressure (27.0%) than whites (24.6%).
- **Physical Inactivity:** African Americans (35.9%) and Hispanics (27.4%) were more likely to report that they did not participate in any leisure time physical activity during the past month than whites (17.6%).
- **Diabetes:** African Americans were almost twice as likely as whites to report having been diagnosed with diabetes (10.7% of African Americans, compared with 5.9% of whites).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

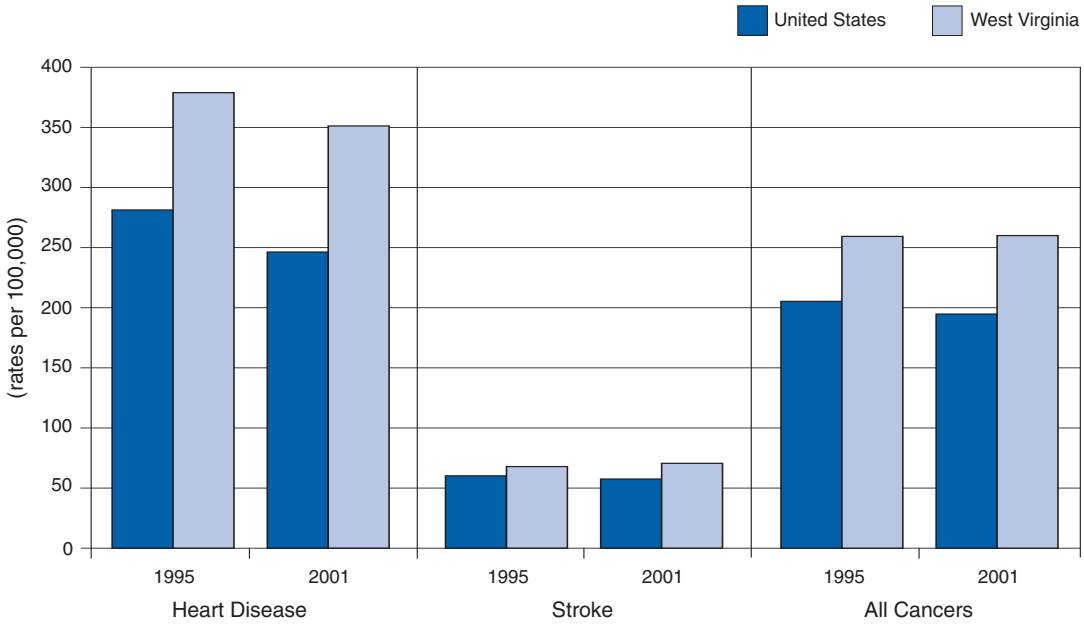
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

West Virginia

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and West Virginia, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

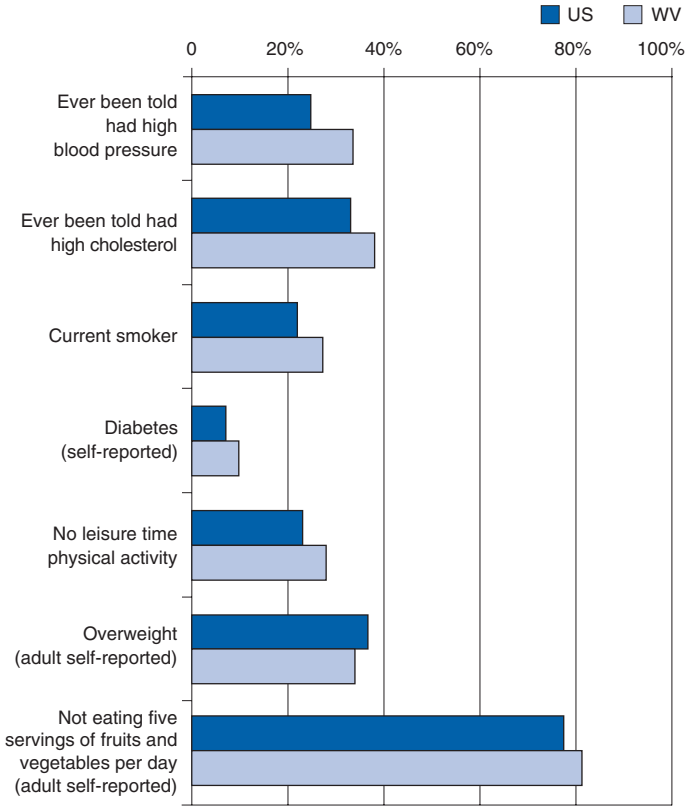
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in West Virginia, accounting for 6,325 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fourth leading cause of death, accounting for 1,272 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 4,710 are expected in West Virginia. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 11,430 new cases that are likely to be diagnosed in West Virginia.

Estimated Cancer Deaths, 2004

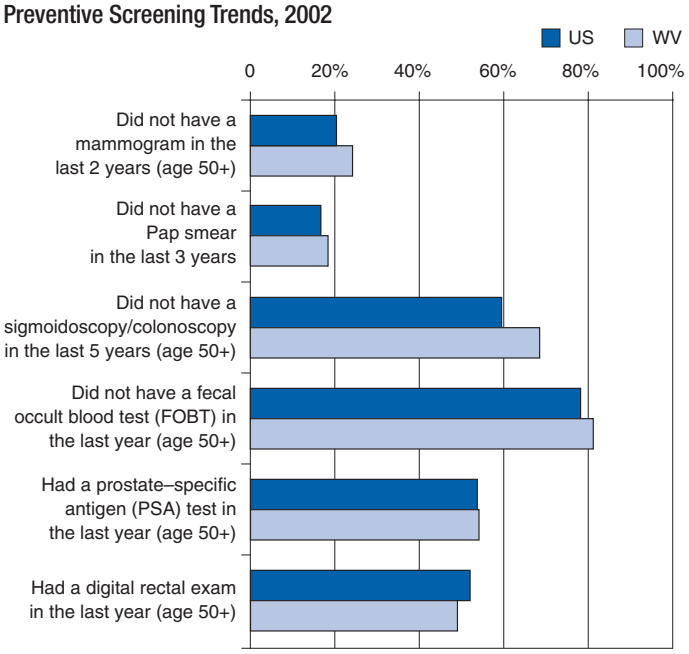
Cause of death	US	WV
All Cancers	563,700	4,710
Breast (female)	40,110	300
Colorectal	56,730	490
Lung and Bronchus	160,440	1,640
Prostate	29,900	200

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

West Virginia's Chronic Disease Program Accomplishments

Examples of West Virginia's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decrease occurring among African American men (382.0 per 100,000 in 1990 versus 340.3 per 100,000 in 2000).
- A 24.7% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 48.9% in 1992 to 24.2% in 2002).
- A 6.9% decrease in the percent of women who reported not having had a Pap smear in the last 3 years (from 25.3% in 1992 to 18.4% in 2002).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to West Virginia in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for West Virginia, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *West Virginia BRFSS*	$122,117
National Program of Cancer Registries *West Virginia Cancer Registry*	$323,964
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Ebenezer Medical Outreach* *The West Virginia Restaurant Survey* *Wheeling Walks Program*	$1,000,000
Diabetes Control Program *Diabetes Control and Prevention Program*	$859,827
National Breast and Cervical Cancer Early Detection Program *Breast and Cervical Cancer Screening Program*	$3,980,000
National Comprehensive Cancer Control Program *Comprehensive Cancer Control Program*	$686,353
WISEWOMAN *Cookin' Up Health*	$442,492
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *West Virginia Tobacco Prevention and Control Program*	$1,090,470
State Nutrition and Physical Activity/Obesity Prevention Program *Aerobics Classes in African American Churches (CVH Minority Initiatives)* *Community Based Initiative Grants* *School Health Index* *State Health Education Conference* *Walk Across West Virginia* *West Virginia State Trails Plan* *West Virginia on the Move*	$449,255
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$8,954,478**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in West Virginia that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Obesity

Obesity is one of the most serious risk factors for a variety of chronic diseases, such as heart disease, diabetes, and hypertension. The obesity prevalence in West Virginia has been consistently higher than in the United States as a whole since state-level monitoring began through CDC's Behavioral Risk Factor Surveillance System (BRFSS). In 1990, the West Virginia rate for adult obesity was 15%, compared with 11.6% for the United States. By 2003, the state obesity rate had increased to 27.6%, compared with 22.2% for the United States.

Poor nutrition and physical inactivity are risk factors for obesity. Data from the BRFSS indicate that in 2003, 57.3% of people in West Virginia did not meet the recommended guidelines for moderate physical activity, compared with the national average of 52.8%. In addition, only 18.7% of people in West Virginia reported eating 5 or more servings of fruits and vegetables per day, compared with the national average of 22.5%.

Data from the 2002 BRFSS show that West Virginians who are obese are more likely than those at a healthy weight to have suffered a heart attack; been diagnosed with hypertension, diabetes, and/or asthma; or to have been limited in their activities because of back pain. While more West Virginians who are obese report that they are trying to lose weight, they are less likely to be physically active or to eat a diet that includes at least five servings of fruits and vegetables per day.

Youth in West Virginia are less active than youth nationwide, according to data from CDC's 1999 Youth Risk Behavior Survey. Those data show that only 38.2% of the state's high school students were enrolled in physical education classes in that year, compared with a national average of 56.1%. Less than half of these students (49.5%) participated on a sports team, while nationally, 55.1% of students reported participating in a team sport.

In 1993, the West Virginia Bureau of Public Health established the West Virginia Coalition of Physical Activity to address the increase in sedentary lifestyles of state residents and to provide a platform to support Healthy People 2010 objectives. Each year, the Coalition coordinates *Walk Across West Virginia*, a statewide physical activity campaign that recruits over 6,300 participants.

Text adapted from *Obesity: Facts, Figures, Guidelines* (2002).

Disparities in Health

Almost 20% of the U.S. population lives in rural areas. People in these rural areas have a higher risk of heart disease, diabetes, and cancer, which is attributable in part to a population that is older, poorer, and less educated. In addition, access to physicians and other health care services is limited. People living in rural areas are also more likely to use tobacco.

West Virginia is the second most rural state in the United States, with 64% of its population living in communities of fewer than 2,500 people and 45 of its 55 counties designated as "nonmetropolitan" by the Bureau of the Census. West Virginia is located in Appalachia, a mountainous region in the eastern United States where, from 1994 to 1998, the death rate for all cancers was significantly higher (176.3 per 100,000) than the corresponding national rate (166.7 per 100,000).

Rural Appalachian culture influences health in several important ways. Appalachians inhabit a particular mountain environment that separates them physically from other cultural groups and the resources of those groups. Thus, rural Appalachian culture has developed in a historical context of isolation and exploitation, which has assured major differences between Appalachian culture and the dominant urban culture. Many Appalachian residents are reluctant to use the mainstream medical system except for emergencies. Health interventions that are developed with consideration for Appalachian culture, values, language, and behaviors have been most successful in altering the health status of mountain dwellers.

Other Disparities

- **Cancer:** African American men in West Virginia in 2000 had a higher cancer death rate than whites (340.3 per 100,000, compared with 278.6 per 100,000). Among women, however, the death rate in 2000 was lower for African Americans than whites (187.6 per 100,000, compared with 189.1 per 100,000).
- **High Blood Pressure:** African Americans in West Virginia are more likely to report having high blood pressure than their white counterparts (42.3%, compared with 33.1%).
- **Cardiovascular Disease:** From 1996 to 2000, in West Virginia the death rates among African Americans for heart disease (669 per 100,000) and stroke (137 per 100,000) were higher than the corresponding rates for whites (642 per 100,000 for heart disease and 117 per 100,000 for stroke).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

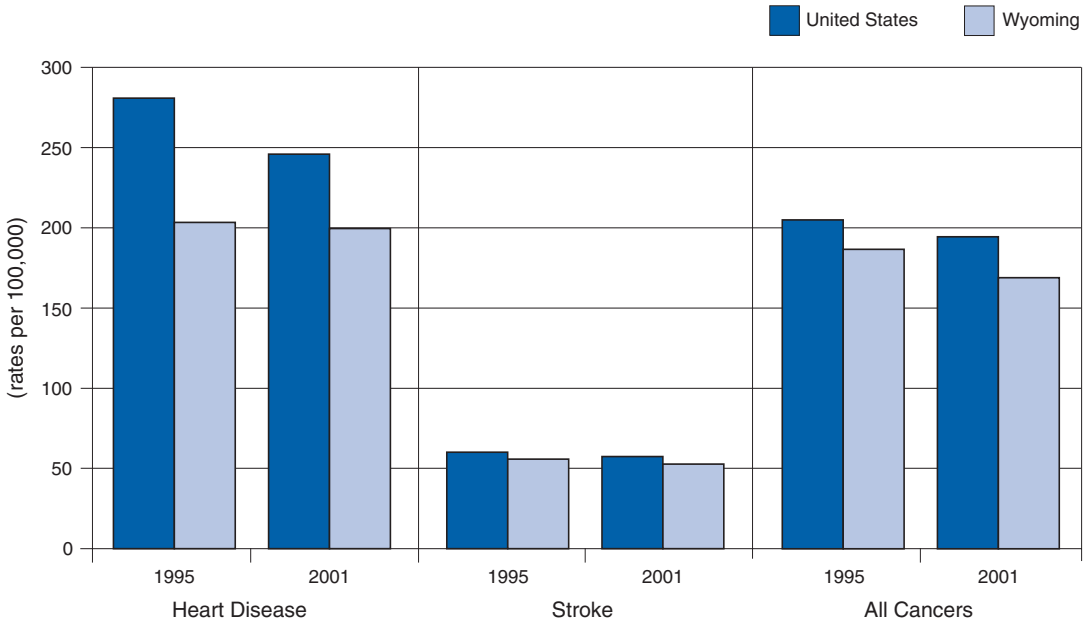
For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp

Wyoming

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Wyoming, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

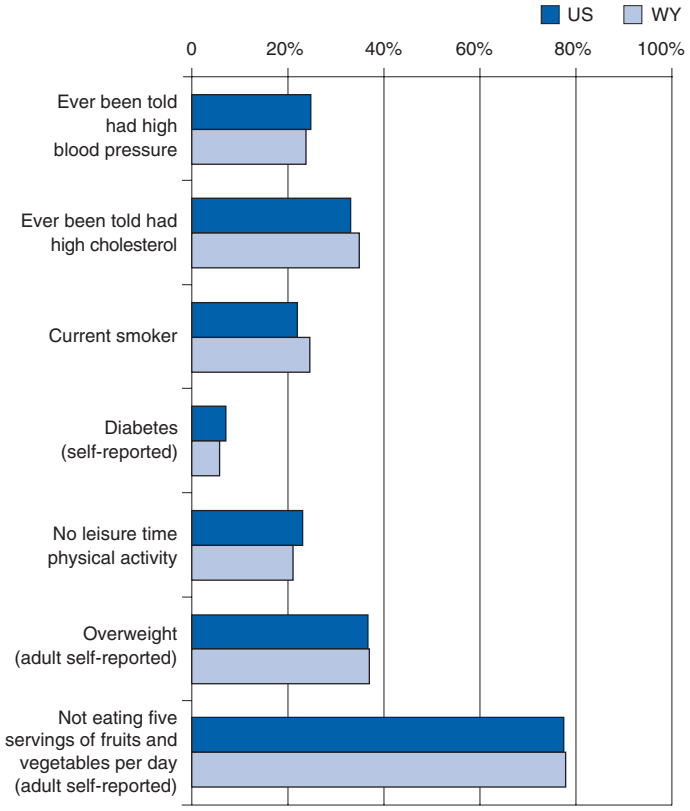
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Wyoming, accounting for 985 deaths or approximately 24% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fifth leading cause of death, accounting for 260 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 1,000 are expected in Wyoming. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 2,430 new cases that are likely to be diagnosed in Wyoming.

Estimated Cancer Deaths, 2004

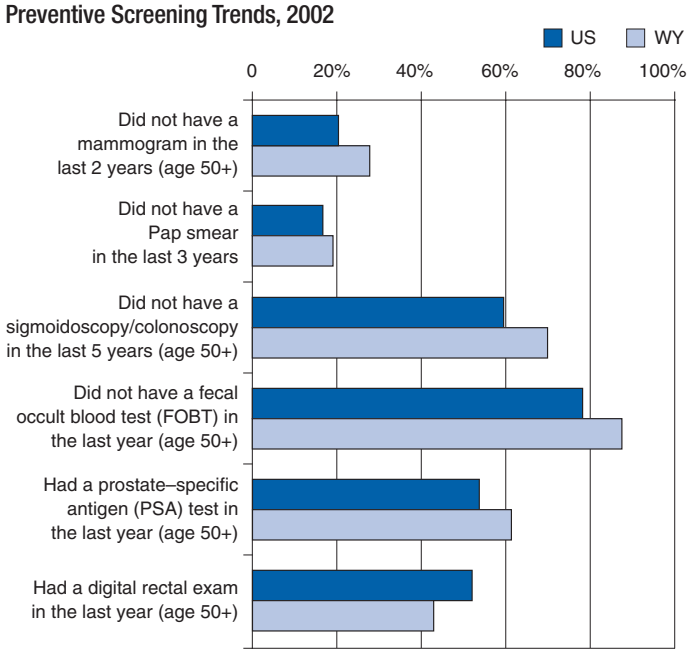
Cause of death	US	WY
All Cancers	563,700	1,000
Breast (female)	40,110	+
Colorectal	56,730	110
Lung and Bronchus	160,440	260
Prostate	29,900	80

+ Represents fewer than 50 deaths. *Source: American Cancer Society, 2004*

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Wyoming's Chronic Disease Program Accomplishments

Examples of Wyoming's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among white, non-Hispanic men (266.7 per 100,000 in 1990 versus 219.9 per 100,000 in 2000).
- An 8.9% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 35.5% in 1992 to 27.8% in 2002).
- Lower prevalence rates than the corresponding national rates for self-reported high blood pressure (23.8% in Wyoming versus 24.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Wyoming in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Wyoming, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Wyoming BRFSS*	$165,702
National Program of Cancer Registries *Wyoming Cancer Surveillance Program*	$417,474
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	$0
Diabetes Control Program *Wyoming Diabetes Prevention and Control Program*	$275,000
National Breast and Cervical Cancer Early Detection Program *Wyoming Department of Health, Breast and Cervical Cancer Early Detection Program*	$719,091
National Comprehensive Cancer Control Program	$0
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Wyoming Tobacco Prevention and Control Program*	$975,274
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$2,552,541**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Wyoming that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD), including coronary heart disease and stroke, is the number one cause of death in the state of Wyoming, accounting for almost 33% of all deaths in 2001. The age-adjusted death rate for heart disease in Wyoming decreased from 232.1 per 100,000 in 1999 to 216.9 per 100,000 in 2000; the state's age-adjusted death rate for stroke also decreased, from 61.5 per 100,000 in 1999 to 58.1 per 100,000 in 2000.

However, the major risk factors associated with CVD remain prevalent in Wyoming's population. According to 2003 data from the Behavioral Risk Factor Surveillance System, 22.4% of Wyoming's adult population reported that they had been diagnosed with high blood pressure, 30.5% reported that they had been diagnosed with high blood cholesterol, and 4.5% reported that they had been diagnosed with diabetes. Thirty seven percent of Wyoming residents are overweight and nearly 20.1% are obese. Additionally, in 2003, more than one fifth of all adults in the state did not engage in any leisure time physical activity, and 24.6% were smokers**.**

The burden of CVD is not limited to morbidity and mortality. Between July 2000 and June 2001, 18,783 people were discharged from Wyoming hospitals with either a primary or a secondary diagnosis of CVD, resulting in a cost of over $246 million. While CVD-related diagnoses accounted for only 35% of the total number of diagnoses, the cost of CVD and CVD-related diagnoses accounted for 54% of the total cost of all hospital discharges.

In an effort to address the problem of CVD in Wyoming, the Cardiovascular Disease Program works to prevent, detect, and monitor cardiovascular disease within the state. The CVD Program provides cardiovascular disease health promotion and disease prevention programs to communities and to health care providers. The CVD Program focuses on primary prevention, where CVD-related risk factors such as physical activity, nutrition, high blood pressure, and high blood cholesterol are addressed. The CVD Program also sponsors the Wyoming 5 A Day Program, and the Wyoming Walks Program.

Text adapted from *The Burden of Cardiovascular Disease in Wyoming* (2003).

Disparities in Health

Across the country, American Indians and Alaska Natives (AI/ANs) comprise more than 500 federally recognized tribes and represent 1% of the U.S. population. Compared with other racial and ethnic minorities, AI/ANs have the highest poverty rate, 26%, which is 2 times the national rate. In addition to high poverty levels, AI/ANs are experiencing growing health disparities.

AI/ANs are the second largest minority population in Wyoming, representing approximately 3% of the state's population. Over half of this population lives in Fremont County, home of the Wind River Indian Reservation. Wyoming's AI/AN population lives in extreme poverty: 58% of the population lives below the poverty level.

Wyoming's AI/AN populations have high rates of heart disease, cancer, liver disease, and diabetes. The state's AI/ANs are more than twice as likely to die from heart disease (179.1 per 100,000) than the nation's AI/AN population (76 per 100,000). Wyoming's AI/AN population has much higher death rates for diabetes (47.8 per 100,000) and liver disease (57.8 per 100,000) than the national rates for AI/ANs (27.3 per 100,000 for diabetes and 24.3 per 100,000 for liver disease). Likewise, Wyoming's AI/AN populations are more likely to die from cancer than AI/ANs nationally (113.4 deaths per 100,000 versus 80.8 deaths per 100,000).

In September 2000, the Minority Health Program in the Wyoming Department of Health received funding to conduct a statewide minority health assessment. The findings of the assessment will help the state to better clarify the areas of greatest need among racial and ethnic populations.

Other Disparities

- **Overweight:** In Wyoming, AI/ANs are more likely to be overweight than whites (41% versus 29%).
- **Smoking:** Wyoming's AI/ANs are more likely to smoke than whites (39% versus 24%).
- **Mammograms:** AI/AN women in Wyoming are more likely to have had a mammogram in the past 2 years than their white counterparts (74.8% versus 65.6%).
- **High blood pressure:** AI/ANs have lower rates of high blood pressure than whites (18% versus 23%).

U.S. Department of Health and Human Services | Centers for Disease Control and Prevention
SAFER • HEALTHIER • PEOPLE™

For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: http://www.cdc.gov/nccdphp