The Burden of Cardiovascular Disease in Maine 2012

Maine Center for Disease Control and Prevention
An Office of the Department of Health and Human Services

Paul R. LePage, Governor
Mary C. Mayhew, Commissioner

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The Burden of Cardiovascular Disease in Maine 2012

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Executive Summary

Cardiovascular diseases (CVDs) are leading causes of death among both men and women in the U.S., accounting for 32% of all deaths (nearly 800,000 lives) in 2009.[1] In 2007, an estimated 82,600,000 American adults (more than 1 in 3) had one or more types of CVD, including 76,400,000 with high blood pressure, 16,300,000 with coronary heart disease, and 7,000,000 with cerebrovascular disease (stroke).[2]

Disabilities and deaths from CVD are related to a number of modifiable risk factors, including unhealthy behaviors such as tobacco use, physical inactivity and poor nutrition. Adverse health conditions, including high blood pressure, high blood cholesterol, diabetes, and being overweight or obese, also contribute to CVD-related disabilities and death.

To understand the impact of cardiovascular disease in Maine, state and national data sources were analyzed to examine multiple aspects of cardiovascular disease and its associated risk factors.

Key Findings: CVD in Maine

- Heart disease is the second leading cause of death in Maine, and stroke is the fourth leading cause of death in the state. Combined, heart disease and stroke caused 3,292 deaths in 2009, 26% of all deaths that year.
- Maine's age-adjusted CVD death rate has been steadily declining since 1993. Between 1999 and 2009, the overall CVD death rate declined 35%.

Heart Disease

- In 2009, 2,652 Mainers died of heart disease (21% of all deaths in the state that year).
- In 2009, 7.5% of Maine's adult population (nearly 72,000 people) reported ever having coronary heart disease (CHD). In the same year, there were 7,325 hospitalizations for CHD.
- In 2009, 1,637 deaths were due to CHD (62% of all heart disease deaths and 13% of all deaths in the state that year).
- In 2009, there were 569 deaths and 4,059 hospitalizations due to acute myocardial infarction (heart attack).

- In 2009, there were 286 deaths and 1,429 hospitalizations due to heart failure.
- In 2009, only one in seven Maine adults (15%) correctly identified all symptoms of a heart attack and knew to call 911 for assistance. Adult males, those with lower education levels and those with lower annual household incomes were less likely to correctly recognize heart attack symptoms and the need to call 911.

Stroke

- In 2009, there were 640 deaths (5% of all deaths in the state that year) and 3,656 hospitalizations due to stroke.
- In 2009, Maine had the 35th highest stroke death rate among all 50 states and the District of Columbia. In the same year, Maine had the highest stroke death rate among all New England states.

Risk Factors and Actions to Control Risk Factors

- Between 1995 and 2009, the prevalence of high blood pressure in Maine increased significantly from 21% to 30%.
- Between 2001 and 2007 there was a significant increase in the prevalence of high cholesterol among Maine adults. The prevalence rate of high cholesterol in 2009 was 39%, which was significantly higher than the prevalence rate of 30% in 2001.
- In 2009, only 78% of adults with high blood pressure were taking medications to control their high blood pressure.
- In 2009, 72% of Maine adults with high blood pressure reported exercising, 68% reported changing their eating habits, 67% reported reducing their salt intake, and 35% reported reducing their alcohol intake to control their high blood pressure.

Conclusion

This report provides updated data and facts concerning the burden of cardiovascular disease in Maine. This information is intended to support the cardiovascular health community in Maine with program planning, strengthening community-clinical linkages, and other work needed to address the health burden of cardiovascular disease.

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Chapter 1: Introduction to Cardiovascular Disease

The Basics

What is Cardiovascular Disease?

Cardiovascular disease is a broad term for a variety of diseases and conditions affecting the heart and blood vessels. The most common of these diseases are heart disease and stroke.

Many Mainers Die from Cardiovascular Disease

Each year in Maine, one out of four (26%) people die from heart disease or stroke. In 2009 a total of 3,292 Mainers lost their lives to these diseases (Figure 1.1). Heart disease and stroke are also major causes of hospitalizations and health care costs in Maine.[1]

Cardiovascular Disease Can Be Managed

People can reduce their chances of developing cardiovascular disease by promoting healthy behaviors such as:

- Engaging in physical activity
- Eating a healthy diet
- Refraining from tobacco use

A person's chances of developing cardiovascular disease are increased if they have these conditions:

- High blood pressure
- High blood cholesterol
- Overweight and obesity
- Diabetes

A person's chances of developing cardiovascular disease can also increase if they have certain kinds of family history or genetic make-up, or if they are advanced in age.[2]

Maine Is Working to Reduce Cardiovascular Disease

The Maine DHHS-CDC- Cardiovascular Health Program (MCVHP) is a state public health program dedicated to addressing cardiovascular disease. The MCVHP promotes a way of life that

minimizes a person's risk of developing cardiovascular disease. This includes:

- Promotion of physical activity, healthy eating, and being tobacco-free
- Preventing and controlling high blood pressure, high blood cholesterol, and diabetes
- Increasing timely care for heart attacks and strokes
- Promotion of good oral health
- Improving the quality of care for those at risk for or diagnosed with cardiovascular disease

To accomplish these goals, the MCVHP partners with State and Local organizations to provide education to Maine residents, as well as offer technical assistance, resources, and training to community organizations, healthcare providers and employers. The MCVHP Vision is a Heart Healthy and Stroke-Free Maine, and its overall goal is to reduce death, disability, and healthcare costs due to heart disease and stroke in Maine.

The MCVHP Priorities are to:

- Control high blood pressure (hypertension)
- Control high blood cholesterol
- Increase knowledge of heart attack and stroke symptoms and the need to call 911
- Improve emergency response for heart attack and stroke
- Improve quality of care related to cardiovascular disease prevention and control
- Eliminate disparities related to cardiovascular disease prevention and control

What Is Included in This Burden Report?

The following chapters provide additional information on:

- The overall burden of cardiovascular disease in Maine
- Cardiovascular disease's serious impact on deaths and hospitalizations and the cost associated with these
- Public awareness of signs and symptoms of heart attack and stroke, the need to call 911, and changes in that knowledge over the past decade
- Risk factors related to cardiovascular disease prevention and management, including tobacco use, physical inactivity, unhealthy eating, overweight and obesity, high blood cholesterol, high blood pressure, and diabetes

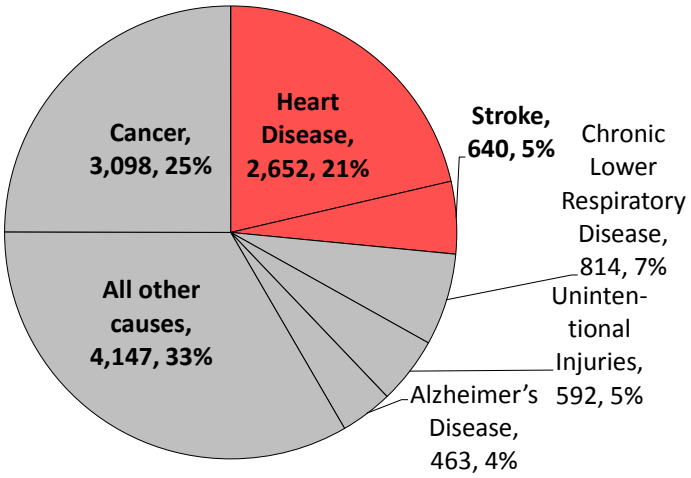
An Overview of Cardiovascular Disease (CVD)

How Common Is Cardiovascular Disease (CVD) in Maine and in the U.S.?

Heart disease and stroke are leading causes of death in the United States (U.S.) and in Maine.

- In 2009, heart disease and stroke combined accounted for more than 3,000 Maine deaths (26.6% of all deaths). Of those, heart disease caused 2,652 deaths (21.4% of all deaths) and stroke caused 640 deaths (5.2% of all deaths; Figure 1.1).
- In 2009, all major cardiovascular diseases combined caused more than 3,500 Maine deaths (Table 1.1).
- In 2009, heart disease was the leading cause of death among all Americans. In that same year, stroke was the fourth leading cause among all Americans.[3]
- Among Mainers, heart disease was the second leading cause of death after cancer in 2009. Stroke was the fourth leading cause of Maine deaths in 2009 (Figure 1.1).
- On average, 9 Mainers die every day of a cardiovascular event (Table 1.1, Figure 1.2).

Figure 1.1. CVD and Leading Causes of Death, Maine, 2009



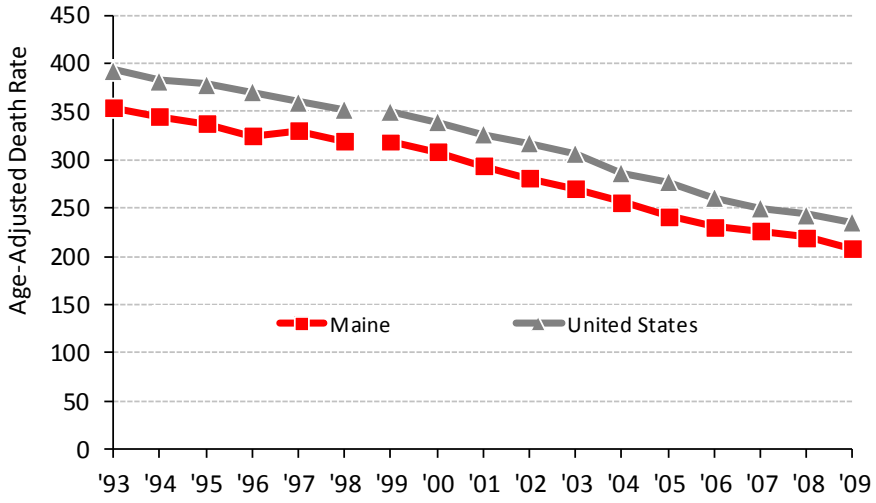
Note: The disease is listed first, followed by the total number of deaths, then the percent of total deaths.
ICD-10 codes: Cancer C00-C97; Heart Disease I00-I09, I11, I13, I20-I51; Stroke I60-I69; Chronic Lower Respiratory Disease J40-J47; Unintentional Injuries)V01-X59,Y85-Y86 ;Alzheimer's Disease G30.
Data Source: Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

How Do CVD Death Rates in Maine Compare to Those in the U.S.?

Maine's CVD death rate has been consistently lower than the U.S. rate from 1993 to 2009.

- Maine's age-adjusted CVD death rate has been consistently lower than the U.S. rate in each year from 1993 to 2009 (Table 1.1, Figure 1.2).
- In 2009, Maine's age-adjusted death rates for all major cardiovascular diseases and heart disease were significantly lower than the U.S. rates, and Maine's stroke death rate was slightly, but not significantly, lower than the U.S. rate.
- In 2009, Maine had the 32nd highest CVD death rate, and the 35th highest heart disease and stroke death rate among all 50 states and the District of Columbia.[4]
- Among the six New England states, however, Maine had the highest stroke death rate, the 2nd highest CVD death rate, and the 4th highest heart disease death rate in 2009.[4]

Figure 1.2. Major Cardiovascular Disease Death Rates by Year, Maine and U.S., 1993-2009



Major CVD: 1999-2009: ICD-10 codes I00-I78; 1993-1998: ICD-9 codes 390-434, 436-448, underlying cause of death. Change in ICD code represented by break in graph line.
CVD=Cardiovascular Disease.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
U.S. Data Source: CDC Wonder.
Maine Data Source: Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

What Are the Trends in CVD Death Rates?

Cardiovascular disease death rates have declined over time in Maine and the U.S.

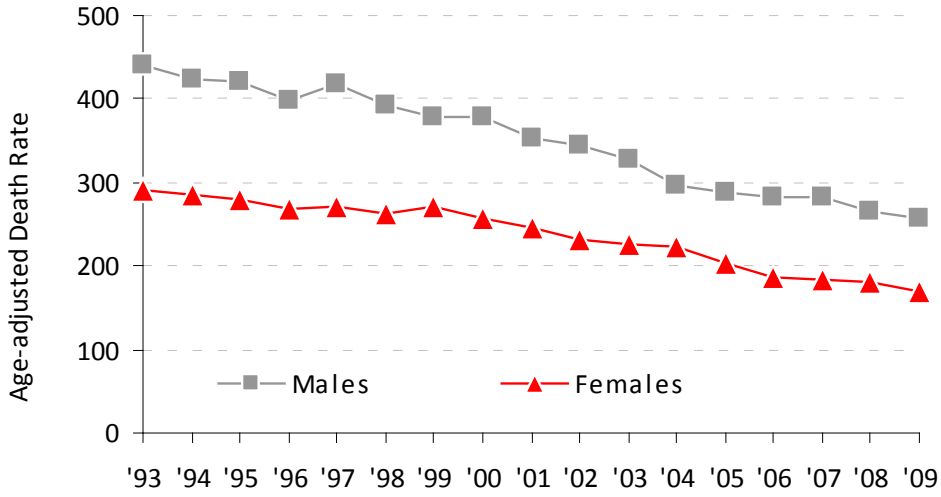
- Both U.S. and Maine age-adjusted CVD death rates have been steadily declining since 1993 (Table 1.1, Figure 1.2).
- Maine's age-adjusted CVD death rate was consistently lower than the U.S. rate from 1993 to 2009.
- Between 1999 and 2009, Maine's overall CVD death rate declined 34.7% (age-adjusted rate: 317.9 per 100,000 in 1999 to 207.5 per 100,000 in 2009). Between 1999 and 2009, the average annual decline in Maine's CVD death rate (4.2%) was greater than that of the U.S. (3.9%; Table 1.1, Figure 1.2).

Are There Male-Female Differences in Heart Disease Death Rates in Maine?

Although the overall CVD death rate has been steadily declining among males and females since 1993, males consistently have higher CVD death rates than females in Maine.

- In 2009, the death rate for males (age-adjusted rate: 256.5 per 100,000) was 50% higher than that for females (age-adjusted rate: 170.9 per 100,000; Table 1.2, Figure 1.3).
- The overall CVD death rate has declined over time for both males and females in Maine, but the higher rates among males compared to females has remained.

Figure 1.3. Major Cardiovascular Disease Death Rates by Gender, Maine, 1993-2009



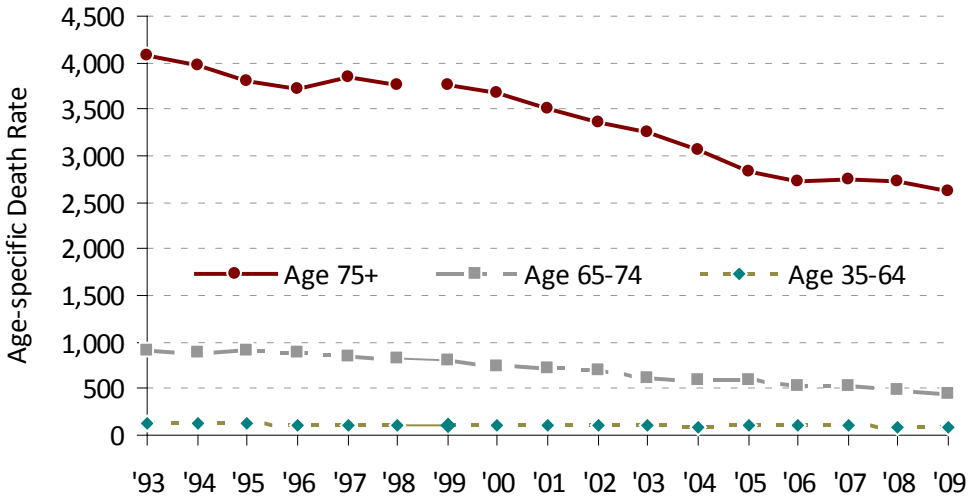
Major CVD: 1999-2009: ICD-10 codes I00-I78; 1993-1998: ICD-9 codes 390-434, 436-448, underlying cause of death. Change in ICD code represented by break in graph line.
CVD=Cardiovascular Disease.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

Do CVD Death Rates Differ by Age Group in Maine?

CVD death rates are higher among older age groups in Maine. CVD death rates have declined over time among those 35-64, 65-74 and 75+ years of age.

- Among those 75 years of age and older, there was a 30.5% decline in the age-specific death rate due to cardiovascular diseases from 1999 to 2009. The rate declined from 3,767.5 per 100,000 in 1999 to 2,617.4 per 100,000 in 2009 (Table 1.3, Figure 1.4.a).

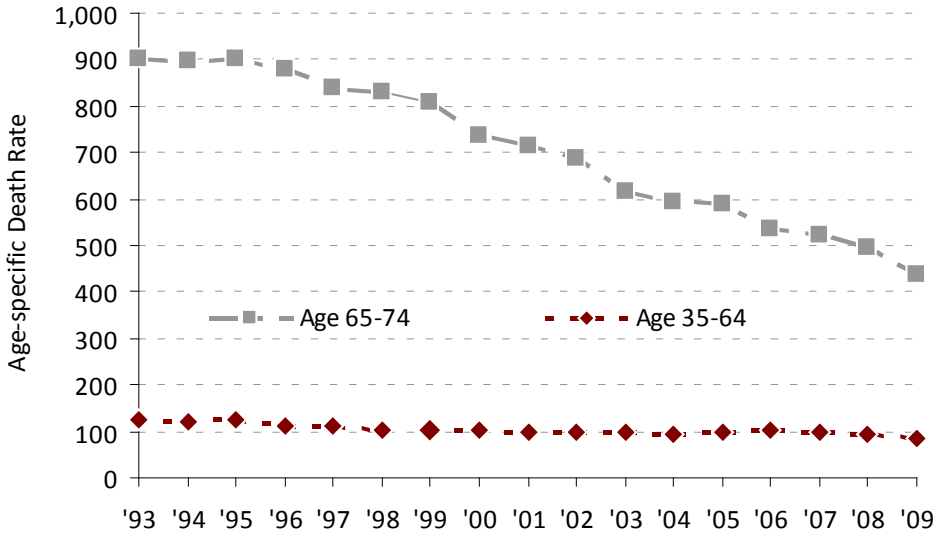
Figure 1.4.a. Major Cardiovascular Disease Death Rates by Age Group, Maine, 1993-2009



Major CVD: 1999-2009: ICD-10 codes I00-I78; 1993-1998: ICD-9 codes 390-434, 436-448, underlying cause of death. Change in ICD code represented by break in graph line.
CVD=Cardiovascular Disease.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

- Among those 65-74 years of age, there was a 45.7% decline in the age-specific death rate due to cardiovascular diseases from 1999 to 2009. The rate was 807.5 per 100,000 in 1999 and 438.1 per 100,000 in 2009 (Table 1.3, Figure 1.4.a, Figure 1.4.b).
- Among those 35-64 years of age, there was a 17.9% decline in the age-specific death rate due to cardiovascular diseases from 1999 to 2009. The rate was 103.1 per 100,000 in 1999 and 84.6 per 100,000 in 2009 (Table 1.3, Figure 1.4.a., Figure 1.4.b.).

Figure 1.4.b. Major Cardiovascular Disease Death Rates by Age Group (Ages 35-74), Maine, 1993-2009 (zoomed in)



Major CVD: 1999-2009: ICD-10 codes I00-I78; 1993-1998: ICD-9 codes 390-434, 436-448, underlying cause of death. Change in ICD code represented by break in graph line.
CVD=Cardiovascular Disease.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

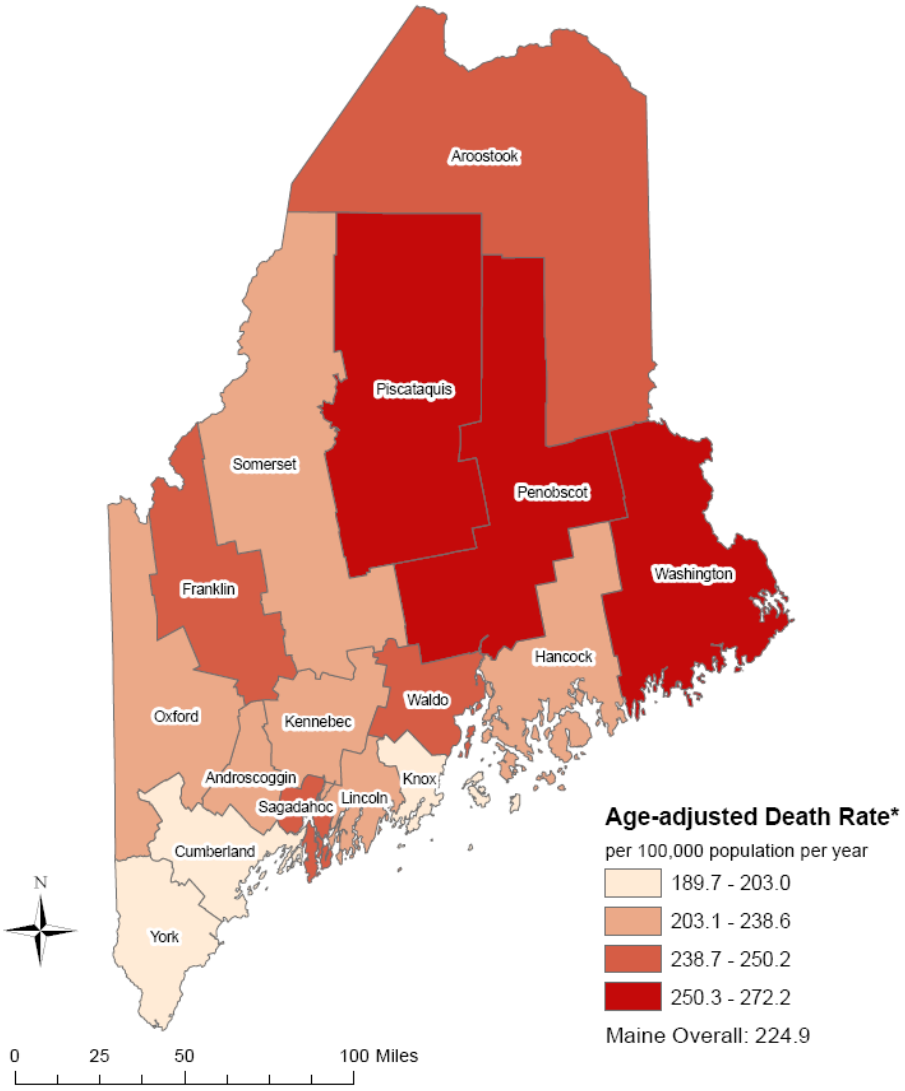
Do CVD Death Rates Differ by County of Residence in Maine?

The counties with the highest CVD death rates tend to be clustered in northern Maine.

- Washington, Penobscot, and Piscataquis counties currently have significantly higher age-adjusted CVD death rates than Maine overall (Table 1.4, Figure 1.5).

Cumberland, Knox, and York counties have significantly lower age-adjusted CVD death rates than Maine overall (Table 1.4, Figure 1.5).

Figure 1.5. Cardiovascular Disease Death Rates, by County of Residence, Maine 2005-2009



Data Source: Maine Mortality Data; Office of Data, Research, and Vital Statistics, Maine CDC.
(Major Cardiovascular Disease: ICD-10 codes I00-I78; underlying cause of death)
*Age-adjusted to the 2000 U.S. standard population

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Chapter 2: Heart Disease, Coronary Heart Disease, Heart Attack, and Heart Failure

About Heart Disease

What Is Heart Disease?

Heart disease is not a single disease but rather multiple diseases of the heart, including:

- Rheumatic heart disease
- Hypertensive heart disease
- Coronary heart disease
- Pulmonary heart disease
- Heart failure
- Heart rhythm disorders
- Cardiac arrest
- Disorders of the heart valves
- Other heart conditions excluding congenital heart malformations

Two major types of heart disease discussed in this chapter are coronary heart disease (which includes heart attack, also known as acute myocardial infarction or AMI) and heart failure.

Why Is Heart Disease an Important Public Health Topic?

Heart disease has been the leading cause of death in the U.S. for nearly 90 years. In 2009, heart disease killed nearly 600,000 Americans (Table 2.1) and accounted for 25% of all deaths.[1] In Maine, heart disease is currently the second leading cause of death (after cancer). In 2009, 2,654 Mainers died of heart disease (21% of all deaths in the state that year). Heart disease is also a leading cause of morbidity, disability, and health care costs in Maine and the U.S.

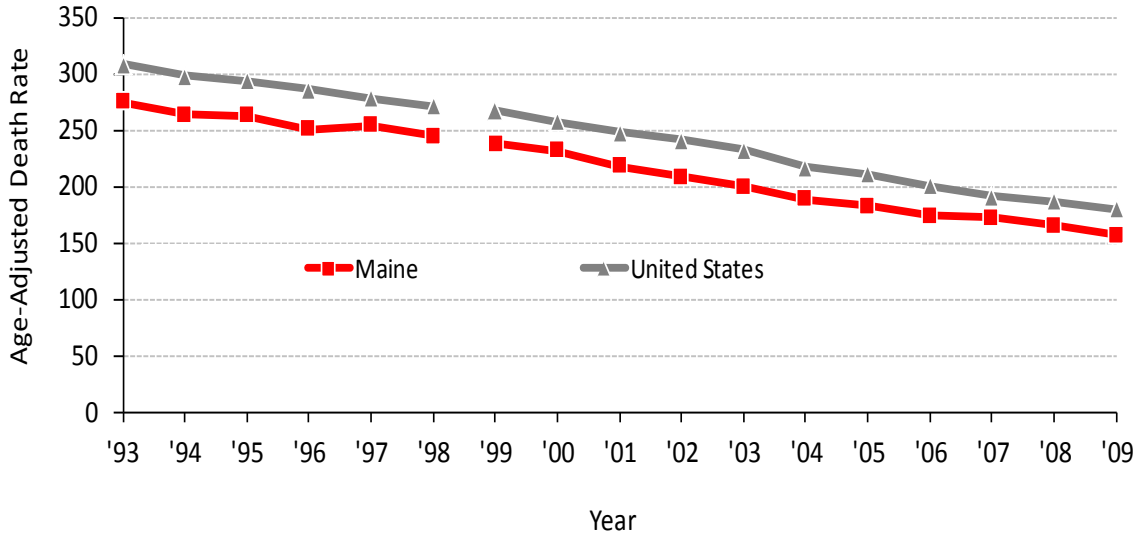
Heart Disease in Maine

How Do Heart Disease Death Rates in Maine Compare to Those in the U.S.?

Maine has consistently lower heart disease death rates compared to U.S. rates.

- Heart disease death rates have decreased both in the U.S. overall and in Maine. Maine has consistently lower heart disease death rates compared to the U.S. (Table 2.1, Figure 2.1).
- In 2009, the Maine age-adjusted heart disease death rate of 156.2 per 100,000 was significantly lower than the U.S. rate of 180.1 per 100,000 (Table 2.1, Figure 2.1).
- Between 1999 and 2009, the decline in heart disease death rates in Maine (34.4%) was similar to that in the U.S. (32.4%; Table 2.1, Figure 2.1).

Figure 2.1. Heart Disease Death Rates by Year, Maine and U.S., 1993-2009



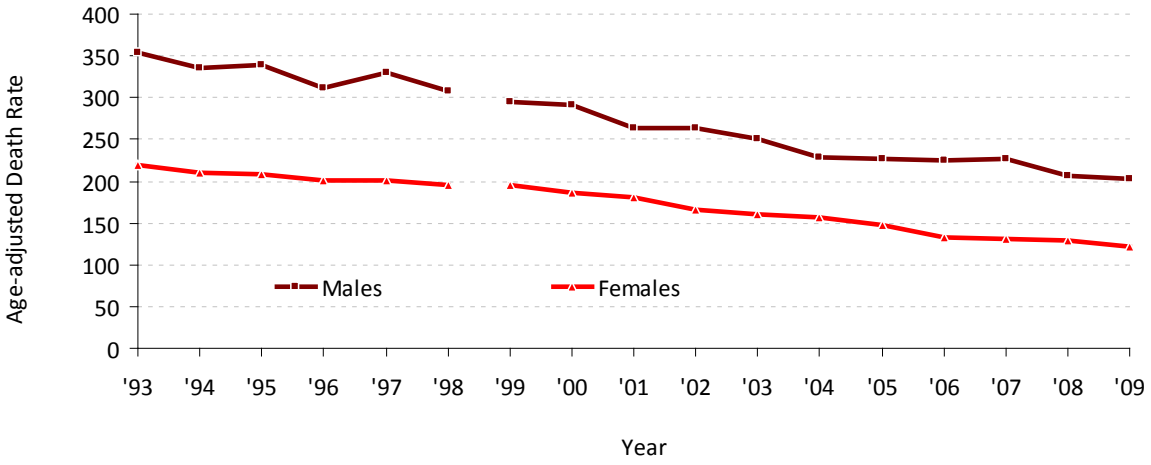
Heart Disease : 1999-2009: ICD-10 codes I00-I09, I11, I13, I20-I51; 1993-1998: ICD-9 codes 390-398, 402, 404, 410-429, underlying cause of death. Change in ICD code represented by break in graph line.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: U.S. data-CDC Wonder, Maine data- Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

Are There Male-Female Differences in Heart Disease Death Rates in Maine?

In Maine, males have higher heart disease death rates than females.

- Although heart disease death rates are decreasing for both males and females, males have consistently had higher rates than females (Table 2.2, Figure 2.2).
- In 2009, the age-adjusted death rate among males of 202.6 per 100,000 was 66% higher than the rate among females of 122.3 (Table 2.2, Figure 2.2).
- Between 1999 and 2009, the decline in heart disease death rates was greater in females (37.6%) than males (31.4%; Table 2.2, Figure 2.2).

Figure 2.2. Heart Disease Death Rates by Gender, Maine, 1993-2009



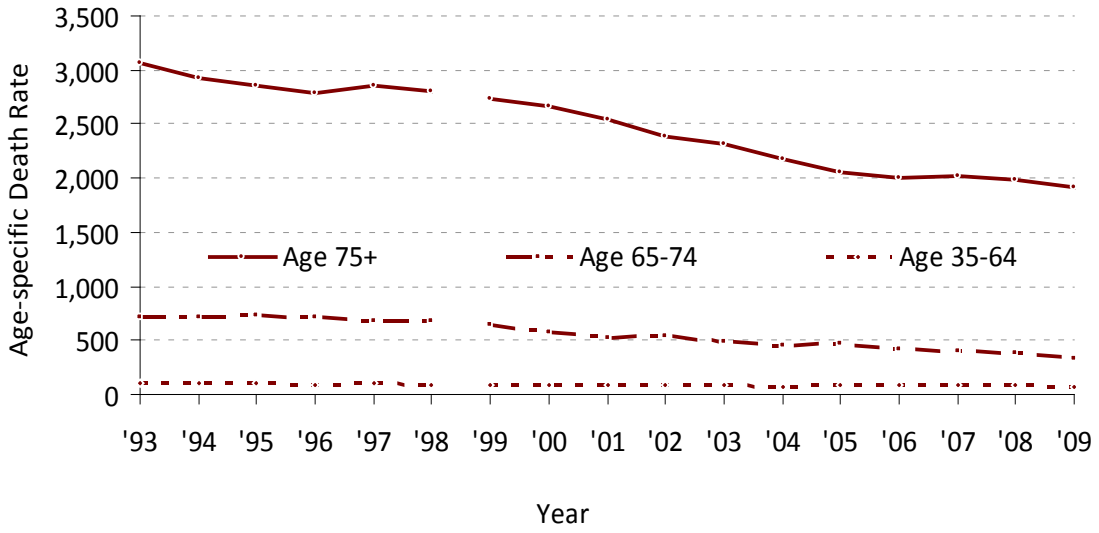
Heart Disease : 1999-2009: ICD-10 codes I00-I09, I11, I13, I20-I51; 1993-1998: ICD-9 codes 390-398, 402, 404, 410-429, underlying cause of death. Change in ICD code represented by break in graph line.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

Do Heart Disease Death Rates Differ by Age Group in Maine?

Heart disease death rates are higher among older age groups in Maine. Heart disease death rates have declined over time among those 35-64, 65-74 and 75+ years of age.

- Mainers 75 years of age and older have heart disease death rates almost 27 times greater than Mainers 35-64 years old (257.8 vs. 50.8 per 100,000). Mainers 65-74 years old have death rates almost 5 times greater than Mainers 35-64 years old (172.9 vs. 50.9 per 100,000; Table 2.3, Figure 2.3).
- Heart disease death rates have been declining among all three age groups (Table 2.3, Figure 2.3).

Figure 2.3. Heart Disease Death Rates by Age Group, Maine, 1993-2009



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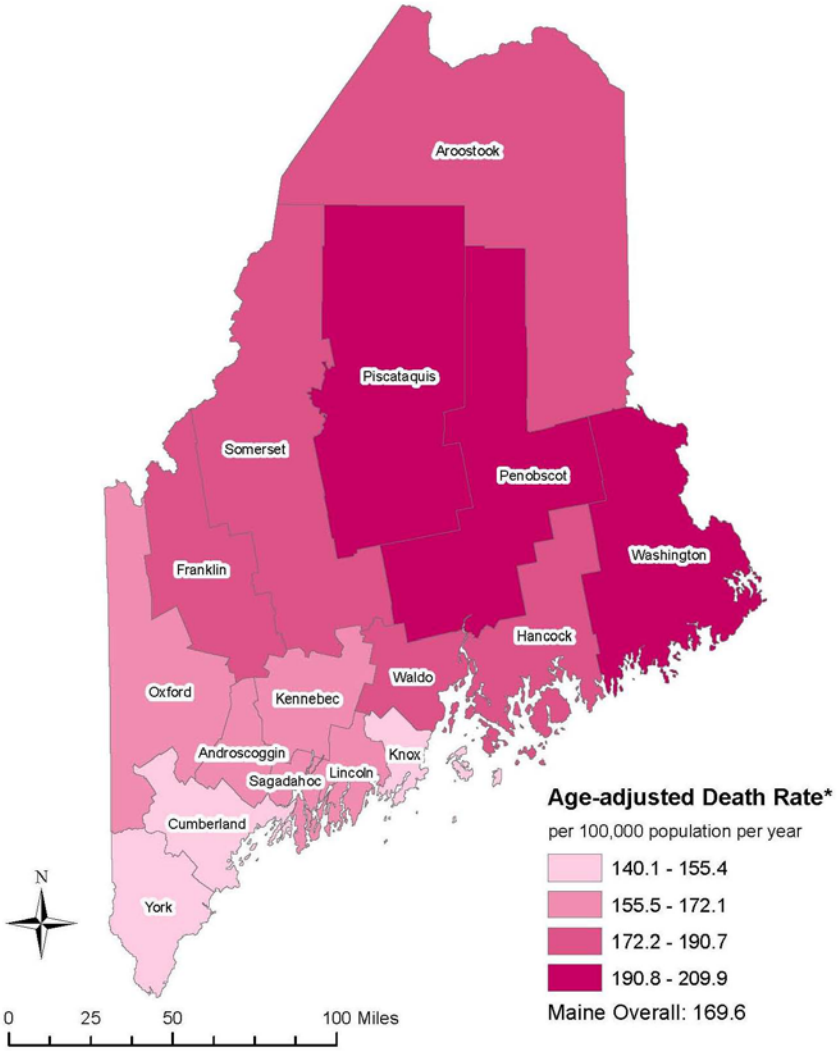
Rates per 100,000 population.
Data Source: Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

Do Heart Disease Death Rates Differ by County of Residence in Maine?

The counties with the highest heart disease death rates tend to cluster in northern Maine.

- Heart disease death rates in Aroostook, Penobscot, Piscataquis, Waldo, and Washington Counties are significantly higher than in Maine overall (Table 2.4, Figure 2.4).
- Heart disease death rates in Cumberland, Knox, and York Counties are significantly lower than in Maine overall (Table 2.4, Figure 2.4).

Figure 2.4. Heart Disease Death Rates by County of Residence, Maine 2005-2009



Data Source: Maine Mortality Data; Office of Data, Research, and Vital Statistics, Maine CDC.
(Heart Disease: ICD-10 codes I00-I09, I11, I13, I20-I51; underlying cause of death)
*Age-adjusted to the 2000 U.S. standard population

About Coronary Heart Disease

What Is Coronary Heart Disease?

Coronary heart disease (CHD) is a type of heart disease that occurs when plaques, or fatty substances, build up in the arteries of the heart, causing them to narrow and harden. This reduces the flow of blood to the heart, resulting in an inadequate supply of blood and oxygen to the heart. Lack of oxygen to the heart can result in angina (chest pain), acute myocardial infarction (heart attack), or other complications.

Why Is Coronary Heart Disease an Important Public Health Topic?

Coronary heart disease (CHD) caused more than 380,000 deaths in the U.S. during 2009 (Table 2.8). One of every six deaths in the U.S. is due to CHD.[2] An estimated 16.3 million Americans 20 years of age and older have CHD.[2] In Maine, there were 1,637 deaths due to CHD in 2009, accounting for 62% of all heart disease deaths and 13% of all deaths in the state that year (Table 2.8). An estimated 72,000 Mainers have a history of CHD (Table 2.13), and in 2009 there were more than 7,000 hospitalizations for CHD among Maine residents (Table 2.5).

Coronary Heart Disease Prevalence in Maine

What Is the Prevalence of CHD in Maine?

Nearly 72,000 Mainers, 7.5% of the adult population, have a history of CHD.

- In 2010, 7.5% of Maine's adult population, nearly 72,000 people, reported ever being told by a doctor that they had angina, a heart attack, or other CHD (Table 2.13). Because this estimate is based upon surveys of adults living in households and does not include adults living in institutions like long-term care facilities, this is likely to be an underestimate of the true prevalence of CHD in Maine.
- The prevalence of CHD has not changed significantly between 1999 and 2010 (Table 2.13).
- Maine males have a higher prevalence of CHD history (9.9%) than Maine females (5.2%; Table 2.13).
- The prevalence of CHD is higher in older age groups. The prevalence of CHD is

less than 5.0% among Maine adults ages 18-54, 10.4% among those ages 55-64, and 16.3% among those ages 65 years and older (Table 2.13).

- Maine adults in lower education groups have higher CHD prevalence rates than those in higher education groups. For example, 16.3% of those with less than a high school education have a history of CHD compared to 6.0% of those who are college graduates (Table 2.13).
- Maine adults in lower household income groups have higher CHD prevalence rates than those in higher household income groups. For example 15.4% of those in the <$15,000 annual household income group have a history of CHD compared to 4.4% of those in the $50,000+ annual household income group (Table 2.13).

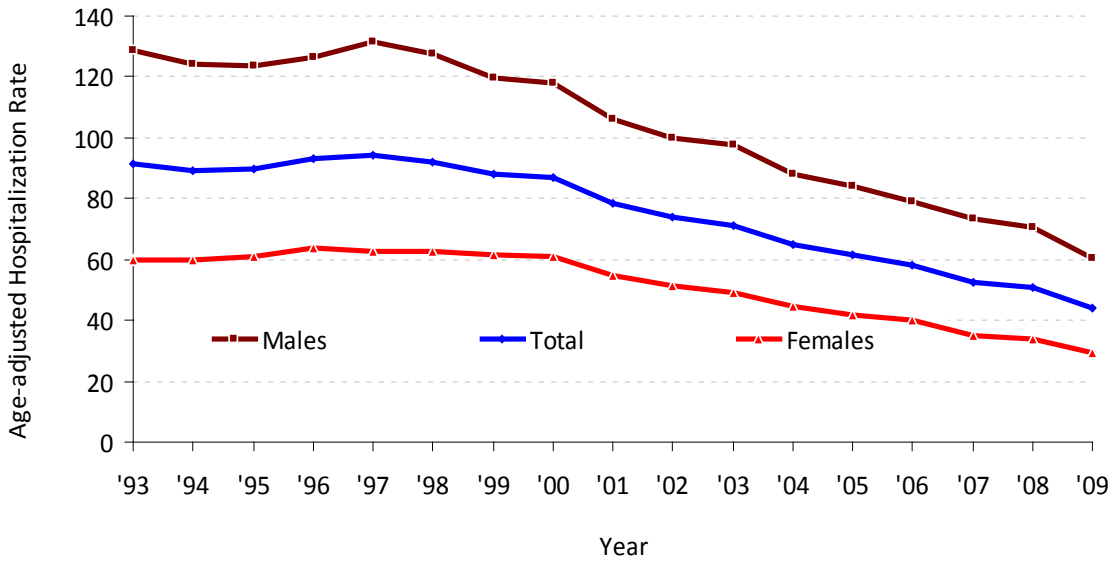
Coronary Heart Disease Hospitalizations in Maine

What Are the Trends in CHD Hospitalization Rates in Maine?

CHD hospitalization rates in Maine have been decreasing over the past decade.

- Between 1993 and 1997, the CHD hospitalization rate in Maine increased slightly from 91.6 to 94.3 per 10,000 population, then decreased to reach the current rate of 43.8 per 10,000 population in 2009 (Table 2.5, Figure 2.5).

Figure 2.5. Coronary Heart Disease Hospitalization Rates by Gender, Maine, 1993-2009



Coronary Heart Disease: ICD-9-CM 410-414; principal diagnosis.
Rates per 10,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Are There Male-Female Differences in CHD Hospitalization Rates in Maine?

Maine males have higher CHD hospitalization rates compared to females.

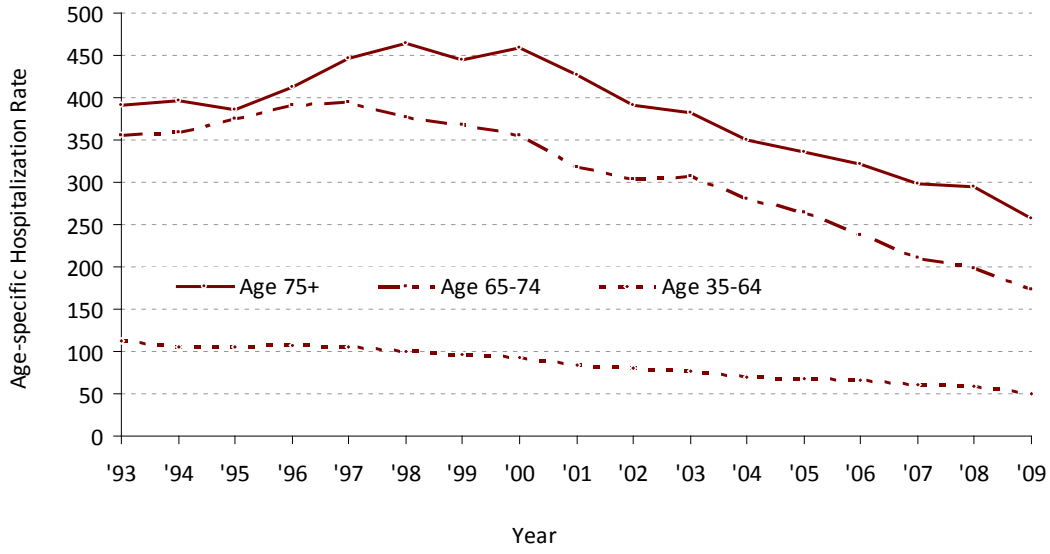
- In every year from 1993 to 2009, Maine males have had significantly higher CHD hospitalization rates than Maine females (Table 2.5, Figure 2.5)
- In 2009, the hospitalization rate for Maine males (60.2 per 10,000 population) was twice as high as the hospitalization rate for Maine females (29.6 per 10,000; Table 2.5, Figure 2.5).
- Between 1997 and 2009, the decline in the CHD hospitalization rate was similar among Maine males (54.3%) and Maine females (52.7%; Table 2.5, Figure 2.5).

Do CHD Hospitalization Rates Differ by Age Group in Maine?

CHD hospitalization rates increase with age. CHD hospitalization rates have declined among Mainers ages 35-64, 65-74 , and 75 and older.

- In Maine in 2009, the CHD hospitalization rate among those 75 years of age and older (257.8 per 10,000) was almost 5 times greater than among those 35-64 years of age (50.8 per 10,000), and the rate among those 65-74 years of age (172.9 per 10,000) was 3 times greater than among those 35-64 years of age (50.8 per 10,000; Table 2.6, Figure 2.6).
- Over the last decade, CHD hospitalization rates have declined the most for those age 65-74 years (53.1%), followed by those age 35-64 years (47.1%) and those age 75+ (42.0%; Table 2.6, Figure 2.6).

Figure 2.6. Coronary Heart Disease Hospitalization Rates by Age Group, Maine, 1993-2009



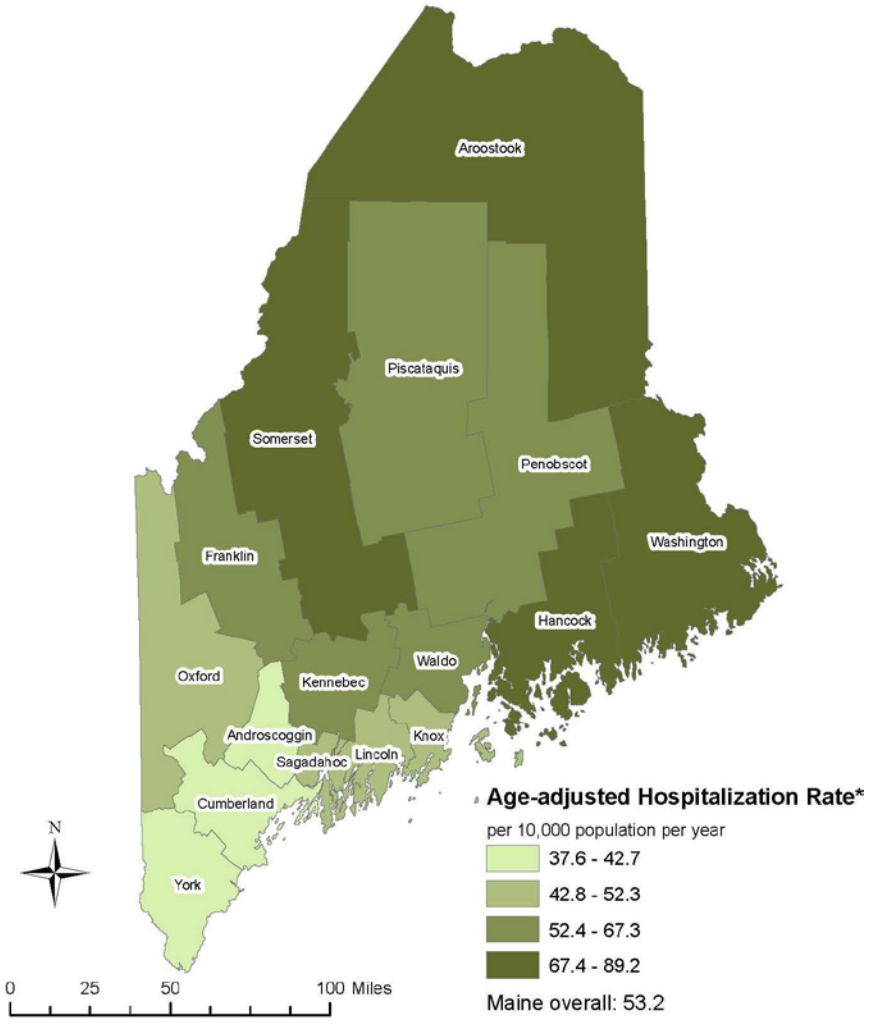
Coronary Heart Disease: ICD-9-CM 410-414; principal diagnosis.
Rates per 10,000 population.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Do CHD Hospitalization Rates Differ by County of Residence in Maine?

Northern counties have higher CHD hospitalization rates compared to southern counties.

- Aroostook, Franklin, Hancock, Kennebec, Penobscot, Piscataquis, Somerset, Waldo, and Washington Counties all have significantly higher CHD hospitalization rates than Maine overall (Table 2.7, Figure 2.7).
- Androscoggin, Cumberland, Lincoln, Oxford, Sagadahoc, and York Counties all have significantly lower CHD hospitalization rates than Maine overall (Table 2.7, Figure 2.7).

Figure 2.7. Coronary Heart Disease Hospitalization Rates, by County of Residence, Maine 2005-2009



Data Source: Maine Inpatient Database, Maine Health Data Organization.
(Coronary Heart Disease: ICD-9-CM 410-414; principal diagnosis)
*Age-adjusted to the 2000 U.S. standard population

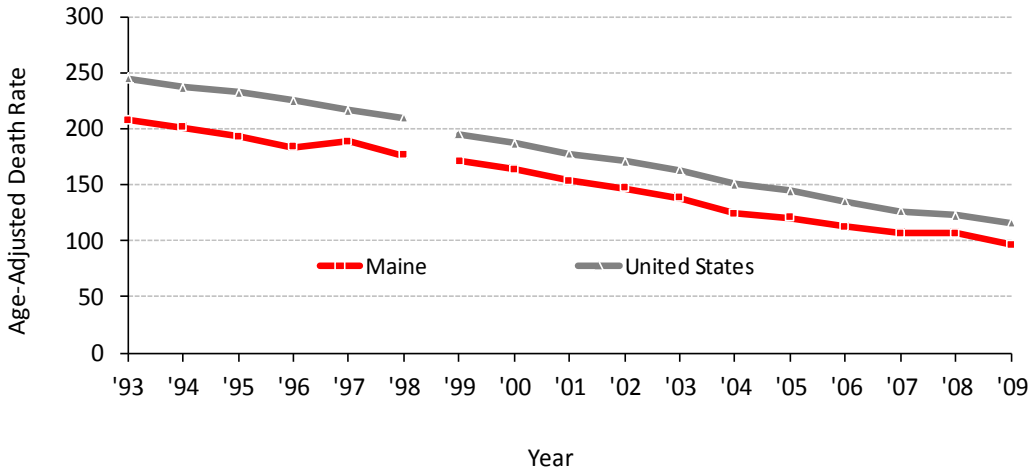
Coronary Heart Disease Deaths in Maine

How Do CHD Death Rates in Maine Compare to Those in the U.S.?

Maine has a lower CHD death rate compared to the U.S.

- Between 1993 and 2009, Maine has consistently had lower CHD death rates compared to the U.S.
- In 2009, the age-adjusted CHD death rate in Maine was 96.4 per 100,000 population compared to 116.1 per 100,000 population in the U.S. (Table 2.8, Figure 2.8).

Figure 2.8. Coronary Heart Disease Death Rates by Year, Maine and U.S., 1993-2009



Coronary Heart Disease: 1999-2009: ICD-10 codes I20-I25; 1993-1998: ICD-9 codes 410-414, 429.2, underlying cause of death . Change in ICD code represented by break in graph line.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: U.S. data-CDC Wonder, Maine data- Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

What Are the Trends in CHD Death Rates in Maine?

CHD death rates have been declining in Maine and the U.S.

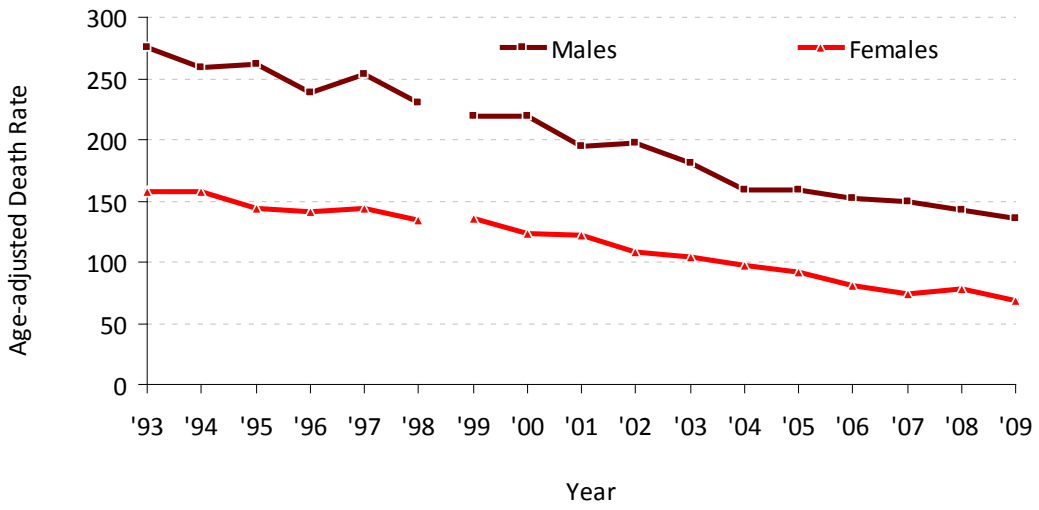
- Between 1999 and 2009, CHD death rates in Maine declined 43.8%, from 171.5 per 100,000 to 96.4 per 100,000 (Table 2.8, Figure 2.8).
- Between 1999 and 2009, the average annual decline in the CHD death rate in Maine (5.6%) was similar to that of the U.S. (5.0%) (Table 2.8, Figure 2.8).

Are There Male-Female Differences in CHD Death Rates in Maine?

Males have higher CHD death rates compared to females, and the decline in CHD death rates has been greater in females.

- Although CHD death rates are declining among both males and females in Maine, a gender disparity remains, with males having consistently higher rates than females (Table 2.9, Figure 2.9).
- In 2009, the CHD death rate for males (135.3 per 100,000) was nearly twice as high as the CHD death rate for females (68.1 per 100,000; Table 2.9, Figure 2.9)
- Between 1999 and 2009, CHD death rates for Maine males declined more slowly (38.3% decline) than those for females (50.0% decline; Table 2.9, Figure 2.9).

Figure 2.9. Coronary Heart Disease Death Rates by Gender, Maine, 1993-2009



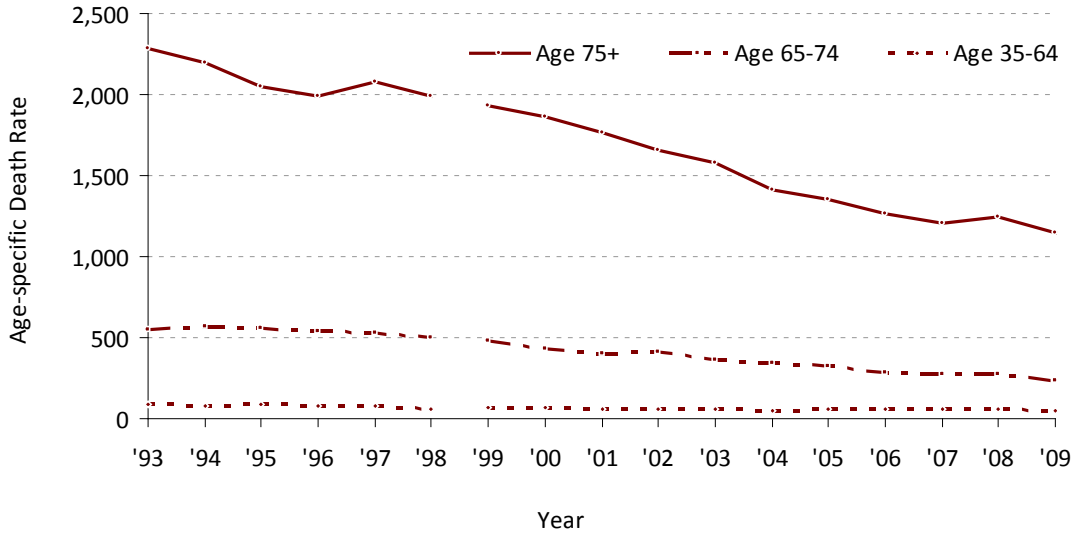
Coronary Heart Disease: 1999-2009: ICD-10 codes I20-I25; 1993-1998: ICD-9 codes 410-414, 429.2, underlying cause of death. Change in ICD code represented by break in graph line.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Maine Mortality Data; Office of Data, Research and Vital Statistics, Maine CDC.

Do CHD Death Rates Differ by Age Group in Maine?

CHD death rates increase with age. Over the past decade, the age-specific CHD death rates have declined among those 35-64, 65-74, and 75+ years of age.

- In Maine in 2009, the CHD death rate among those 75 years of age and older (1,147.2 per 100,000) was almost 25 times greater than among those 35-64 years of age (46.7 per 100,000), and the rate among those 65-74 years of age (230.6 per 100,000) was 5 times greater than among those 35-64 years of age (46.7 per 100,000; Table 2.10, Figure 2.10).
- Between 1999 and 2009, CHD death rates declined the most among those 65-74 years of age (51.9%) followed by those 75+ years of age (40.7%), and then by those 35-64 years of age (27.6%; Table 2.10, Figure 2.10).

Figure 2.10. Coronary Heart Disease Death Rates by Age Groups, Maine, 1993-2009



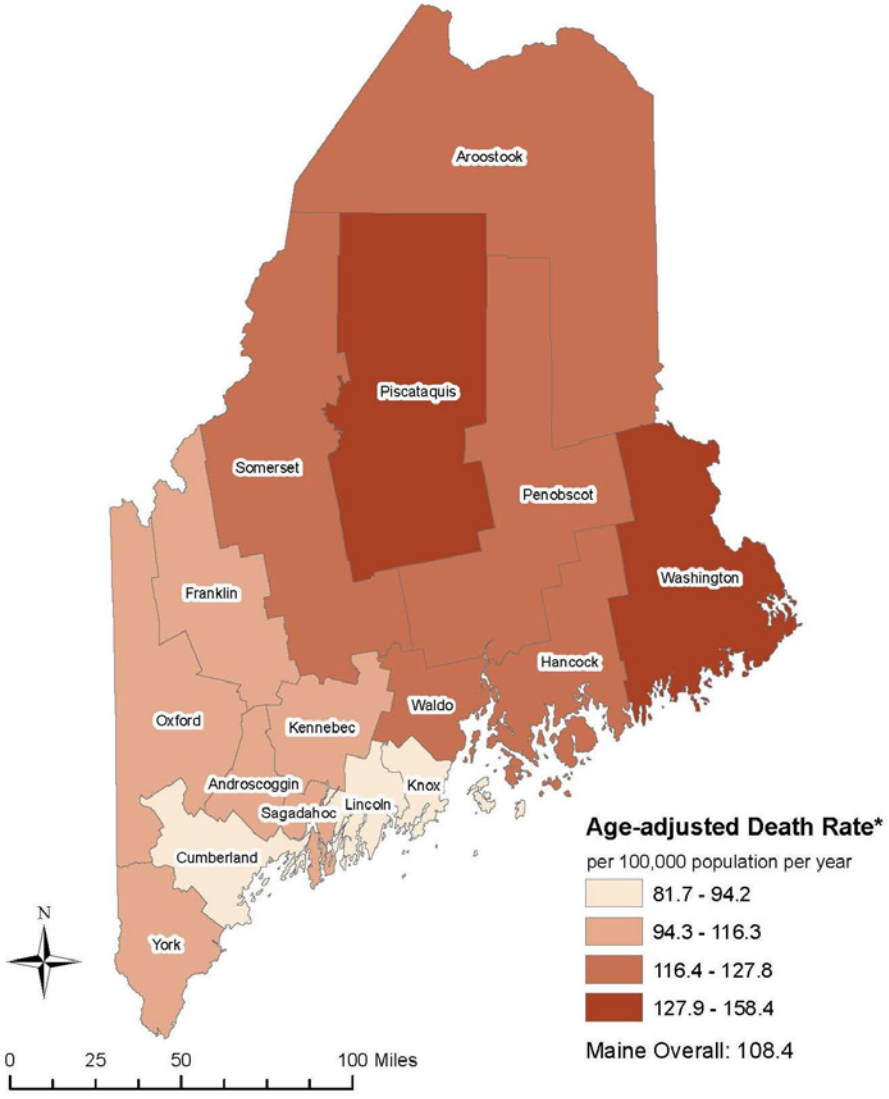
Coronary heart disease: 1999-2009: ICD-10 codes I20-I25; 1993-1998: ICD-9 codes 410-414, 429.2, underlying cause of death. Change in ICD code represented by break in graph line.
Rates per 100,000 population.
Data Source: Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

Do CHD Death Rates Differ by County of Residence in Maine?

<u>The counties with the highest CHD death rates tend to be in northern Maine.</u>

- Aroostook, Hancock, Penobscot, Piscataquis, Somerset, and Washington Counties all have significantly higher CHD death rates than Maine overall (Table 2.11, Figure 2.11).
- Cumberland and Knox Counties have significantly lower CHD death rates than Maine overall (Table 2.11, Figure 2.11).

Figure 2.11. Coronary Heart Disease Death Rates by County of Residence, Maine 2005-2009



Data Source: Maine Mortality Data; Office of Data, Research, and Vital Statistics, Maine CDC.
(Coronary Heart Disease: ICD-10 codes I20-I25; underlying cause of death)
*Age-adjusted to the 2000 U.S. standard population

About Heart Attack

What Is a Heart Attack?

A heart attack (also called an acute myocardial infarction or AMI) occurs when the blood supply to part of the heart muscle is severely reduced or stopped. This happens when one or more of the coronary arteries supplying blood to the heart muscle are blocked, which is usually caused by the buildup of plaque. If the blood supply is cut off for more than a few minutes, heart muscle cells suffer permanent injury and die. This can kill or disable someone, depending on how much heart muscle is damaged.

Why Is Heart Attack an Important Public Health Topic?

In 2009, more than 125,000 deaths in the U.S. were caused by a heart attack (Table 2.19). This year, approximately 785,000 Americans will have their first heart attack, and about 470,000 will have a recurrent heart attack. An estimated additional 195,000 silent heart attacks (heart attacks with no symptoms, vague or mild symptoms, or atypical symptoms) occur each year.[2] People who survive a heart attack have a substantially increased risk of another heart attack, sudden death, heart failure, and stroke than the general population.[2] In Maine during 2009, there were more than 500 deaths (Table 2.19) and 4,000 hospitalizations due to heart attack (Table 2.16).

Heart Attack Knowledge in Maine

Do Maine Adults Know the Symptoms of Heart Attack?

Only one in seven Maine adults (15.1%) correctly identified all the symptoms of a heart attack and knew to call 9-1-1 for assistance.

- While nearly 90% of Maine adults (88.6%) said they would call 9-1-1 for a heart attack, less than one in six (16.2%) actually knew the symptoms of a heart attack. Only 15.1% knew all the symptoms of a heart attack and the need to call 9-1-1 (Table 2.13).
- Most Maine adults correctly identified chest pain or discomfort (95.7%), pain or discomfort in the arms or shoulders (88.7%), and shortness of breath (88.0%) as heart attack symptoms (Tables 2.12a and 2.12b).
- Fewer Maine adults recognized pain or discomfort in the jaw, neck or back

(61.5%) and feeling weak, lightheaded or faint (65.6%) as symptoms (Table 2.12a).

- Few Maine adults (41.2%) knew that sudden trouble seeing in one or both eyes is not a symptom of a heart attack (Table 2.12b).

What Are the Disparities in Heart Attack Knowledge in Maine?

Men, non-Whites or Hispanics, adults with lower education levels, and adults with lower household incomes were less likely to correctly identify all symptoms of heart attack and know to call 9-1-1 for assistance.

Differences by Gender:

- A significantly greater percentage of women (18.3%) knew all symptoms of heart attack and knew to call 9-1-1 for assistance compared to men (11.6%; Tables 2.12a, 2.12b, 2.13).
- A significantly higher proportion of women (72.5%) correctly identified pain in the jaw, neck or back as a heart attack symptom compared to men (49.4%; Tables 2.12a, 2.13).

Differences by Race/Ethnicity:

- Only 7.5% of non-white or Hispanic adults correctly identified all symptoms of heart attack and the need to call 9-1-1 compared to 15.4% of non-Hispanic white (Tables 2.12a, 2.12b, 2.13).
- A higher percentage of non-Hispanic Whites knew the individual symptoms of heart attack and the need to call 9-1-1 compared to non-Whites or Hispanics (Tables 2.12a, 2.12b, 2.13).

Differences by Age

- Knowledge of heart attack symptoms and the need to call 9-1-1 is low in all age groups. Maine adults aged 55-64 years (19.3%) were most likely to correctly identify all the heart attack symptoms, and adults 18-24 years (9.2%) were the least likely (Tables 2.12a, 2.12b, 2.13).

Differences by Education Level:

- Maine adults in lower education groups were less likely to correctly identify heart attack symptoms and the need to call 9-1-1. Adults who were college graduates (20.7%) were more likely to correctly identify all heart attack symptoms than those with less than high school education (5.5%), high school graduates (11.3%) and those with some post-high school education (17.9%; Tables 2.12a, 2.12b, 2.13).

Differences by Annual Household Income Level:

- Knowledge of heart attack symptoms and the need to call 9-1-1 increased with increasing household income. Maine adults in the $50,000+ annual household income group were more likely to correctly identify all heart attack symptoms and knew to call 9-1-1 for assistance than Mainers in the less than $15,000 annual household income group (17.9% vs. 9.5%, respectively; Tables 2.12a, 2.12b, 2.13).

Does Heart Attack Knowledge Differ by CHD History?

Maine adults with a history of CHD were no more likely to know the symptoms of heart attack and the need to call 9-1-1 than those without a history of CHD.

- There was no significant difference in overall knowledge of symptoms of heart attack and the need to call 9-1-1 for assistance among those with a history of CHD (15.4%) compared to those without a history of CHD (15.1%; Table 2.13)
- Maine adults with a history of CHD were more likely to correctly identify pain in the jaw, neck or back as a symptom of heart attack as compared to those without a history of CHD (78.0% vs. 60.4%, respectively; Table 2.12a).

What Are the Trends in Heart Attack Knowledge in Maine?

Knowledge of heart attack symptoms and the need to call 9-1-1 has significantly increased in Maine between 2001 and 2009.

- Between 2001 and 2004, the percentage of Maine adults who correctly identified all the heart attack symptoms and knew to call 9-1-1 increased significantly from 10.0% to 13.2%. This increase was mainly driven by a

significant increase in the percentage of Maine adults who knew to call 9-1-1 for heart attack, from 81.7% in 2001 to 89.4% in 2004. The percentage of Maine adults who correctly identified all the symptoms of heart attack increased slightly, but not significantly, during this time period, from 12.0% in 2001 to 14.3% in 2004 (Table 2.15)

- Between 2004 and 2005, knowledge of heart attack symptoms and the need to call 9-1-1 did not change much among Maine adults (Table 2.15).
- Between 2005 and 2009, the percentage of Maine adults who correctly identified all the heart attack symptoms and knew to call 9-1-1 again increased significantly from 12.3% to 15.1%. During this time period, this increase was mainly driven by a significant increase in the percentage of Maine adults who correctly identified all the heart attack symptoms, from 13.4% in 2005 to 16.2% in 2009. The percentage of Maine adults who knew to call 9-1-1 for heart attack did not change between 2005 (88.2%) and 2009 (88.1%; Table 2.15).
- Knowledge that pain in the jaw, neck, or back is a symptom of heart attack increased significantly from 50.9% in 2001 to 61.5% in 2009. There were no significant changes in knowledge of any of the other individual heart attack symptoms (Tables 2.14a and 2.14b).

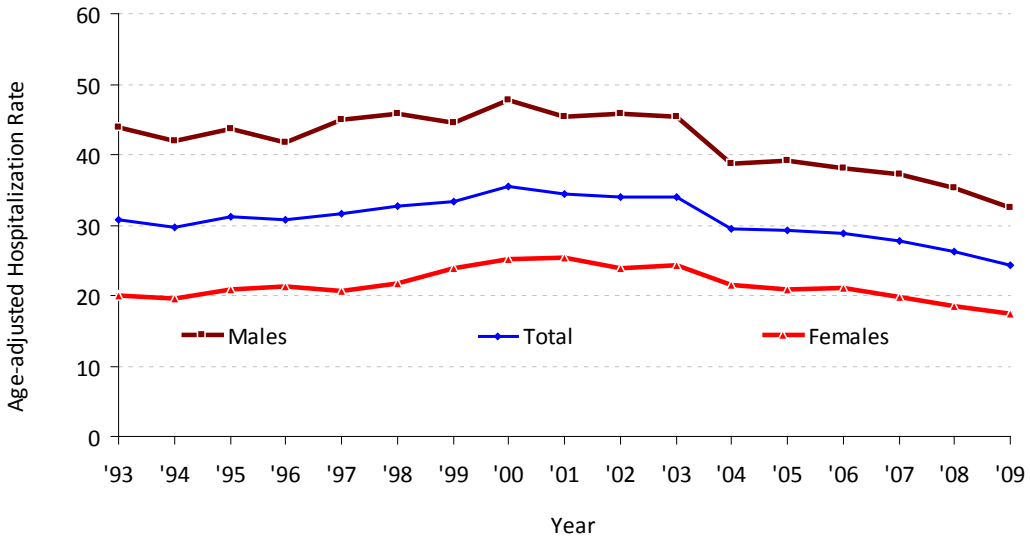
Heart Attack Hospitalizations in Maine

What Are the Trends in Heart Attack Hospitalization Rates in Maine?

Heart attack hospitalization rates have declined since 2000. (Table 2.16)

- Between 1993 and 2000, Maine's heart attack hospitalization rates increased by 14.9%. Since then, however, heart attack hospitalization rates decreased by 31.1% between 2000 and 2009 (Table 2.16, Figure 2.12).

Figure 2.12. Heart Attack Hospitalization Rates by Gender, Maine, 1993-2009



Heart Attack: ICD-9-CM code 410 principal diagnosis .
Rates per 10,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Are There Male-Female Differences in Heart Attack Hospitalization Rates in Maine?

Maine males have consistently higher heart attack hospitalization rates than Maine females.

- Although heart attack hospitalization rates have declined for Maine males and females over the past decade, a gender disparity remains, with males having significantly higher rates than females across this period.
- In 2009, the heart attack hospitalization rate for Maine males (32.5 per 10,000 population) was nearly twice as high as that for Maine females (117.4 per 10,000 population; Table 2.16, Figure 2.12).

Do Heart Attack Hospitalization Rates Differ by Age Group in Maine?

Heart attack hospitalization rates increase with age. Maine adults 65-74 years of age had the largest percentage decrease in heart attack hospitalization rates.

- In 2009, Mainers 65-74 years of age were hospitalized for heart attack at a rate almost 3.5 times that of those 35-64 years of age (87.0 vs. 25.6 per 10,000, respectively). Mainers 75+ years of age were hospitalized for heart attack at a rate 6.5 times higher than those 35-64 years of age (167.2 vs. 25.6 per 10,000 respectively; Table 2.17, Figure 2.13).
- From 2000 to 2009, Maine adults 65-74 years of age had the largest percentage decrease (30.2%) in heart attack hospitalizations. During the same period of time, the percentage decrease in heart attack hospitalization rates among adults 35-64 years of age (26.9%) and 75+ years of age (26.5%) were similar (Table 2.17, Figure 2.13).

Figure 2.13. Heart Attack Hospitalization Rates by Age Group, Maine, 1993-2009

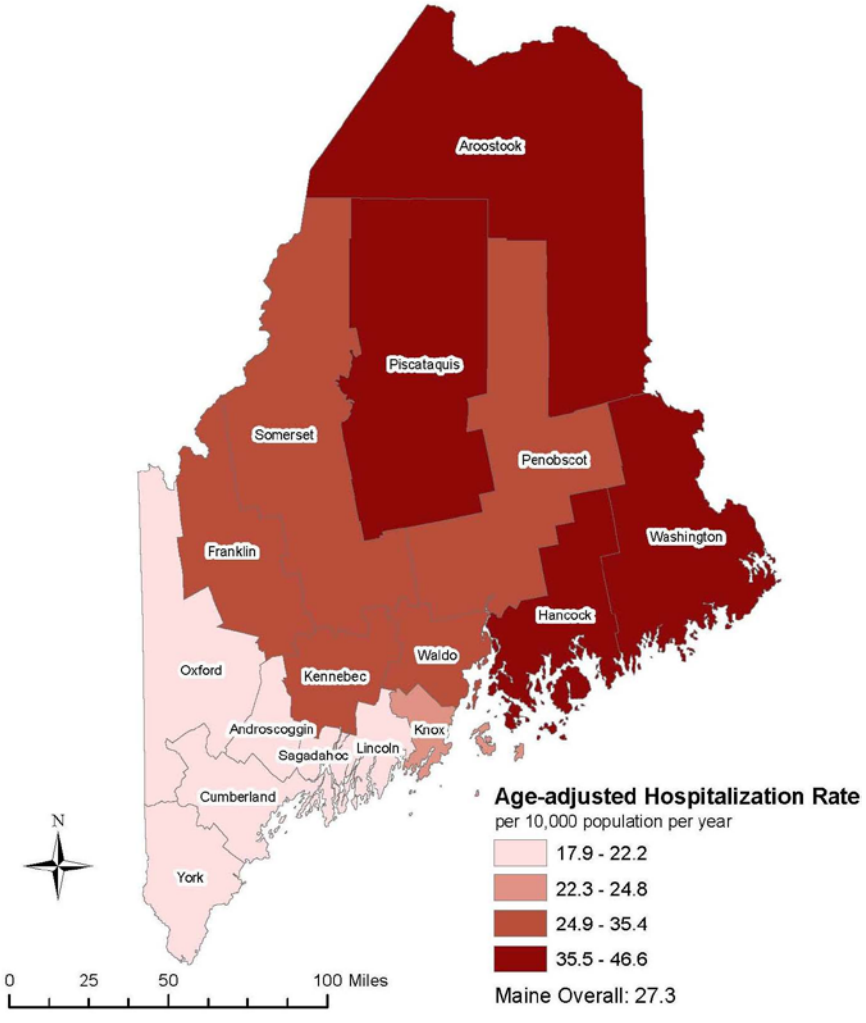
Heart Attack : ICD-9-CM code 410 principal diagnosis.
Rates per 10,000 population.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Do Heart Attack Hospitalization Rates Differ by County of Residence in Maine?

Northern and Downeast counties have higher heart attack hospitalization rates than Maine overall.

- Heart attack hospitalization rates in Aroostook, Hancock, Kennebec, Piscataquis, Somerset, Waldo, and Washington Counties were significantly higher than in Maine overall (Table 2.18, Figure 2.14).
- Heart attack hospitalization rates in Androscoggin, Cumberland, Knox, Lincoln, Oxford, Sagadahoc, and York Counties were significantly lower than in Maine overall (Table 2.18, Figure 2.14).

Figure 2.14. Heart Attack Hospitalization Rates, by County of Residence, Maine, 2005-2009



Data Source: Maine Inpatient Database, Maine Health Data Organization.
(Acute Myocardial Infarction: ICD-9-CM 410; principal diagnosis)
*Age-adjusted to the 2000 U.S. standard population

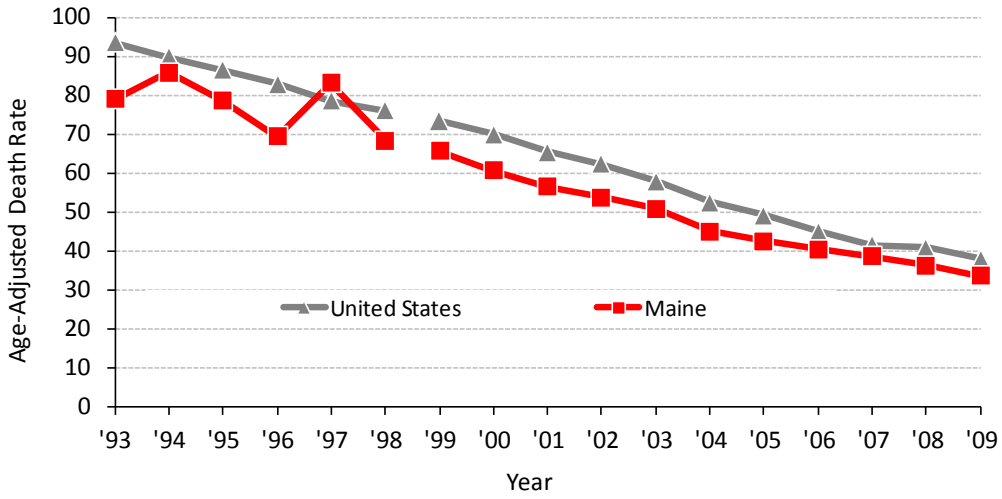
Heart Attack Deaths in Maine

How Do Heart Attack Death Rates in Maine Compare to Those in the U.S.?

Maine has lower heart attack death rates than the U.S.

- Over the past decade, Maine has had lower heart attack death rates compared to the U.S.
- In 2009, Maine's age-adjusted heart attack death rate (33.4 per 100,000) was significantly lower than that of the U.S. (37.8 per 100,000 population; Table 2.19, Figure 2.15).

Figure 2.15. Heart Attack Death Rates by Year, Maine and U.S., 1993-2009



Heart Attack : 1999-2009: ICD-10 codes I21,I22; 1993-1998 ICD-9 codes 410; underlying cause of death. Change in ICD code represented by break in graph line.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: U.S. data-CDC Wonder, Maine data- Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

What Are the Trends in Heart Attack Death Rates in Maine?

Heart attack death rates have been declining in Maine as well as the U.S.

- Since 1999, heart attack death rates have declined steadily in Maine, from 65.6 per 100,000 in 1999 to 33.4 per 100,000 in 2009.

- Between 1999 and 2009, heart attack death rates in Maine declined by 49.0% which was similar to the U.S. decline of 48.4% (Table 2.19, Figure 2.15).

Are There Male-Female Differences in Heart Attack Death Rates in Maine?

Males have consistently higher heart attack death rates compared to females.

- Although heart attack death rates are declining among both Maine males and females, a gender disparity remains, with males having consistently higher rates than females (Table 2.20, Figure 2.16).
- In 2009, the heart attack death rate among males (46.0 per 100,000) was nearly twice that of females (23.9 per 100,000).
- Between 1999 and 2009, heart attack death rates declined more slowly among males (45.8%) than for females (53.3%; Table 2.20, Figure 2.16).

Figure 2.16. Heart Attack Death Rates by Gender, Maine, 1993-2009

Heart Attack : 1999-2009: ICD-10 codes I21,I22; 1993-1998 ICD-9 codes 410; underlying cause of death. Change in ICD code represented by break in graph line.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Maine Mortality Data; Office of Data, Research and Vital Statistics, Maine CDC.

Do Heart Attack Death Rates Differ by Age Group in Maine?

Heart attack death rates increase with age. The age-specific heart attack death rates have declined in each age group among those aged 35+ years of age since 1999.

- In 2009, Mainers 75 years of age and older had a heart attack death rate 16.4 times greater than Mainers 35-64 years of age (350.0 vs. 21.4 per 100,000, respectively). Mainers 65-74 years of age had a death rate 4.4 times greater than Mainers 35-64 years of age (95.0 vs. 21.4 per 100,000, respectively; Table 2.21, Figure 2.17).
- Between 1999 and 2009, heart attack death rates have declined most rapidly among those in 65-74 years of age (54.6% decline) followed by those 75+ years of age (48.7% decline), and lastly among those 35-64 years of age (26.0% decline; Table 2.21, Figure 2.17).

Figure 2.17. Heart Attack Death Rate by Age Group, Maine, 1993-2009

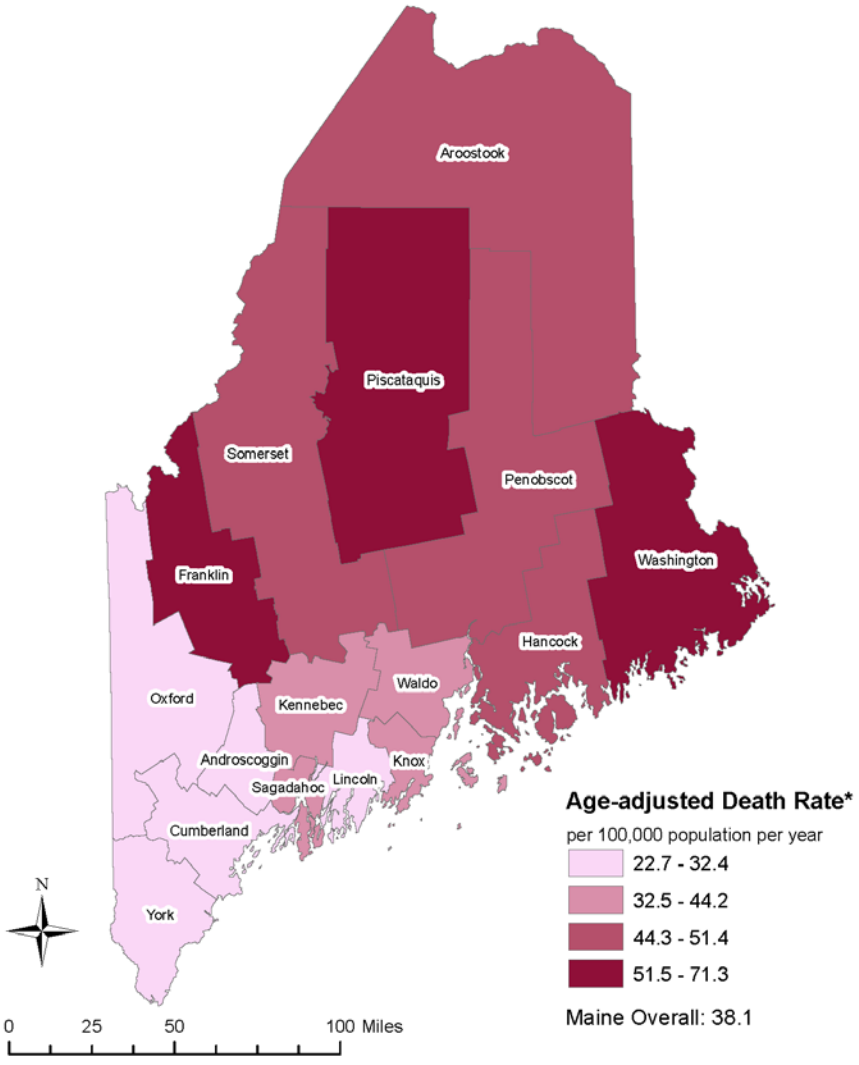
Heart Attack : 1999-2009: ICD-10 codes I21,I22; 1993-1998 ICD-9 codes 410; underlying cause of death. Change in ICD code represented by break in graph line.
Rates per 100,000 population.
Data Source: Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

Do Heart Attack Death Rates Differ by County of Residence in Maine?

Counties with the highest heart attack death rates tend to be in northern Maine.

- Heart attack death rates in Franklin, Penobscot, Piscataquis, Somerset, and Washington Counties were significantly higher than in Maine overall (Table 2.22, Figure 2.18).
- Heart attack death rates in Androscoggin, Cumberland, Lincoln, Oxford, and York were significantly lower than in Maine overall (Table 2.22, Figure 2.18).

Figure 2.18. Heart Attack Death Rates by County of Residence, Maine 2005-2009



Data Source: Maine Mortality Data; Office of Data, Research, and Vital Statistics, Maine CDC.
(Heart Failure: ICD-10 codes I21,I22; underlying cause of death)
*Age-adjusted to the 2000 U.S. standard population

About Heart Failure

What Is Heart Failure?

Heart failure occurs when damage to the heart muscle results in a decrease in the heart's ability to fill and pump blood throughout the body. A heart attack, hypertension, heart valve disease, and other conditions that damage the heart muscle can lead to heart failure. Heart failure is preceded by high blood pressure in 75% of all cases.[2] More than 90% of heart failure deaths are specified as "congestive heart failure" and the terms heart failure and congestive heart failure (CHF) are often used interchangeably. As blood flow out of the heart slows, blood returning to the heart through the veins backs up, causing fluid congestion in the tissues.

Why Is Heart Failure an Important Public Health Topic?

Around 5.7 million people in the U.S. have heart failure, and about 670,000 people are diagnosed with it each year.[2] Survival after heart failure diagnosis has been improving, but mortality is still very high; about half of those diagnosed with heart failure will die within five years.[2] Heart failure (HF) caused more than 56,000 deaths in the U.S. during 2009 (Table 2.26). In Maine, there were more than 1,400 hospitalizations (Table 2.23) due to CHF and almost 300 deaths due to HF in 2009 (Table 2.26).

Heart Failure Hospitalizations in Maine

What Are the Trends in Congestive Heart Failure Hospitalization Rates in Maine?

CHF hospitalization rates have declined dramatically in Maine in recent years.

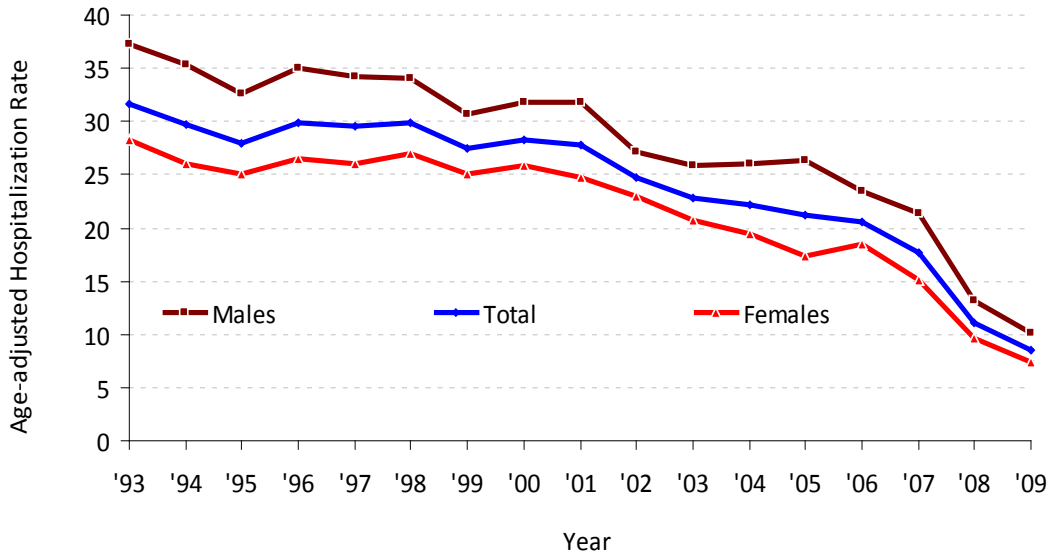
- Between 2006 and 2009, Maine's age-adjusted CHF hospitalization rate fell from 20.6 to 8.5 per 100,000, an average annual decline of 25% per year (Figure 2.19, Table 2.23).
- The number of CHF hospitalizations in Maine dropped from 3,293 in 2006 to only 1,429 in 2009 (Table 2.23).
- These declines may be due in part to U.S. efforts to improve clinical care and management of CHF to prevent hospitalization, but may also be due to changes in how CHF hospitalizations are coded and categorized.

Are There Male-Female Differences in CHF Hospitalization Rates in Maine?

Maine males have a higher age-adjusted CHF hospitalization rate than females, but the annual number of CHF hospitalizations is higher among females than males. CHF hospitalization rates for both males and females have been declining substantially.

- Maine males have consistently higher age-adjusted CHF hospitalization rates than females. Females, however, had a greater number of hospitalizations than males in most recent years.
- In 2009, the age-adjusted CHF hospitalization rate among males (10.1 per 10,000 population) was higher than among females (7.4 per 10,000 population), but the number of hospitalizations was higher for females (736) than males (693) and the crude hospitalization rates were similar for males (10.8) and females (10.9; Figure 2.19, Table 2.23).
- There has been a significant decrease in CHF hospitalization rates among both males and females. From 1993 to 2009, the decline in CHF hospitalization rates among males (72.8%) was similar to that among females (73.8%; Figure 2.19, Table 2.23).

Figure 2.19. Congestive Heart Failure Hospitalization Rates by Gender, Maine, 1993-2009



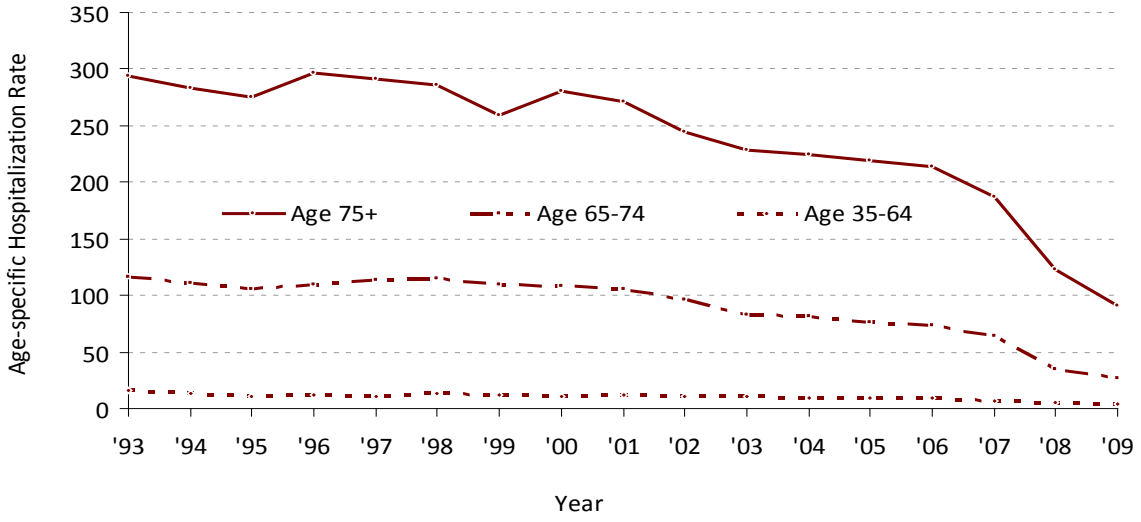
Congestive Heart failure: ICD-9-CM code 428.0 principal diagnosis.
Rates per 10,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Do CHF Hospitalization Rates Differ by Age Group in Maine?

CHF hospitalizations increase with age. CHF hospitalization rates are declining in all age groups among those 35 years and older.

- Younger adults ages 35-64 are less likely to be hospitalized due to CHF. Maine adults 35-64 years of age have hospitalization rates 6.5 times lower than those aged 65-74 years (4.1 vs. 26.8 per 10,000, respectively) and 22.3 times lower than those 75 years of age and older (4.1 vs. 91.5 per 10,000, respectively; Figure 2.20, Table 2.24).
- Maine adults 65-74 years of age had the largest percentage decrease (77.0%) in CHF hospitalizations between 1993 to 2009, compared to those 35-64 years (74.4%) and 75 years and older (69.0%; Figure 2.20, Table 2.24).

Figure 2.20. Congestive Heart Failure Hospitalization Rates by Age Group, Maine, 1993-2009



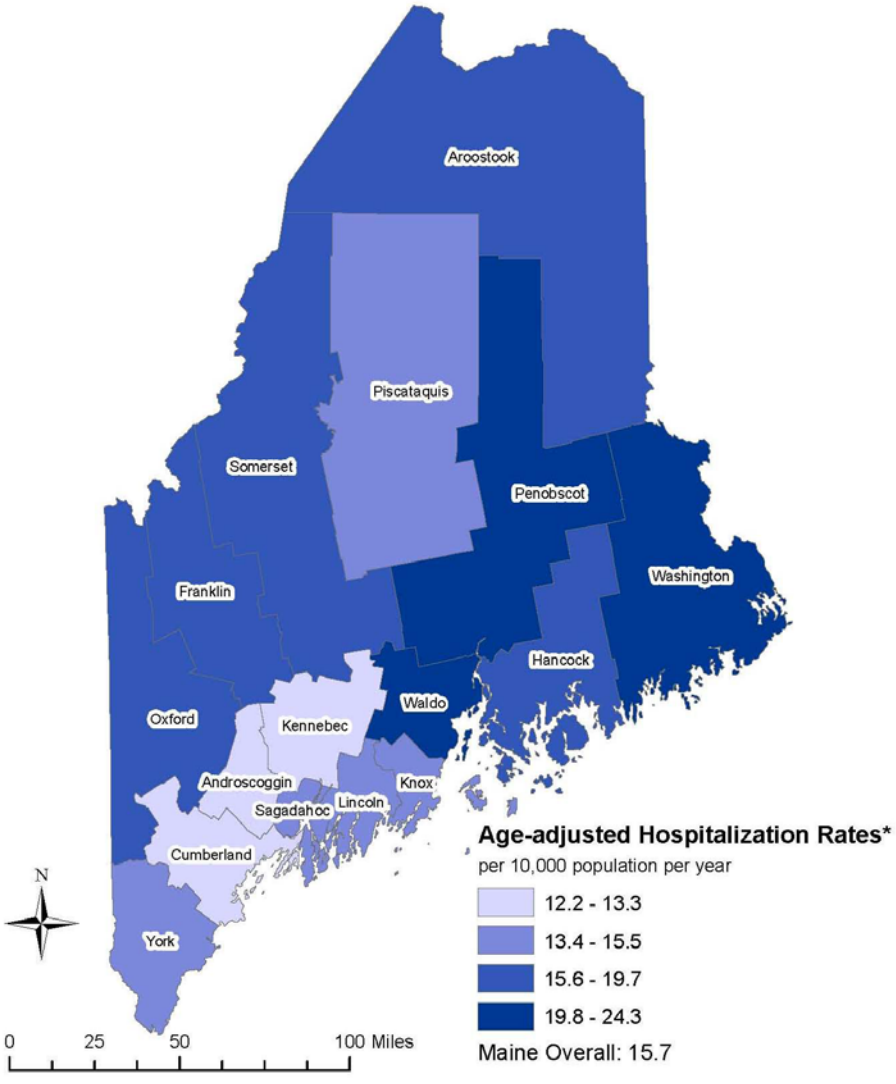
Congestive Heart failure: ICD-9-CM code 428.0 principal diagnosis.
Rates per 10,000 population.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Do CHF Hospitalization Rates Differ by County of Residence in Maine?

Counties with the highest CHF hospitalization rates tend to be in northeastern Maine.

- CHF hospitalization rates in Aroostook, Franklin, Hancock, Penobscot, Waldo and Washington Counties were significantly higher than Maine overall (Figure 2.21, Table 2.25)
- CHF hospitalization rates in Androscoggin, Cumberland, Kennebec, and Knox Counties were significantly lower than Maine overall (Figure 2.21, Table 2.25).

Figure 2.21. Congestive Heart Failure Hospitalization Rates, by County of Residence, Maine 2005-2009



Data Source: Maine Inpatient Database, Maine Health Data Organization.
(Congestive Heart Failure: ICD-9-CM 428.0; principal diagnosis)
*Age-adjusted to the 2000 U.S. standard population

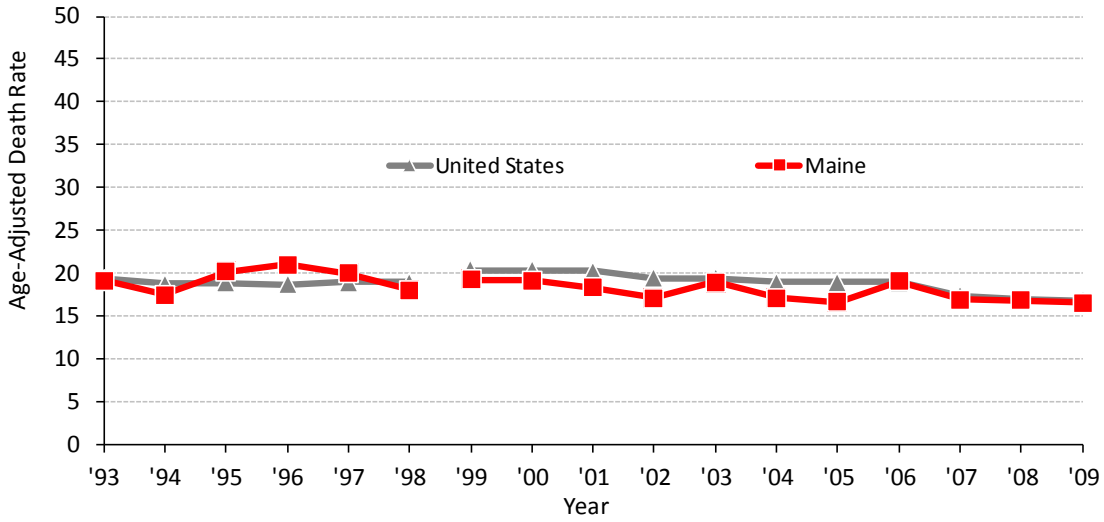
Heart Failure Deaths in Maine

How Do Heart Failure Death Rates in Maine Compare to Those in the U.S.?

Maine's heart failure death rates are similar to those of the U.S.

- Maine had a slightly higher heart failure death rate compared to the U.S. between 1995 and 1997, but has had a rate lower than or similar to the nation ever since (Table 2.26, Figure 2.22).
- In 2009, Maine's age-adjusted heart failure death rate of 16.5 per 100,000 was similar to the U.S. rate of 16.8 per 100,000 (Table 2.26, Figure 2.22).

Figure 2.22. Heart Failure Death Rates by Year, Maine and U.S., 1993-2009



Heart Failure: 1999-2009: ICD-10 codes I50; 1993-1998 ICD-9 codes 428; underlying cause of death.
Change in ICD code represented by break in graph line.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: U.S. data-CDC Wonder, Maine data- Maine Mortality Data; Data, Research and Vital Statistics, Maine CDC.

What Are the Trends in Heart Failure Death Rates in Maine?

There has been no significant change in the heart failure death ratesin Maine since 1999.

- Between 1999 and 2009, heart failure death rates have not declined significantly in Maine, though there has been a slow downward trend (Table 2.26, Figure 2.22).

Are There Male-Female Differences in Heart Failure Death Rates in Maine?

Maine males have had a slightly, but not significantly, higher age-adjusted heart failure death rate compared to females. The annual number of heart failure deaths has generally been higher in Maine females than males.

- Between 1999 and 2009, heart failure death rates among Maine males were generally slightly, but not significantly, higher than those for females, while the number of deaths was generally higher among females (Table 2.27, Figure 2.23).
- In 2009, the heart failure death rate among Maine males (19.2 per 100,000) was not significantly different from that among Maine females (14.9 per 100,000); 168 females died of heart failure that year compared to 118 males (Table 2.27, Figure 2.23).
- Heart failure death rates for Maine males and females have not declined significantly between 1999 and 2009 (Table 2.27, Figure 2.23).

Figure 2.23. Heart Failure Death Rates by Gender, Maine, 1993-2009

Heart Failure: 1999-2009: ICD-10 codes I50; 1993-1998 ICD-9 codes 428; underlying cause of death.
Change in ICD code represented by break in graph line.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Maine Mortality Data; Office of Data, Research and Vital Statistics, Maine CDC.

Do Heart Failure Death Rates Differ by Age Group in Maine?

Heart failure death rates increase with age. Between 1999 and 2009, there were no significant decreases in the heart failure death rates in any of the age groups in Maine.

- Mainers 75 years of age and older have heart failure death rates 14.3 times greater than Mainers 65-74 years of age (263.4 per 10,000 vs. 18.4 per 10,000, respectively; Table 2.28, Figure 2.24).
- Between 1999 and 2009, heart failure death rates did not decline significantly among Mainers 65-74 or 75 years of age and older (Table 2.28, Figure 2.24).

Figure 2.24. Heart Failure Death Rate by Age Group, Maine, 1993-2009

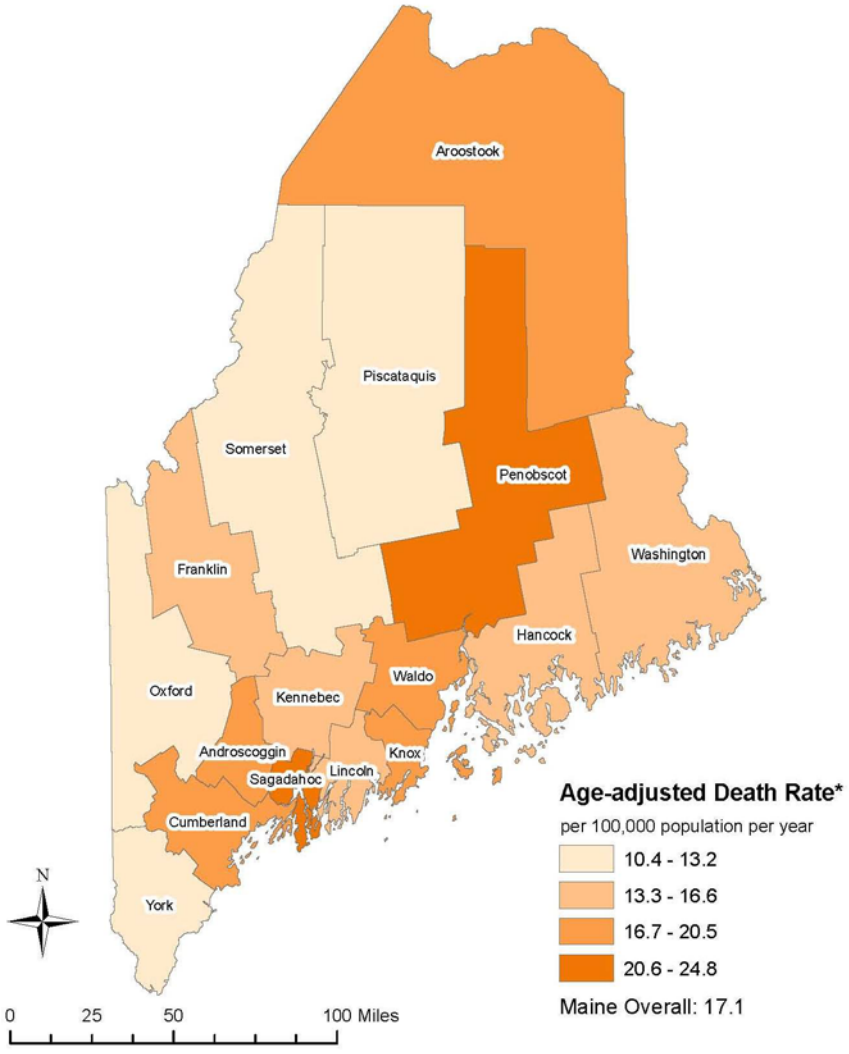
Heart Failure: 1999-2009: ICD-10 codes I50; 1993-1998 ICD-9 codes 428; underlying cause of death. Change in ICD code represented by break in graph line.
Rates per 100,000 population.
Data Source: Maine Mortality Data; Office of Data, Research and Vital Statistics, Maine CDC.

Do Heart Failure Death Rates Differ by County of Residence in Maine?

Counties with the highest heart failure death rates seem to run in a band from northern to southern Maine.

- Penobscot County has the highest heart failure death rate (24.8 per 100,000 population), significantly higher than in Maine overall (17.1 per 100,000 population; Table 2.29, Figure 2.25).
- Heart failure death rates in Oxford, Somerset, and York Counties are significantly lower than in Maine overall (Table 2.29, Figure 2.25).

Figure 2.25. Heart Failure Death Rates by County of Residence, Maine 2005-2009



Data Source: Maine Mortality Data; Office of Data, Research, and Vital Statistics, Maine CDC.
(Heart Failure: ICD-10 codes I50; underlying cause of death)
*Age-adjusted to the 2000 U.S. standard population

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Chapter 3: Stroke

About Stroke

What Is Stroke?

Cerebrovascular disease, commonly referred to as stroke, is a type of cardiovascular disease that affects the arteries leading to and within the brain. A stroke occurs when a blood vessel leading to the brain (or in the brain) is blocked by a clot, or bursts. When this happens, part of the brain cannot get the blood and oxygen it needs, and it starts to die. Depending on where the blockage occurs, stroke can cause paralysis, adversely affect language and vision, and cause other long-term health problems or death.

Why Is Stroke an Important Public Health Topic?

Stroke is a leading cause of death, premature mortality, and serious, long-term disability in Maine and the U.S. Stroke is the fourth leading cause of death in Maine and the U.S., (Figure 1.1) after heart disease, cancer and chronic lower respiratory disease.[1] Stroke is also an important cause of serious, long-term disability in the U.S.[2] In 2009 there were 640 deaths due to stroke in Maine, 5.2% of all deaths in that year. On average, there was one stroke death every 14 hours in Maine (Table 3.8, Figure 1.1). Stroke is also a major cause of premature death; in Maine it is the eighth leading cause of years of potential life lost before age 75.[3] In 2009, more than 3,600 Mainers were hospitalized due to a stroke. On average there was one hospitalization every 2.5 hours (Table 3.5).

In 2009, Maine had the 35th highest stroke death rate among all 50 states and D.C., but among all New England states, Maine had the highest stroke death rate.[4]

Stroke Knowledge in Maine

Studies have shown that stroke victims have fewer short-term disabilities and improved survival if they receive rapid medical care.[5] Hence, individuals having a stroke benefit greatly if they or onlookers know the symptoms and call 9-1-1 immediately.

Do Maine Adults Know the Symptoms of Stroke?

While nearly 90% of Maine adults said they would call 9-1-1 for a stroke, less than one in four (23.1%) actually knew the symptoms of a stroke.

- In 2009, nearly 90% of Maine adults (88.6%) said they would call 9-1-1 for stroke, but only 23.1% knew all the symptoms of a stroke. Only 20.7% knew all the symptoms of stroke and the need to call 9-1-1 (Table 3.1).
- More than 85% of Maine adults recognized three stroke symptoms: numbness or weakness of face, arm, or leg; sudden confusion or trouble speaking; and sudden trouble walking, dizziness, or loss of balance (Tables 3.2a and 3.2b).
- Fewer Maine adults knew that sudden trouble seeing is a stroke symptom (75.4%), and only 59.1% knew that sudden severe headache with no known cause is a stroke symptom (Tables 3.2a and 3.2b).
- Only 41.0% of Maine adults knew that sudden chest pain is not a symptom of a stroke (Table 3.2b).

What Are the Disparities in Stroke Knowledge in Maine?

Maine adults 65 years of age and older, in lower education groups, and in lower household income groups were less likely to correctly identify all symptoms of stroke and call 9-1-1 for assistance.

Differences by Gender:

- About 23% of both men and women in Maine knew all the stroke symptoms, and about 21% of both men and women both knew all the stroke symptoms and said they would call 9-1-1 for stroke (Table 3.1).
- Maine women were significantly more likely than men to know that sudden trouble walking, dizziness or loss of balance (90.9% vs. 86.6%, respectively) and sudden severe headache with no known cause are stroke symptoms (63.8% vs. 53.9%, respectively). There were no other significant differences between men and women in knowledge of individual stroke symptoms (Tables 3.2a and 3.2b).

Differences by Race/Ethnicity:

- Only 12.7% of non-white or Hispanic adults knew all the stroke symptoms and the need to call 9-1-1 as compared to 21.1% of non-Hispanic white adults, but this difference was not statistically significant (Table 3.1).

Differences by Age:

- Knowledge of all stroke symptoms and the need to call 9-1-1 was lowest among those in the 18-34 year age groups and the 65+ year age group. Knowledge was highest in the 35-64 year age groups. Those in the 65+ age group (18.1%) were significantly less likely to know all the stroke symptoms and the need to call 9-1-1 compared to those in the 35-44 (26.4%) and 55-64 (25.0) age groups (Table 3.1).

Differences by Education Level:

- Knowledge of the stroke symptoms and the need to call 9-1-1 was lowest in lower education groups and increased with education level. Only 7.5% of Maine adults with less than high-school education knew all stroke symptoms and the need to call 9-1-1 28.5% of college graduates (Table 3.1).
- Knowledge of the individual stroke symptoms also varied by education level, with those in the lower education groups being less likely to know the stroke symptoms than those in the higher education groups (Tables 3.2a and 3.2b).

Differences by Annual Household Income Level:

- Knowledge of the stroke symptoms and the need to call 9-1-1 was lowest in the lower household income groups and increased with household income level. Only 11.3% of Maine adults in the less than $15,000 income group and 16.5% of those in the $15,000-24,999 income group knew all the stroke symptoms and the need to call 9-1-1 compared to 25.9% among those in the $50,000+ income group (Table 3.1).

Is Stroke Knowledge Higher Among Maine Adults with a History of Stroke?

Maine adults with a history of stroke were no more likely to know all the symptoms of stroke and the need to call 9-1-1 than those without a history of stroke.

- The percentage of Maine adults who knew all the symptoms of stroke and the need to call 9-1-1 was similar among those with a history of stroke (20.7%) and those without a history of stroke (19.8%; Table 3.1).
- A significantly higher percentage of Maine adults with a history of stroke correctly identified sudden severe headache with no known cause as a stroke symptom (70.0%) than those without a history of stroke (58.8%; Table 3.2b).
- Knowledge of the other individual stroke symptoms did not vary by stroke history (Tables 3.2a and 3.2b).

What Are the Trends in Stroke Knowledge in Maine?

Knowledge of stroke symptoms and the need to call 9-1-1 has significantly increased in Maine between 2001 and 2009.

- The percentage of Maine adults who knew all the stroke symptoms and the need to dial 9-1-1 in increase significantly from 15.1% in 2001 to 20.7% in 2009 (Table 3.3).
- Knowledge of all stroke symptoms increased significantly from 17.8% in 2001 to 19.4% in 2004, and then increased significantly again from 19.5% in 2005 to 23.1% in 2009.
- Knowledge of the need to call 9-1-1 increased significantly from 84.2% in 2001 to 89.7% in 2004, and has not changed significantly since then.
- Knowledge of individual stroke symptoms significantly increased from 2001 to 2009 except for two stroke symptoms: 1) sudden numbness or weakness of face, arm, or leg, and 2) sudden severe headache with no known cause. These two symptoms showed an increase in knowledge, but they were not statistically significant (Tables 3.4a and 3.4b).

Stroke Prevalence

What Is the Prevalence of Stroke in Maine?

Approximately 29,000 Mainers, 2.8% of the adult population, have a history of stroke.

Older adults, adults with lower education and adults in lower household income groups have higher stroke prevalence rates.

- In 2010, 2.8% of Maine adults (about 29,000 adults) reported that they had a history of stroke. This estimate is based on survey data that excludes people living in long-term care facilities and people who had difficulty communicating over the phone, so it is likely to underestimate of the true prevalence of stroke (Table 3.1).
- The percentage of Maine adults who reported ever having had a stroke did not change significantly between 1999 and 2010 (Table 3.3).
- In 2010, the prevalence of stroke history did not differ significantly by gender (men: 2.6%; women: 2.9%) or race (non-Hispanic white: 2.7%; non-white or Hispanic: 3.6%) among Maine adults (Table 3.1).
- The prevalence of stroke history is higher in older age groups. Maine adults in the 65+ age group had a significantly higher stroke history prevalence (6.1%) compared to younger age groups (Table 3.1).
- Maine adults in lower education groups have higher prevalence of stroke history than those in higher education groups. Maine adults with less than a high school education had a significantly greater prevalence of stroke history (4.9%) compared to those who were college graduates (1.8%) and those with some post-high school education (2.4%). (Table 3.1).
- Maine adults in lower household income groups have a higher prevalence of stroke history than those in higher household income groups. Maine adults in the less than $25,000 annual household income groups had significantly higher stroke prevalence rates compared to those in the $35,000+ annual household income groups (Table 3.1).

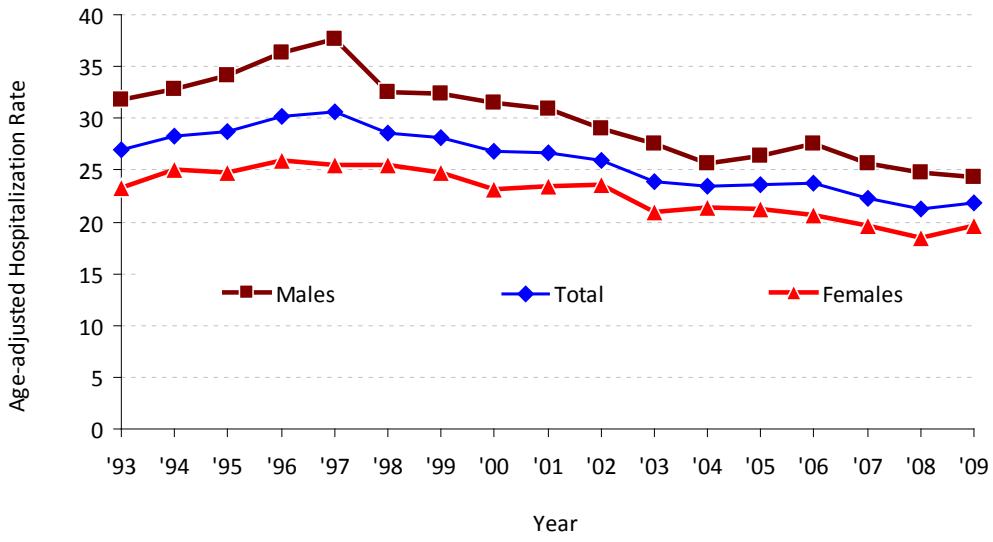
Stroke Hospitalizations

What Are the Trends in Stroke Hospitalizations in Maine?

Stroke hospitalization rates in Maine have declined since 1997.

- The age-adjusted stroke hospitalization rates increased steadily from 26.9 per 10,000 population in 1993 to 30.6 per 10,000 population in 1997. Since then however, the rates have declined significantly to 21.9 in 2009 (Table 3.5, Figure 3.1).
- There was a very slight, but not statistically significant, increase in the age-adjusted stroke hospitalization rate from 21.3 per 10,000 in 2008 to 21.9 per 10,000 in 2009 that seems to be driven by a slight increase in stroke hospitalization rates among females and those 75+ years of age. This very small one-year increase may be due purely to chance (Table 3.5, Figure 3.1).

Figure 3.1. Stroke Hospitalization Rates by Gender, Maine, 1993-2009



Stroke: ICD-9-CM codes 430-438, principal diagnosis
Rates per 10,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Maine Inpatient Database, Maine Health Data Organization

Are There Male-Female Differences in Stroke Hospitalizations in Maine?

Maine males have higher stroke hospitalization rates compared to females.

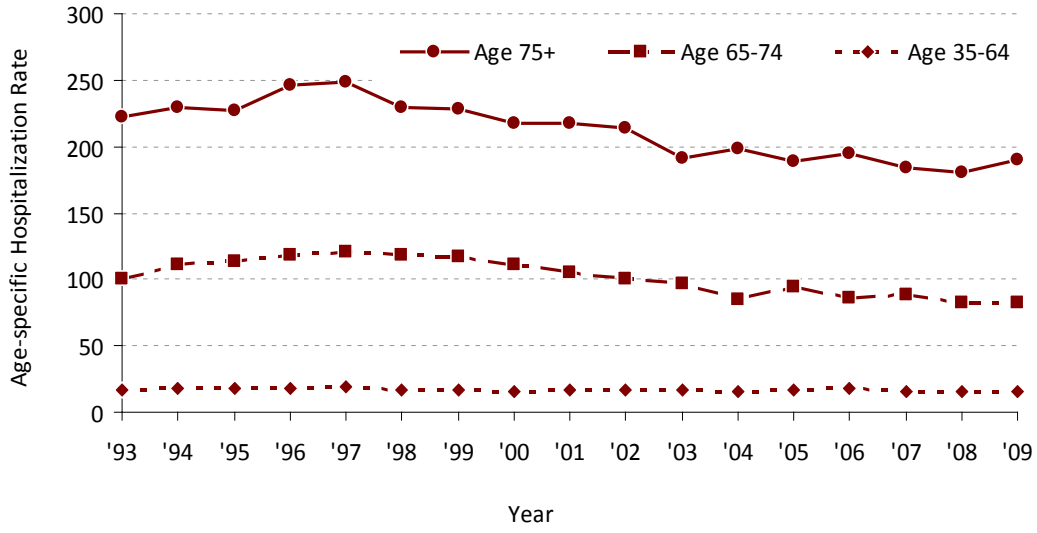
- In 2009, males were significantly more likely to be hospitalized for stroke than females (24.3 vs. 19.7 per 10,000, respectively). Between 1993 and 2009, hospitalization rates for males were consistently higher than those for females (Table 3.5, Figure 3.1).
- Since 1997, age-adjusted stroke hospitalization rates have generally been on the decline for both males and females, despite some year-to-year variation. Rates for females, however, increased very slightly, but not significantly, between 2008 (18.4 per 10,000) and 2009 (19.7 per 10,000), while rates for males have continued to decline. This small one-year increase among females may be due purely to chance (Table 3.5, Figure 3.1).

Do Stroke Hospitalizations Differ by Age Group in Maine?

Stroke hospitalization rates increase with age.

- Stroke hospitalization rates increase with age. Mainers in the 75+ year age group have the highest hospitalization rates, nearly 13 times higher than those in the 35-64 year age group (190.6 vs. 15.3 per 10,000, respectively). Mainers in the 65-74 year age group have hospitalization rates more than five times higher than those in the 35-64 age group (82.5 vs. 15.3 per 10,000 respectively). These differences have persisted over time (Table 3.6, Figure 3.2).
- Hospitalization rates for all three age groups have generally declined since 1997. Hospitalization rates for those in the 75+ year age group increased somewhat, but not significantly, between 2008 and 2009; this may be due purely to chance (Table 3.6, Figure 3.2).

Figure 3.2. Stroke Hospitalization Rates by Age Group, Maine, 1993-2009



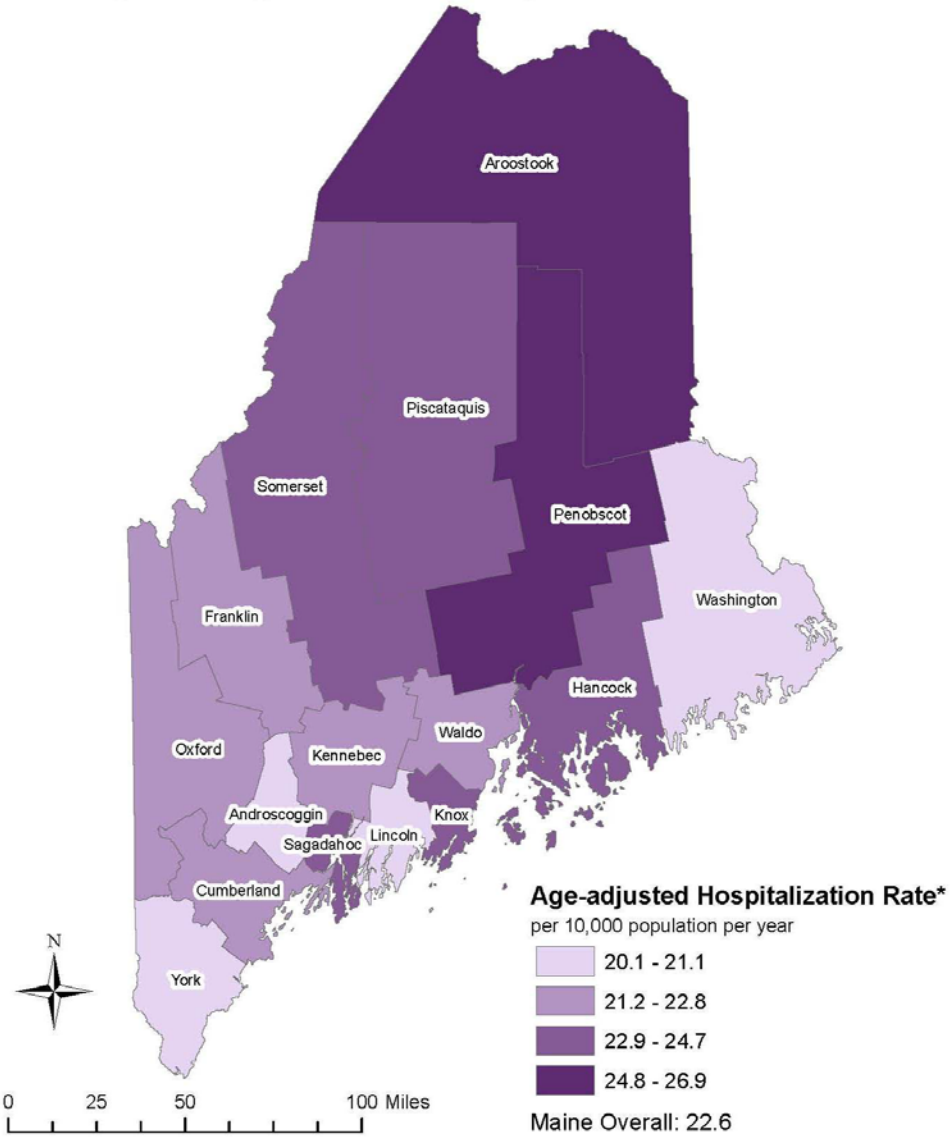
Stroke: ICD-9-CM codes 430-438, principal diagnosis
Rates per 10,000 population
Data Source: Maine Inpatient Database, Maine Health Data Organization

Do Stroke Hospitalizations Differ by County of Residence in Maine?

<u>The counties with the highest stroke hospitalization rates tend to be in northern Maine.</u>

- Aroostook, Penobscot, and Somerset Counties all have significantly higher stroke hospitalization rates than Maine overall (Table 3.7, Figure 3.3).
- York County has a significantly lower stroke hospitalization rates than Maine overall (Table 3.7, Figure 3.3).

Figure 3.3. Stroke Hospitalization Rates, by County of Residence, Maine 2005-2009



Data Source: Maine Inpatient Database, Maine Health Data Organization.
(Stroke: ICD-9-CM 430-438; principal diagnosis)
*Age-adjusted to the 2000 U.S. standard population

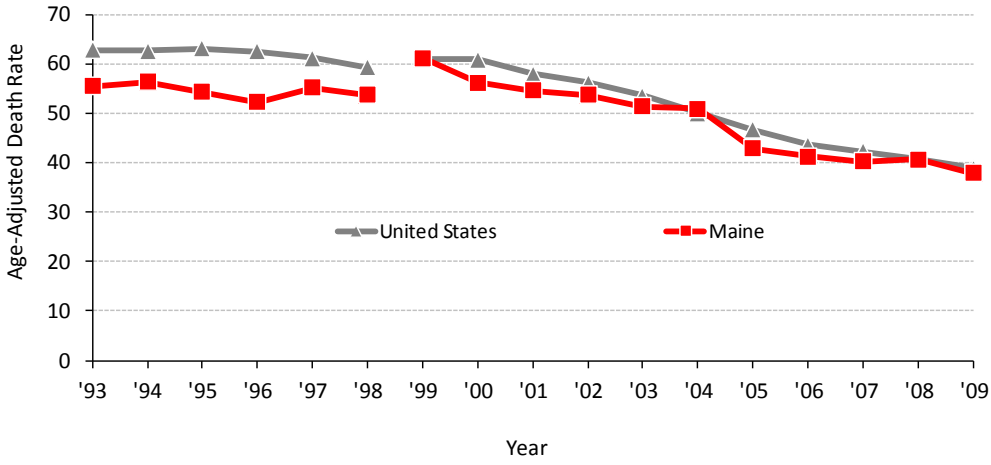
Stroke Deaths

How Do Stroke Death Rates in Maine Compare to Those in the U.S.?

Maine's stroke death rate is similar to the U.S. rate.

- Maine's 2009 age-adjusted stroke death rate of 37.8 per 100,000 was similar to the U.S. rate of 38.9 per 100,000 population (Table 3.8, Figure 3.4).
- From 1993 to 1998, stroke death rates in Maine were consistently lower than the U.S. rates. From 1999 to 2007, Maine's stroke death rates have been similar to or lower than the U.S. rates. In 2008 and 2009, Maine rates were similar to, and not significantly different from, U.S. rates (Table 3.8, Figure 3.4).

Figure 3.4. Stroke Death Rates by Year, Maine and U.S., 1993-2009



Stroke: 1999-2009: ICD-10 codes I60-I69; 1993-1998: ICD-9 codes 430-434, 436-438, underlying cause of death. Change in ICD code represented by break in graph line.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: U.S. data-CDC Wonder, Maine data- Data, Research and Vital Statistics, Maine CDC.

What Are the Trends in Stroke Deaths in Maine?

Fewer adults in Maine are dying from stroke today compared to 1999. Maine's age-adjusted stroke death rate has declined substantially since 1999, faster than the decline in U.S. rates.

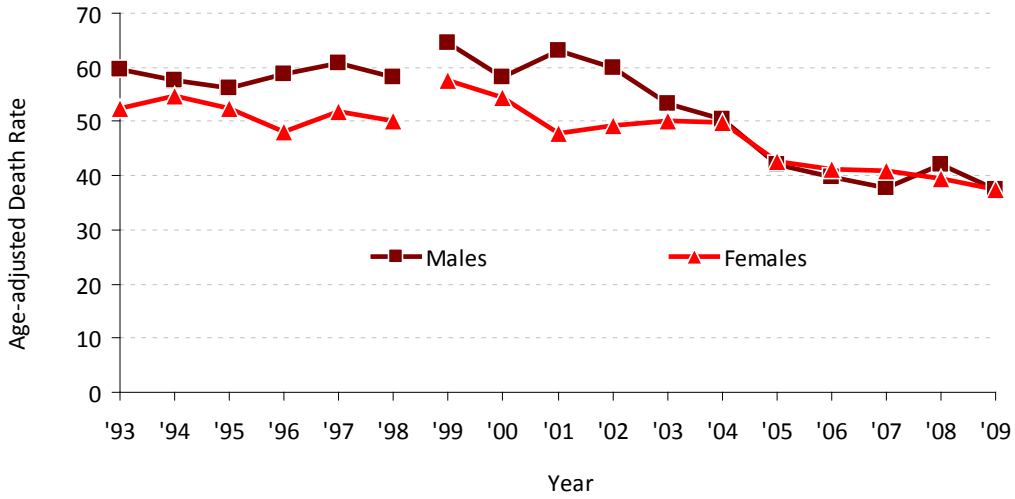
- Maine's age-adjusted stroke death rate has declined substantially from 61.1 per 100,000 in 1999 to 37.8 per 100,000 in 2009 (Table 3.8, Figure 3.4).
- The number of deaths due to stroke in the state has also declined from 878 in 1999 to 640 in 2009.
- Between 1999 and 2009, Maine's decline in age-adjusted stroke death rates (4.6% per year) was similar to that in the U.S. (4.5% per year). If Maine continues to experience this rate of decline in stroke death rates, Maine will achieve the Healthy People 2020 target of a stroke death rate of less than 33.8 per 100,000 population within the next 3 years (Table 3.8, Figure 3.4).

Are There Male-Female Differences in Stroke Deaths in Maine?

Maine males and females currently have similar stroke death rates.

- In 2009, stroke death rates among Maine males (37.5 per 100,000 population) were similar to those among females (37.4 per 100,000 population, Table 3.9, Figure 3.5).
- Historically in Maine, males have had higher stroke death rates than females. However, between 2001 and 2004, rates among males declined more rapidly than those among females, with rates among males falling to the level of those for females (Table 3.9, Figure 3.5).
- Since 2004, stroke death rates have declined at a similar pace for males and females, and stroke death rates have been similar between males and females (Table 3.9, Figure 3.5).

Figure 3.5. Stroke Death Rates by Gender, Maine, 1993-2009



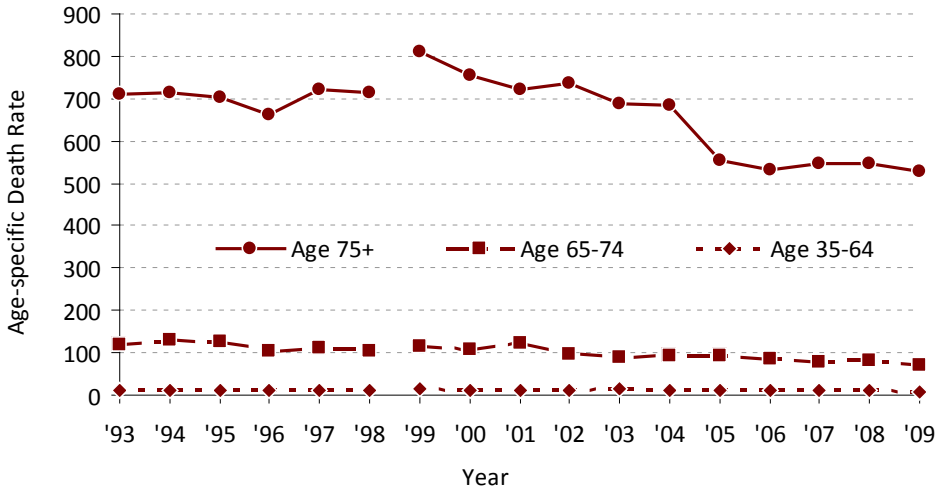
Stroke: 1999-2009: ICD-10 codes I60-I69; 1993-1998: ICD-9 codes 430-434, 436-438, underlying cause of death. Change in ICD code represented by break in graph line.
Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.
Data Source: Office of Data, Research and Vital Statistics, Maine CDC.

Do Stroke Death Rates Differ by Age Group in Maine?

Stroke death rates increase with age, and Mainers in the oldest age group (75+ years) have the highest stroke death rates.

- Stroke death rates increase with age. Mainers in the 75+ year age group have the highest death rates, 65 times higher than those in the 35-64 year age group (528.8 vs. 8.2 per 100,000, respectively). Mainers in the 65-74 year age group have death rates nearly nine times higher than those in the 35-64 age group (71.0 vs. 8.2 per 100,000, respectively). These differences have persisted over time (Table 3.10, Figure 3.6).
- The trends over time in stroke death rates vary somewhat by age group. Stroke death rates for Mainers 75+ years of age declined substantially between 1999 and 2005, but have since leveled off, with no meaningful decline between 2005 and 2009. Among those 65-74 years of age, stroke death rates declined slowly but steadily between 2001 and 2009. Among those 35-64 years of age, stroke death rates showed little change between 1999 and 2006; and between 2006 and 2009, rates declined steadily though not significantly (Table 3.10, Figure 3.6).

Figure 3.6. Stroke Death Rate by Age Group, Maine, 1993-2009



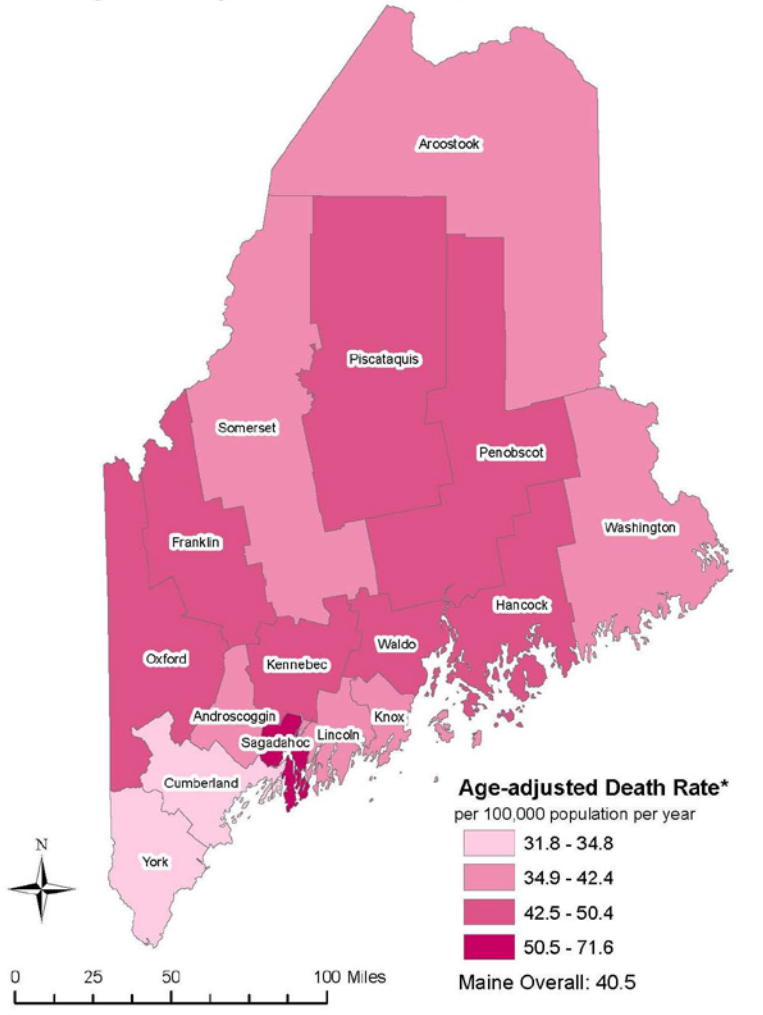
Stroke: 1999-2009: ICD-10 codes I60-I69; 1993-1998: ICD-9 codes 430-434, 436-438, underlying cause of death. Change in ICD code represented by break in graph line.
Rates per 100,000 population.
Data Source: Office of Data, Research and Vital Statistics, Maine CDC.

Do Stroke Death Rates Differ by County of Residence in Maine?

Counties with the highest stroke death rates are clustered in the mid-section of Maine, and counties with the lowest stroke death rates are in southern Maine.

- Sagadahoc County has the highest age-adjusted stroke death rate in the state (71.6 per 100,000 population), with a rate that is 1.77 times higher than the state rate; this difference is statistically significant (Table 3.11, Figure 3.7).
- York and Cumberland Counties have the lowest age-adjusted stroke death rates (31.8 and 34.8 per 100,000 population, respectively) in the state, with rates that are significantly lower than the state rate (Table 3.11, Figure 3.7).

Figure 3.7. Stroke Death Rates, by County of Residence, Maine 2005-2009



Data Source: Maine Mortality Data; Office of Data, Research, and Vital Statistics, Maine CDC.
(Stroke: ICD-10 codes I60-I69; underlying cause of death)
*Age-adjusted to the 2000 U.S. standard population

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Chapter 4: The Economic Costs of Cardiovascular Disease

Overview

Cardiovascular diseases are very costly diseases economically, both in terms of medical-related expenses and the costs of lost productivity. A 2012 American Heart Association report estimated that the direct and indirect cost of cardiovascular disease was $297.7 billion nationally in 2008.[1] Direct costs include the cost of physicians and other professionals, hospital and nursing home services, the cost of medications, home healthcare, and other medical durables. Indirect costs include the lost productivity that results from illness and death.

Costs associated with hospitalizations are some of the largest contributors to the direct costs of cardiovascular disease (CVD). From 1999 to 2009 in the U.S., the number of inpatient discharges from short-stay hospitals with CVD as the first-listed diagnosis decreased from 6,344,000 to 6,165,000.[1] In 2009, in the U.S., CVD ranked highest among all disease categories in hospital discharges.[1] The total inpatient hospital cost for CVD in 2008 was $79.7 billion.[1]

Economic costs can be difficult to measure, and state-level data on economic costs for cardiovascular disease are limited. In this chapter, we present the most recent information available.

Prevention and early identification of risk factors and disease, as well as control of risk factors and management of disease, can help lower the economic costs resulting from cardiovascular diseases.

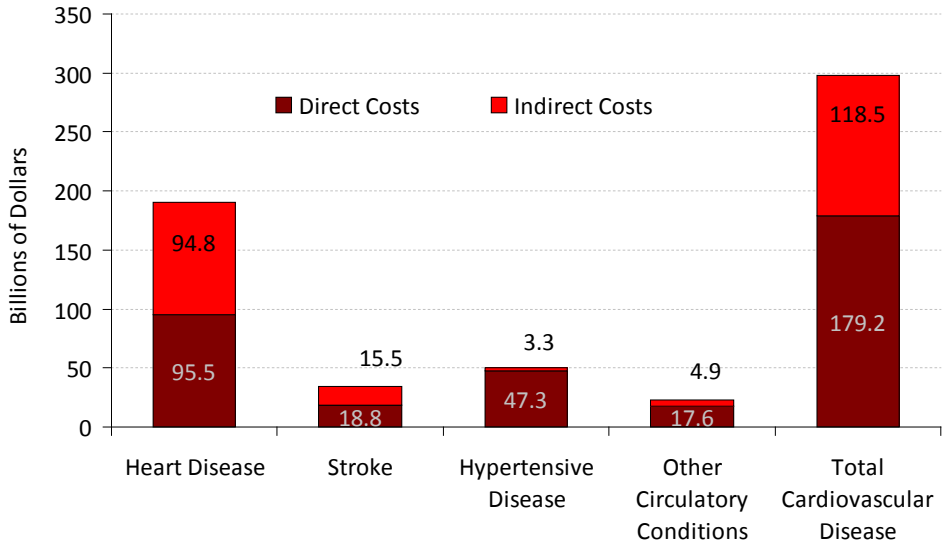
U.S. and Maine Data

What Is the Economic Cost of CVD in the U.S.?

In the U.S. in 2008, the direct and indirect costs resulting from CVD were estimated at $297 billion.

- In 2008, CVD resulted in more than $297 billion in direct and indirect costs in the U.S. Indirect costs were $118 billion and direct costs were over $179 billion (Figure 4.1).
- Of the CVDs examined, heart disease was the most costly, resulting in more than $190 billion in direct and indirect costs in the U.S. in 2008.

Figure 4.1. Estimated Direct and Indirect Costs of Selected Cardiovascular Diseases, United States, 2008



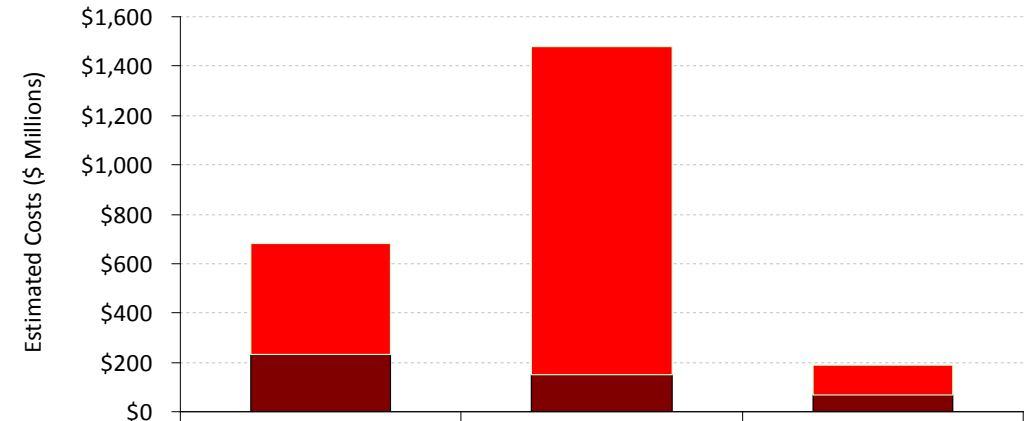
Data Source: American Heart Association. Heart Disease and Stroke Statistics-2012Update

What Are the Economic Costs of CVD in Maine?

CVD results in substantial direct and indirect cost burdens in Maine.

- The Milken Institute, in their report "An Unhealthy America: The Economic Burden of Chronic Disease," estimated that direct and indirect costs in Maine associated with heart disease, high blood pressure, and stroke were $680 million, $1480 million, and $190 million in 2003 (Figure 4.2).[2]
- Heart disease had the highest direct costs ($230 million) and high blood pressure had the highest indirect costs ($1,330 million; Figure 4.2).[2]
- High blood pressure has the highest combined direct and indirect costs ($1,480 million; Figure 4.2).[2]

Figure 4.2. Estimated Costs due to Selected Cardiovascular Diseases, Maine, 2003



	Heart Disease	High Blood Pressure	Stroke
Indirect Costs	$450	$1,330	$120
Direct Costs	$230	$150	$70

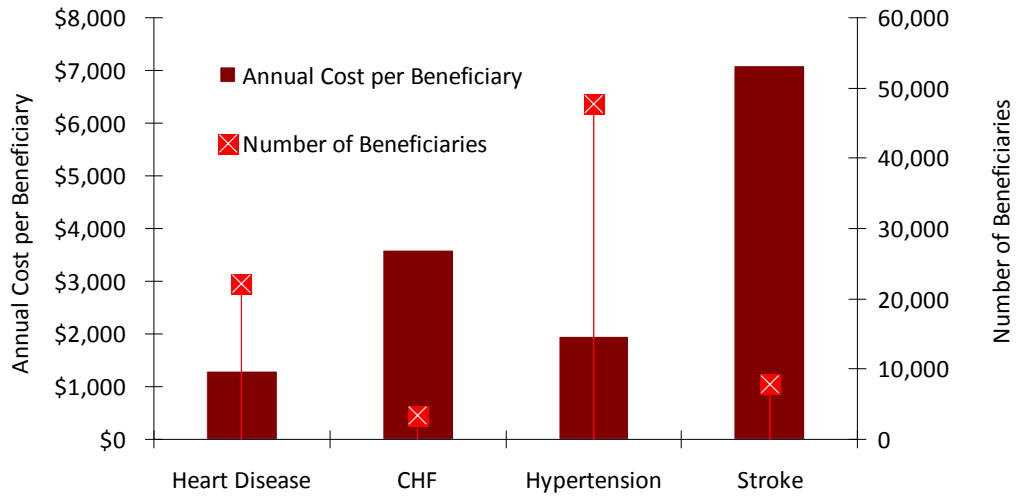
Source: Milken Institute; An unhealthy America: the economic burden of chronic disease.
http://www.chronicdiseaseimpact.com/ebcd.taf?cat=state&state=ME
Costs are in 2003 dollars.

What Are the Medicaid Costs Related to CVD in Maine?

CVDs are major causes of Medicaid costs in Maine.

- The U.S. Centers for Disease Control and Prevention's "Chronic Disease Cost Calculator" calculates the Medicaid costs for a number of chronic diseases at the state level. These are direct costs only, and do not include indirect costs. These are total Medicaid costs, including both the state and federal share of costs.[3]
- Among the four CVDs included, hypertension is the most prevalent condition (16.2%) among Medicare beneficiaries in Maine, followed by heart disease (7.6%; Table 4.1, Figure 4.3).[3]
- While stroke is less prevalent (2.6%), it is by far the most costly per beneficiary with the condition ($7,090), followed by congestive heart failure ($3,580) and hypertension ($1,950; Table 4.1, Figure 4.3).[3]

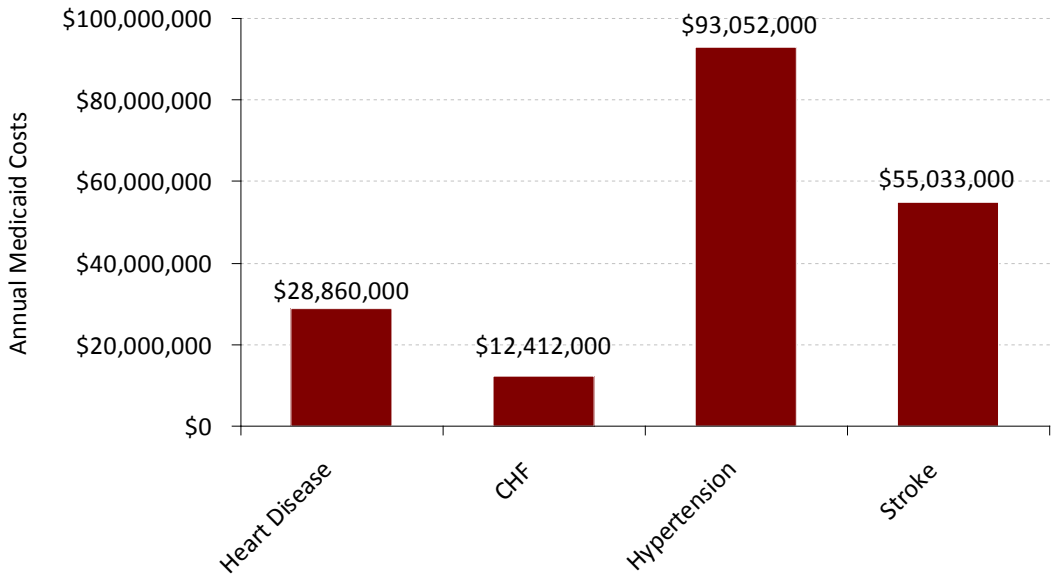
Figure 4.3. Annual Medicaid Costs due to Selected Cardiovascular Diseases per Beneficiary and Number of Beneficiaries with Conditions, Maine



Source: Centers for Disease Control and Prevention. Chronic Disease Cost Calculator: Version 1.0.3225. Available at: http://www.cdc.gov/nccdphp/resources/calculator.htm.
Costs are in 2007 dollars. CHF: Congestive Heart Failure.

- Hypertension results in the highest total annual Medicaid cost (more than $93 million) among the CVDs, followed by stroke (more than $55 million), heart disease (nearly $29 million), and congestive heart failure (more than $12 million; Table 4.1, Figure 4.4).[3]

Figure 4.4. Annual Medicaid Costs due to Selected Cardiovascular Diseases, Maine



Source: Centers for Disease Control and Prevention. Chronic Disease Cost Calculator: Version 1.0.3225. Available at: http://www.cdc.gov/nccdphp/resources/calculator.htm.
Costs are in 2007 dollars. CHF: Congestive Heart Failure.

Conclusion

CVD is a major contributor to direct and indirect costs in Maine and the U.S. CVD is also a major cause of Medicaid costs in Maine. As the population of Maine becomes increasingly older, more residents will be living with chronic conditions. This will have a profound effect on our healthcare system, as well as the economy. While the ultimate goal is to decrease the overall number of cardiovascular-related hospitalizations, and the total charges incurred during a hospital stay, such financial improvements must not come at a cost of decreased quality of care for patients with cardiovascular diseases in Maine.

References

1. Roger VL, Go AS, Lloyd-Jones DM, et al. Heart disease and stroke statistics 2012 update: A report from the American Heart Association. *Circulation.* 2012;125:e2-e220. http://circ.ahajournals.org/content/125/1/e2.full.pdf+html Accessed on Sept. 25, 2012.
2. Milken Institute; An unhealthy America: the economic burden of chronic disease. http://www.chronicdiseaseimpact.com/ebcd.taf?cat=state&state=ME Accessed on Sept. 25, 2012.
3. Centers for Disease Control and Prevention. Chronic Disease Cost Calculator: Version 1.0.3225. Available at: http://www.cdc.gov/nccdphp/resources/calculator.htm Accessed on Sept. 25, 2012.

Chapter 5: Risk Factors for Cardiovascular Disease

What are the Risk Factors for Cardiovascular Disease?

There are many risk factors for cardiovascular disease including high blood pressure, high cholesterol, physical activity, nutrition, weight status, smoking, and diabetes. In this chapter we will look at the prevalence of these risk factors among Maine adults. We will focus primarily on high blood pressure and high cholesterol, but will also provide some brief information on other risk factors. This chapter is divided into two sections:

- Section I: Blood Pressure and Cholesterol
- Section II: Other Risk Factors for Cardiovascular Disease

Section I: Blood Pressure and Cholesterol

High Blood Pressure

How Do High Blood Pressure Prevalence Rates in Maine Compare to Those in the U.S.?

Maine prevalence rates of high blood pressure are similar to U.S. rates.

- In 2009, 30.0% of Maine adults reported having ever been diagnosed with high blood pressure, slightly higher than the U.S. median of 28.7% (Table 5.1, Figure 5.1). Many people have high blood pressure but have not had it diagnosed, so this is likely an underestimate of the real prevalence of high blood pressure in Maine.
- Since 1995, the prevalence of diagnosed high blood pressure in Maine has been similar to the U.S. median (Table 5.1, Figure 5.1).

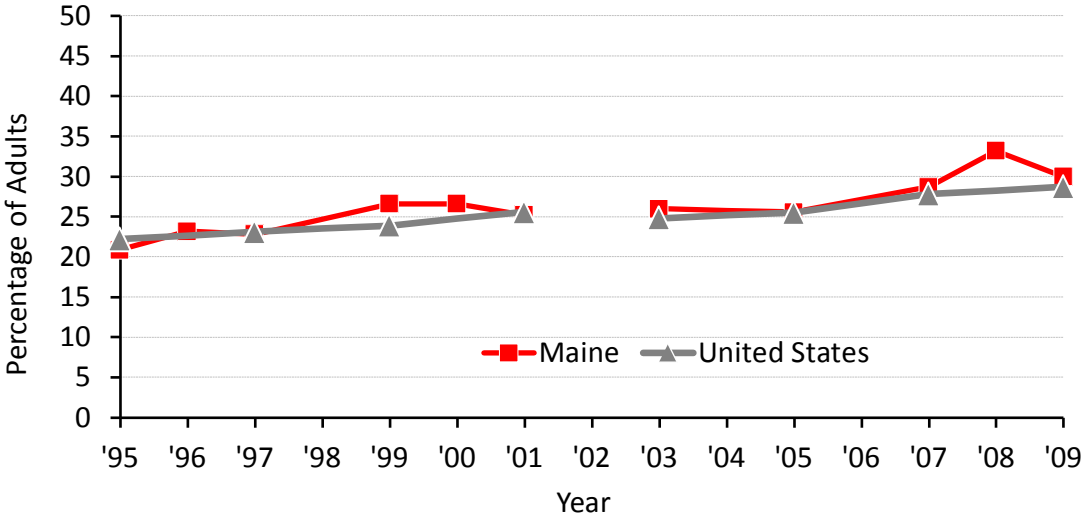
What Are the Trends in the Prevalence of High Blood Pressure?

The prevalence of high blood pressure in Maine and the U.S. is rising.

- Since 1995, the prevalence of diagnosed high blood pressure in Maine and the U.S. has been rising.

- Between 1995 and 2009, the prevalence of diagnosed high blood pressure in Maine increased steadily and significantly from 20.9% to 30.0% (Table 5.1, Figure 5.1).

Figure 5.1 High Blood Pressure Prevalence by Year, Maine and U.S. Adults, 1995-2009



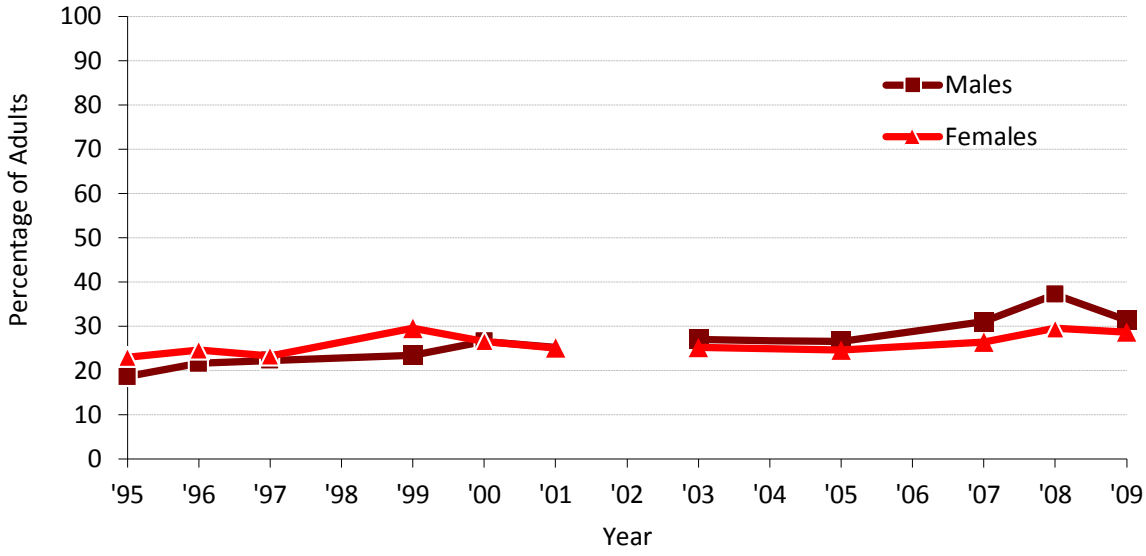
Adults = ages 18+ years.
1990-2001 included women diagnosed with high blood pressure only while pregnant as hypertensive, while 2003 and later years data do not consider them to be hypertensive.
Data not available for U.S. in '96,'00,'08; data not available for Maine or U.S. in '98,'02,'04,'06',10.
Data Source: Behavioral Risk Factor Surveillance System.

Are There Male-Female Differences in High Blood Pressure Prevalence Rates in Maine?

Currently, the prevalence of diagnosed high blood pressure is similar among Maine men and women.

- Between 1995 and 2009, the prevalence of diagnosed high blood pressure was similar among Maine men and women, except in 2007 and 2008 when the rate for men was significantly higher than the rate for women (Table 5.2, Figure 5.2).
- For both men and women, the prevalence of diagnosed high blood pressure has increased significantly since 1995 (Table 5.2, Figure 5.2).
- Between 1995 and 2009, the prevalence of diagnosed high blood pressure increase among Maine men from 18.5% to 31.4% and among Maine women from 23.0% to 28.7% (Table 5.2, Figure 5.2).

Figure 5.2 High Blood Pressure Prevalence, by Gender, Maine, 1995-2009



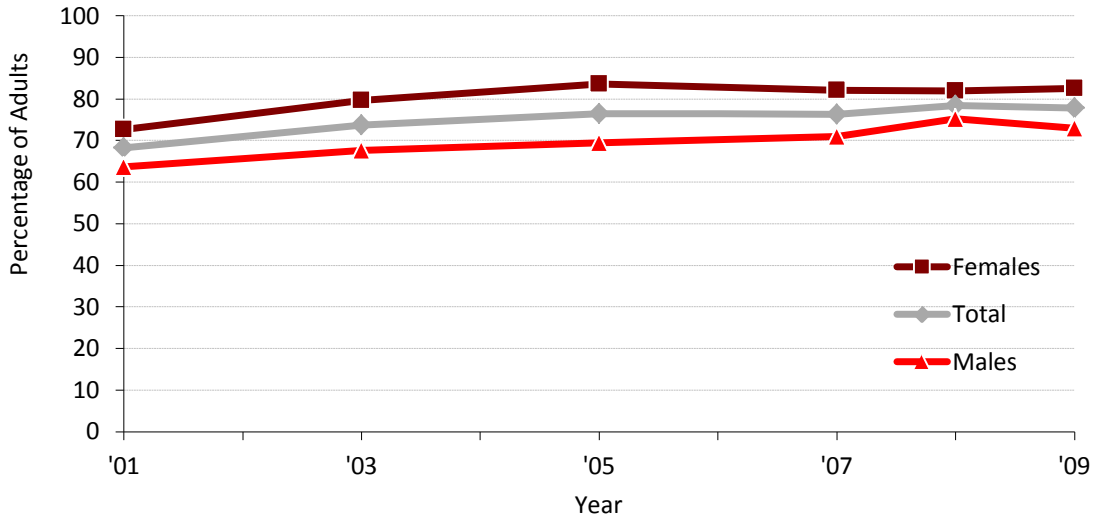
Adults = ages 18+ years.
1995-2001 included women with pregnancy-related high blood pressure, while 2003 and later years data do not consider them to have high blood pressure.
Data not available in 1998, 2002, 2004, 2006, 2010.
Data Source: Behavioral Risk Factor Surveillance System.

Are Maine Adults with High Blood Pressure Taking Medication to Control Their Condition?

In 2009, only 78% of adults with diagnosed high blood pressure were taking medication to control their blood pressure, but this is an increase over previous years. Maine men are less likely to be taking medication than Maine women.

- Between 2001 and 2009, the percentage of Maine adults with diagnosed high blood pressure who are taking medication to control their high blood pressure increased from 68% to 78%, a 14% relative increase; this increase has been steady and statistically significant (Table 5.3, Figure 5.3).
- A significantly greater percentage of Maine women with diagnosed high blood pressure took medication compared to Maine men for all years shown, except in 2008 when the difference was not significant (Table 5.3, Figure 5.3).
- In 2009, only 73% of men with diagnosed high blood pressure were taking medication to control their blood pressure, compared to 83% of women (Table 5.3, Figure 5.3).

Figure 5.3 Maine Adults with High Blood Pressure Taking Medication for High Blood Pressure, Prevalence by Year and Gender, Maine Adults, 2000-2009



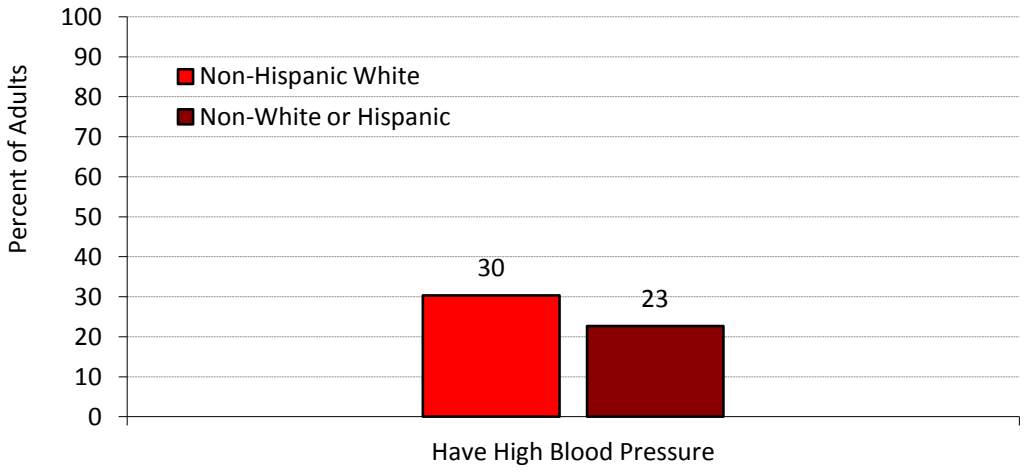
Adults = ages 18+ years.
Rates are percentages among Maine adults diagnosed with high blood pressure.
Data not available in 2002, 2004, 2006, 2010.
Data Source: Behavioral Risk Factor Surveillance System.

Do High Blood Pressure Prevalence Rates and Taking Medication for High Blood Pressure Rates Differ by Race/Ethnicity in Maine?

Non-Hispanic Whites have a higher prevalence of diagnosed high blood pressure compared to Hispanics and people in other race groups.

- In 2009, non-Hispanic Whites in Maine had a significantly higher prevalence of diagnosed high blood pressure (30.3%) compared to those in other race groups or Hispanics (22.7%; Table 5.4, Figure 5.4).
- Differences in blood pressure medication use by race/ethnicity in Maine cannot be assessed at this time as the numbers of survey respondents are too small to produce statistically reliable estimates by race/ethnicity for this measure.

Figure 5.4 High Blood Pressure among Maine Adults by Race, 2009



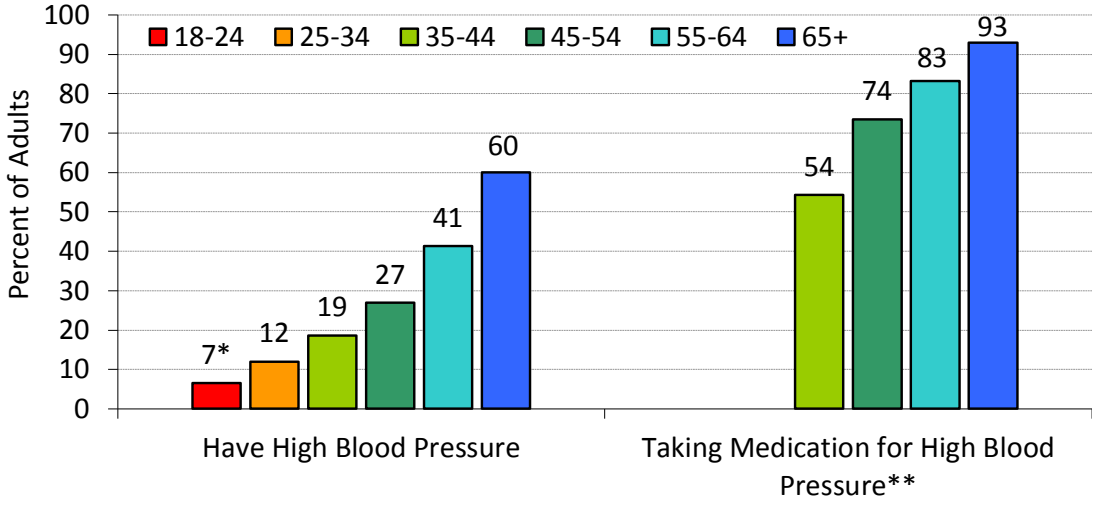
Adults = ages 18+ years.
Data Source: Behavioral Risk Factor Surveillance System.

Do High Blood Pressure Prevalence Rates and Taking Medication for High Blood Pressure Rates Differ by Age Group in Maine?

Older age groups have a higher prevalence of diagnosed high blood pressure and are more likely to be taking medication for their high blood pressure.

- Among Maine adults in 2009, with each increase in age group there was a significantly greater prevalence of diagnosed high blood pressure. The prevalence of diagnosed high blood pressure among Maine adults in the 65+ years age group was 5 times the prevalence in the 25-34 years age group, 3 times the prevalence in the 35-44 years age group, 2 times the prevalence in the 45-54 years age group, and 0.5 times the prevalence in the 55-64 years age group (60.1% vs. 12.0%, 18.6%, 26.9%, and 41.3% respectively; Table 5.4, Figure 5.5).
- In 2009, a significantly greater percentage of Maine adults in the 65+ years age group (93.0%) took medication to control their high blood pressure compared to 35-44 years age group (54.3%), 45-54 years age group (73.5%), and 55-64 years age group (83.2%; Table 5.4, Figure 5.5).

Figure 5.5 Blood Pressure-Related Measures among Maine Adults by Age Group, 2009



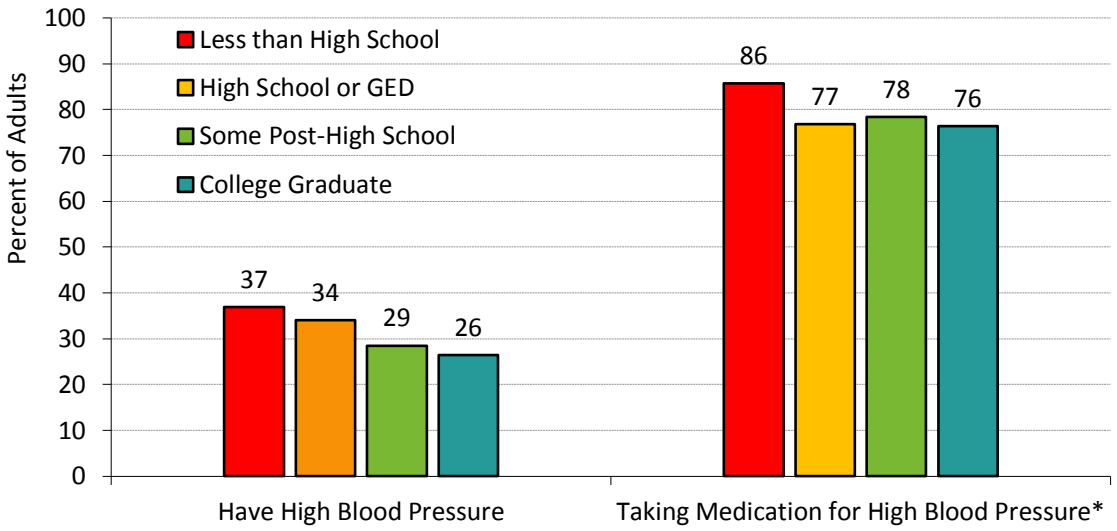
Adults = ages 18+ years.
*These percentages are based on a numerator < 50 and may be unreliable; please use caution in interpreting.
**Rates are percentages among Maine adults diagnosed with high blood pressure.
Data Source: Behavioral Risk Factor Surveillance System.

Do High Blood Pressure Prevalence Rates and Taking Medication for High Blood Pressure Rates Differ by Education Level in Maine?

Maine adults with lower education levels have higher prevalence rates of diagnosed high blood pressure. There is no statistically significant difference in the percentage of Maine adults taking medication for their high blood pressure by education level.

- Maine adults with less than a high school education (36.9%) and those with a high school education or G.E.D. (34.0%) have a significantly higher prevalence of diagnosed high blood pressure than Maine adults with some post-high school education (28.5%) and college graduates (26.4%; Table 5.4, Figure 5.6).
- There is no statistically significant difference between education levels in the percentage of Maine adults with high blood pressure who are taking medication to control their high blood pressure (Table 5.4, Figure 5.6).

Figure 5.6 Blood Pressure-Related Measures among Maine Adults by Education, 2009



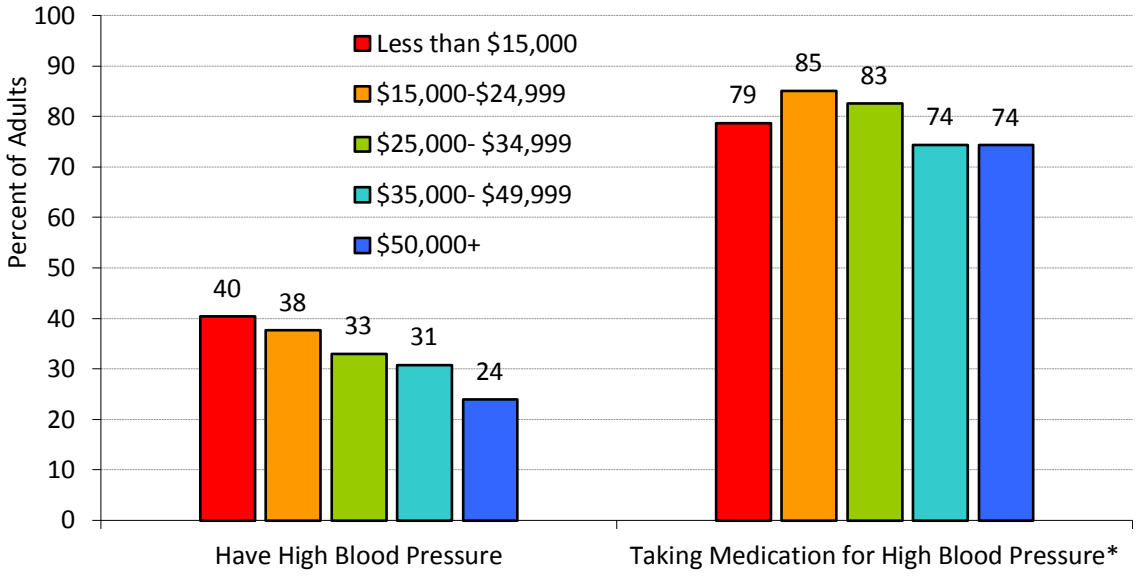
Adults = ages 18+ years.
*Rates are percentages among Maine adults diagnosed with high blood pressure.
Data Source: Behavioral Risk Factor Surveillance System.

Do High Blood Pressure Prevalence Rates and Taking Medication for High Blood Pressure Rates Differ by Annual Household Income in Maine?

<u>The prevalence of diagnosed high blood pressure is higher among those in the lower annual household income groups.</u>

- Maine adults in the <$15,000 (40.4%), and $15,000-24,999 (37.7%) annual household income groups have a significantly higher prevalence of diagnosed high blood pressure than those in the $35,000-49,000 (30.8%), and $50,000+ income groups (23.9%; Table 5.4, Figure 5.7).
- People in the $15,000-24,999 annual household income group are more likely to be taking blood pressure medication (85.1%) than those in the $35,000-49,999 and $50,000+ income groups (74.4% and 74.3%, respectively; Table 5.4, Figure 5.7).

Figure 5.7 Blood Pressure-Related Measures among Maine Adults by Household Income, 2009



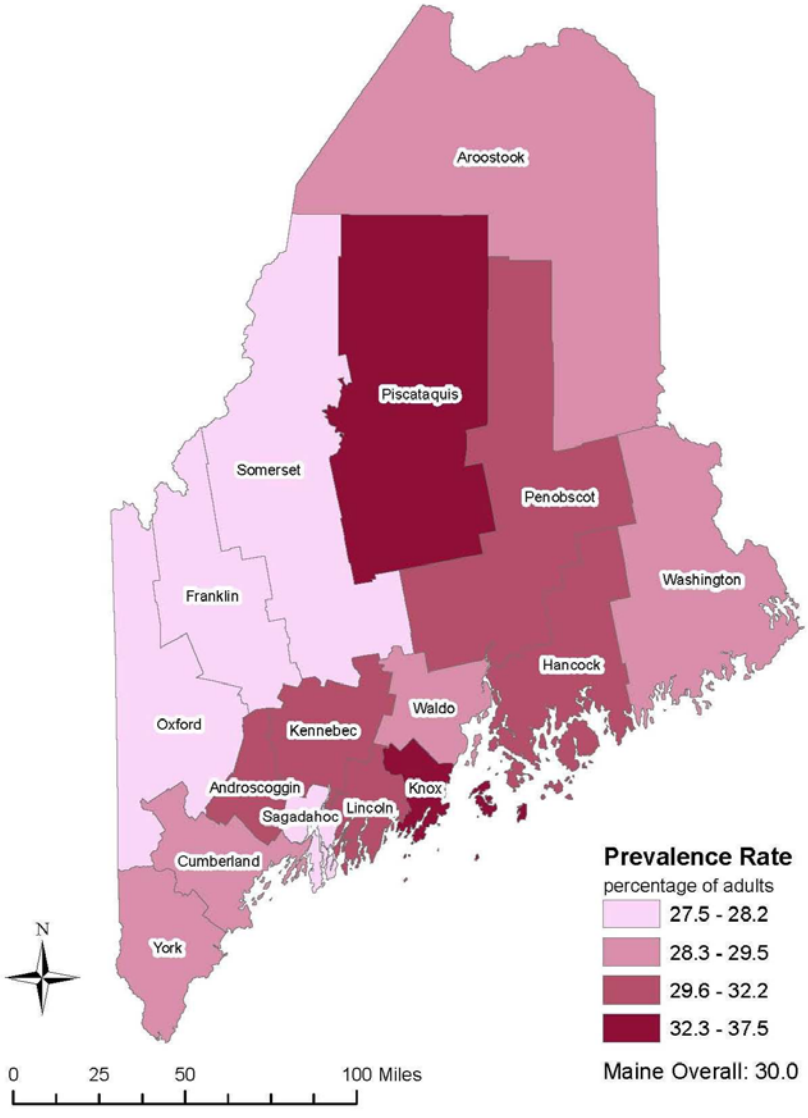
Adults = ages 18+ years.
*Rates are percentages among Maine adults diagnosed with high blood pressure.
Data Source: Behavioral Risk Factor Surveillance System.

Do High Blood Pressure Prevalence Rates Differ by County of Residence in Maine?

There is no difference in the prevalence of high blood pressure by county of residence among Maine adults.

- In 2009, Piscataquis County had the highest prevalence (37.5%) of diagnosed high blood pressure and Sagadahoc County (27.5%) had the lowest prevalence, but no county had a prevalence rate significantly different from other counties or the state overall (Table 5.5, Figure 5.8).

Figure 5.8. Prevalence of High Blood Pressure, by County of Residence, Maine Adults 2009



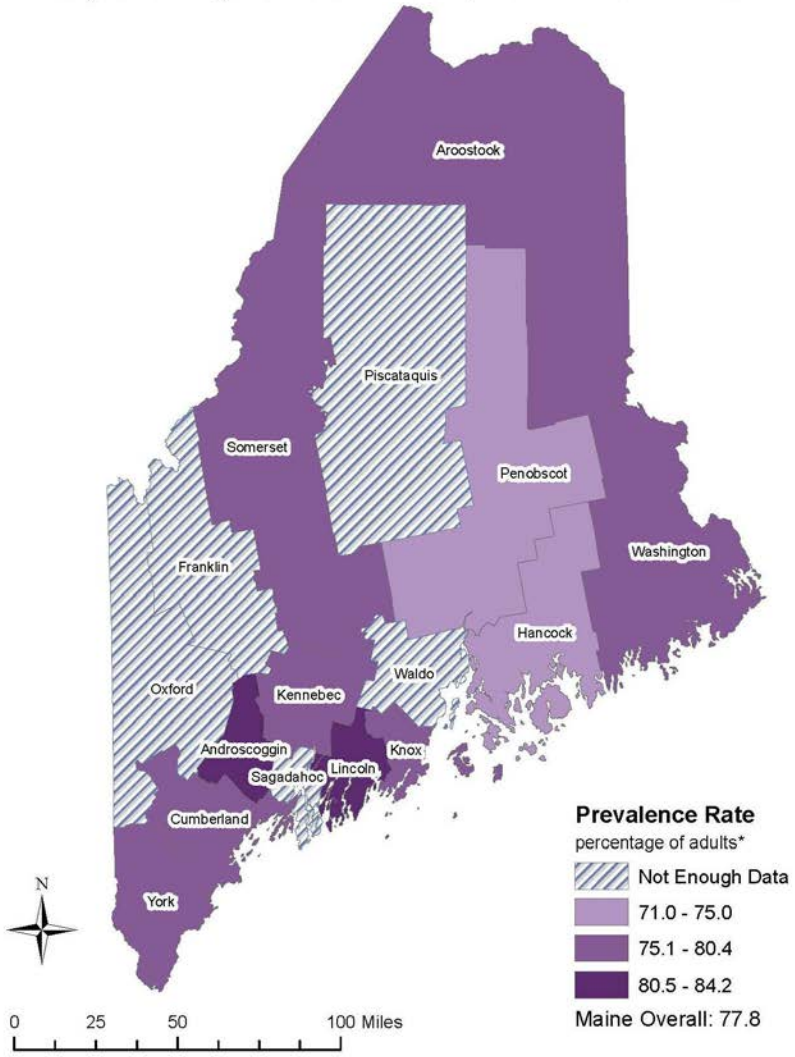
Data Source: Behavioral Risk Factor Surveillance System.
All %s are weighted to be more representative of the general adult population of Maine and to adjust for non-response.

Does Taking Medication for High Blood Pressure Differ by County of Residence in Maine?

There is no difference in the percentage of Maine adults with high blood pressure who are taking blood pressure medication by county of residence.

- Lincoln County (84.2%) has the highest percentage and Hancock County has the lowest percentage taking medication for high blood pressure (71.0%), but no county is significantly different from other counties or the state overall (Table 5.5, Figure 5.9).

Figure 5.9. Taking Medication for High Blood Pressure, by County of Residence, Maine Adults 2009



Data Source: Behavioral Risk Factor Surveillance System.
All %s are weighted to be more representative of the general adult population of Maine and to adjust for non-response.
* Among those who reported they have been diagnosed with high blood pressure.

Are Maine Adults with High Blood Pressure Taking Other Actions to Control Their Blood Pressure?

Some Maine adults with diagnosed high blood pressure are taking other actions to control their blood pressure, such as changing their eating habits, reducing their salt intake, reducing alcohol use, and exercising.

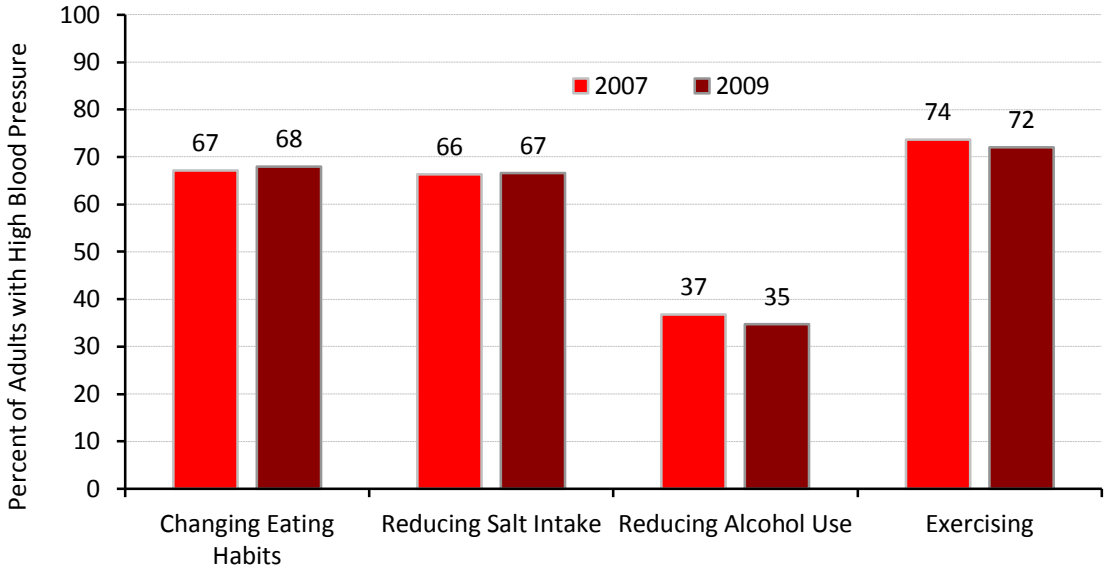
- In 2009, among Maine adults with diagnosed high blood pressure, 72% reported exercising, 68% reported changing their eating habits, 67% reported reducing their salt intake, and 35% reported reducing their alcohol intake, all to control their blood pressure.

What Are the Trends in Actions to Control High Blood Pressure Among Maine adults?

Between 2007 and 2009, there was no change in the percentage of Maine adults with high blood pressure who were taking other actions to control their high blood pressure.

- Currently, the Maine BRFSS has data on actions to control high blood pressure for 2 years, 2007 and 2009. We have been tracking 4 actions to control high blood pressure:
    1. Changing eating habits,
    2. Reducing salt intake,
    3. Reducing alcohol use,
    4. Exercising.
- Between 2007 and 2009, there was no change in the percentage of adults with diagnosed high blood pressure who were exercising, changing their eating habits, reducing their salt intake, or reducing their alcohol use to control their blood pressure (Table 5.6, Figure 5.10).
- Most Maine adults were exercising to control their high blood pressure (72.1% in 2009); fewer were reducing their alcohol intake (34.7% in 2009; Table 5.6, Figure 5.10).
- There are no significant differences between men and women in the percentage taking these actions to control their blood pressure (Table 5.6).

Figure 5.10 Maine Adults with High Blood Pressure Taking Actions to Control Their High Blood Pressure, 2007-2009



Adults = ages 18+ years.
Data Source: Behavioral Risk Factor Surveillance System.

Are There Any Demographic Differences Among Maine Adults Taking Actions to Control Their High Blood Pressure?

There are no statistically significant differences in individual actions to control high blood pressure by gender, education, or income. The percentage reducing their alcohol use to control high blood pressure varies by age group.

- A significantly greater percentage of Maine adults in the 45-54 years age group (44.0%) and 55-64 years age group (42.7%) reported reducing alcohol use to control their high blood pressure compared to those in the 65+ age group (29.3%; Table 5.7).
- There were no other statistically significant differences in individual actions to control high blood pressure by gender, education, or income (Table 5.7)
- It is important to note that these actions to control high blood pressure measures do not take the individual's current risk factor levels into consideration. For example, the percentage of those who report reducing their

alcohol use does not take into consideration the individual's current level of alcohol use.

Are Maine Adults with High Blood Pressure Receiving Advice from Their Health Care Professional on Other Actions to Take to Control High Blood Pressure?

Many Maine adults with high blood pressure have been advised by their healthcare professional to exercise, reduce their salt intake, or change their eating habits to control their high blood pressure.

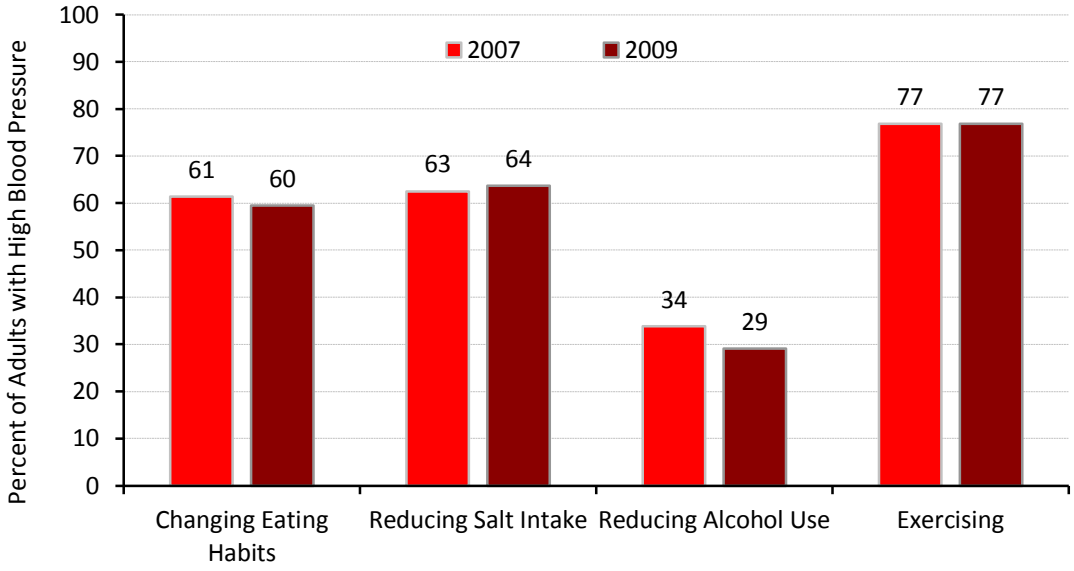
- In 2009, most Maine adults were advised by their healthcare professional to exercise (76.8%), reduce their salt intake (63.7%), or change their eating habits (59.5%) to control their blood pressure, but fewer have been told to reduce their alcohol intake (29.1% in 2009; Table 5.8, Figure 5.11).
- In both 2007 and 2009, more Maine men (38.2% and 36.9%, respectively) were advised by their health care professional to reduce alcohol use to control their high blood pressure compared to women (28.9% and 21.6%, respectively; Table 5.8).

What Are the Trends in the Percentage of Maine Adults with High Blood Pressure Who Have Been Advised by Their Healthcare Professional to Take Other Actions to Control Their Condition?

Between 2007 and 2009, there has been no change in the percentage of Maine adults with high blood pressure advised by their healthcare professional to take other actions to control their high blood pressure.

- Currently, the Maine BRFSS has data on healthcare professionals' advice to Maine adults to take actions to control high blood pressure for only two years, 2007 and 2009.
- Between 2007 and 2009 there was no change in the percentage of Maine adults advised by their health care professional to change eating habits, reduce salt intake, reduce alcohol use, or exercise to control their high blood pressure (Table 5.8, Figure 5.11).

Figure 5.11 Maine Adults with High Blood Pressure Advised by their Healthcare Professional to take Actions to Control their High Blood Pressure, 2007-2009



Adults = ages 18+ years.
Data Source: Behavioral Risk Factor Surveillance System.

Are There Any Demographic Differences in the Percentage of Maine Adults with High Blood Pressure who Have Been Advised by Their Healthcare Professional to Take Actions to Control Their Condition?

There are some differences by gender, age, and annual household income level in the percentage of Maine adults who have been advised by their healthcare professionals to take actions to control their high blood pressure.

- A significantly higher percentage of Maine men (36.9%) were advised by their health care professional to reduce their alcohol use to control their high blood pressure compared to women (21.6%; Table 5.9).
- A significantly lower percentage of Maine adults in the 65+ years age group had been advised by their health care professional to change their eating habits (50.5%) compared to those aged 35-44 years (73.2%), 45-54 years (68.9%), and 55 to 64 years (68.8%, respectively; Table 5.9).
- Maine adults in the 65+ years age group were also significantly less likely to have been advised by their health care professional to reduce their alcohol use

(22.4%) compared to those aged 45-54 years (40.3%), and 55-64 years (33.3%; Table 5.9).

- A significantly lower percentage of Maine adults in the $15,000-$24,999 annual household income group were advised to reduce their alcohol use (25.6%), exercise (72.8%), and to control their high blood pressure compared to those in the $50,000+ group (38.3% and 84.1%, respectively; Table 5.9).
- Again, it is important to note that these measures of physician advice to take actions to control high blood pressure do not take the individual's current risk factor levels into consideration. For example, the percentage of those who have been advised by their physician to reduce their alcohol use does not take into consideration the individual's current level of alcohol use.

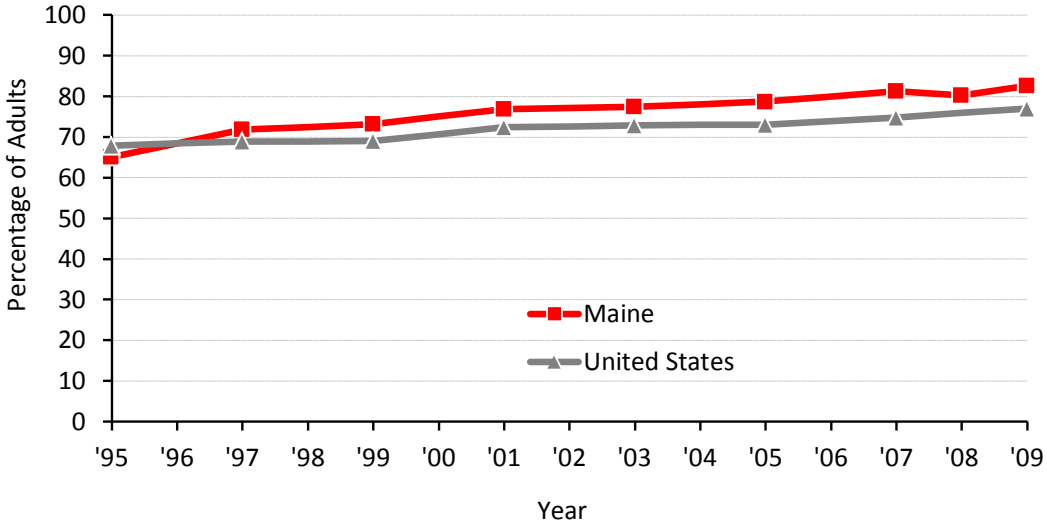
High Cholesterol

What Is the Trend in the Cholesterol Screening Rate in the U.S. and in Maine?

More than 80% of Maine adults have had their cholesterol checked in the past 5 years. The percentage of adults who had their cholesterol levels checked in the past 5 years has increased in both Maine and the U.S. A higher percentage of Maine adults had their cholesterol checked compared to the U.S. median.

- Between 1995 and 2009, there was a steady and significant increase in the percentage of Maine adults who had their cholesterol levels checked within the last 5 years, from 65.1% in 1995 to 82.6% in 2009 (Table 5.10, Figure 5.12).
- Since 2001, Maine has had a higher percentage of Maine adults who had their cholesterol levels checked within the past 5 years, compared to the U.S. median (Table 5.10, Figure 5.12).
- In 2009, 82.5% of Maine adults reported having their cholesterol checked in the past 5 years compared with the U.S. median of 77.0% (Table 5.10, Figure 5.12).

Figure 5.12 Adults who have had their Cholesterol Levels Checked within the Past 5 Years, by Year, U.S. and Maine, 1995-2009



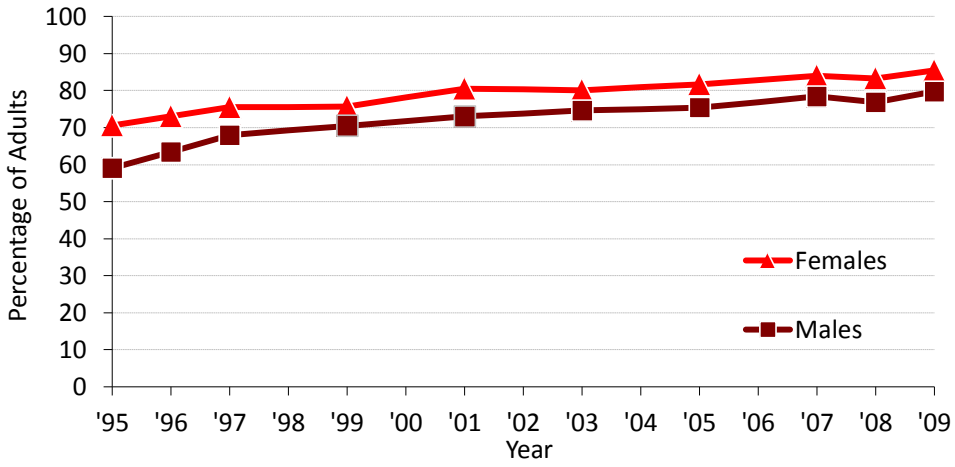
Adults = ages 18+ years.
Data not available for Maine or U.S. in '98, '00,'02,'04,'06',and the U.S. in '08.
Data Source: Behavioral Risk Factor Surveillance System.

Are There Male-Female Differences in Cholesterol Screening in Maine?

Maine women are more likely to have had their cholesterol levels checked within the past 5 years compared to Maine men.

- In 2009, 85.4% of Maine women reported having had their cholesterol checked within in the past 5 years compared with 79.7% of Maine men.
- Between 1995 and 2009, women were more likely to have had their cholesterol checked in the past 5 years than men in all years except 1999 and 2003, when the differences were not statistically significant (Table 5.11, Figure 5.13).
- Between 1995 and 2009, there was a significant increase in cholesterol screening among both men and women in Maine. Among Maine men, between 1995 and 2009, the percentage of adults who had their cholesterol levels checked within the past 5 years increased a bit more rapidly among men than women, but rates among men are still lower than women (Table 5.11, Figure 5.13).

Figure 5.13 Adults who have had their Cholesterol Levels Checked within the Past 5 Years, by Year and Gender, Maine, 1995-2009



Adults = ages 18+ years.
Data not available in 1998, 2000, 2002, 2004, 2006.
Data Source: Behavioral Risk Factor Surveillance System.

How Do High Cholesterol Prevalence Rates in Maine Compare to Those in the U.S.?

The prevalence of diagnosed high cholesterol among Maine adults is similar to the U.S. median.

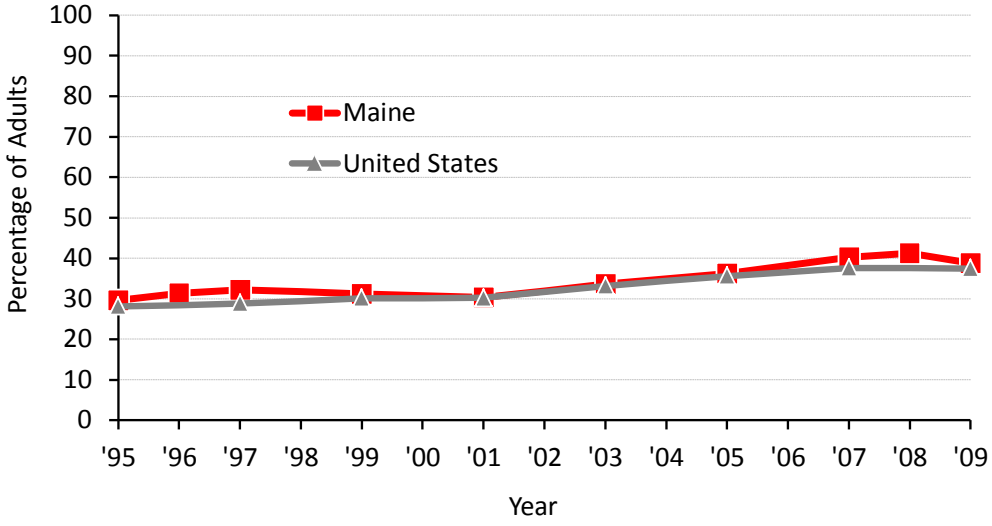
- In 2009, 38.8% of Maine adults reported they had been diagnosed with high cholesterol, similar to the U.S. median of 37.5%. The prevalence of high cholesterol among Maine adults is similar to the U.S. median for all years between 1995 and 2009 (Table 5.12, Figure 5.14).

What Are the Trends in the Prevalence of Diagnosed High Cholesterol?

The prevalence of diagnosed high cholesterol has increased significantly since 2001 in Maine and the U.S.

- Between 1995 and 2001, the prevalence of diagnosed high cholesterol among Maine adults and the U.S. median remained stable. Between 2001 and 2008, however, there has been a steady and significant rise in the prevalence of diagnosed high cholesterol among Maine adults and the U.S. median. The prevalence of diagnosed high cholesterol among Maine adults in 2009 (38.8%) is significantly higher than the prevalence in 1995 (29.6%; Table 5.12, Figure 5.14).

Figure 5.14 High Cholesterol Prevalence by Year, Maine and U.S. Adults, 1995-2009



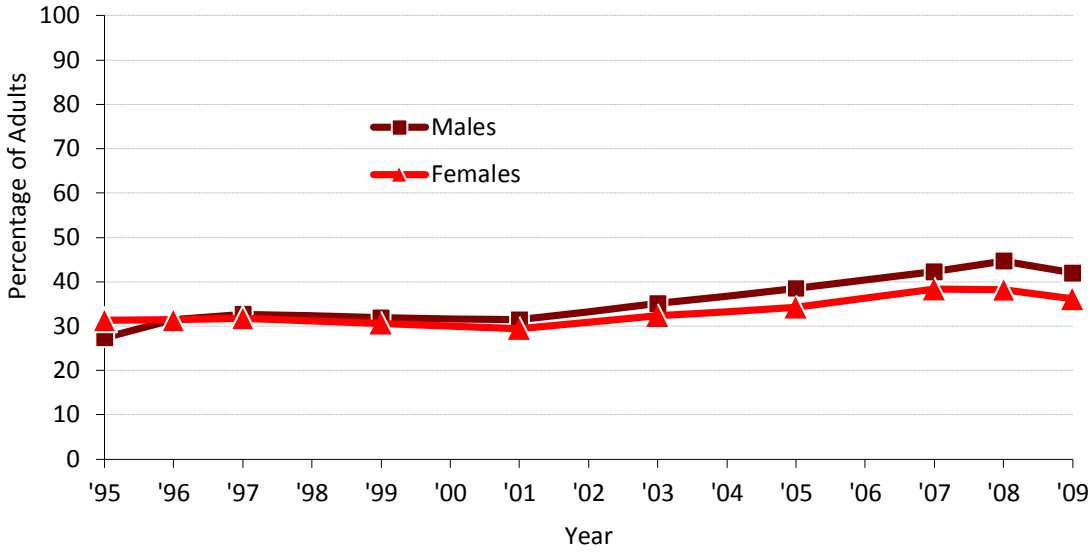
Adults = ages 18+ years.
Data not available Maine or U.S. in '98, '00,'02,'04,'06','and U.S. in '96 and '08.
Data Source: Behavioral Risk Factor Surveillance System.

Are There Male-Female Differences in High Cholesterol Prevalence Rates in Maine?

Maine men currently have a higher prevalence of diagnosed high cholesterol compared to women.

- Between 1997 and 2001, the prevalence of diagnosed high cholesterol among Maine men was similar to Maine women and the prevalence did not change much. Between 2001 and 2008, however, rates increased significantly for both genders but the increase was greater among men than women (Table 5.13, Figure 5.15).
- Between 2007 and 2009, rates plateaued for men and declined slightly for women, such that, in 2009, men had a significantly higher prevalence of diagnosed high cholesterol (42.0%) compared to women (36.1%) for the first time (Table 5.13, Figure 5.15).

Figure 5.15 High Cholesterol Prevalence, by Year and Gender, Maine, 1995-2009



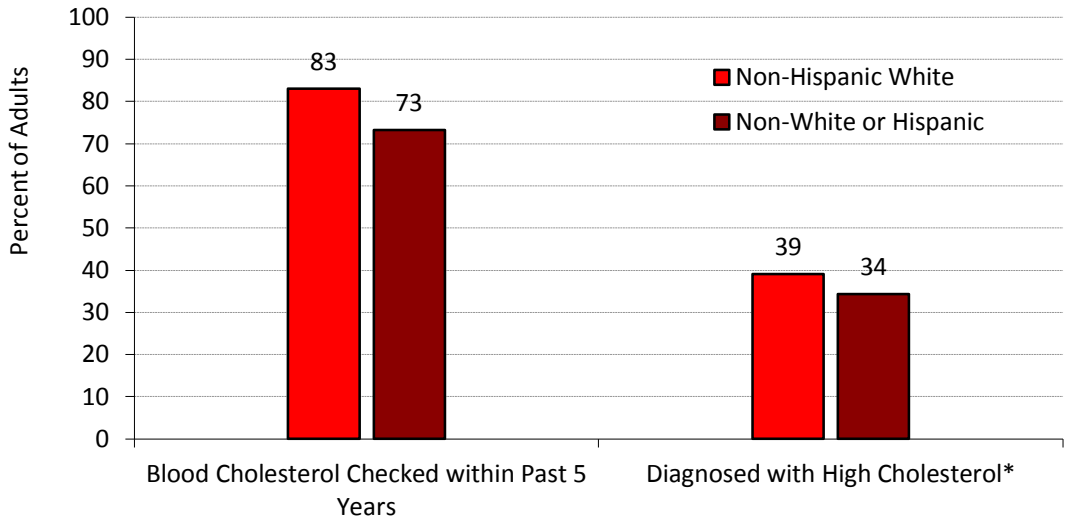
Adults = ages 18+ years.
Data not available in 1998, 2000, 2002, 2004, 2006.
Data Source: Behavioral Risk Factor Surveillance System.

Do Cholesterol-Related Measures Differ by Race/Ethnicity in Maine?

<u>There are no significant differences in cholesterol-related measures by race/ethnicity in Maine.</u>

- The percentage of Maine adults who had their cholesterol levels checked in the past 5 years is higher among non-Hispanic Whites (83.0%) than non-Whites or Hispanics (73.3%), though this difference is not quite statistically significant (Table 5.14, Figure 5.16).
- The prevalence of diagnosed high cholesterol is similar among non-Hispanic Whites (39.1%) and non-Whites or Hispanics (34.3%; Table 5.14, Figure 5.16).

Figure 5.16 Cholesterol-Related Measures among Maine Adults by Race, 2009



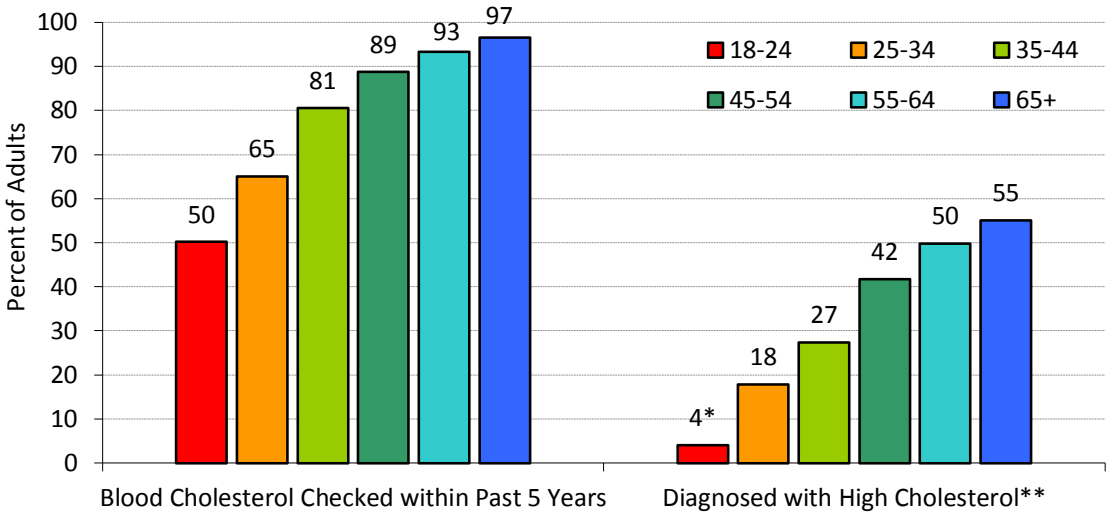
Adults = ages 18+ years.
* Rates are percentages among Maine adults who have had their blood cholesterol level checked.
Data Source: Behavioral Risk Factor Surveillance System.

Do Cholesterol-Related Measures Differ by Age Group in Maine?

Having cholesterol levels checked within the past 5 years increases with age. Diagnosed high cholesterol prevalence increases with age.

- With every 10 year age group increase, there is a significant increase in the percentage of adults who had their cholesterol levels checked within the past 5 years and an increase in the percentage that have high cholesterol (Table 5.14, Figure 5.17).
- Almost twice as many Maine adults over the age of 65 years had their blood cholesterol levels checked within the past 5 years (96.5%) compared to those 18-24 years of age (50.2%) and almost three times as many Maine adults over the age of 65 had diagnosed high blood cholesterol (55.1%) compared to those 25-34 years of age (17.9%). (Table 5.14, Figure 5.17).

Figure 5.17 Cholesterol-Related Measures among Maine Adults by Age Group, 2009



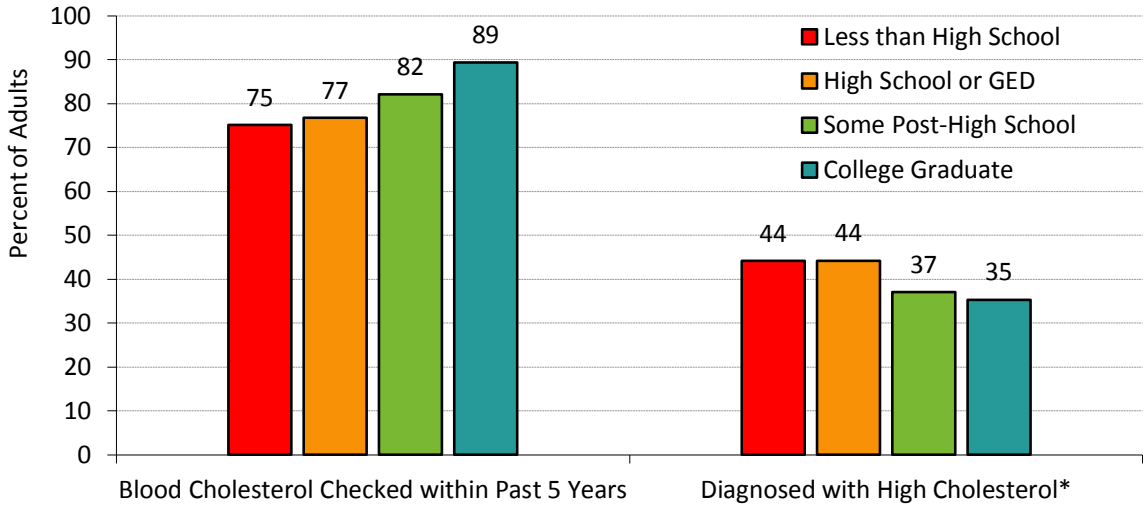
Adults = ages 18+ years.
*This percentage is based on a numerator < 50 and may be unreliable; please use caution in interpreting.
**Rates are percentages among Maine adults who have had their blood cholesterol level checked.
Data Source: Behavioral Risk Factor Surveillance System.

Do Cholesterol-Related Measures Differ by Education Level in Maine?

Adults in lower education groups are less likely to have had their cholesterol levels checked within the past 5 years, and they are more likely to have diagnosed high cholesterol compared to adults in higher education groups.

- A significantly lower percentage of Maine adults with less than a high school education (75.1%), a high school education or G.E.D. (76.7%), or some post-high school education (82.1%) had their cholesterol levels checked within the past 5 years compared to those with a college education (89.3%; Table 5.14, Figure 5.18).
- A significantly higher percentage of Maine adults with less than a high school education (44.1%) or a high school education or G.E.D. (44.2%) had diagnosed high cholesterol compared to those with a college education (35.3%; Table 5.14, Figure 5.18).

Figure 5.18 Cholesterol-Related Measures among Maine Adults by Education, 2009



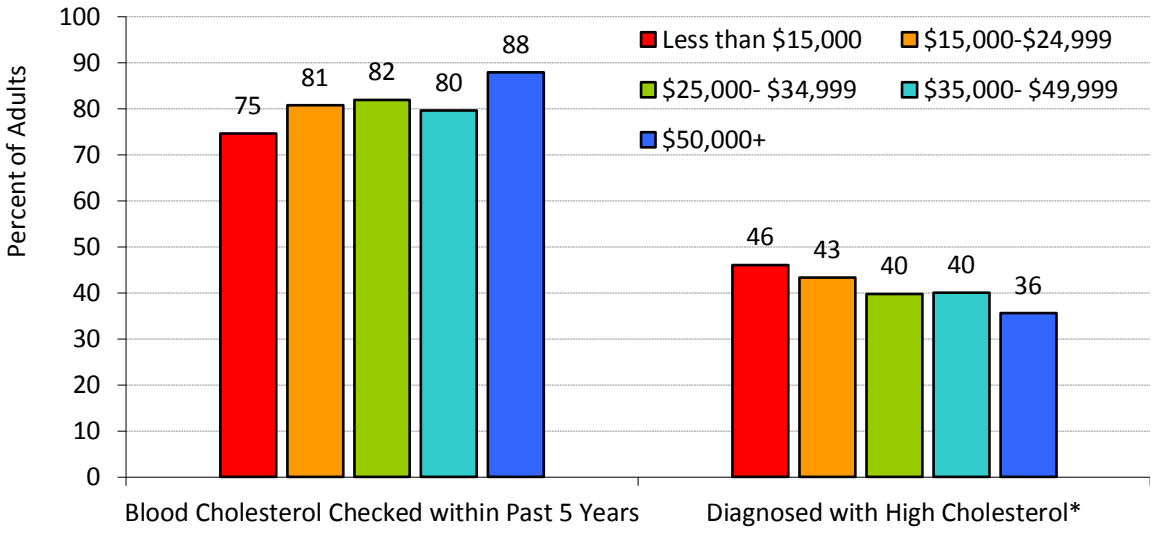
Adults = ages 18+ years.
*Rates are percentages among Maine adults who have had their blood cholesterol level checked.
Data Source: Behavioral Risk Factor Surveillance System.

Do Cholesterol-Related Measures Differ by Annual Household Income in Maine?

Maine adults in lower annual household income groups are less likely to have had their cholesterol levels checked within the past 5 years and are more likely to have diagnosed high cholesterol compared to those in higher income groups.

- A significantly lower percentage of Maine adults in the <$15,000 annual household income group (74.7%), $15,000-$24,999 group (80.8%), $25,000-$34,999 group (82.0%), and $35,000-$49,999 group (79.7%), had their cholesterol levels checked within the past 5 years compared to those in the $50,000+ income group (88.0%; Table 5.14, Figure 5.19).
- A significantly higher percentage of Maine adults in the <$15,000 (46.1%) annual household income group and $15,000-$24,999 group (43.4%) had diagnosed high cholesterol compared to those in the $50,000+ income group (35.6%; Table 5.14, Figure 5.19).

Figure 5.19 Cholesterol-Related Measures among Maine Adults by Household Income, 2009



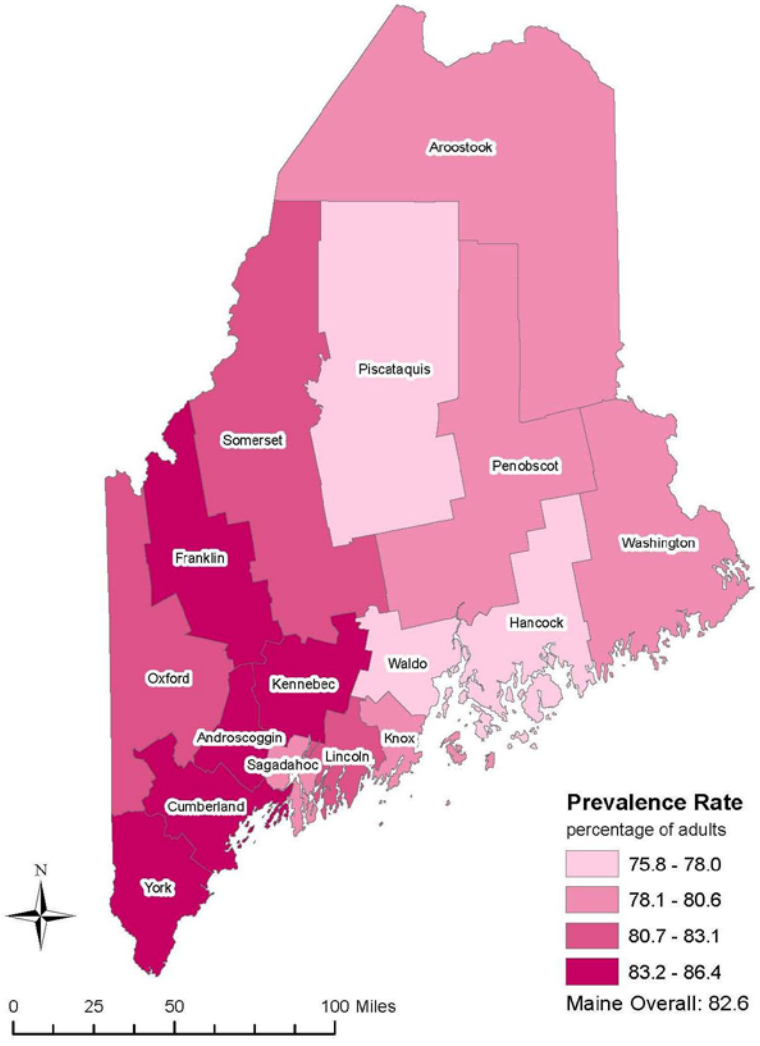
Adults = ages 18+ years.
*Rates are percentages among Maine adults who have had their blood cholesterol level checked.
Data Source: Behavioral Risk Factor Surveillance System.

Does the Percentage of Maine Adults who Had Their Cholesterol Levels Checked within the Past 5 Years Differ by County of Residence?

The percentage of Maine adults who had their cholesterol levels checked within the past 5 years does not vary much by county of residence in Maine.

- Waldo County has a significantly lower percentage of adults who had their cholesterol levels checked within the past 5 years (75.8%) compared to Cumberland County (86.4%). No Maine county has a prevalence rate that is significantly different from Maine overall (82.6%; Table 5.15, Figure 5.20).

Figure 5.20. Blood Cholesterol Checked Within the Past 5 Years, by County of Residence, Maine Adults 2009



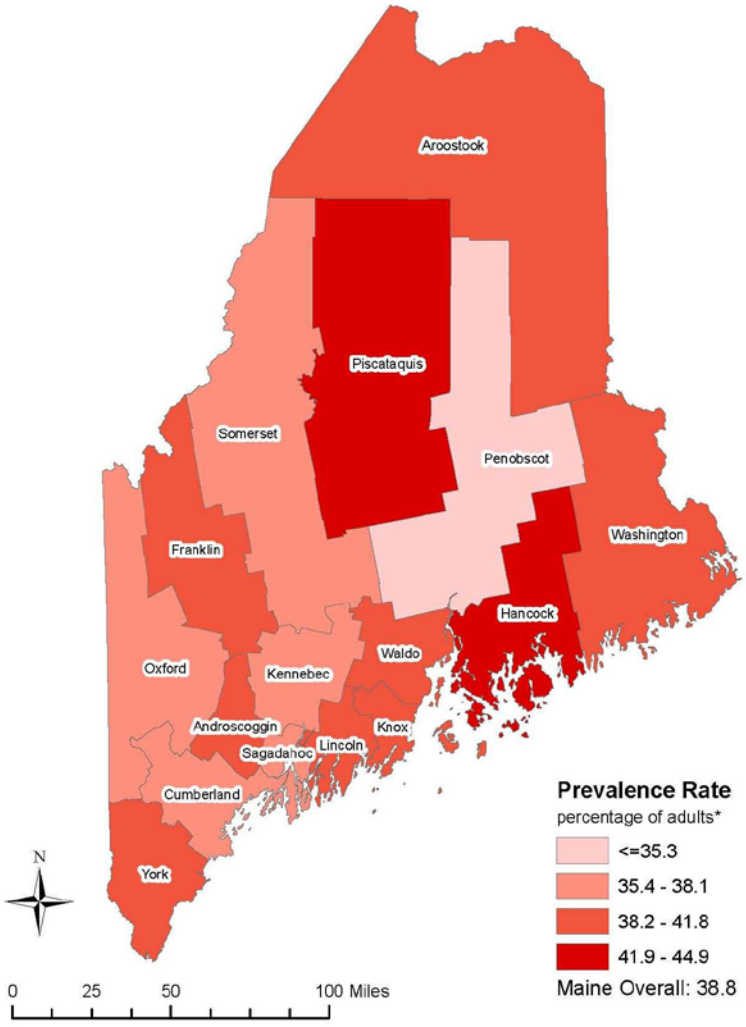
Data Source: Behavioral Risk Factor Surveillance System.
All %s are weighted to be more representative of the general adult population of Maine and to adjust for non-response.

Do High Cholesterol Prevalence Rates Differ by County of Residence in Maine?

There are no significant differences in the percentage of Maine adults who have diagnosed high cholesterol by county of residence.

- Piscataquis County has the highest prevalence (44.9%) of diagnosed high cholesterol in the state and Penobscot County (35.3%) has the lowest prevalence. No Maine county has a prevalence rate that is significantly different from Maine overall (38.8%) or any other county (Table 5.15, Figure 5.21).

Figure 5.21. Prevalence of High Cholesterol, by County of Residence, Maine Adults 2009



Data Source: Behavioral Risk Factor Surveillance System.
All %s are weighted to be more representative of the general adult population of Maine and to adjust for non-response.
*Among those who reported they have had their blood cholesterol levels checked.

Section II: Other Risk Factors for Cardiovascular Disease

Overview

In this section we will take a brief look at some of the other risk factors for cardiovascular disease, including physical activity, nutrition, weight status, smoking, and diabetes, among Maine adults.

Physical Activity

Are Maine Adults Getting Enough Physical Activity?

43.3% of Maine adults do not engage in the recommended amount of physical activity.

Studies have shown that physical inactivity is associated with increased incidence of heart disease, and that morbidity and mortality due to heart disease are higher among physically inactive adults.[1] Physical inactivity coupled with a high calorie diet can result in weight gain, which is also a risk factor for heart disease.[2]

- The U.S. Center for Disease Control and Prevention (CDC) recommends that adults engage in 150 minutes or more of aerobic physical activity per week. According to the Behavioral Risk Factor Surveillance System (BRFSS), in 2011, 43.3% of Maine adults did not engage in the recommended amount of aerobic physical activity. This is lower than the U.S. median during the same year (48.3%; Table 5.16, Figure 5.22). Please note that due to major methodological changes to the BRFSS in 2011, BRFSS 2011 and future data cannot be compared to BRFSS data from 2010 and before.
- For more information on physical activity among Mainers please visit this website: http://www.maine.gov/dhhs/mecdc/population-health/hmp/panp/index.html.

Nutrition

Are Maine Adults Getting the Right Nutrition?

72.0% of Maine adults eat fewer than 5 servings of fruits and vegetables per day.

Having an unhealthy diet that is rich in unhealthy fats and contains high amounts of sodium can increase the risk of developing heart disease.[2] Although fruit and vegetable intake is only one measure of a healthy diet, it is the only dietary indicator for which we have data and it is an important measure of diet quality.

- In 2009, 72.0% of Maine adults consumed less than 5 servings of fruits and vegetables per day, which is lower than the U.S. median (76.6%; Table 5.16, Figure 5.22).
- For more information on nutrition among Mainers please visit this website: http://www.maine.gov/dhhs/mecdc/population-health/hmp/panp/index.html.

Weight Status

Are Maine Adults Maintaining a Healthy Weight?

Only 33.4% of Maine adults are at a healthy weight.

Adults who are overweight or obese are at an increased risk of developing cardiovascular disease.[2]

- According to the BRFSS, in 2011, 65.0% of Maine adults were either overweight or obese (37.2% overweight and 27.8% obese), which is similar to the U.S. median (63.5%; 35.7% overweight and 27.8% obese). Only 33.4% of Maine adults were at a healthy weight, which is also similar to the U.S. median (34.5%; Table 5.16, Figure 5.22). Please note that due to major methodological changes to the BRFSS in 2011, BRFSS 2011 and future data cannot be compared to BRFSS data from 2010 and before.
- For more information on weight status among Mainers please visit this website: http://www.maine.gov/dhhs/mecdc/population-health/hmp/panp/index.html.

Smoking

How Many Maine Adults Are Smokers?

22.8% of Maine adults are current smokers.

The U.S. Surgeon General states that, "tobacco use remains the single largest preventable cause of death and disease both for men and women."[3] Heart attack, coronary heart disease, and stroke death rates are substantially higher among smokers compared to nonsmokers. Cigarette smoking increases the risk of developing heart disease and there is increased morbidity and mortality from heart disease among smokers.[3]

- According to the BRFSS, in 2011, 22.8% of Maine adults were current smokers and this rate is similar to the U.S. median (21.2%; Table 5.16, Figure 5.22). Please note that due to major methodological changes to the BRFSS in 2011, BRFSS 2011 and future data cannot be compared to BRFSS data from 2010 and before.
- For more information on smoking and tobacco use among Mainers please visit this website: http://www.tobaccofreemaine.org/.

Diabetes

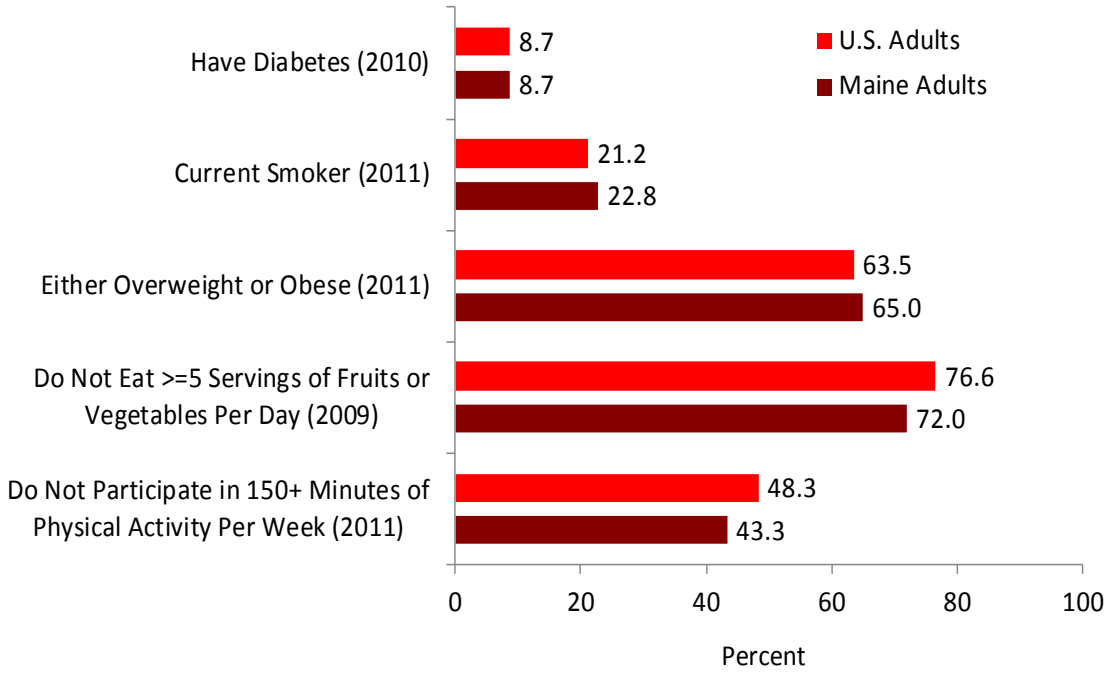
How Many Maine Adults Have Diabetes?

8.7% of Maine adults have diabetes.

People with diabetes are at substantially increased risk for heart disease and stroke, and morbidity and mortality due to these diseases are higher among adults with diabetes.[4]

- In 2010, 8.7% of Maine adults had diabetes and this rate is same as the U.S. median (8.7%; Table 5.16, Figure 5.22).
- For more information on diabetes among Mainers please visit this website: http://www.maine.gov/dhhs/mecdc/population-health/dcp/.

Figure 5.22 Prevalence of Cardiovascular Disease Risk Factors Among Maine Adults



Diabetes does not include pregnancy-related diabetes. Adults = ages 18+ years
Data Source: Behavioral Risk Factor Surveillance System
Please note that due to major methodological changes to the BRFSS in 2011, BRFSS 2011 and future data cannot be compared to BRFSS data from 2010 and before.

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1. Leon AS, Connett J, Jacobs DR, Jr Rauramaa R. Leisure-time physical activity levels and risk of coronary heart disease and death: The multiple risk factor intervention trial. *JAMA: The Journal of the American Medical Association.* 1987;258(17):2388-2395.
2. Eckel RH and For the Nutrition Committee. Obesity and heart disease: A statement for healthcare professionals from the Nutrition Committee, American Heart Association *Circulation.* 1997;96(9):3248-3250.
3. U.S. Department of Health and Human Services. How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services; Centers for Disease Control and Prevention; National Center for Chronic Disease Prevention and Health Promotion; Office on Smoking and Health; 2010.
4. Grundy SM, Benjamin IJ, Burke GL, et al. Diabetes and Cardiovascular Disease. Circulation. September 7, 1999. 1999;100(10):1134-1146.

Appendix: Tables

Table 1.1. Major Cardiovascular Disease Deaths by Year, U.S. and Maine, 1993-2009

	U.S. Total				Maine Total			
Year	# of Deaths	Crude Rate	Age-adjusted Rate	95% CI	# of Deaths	Crude Rate	Age-adjusted Rate	95% CI
1993	947,760	364.5	**393.5**	392.7 - 394.3	4,581	368.8	**353.9**	343.7 - 364.3
1994	940,326	357.2	**382.5**	381.7 - 383.2	4,544	365.7	**344.9**	335.0 - 355.1
1995	951,015	357.0	**378.7**	378.0 - 379.5	4,517	363.3	**337.7**	327.9 - 347.7
1996	949,769	352.4	**370.3**	369.6 - 371.1	4,411	353.1	**324.6**	315.1 - 334.3
1997	943,749	346.0	**360.6**	359.9 - 361.4	4,566	363.9	**330.5**	321.0 - 340.3
1998	940,159	340.6	**352.0**	351.3 - 352.7	4,481	355.9	**319.5**	310.2 - 329.0
	Change from ICD-9 to ICD-10				Change from ICD-9 to ICD-10			
1999	950,314	340.6	**349.3**	348.6 - 350.0	4,555	359.6	**317.9**	308.7 - 327.2
2000	936,923	332.9	**339.7**	339.0 - 340.4	4,518	353.7	**307.9**	299.0 - 317.1
2001	922,334	323.9	**326.5**	325.8 - 327.2	4,396	342.2	**293.8**	285.1 - 302.6
2002	918,628	318.6	**317.4**	316.7 - 318.0	4,275	330.3	**280.7**	272.3 - 289.2
2003	902,443	310.3	**306.1**	305.5 - 306.7	4,184	320.4	**269.8**	261.7 - 278.1
2004	861,190	293.3	**286.5**	285.9 - 287.1	4,019	305.1	**256.5**	248.6 - 264.6
2005	856,030	288.8	**277.3**	276.7 - 277.9	3,899	295.0	**241.9**	234.4 - 249.7
2006	823,746	275.1	**261.2**	260.6 - 261.8	3,728	282.1	**230.4**	223.1 - 238.0
2007	806,156	267.3	**249.9**	249.4 - 250.5	3,733	283.4	**226.3**	219.0 - 233.7
2008	804,483	264.6	**243.5**	242.9 - 244.0	3,685	279.9	**219.6**	212.5 - 226.9
2009	780,624	254.3	**234.8**	234.3 - 235.3	3,525	267.4	**207.5**	200.7 - 214.6

Major Cardiovascular Disease: 1999-2009: ICD-10 codes I00-I78; 1993-1998 ICD-9 codes 390-434, 436-448; underlying cause of death.

symbol means "number."

Crude rates are deaths per 100,000 population.

Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.

95% CI: 95% confidence interval of the age-adjusted rate.

Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 1.2. Major Cardiovascular Disease Deaths by Year and Gender, Maine, 1993-2009

Maine Males					Maine Females			
Year	# of Deaths	Crude Rate	Age-adjusted Rate	95% CI	# of Deaths	Crude Rate	Age-adjusted Rate	95% CI
1993	2,114	349.7	**440.1**	420.9 - 459.8	2,467	386.9	**291.7**	280.2 - 303.6
1994	2,099	347.5	**425.1**	406.6 - 444.2	2,445	382.8	**285.4**	274.1 - 297.1
1995	2,100	347.5	**420.8**	402.4 - 439.7	2,417	378.2	**278.9**	267.8 - 290.4
1996	2,039	335.7	**398.0**	380.4 - 416.1	2,372	369.6	**269.5**	258.7 - 280.8
1997	2,144	351.5	**417.1**	399.1 - 435.6	2,422	375.6	**271.1**	260.3 - 282.3
1998	2,098	342.8	**393.9**	376.8 - 411.5	2,383	368.3	**261.6**	251.1 - 272.5
Change from ICD-9 to ICD-10					Change from ICD-9 to ICD-10			
1999	2,056	333.7	**379.2**	362.7 - 396.3	2,499	384.1	**270.5**	259.9 - 281.5
2000	2,109	339.4	**377.6**	361.4 - 394.4	2,409	367.3	**255.8**	245.6 - 266.4
2001	2,029	324.6	**351.7**	336.3 - 367.6	2,367	359.0	**247.1**	237.1 - 257.4
2002	2,034	322.8	**344.6**	329.6 - 360.1	2,241	337.3	**231.8**	222.1 - 241.7
2003	1,968	309.1	**326.4**	311.9 - 341.4	2,216	331.2	**225.6**	216.2 - 235.4
2004	1,833	285.0	**297.4**	283.8 - 311.6	2,186	324.3	**221.8**	212.5 - 231.5
2005	1,852	286.9	**288.2**	275.0 - 301.8	2,047	302.9	**204.3**	195.4 - 213.5
2006	1,841	284.8	**283.3**	270.4 - 296.8	1,887	279.5	**187.3**	178.8 - 196.1
2007	1,842	286.6	**281.1**	268.2 - 294.4	1,891	280.4	**183.7**	175.4 - 192.4
2008	1,793	279.1	**265.6**	253.2 - 278.3	1,892	280.7	**180.9**	172.7 - 189.5
2009	1,718	266.9	**256.5**	244.4 - 269.2	1,807	267.8	**170.9**	163.0 - 179.2

Major Cardiovascular Disease: 1999-2009: ICD-10 codes I00-I78; 1993-1998 ICD-9 codes 390-434, 436-448; underlying cause of death.

symbol means "number."

Crude rates are deaths per 100,000 population.

Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.

95% CI: 95% confidence interval of the age-adjusted rate.

Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

Table 1.3. Major Cardiovascular Disease Deaths by Selected Age Groups and Year, Maine, 1993-2009

	Age 35-64			Age 65-74			Age 75+		
Year	**# of Deaths**	**Age-specific Rate**	**95% CI**	**# of Deaths**	**Age-specific Rate**	**95% CI**	**# of Deaths**	**Age-specific Rate**	**95% CI**
1993	579	**126.6**	116.5-137.4	861	**899.7**	840.6-961.8	3,117	**4,070.8**	3,929.2-4,216.3
1994	564	**121.1**	111.3-131.6	865	**896.8**	838.0-958.6	3,088	**3,969.2**	3,830.4-4,111.7
1995	595	**125.3**	115.4-135.8	873	**902.6**	843.7-964.5	3,022	**3,809.6**	3,675.0-3,947.9
1996	539	**110.8**	101.6-120.6	847	**877.9**	819.7-939.0	3,005	**3,719.4**	3,587.6-3,854.8
1997	559	**112.1**	103.0-121.8	811	**839.9**	783.1-899.8	3,166	**3,839.7**	3,707.1-3,975.8
1998	515	**101.4**	92.8-110.5	801	**830.7**	774.2-890.3	3,154	**3,770.7**	3,640.3-3,904.7
				Change from ICD-9 to ICD-10					
1999	536	**103.1**	94.6-112.3	775	**807.5**	751.7-866.4	3,229	**3,767.5**	3,638.6-3,899.7
2000	558	**103.7**	95.3-112.7	709	**737.9**	684.5-794.2	3,233	**3,684.9**	3,558.9-3,814.1
2001	548	**100.2**	92.0-109.0	685	**714.9**	662.3-770.5	3,137	**3,510.2**	3,388.4-3,635.2
2002	540	**96.9**	88.9-105.4	657	**687.6**	636.0-742.3	3,056	**3,364.3**	3,246.1-3,485.7
2003	559	**99.2**	91.1-107.7	593	**618.0**	569.3-669.8	3,008	**3,254.4**	3,139.1-3,372.8
2004	534	**92.8**	85.1-101.0	568	**595.4**	547.4-646.4	2,898	**3,071.5**	2,960.7-3,185.5
2005	581	**99.9**	91.9-108.3	566	**589.7**	542.1-640.4	2,729	**2,822.6**	2,717.7-2,930.5
2006	604	**104.0**	95.9-112.7	524	**533.6**	488.9-581.3	2,567	**2,718.3**	2,614.2-2,825.6
2007	571	**98.3**	90.4-106.7	517	**520.5**	476.6-567.3	2,620	**2,739.1**	2,635.2-2,846.0
2008	548	**94.4**	86.7-102.7	510	**493.9**	452.0-538.7	2,605	**2,715.5**	2,612.2-2,821.8
2009	485	**84.6**	77.2-92.4	475	**438.1**	399.6-479.3	2,544	**2,617.4**	2,516.7-2,721.2

Major Cardiovascular Disease: 1999-2009: ICD-10 codes I00-I78; 1993-1998 ICD-9 codes 390-434, 436-448; underlying cause of death.
symbol means "number."
Age-specific rates are deaths per 100,000 population within that age group.
95% CI: 95% confidence interval of the age-adjusted rate.
Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

Table 1.4. Major Cardiovascular Disease Deaths by County of Residence, Maine, 2005-2009

County	Average Annual # of Deaths	Crude Rate	Age-adjusted rate	95% CI
Androscoggin	299	279.0	**224.5**	213.2 - 236.4
Aroostook	260	360.2	**249.7**	236.3 - 263.8
Cumberland	640	232.0	**189.7**	183.1 - 196.4
Franklin	85	284.8	**246.7**	223.6 - 271.5
Hancock	172	321.3	**238.6**	222.8 - 255.3
Kennebec	342	283.0	**229.3**	218.5 - 240.5
Knox	125	304.5	**199.3**	183.7 - 216.0
Lincoln	119	341.6	**219.0**	201.5 - 237.9
Oxford	173	305.9	**237.6**	222.0 - 254.2
Penobscot	447	301.7	**272.0**	260.8 - 283.6
Piscataquis	67	388.7	**272.2**	243.5 - 303.8
Sagadahoc	105	286.5	**250.0**	228.9 - 272.6
Somerset	148	287.7	**234.1**	217.5 - 251.8
Waldo	112	290.8	**250.2**	229.8 - 272.1
Washington	127	385.8	**261.6**	241.4 - 283.3
York	492	243.7	**203.0**	195.0 - 211.3
Maine total	3,714	281.6	**224.9**	221.7 - 228.2
U.S. total	814,208	269.9	**253.0**	252.7 - 253.2

Major Cardiovascular Disease: ICD-10 codes I00-I78; underlying cause of death.

Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
symbol means “number.”

95% CI: 95% confidence interval of the age-adjusted rate.

Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 2.1. Heart Disease Deaths by Year, U.S. and Maine, 1993-2009

	U.S. Total				Maine Total			
Year	Number of Deaths	Crude Rate	Age-adjusted Rate	95% CI	Number of Deaths	Crude Rate	Age-adjusted Rate	95% CI
1993	743,460	285.9	**308.1**	307.4-308.8	3,556	286.2	**274.9**	265.9-284.1
1994	732,409	278.2	**297.5**	296.8-298.2	3,469	279.2	**263.4**	254.7-272.4
1995	737,563	276.9	**293.4**	292.7-294.1	3,507	282.0	**262.6**	254.0-271.5
1996	733,361	272.1	**285.7**	285.1-286.4	3,400	272.2	**250.3**	241.9-258.9
1997	726,974	266.5	**277.7**	277.0-278.3	3,510	279.7	**254.3**	245.9-262.9
1998	724,859	262.6	**271.3**	270.7-271.9	3,432	272.6	**244.7**	236.6-253.0
				Change from ICD-9 to ICD-10				
1999	725,192	259.9	**266.4**	265.8-267.1	3,410	269.2	**238.2**	230.2-246.3
2000	710,760	252.6	**257.6**	257.0-258.2	3,389	265.3	**231.1**	223.4-239.1
2001	700,142	245.8	**247.8**	247.2-248.4	3,261	253.9	**218.1**	210.6-225.7
2002	696,947	241.7	**240.8**	240.2-241.3	3,164	244.4	**208.1**	200.9-215.5
2003	685,089	235.6	**232.3**	231.8-232.9	3,095	237.0	**199.9**	192.9-207.1
2004	652,486	222.2	**217.0**	216.4-217.5	2,949	223.9	**188.3**	181.6-195.3
2005	652,091	220.0	**211.1**	210.6-211.7	2,930	221.7	**182.0**	175.5-188.8
2006	631,636	211.0	**200.2**	199.7-200.7	2,814	212.9	**173.9**	167.5-180.5
2007	616,067	204.3	**190.9**	190.4-191.4	2,838	215.5	**172.1**	165.8-178.6
2008	616,828	202.9	**186.5**	186.1-187.0	2,779	211.1	**164.9**	158.8-171.2
2009	599,413	195.2	**180.1**	179.6-180.6	2,654	201.3	**156.2**	150.2-162.3

Heart Disease: 1999-2009: ICD-10 codes I00-I09, I11, I13, I20-I51; 1993-1998 ICD-9 codes 390-398, 402, 404, 410-429; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.
U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 2.2. Heart Disease Deaths by Year and Gender, Maine, 1993-2009

	Maine Males				Maine Females			
Year	**Number of Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**	**Number of Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**
1993	1,708	282.5	**353.4**	336.3-371.1	1,848	289.8	**219.3**	209.3-229.7
1994	1,677	277.7	**336.3**	319.9-353.2	1,792	280.6	**209.6**	199.9-219.6
1995	1,708	282.6	**339.4**	323.0-356.3	1,799	281.5	**209.0**	199.3-219.0
1996	1,625	267.5	**312.4**	297.1-328.4	1,775	276.6	**201.6**	192.2-211.4
1997	1,717	281.5	**330.1**	314.2-346.5	1,793	278.0	**201.1**	191.8-210.8
1998	1,655	270.4	**308.0**	293.0-323.5	1,777	274.6	**194.9**	185.8-204.3
				Change from ICD-9 to ICD-10				
1999	1,610	261.3	**295.2**	280.7-310.3	1,800	276.7	**196.0**	186.9-205.4
2000	1,645	264.7	**291.4**	277.2-306.1	1,744	265.9	**186.0**	177.2-195.1
2001	1,535	245.6	**264.1**	250.8-277.9	1,726	261.8	**180.7**	172.2-189.6
2002	1,570	249.2	**262.9**	249.9-276.4	1,594	239.9	**165.7**	157.6-174.2
2003	1,525	239.5	**250.0**	237.5-263.1	1,570	234.7	**159.9**	152.0-168.2
2004	1,418	220.5	**228.1**	216.2-240.5	1,531	227.1	**155.8**	148.0-164.0
2005	1,465	226.9	**226.1**	214.5-238.1	1,465	216.7	**146.8**	139.2-154.6
2006	1,470	227.4	**224.9**	213.4-236.9	1,344	199.1	**133.2**	126.0-140.6
2007	1,498	233.0	**227.3**	215.8-239.3	1,340	198.7	**130.4**	123.3-137.7
2008	1,409	219.3	**206.2**	195.4-217.4	1,370	203.2	**129.8**	122.8-137.0
2009	1,362	211.6	**202.6**	191.8-213.8	1,292	191.5	**122.3**	115.5-129.3

Heart Disease: 1999-2009: ICD-10 codes I00-I09, I11, I13, I20-I51; 1993-1998 ICD-9 codes 390-398, 402, 404, 410-429; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

Table 2.3. Heart Disease Deaths by Selected Age Groups and Year, Maine, 1993-2009

	Age 35-64			Age 65-74			Age 75+		
Year	Number of Deaths	Age-specific Rate	95% CI	Number of Deaths	Age-specific Rate	95% CI	Number of Deaths	Age-specific Rate	95% CI
1993	505	**110.4**	101.0-20.5	688	**718.9**	666.2-774.7	2,348	**3,066.5**	2,943.7-3,193.1
1994	478	**102.7**	93.7-112.3	692	**717.5**	665.0-773.0	2,279	**2,929.3**	2,810.3-3,052.1
1995	522	**109.9**	100.7-19.8	700	**723.7**	671.1-779.4	2,260	**2,849.0**	2,732.8-2,969.0
1996	462	**95.0**	86.5-104.0	681	**705.8**	653.8-760.9	2,249	**2,783.7**	2,669.8-2,901.2
1997	480	**96.3**	87.8-105.3	654	**677.3**	626.4-731.3	2,353	**2,853.7**	2,739.6-2,971.4
1998	440	**86.6**	78.7-95.1	647	**671.0**	620.3-724.8	2,339	**2,796.4**	2,684.2-2,912.0
				Change from ICD-9 to ICD-10					
1999	448	**86.2**	78.4-94.6	613	**638.7**	589.1-691.3	2,338	**2,727.9**	2,618.4-2,840.8
2000	481	**89.4**	81.6-97.8	553	**575.5**	528.5-625.5	2,343	**2,670.5**	2,563.4-2,780.9
2001	457	**83.6**	76.1-91.6	508	**530.2**	485.0-578.3	2,274	**2,544.5**	2,441.0-2,651.3
2002	466	**83.6**	76.2-91.6	519	**543.2**	497.5-592.0	2,163	**2,381.2**	2,281.9-2,483.7
2003	455	**80.7**	73.5-88.5	472	**491.9**	448.5-538.3	2,147	**2,322.8**	2,225.6-2,423.2
2004	449	**78.1**	71.0-85.6	435	**456.0**	414.1-500.9	2,048	**2,170.6**	2,077.6-2,266.7
2005	484	**83.2**	76.0-91.0	444	**462.6**	420.6-507.7	1,980	**2,047.9**	1,958.7-2,140.1
2006	494	**85.1**	77.7-92.9	402	**409.3**	370.3-451.4	1,894	**2,005.7**	1,916.3-2,098.1
2007	480	**82.6**	75.4-90.4	402	**404.7**	366.1-446.3	1,934	**2,021.9**	1,932.8-2,114.1
2008	468	**80.6**	73.5-88.3	393	**380.6**	343.9-420.2	1,904	**1,984.8**	1,896.6-2,076.0
2009	405	**70.6**	63.9-77.8	367	**338.5**	304.7-375.0	1,864	**1,917.8**	1,831.7-2,006.9

Heart Disease: 1999-2009: ICD-10 codes I00-I09, I11, I13, I20-I51; 1993-1998 ICD-9 codes 390-398, 402, 404, 410-429; underlying cause of death.

Age-specific rates are deaths per 100,000 population within that age group.

95% CI: 95% confidence interval of the age-specific rate.

Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

Table 2.4. Heart Disease Death Rates by County of Residence, Maine, 2005-2009

County	Average Annual Number of Deaths	Crude Rate	Age-adjusted rate	95% CI
Androscoggin	229	213.3	**171.7**	161.8 - 182.1
Aroostook	199	275.3	**190.7**	179.0 - 203.1
Cumberland	474	171.7	**140.1**	134.5 - 146.0
Franklin	65	217.1	**188.1**	168.1 - 210.0
Hancock	130	242.4	**179.3**	165.7 - 193.8
Kennebec	256	211.9	**171.6**	162.2 - 181.3
Knox	92	225.8	**148.2**	134.8 - 162.7
Lincoln	89	254.5	**163.8**	148.6 - 180.3
Oxford	126	221.5	**172.1**	158.8 - 186.3
Penobscot	346	233.2	**209.9**	200.0 - 220.1
Piscataquis	51	297.0	**207.8**	182.9 - 235.7
Sagadahoc	69	189.2	**165.3**	148.2 - 183.9
Somerset	115	223.0	**181.7**	167.1 - 197.3
Waldo	86	222.8	**190.3**	172.6 - 209.4
Washington	101	306.5	**208.8**	190.7 - 228.3
York	377	186.6	**155.4**	148.4 - 162.6
Maine total	2,803	212.5	**169.6**	166.8 - 172.5
U.S. total	623,207	206.6	**193.5**	193.3 - 193.7

Heart Disease: ICD-10 codes I00-I09, I11, I13, I20-I51; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.
U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 2.5. Coronary Heart Disease Hospitalizations by Year and Gender, Maine, 1993-2009

	Maine Total				Maine Males				Maine Females			
Year	Number of Hospitalizations	Crude Rate	Age-adjusted Rate	95% CI	Number of Hospitalizations	Crude Rate	Age-adjusted Rate	95% CI	Number of Hospitalizations	Crude Rate	Age-adjusted Rate	95% CI
1993	11,619	93.5	**91.6**	90.0 - 93.3	7,223	119.5	**128.5**	125.6 - 131.6	4,396	68.9	**59.9**	58.1 - 61.8
1994	11,524	92.7	**89.3**	87.7 - 91.0	7,081	117.2	**124.1**	121.2 - 127.1	4,443	69.6	**59.7**	57.9 - 61.5
1995	11,779	94.7	**90.0**	88.3 - 91.6	7,203	119.2	**123.4**	120.6 - 126.4	4,576	71.6	**61.1**	59.3 - 62.9
1996	12,355	98.9	**92.9**	91.3 - 94.6	7,492	123.4	**126.6**	123.7 - 129.5	4,863	75.8	**64.0**	62.2 - 65.8
1997	12,772	101.8	**94.3**	92.7 - 96.0	7,931	130.0	**131.8**	128.9 - 134.8	4,841	75.1	**62.6**	60.8 - 64.4
1998	12,698	100.8	**92.2**	90.6 - 93.8	7,791	127.3	**127.7**	124.8 - 130.5	4,907	75.8	**62.5**	60.7 - 64.3
1999	12,409	98.0	**88.2**	86.7 - 89.8	7,503	121.8	**119.9**	117.2 - 122.7	4,906	75.4	**61.3**	59.6 - 63.0
2000	12,549	98.2	**87.0**	85.4 - 88.5	7,595	122.2	**118.2**	115.6 - 121.0	4,954	75.5	**60.8**	59.1 - 62.5
2001	11,526	89.7	**78.6**	77.1 - 80.0	6,945	111.1	**106.1**	103.6 - 108.7	4,581	69.5	**55.0**	53.4 - 56.6
2002	11,050	85.4	**74.0**	72.6 - 75.4	6,719	106.6	**100.2**	97.7 - 102.6	4,331	65.2	**51.3**	49.8 - 52.9
2003	10,897	83.5	**71.4**	70.1 - 72.8	6,687	105.0	**97.6**	95.2 - 100.0	4,210	62.9	**49.0**	47.5 - 50.5
2004	10,060	76.4	**64.7**	63.4 - 65.9	6,199	96.4	**88.2**	86.0 - 90.5	3,861	57.3	**44.4**	43.0 - 45.9
2005	9,757	73.8	**61.3**	60.1 - 62.6	6,061	93.9	**84.2**	82.1 - 86.4	3,696	54.7	**41.7**	40.3 - 43.0
2006	9,254	70.0	**58.1**	56.9 - 59.3	5,719	88.5	**79.3**	77.2 - 81.4	3,535	52.4	**39.9**	38.5 - 41.2
2007	8,528	64.7	**52.7**	51.6 - 53.9	5,380	83.7	**73.6**	71.6 - 75.6	3,148	46.7	**35.0**	33.8 - 36.3
2008	8,363	63.5	**50.9**	49.8 - 52.0	5,255	81.8	**70.6**	68.7 - 72.6	3,108	46.1	**33.9**	32.7 - 35.1
2009	7,325	55.6	**43.8**	42.7 - 44.8	4,559	70.8	**60.2**	58.4 - 62.0	2,766	41.0	**29.6**	28.5 - 30.7

Coronary Heart Disease: ICD-9-CM 410-414; principal diagnosis.
Crude rates are hospitalizations per 10,000 population.
Age-adjusted rates are hospitalizations per 10,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 2.6. Coronary Heart Disease Hospitalizations by Selected Age Groups and Year, Maine, 1993-2009

	Age 35-64			Age 65-74			Age 75+		
Year	Number of Hospitalizations	Age-specific Rate	95% CI	Number of Hospitalizations	Age-specific Rate	95% CI	Number of Hospitalizations	Age-specific Rate	95% CI
1993	5,125	**112.1**	109.0 - 115.2	3,405	**355.8**	343.9 - 367.9	3,000	**391.8**	377.9 - 406.1
1994	4,895	**105.1**	102.2 - 108.1	3,458	**358.5**	346.7 - 370.7	3,086	**396.7**	382.8 - 410.9
1995	5,045	**106.2**	103.3 - 109.2	3,620	**374.3**	362.2 - 386.7	3,056	**385.3**	371.7 - 399.2
1996	5,198	**106.9**	104.0 - 109.8	3,767	**390.4**	378.1 - 403.1	3,328	**411.9**	398.0 - 426.2
1997	5,215	**104.6**	101.8 - 107.5	3,805	**394.1**	381.7 - 406.8	3,677	**445.9**	431.6 - 460.6
1998	5,094	**100.3**	97.6 - 103.1	3,641	**377.6**	365.5 - 390.1	3,880	**463.9**	449.4 - 478.7
1999	4,994	**96.1**	93.4 - 98.8	3,537	**368.5**	356.5 - 380.9	3,812	**444.8**	430.8 - 459.1
2000	5,043	**93.7**	91.2 - 96.3	3,413	**355.2**	343.4 - 367.3	4,031	**459.4**	445.4 - 473.8
2001	4,612	**84.4**	81.9 - 86.8	3,048	**318.1**	306.9 - 329.6	3,811	**426.4**	413.0 - 440.2
2002	4,525	**81.2**	78.9 - 83.6	2,899	**303.4**	292.5 - 314.7	3,553	**391.1**	378.4 - 404.2
2003	4,355	**77.3**	75.0 - 79.6	2,950	**307.4**	296.4 - 318.7	3,537	**382.7**	370.2 - 395.5
2004	4,042	**70.3**	68.1 - 72.5	2,676	**280.5**	270.0 - 291.3	3,296	**349.3**	337.5 - 361.5
2005	3,944	**67.8**	65.7 - 70.0	2,543	**265.0**	254.8 - 275.5	3,241	**335.2**	323.8 - 347.0
2006	3,840	**66.1**	64.1 - 68.3	2,330	**237.3**	227.7 - 247.1	3,039	**321.8**	310.5 - 333.5
2007	3,536	**60.9**	58.9 - 62.9	2,090	**210.4**	201.5 - 219.6	2,852	**298.2**	287.3 - 309.3
2008	3,449	**59.4**	57.5 - 61.4	2,053	**198.8**	190.3 - 207.6	2,829	**294.9**	284.1 - 306.0
2009	2,915	**50.8**	49.0 - 52.7	1,875	**172.9**	165.2 - 180.9	2,506	**257.8**	247.8 - 268.1

Coronary Heart Disease: ICD-9-CM 410-414; principal diagnosis.
Age-specific rates are hospitalizations per 10,000 population within that age group.
95% CI: 95% confidence interval of the age-specific rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 2.7. Coronary Heart Disease Hospitalizations by County of Residence, Maine, 2005-2009

County	Average Annual Number of Hospitalizations	Crude Rate	Age-adjusted rate	95% CI
Androscoggin	536	50.1	**42.7**	41.0 - 44.3
Aroostook	886	122.5	**89.2**	86.6 - 92.0
Cumberland	1,223	44.3	**37.6**	36.7 - 38.6
Franklin	208	69.6	**59.1**	55.5 - 62.9
Hancock	510	95.4	**71.9**	69.1 - 74.8
Kennebec	834	68.9	**56.3**	54.5 - 58.0
Knox	300	73.4	**52.3**	49.7 - 55.1
Lincoln	239	68.4	**47.3**	44.5 - 50.1
Oxford	330	58.2	**45.6**	43.4 - 47.9
Penobscot	1,139	76.8	**67.3**	65.5 - 69.1
Piscataquis	158	91.7	**64.6**	60.1 - 69.3
Sagadahoc	199	54.3	**45.2**	42.4 - 48.2
Somerset	477	92.5	**74.6**	71.6 - 77.7
Waldo	269	70.0	**57.4**	54.3 - 60.6
Washington	349	106.3	**76.8**	73.1 - 80.5
York	989	49.0	**40.5**	39.3 - 41.6
Maine total	8,645	65.5	**53.2**	52.7 - 53.7

Coronary Heart Disease: ICD-9-CM 410-414; principal diagnosis.
Crude rates are hospitalizations per 10,000 population.
Age-adjusted rates are hospitalizations per 10,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 2.8. Coronary Heart Disease Deaths by Year, U.S. and Maine, 1993-2009

	U.S. Total				Maine Total			
Year	**Number of Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**	**Total Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**
1993	562,703	216.4	**233.2**	232.6 -233.8	2,678	215.6	**207.1**	199.3 - 215.1
1994	552,678	210.0	**224.5**	223.9-225.1	2,644	212.8	**200.6**	193.0 - 208.4
1995	552,464	207.4	**219.7**	219.1-220.3	2,574	207.0	**192.8**	185.4 - 200.4
1996	544,638	202.1	**212.1**	211.6-212.7	2,490	199.3	**183.4**	176.2 - 190.7
1997	533,061	195.4	**203.6**	203.0-204.1	2,602	207.4	**188.5**	181.3 - 195.9
1998	526,617	190.8	**197.1**	196.6-197.6	2,468	196.0	**176.0**	169.1 - 183.1
				Change from ICD-9 to ICD-10				
1999	529,659	189.8	**194.6**	194.1-195.1	2,455	193.8	**171.5**	164.8 - 178.4
2000	515,204	183.1	**186.8**	186.2-187.3	2,398	187.7	**163.7**	157.2 - 170.4
2001	502,189	176.3	**177.8**	177.3-178.3	2,290	178.3	**153.1**	146.9 - 159.5
2002	494,382	171.4	**170.9**	170.4-171.3	2,226	172.0	**146.4**	140.4 - 152.7
2003	480,028	165.1	**162.8**	162.4-163.3	2,131	163.2	**137.7**	131.9 - 143.7
2004	451,326	153.7	**150.2**	149.7-150.6	1,945	147.7	**124.2**	118.8 - 129.9
2005	445,687	150.4	**144.4**	144.0-144.9	1,943	147.0	**120.6**	115.3 - 126.1
2006	425,425	142.1	**135.0**	134.6-135.4	1,815	137.3	**112.1**	106.9 - 117.4
2007	406,351	134.7	**126.0**	125.6-126.4	1,759	133.5	**106.7**	101.8 - 111.9
2008	405,309	133.3	**122.7**	122.3-123.1	1,798	136.6	**106.7**	101.8 - 111.8
2009	386,324	125.8	**116.1**	115.7-116.5	1,637	124.2	**96.4**	91.7 - 101.2

Coronary Heart Disease: 1999-2009: ICD-10 codes I20-I25; 1993-1998 ICD-9 codes 410-414,429.2; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.
U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 2.9. Coronary Heart Disease Deaths by Year and Gender, Maine, 1993-2009

	Maine Males				Maine Females			
Year	**Number of Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**	**Number of Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**
1993	1,347	222.8	**275.6**	260.7 - 291.2	1,331	208.7	**158.1**	149.6 - 166.9
1994	1,299	215.1	**258.9**	244.6 - 273.7	1,345	210.6	**157.5**	149.1 - 166.3
1995	1,330	220.1	**262.3**	248.0 - 277.1	1,244	194.6	**144.5**	136.5 - 152.9
1996	1,247	205.3	**238.3**	224.9 - 252.2	1,243	193.7	**141.7**	133.9 - 150.0
1997	1,326	217.4	**253.2**	239.4 - 267.6	1,276	197.9	**143.5**	135.6 - 151.7
1998	1,243	203.1	**230.5**	217.6 - 244.0	1,225	189.3	**134.8**	127.3 - 142.7
				Change from ICD-9 to ICD-10				
1999	1,205	195.6	**219.4**	206.9 - 232.4	1,250	192.1	**136.3**	128.8 - 144.3
2000	1,241	199.7	**218.5**	206.2 - 231.2	1,157	176.4	**123.3**	116.3 - 130.8
2001	1,131	180.9	**194.0**	182.7 - 205.8	1,159	175.8	**121.4**	114.4 - 128.7
2002	1,184	187.9	**197.2**	186.0 - 209.0	1,042	156.9	**108.3**	101.8 - 115.2
2003	1,109	174.2	**181.0**	170.3 - 192.1	1,022	152.8	**104.2**	97.8 - 110.9
2004	991	154.1	**158.9**	149.0 - 169.3	954	141.5	**97.0**	90.9 - 103.5
2005	1,033	160.0	**159.3**	149.6 - 169.5	910	134.6	**91.1**	85.2 - 97.4
2006	998	154.4	**151.5**	142.1 - 161.4	817	121.0	**81.1**	75.6 - 87.0
2007	996	154.9	**149.7**	140.4 - 159.5	763	113.1	**74.0**	68.8 - 79.6
2008	976	151.9	**141.9**	133.0 - 151.2	822	121.9	**78.0**	72.6 - 83.7
2009	920	143.0	**135.3**	126.6 - 144.5	717	106.3	**68.1**	63.1 - 73.4

Coronary Heart Disease: 1999-2009: ICD-10 codes I20-I25; 1993-1998 ICD-9 codes 410-414, 429.2; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

Table 2.10. Coronary Heart Disease Deaths by Selected Age Groups and Year, Maine, 1993-2009

	Age 35-64			Age 65-74			Age 75+		
Year	Number of Deaths	Age-specific Rate	95% CI	Number of Deaths	Age-specific Rate	95% CI	Number of Deaths	Age-specific Rate	95% CI
1993	398	**87.0**	78.7-96.0	530	**553.8**	507.7-603.0	1,747	**2,281.6**	2,175.9-2,391.2
1994	371	**79.7**	71.8-88.2	553	**573.3**	526.5-623.2	1,711	**2,199.2**	2,096.2-2,306.0
1995	408	**85.9**	77.8-94.7	536	**554.2**	508.2-603.1	1,622	**2,044.8**	1,946.4-2,146.7
1996	359	**73.8**	66.4-81.8	522	**541.0**	495.6-589.5	1,605	**1,986.6**	1,890.6-2,086.2
1997	367	**73.6**	66.3-81.5	512	**530.3**	485.3-578.3	1,714	**2,078.7**	1,981.5-2,179.5
1998	322	**63.4**	56.7-70.7	483	**500.9**	457.3-547.7	1,662	**1,987.0**	1,892.6-2,084.9
				Change from ICD-9 to ICD-10					
1999	335	**64.5**	57.7-71.7	460	**479.3**	436.5-525.2	1,658	**1,934.5**	1,842.5-2,029.9
2000	347	**64.5**	57.9-71.6	413	**429.8**	389.4-473.3	1,631	**1,859.0**	1,769.8-1,951.4
2001	325	**59.4**	53.2-66.3	382	**398.7**	359.7-440.7	1,576	**1,763.5**	1,677.5-1,852.8
2002	326	**58.5**	52.3-65.2	389	**407.1**	367.7-449.7	1,503	**1,654.6**	1,572.0-1,740.4
2003	317	**56.2**	50.2-62.8	350	**364.8**	327.5-405.0	1,456	**1,575.2**	1,495.4-1,658.3
2004	281	**48.8**	43.3-54.9	323	**338.6**	302.7-377.6	1,335	**1,414.9**	1,340.1-1,492.9
2005	322	**55.4**	49.5-61.7	310	**323.0**	288.0-361.0	1,305	**1,349.7**	1,277.5-1,425.0
2006	333	**57.4**	51.4-63.9	276	**281.0**	248.9-316.2	1,198	**1,268.6**	1,197.8-1,342.5
2007	328	**56.5**	50.5-62.9	269	**270.8**	239.4-305.2	1,156	**1,208.5**	1,139.9-1,280.3
2008	317	**54.6**	48.8-61.0	281	**272.1**	241.2-305.9	1,198	**1,248.8**	1,179.1-1,321.6
2009	268	**46.7**	41.3-52.7	250	**230.6**	202.9-261.0	1,115	**1,147.2**	1,080.8-1,216.6

Coronary Heart Disease: 1999-2009: ICD-10 codes I20-I25; 1993-1998 ICD-9 codes 410-414, 429.2; underlying cause of death.
Age-specific rates are deaths per 100,000 population within that age group.
95% CI: 95% confidence interval of the age-specific rate.
Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

Table 2.11. Coronary Heart Disease Deaths by County of Residence, Maine, 2005-2009

County	Average Annual Number of Deaths	Crude Rate	Age-adjusted Rate	95% CI
Androscoggin	143	133.4	**107.8**	99.9 - 116.1
Aroostook	133	184.3	**127.8**	118.2 - 138.0
Cumberland	276	100.0	**81.7**	77.4 - 86.2
Franklin	40	134.7	**116.3**	100.7 - 133.8
Hancock	89	167.2	**123.0**	111.8 - 135.1
Kennebec	168	138.5	**111.7**	104.2 - 119.6
Knox	58	140.8	**93.4**	82.8 - 105.2
Lincoln	51	147.3	**94.2**	82.9 - 106.8
Oxford	83	147.1	**113.4**	102.7 - 125.0
Penobscot	212	142.8	**127.7**	120.1 - 135.7
Piscataquis	39	225.1	**158.4**	136.6 - 183.1
Sagadahoc	44	120.3	**105.1**	91.6 - 120.1
Somerset	80	154.3	**126.2**	114.1 - 139.4
Waldo	54	141.3	**121.3**	107.2 - 136.8
Washington	72	220.6	**149.9**	134.7 - 166.5
York	248	122.8	**102.4**	96.7 - 108.3
Maine total	1,790	135.7	**108.4**	106.1 - 110.6
U.S. total	413,819	137.2	**128.6**	128.4 - 128.8

Coronary Heart Disease: ICD-10 codes I20-I25; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.
U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 2.12a. Knowledge of Individual Heart Attack Symptoms by Demographics, Maine Adults, 2009

	Know Pain in Jaw, Neck, Back is a Symptom				Know Feeling Weak, Lightheaded, Faint is a Symptom				Know Chest Pain is a Symptom			
Demographic Groups	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
Total	3,894	2,634	**61.5**	59.3-63.7	3,894	2,503	**65.6**	63.6-67.7	3,893	3,695	**95.7**	94.8-96.6
Gender												
Male	1,480	802	**49.4**	46.0-52.9	1,479	884	**62.0**	58.7-65.4	1,479	1,391	**94.9**	93.4-96.5
Female	2,414	1,832	**72.5**	70.0-75.1	2,415	1,619	**68.9**	66.5-71.4	2,414	2,304	**96.4**	95.5-97.2
Race												
Non-Hispanic White	3,731	2,554	**63.0**	60.8-65.3	3,731	2,413	**66.1**	64.0-68.1	3,730	3,551	**96.1**	95.3-96.9
Non-White or Hispanic	119	55	**31.8**	21.7-41.9	119	64	**59.1**	47.2-71.0	119	105	**87.9**	79.7-96.1
Age												
18-24	91	39	**38.5***	27.8-49.2*	91	67	**72.7**	62.4-83.0	91	88	**96.1**	90.9-100.0
25-34	250	134	**51.6**	44.5-58.8	250	179	**69.7**	62.9-76.4	250	242	**97.4**	95.4-99.5
35-44	494	309	**60.7**	55.8-65.6	494	339	**66.7**	62.0-71.5	494	481	**97.0**	95.0-99.0
45-54	837	567	**65.2**	61.4-69.0	838	566	**67.2**	63.5-70.9	838	816	**97.4**	96.1-98.6
55-64	1,024	750	**72.1**	68.9-75.2	1,024	679	**66.0**	62.7-69.3	1,023	986	**95.9**	94.5-97.4
65+	670	495	**73.2**	69.4-76.9	669	415	**62.2**	58.1-66.3	669	633	**95.0**	93.2-96.7
Education												
Less than High School	214	102	**46.1**	36.2-56.1	214	97	**48.1**	38.0-58.1	214	179	**88.1**	82.5-93.8
High School or GED	1,217	785	**55.8**	51.7-60.0	1,220	737	**60.9**	57.0-64.9	1,219	1,137	**94.8**	93.5-96.2
Some Post-High School	1,028	726	**64.5**	60.2-68.8	1,027	694	**70.6**	66.8-74.4	1,028	991	**96.4**	94.3-98.4
College Graduate	1,428	1,017	**66.5**	63.2-69.8	1,426	971	**68.5**	65.3-71.6	1,425	1,382	**97.0**	95.8-98.2
Household Income												
Less than $15,000	432	272	**52.6**	44.8-60.4	432	241	**54.6**	47.1-62.2	433	395	**93.9**	91.4-96.3
$15,000-$24,999	616	413	**61.5**	56.1-66.8	616	380	**62.7**	57.7-67.7	616	578	**94.5**	92.3-96.6
$25,000- $34,999	403	275	**59.8**	52.8-66.8	403	269	**67.2**	60.9-73.5	403	379	**94.1**	90.8-97.4
$35,000- $49,999	548	388	**65.0**	59.2-70.7	547	364	**67.0**	61.7-72.3	546	514	**92.9**	88.8-97.0
$50,000+	1,444	999	**63.7**	60.5-67.0	1,444	993	**70.2**	67.3-73.1	1,444	1,414	**98.3**	97.5-99.0
History of CHD												
No	3,548	2,363	**60.4**	58.0-62.7	3,549	2,284	**65.7**	63.6-67.9	3,548	3,378	**96.0**	95.1-96.9
Yes	346	271	**78.0**	72.4-83.6	345	219	**64.4**	58.2-70.6	345	317	**91.3**	86.8-95.8

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.
*This percentage is based on a numerator < 50 and may be unreliable; please use caution in interpreting.
All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.
Data Source: Maine Behavioral Risk Factor Surveillance System.

Table 2.12b. Knowledge of Individual Heart Attack Symptoms by Demographics, Maine Adults, 2009

	Know Pain in Arms, Shoulder is a Symptom				Know Shortness of Breath is a Symptom				Know Sudden Trouble Seeing is Not a Symptom			
Demographic Groups	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
Total	3,893	3,514	**88.7**	87.1-90.4	3,892	3,424	**88.0**	86.5-89.5	3,892	1,651	**41.2**	39.1-43.3
Gender												
Male	1,480	1,293	**85.4**	82.5-88.3	1,480	1,268	**85.8**	83.2-88.4	1,478	667	**42.5**	39.1-45.9
Female	2,413	2,221	**91.8**	90.0-93.5	2,412	2,156	**90.0**	88.4-91.5	2,414	984	**39.9**	37.3-42.5
Race												
Non-Hispanic White	3,730	3,383	**89.4**	87.8-91.1	3,729	3,294	**88.4**	86.9-89.9	3,729	1,581	**41.3**	39.2-43.5
Non-White or Hispanic	119	96	**76.2**	64.6-87.8	119	96	**81.8**	72.7-90.8	119	47	**35.0***	23.8-46.2*
Age												
18-24	91	69	**71.3**	60.6-82.0	91	81	**87.9**	80.1-95.7	91	27	**29.0***	19.1-38.9*
25-34	250	229	**91.5**	87.4-95.6	250	223	**87.8**	82.5-93.2	250	96	**42.1**	34.9-49.2
35-44	494	450	**90.2**	87.1-93.4	494	442	**87.6**	84.0-91.1	494	201	**39.5**	34.8-44.3
45-54	837	787	**94.1**	92.3-96.0	837	759	**90.4**	88.1-92.7	838	371	**43.9**	40.1-47.8
55-64	1,023	963	**94.4**	92.8-95.9	1,023	920	**90.3**	88.2-92.3	1,023	440	**42.8**	39.3-46.2
65+	670	609	**90.4**	87.9-92.9	670	595	**88.6**	86.0-91.3	668	289	**43.7**	39.5-47.9
Education												
Less than High School	214	163	**71.8**	61.3-82.2	214	163	**76.3**	67.6-85.1	214	95	**44.0**	34.1-53.8
High School or GED	1,219	1,079	**85.9**	82.5-89.4	1,219	1,032	**84.3**	81.1-87.4	1,219	506	**39.8**	35.9-43.6
Some Post-High School	1,028	945	**91.6**	88.8-94.3	1,027	910	**88.3**	85.3-91.3	1,028	415	**39.0**	34.9-43.1
College Graduate	1,425	1,320	**91.4**	89.1-93.7	1,425	1,314	**92.8**	91.2-94.4	1,424	632	**43.7**	40.4-46.9
Household Income												
Less than $15,000	433	377	**83.0**	76.4-89.5	433	360	**84.4**	79.6-89.2	433	195	**41.5**	34.2-48.8
$15,000-$24,999	616	544	**86.6**	82.4-90.8	615	531	**86.9**	83.4-90.4	616	247	**41.0**	35.8-46.1
$25,000- $34,999	402	358	**89.3**	85.1-93.4	402	340	**82.3**	76.9-87.7	403	178	**42.4**	35.8-49.1
$35,000- $49,999	546	501	**89.7**	85.3-94.1	546	485	**86.8**	82.2-91.3	547	236	**42.8**	37.4-48.3
$50,000+	1,444	1,350	**92.8**	90.9-94.8	1,444	1,328	**92.2**	90.4-93.9	1,443	627	**41.9**	38.7-45.1
History of CHD												
No	3,548	3,213	**88.8**	87.1-90.6	3,548	3,126	**88.1**	86.6-89.7	3,548	1,493	**40.8**	38.6-43.0
Yes	345	301	**86.9**	82.0-91.9	344	298	**85.9**	80.8-91.0	344	158	**46.3**	39.9-52.7

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.
*This percentage is based on a numerator < 50 and may be unreliable; please use caution in interpreting.
All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.
Data Source: Maine Behavioral Risk Factor Surveillance System.

Table 2.13. Coronary Heart Disease-related Prevalence Rates by Demographics, Maine Adults, 2009

	History of Heart Attack, Angina, Other CHD (2010)				Knew All Heart Attack Symptoms				Would Call 911 for Heart Attack or Stroke				Knew All Heart Attack Symptoms and Would Call 911 for Heart Attack or Stroke			
Demographic Groups	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
Total	8,132	794	**7.5**	6.8-8.1	3,898	673	**16.2**	14.7-17.6	3,872	3,472	**88.6**	87.1-90.1	3,895	623	**15.1**	13.6-16.5
Gender																
Male	3,160	448	**9.9**	8.8-11.0	1,482	207	**12.6**	10.6-14.7	1,475	1,280	**86.3**	83.7-88.9	1,482	187	**11.6**	9.7-13.6
Female	4,972	346	**5.2**	4.5-5.9	2,416	466	**19.4**	17.3-21.5	2,397	2,192	**90.7**	89.0-92.4	2,413	436	**18.3**	16.2-20.3
Race																
Non-Hispanic White	7,725	746	**7.2**	6.6-7.9	3,735	653	**16.5**	15.0-18.0	3,711	3,335	**88.7**	87.1-90.3	3,732	603	**15.4**	13.9-16.9
Non-White or Hispanic	297	34	**11.4***	6.2-16.6*	119	11	**7.5***	2.4-12.6*	119	100	**86.7**	79.2-94.2	119	11	**7.5***	2.4-12.6*
Age																
18-24	214	1	**1.1***	0.0-3.3*	91	9	**9.2***	3.1-15.3*	90	76	**81.2**	71.8-90.6	90	9	**9.3***	3.1-15.5*
25-34	517	8	**1.2***	0.3-2.2*	250	38	**15.9***	10.7-21.2*	248	221	**88.1**	83.4-92.8	250	35	**14.6***	9.6-19.5*
35-44	998	17	**1.6***	0.8-2.4*	494	89	**17.1**	13.5-20.6	493	450	**91.3**	88.5-94.2	494	85	**16.3**	12.8-19.8
45-54	1,693	73	**4.7**	3.4-6.1	837	166	**18.6**	15.7-21.6	835	752	**89.6**	87.1-92.1	837	153	**17.3**	14.4-20.1
55-64	2,065	192	**10.4**	8.8-12.0	1,025	201	**19.3**	16.5-22.1	1,018	924	**90.6**	88.6-92.7	1,023	188	**18.1**	15.3-20.8
65+	1,504	233	**16.3**	14.1-18.5	672	116	**17.2**	14.0-20.3	667	596	**90.1**	87.6-92.5	672	106	**15.7**	12.6-18.7
Education																
Less than High School	529	121	**16.3**	12.9-19.8	215	13	**5.5***	1.2-9.8*	210	189	**89.5**	83.6-95.4	215	13	**5.5***	1.2-9.8*
High School or GED	2,726	291	**8.4**	7.2-9.7	1,221	164	**11.3**	9.2-13.4	1,213	1,084	**86.8**	83.3-90.2	1,220	148	**10.4**	8.3-12.4
Some Post-High School	2,038	172	**5.8**	4.8-6.8	1,027	189	**17.9**	14.7-21.2	1,020	924	**91.1**	88.9-93.4	1,026	179	**17.4**	14.2-20.7
College Graduate	2,826	206	**6.0**	5.0-7.0	1,428	307	**20.7**	18.1-23.2	1,422	1,270	**88.1**	85.7-90.5	1,427	283	**18.9**	16.4-21.3
Household Income																
Less than $15,000	934	154	**15.4**	11.9-19.0	435	52	**9.7**	6.4-13.1	429	390	**90.8**	86.3-95.3	435	50	**9.5**	6.2-12.9
$15,000-$24,999	1,382	198	**11.5**	9.6-13.4	615	90	**13.6**	10.0-17.3	610	549	**89.1**	85.7-92.5	615	82	**12.7**	9.1-16.3
$25,000- $34,999	858	88	**7.9**	6.0-9.8	403	69	**16.0**	11.3-20.8	399	351	**85.5**	79.8-91.2	402	62	**14.4**	9.8-18.9
$35,000- $49,999	1,141	92	**6.0**	4.6-7.4	548	112	**19.1**	15.0-23.3	545	491	**89.5**	85.9-93.1	547	102	**16.9**	13.1-20.8
$50,000+	2,872	158	**4.4**	3.6-5.2	1,444	301	**18.7**	16.3-21.1	1,440	1,296	**88.6**	86.1-91.0	1,443	284	**17.9**	15.5-20.2
History of CHD																
No	N/A	N/A	N/A	N/A	3,553	615	**16.1**	14.5-17.6	3,533	3,177	**88.9**	87.3-90.5	3,550	571	**15.1**	13.6-16.6
Yes	N/A	N/A	N/A	N/A	345	58	**17.1**	12.2-22.1	339	295	**84.7**	79.2-90.1	345	52	**15.4**	10.6-20.2

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.; N/A= Not Applicable.

Knew all heart attack symptoms: correctly identified all five true heart attack symptoms and identified the one incorrect symptom as not being a heart attack symptom.

*This percentage is based on a numerator < 50 and may be unreliable; please use caution in interpreting.

All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.

Data Source: Maine Behavioral Risk Factor Surveillance System.

Table 2.14a. Knowledge of Individual Heart Attack Symptoms by Year, Maine Adults, 2001-2009

	Know Pain in Jaw, Neck, Back is a Symptom				Know Feeling Weak, Lightheaded, Faint is a Symptom				Know Chest Pain is a Symptom			
Year	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
2001	2,380	1,271	**50.9**	48.6-53.1	2,378	1,489	**63.1**	60.9-65.3	2,377	2,264	**95.6**	94.7-96.5
2004	3,379	1,979	**55.4**	53.3-57.4	3,377	2,153	**65.3**	63.4-67.2	3,376	3,217	**95.7**	94.9-96.4
2005	3,748	2,068	**51.0**	49.1-53.0	3,748	2,325	**62.0**	60.2-63.9	3,747	3,482	**93.0**	92.0-94.0
2009	3,894	2,634	**61.5**	59.3-63.7	3,894	2,503	**65.6**	63.6-67.7	3,893	3,695	**95.7**	94.8-96.6

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.
All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.
Data Source: Maine Behavioral Risk Factor Surveillance System.

Table 2.14b. Knowledge of Individual Heart Attack Symptoms by Year, Maine Adults, 2001-2009

	Know Pain in Arms, Shoulder is a Symptom				Know Shortness of Breath is a Symptom				Know Sudden Trouble Seeing is Not a Symptom			
Year	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
2001	2,377	2,150	**90.8**	89.5-92.1	2,376	2,025	**85.4**	83.7-87.1	2,377	978	**40.3**	38.0-42.5
2004	3,375	3,066	**90.1**	88.9-91.4	3,375	2,884	**85.8**	84.4-87.2	3,375	1,429	**40.9**	39.0-42.9
2005	3,743	3,364	**88.8**	87.4-90.1	3,743	3,203	**85.3**	83.9-86.7	3,745	1,703	**43.5**	41.6-45.4
2009	3,893	3,514	**88.7**	87.1-90.4	3,892	3,424	**88.0**	86.5-89.5	3,892	1,651	**41.2**	39.1-43.3

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.
All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.
Data Source: Maine Behavioral Risk Factor Surveillance System.

Table 2.15. Coronary Heart Disease-related Prevalence Rates by Year, Maine Adults, 1999-2010

	History of Heart Attack, Angina, Other CHD				Knew All Heart Attack Symptoms				Would Call 911 for Heart Attack or Stroke				Knew All Heart Attack Symptoms and Would Call 911 for Heart Attack or Stroke			
Year	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
1999	1,673	145	**7.9**	6.5-9.3	*	*	*	*	*	*	*	*	*	*	*	*
2000	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2001	*	*	*	*	2,420	303	**12.0**	10.5-13.4	2,420	1,989	**81.7**	79.9-83.4	2,420	255	**10.0**	8.7-11.3
2002	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2003	2,300	163	**6.5**	5.4-7.5	*	*	*	*	*	*	*	*	*	*	*	*
2004	*	*	*	*	3,378	497	**14.3**	13.0-15.7	3,370	3,037	**89.4**	88.0-90.7	3,370	460	**13.2**	11.9-14.5
2005	3,960	302	**6.8**	6.0-7.7	3,744	565	**13.4**	12.1-14.7	3,735	3,305	**88.2**	86.9-89.5	3,735	512	**12.3**	11.0-13.5
2006	4,040	300	**6.2**	5.4-7.0	*	*	*	*	*	*	*	*	*	*	*	*
2007	6,830	582	**7.2**	6.5-8.0	*	*	*	*	*	*	*	*	*	*	*	*
2008	6,788	655	**7.4**	6.8-8.1	*	*	*	*	*	*	*	*	*	*	*	*
2009	8,082	748	**6.8**	6.2-7.4	3,898	673	**16.2**	14.7-17.6	3,895	3,472	**88.1**	86.5-89.6	3,895	623	**15.1**	13.6-16.5
2010	8,132	794	**7.5**	6.8-8.1	*	*	*	*	*	*	*	*	*	*	*	*

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.
Knew all heart attack symptoms: correctly identified all five true heart attack symptoms and identified the one incorrect symptom as not being a heart attack symptom.
All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.
Data Source: Maine Behavioral Risk Factor Surveillance System.
* Data not available for that year.

Table 2.16. Heart Attack Hospitalizations by Year and Gender, Maine, 1993-2009

	Maine Total				Maine Males				Maine Females			
Year	Number of Hospitalizations	Crude Rate	Age-adjusted Rate	95% CI	Number of Hospitalizations	Crude Rate	Age-adjusted Rate	95% CI	Number of Hospitalizations	Crude Rate	Age-adjusted Rate	95% CI
1993	3,914	31.5	**30.8**	29.9 - 31.8	2,419	40.0	**43.8**	42.1 - 45.6	1,495	23.4	**20.0**	19.0 - 21.0
1994	3,827	30.8	**29.7**	28.7 - 30.6	2,340	38.7	**41.9**	40.2 - 43.6	1,487	23.3	**19.6**	18.6 - 20.6
1995	4,081	32.8	**31.2**	30.2 - 32.1	2,498	41.3	**43.6**	41.9 - 45.4	1,583	24.8	**20.8**	19.8 - 21.8
1996	4,079	32.7	**30.7**	29.8 - 31.7	2,433	40.1	**41.8**	40.2 - 43.5	1,646	25.7	**21.2**	20.2 - 22.3
1997	4,296	34.2	**31.7**	30.8 - 32.7	2,648	43.4	**44.9**	43.1 - 46.6	1,648	25.6	**20.7**	19.7 - 21.8
1998	4,502	35.8	**32.6**	31.7 - 33.6	2,751	44.9	**45.8**	44.1 - 47.6	1,751	27.1	**21.7**	20.7 - 22.7
1999	4,690	37.0	**33.3**	32.4 - 34.3	2,731	44.3	**44.6**	42.9 - 46.3	1,959	30.1	**23.8**	22.7 - 24.9
2000	5,112	40.0	**35.4**	34.4 - 36.4	3,010	48.4	**47.8**	46.1 - 49.5	2,102	32.0	**25.2**	24.1 - 26.3
2001	5,066	39.4	**34.5**	33.6 - 35.5	2,914	46.6	**45.3**	43.6 - 47.0	2,152	32.6	**25.3**	24.3 - 26.4
2002	5,091	39.3	**34.0**	33.1 - 35.0	3,020	47.9	**45.7**	44.1 - 47.4	2,071	31.2	**23.8**	22.8 - 24.9
2003	5,178	39.7	**34.0**	33.1 - 34.9	3,044	47.8	**45.3**	43.7 - 47.0	2,134	31.9	**24.3**	23.3 - 25.4
2004	4,598	34.9	**29.5**	28.7 - 30.4	2,665	41.4	**38.8**	37.4 - 40.4	1,933	28.7	**21.6**	20.7 - 22.6
2005	4,649	35.2	**29.2**	28.4 - 30.1	2,757	42.7	**39.2**	37.7 - 40.7	1,892	28.0	**20.8**	19.9 - 21.8
2006	4,589	34.7	**28.9**	28.0 - 29.7	2,690	41.6	**38.0**	36.6 - 39.5	1,899	28.1	**21.0**	20.1 - 22.0
2007	4,493	34.1	**27.8**	27.0 - 28.7	2,680	41.7	**37.3**	35.8 - 38.7	1,813	26.9	**19.8**	18.9 - 20.7
2008	4,312	32.8	**26.3**	25.5 - 27.1	2,568	40.0	**35.3**	33.9 - 36.7	1,744	25.9	**18.6**	17.8 - 19.6
2009	4,059	30.8	**24.4**	23.6 - 25.2	2,408	37.4	**32.5**	31.2 - 33.8	1,651	24.5	**17.4**	16.6 - 18.3

Heart Attack: ICD-9-CM 410; principal diagnosis.
Crude rates are hospitalizations per 10,000 population.
Age-adjusted rates are hospitalizations per 10,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 2.17. Heart Attack Hospitalizations by Selected Age Groups and Year, Maine, 1993-2009

	Age 35-64			Age 65-74			Age 75+		
Year	Number of Hospitalizations	Age-specific Rate	95% CI	Number of Hospitalizations	Age-specific Rate	95% CI	Number of Hospitalizations	Age-specific Rate	95% CI
1993	1,583	**34.6**	32.9 - 36.4	1,063	**111.1**	104.5 - 118.0	1,227	**160.2**	151.4 - 169.5
1994	1,509	**32.4**	30.8 - 34.1	1,034	**107.2**	100.8 - 113.9	1,256	**161.4**	152.6 - 170.6
1995	1,636	**34.4**	32.8 - 36.2	1,160	**119.9**	113.1 - 127.0	1,253	**158.0**	149.3 - 167.0
1996	1,627	**33.4**	31.8 - 35.1	1,083	**112.2**	105.7 - 119.1	1,338	**165.6**	156.9 - 174.7
1997	1,641	**32.9**	31.3 - 34.5	1,118	**115.8**	109.1 - 122.8	1,495	**181.3**	172.2 - 190.7
1998	1,628	**32.1**	30.5 - 33.6	1,192	**123.6**	116.7 - 130.8	1,637	**195.7**	186.3 - 205.4
1999	1,722	**33.1**	31.6 - 34.7	1,143	**119.1**	112.3 - 126.2	1,791	**209.0**	199.4 - 218.9
2000	1,881	**35.0**	33.4 - 36.6	1,197	**124.6**	117.6 - 131.8	1,995	**227.4**	217.5 - 237.6
2001	1,855	**33.9**	32.4 - 35.5	1,194	**124.6**	117.6 - 131.9	1,985	**222.1**	212.5 - 232.1
2002	1,904	**34.2**	32.7 - 35.7	1,157	**121.1**	114.2 - 128.3	1,994	**219.5**	210.0 - 229.4
2003	1,881	**33.4**	31.9 - 34.9	1,254	**130.7**	123.6 - 138.1	2,004	**216.8**	207.4 - 226.5
2004	1,694	**29.4**	28.1 - 30.9	1,015	**106.4**	99.9 - 113.1	1,861	**197.2**	188.4 - 206.4
2005	1,709	**29.4**	28.0 - 30.8	1,030	**107.3**	100.9 - 114.1	1,896	**196.1**	187.4 - 205.1
2006	1,775	**30.6**	29.2 - 32.0	977	**99.5**	93.3 - 105.9	1,799	**190.5**	181.8 - 199.5
2007	1,730	**29.8**	28.4 - 31.2	981	**98.8**	92.7 - 105.1	1,752	**183.2**	174.7 - 191.9
2008	1,603	**27.6**	26.3 - 29.0	930	**90.1**	84.4 - 96.0	1,762	**183.7**	175.2 - 192.5
2009	1,469	**25.6**	24.3 - 27.0	943	**87.0**	81.5 - 92.7	1,625	**167.2**	159.2 - 175.5

Heart Attack: ICD-9-CM 410; principal diagnosis.
Age-specific rates are hospitalizations per 10,000 population within that age group.
95% CI: 95% confidence interval of the age-specific rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 2.18. Heart Attack Hospitalizations by County of Residence, Maine, 2005-2009

County	Average Annual Number of Hospitalizations	Crude Rate	Age-adjusted Rate	95% CI
Androscoggin	282	26.3	**22.2**	21.0 - 23.4
Aroostook	464	64.2	**46.6**	44.7 - 48.6
Cumberland	583	21.1	**17.9**	17.2 - 18.5
Franklin	105	35.1	**30.3**	27.7 - 33.1
Hancock	271	50.7	**38.5**	36.5 - 40.6
Kennebec	488	40.4	**33.1**	31.8 - 34.5
Knox	144	35.1	**24.8**	23.0 - 26.7
Lincoln	111	31.7	**22.1**	20.3 - 24.1
Oxford	157	27.8	**22.0**	20.5 - 23.6
Penobscot	539	36.4	**32.2**	30.9 - 33.4
Piscataquis	93	54.1	**38.3**	34.8 - 42.0
Sagadahoc	87	23.8	**20.0**	18.1 - 22.0
Somerset	225	43.6	**35.4**	33.3 - 37.6
Waldo	146	38.0	**31.5**	29.2 - 33.9
Washington	205	62.5	**44.6**	41.9 - 47.5
York	520	25.8	**21.4**	20.6 - 22.3
Maine total	4,420	33.5	**27.3**	26.9 - 27.7

Heart Attack: ICD-9-CM 410; principal diagnosis.
Crude rates are hospitalizations per 10,000 population.
Age-adjusted rates are hospitalizations per 10,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 2.19. Heart Attack Deaths by Year, U.S. and Maine, 1993-2009

	U.S. Total				Maine Total			
Year	**Number of Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**	**Number of Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**
1993	227,456	87.5	**93.5**	93.1 - 93.8	1,019	82.0	**78.9**	74.2 - 84.0
1994	222,399	84.5	**89.7**	89.3 - 90.0	1,131	91.0	**85.8**	80.9 - 91.0
1995	218,229	81.9	**86.3**	85.9 - 86.7	1,044	84.0	**78.5**	73.8 - 83.4
1996	213,532	79.2	**82.8**	82.5 - 83.2	938	75.1	**69.3**	65.0 - 73.9
1997	206,212	75.6	**78.5**	78.1 - 78.8	1,144	91.2	**83.1**	78.3 - 88.1
1998	203,551	73.7	**76.0**	75.7 - 76.3	953	75.7	**68.3**	64.0 - 72.7
				Change from ICD-9 to ICD-10				
1999	199,454	71.5	**73.2**	72.9 - 73.5	937	74.0	**65.6**	61.5 - 70.0
2000	192,898	68.5	**69.9**	69.6 - 70.2	886	69.4	**60.6**	56.6 - 64.7
2001	184,757	64.9	**65.4**	65.1 - 65.7	840	65.4	**56.4**	52.6 - 60.3
2002	179,514	62.3	**62.1**	61.8 - 62.4	813	62.8	**53.7**	50.0 - 57.5
2003	170,564	58.7	**57.9**	57.7 - 58.2	786	60.2	**50.7**	47.2 - 54.4
2004	156,816	53.4	**52.3**	52.0 - 52.5	706	53.6	**44.8**	41.6 - 48.3
2005	151,004	50.9	**49.1**	48.8 - 49.3	685	51.8	**42.3**	39.1 - 45.6
2006	141,462	47.2	**45.0**	44.8 - 45.3	655	49.6	**40.4**	37.3 - 43.6
2007	132,968	44.1	**41.4**	41.2 - 41.6	635	48.2	**38.5**	35.6 - 41.7
2008	133,958	44.1	**40.7**	40.5 - 40.9	605	46.0	**36.1**	33.3 - 39.2
2009	125,464	40.9	**37.8**	37.6- 38.0	569	43.2	**33.4**	30.7 - 36.3

Heart Attack: 1999-2009: ICD-10 codes I21,I22; 1993-1998 ICD-9 codes 410; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics; Maine CDC.
U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 2.20. Heart Attack Deaths by Year and Gender, Maine, 1993-2009

	Maine Males				Maine Females			
Year	**Number of Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**	**Number of Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**
1993	534	88.3	**105.9**	96.8 - 115.5	485	76.1	**59.6**	54.3 - 65.2
1994	581	96.2	**111.8**	102.7 - 121.5	550	86.1	**66.2**	60.7 - 72.0
1995	555	91.8	**105.6**	96.8 - 115.0	489	76.5	**58.8**	53.6 - 64.3
1996	490	80.7	**90.6**	82.5 - 99.1	448	69.8	**52.4**	47.6 - 57.6
1997	606	99.4	**113.0**	103.9 - 122.6	538	83.4	**62.4**	57.2 - 68.0
1998	513	83.8	**91.2**	83.3 - 99.6	440	68.0	**49.6**	45.0 - 54.5
				Change from ICD-9 to ICD-10				
1999	479	77.7	**84.9**	77.3 - 93.0	458	70.4	**51.2**	46.5 - 56.2
2000	499	80.3	**86.9**	79.3 - 95.1	387	59.0	**42.1**	37.9 - 46.6
2001	441	70.5	**74.9**	68.0 - 82.4	399	60.5	**43.0**	38.9 - 47.6
2002	439	69.7	**71.0**	64.5 - 78.1	374	56.3	**39.7**	35.7 - 44.0
2003	405	63.6	**65.0**	58.7 - 71.8	381	56.9	**39.2**	35.3 - 43.5
2004	358	55.7	**56.3**	50.5 - 62.5	348	51.6	**35.3**	31.6 - 39.3
2005	357	55.3	**54.0**	48.4 - 60.0	328	48.5	**33.1**	29.6 - 37.0
2006	358	55.4	**52.6**	47.2 - 58.4	297	44.0	**30.0**	26.6 - 33.7
2007	356	55.4	**52.2**	46.8 - 58.0	279	41.4	**27.8**	24.6 - 31.4
2008	332	51.7	**47.2**	42.2 - 52.7	273	40.5	**26.3**	23.3 - 29.8
2009	323	50.2	**46.0**	41.1 - 51.5	246	36.5	**23.9**	21.0 - 27.2

Heart Attack: 1999-2009: ICD-10 codes I21, I22; 1993-1998 ICD-9 codes 410; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

Table 2.21. Heart Attack Deaths by Selected Age Groups and Year, Maine, 1993-2009

	Age 35-64			Age 65-74			Age 75+		
Year	Number of Deaths	Age-specific Rate	95% CI	Number of Deaths	Age-specific Rate	95% CI	Number of Deaths	Age-specific Rate	95% CI
1993	195	**42.6**	36.9-49.1	227	**237.2**	207.3-270.1	596	**778.4**	717.1-843.5
1994	199	**42.7**	37.0-49.1	285	**295.5**	262.2-331.9	643	**826.5**	763.8-892.9
1995	210	**44.2**	38.4-50.6	246	**254.3**	223.5-288.2	584	**736.2**	677.7-798.4
1996	180	**37.0**	31.8-42.8	219	**227.0**	197.9-259.1	538	**665.9**	610.8-724.6
1997	203	**40.7**	35.3-46.7	259	**268.2**	236.6-303.0	677	**821.1**	760.4-885.3
1998	172	**33.9**	29.0-39.3	208	**215.7**	187.4-247.1	572	**683.9**	628.9-742.3
				Change from ICD-9 to ICD-10					
1999	150	**28.9**	24.4-33.9	201	**209.4**	181.5-240.5	586	**683.7**	629.5-741.4
2000	142	**26.4**	22.2-31.1	177	**184.2**	158.1-213.4	564	**642.8**	590.9-698.1
2001	136	**24.9**	20.9-29.4	153	**159.7**	135.4-187.1	551	**616.6**	566.1-670.2
2002	148	**26.6**	22.5-31.2	160	**167.5**	142.5-195.5	504	**554.8**	507.5-605.5
2003	135	**23.9**	20.1-28.3	146	**152.2**	128.5-178.9	505	**546.4**	499.7-596.2
2004	110	**19.1**	15.7-23.0	127	**133.1**	111.0-158.4	469	**497.1**	453.1-544.2
2005	134	**23.0**	19.3-27.3	103	**107.3**	87.6-130.2	447	**462.3**	420.5-507.2
2006	155	**26.7**	22.7-31.2	108	**110.0**	90.2-132.8	390	**413.0**	373.0-456.1
2007	137	**23.6**	19.8-27.9	113	**113.8**	93.8-136.8	382	**399.4**	360.3-441.5
2008	123	**21.2**	17.6-25.3	109	**105.6**	86.7-127.3	371	**386.7**	348.4-428.2
2009	123	**21.4**	17.8-25.6	103	**95.0**	77.5-115.2	341	**350.8**	314.6-390.1

Heart Attack: 1999-2009: ICD-10 codes I21,I22; 1993-1998 ICD-9 codes 410; underlying cause of death.
Age-specific rates are deaths per 100,000 population within that age group.
95% CI: 95% confidence interval of the age-specific rate.
Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

Table 2.22. Heart Attack Death Rates by County of Residence, Maine, 2005-2009

County	Average Annual Number of Deaths	Crude Rate	Age-adjusted rate	95% CI
Androscoggin	42	39.2	**31.8**	27.6 - 36.5
Aroostook	51	70.3	**48.6**	42.8 - 55.1
Cumberland	76	27.7	**22.7**	20.5 - 25.1
Franklin	21	69.7	**60.0**	49.0 - 72.9
Hancock	36	67.0	**49.1**	42.1 - 57.0
Kennebec	66	54.7	**44.2**	39.5 - 49.2
Knox	25	60.1	**39.5**	32.7 - 47.4
Lincoln	15	43.6	**28.1**	22.1 - 35.5
Oxford	24	42.7	**32.4**	26.8 - 38.8
Penobscot	81	54.6	**48.4**	43.8 - 53.4
Piscataquis	18	102.1	**71.3**	56.9 - 88.6
Sagadahoc	17	47.0	**41.0**	32.7 - 50.7
Somerset	33	64.0	**51.4**	43.8 - 60.0
Waldo	18	46.7	**39.0**	31.2 - 48.1
Washington	32	98.1	**66.7**	56.7 - 78.1
York	75	37.0	**30.9**	27.8 - 34.2
Maine total	630	47.7	**38.1**	36.7 - 39.4
U.S. total	136,971	45.4	**42.7**	42.6 - 42.8

Heart Attack: ICD-10 codes I21,I22; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.
U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 2.23. Congestive Heart Failure Hospitalizations by Year and Gender, Maine, 1993-2009

	Maine Total				Maine Males				Maine Females			
Year	Number of Hospital-izations	Crude Rate	Age-adjusted Rate	95% CI	Number of Hospital-izations	Crude Rate	Age-adjusted Rate	95% CI	Number of Hospital-izations	Crude Rate	Age-adjusted Rate	95% CI
1993	4,115	33.1	**31.7**	30.7 - 32.7	1,888	31.2	**37.2**	35.4 - 38.9	2,227	34.9	**28.2**	27.0 - 29.4
1994	3,912	31.5	**29.7**	28.7 - 30.6	1,820	30.1	**35.3**	33.6 - 37.0	2,092	32.8	**26.1**	25.0 - 27.3
1995	3,752	30.2	**28.0**	27.1 - 28.9	1,704	28.2	**32.6**	31.0 - 34.2	2,048	32.0	**25.0**	23.9 - 26.1
1996	4,056	32.5	**29.9**	29.0 - 30.8	1,853	30.5	**35.0**	33.4 - 36.7	2,203	34.3	**26.5**	25.4 - 27.7
1997	4,073	32.5	**29.5**	28.6 - 30.4	1,864	30.6	**34.2**	32.7 - 35.9	2,209	34.3	**26.1**	25.1 - 27.3
1998	4,176	33.2	**29.9**	29.0 - 30.8	1,885	30.8	**34.0**	32.5 - 35.6	2,291	35.4	**27.0**	25.9 - 28.2
1999	3,910	30.9	**27.4**	26.6 - 28.3	1,755	28.5	**30.7**	29.2 - 32.1	2,155	33.1	**25.1**	24.1 - 26.2
2000	4,112	32.2	**28.2**	27.4 - 29.1	1,854	29.8	**31.8**	30.3 - 33.3	2,258	34.4	**25.8**	24.7 - 26.9
2001	4,107	32.0	**27.8**	26.9 - 28.6	1,903	30.4	**31.8**	30.3 - 33.3	2,204	33.4	**24.8**	23.7 - 25.8
2002	3,730	28.8	**24.8**	24.0 - 25.6	1,670	26.5	**27.2**	25.9 - 28.6	2,060	31.0	**22.9**	21.9 - 23.9
2003	3,500	26.8	**22.8**	22.1 - 23.6	1,614	25.3	**25.9**	24.7 - 27.2	1,886	28.2	**20.7**	19.8 - 21.7
2004	3,452	26.2	**22.2**	21.5 - 23.0	1,663	25.9	**26.0**	24.8 - 27.3	1,789	26.5	**19.4**	18.5 - 20.3
2005	3,381	25.6	**21.2**	20.5 - 21.9	1,725	26.7	**26.4**	25.2 - 27.7	1,656	24.5	**17.4**	16.6 - 18.3
2006	3,293	24.9	**20.6**	19.9 - 21.3	1,541	23.8	**23.5**	22.3 - 24.7	1,752	25.9	**18.4**	17.5 - 19.3
2007	2,851	21.6	**17.7**	17.0 - 18.4	1,412	22.0	**21.3**	20.2 - 22.4	1,439	21.3	**15.1**	14.4 - 16.0
2008	1,840	14.0	**11.1**	10.6 - 11.7	895	13.9	**13.2**	12.3 - 14.1	945	14.0	**9.6**	9.0 - 10.3
2009	1,429	10.8	**8.5**	8.1 - 9.0	693	10.8	**10.1**	9.3 - 10.9	736	10.9	**7.4**	6.8 - 7.9

Congestive Heart Failure: ICD-9-CM 428.0; principal diagnosis.
Crude rates are hospitalizations per 10,000 population.
Age-adjusted rates are hospitalizations per 10,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 2.24. Congestive Heart Failure Hospitalizations by Selected Age Groups and Year, Maine, 1993-2009

	Age 35-64			Age 65-74			Age 75+		
Year	Number of Hospitalizations	Age-specific Rate	95% CI	Number of Hospitalizations	Age-specific Rate	95% CI	Number of Hospitalizations	Age-specific Rate	95% CI
1993	733	**16.0**	14.9 - 17.2	1,116	**116.6**	109.9 - 123.7	2,250	**293.9**	281.8 - 306.3
1994	623	**13.4**	12.3 - 14.5	1,071	**111.0**	104.5 - 117.9	2,199	**282.6**	271.0 - 294.7
1995	526	**11.1**	10.1 - 12.1	1,020	**105.5**	99.1 - 112.1	2,186	**275.6**	264.1 - 287.4
1996	569	**11.7**	10.8 - 12.7	1,058	**109.7**	103.1 - 116.5	2,400	**297.1**	285.3 - 309.2
1997	561	**11.3**	10.3 - 12.2	1,099	**113.8**	107.2 - 120.8	2,399	**291.0**	279.4 - 302.8
1998	663	**13.1**	12.1 - 14.1	1,108	**114.9**	108.2 - 121.9	2,393	**286.1**	274.7 - 297.8
1999	622	**12.0**	11.0 - 12.9	1,057	**110.1**	103.6 - 117.0	2,224	**259.5**	248.8 - 270.5
2000	602	**11.2**	10.3 - 12.1	1,039	**108.1**	101.7 - 114.9	2,462	**280.6**	269.6 - 291.9
2001	648	**11.9**	11.0 - 12.8	1,012	**105.6**	99.2 - 112.3	2,425	**271.3**	260.7 - 282.4
2002	587	**10.5**	9.7 - 11.4	913	**95.6**	89.5 - 102.0	2,215	**243.8**	233.8 - 254.2
2003	582	**10.3**	9.5 - 11.2	793	**82.6**	77.0 - 88.6	2,114	**228.7**	219.1 - 238.7
2004	546	**9.5**	8.7 - 10.3	773	**81.0**	75.4 - 86.9	2,123	**225.0**	215.5 - 234.8
2005	527	**9.1**	8.3 - 9.9	725	**75.5**	70.1 - 81.2	2,113	**218.5**	209.3 - 228.1
2006	546	**9.4**	8.6 - 10.2	722	**73.5**	68.3 - 79.1	2,012	**213.1**	203.9 - 222.6
2007	417	**7.2**	6.5 - 7.9	631	**63.5**	58.7 - 68.7	1,785	**186.6**	178.1 - 195.5
2008	293	**5.0**	4.5 - 5.7	360	**34.9**	31.4 - 38.7	1,176	**122.6**	115.7 - 129.8
2009	237	**4.1**	3.6 - 4.7	291	**26.8**	23.8 - 30.1	889	**91.5**	85.6 - 97.7

Congestive Heart Failure: ICD-9-CM 428.0; principal diagnosis.
Age-specific rates are hospitalizations per 10,000 population within that age group.
95% CI: 95% confidence interval of the age-specific rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 2.25. Congestive Heart Failure Hospitalizations by County of Residence, Maine, 2005-2009

County	Average Annual Number of Hospitalizations	Crude Rate	Age-adjusted Rate	95% CI
Androscoggin	172	16.1	**13.3**	12.4 - 14.2
Aroostook	195	26.9	**18.8**	17.6 - 20.0
Cumberland	398	14.4	**12.2**	11.7 - 12.8
Franklin	64	21.4	**18.4**	16.4 - 20.5
Hancock	142	26.5	**19.7**	18.3 - 21.3
Kennebec	179	14.8	**12.2**	11.4 - 13.0
Knox	83	20.3	**13.8**	12.5 - 15.3
Lincoln	81	23.3	**14.9**	13.5 - 16.4
Oxford	120	21.2	**16.7**	15.4 - 18.1
Penobscot	344	23.2	**20.8**	19.8 - 21.8
Piscataquis	36	21.1	**14.7**	12.6 - 17.1
Sagadahoc	58	15.7	**14.1**	12.5 - 15.8
Somerset	105	20.3	**16.6**	15.2 - 18.1
Waldo	93	24.1	**20.5**	18.7 - 22.5
Washington	116	35.2	**24.3**	22.3 - 26.4
York	372	18.4	**15.5**	14.8 - 16.3
Maine total	2,559	19.4	**15.7**	15.5 - 16.0

Congestive Heart Failure: ICD-9-CM 428.0; principal diagnosis.
Crude rates are hospitalizations per 10,000 population.
Age-adjusted rates are hospitalizations per 10,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 2.26. Heart Failure Deaths by Year, U.S. and Maine, 1993-2009

	U.S. Total				Maine Total			
Year	Number of Deaths	Crude Rate	Age-adjusted Rate	95% CI	Number of Deaths	Crude Rate	Age-adjusted Rate	95% CI
1993	45,613	17.5	**19.3**	19.1-19.5	247	19.9	**19.1**	16.8-21.6
1994	45,155	17.2	**18.7**	18.5-18.9	230	18.5	**17.4**	15.2-19.8
1995	46,484	17.4	**18.8**	18.6-19.0	270	21.7	**20.1**	17.8-22.6
1996	47,230	17.5	**18.6**	18.5-18.8	289	23.1	**21.0**	18.7-23.6
1997	48,930	17.9	**18.9**	18.7-19.0	277	22.1	**19.9**	17.6-22.4
1998	50,228	18.2	**18.9**	18.8-19.1	255	20.3	**18.0**	15.9-20.4
				Change from ICD-9 to ICD-10				
1999	54,913	19.7	**20.3**	20.1-20.4	278	21.9	**19.2**	17.0-21.6
2000	55,704	19.8	**20.3**	20.1-20.4	283	22.2	**19.1**	17.0-21.5
2001	56,934	20.0	**20.2**	20.0-20.3	277	21.6	**18.3**	16.2-20.6
2002	56,494	19.6	**19.4**	19.3-19.6	265	20.5	**17.1**	15.1-19.3
2003	57,448	19.8	**19.4**	19.2-19.6	298	22.8	**18.9**	16.8-21.2
2004	57,120	19.5	**18.9**	18.7-19.0	271	20.6	**17.1**	15.1-19.2
2005	58,933	19.9	**18.9**	18.8-19.1	271	20.5	**16.6**	14.7-18.7
2006	60,337	20.2	**18.9**	18.7-19.0	312	23.6	**19.0**	17.0-21.3
2007	56,565	18.8	**17.3**	17.1-17.4	282	21.4	**16.9**	15.0-19.1
2008	56,830	18.7	**16.9**	16.7-17.0	287	21.8	**16.8**	14.9-18.8
2009	56,410	18.4	**16.8**	16.6-16.9	286	21.7	**16.5**	14.6-18.5

Heart Failure: 1999-2009: ICD-10 codes I50; 1993-1998 ICD-9 codes 428; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.
U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 2.27. Heart Failure Deaths by Year and Gender, Maine, 1993-2009

	Maine Males				Maine Females			
Year	**Total Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**	**Total Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**
1993	83	13.7	**20.6**	16.3-25.6	164	25.7	**18.5**	15.7-21.6
1994	85	14.1	**19.2**	15.2-23.8	145	22.7	**16.2**	13.6-19.1
1995	96	15.9	**21.8**	17.6-26.7	174	27.2	**19.5**	16.7-22.7
1996	110	18.1	**23.5**	19.2-28.4	179	27.9	**19.2**	16.5-22.3
1997	94	15.4	**20.1**	16.2-24.7	183	28.4	**19.4**	16.7-22.5
1998	94	15.4	**19.0**	15.3-23.3	161	24.9	**16.5**	14.1-19.4
			Change from ICD-9 to ICD-10					
1999	118	19.1	**24.2**	20.0-29.0	160	24.6	**16.6**	14.1-19.4
2000	108	17.4	**20.6**	16.8-24.9	175	26.7	**17.8**	15.2-20.7
2001	101	16.2	**18.8**	15.2-22.8	176	26.7	**17.7**	15.2-20.6
2002	90	14.3	**16.4**	13.1-20.1	175	26.3	**17.1**	14.6-19.9
2003	118	18.5	**21.0**	17.3-25.2	180	26.9	**17.4**	14.9-20.2
2004	92	14.3	**16.5**	13.2-20.2	179	26.6	**17.1**	14.7-19.9
2005	92	14.3	**15.6**	12.5-19.1	179	26.5	**17.0**	14.6-19.8
2006	129	20.0	**21.3**	17.8-25.4	183	27.1	**17.3**	14.8-20.1
2007	114	17.7	**18.6**	15.4-22.4	168	24.9	**15.8**	13.5-18.5
2008	109	17.0	**17.1**	14.0-20.6	178	26.4	**16.2**	13.9-18.9
2009	118	18.3	**19.2**	15.9-23.0	168	24.9	**14.9**	12.7-17.5

Heart Failure: 1999-2009: ICD-10 codes I50; 1993-1998 ICD-9 codes 428; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

Table 2.28. Heart Failure Deaths by Selected Age Groups and Year, Maine, 1993-2009

	Age 35-64			Age 65-74			Age 75+		
Year	Number of Deaths	Age-specific Rate	95% CI	Number of Deaths	Age-specific Rate	95% CI	Number of Deaths	Age-specific Rate	95% CI
1993	10	**2.2***	1.0 - 4.0*	23	**24.0***	15.2 - 36.1*	214	**279.5**	243.3 - 319.5
1994	10	**2.1***	1.0 - 3.9*	29	**30.1***	20.1 - 43.2*	191	**245.5**	211.9 - 282.9
1995	11	**2.3***	1.2 - 4.1*	31	**32.1***	21.8 - 45.5*	228	**287.4**	251.3 - 327.3
1996	5	**1.0***	0.3 - 2.4*	40	**41.5***	29.6 - 56.5*	244	**302.0**	265.3 - 342.4
1997	4	**0.8***	0.2 - 2.1*	28	**29.0***	19.3 - 41.9*	244	**295.9**	260.0 - 335.5
1998	11	**2.2***	1.1 - 3.9*	29	**30.1***	20.1 - 43.2*	215	**257.0**	223.8 - 293.8
				Change from ICD-9 to ICD-10					
1999	11	**2.1***	1.1 - 3.8*	33	**34.4***	23.7 - 48.3*	234	**273.0**	239.2 - 310.3
2000	10	**1.9***	0.9 - 3.4*	30	**31.2***	21.1 - 44.6*	243	**277.0**	243.2 - 314.1
2001	12	**2.2***	1.1 - 3.8*	26	**27.1***	17.7 - 39.8*	239	**267.4**	234.6 - 303.6
2002	8	**1.4***	0.6 - 2.8*	27	**28.3***	18.6 - 41.1*	230	**253.2**	221.5 - 288.1
2003	15	**2.7***	1.5 - 4.4*	20	**20.8***	12.7 - 32.2*	263	**284.5**	251.2 - 321.1
2004	11	**1.9***	1.0 - 3.4*	9	**9.4***	4.3 - 17.9*	251	**266.0**	234.1 - 301.1
2005	14	**2.4***	1.3 - 4.0*	16	**16.7***	9.5 - 27.1*	239	**247.2**	216.8 - 280.6
2006	16	**2.8***	1.6 - 4.5*	22	**22.4***	14.0 - 33.9*	273	**289.1**	255.8 - 325.5
2007	12	**2.1***	1.1 - 3.6*	27	**27.2***	17.9 - 39.5*	240	**250.9**	220.2 - 284.7
2008	16	**2.8***	1.6 - 4.5*	26	**25.2***	16.4 - 36.9*	244	**254.4**	223.4 - 288.4
2009	9	**1.6***	0.7 - 3.0*	20	**18.4***	11.3 - 28.5*	256	**263.4**	232.1 - 297.7

Heart Failure: 1999-2009: ICD-10 codes I50; 1993-1998 ICD-9 codes 428; underlying cause of death.
Age-specific rates are deaths per 100,000 population within that age group.
95% CI: 95% confidence interval of the age-specific rate.
*This percentage is based on a numerator < 50 and may be unreliable; please use caution in interpreting.
Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

Table 2.29. Heart Failure Deaths by County of Residence, Maine, 2005-2009

County	Average Annual Number of Deaths	Crude Rate	Age-adjusted Rate	95% CI
Androscoggin	26	24.1	**18.6**	15.5 - 22.2
Aroostook	19	26.3	**17.9**	14.4 - 22.0
Cumberland	64	23.2	**18.4**	16.4 - 20.5
Franklin	6	19.4	**16.6**	11.1 - 24.0
Hancock	11	20.6	**15.2**	11.5 - 20.0
Kennebec	25	20.5	**16.4**	13.7 - 19.6
Knox	12	29.8	**18.9**	14.4 - 24.6
Lincoln	8	24.1	**14.8**	10.6 - 20.4
Oxford	8	14.5	**11.2**	8.0 - 15.3
Penobscot	40	27.1	**24.8**	21.5 - 28.5
Piscataquis	3	15.1	**10.4***	5.5 - 18.4*
Sagadahoc	10	26.2	**23.1**	17.0 - 30.7
Somerset	7	14.3	**11.7**	8.2 - 16.2
Waldo	9	23.4	**20.5**	15.0 - 27.6
Washington	7	22.5	**15.0**	10.5 - 21.1
York	32	15.9	**13.2**	11.3 - 15.5
Maine total	288	21.8	**17.1**	16.3 - 18.1
U.S. total	57,815	19.2	**17.7**	17.6 - 17.8

Heart Failure: ICD-10 codes I50; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.
U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.
* These rates are based on fewer than 20 deaths in 5 years and should be interpreted with caution.

Table 3.1. Stroke-related Prevalence Rates by Demographics, Maine Adults, 2009

	History of Stroke (2010)				Knew All Stroke Symptoms				Would Call 911 for Heart Attack or Stroke				Knew All Stroke Symptoms and Would Call 911 for Heart Attack or Stroke			
Demographic Groups	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
Total	8,113	318	**2.8**	2.4-3.1	3,896	907	**23.1**	21.4-24.9	3,872	3,472	**88.6**	87.1-90.1	3,895	826	**20.7**	19.1-22.4
Gender																
Male	3,151	129	**2.6**	2.1-3.1	1,482	346	**23.4**	20.6-26.3	1,475	1,280	**86.3**	83.7-88.9	1,482	305	**20.4**	17.8-23.0
Female	4,962	189	**2.9**	2.4-3.4	2,414	561	**22.9**	20.7-25.0	2,397	2,192	**90.7**	89.0-92.4	2,413	521	**21.0**	18.9-23.1
Race																
Non-Hispanic White	7,707	293	**2.7**	2.3-3.0	3,733	877	**23.6**	21.8-25.4	3,711	3,335	**88.7**	87.1-90.3	3,732	797	**21.1**	19.3-22.8
Non-White or Hispanic	296	14	**3.6***	0.9-6.2*	119	20	**13.2***	6.4-20.1*	119	100	**86.7**	79.2-94.2	119	19	**12.7***	5.9-19.5*
Age																
18-24	214	2	**0.8***	0.0-2.0*	90	19	**20.2***	11.6-28.9*	90	76	**81.2**	71.8-90.6	90	15	**14.7***	7.4-22.1*
25-34	516	3	**0.6***	0.0-1.3*	250	54	**19.9**	14.5-25.3	248	221	**88.1**	83.4-92.8	250	51	**19.3**	14.0-24.6
35-44	998	11	**0.8***	0.3-1.4*	494	145	**28.9**	24.5-33.4	493	450	**91.3**	88.5-94.2	494	131	**26.4**	22.1-30.7
45-54	1,691	32	**1.7***	1.0-2.3*	837	210	**25.3**	21.9-28.8	835	752	**89.6**	87.1-92.1	837	195	**23.0**	19.8-26.3
55-64	2,062	75	**3.4**	2.6-4.3	1,024	288	**27.3**	24.2-30.4	1,018	924	**90.6**	88.6-92.7	1,023	265	**25.0**	22.0-28.0
65+	1,502	89	**6.1**	4.7-7.5	672	133	**20.3**	16.9-23.7	667	596	**90.1**	87.6-92.5	672	120	**18.1**	14.8-21.4
Education																
Less than High School	524	46	**4.9***	3.3-6.6*	215	11	**7.8***	1.1-14.4*	210	189	**89.5**	83.6-95.4	215	10	**7.5***	0.9-14.2*
High School or GED	2,721	136	**3.6**	2.9-4.3	1,220	185	**17.3**	14.2-20.3	1,213	1,084	**86.8**	83.3-90.2	1,220	167	**15.2**	12.4-18.0
Some Post-High School	2,034	68	**2.4**	1.6-3.2	1,026	229	**21.3**	18.0-24.6	1,020	924	**91.1**	88.9-93.4	1,026	213	**19.6**	16.4-22.8
College Graduate	2,821	68	**1.8**	1.3-2.3	1,428	480	**32.0**	29.0-35.1	1,422	1,270	**88.1**	85.7-90.5	1,427	435	**28.5**	25.6-31.4
Household Income																
Less than $15,000	931	74	**5.2**	3.7-6.7	435	57	**14.2**	8.9-19.4	429	390	**90.8**	86.3-95.3	435	50	**11.3**	7.3-15.3
$15,000-$24,999	1,375	90	**5.7**	4.2-7.1	615	109	**18.0**	13.9-22.1	610	549	**89.1**	85.7-92.5	615	98	**16.5**	12.5-20.5
$25,000- $34,999	857	30	**2.8***	1.5-4.2*	403	91	**22.0**	16.2-27.9	399	351	**85.5**	79.8-91.2	402	83	**20.4**	14.7-26.2
$35,000- $49,999	1,140	28	**2.1***	1.2-2.9*	547	133	**25.0**	20.1-29.8	545	491	**89.5**	85.9-93.1	547	120	**22.2**	17.6-26.9
$50,000+	2,870	52	**1.2**	0.9-1.6	1,443	452	**29.0**	26.1-31.9	1,440	1,296	**88.6**	86.1-91.0	1,443	414	**25.9**	23.2-28.6
History of Stroke																
No	N/A	N/A	N/A	N/A	158	30	**21.7***	14.1-29.4*	154	131	**84.8**	77.9-91.6	158	27	**19.8***	12.4-27.3*
Yes	N/A	N/A	N/A	N/A	3,723	872	**23.1**	21.3-24.9	3,703	3,328	**88.8**	87.2-90.4	3,722	794	**20.7**	19.0-22.4

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval; N/A= Not Applicable.
Knew all stroke symptoms: correctly identified all five true stroke symptoms and identified the one incorrect symptom as not being a symptom of stroke.
*This percentage is based on a numerator < 50 and may be unreliable; please use caution in interpreting.
All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.
Data Source: Maine Behavioral Risk Factor Surveillance System.

Table 3.2a. Knowledge of Individual Stroke Symptoms by Demographics, Maine Adults, 2009

	Knew Sudden Confusion or Trouble Speaking are Symptoms				Knew Sudden Numbness or Weakness of Face, Arm, or Leg are Symptoms				Knew Sudden Trouble Seeing is a Symptom			
Demographic Groups	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
Total	3,894	3,656	**93.1**	91.7-94.4	3,891	3,747	**96.3**	95.3-97.2	3,891	2,894	**75.4**	73.5-77.2
Gender												
Male	1,480	1,363	**91.5**	89.1-93.8	1,480	1,404	**95.1**	93.4-96.8	1,480	1,090	**75.0**	72.0-78.0
Female	2,414	2,293	**94.5**	93.1-96.0	2,411	2,343	**97.3**	96.4-98.2	2,411	1,804	**75.7**	73.4-77.9
Race												
Non-Hispanic White	3,731	3,514	**93.6**	92.3-94.9	3,728	3,604	**96.9**	96.1-97.8	3,728	2,790	**76.3**	74.5-78.1
Non-White or Hispanic	119	104	**83.2**	72.0-94.4	119	106	**84.8**	74.7-94.9	119	79	**60.6**	47.7-73.4
Age												
18-24	91	81	**85.8**	77.3-94.3	90	87	**96.3**	92.1-100.0	90	72	**79.5**	70.3-88.6
25-34	250	232	**91.5**	86.6-96.4	250	240	**94.1**	89.6-98.6	250	188	**74.0**	67.4-80.5
35-44	494	467	**93.8**	91.1-96.4	494	481	**97.2**	95.4-99.1	494	384	**77.1**	72.9-81.3
45-54	837	810	**97.1**	96.0-98.3	837	822	**98.2**	97.2-99.2	837	645	**77.9**	74.7-81.1
55-64	1,024	988	**96.8**	95.7-98.0	1,023	995	**97.1**	95.9-98.3	1,022	788	**76.6**	73.6-79.6
65+	671	633	**94.8**	93.0-96.5	671	644	**96.3**	94.9-97.8	672	497	**75.2**	71.6-78.8
Education												
Less than High School	215	166	**77.1**	68.3-85.9	215	183	**81.2**	71.6-90.8	215	102	**47.4**	37.5-57.3
High School or GED	1,218	1,120	**91.7**	89.1-94.2	1,218	1,163	**95.8**	94.0-97.7	1,218	809	**69.0**	65.3-72.7
Some Post-High School	1,027	979	**93.9**	91.0-96.8	1,025	996	**98.1**	97.3-98.9	1,025	795	**80.4**	77.3-83.5
College Graduate	1,427	1,384	**96.0**	94.5-97.6	1,426	1,398	**97.5**	96.4-98.7	1,426	1,185	**81.3**	78.7-83.9
Household Income												
Less than $15,000	434	391	**86.0**	78.7-93.2	434	404	**90.2**	83.9-96.6	433	273	**60.2**	52.4-67.9
$15,000-$24,999	615	556	**91.6**	88.7-94.4	615	590	**95.6**	93.1-98.1	615	433	**69.3**	64.3-74.4
$25,000- $34,999	403	373	**90.8**	86.6-95.1	403	383	**94.8**	91.7-97.9	403	293	**73.1**	67.4-78.8
$35,000- $49,999	547	523	**93.3**	89.0-97.6	546	532	**97.3**	95.7-99.0	546	423	**79.3**	75.3-83.2
$50,000+	1,444	1,408	**96.8**	95.5-98.1	1,443	1,419	**98.1**	97.0-99.1	1,443	1,167	**80.1**	77.4-82.8
History of Stroke												
Yes	158	145	**92.9**	88.8-96.9	157	153	**97.7**	95.4-100.0	157	112	**74.0**	66.5-81.5
No	3,721	3,499	**93.2**	91.8-94.6	3,719	3,581	**96.4**	95.4-97.3	3,719	2772	**75.5**	73.6-77.4

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.
All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.
Data Source: Maine Behavioral Risk Factor Surveillance System.

Table 3.2b. Knowledge of Individual Stroke Symptoms by Demographics, Maine Adults, 2009

	Knew Sudden Trouble Walking, Dizziness, or Loss of Balance are Symptoms				Knew Severe Headache with No Known Cause is a Symptom				Knew Chest Pain is Not a Symptom			
Demographic Groups	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
Total	3,892	3,471	**88.9**	87.4-90.4	3,892	2,393	**59.1**	56.9-61.2	3,892	1,575	**41.0**	38.9-43.1
Gender												
Male	1,481	1,287	**86.6**	84.0-89.2	1,481	835	**53.9**	50.4-57.4	1,480	631	**43.2**	39.8-46.6
Female	2,411	2,184	**90.9**	89.3-92.6	2,411	1,558	**63.8**	61.2-66.4	2,412	944	**38.9**	36.3-41.5
Race												
Non-Hispanic White	3,729	3,332	**89.3**	87.8-90.8	3,729	2,303	**59.8**	57.6-62.0	3,729	1,521	**41.7**	39.5-43.8
Non-White or Hispanic	119	103	**82.1**	71.3-92.9	119	65	**44.5**	32.5-56.6	119	39	**28.3***	18.0-38.6*
Age												
18-24	90	79	**85.1**	76.5-93.7	90	55	**56.5**	45.2-67.8	90	37	**39.6***	28.8-50.4*
25-34	250	218	**86.2**	80.7-91.6	250	133	**48.4**	41.3-55.5	250	101	**39.4**	32.5-46.2
35-44	494	456	**91.8**	88.8-94.7	494	293	**59.2**	54.4-64.1	494	229	**45.7**	40.8-50.6
45-54	837	758	**90.3**	88.0-92.6	837	528	**61.7**	57.9-65.5	837	373	**45.5**	41.6-49.4
55-64	1,023	945	**92.2**	90.3-94.1	1,023	689	**66.2**	62.9-69.6	1,023	433	**41.6**	38.1-45.0
65+	671	597	**88.9**	86.3-91.6	672	414	**62.5**	58.4-66.6	671	245	**36.3**	32.2-40.3
Education												
Less than High School	215	171	**75.1**	65.2-85.1	215	99	**45.5**	35.6-55.4	215	47	**23.6***	14.8-32.5*
High School or GED	1,219	1,041	**84.8**	81.6-88.0	1,219	674	**53.4**	49.3-57.5	1,218	396	**34.2**	30.5-37.9
Some Post-High School	1,026	925	**91.4**	89.2-93.5	1,026	651	**60.4**	56.2-64.7	1,026	391	**39.2**	35.0-43.4
College Graduate	1,425	1,327	**92.5**	90.3-94.6	1,425	964	**65.0**	61.8-68.2	1,426	739	**51.0**	47.7-54.3
Household Income												
Less than $15,000	434	370	**82.1**	75.2-89.1	434	235	**47.7**	40.2-55.2	434	126	**30.2**	23.4-36.9
$15,000-$24,999	615	531	**88.0**	84.9-91.0	615	368	**60.1**	55.0-65.2	615	211	**35.1**	30.0-40.1
$25,000- $34,999	403	355	**87.5**	83.0-92.1	402	246	**55.0**	48.0-61.9	403	163	**42.1**	35.4-48.9
$35,000- $49,999	545	500	**91.9**	89.2-94.5	546	355	**64.5**	59.1-69.9	546	229	**41.4**	36.0-46.8
$50,000+	1,443	1,339	**91.4**	89.3-93.5	1,443	920	**60.4**	57.2-63.7	1,443	720	**48.4**	45.1-51.7
History of Stroke												
Yes	157	142	**89.0**	81.0-97.0	156	103	**70.0**	61.9-78.0	157	59	**38.3**	29.4-47.2
No	3,720	3,315	**88.9**	87.4-90.5	3,721	2,280	**58.8**	56.6-61.0	3,720	1,509	**41.0**	38.9-43.2

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

*This percentage is based on a numerator < 50 and may be unreliable; please use caution in interpreting.

All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.

Data Source: Maine Behavioral Risk Factor Surveillance System.

Table 3.3. Stroke-related Prevalence Rates by Year, Maine Adults, 1999-2010

	History of Stroke				Knew All Stroke Symptoms				Would Call 911 for Heart Attack or Stroke				Knew All Stroke Symptoms and Would Call 911 for Heart Attack or Stroke			
Year	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
1999	1,662	43	**2.3^**	1.5-3.0^	*	*	*	*	*	*	*	*	*	*	*	*
2000	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2001	*	*	*	*	2,420	440	**17.8**	16.0-19.5	2,356	1,989	**84.2**	82.5-85.8	2,420	374	**15.1**	13.4-16.7
2002	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2003	2,281	40	**1.6^**	1.0-2.1^	*	*	*	*	*	*	*	*	*	*	*	*
2004	*	*	*	*	3,371	651	**19.4**	17.8-21.0	3,355	3,037	**89.7**	88.4-91.1	3,370	599	**17.4**	15.9-18.9
2005	3,949	130	**2.6**	2.1-3.1	3,736	773	**19.5**	18.0-21.0	3,721	3,305	**88.6**	87.4-89.8	3,735	700	**17.8**	16.3-19.2
2006	4,030	117	**2.6**	2.0-3.1	*	*	*	*	*	*	*	*	*	*	*	*
2007	6,806	217	**2.7**	2.3-3.2	*	*	*	*	*	*	*	*	*	*	*	*
2008	6,765	250	**2.8**	2.4-3.2	*	*	*	*	*	*	*	*	*	*	*	*
2009	8,058	291	**2.4**	2.1-2.7	3,896	907	**23.1**	21.4-24.9	3,872	3,472	**88.6**	87.1-90.1	3,895	826	**20.7**	19.1-22.4
2010	8,113	318	**2.8**	2.4-3.1	*	*	*	*	*	*	*	*	*	*	*	*

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.
Knew all stroke symptoms: correctly identified all five true stroke symptoms and identified the one incorrect symptom as not being a symptom of stroke.
^This percentage is based on a numerator < 50 and may be unreliable; please use caution in interpreting.
All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.
Data Source: Maine Behavioral Risk Factor Surveillance System.
* Data not available for that year.

Table 3.4a. Knowledge of Individual Stroke Symptoms by Year, Maine Adults, 2001-2009

	Knew Sudden Confusion or Trouble Speaking are Symptoms				Knew Sudden Numbness or Weakness of Face, Arm, or Leg are Symptoms				Knew Sudden Trouble Seeing is a Symptom			
Year	Total Resp.	n	%	95% CI	Total Resp.	n	%	95% CI	Total Resp.	n	%	95% CI
2001	2,376	2,117	**88.6**	87.1-90.0	2,376	2,251	**94.7**	93.6-95.7	2,376	1,529	**63.7**	61.6-65.9
2004	3,373	3,003	**88.3**	86.9-89.6	3,369	3,215	**95.2**	94.3-96.2	3,370	2,249	**67.0**	65.1-68.9
2005	3,737	3,339	**88.0**	86.6-89.4	3,735	3,514	**93.3**	92.2-94.3	3,735	2,566	**68.2**	66.3-70.0
2009	3,894	3,656	**93.1**	91.7-94.4	3,891	3,747	**96.3**	95.3-97.2	3,891	2,894	**75.4**	73.5-77.2

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.
All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.
Data Source: Maine Behavioral Risk Factor Surveillance System.

Table 3.4b. Knowledge of Individual Stroke Symptoms by Year, Maine Adults, 2001-2009

	Knew Sudden Trouble Walking, Dizziness, or Loss of Balance are Symptoms				Knew Severe Headache with No Known Cause is a Symptom				Knew Chest Pain is Not a Symptom			
Year	Total Resp.	n	%	95% CI	Total Resp.	n	%	95% CI	Total Resp.	n	%	95% CI
2001	2,376	1,996	**84.8**	83.2-86.3	2,376	1,325	**54.9**	52.6-57.1	2,376	854	**36.6**	34.4-38.8
2004	3,367	2,792	**82.8**	81.2-84.3	3,366	1,876	**54.7**	52.7-56.8	3,369	1,218	**36.4**	34.5-38.4
2005	3,735	3,147	**84.5**	83.2-85.9	3,734	2,147	**55.1**	53.2-57.1	3,734	1,451	**38.0**	36.2-39.9
2009	3,892	3,471	**88.9**	87.4-90.4	3,892	2,393	**59.1**	56.9-61.2	3,892	1,575	**41.0**	38.9-43.1

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.
All %'s are weighted to be representative of the general Maine adult population and to adjust for non-response.
Data Source: Maine Behavioral Risk Factor Surveillance System.

Table 3.5. Stroke Hospitalization Rates by Year, Maine, 1993-2009

	Maine Total				Maine Males				Maine Females			
Year	Number of Hospital-izations	Crude Rate	Age-adjusted Rate	95% CI	Number of Hospital-izations	Crude Rate	Age-adjusted Rate	95% CI	Number of Hospital-izations	Crude Rate	Age-adjusted Rate	95% CI
1993	3,481	28.0	**26.9**	26.0 - 27.8	1,665	27.5	**31.8**	30.2 - 33.4	1,816	28.5	**23.3**	22.2 - 24.4
1994	3,726	30.0	**28.3**	27.4 - 29.3	1,761	29.2	**32.8**	31.3 - 34.4	1,965	30.8	**25.1**	24.0 - 26.2
1995	3,822	30.7	**28.7**	27.8 - 29.6	1,870	30.9	**34.1**	32.6 - 35.7	1,952	30.5	**24.7**	23.6 - 25.8
1996	4,068	32.6	**30.2**	29.3 - 31.1	2,004	33.0	**36.3**	34.7 - 37.9	2,064	32.2	**25.9**	24.7 - 27.0
1997	4,193	33.4	**30.6**	29.7 - 31.5	2,117	34.7	**37.6**	36.0 - 39.3	2,076	32.2	**25.5**	24.4 - 26.7
1998	3,980	31.6	**28.6**	27.7 - 29.5	1,883	30.8	**32.5**	31.0 - 34.0	2,097	32.4	**25.5**	24.4 - 26.6
1999	3,979	31.4	**28.1**	27.2 - 29.0	1,907	30.9	**32.4**	30.9 - 33.9	2,072	31.8	**24.8**	23.7 - 25.9
2000	3,880	30.4	**26.8**	25.9 - 27.6	1,907	30.7	**31.5**	30.1 - 33.0	1,973	30.1	**23.2**	22.2 - 24.3
2001	3,916	30.5	**26.7**	25.8 - 27.5	1,907	30.5	**30.9**	29.5 - 32.3	2,009	30.5	**23.5**	22.4 - 24.5
2002	3,865	29.9	**25.9**	25.1 - 26.7	1,824	28.9	**29.0**	27.7 - 30.4	2,041	30.7	**23.6**	22.5 - 24.6
2003	3,653	28.0	**23.9**	23.2 - 24.7	1,802	28.3	**27.6**	26.3 - 28.9	1,851	27.7	**20.9**	19.9 - 21.8
2004	3,627	27.5	**23.4**	22.6 - 24.2	1,702	26.5	**25.7**	24.5 - 27.0	1,925	28.6	**21.4**	20.4 - 22.4
2005	3,749	28.4	**23.6**	22.9 - 24.4	1,814	28.1	**26.4**	25.2 - 27.7	1,935	28.6	**21.2**	20.3 - 22.2
2006	3,773	28.5	**23.8**	23.0 - 24.5	1,894	29.3	**27.5**	26.3 - 28.8	1,879	27.8	**20.6**	19.7 - 21.6
2007	3,585	27.2	**22.3**	21.6 - 23.0	1,782	27.7	**25.7**	24.5 - 26.9	1,803	26.7	**19.6**	18.7 - 20.5
2008	3,502	26.6	**21.3**	20.6 - 22.1	1,752	27.3	**24.7**	23.5 - 25.9	1,750	26.0	**18.4**	17.6 - 19.3
2009	3,656	27.7	**21.9**	21.2 - 22.6	1,769	27.5	**24.3**	23.1 - 25.5	1,887	28.0	**19.7**	18.8 - 20.6

Stroke: ICD-9-CM 430-438; principal diagnosis.
Crude rates are hospitalizations per 10,000 population.
Age-adjusted rates are hospitalizations per 10,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 3.6. Stroke Hospitalizations by Selected Age Groups and Year, Maine, 1993-2009

	Age 35-64			Age 65-74			Age 75+		
Year	Number of Hospital-izations	Age-specific Rate	95% CI	Number of Hospital-izations	Age-specific Rate	95% CI	Number of Hospital-izations	Age-specific Rate	95% CI
1993	780	**17.1**	15.9 - 18.3	960	**100.3**	94.1 - 106.9	1,700	**222.0**	211.6 - 232.8
1994	814	**17.5**	16.3 - 18.7	1,077	**111.7**	105.1 - 118.5	1,786	**229.6**	219.0 - 240.5
1995	872	**18.4**	17.2 - 19.6	1,100	**113.7**	107.1 - 120.7	1,798	**226.7**	216.3 - 237.4
1996	883	**18.2**	17.0 - 19.4	1,139	**118.1**	111.3 - 125.1	1,986	**245.8**	235.1 - 256.9
1997	928	**18.6**	17.4 - 19.8	1,161	**120.2**	113.4 - 127.4	2,055	**249.2**	238.6 - 260.2
1998	874	**17.2**	16.1 - 18.4	1,145	**118.8**	112.0 - 125.8	1,924	**230.0**	219.9 - 240.5
1999	860	**16.5**	15.5 - 17.7	1,129	**117.6**	110.9 - 124.7	1,953	**227.9**	217.9 - 238.2
2000	861	**16.0**	15.0 - 17.1	1,065	**110.8**	104.3 - 117.7	1,912	**217.9**	208.3 - 227.9
2001	905	**16.6**	15.5 - 17.7	1,009	**105.3**	98.9 - 112.0	1,946	**217.8**	208.2 - 227.6
2002	909	**16.3**	15.3 - 17.4	962	**100.7**	94.4 - 107.3	1,947	**214.3**	204.9 - 224.1
2003	918	**16.3**	15.2 - 17.4	929	**96.8**	90.7 - 103.2	1,769	**191.4**	182.6 - 200.5
2004	903	**15.7**	14.7 - 16.8	810	**84.9**	79.2 - 91.0	1,869	**198.1**	189.2 - 207.3
2005	981	**16.9**	15.8 - 18.0	904	**94.2**	88.1 - 100.5	1,824	**188.7**	180.1 - 197.5
2006	1,046	**18.0**	16.9 - 19.1	843	**85.8**	80.1 - 91.8	1,836	**194.4**	185.6 - 203.5
2007	923	**15.9**	14.9 - 17.0	877	**88.3**	82.5 - 94.3	1,757	**183.7**	175.2 - 192.5
2008	893	**15.4**	14.4 - 16.4	853	**82.6**	77.2 - 88.3	1,730	**180.3**	171.9 - 189.0
2009	876	**15.3**	14.3 - 16.3	894	**82.5**	77.1 - 88.0	1,853	**190.6**	182.1 - 199.5

Stroke: ICD-9-CM 430-438; principal diagnosis.
Age-specific rates are hospitalizations per 10,000 population within that age group.
95% CI: 95% confidence interval of the age-specific rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 3.7. Stroke Hospitalizations by County of Residence, Maine, 2005-2009

County	Average Annual Number of Hospitalizations	Crude Rate	Age-adjusted rate	95% CI
Androscoggin	265	24.8	**21.1**	20.0 - 22.3
Aroostook	261	36.1	**25.7**	24.3 - 27.1
Cumberland	704	25.5	**21.8**	21.1 - 22.6
Franklin	75	25.1	**21.6**	19.5 - 24.0
Hancock	174	32.5	**24.4**	22.8 - 26.1
Kennebec	322	26.6	**21.9**	20.8 - 23.0
Knox	139	34.0	**23.4**	21.7 - 25.2
Lincoln	108	31.1	**20.9**	19.1 - 22.7
Oxford	158	27.8	**21.7**	20.2 - 23.3
Penobscot	449	30.3	**26.9**	25.8 - 28.0
Piscataquis	58	33.9	**24.0**	21.2 - 27.0
Sagadahoc	99	27.0	**23.1**	21.1 - 25.3
Somerset	157	30.5	**24.7**	23.0 - 26.5
Waldo	104	27.1	**22.8**	20.9 - 24.9
Washington	97	29.6	**20.6**	18.8 - 22.6
York	482	23.9	**20.1**	19.3 - 20.9
Maine total	3,653	27.7	**22.6**	22.2 - 22.9

Stroke: ICD-9-CM 430-438; principal diagnosis.
Crude rates are hospitalizations per 10,000 population.
Age-adjusted rates are hospitalizations per 10,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Data Source: Maine Inpatient Database, Maine Health Data Organization.

Table 3.8. Stroke Deaths by Year, U.S. and Maine, 1993-2009

	U.S. Total				Maine Total			
Year	Number of Deaths	Crude Rate	Age-adjusted Rate	95% CI	Total Deaths	Crude Rate	Age-adjusted Rate	95% CI
1993	149,780	57.6	**62.7**	62.4-63.0	718	57.8	**55.4**	51.5-59.7
1994	152,939	58.1	**62.6**	62.3-63.0	743	59.8	**56.3**	52.3-60.5
1995	157,600	59.2	**63.1**	62.8-63.4	729	58.6	**54.2**	50.3-58.3
1996	159,547	59.2	**62.5**	62.2-62.8	708	56.7	**52.2**	48.4-56.2
1997	159,392	58.4	**61.1**	60.8-61.4	764	60.9	**55.1**	51.3-59.2
1998	158,042	57.3	**59.3**	59.0-59.6	752	59.7	**53.6**	49.8-57.6
			Change from ICD-9 to ICD-10					
1999	167,366	60.0	**61.6**	61.3-61.9	878	69.3	**61.1**	57.1-65.3
2000	167,661	59.6	**60.9**	60.6-61.1	827	64.7	**56.2**	52.4-60.2
2001	163,538	57.4	**57.9**	57.6-58.2	820	63.8	**54.6**	50.9-58.5
2002	162,672	56.4	**56.2**	55.9-56.5	822	63.5	**53.7**	50.1-57.5
2003	157,689	54.2	**53.5**	53.2-53.8	801	61.3	**51.4**	47.9-55.1
2004	150,074	51.1	**50.0**	49.7-50.2	800	60.7	**50.9**	47.5-54.6
2005	143,579	48.4	**46.6**	46.3-46.8	694	52.5	**42.9**	39.7-46.2
2006	137,119	45.8	**43.6**	43.3-43.8	668	50.5	**41.2**	38.1-44.5
2007	135,952	45.1	**42.2**	42.0-42.5	662	50.3	**40.2**	37.1-43.4
2008	134,148	44.1	**40.7**	40.5 -41.0	672	51.0	**40.7**	37.7-44.0
2009	128,842	42.0	**38.9**	38.7 -39.1	640	48.5	**37.8**	34.9-40.9

Stroke: 1999-2009: ICD-10 codes I60-I69; 1993-1998 ICD-9 codes 430-434, 436-438; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.
U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 3.9. Stroke Deaths by Year and Gender, Maine, 1993-2009

	Maine Males				Maine Females			
Year	**Total Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**	**Total Deaths**	**Crude Rate**	**Age-adjusted Rate**	**95% CI**
1993	273	45.2	**59.5**	52.4-67.1	445	69.8	**52.3**	47.5-57.5
1994	274	45.4	**57.7**	50.9-65.1	469	73.4	**54.6**	49.7-59.9
1995	265	43.8	**56.1**	49.4-63.4	464	72.6	**52.4**	47.7-57.5
1996	285	46.9	**58.7**	51.9-66.1	423	65.9	**48.2**	43.6-53.1
1997	296	48.5	**60.9**	54.0-68.4	468	72.6	**51.9**	47.2-56.9
1998	296	48.4	**58.3**	51.7-65.4	456	70.5	**50.1**	45.6-55.0
				Change from ICD-9 to ICD-10				
1999	338	54.9	**64.4**	57.6-71.7	540	83.0	**57.5**	52.7-62.6
2000	309	49.7	**58.1**	51.7-65.1	518	79.0	**54.4**	49.8-59.4
2001	354	56.6	**63.2**	56.7-70.2	466	70.7	**47.8**	43.5-52.4
2002	339	53.8	**59.8**	53.6-66.6	483	72.7	**49.2**	44.8-53.9
2003	308	48.4	**53.2**	47.3-59.5	493	73.7	**50.1**	45.7-54.8
2004	303	47.1	**50.4**	44.9-56.5	497	73.7	**49.8**	45.5-54.5
2005	262	40.6	**42.0**	37.0-47.4	432	63.9	**42.6**	38.6-46.9
2006	251	38.8	**39.7**	34.9-45.1	417	61.8	**41.2**	37.3-45.5
2007	239	37.2	**37.8**	33.1-42.9	423	62.7	**40.9**	37.0-45.1
2008	270	42.0	**42.0**	37.1-47.4	402	59.6	**39.4**	35.6-43.6
2009	243	37.8	**37.5**	32.9-42.5	397	58.8	**37.4**	33.8-41.5

Stroke: 1999-2009: ICD-10 codes I60-I69; 1993-1998 ICD-9 codes 430-434, 436-438; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.
U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 3.10. Stroke Deaths by Selected Age Groups and Year, Maine, 1993-2009

	Age 35-64			Age 65-74			Age 75+		
Year	Number of Deaths	Age-specific Rate	95% CI	Number of Deaths	Age-specific Rate	95% CI	Number of Deaths	Age-specific Rate	95% CI
1993	53	**11.6**	8.7-15.2	115	**120.2**	99.2-144.2	543	**709.2**	650.8-771.4
1994	58	**12.5**	9.5-16.1	124	**128.6**	106.9-153.3	555	**713.4**	655.2-775.3
1995	48	**10.1**	7.5-13.4	122	**126.1**	104.7-150.6	558	**703.4**	646.3-764.3
1996	61	**12.5**	9.6-16.1	101	**104.7**	85.3-127.2	536	**663.4**	608.4-722.0
1997	58	**11.6**	8.8-15.0	107	**110.8**	90.8-133.9	595	**721.6**	664.8-782.0
1998	51	**10.0**	7.5-13.2	101	**104.8**	85.3-127.3	596	**712.5**	656.5-772.1
				Change from ICD-9 to ICD-10					
1999	70	**13.5**	10.5-17.0	111	**115.7**	95.1-139.3	694	**809.7**	750.6-872.3
2000	57	**10.6**	8.0-13.7	104	**108.2**	88.4-131.1	663	**755.7**	699.2-815.4
2001	54	**9.9**	7.4-12.9	119	**124.2**	102.9-148.6	646	**722.9**	668.2-780.8
2002	57	**10.2**	7.7-13.3	93	**97.3**	78.6-119.2	668	**735.4**	680.7-793.3
2003	77	**13.7**	10.8-17.1	87	**90.7**	72.6-111.8	635	**687.0**	634.6-742.6
2004	61	**10.6**	8.1-13.6	90	**94.3**	75.9-116.0	647	**685.7**	633.9-740.7
2005	68	**11.7**	9.1-14.8	90	**93.8**	75.4-115.3	535	**553.3**	507.4-602.3
2006	73	**12.6**	9.9-15.8	84	**85.5**	68.2-105.9	503	**532.7**	487.1-581.3
2007	59	**10.2**	7.7-13.1	79	**79.5**	63.0-99.1	522	**545.7**	499.9-594.6
2008	55	**9.5**	7.1-12.3	83	**80.4**	64.0-99.6	526	**548.3**	502.5-597.2
2009	47	**8.2**	6.0-10.9	77	**71.0**	56.0-88.8	514	**528.8**	484.1-576.6

Stroke: 1999-2009: ICD-10 codes I60-I69; 1993-1998 ICD-9 codes 430-434, 436-438; underlying cause of death.
Age-specific rates are deaths per 100,000 population within that age group.
95% CI: 95% confidence interval of the age-specific rate.
Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.

Table 3.11. Stroke Deaths by County of Residence, Maine, 2005-2009

County	Average Annual Number of Deaths	Crude Rate	Age-adjusted rate	95% CI
Androscoggin	54	50.2	**40.5**	35.8 - 45.8
Aroostook	42	58.4	**40.5**	35.2 - 46.4
Cumberland	117	42.5	**34.8**	32.0 - 37.8
Franklin	15	51.6	**44.8**	35.3 - 56.2
Hancock	34	62.8	**47.3**	40.4 - 55.2
Kennebec	66	54.9	**44.6**	39.9 - 49.7
Knox	25	60.1	**38.8**	32.2 - 46.7
Lincoln	23	67.1	**42.4**	34.9 - 51.2
Oxford	33	57.9	**45.1**	38.4 - 52.7
Penobscot	75	50.5	**46.0**	41.4 - 50.9
Piscataquis	12	70.8	**50.4**	38.4 - 65.5
Sagadahoc	30	82.0	**71.6**	60.5 - 84.1
Somerset	25	49.2	**40.1**	33.4 - 47.8
Waldo	20	52.5	**45.9**	37.3 - 55.9
Washington	19	56.7	**37.9**	30.5 - 46.8
York	77	37.9	**31.8**	28.7 - 35.2
Maine total	667	50.6	**40.5**	39.1 - 41.9
U.S. total	135,928	45.1	**42.4**	42.3 - 42.5

Stroke: ICD-10 codes I60-I69; underlying cause of death.
Crude rates are deaths per 100,000 population.
Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.
95% CI: 95% confidence interval of the age-adjusted rate.
Maine Data Source: Maine Mortality Data; Data, Research, and Vital Statistics, Maine CDC.
U.S. Data Source: Compressed Mortality Files accessed through CDC Wonder.

Table 4.1. Prevalence and Annual Cost of Cardiovascular Conditions among Medicaid Beneficiaries, Maine

Condition	Beneficiaries	Beneficiaries with condition		Cost per beneficiary	Total Medicaid costs
		Prevalence (%)	Number		
Heart Disease	293,966	7.6	22,228	$1,300	$28,860,000
CHF	293,966	1.2	3,467	$3,580	$12,412,000
Hypertension	293,966	16.2	47,677	$1,950	$93,052,000
Stroke	293,966	2.6	7,762	$7,090	$55,033,000

Source: Centers for Disease Control and Prevention. Chronic Disease Cost Calculator: Version 1.0.3225. Available at: http://www.cdc.gov/nccdphp/resources/calculator.htm.
Costs are in 2007 dollars.
CHF: Congestive Heart Failure.
Prevalence was defined as the percentage of the Medicaid population reporting treatment for or problems with the disease in the previous year.
Costs should not be summed across conditions, as this may overestimate the total costs. For instance, the estimates for Hypertension include the costs of complications including heart disease, CHF and stroke.

Table 5.1 High Blood Pressure Prevalence by Year, U.S. and Maine Adults, 1995-2010

	U.S. Median^		Maine Total			
Year	**Number of States**	**%**	**Total Resp.**	**N**	**%**	**95% CI**
1995	49	**22.2**	1,278	288	**20.9**	18.5-23.2
1996	*	*	1,681	417	**23.2**	21.0-25.3
1997	51	**23.1**	1,691	401	**22.8**	20.7-25.0
1998	*	*	*	*	*	*
1999	51	**23.9**	1,669	490	**26.6**	24.3-29.0
2000	*	*	4,568	1,268	**26.6**	24.5-28.7
2001	51	**25.6**	2,412	663	**25.2**	23.3-27.0
2002	*	*	*	*	*	*
2003	51	**24.8**	2,387	660	**26.0**	24.1-28.0
2004	*	*	*	*	*	*
2005	51	**25.5**	3,956	1,131	**25.6**	24.0-27.1
2006	*	*	*	*	*	*
2007	51	**27.8**	6,821	2,300	**28.7**	27.3-30.0
2008	*	*	2,593	1,016	**33.2**	31.0-35.4
2009	51	**28.7**	8,059	3,094	**30.0**	28.8-31.3
2010	*	*	*	*	*	*

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

^Includes the 50 states and Washington, D.C.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

Data Source: Behavioral Risk Factor Surveillance System.

* Data not available for that year.

Table 5.2 High Blood Pressure Prevalence by Year and Gender, Maine Adults, 1995-2010

	Maine Males				Maine Females			
Year	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
1995	562	111	**18.6**	15.2-22.0	716	177	**23.0**	19.6-26.4
1996	703	159	**21.6**	18.5-24.7	978	258	**24.6**	21.7-27.5
1997	746	183	**22.3**	19.1-25.5	945	218	**23.3**	20.5-26.1
1998	*	*	*	*	*	*	*	*
1999	735	203	**23.5**	20.2-26.9	934	287	**29.5**	26.3-32.7
2000	1,878	507	**26.6**	23.4-29.9	2,690	761	**26.6**	23.8-29.4
2001	1,024	286	**25.3**	22.5-28.1	1,388	377	**25.1**	22.7-27.5
2002	*	*	*	*	*	*	*	*
2003	939	274	**27.0**	23.9-30.0	1,448	386	**25.2**	22.7-27.6
2004	*	*	*	*	*	*	*	*
2005	1,555	457	**26.6**	24.2-29.1	2,401	674	**24.6**	22.7-26.5
2006	*	*	*	*	*	*	*	*
2007	2,546	914	**31.1**	28.9-33.3	4,275	1,386	**26.4**	24.8-28.0
2008	1,027	450	**37.2**	33.6-40.9	1,566	566	**29.5**	26.9-32.1
2009	3,070	1,224	**31.4**	29.4-33.5	4,989	1,870	**28.7**	27.3-30.2
2010	*	*	*	*	*	*	*	*

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

^Includes the 50 states and Washington, D.C.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

Data Source: Behavioral Risk Factor Surveillance System.

* Data not available for that year.

Table 5.3 Maine Adults with High Blood Pressure Taking Medication for High Blood Pressure, Prevalence by Year and Gender, Maine Adults, 2000-2010

	Maine Total				Maine Males			Maine Females		
Year	**Total Resp.**	**n**	**%**	**95% CI**	**n**	**%**	**95% CI**	**n**	**%**	**95% CI**
2001	660	456	**68.3**	64.4-72.2	183	**63.7**	57.6-69.7	273	**72.6**	67.7-77.5
2002	*	*	*	*	*	*	*	*	*	*
2003	660	503	**73.7**	69.7-77.7	194	**67.6**	61.2-74.0	309	**79.7**	75.1-84.3
2004	*	*	*	*	*	*	*	*	*	*
2005	1,131	895	**76.5**	73.5-79.5	326	**69.5**	64.6-74.3	569	**83.6**	80.3-86.9
2006	*	*	*	*	*	*	*	*	*	*
2007	2,295	1,908	**76.3**	73.5-79.1	705	**71.0**	66.6-75.4	1,203	**82.1**	78.8-85.4
2008	1,013	843	**78.4**	74.8-81.9	366	**75.3**	69.9-80.7	477	**81.9**	77.6-86.2
2009	3,089	2,597	**77.8**	75.4-80.1	1,000	**73.0**	69.1-76.9	1,597	**82.6**	80.3-84.9
2010	*	*	*	*	*	*	*	*	*	*

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

Data Source: Behavioral Risk Factor Surveillance System.

* Data not available for that year.

Table 5.4 High Blood Pressure and Taking Medication for High Blood Pressure, Prevalence Rates by Demographics, Maine Adults, 2009

Demographic Groups	Diagnosed with High Blood Pressure				Taking Medication for High Blood Pressure**			
	Total Respon-dents	n	%	95% CI	Total Respon-dents	n	%	95% CI
Total	8,059	3,094	**30.0**	28.8-31.3	3,089	2,597	**77.8**	75.4-80.1
Gender								
Male	3,070	1,224	**31.4**	29.4-33.5	1,223	1,000	**73.0**	69.1-76.9
Female	4,989	1,870	**28.7**	27.3-30.2	1,866	1,597	**82.6**	80.3-85.0
Race/Ethnicity								
Non-Hispanic White	7,703	2,962	**30.3**	29.0-31.6	2,957	2,493	**78.0**	75.6-80.4
Other Race or Hispanic	258	90	**22.7**	17.0-28.4	-	-	**-**	-
Age								
18-24	206	12	**6.5***	2.8-10.2*	-	-	**-**	-
25-34	507	54	**12.0**	8.4-15.7	-	-	**-**	-
35-44	1,098	188	**18.6**	15.9-21.3	188	109	**54.3**	46.0-52.5
45-54	1,741	471	**26.9**	24.5-29.2	471	352	**73.5**	68.8-78.2
55-64	2,053	877	**41.3**	38.9-43.7	847	708	**83.2**	80.4-86.1
65+	2,454	1,492	**60.1**	57.8-62.3	1,489	1,378	**93.0**	91.6-94.4
Education								
Less Than H.S.	471	241	**36.9**	31.3-42.5	240	213	**85.8**	78.7-92.9
H.S. or G.E.D.	2,567	1,114	**34.0**	31.7-36.4	1,112	944	**76.8**	72.6-81.1
Some Post-H.S.	2,064	804	**28.5**	26.2-30.9	804	668	**78.4**	74.1-82.7
College Graduate	2,946	931	**26.4**	24.5-28.3	929	768	**76.4**	72.5-80.4
Household Income								
Less than $15,000	904	464	**40.4**	35.7-45.1	464	398	**78.7**	70.9-86.7
$15,000-24,999	1,240	593	**37.7**	34.2-41.2	592	517	**85.1**	81.0-89.2
$25,000-34,999	848	337	**33.0**	29.1-37.0	336	294	**82.6**	76.3-88.8
$35,000-49,999	1,216	451	**30.8**	27.7-33.9	451	354	**74.4**	69.3-79.6
$50,000+	2,920	828	**23.9**	22.1-25.7	828	681	**74.3**	70.0-78.5

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

"-"=Data suppressed as they do not meet standards of statistical reliability as 95% CI half-width >10 or unweighted denominator <50.

H.S. =High School.

*These percentages are based on a numerator < 50 and may be unreliable; please use caution in interpreting.

** Among those who reported they have been diagnosed with high blood pressure.

Data Source: Behavioral Risk Factor Surveillance System.

Table 5.5 High Blood Pressure Prevalence Rates by County of Residence, Maine Adults, 2009

Demographic Groups	Diagnosed with High Blood Pressure				Taking Medication for High Blood Pressure*			
	Total Respon-dents	n	%	95% CI	Total Respon-dents	n	%	95% CI
County								
Androscoggin	475	186	**31.3**	26.3-36.3	186	162	**82.2**	74.3-90.0
Aroostook	406	158	**28.7**	23.6-33.9	157	132	**78.2**	68.5-87.8
Cumberland	1,319	487	**29.5**	26.5-32.5	487	406	**76.5**	70.5-82.4
Franklin	298	113	**28.2**	22.0-34.4	-	-	**-**	-
Hancock	378	143	**30.4**	25.1-35.8	143	111	**71.0**	61.3-80.8
Kennebec	636	245	**30.4**	25.8-34.9	245	207	**78.4**	69.0-87.8
Knox	451	192	**35.8**	30.5-41.0	192	165	**80.4**	72.5-88.2
Lincoln	401	159	**31.5**	26.2-36.7	159	140	**84.2**	77.1-91.2
Oxford	340	125	**27.5**	22.1-33.0	-	-	**-**	-
Penobscot	725	291	**32.2**	28.0-36.5	291	242	**75.0**	66.5-83.4
Piscataquis	195	91	**37.5**	29.3-45.7	-	-	**-**	-
Sagadahoc	334	128	**27.5**	21.7-33.3	-	-	**-**	-
Somerset	277	104	**28.2**	22.3-34.1	104	85	**79.8**	70.4-89.2
Waldo	367	132	**28.9**	23.3-34.5	-	-	**-**	-
Washington	350	133	**29.2**	23.8-34.7	133	111	**77.2**	68.3-86.2
York	950	347	**28.7**	25.4-32.1	346	294	**78.5**	72.2-84.7
Maine Total	8,059	3,094	**30.0**	28.8-31.3	3,089	2,597	**77.8**	75.4-80.1

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

"-"=Data suppressed as they do not meet standards of statistical reliability as 95% CI half-width >10 or unweighted denominator <50.

* Among those who reported they have been diagnosed with high blood pressure.

Data Source: Behavioral Risk Factor Surveillance System.

Table 5.6 Maine Adults with High Blood Pressure taking Actions to Control Their High Blood Pressure, by Year and Gender, 2007-2009

Actions		Maine Total			Maine Males			Maine Females		
Year	Total Resp.	n	%	95% CI	n	%	95% CI	n	%	95% CI
Changing Eating Habits										
2007	1,334	924	**67.2**	63.6-70.7	364	**66.4**	61.1-71.6	560	**68.0**	63.4-72.7
2008	*	*	*	*	*	*	*	*	*	*
2009	1,517	1,045	**68.0**	64.8-71.3	377	**63.6**	58.2-68.9	668	**72.4**	68.8-76.0
Reducing Salt Intake										
2007	1,339	917	**66.3**	62.7-69.9	358	**64.1**	58.7-69.4	559	**68.8**	64.1-73.4
2008	*	*	*	*	*	*	*	*	*	*
2009	1,523	1,065	**66.6**	63.3-69.9	389	**62.2**	56.7-67.7	676	**70.8**	67.2-74.5
Reducing Alcohol Use										
2007	1,337	490	**36.8**	33.5-40.2	222	**39.1**	33.9-44.3	268	**34.4**	30.1-38.6
2008	*	*	*	*	*	*	*	*	*	*
2009	1,518	507	**34.7**	31.5-37.8	209	**36.4**	31.3-41.5	298	**33.0**	29.4-36.6
Exercising										
2007	1,333	977	**73.7**	70.7-76.8	409	**74.9**	70.2-79.6	568	**72.5**	68.6-76.4
2008	*	*	*	*	*	*	*	*	*	*
2009	1,511	1,088	**72.1**	69.0-75.1	413	**71.4**	66.4-76.4	675	**72.7**	69.2-76.1

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

* Data not available for that year.

Data Source: Behavioral Risk Factor Surveillance System.

Table 5.7 Maine Adults with High Blood Pressure taking Actions to Control Their High Blood Pressure, by Demographics, 2009

	Changing Eating Habits				Reducing Salt Intake				Reducing Alcohol Use				Exercising			
Demographic Groups	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
Total	1,517	1,045	**68.0**	64.8-71.3	1,523	1,065	**66.6**	63.3-69.9	1,518	507	**34.7**	31.5-37.8	1,511	1,088	**72.1**	69.0-75.1
Gender																
Male	588	377	**63.6**	58.2-68.9	586	389	**62.2**	56.7-67.7	586	209	**36.4**	31.3-41.5	582	413	**71.4**	66.5-76.4
Female	929	668	**72.4**	68.8-76.0	937	676	**70.8**	67.2-74.5	932	298	**33.0**	29.4-36.6	929	675	**72.7**	69.2-76.1
Race																
Non-Hispanic White	1,458	1,005	**68.1**	64.8-71.4	1,463	1,028	**66.8**	63.4-70.2	1,459	487	**34.5**	31.3-37.6	1,451	1,052	**72.7**	69.6-75.8
Non-White or Hispanic	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-
Age																
18-24	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-
25-34	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-
35-44	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-
45-54	238	171	**73.2**	66.9-79.6	240	166	**66.5**	59.3-73.7	240	106	**44.0**	36.7-51.4	238	165	**70.2**	63.4-77.0
55-64	438	355	**80.8**	76.6-85.0	439	325	**74.2**	69.7-78.8	436	175	**42.7**	37.5-47.9	437	330	**76.1**	71.6-80.5
65+	382	246	**66.3**	61.0-71.5	386	270	**69.6**	64.5-74.8	385	107	**29.3**	24.1-34.5	381	278	**74.0**	69.1-78.9
Education																
Less than High School	-	-	**-**	-	-	-	**-**	-	115	22	**20.3***	11.7-29.0*	-	-	**-**	-
High School or GED	538	368	**65.0**	58.8-71.1	537	379	**66.0**	59.8-72.3	535	188	**35.3**	29.6-41.0	533	374	**69.3**	63.6-75.0
Some Post-High School	402	290	**71.1**	65.4-76.7	406	284	**67.6**	61.8-73.4	404	135	**34.1**	28.4-39.8	401	289	**70.6**	65.1-76.1
College Graduate	459	315	**70.2**	65.1-75.4	461	322	**66.9**	61.4-72.4	460	162	**37.7**	32.2-43.2	460	348	**78.9**	74.4-83.3
Household Income																
Less than $15,000	-	-	**-**	-	-	-	**-**	-	215	58	**24.6**	17.3-32.0	-	-	**-**	-
$15,000-$24,999	309	211	**68.3**	61.9-74.6	311	226	**70.1**	63.5-76.7	308	97	**33.2**	26.8-39.6	306	219	**70.7**	64.4-77.1
$25,000- $34,999	157	106	**65.3**	55.8-74.9	158	107	**62.6**	52.9-72.4	158	49	**30.4***	22.0-38.8*	158	111	**73.2**	64.9-81.5
$35,000- $49,999	210	155	**74.5**	67.5-81.5	211	160	**74.8**	67.8-81.8	211	82	**43.4**	34.9-51.9	207	163	**76.5**	68.8-84.1
$50,000+	407	297	**72.4**	67.0-77.8	408	276	**64.5**	58.7-70.3	409	157	**37.1**	31.4-42.8	408	308	**77.3**	72.6-82.0

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

"-"=Data suppressed as they do not meet standards of statistical reliability as 95% CI half-width >10 or unweighted denominator <50.

*This percentage is based on a numerator < 50 and may be unreliable; please use caution in interpreting.

Data Source: Behavioral Risk Factor Surveillance System.

Table 5.8 Maine Adults with High Blood Pressure Advised by their Healthcare Professional to take Actions to Control their High Blood Pressure, by Year and Gender, 2007-2009

Actions		Maine Total			Maine Males			Maine Females		
Year	Total Resp.	n	%	95% CI	n	%	95% CI	n	%	95% CI
Changing Eating Habits										
2007	1,335	821	**61.4**	57.7-65.1	351	**64.3**	58.6-69.9	470	**58.2**	53.6-62.8
2008	*	*	*	*	*	*	*	*	*	*
2009	1,519	873	**59.5**	56.2-62.7	354	**62.4**	57.1-67.7	519	**56.6**	52.8-60.4
Reducing Salt Intake										
2007	1,335	884	**62.5**	58.7-66.2	352	**60.5**	54.8-66.3	532	**64.6**	59.9-69.3
2008	*	*	*	*	*	*	*	*	*	*
2009	1,518	995	**63.7**	60.4-67.0	389	**61.4**	55.9-66.9	606	**65.8**	62.2-69.5
Reducing Alcohol Use										
2007	1,337	432	**33.8**	30.5-37.1	207	**38.2**	33.1-43.4	225	**28.9**	24.9-33.0
2008	*	*	*	*	*	*	*	*	*	*
2009	1,522	403	**29.1**	26.1-32.1	220	**36.9**	31.9-41.9	183	**21.6**	18.2-24.9
Exercising										
2007	1,330	1,056	**76.9**	73.2-80.7	423	**75.7**	69.8-81.5	633	**78.3**	73.9-82.8
2008	*	*	*	*	*	*	*	*	*	*
2009	1,515	1,158	**76.8**	73.9-79.8	451	**75.9**	70.7-81.1	707	**77.7**	74.7-80.8

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

* Data not available for that year.

Data Source: Behavioral Risk Factor Surveillance System.

Table 5.9 Maine Adults with High Blood Pressure Advised by their Healthcare Professional to take Actions to Control their High Blood Pressure, by Demographics, 2009

	Change Eating Habits				Reduce Salt Intake				Reduce Alcohol Use				Exercise			
Demographic Groups	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**	**Total Resp.**	**n**	**%**	**95% CI**
Total	1,519	873	**59.5**	56.2-62.7	1,518	995	**63.7**	60.4-66.9	1,522	403	**29.1**	26.1-32.1	1,515	1,158	**76.8**	73.9-79.8
Gender																
Male	589	354	**62.4**	57.1-67.7	588	389	**61.4**	55.9-66.9	589	220	**36.9**	31.9-41.9	585	451	**75.9**	70.7-81.1
Female	930	519	**56.6**	52.9-60.4	930	606	**65.8**	62.2-69.5	933	183	**21.6**	18.3-24.9	930	707	**77.7**	74.7-80.8
Race/ Ethnicity																
Non-Hispanic White	1,460	840	**59.5**	56.2-62.9	1,460	954	**63.2**	59.8-66.6	1,463	385	**29.0**	25.9-32.0	1,456	1,114	**76.9**	73.9-80.0
Non-White or Hispanic	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-
Age																
18-24	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-
25-34	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-
35-44	89	62	**73.2**	63.3-83.1	-	-	**-**	-	-	-	**-**	-	89	71	**81.4**	72.7-90.2
45-54	239	165	**68.9**	62.2-75.7	239	157	**62.6**	55.4-69.9	239	89	**40.3**	32.9-47.7	240	194	**81.6**	76.0-87.2
55-64	438	298	**68.8**	64.0-73.6	435	298	**70.2**	65.4-74.9	439	145	**33.3**	28.4-38.1	436	353	**81.8**	77.7-85.8
65+	385	195	**50.5**	44.9-56.2	386	246	**64.9**	59.5-70.2	386	77	**22.4**	17.4-27.4	384	289	**75.5**	70.7-80.3
Education																
Less than High School	-	-	**-**	-	-	-	**-**	-	115	29	**25.0***	15.7-34.4*	-	-	**-**	-
High School or GED	536	306	**59.2**	53.2-65.3	538	366	**65.9**	59.8-72.1	536	142	**30.2**	24.7-35.7	532	397	**73.1**	67.0-79.1
Some Post-High School	404	237	**62.0**	56.3-67.6	405	267	**64.4**	58.5-70.3	406	101	**27.2**	21.7-32.6	404	321	**80.7**	76.1-85.3
College Graduate	461	267	**60.1**	54.7-65.5	458	284	**61.3**	55.6-67.0	461	130	**30.3**	25.1-35.5	460	356	**80.8**	76.7-84.9
Household Income																
Less than $15,000	215	115	**49.6**	39.0-60.2	216	142	**56.1**	44.8-67.4	215	49	**21.3***	14.4-28.1*	214	162	**66.8**	54.5-79.1
$15,000-$24,999	310	166	**56.8**	50.2-63.5	308	199	**65.6**	58.9-72.3	310	70	**25.6**	19.4-31.7	309	222	**72.8**	66.9-78.7
$25,000- $34,999	158	99	**65.4**	56.7-74.1	158	112	**66.1**	56.3-75.9	158	49	**32.0***	23.2-40.8*	158	127	**80.7**	73.7-87.7
$35,000- $49,999	212	128	**58.8**	50.5-67.1	212	140	**64.8**	56.7-73.0	212	57	**30.0**	22.0-38.0	212	167	**80.0**	73.5-86.4
$50,000+	406	262	**67.4**	62.2-72.7	405	258	**62.8**	57.1-68.5	408	148	**38.3**	32.4-44.1	406	335	**84.1**	80.1-88.2

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

"-"=Data suppressed as they do not meet standards of statistical reliability as 95% CI half-width >10 or unweighted denominator <50.

*This percentage is based on a numerator < 50 and may be unreliable; please use caution in interpreting.

Data Source: Behavioral Risk Factor Surveillance System.

Table 5.10. Adults who have had their Cholesterol Levels Checked within the Past 5 Years, by Year, U.S. and Maine, 1995-2010

	U.S. Median^		Maine Total			
Year	**Number of States**	**%**	**Total Resp.**	**n**	**%**	**95% CI**
1995	49	**67.9**	1,245	864	**65.1**	62.0-68.2
1996	*	*	*	*	*	*
1997	51	**68.9**	1,646	1,215	**71.8**	69.3-74.4
1998	*	*	*	*	*	*
1999	51	**69.0**	1,616	1,221	**73.2**	70.7-75.8
2000	*	*	*	*	*	*
2001	51	**72.4**	2,343	1,862	**76.9**	74.9-79.0
2002	*	*	*	*	*	*
2003	51	**72.9**	2,315	1,875	**77.5**	75.4-79.6
2004	*	*	*	*	*	*
2005	51	**73.0**	3,859	3,217	**78.7**	76.9-80.5
2006	*	*	*	*	*	*
2007	51	**74.8**	6,653	5,722	**81.3**	79.9-82.7
2008	*	*	2,522	2,188	**80.2**	77.8-82.6
2009	51	**77.0**	7,894	6,999	**82.6**	81.3-84.0
2010	*	*	*	*	*	*

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

^Includes the 50 states and Washington, D.C.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

Data Source: Behavioral Risk Factor Surveillance System.

* Data not available for that year.

Table 5.11 Adults who have had their Cholesterol Levels Checked within the Past 5 Years, by Year and Gender, Maine, 1995-2010

		Maine Males			Maine Females		
Year	**Total Resp.**	**n**	**%**	**95% CI**	**n**	**%**	**95% CI**
1995	1,245	356	**59.1**	54.6-63.6	508	**70.6**	66.7-74.5
1996	*	*	*	*	*	*	*
1997	1,646	512	**67.9**	64.0-71.8	703	**75.5**	72.3-78.6
1998	*	*	*	*	*	*	*
1999	1,616	515	**70.5**	66.4-74.5	706	**75.7**	72.5-79.0
2000	*	*	*	*	*	*	*
2001	2,343	754	**73.0**	69.8-76.2	1,108	**80.5**	78.0-83.1
2002	*	*	*	*	*	*	*
2003	2,315	718	**74.6**	71.2-78.1	1,157	**80.1**	77.6-82.6
2004	*	*	*	*	*	*	*
2005	3,859	1,214	**75.4**	72.5-78.3	2,003	**81.7**	79.5-83.9
2006	*	*	*	*	*	*	*
2007	6,653	2,055	**78.4**	76.1-80.6	3,667	**84.0**	82.3-85.8
2008	2,522	855	**76.9**	72.8-80.9	1,333	**83.3**	80.7-85.9
2009	7,894	2,622	**79.7**	77.5-81.9	4,377	**85.4**	83.8-86.9
2010	*	*	*	*	*	*	*

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

Data Source: Behavioral Risk Factor Surveillance System.

* Data not available for that year.

Table 5.12 Adults who have High Cholesterol by Year and Gender, U.S and Maine, 1995-2010**

	U.S. Median^		Maine Total			
Year	**Number of States**	**%**	**Total Resp.**	**n**	**%**	**95% CI**
1995	49	**28.1**	915	283	**29.6**	26.3-32.9
1996	*	*	1,251	401	**31.4**	28.5-34.3
1997	51	**28.8**	1,313	423	**32.2**	29.3-35.0
1998	*	*	*	*	*	*
1999	51	**30.1**	1,295	430	**31.2**	28.4-34.0
2000	*	*	*	*	*	*
2001	51	**30.2**	1,991	629	**30.3**	28.1-32.5
2002	*	*	*	*	*	*
2003	51	**33.2**	2,013	712	**33.6**	31.4-35.9
2004	*	*	*	*	*	*
2005	51	**35.6**	3,403	1,325	**36.2**	34.4-38.1
2006	*	*	*	*	*	*
2007	51	**37.6**	6,059	2,679	**40.2**	38.6-41.8
2008	*	*	2,306	1,077	**41.2**	38.8-43.6
2009	51	**37.5**	7,315	3,301	**38.8**	37.4-40.2
2010	*	*	*	*	*	*

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

^Includes the 50 states and Washington, D.C.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

** Among those who reported they had their blood cholesterol checked.

Data Source: Behavioral Risk Factor Surveillance System.

* Data not available for that year.

Table 5.13 Adults who have High Cholesterol by Year and Gender, U.S and Maine, 1995-2010**

		Maine Males			Maine Females		
Year	**Total Resp.**	**n**	**%**	**95% CI**	**n**	**%**	**95% CI**
1995	915	104	**27.4**	22.5-32.3	179	**31.3**	27.2-35.5
1996	1,251	155	**31.4**	27.0-35.9	246	**31.4**	27.9-35.0
1997	1,313	179	**32.7**	28.4-37.0	244	**31.7**	28.1-35.4
1998	*	*	*	*	*	*	*
1999	1,295	194	**31.9**	27.5-36.2	236	**30.6**	27.0-34.2
2000	*	*	*	*	*	*	*
2001	1,991	272	**31.4**	28.0-34.9	357	**29.4**	26.6-32.2
2002	*	*	*	*	*	*	*
2003	2,013	293	**35.1**	31.5-38.7	419	**32.3**	29.5-35.2
2004	*	*	*	*	*	*	*
2005	3,403	538	**38.5**	35.5-41.5	787	**34.2**	31.9-36.5
2006	*	*	*	*	*	*	*
2007	6,059	1,010	**42.3**	39.8-44.9	1,669	**38.3**	36.4-40.2
2008	2,306	458	**44.6**	40.7-48.4	619	**38.2**	35.2-41.2
2009	7,315	1,340	**42.0**	39.7-44.2	1,961	**36.1**	34.4-37.7
2010	*	*	*	*	*	*	*

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

Data Source: Behavioral Risk Factor Surveillance System.

** Among those who reported they had their blood cholesterol checked.

* Data not available for that year.

Table 5.14 Cholesterol-Related Prevalence Rates by Demographics, Maine Adults, 2009

Demographic Groups	Blood Cholesterol Checked within Past 5 Years				Diagnosed with High Cholesterol**			
	Total Resp.	n	%	95% CI	Total Resp.	n	%	95% CI
Total	7,894	6,999	**82.6**	81.3-84.0	7,315	3,301	**38.8**	37.4-40.2
Gender								
Male	3,026	2,622	**79.7**	77.5-81.9	2,742	1,340	**42.0**	39.7-44.2
Female	4,868	4,377	**85.4**	83.8-86.9	4,573	1,961	**36.1**	34.4-37.7
Race/Ethnicity								
Non-Hispanic White	7,546	6,710	**83.0**	81.7-84.4	7,011	3,167	**39.1**	37.7-40.5
Other Race or Hispanic	254	207	**73.3**	64.8-81.7	217	97	**34.3**	26.2-42.3
Age								
18-24	178	86	**50.2**	42.2-58.2	93	5	**4.0***	0.3-7.6*
25-34	477	311	**65.1**	60.0-70.1	330	54	**17.9**	13.0-22.8
35-44	1,082	875	**80.6**	77.9-83.2	962	265	**27.4**	24.3-30.6
45-54	1,721	1,524	**88.8**	87.0-90.5	1,625	662	**41.7**	39.0-44.5
55-64	2,037	1,889	**93.4**	92.1-94.6	1,946	999	**49.8**	47.3-52.4
65+	2,399	2,314	**96.5**	95.7-97.4	2,359	1,316	**55.1**	52.8-57.4
Education								
Less Than H.S.	444	381	**75.1**	68.5-81.6	399	218	**44.1**	37.7-50.5
H.S. or G.E.D.	2,510	2,155	**76.7**	73.9-79.5	2,253	1,111	**44.2**	41.6-46.8
Some Post-H.S.	2,030	1,793	**82.1**	79.4-84.8	1,882	855	**37.1**	34.4-39.9
College Graduate	2,901	2,662	**89.3**	87.7-91.0	2,771	1,114	**35.3**	33.2-37.5
Household Income								
Less than $15,000	868	740	**74.7**	69.1-80.2	786	424	**46.1**	41.6-50.6
$15,000-24,999	1,213	1,067	**80.8**	76.9-84.7	1,115	552	**43.4**	39.6-47.3
$25,000-34,999	830	714	**82.0**	78.2-85.7	758	345	**39.8**	35.4-44.2
$35,000-49,999	1,203	1,043	**79.7**	76.4-83.0	1,086	499	**40.0**	36.5-43.6
$50,000+	2,886	2,644	**88.0**	86.2-89.7	2,746	1,093	**35.6**	33.5-37.7

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.

*This percentage is based on a numerator < 50 and may be unreliable; please use caution in interpreting.

**Among those who reported they had their blood cholesterol checked.

All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.

Data Source: Behavioral Risk Factor Surveillance System.

Table 5.15 Cholesterol-Related Prevalence Rates by County of Residence, Maine Adults, 2009

Demographic Groups	Blood Cholesterol Checked within Past 5 Years				Diagnosed with High Cholesterol*			
	Total Resp.	n	%	95% CI	Total Resp.	n	%	95% CI
County								
Androscoggin	469	419	**84.4**	79.6-89.1	434	202	**39.7**	34.1-45.3
Aroostook	404	355	**79.8**	73.7-85.9	366	175	**39.1**	33.0-45.2
Cumberland	1,296	1,189	**86.4**	83.3-89.5	1,227	535	**37.8**	34.5-41.1
Franklin	286	254	**84.1**	77.0-91.2	267	130	**40.8**	32.9-48.7
Hancock	371	317	**78.0**	71.8-84.1	340	162	**42.9**	36.7-49.1
Kennebec	618	555	**83.8**	78.8-88.9	573	253	**37.4**	32.8-42.1
Knox	443	382	**79.7**	74.1-85.3	404	190	**41.8**	36.2-47.5
Lincoln	394	353	**82.6**	76.2-89.0	368	165	**40.4**	34.5-46.2
Oxford	336	302	**81.9**	75.1-88.7	316	142	**38.1**	32.0-44.2
Penobscot	713	615	**80.6**	76.1-85.0	654	281	**35.3**	31.0-39.6
Piscataquis	189	162	**76.1**	67.1-85.1	176	85	**44.9**	36.2-53.6
Sagadahoc	325	278	**79.9**	73.5-86.2	294	129	**37.4**	30.3-44.5
Somerset	275	252	**83.1**	75.6-90.7	261	112	**37.6**	30.8-44.3
Waldo	358	300	**75.8**	69.0-82.6	313	141	**40.3**	33.2-47.3
Washington	334	291	**79.3**	72.6-86.1	304	139	**40.1**	33.5-46.6
York	930	839	**83.8**	80.0-87.7	877	398	**40.2**	36.3-44.2
Maine Total	7,894	6,999	**82.6**	81.3-84.0	7,315	3,301	**38.8**	37.4-40.2

Total Resp. = Total Respondents (unweighted denominator); n = unweighted numerator; 95% CI = 95% Confidence Interval.
All %s are weighted to be representative of the general Maine adult population and to adjust for non-response.
* Among those who reported they had their blood cholesterol checked.
Data Source: Behavioral Risk Factor Surveillance System.

Table 5.16 Prevalence of Cardiovascular Disease Risk Factors, Maine Adults

	U.S. Median^		Maine			
	Number of States^	Median %	Total Respondents	n	%	95% CI
Participate in 150 minutes or more of physical activity per week (2011)						
Yes	51	**51.7**	12,356	7,027	**56.7**	55.5-57.9
No	51	**48.3**	12,356	5,329	**43.3**	42.1-44.5
Eat 5 or more servings of fruits or vegetables per day (2009)						
Yes	51	**23.4**	7,895	2,353	**28.0**	26.7-29.3
No	51	**76.6**	7,895	5,542	**72.0**	70.7-73.3
Weight Status (2011)						
Underweight	51	**1.8**	12,643	182	**1.6**	1.2-1.9
Healthy Weight	51	**34.5**	12,643	4,287	**33.4**	32.3-34.5
Overweight	51	**35.7**	12,643	4,728	**37.2**	36.1-38.4
Obese	51	**27.8**	12,643	3,446	**27.8**	26.8-28.9
Current Smoker (2011)						
Yes	51	**21.2**	13,166	2,219	**22.8**	21.7-23.9
No	51	**78.8**	13,166	10,947	**77.2**	76.2-78.3
Have Diabetes (2010)						
Yes	51	**8.7**	8,123	958	**8.7**	8.0-9.3
No	51	**91.4**	8,123	7,165	**91.3**	90.7-92.0

Total Respondents =unweighted denominator; n = unweighted numerator; 95% CI = 95% Confidence Interval.

^Includes the 50 states and Washington, D.C.

Diabetes does not include pregnancy-related diabetes.

Healthy weight defined as BMI >=18.5 and <25.0 $kg/m^{2.}$

Overweight defined as BMI >=25.0 and < 30.0 $kg/m^{2.}$

Obese defined as BMI >=30.0 $kg/m^{2.}$

All %'s are weighted to be more representative of the general adult population of Maine and to adjust for non-response.

N/A=Not Available.

Data Source: Behavioral Risk Factor Surveillance System 2009, 2010, 2011.

Please note that due to major methodological changes to the BRFSS in 2011, BRFSS 2011 and future data cannot be compared to BRFSS data from 2010 and before.

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