



Colorado Department
of Public Health
and Environment

Women and Cardiovascular Disease

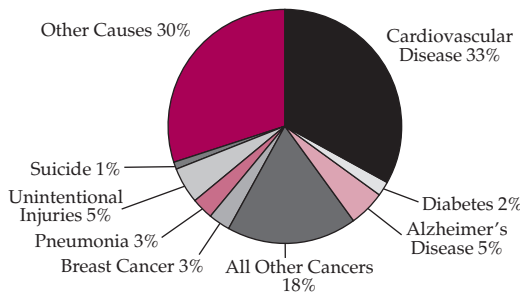
CARDIOVASCULAR DISEASE AND STROKE PREVENTION PROGRAM

Cardiovascular disease is the leading cause of death among women in Colorado. Although awareness of cardiovascular disease as a threat to women's health has increased, a 2003 American Heart Association national study demonstrated that only 46 percent of women 25 years of age and older identified heart disease as the leading cause of death in women. Additionally, only 38 percent of women 25 years of age and older reported that their doctors had ever discussed heart disease with them.¹

Mortality

In 2002, 4,913 women in Colorado died from cardiovascular disease-related illnesses, accounting for 33 percent of the total deaths among Colorado women. The mortality rate for cardiovascular disease-related illnesses is 15 percentage points above the mortality rate for cancer, the number two killer of women in Colorado (Figure 1).

Figure 1: Leading Cause of Death, Colorado Women, 2002



Source: Health Statistics Section, Colorado Department of Public Health and Environment, 2002.

Cardiovascular disease is a broad diagnosis category that encompasses the following:

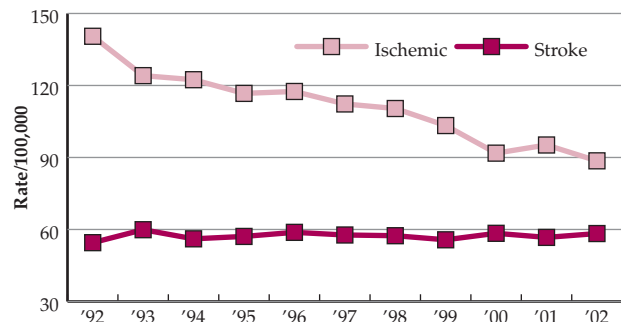
- Ischemic heart disease (heart attack);
- Stroke;
- Heart failure;
- Hypertensive heart disease; and
- Diseases of the arteries, veins, and circulatory systems

Of these diagnoses, ischemic heart disease and stroke account for the majority of deaths, 37 percent and 25 percent, respectively.

A decline in the cardiovascular disease mortality rate has been realized in the past ten years among women. However, the decline was less for women (16 percent) than for

men (22 percent). In the past decade, the death rate associated with heart attack (ischemic heart disease) has declined by 37 percent, but the stroke death rate has remained relatively stable (Figure 2).

Figure 2: Age-adjusted Ischemic Heart Disease and Stroke Death Rates, Colorado Women, 1992–2002



Source: Health Statistics Section, Colorado Department of Public Health and Environment, 2002

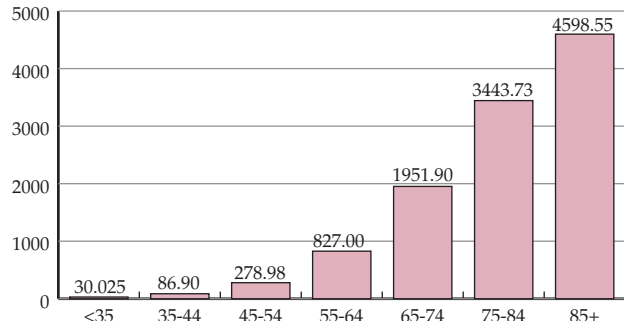
Morbidity

Hospital discharge rates within Colorado provide a measure of the impact of cardiovascular disease. In 2002, there were 21,332 women discharged from the hospital with cardiovascular disease as the primary diagnosis. Of these, 63 percent of hospitalizations were related to heart attack, and 37 percent were related to stroke.

The prevalence of cardiovascular disease increases with age among women. In 2002, women 75 to 84 years of age accounted for 30 percent of the total cardiovascular disease hospitalizations (Figure 3).

As our population ages, cardiovascular disease among women will become an even greater public health issue.

Figure 3: Number of Hospital Discharge Records with Cardiovascular Disease as Primary Diagnosis by Age, Colorado Women, Annual Average, 1998–2002



Source: Source: Health Statistics Section, Colorado Department of Public Health and Environment, March, 2004.

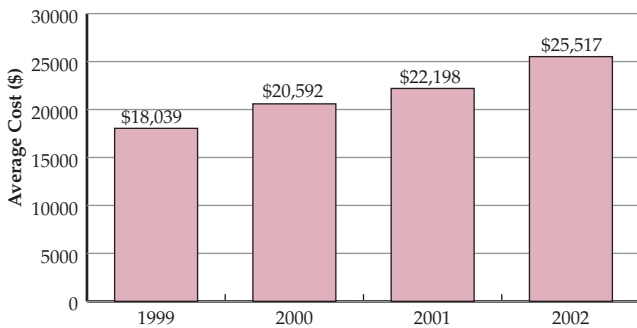
¹Circulation. 2004 Feb 10;109(5):573–9. Epub 2004 Feb 04.



Cost

There has been a steady rise in the average charge per hospitalization for cardiovascular disease in women, increasing by 41 percent in the past four years (Figure 4). In 2002, the average charge was \$25,517, leading to an estimated \$550 million in hospitalization costs for women treated for cardiovascular disease.

Figure 4: Average Charge for Cardiovascular Disease Hospitalization, Colorado Women, 1999–2002



Source: Health Statistics Section, Colorado Department of Public Health and Environment, March, 2004.

Risk Factors

Several behavioral risk factors are associated with cardiovascular disease, including:

- High blood pressure
- High blood cholesterol
- Diabetes
- Tobacco smoking
- Obesity
- Sedentary lifestyle

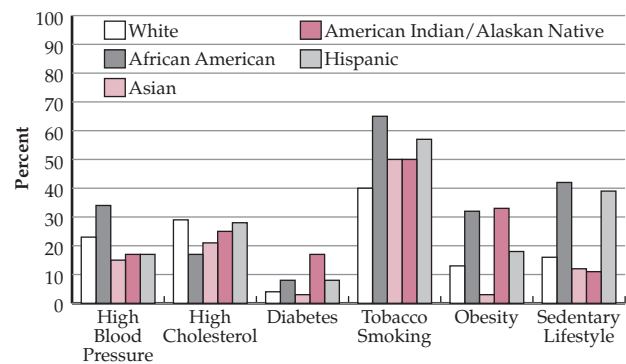
The 2001 Behavior Risk Surveillance Survey (BRFSS) found that 24.9 percent of Colorado women had been identified with high cholesterol, and another 27.4 percent had not been checked within the past five years.

In the past six years, the smoking rate among Colorado women has remained relatively stable at 21 percent. In 2002, 21 percent of women did not engage in any leisure-time physical activity, and 73.4 percent did not meet the recommended daily nutrition requirement of five fruits/vegetables per day.

Health Disparities

Figure 5 shows that overall, African American women have the highest prevalence of three out of the six risk factors, tobacco smoking (65 percent), sedentary lifestyle (42 percent) and high blood pressure (34 percent).

Figure 5: Cardiovascular Disease Risk Factor by Race/Ethnicity, Colorado Women, 2002



Source: Health Statistics Section, Colorado Department of Public Health and Environment, 2002

African American, Hispanic, and younger women (<45 years old) had lower awareness of heart disease as their leading cause of death than did white and older women.²

For the Future

Screening for high blood pressure and high cholesterol coupled with other behavior changes such as stopping smoking, increasing daily physical activity, and improving nutrition significantly decrease the risk for cardiovascular disease.

In collaboration with organizations and health professionals throughout the state, the Colorado Department of Public Health and Environment has established a Cardiovascular Disease and Stroke Prevention Coalition to implement strategies that will decrease mortality, morbidity, and risk factors associated with cardiovascular disease.

²Circulation. 2004 Feb 10;109(5):573–9. Epub 2004 Feb 04.

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