Heart Disease and Stroke: The Scope of the Problem

Untimely, Preventable Deaths

We often describe death as untimely when it claims the lives of men, women, and children who die before their time on our highways, or from work-related injuries, overdoses, violent rampages, terrorist acts, or in war. Death from heart disease or stroke is often untimely ... and often preventable.

The Scope of the Problem in the United States

Every 33 seconds, one American dies of some form of heart disease or of stroke. Every day, heart disease or stroke kills more than 2,600 Americans. And every year, these diseases claim the lives of 1.9 million men and women in this Nation—a number so high it could fill the Rose Bowl nearly 20 times, Arlington National Cemetery nearly 8 times, and one-third of the Pentagon's 6.5 million square feet. That number is nearly twice the number of lives claimed by cancer or collectively by World War II, and the Korean and Vietnam conflicts. That number can be reduced, not just by keeping people with heart disease alive longer, but by preventing heart disease in the first place.

Who lives with heart disease or the consequences of stroke in America?

58,800,000 Americans, or 1 in 5 men and women, have one or more types of heart disease or live with the devastating impact of stroke. One in three men can expect to develop heart disease or have a stroke before age 60. For women, the odds are 1 in 10, although more than half of all deaths due to heart disease each year occur among women, and heart disease is the number one cause of death among women in this country. Further, the rate of premature deaths due to heart disease or stroke is greater among blacks than among whites. Heart disease disables and kills and often can strike both women and men in the prime of their lives.

How big is the problem of heart disease in the United States?

Heart disease is the Nation's number one killer. In 1996, coronary heart disease, which is the most common form of heart disease characterized by chest pain and heart attack, ended the lives of 476,124 Americans.

Twelve million people alive today have a history of heart attack, chest pain, or both. Of these, 5.8 million are men and 6.1 million are women. This year, an estimated 1.1 million Americans will have a new or recurrent heart attack and about one-third of them will die. At least 250,000 people a year die of heart attack within 1 hour of the onset of symptoms and before they reach a hospital. These are sudden deaths caused by cardiac arrest, usually resulting from ventricular fibrillation.

The cost of heart disease

Deaths and disabilities due to heart disease and stroke in 1998 cost the Nation \$286.5 billion. This cost, which includes lost productivity as well as health expenditures,

has a profound impact on the Nation's health care system. Not only does this cost promise to increase as baby boomers age and the community of people living with heart disease or stroke continues to expand, but all the costs associated with delaying death from heart disease (including the fees for physicians and other professionals, the cost of hospital and nursing home care, expensive medications, home health, and other medical durables) will compound the Nation's economic burden. While medicines and treatments are effective, they are expensive; it would be more cost-effective to prevent the disease in the first place. For example, for one person with heart disease, costs for diagnostic tests, surgery, hospital and doctors' visits, physical therapy, and drugs can add up to \$121,200 over 20 years. For those needing surgery or procedures and ongoing care, heart disease and stroke can cost more than \$4.8 million over a lifetime. The cost in terms of human suffering and death can never be assessed.

What States carry the highest death rates due to heart disease?

New York has the highest death rate due to heart disease of any other State, with 172.5 deaths per 100,000 compared to the Nation's 131 deaths per 100,000. Missouri ranks 4th with 155.7 deaths per 100,000; Kentucky ranks 7th, with 146.3 deaths per 100,000; and South Carolina ranks 10th with 142.4 deaths per 100,000.

How big is the problem of stroke in the United States?

Stroke is the third leading cause of death in the United States. In 1996, it killed nearly 160,000 individuals—accounting for 7 percent of all deaths in the United States that year. With its devastating effects including partial or full paralysis, stroke is the leading cause of serious, long-term disability. Here are some other facts you should know:

- In the United States, there are more than 4 million stroke survivors, most of whom are either moderately or severely impaired.
- Stroke accounts for more than half the patients hospitalized for acute neurological diseases.
- Stroke is a major factor in late-life dementia that affects more than 40 percent of Americans older than 80.
- The estimated combined cost of health care and lost productivity due to stroke in the United States was estimated at \$45.3 billion during 1999 alone.
- The estimated lifetime cost of a mild stroke in an older individual is \$100,000. The estimated lifetime cost of a severe stroke in a younger individual is \$500,000.
- Stroke risk factors that can be changed or controlled include high blood pressure, diabetes, atrial fibrillation, smoking, high blood cholesterol, obesity, and physical inactivity.

What States carry the highest death rates due to stroke?

- The "Stroke Belt" is usually defined as an 8 to 12 State region (typically including Alabama, Georgia, Mississippi, North Carolina, South Carolina, Kentucky, Tennessee, Florida, Indiana, Arkansas, Louisiana, Virginia, and Washington, D.C.) where stroke death rates are substantially higher than in the rest of the country.
- Within the Stroke Belt, the highest death rates are clustered in the coastal plains regions of Georgia, North Carolina, and South Carolina. This region has been called the "Stroke Buckle."
- The stroke death rate in the Stroke Buckle is 2 times greater than that in the rest of the Nation.
- The excess risk of stroke death in the Stroke Buckle impacts men and women, African Americans and whites.
- The pattern of excess stroke death rates in the Stroke Buckle has existed for at least 50 years.
- The causes of the excess stroke death rates in the Stroke Buckle are not known. Causes that have been suggested include a higher prevalence of stroke risk factors, lack of access to health care, or factors associated with the geography of the region (such as water content).