PROGRESS REVIEW

Heart Disease and Stroke

DEPARTMENT OF HEALTH & HUMAN SERVICES ■ PUBLIC HEALTH SERVICE ■ February 3, 1999

The Assistant Secretary for Health and Surgeon General chaired the third and final review of progress in achieving Healthy People 2000 objectives for Heart Disease and Stroke. The review was organized by the National Heart, Lung, and Blood Institute, National Institutes of Health, which serves as the lead agency for this priority area, designated as chapter 15 in the Healthy People 2000 (HP2000) document. The discussions addressed three principal topics—1) expanding the application of knowledge to prevent or lower cardiovascular disease (CVD) risk; 2) eliminating disparities in CVD risk among population groups; and 3) assessing the impact on CVD risk of increasing overweight/obesity. Through broadcast facilities on the National Institutes of Health campus, viewers at remote sites were linked with the participants and could pose questions by telephone and facsimile transmission. During the overview and discussion, attention was focused on the following HP2000 objectives:

15.1 For the total population, the age-adjusted death rate from coronary heart disease decreased from 135 per 100,000 in 1987 to 105 in 1996. The HP2000 target is 100. For Blacks, the rate decreased from 168 per 100,000 in 1987 to 140 in 1996 (target, 115).

15.2 For stroke, the age-adjusted death rate for the total population decreased from 30.4 per 100,000 in 1987 to 25.9 in 1997 (preliminary data). The HP2000 target is 20.0. The rate for Blacks decreased from 52.5 per 100,000 in 1987 to 42.0 in 1997 (preliminary data). The target is 27.0.

15.3 From 14.4 cases per 100,000 in 1987, the incidence of end-stage renal disease increased to 27.6 cases per 100,000 in 1996. The HP2000 target is 13.0. For Blacks, the incidence increased from 34.0 per 100,000 in 1987 to 65.1 in 1996 (target, 30.0)

15.5 The proportion of people aged 18 and over who took action to control their high blood pressure remained at about 71 percent between 1991 and 1994. The HP2000 target is 90 percent. The proportion of white hypertensive males aged 18-34 who did so decreased from 34 percent in 1991 to 30 percent in 1994. Among black hypertensive males aged 18-34, the proportion taking action increased from 40 percent in 1991 to 50 percent in 1994. The target for both male groups is 80 percent.

15.6 The mean serum cholesterol level among adults aged 20-74 decreased from 213 mg/dL in 1976-80 to 203 mg/dL in 1988-94. The HP 2000 target is 200 mg/dL.

15.7 The prevalence of blood cholesterol levels of 240 mg/dL in adults aged 20-74 decreased from 27 percent in 1976-80 to 19 percent in 1988-94, thus meeting the HP2000 target of 20 percent.

15.10 The prevalence of overweight has increased among the total population, as well as in several select population groups. In 1988-94, the age-adjusted prevalence of overweight or obesity (BMI 25) was 54.9 perecent - up from 46 percent in 1976-80 and 1971-74 and 43.3 percent in 1960-62. Among men, the age-adjusted prevelance increased from 48.2 percent in 1960-62 to 59.4 percent in 1988-94; among women, overweight increased from 38.7 percent to 50.7 percent. Among black men and women, the prevelance increased from 43.1 to 56.5 percent and from 57.0 to 65.8 percent, respectively.

15.11 In the past decade, less than one-quarter of people aged 18-74 engaged in light to moderate physical activity for at least 30 minutes, 5 or more times per week. The proportion has shown little change since early in the decade. The HP2000 target is 30 percent.

15.12 The prevalence of cigarette smoking among people 18 years of age and older decreased from 27 percent in 1992 to 25 percent in 1995. This represents a decrease from 29 to 27 percent in males and from 25 to 23 percent in females. The HP2000 target is 15 percent. For select population groups aged 18 and over, the highest cigarette smoking prevalence rates in 1995 were—36 percent for blue-collar workers, 35 percent for American Indians/Alaska Natives, and 32 percent for military personnel. The target for each of these groups is 20 percent. In 1995, Blacks aged 18 and over showed a prevalence of 26 percent (target, 18 percent). Eighteen percent of Hispanics in that age group smoked cigarettes in 1995 (target, 15 percent).

HIGHLIGHTS

- The ongoing Framingham Heart Study, which marked its 50th anniversary in 1998, has demonstrated that lifestyle-related risk factors, such as high blood pressure, high blood cholesterol, and smoking, greatly increase the risk of developing CVD.
- In 1983, two years prior to the start of the National Cholesterol Education Program, only 35 percent of American adults had their cholesterol checked. This rose to 75 percent in 1995.
- Recent clinical trials employing one of the statin drugs (lovastatin, pravastatin, simvastatin) and trials of blood pressure lowering in older people have provided conclusive evidence that cholesterol and blood pressure lowering reduces CVD events and deaths and total deaths in people with and without CVD.
- Obesity is a major risk factor for CVD. The recent increase in the prevalence of obesity in most population groups cannot be ascribed to genetic changes, but rather to the cumulative effects of inactivity, increased caloric intake, and environmental changes in the activities of daily living, all of which in combination create an imbalance in energy expenditure.
- Life insurance companies will reduce premiums to customers who succeed in lowering their blood pressure.
- Only 50 percent of people who have undergone angioplasty comply with post-surgical regimens for diet and exercise recommended by their physicians.
- In June 1998, the National Heart, Lung, and Blood Institute issued *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults,* which provides a new approach for physicians to use in assessing overweight and establishes principles of safe and effective weight loss.

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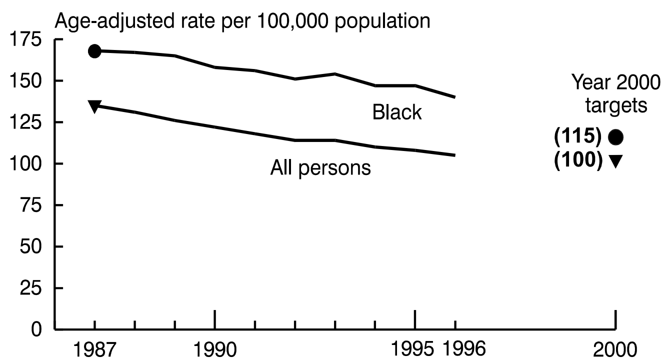
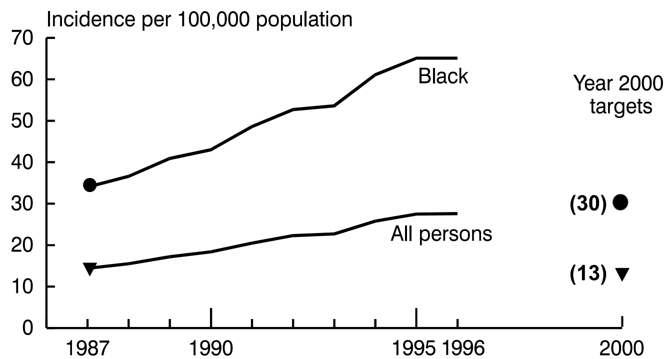


NOTE: Death rates are age adjusted to the 1940 U.S. standard population.
Source: CDC/NCHS, National Vital Statistics System, 1987-96.



Source: HCFA/Bureau of Data Management and Strategy, End Stage Renal Disease Medicare Reimbursement Data, 1987-96.

15.14 The overall aim of this objective is for 75 percent of people aged 18 and over to have had their blood pressure checked within the preceding 5 years. The most recent year for which these data are available is 1993, when the proportion was 66 percent. However, the proportion of people aged 18 and over whose blood pressure had ever been checked increased from 59 percent in 1988 to 75 percent in 1995.

HIGHLIGHTS (Con't.)

- While there was a 59 percent decline in the death rate from CVD between 1950 and 1996, heart disease is still the leading cause of death for adults over 45.
- The death rate from stroke is nearly 80 percent greater in Blacks than in Whites. This disparity has not narrowed over the decade.
- The so-called "stroke belt"—formerly a band of southeastern states with stroke death rates consistently higher than those in the rest of the country—has shifted in recent years to the north and west of the original cluster.
- In addition to being a risk factor for CVD and stroke, hypertension is one of the major causes of end-stage renal disease (ESRD). The incidence of ESRD due to hypertension appears to have leveled and may be declining, while the diabetes contribution may be increasing.

FOLLOW-UP

- Accelerate the transfer of research on CVD and stroke into practice, both by health care providers and community programs.
- Tailor approaches to lifestyle modification and educational materials to the cultural patterns of specific populations and communities. Include more culturally appropriate and positive public health messages about diet and physical activity (e.g., the Native American concept of wellness) to encourage a better balance of work and leisure-time activities.
- To aid community efforts in stroke and CVD prevention, foster expanded and creative partnerships among churches, businesses, schools, and other social institutions, e.g., fruit- and vegetable-buying cooperatives.
- Seek sustainable and multifactorial approaches to combating overweight and obesity at the individual and societal levels. Employ environmentally-based strategies to increase physical activity, e.g., by encouraging people to walk up flights of stairs.
- Encourage health care providers to counsel patients in hypertensive care and weight reduction.
- Work with school systems to address the problem of obesity among children and adolescents.

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