# PROGRESS REVIEW

## Diabetes & Other Chronic Disabling Conditions

**DEPARTMENT OF HEALTH & HUMAN SERVICES ■ PUBLIC HEALTH SERVICE ■ April 7, 1999**

The Assistant Secretary for Health and Surgeon General chaired the third and final review of progress in achieving Healthy People 2000 objectives for Diabetes and Other Chronic Disabling Conditions. The review, which focused on diabetes and asthma, was organized by the Centers for Disease Control and Prevention and the National Institutes of Health, which serve as the co-lead agencies for this Healthy People 2000 priority area. The discussions centered on four principal topics—1) new knowledge in diabetes; 2) health disparities in diabetes; 3) the National Diabetes Education Program; and 4) controlling and preventing asthma. Other chronic conditions covered in this priority area were addressed in earlier progress reviews. The overview and discussion focused on selected objectives and the status of their data in priority areas ***17*** (Diabetes and Other Chronic Disabling Conditions) and ***11*** (Environmental Health), as follows:

***17.4*** Activity limitation among people with asthma increased from 20.4 percent in 1988-90 to 22.5 percent in 1991-93, then decreased to 19.6 percent in 1994-96. The year 2000 target is 10 percent. Among Blacks with asthma, 30.5 percent experienced activity limitation in 1989-91, compared with 27.0 percent in 1994-96. The target is 19 percent.

***11.1*** Asthma hospitalization rates have dropped 5 percent since 1987 for the total population, while rates for Blacks have increased 8 percent. In 1996 the rate for Blacks was twice the rate for the total population.

***17.9*** The age-adjusted death rate from diabetes for the total population increased from 38 per 100,000 in 1990 to 41 in 1996. The year 2000 target is 34 per 100,000. Over the same time period, the rate for Blacks increased from 71 per 100,000 to 76 (target, 58); for American Indians/Alaska Natives, from 46 to 63 (target, 41); for Mexican-Americans, from 55.7 to 60.1 (target, 50); and for Puerto-Ricans, from 40.7 to 58.5 (target, 42).

***17.10*** Among people with diabetes, the prevalence of end-stage renal disease (ESRD) increased from 2.5 per 1,000 in 1990 to 4.1 in 1996. The year 2000 target is 1.4 per 1,000. The prevalence of lower extremity amputation in people with diabetes increased from 8.6 per 1,000 in 1990 to 11.1 in 1996. The target is 4.9. Among Blacks with diabetes, the prevalence of ESRD due to that condition increased from 3.1 per 1,000 in 1986-89 to 5.5 in 1993-96 (target, 2.0). The rate of low-er extremity amputations increased in Blacks with diabetes from 8.0 per 1,000 in 1990 to 10.1 in 1996 (target, 6.1).

### DEVELOPMENTS

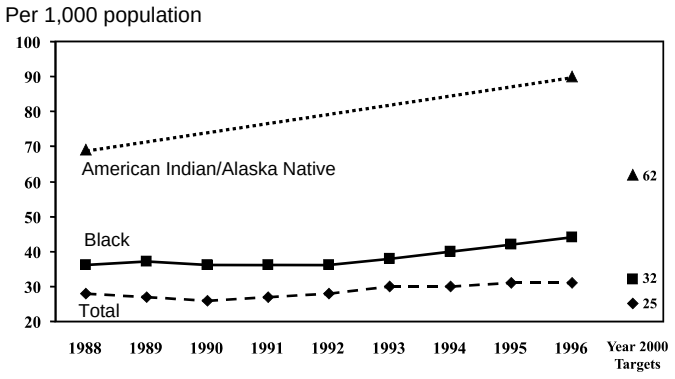
- The Diabetes Control and Complications Trial (DCCT) established that intensive therapy aimed at keeping blood glucose levels as close to normal as possible in people with Type 1 diabetes delayed the onset and slowed the progression of diabetic retinopathy, nephropathy, and neuropathy by 35 to 70 percent.
- About 500,000 hospitalizations, 5,500 deaths, and more than 100 million days of restricted activity related to asthma occur each year. Overall, asthma hospitalization rates have decreased, but among children, rates continue to increase.
- Despite the fact that almost all asthma attacks can be controlled with currently available therapies under guidelines of the National Asthma Education and Prevention Program (NAEPP), mortality rates for asthma have increased.
- The United Kingdom Prospective Diabetes Study (UKPDS) is the largest study of people with Type 2 diabetes ever performed, lasting 20 years and including over 5,000 patients. UKPDS findings demonstrate that intensive control of blood glucose in Type 2 diabetes reduces the incidence of both retinopathy and nephropathy by 25 percent, compared to standard treatment. Further, improved control of blood pressure in people with Type 2 diabetes significantly reduced both micro- and macrovascular complications.

***17.11*** The prevalence of diabetes in the total population increased from 26 per 1,000 in 1988-90 to 31 in 1994-96. The year 2000 target is 25 per 1,000. For Blacks, the prevalence went from 36 per 1,000 in 1988-90 to 44 in 1994-96 (target, 32). Among American Indians/Alaska Natives in Indian Health Service areas, diabetes prevalence increased from 69 per 1,000 (ages 15 and over) in 1987 to 90 per 1,000 (ages 20 and over) in 1996 (target, 62).

***17.12*** In 1988-94, the age-adjusted prevalence of overweight or obesity (BMI≥25) was 54.9 percent — up from 46 percent in the 1970s and 43.3 percent in 1960-62. Among men, it increased to 59.4 percent in 1988-94, and among women, to 50.7 percent. Among black men and women, the prevalence increased from 43.1 to 56.5 percent and from 57.0 to 65.8 percent, respectively. Prevalence in adolescents increased from 15 percent in 1976-80 to 24 percent in 1988-94.

## Diabetes Prevalence: 1988-96

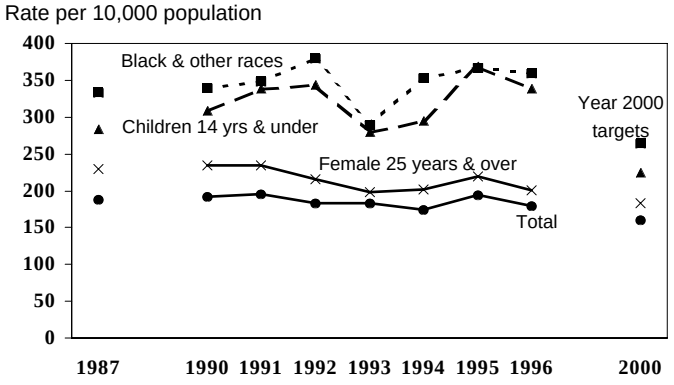
Objective 17.11




Note: Data for Total and Black are 3-year moving averages plotted on the last year.
Source: CDC/NCHS, National Health Interview Survey, 1988-96

## Asthma Hospitalizations: 1987-96

Objective 11.1




Source: CDC/NCHS, National Hospital Discharge Survey, 1987-96.

## DEVELOPMENTS (Cont.)

- The current projection is that, worldwide, there will be nearly 300 million people with diabetes in 2025, most of whom will have Type 2 diabetes. In the U.S., there will be about 22 million people with diabetes in 2025.
- The National Health and Nutrition Examination Survey provides a prevalence estimate that between one-third and one-half of diabetes cases are undiagnosed.
- Only Hawaii and Massachusetts have met the Healthy People 2000 target of having 70 percent of people with diabetes 18 years of age and older undergo a dilated eye examination in the previous year.
- Long-term maintenance of normal blood glucose control can reverse kidney damage caused by diabetes.
- The greatest change in the management of both Type 1 and Type 2 diabetes in the past two decades has been the introduction and widespread acceptance and use of reliable, accurate, and relatively user-friendly self-glucose monitoring devices.
- In a model for other screening programs, the Veterans Health Administration has instituted risk stratification of diabetic patients in need of more frequent eye exams.
- As part of the President's Initiative on Race, the Department of Health and Human Services has focused on reducing rates of ESRD and lower extremity amputation from diabetes among Blacks and American Indians/Alaska Natives. The targets in Healthy People 2000 are used in this initiative.

## FOLLOW-UP

- Accelerate the translation of advances in research on diabetes and asthma into clinical practice.
- Promote the use of NAEPP Guidelines in clinical prcactice.
- Find better ways to communicate about opportunities to prevent and control diabetes and asthma and to reduce and eliminate racial and ethnic disparities in those areas.
- Refine data collection to make possible an earlier and more complete description of trends in diabetes and asthma morbidity and mortality.
- Address the problem of obesity and overweight as predisposing factors for diabetes. Devise weight control programs that achieve an optimal energy balance, incorporating elements of both sound nutrition and physical activity. The CDC Diabetes Prevention Program leads the way in such activity.

## PARTICIPANTS

American Association of Diabetes Educators
American Diabetes Association
Asthma and Allergy Foundation of America
Centers for Disease Control and Prevention
Department of Veterans Affairs
Dupont Corporation
Health Care Financing Administration
Health Resources and Services Administration
Indian Health Service
Johns Hopkins University
Juvenile Diabetes Foundation
Maryland Department of Health and Mental Hygiene
National Coalition of Hispanic Health and Human Services Organizations
National Institutes of Health
Office of the Assistant Secretary for Planning and Evaluation
Office of Disease Prevention and Health Promotion
Office of Minority Health
Office of Public Health and Science
Regenstrief Health Center

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