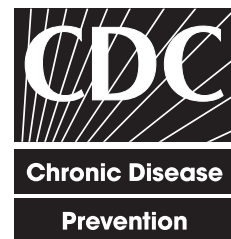


Preventing Chronic Diseases: Investing Wisely in Health



Preventing Diabetes and Its Complications

U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES

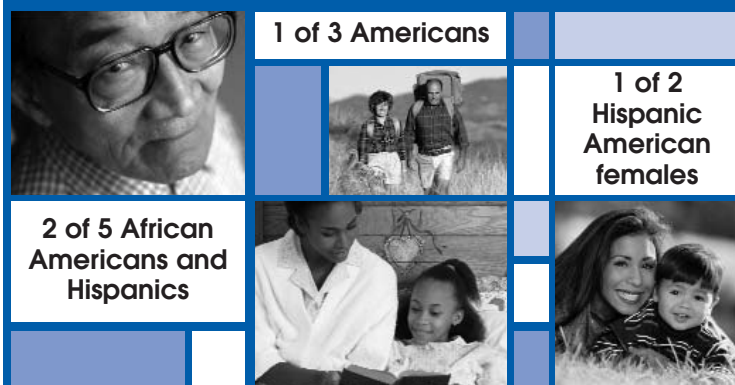
The Reality

- Over 18.2 million Americans have diabetes, and about one-third of them don't know that they have the disease.
- By 2050, an estimated 39 million U.S. residents are expected to have diagnosed diabetes.
- American Indians, African Americans, and Hispanics are about 2 times more likely than whites to have diabetes.
- Type 2 diabetes, once believed to affect only adults, is being diagnosed increasingly among young people.
- One in three U.S. children born in 2000 could develop diabetes during their lifetime.
- Diabetes is the sixth leading cause of death. Over 200,000 people die each year of diabetes-related complications.
- Diabetes is a leading cause of kidney failure, new blindness in adults, and leg and foot amputations unrelated to injury.
- Diabetes is a major cause of heart disease and stroke, which are responsible for about 65% of deaths among people with diabetes.
- About 18,000 women with preexisting diabetes deliver babies each year, and 135,000 expectant mothers learn they have gestational diabetes. Diabetes increases a woman's risk for pregnancy complications and increases her child's risk for obesity and diabetes later in life.
- Diabetes is most common among people aged 65–74 and least common among people under age 45, regardless of race, ethnicity or sex.
- An estimated 41 million Americans have a high risk for developing type 2 diabetes—a condition known as pre-diabetes. People with pre-diabetes have impaired fasting glucose (IFG), impaired glucose tolerance (IGT), or both.

The Cost of Diabetes in 2002

- Total costs (direct and indirect): \$132 billion.
- Direct medical costs: \$92 billion.
- Indirect costs (disability, work loss, premature death): \$40 billion.
- Average health care costs per year: \$13,243 for a person with diabetes vs. \$2,560 for a person without diabetes.

What is the lifetime risk for diabetes for people born in the United States in 2000?



Control diabetes. For life.

Preventing Diabetes Complications

- Regular eye exams and timely treatment could prevent up to 90% of diabetes-related blindness.
- Foot care programs that include regular examinations and patient education could prevent up to 85% of diabetes-related amputations.
- Treatment to better control blood pressure can reduce heart disease and stroke by 33%–50% and diabetes-related kidney failure by 33%.

Diabetes Control: A Good Investment

- Intensified blood pressure control can cut health care costs by \$900 (2000 US dollars) over the lifetime of a person with type 2 diabetes. It can also extend life by 6 months.
- In just 5 years, a foot care program can save \$900 (2000 U.S. dollars) in health care costs for a person with diabetes who has had foot ulcers. Such care prevents amputations.
- Outpatient training to help people self-manage their diabetes prevents hospitalizations. Every \$1 invested in such training can cut health care costs by up to \$8.76.
- Preconception care for women with diabetes leads to healthier mothers and babies. Every \$1 invested in such care can reduce health costs by up to \$5.19 by preventing costly complications.



Effective Strategies

Early detection, improved delivery of care, and better self-management are key for preventing diabetes complications. Here are several examples of these strategies in action:

- *Small Steps. Big Rewards. Prevent Type 2 Diabetes* is a national campaign that targets people hardest hit by diabetes, including African Americans, American Indians and Alaska Natives, Asians and Pacific Islanders, Hispanics, and older adults. The National Diabetes Education Program (NDEP) launched the campaign to encourage people with pre-diabetes to make modest lifestyle changes that could delay and possibly prevent the onset of the disease. By losing 5%–7% of their body weight and getting just 2 1/2 hours of physical activity a week, people with pre-diabetes can cut their risk for developing type 2 diabetes by more than half.
- The National Diabetes Collaborative (also known as the Diabetes Prevention Prototype) is helping federally funded health centers improve diabetes care for their patients and prevent pre-diabetes from progressing to diabetes. Three major partners are involved: CDC, the Bureau of Primary Health Care, and the Institute for Healthcare Improvement. Supported by a network of 48 CDC-funded Diabetes Prevention and Control Programs, the collaborative aims to improve care delivery systems for people with diabetes, increase people's access to diabetes care, and help medically underserved people at the participating centers.

Preliminary results are promising. A greater percentage of diabetes patients are having the highly effective A1C blood test, and the centers have identified 1,660 people who are at risk for pre-diabetes. All of these individuals have had an oral glucose tolerance test, and over 850 of them have been diagnosed with either pre-diabetes or diabetes. In addition, the collaborative is pilot-testing to identify strategies for reaching people at high risk for diabetes.

Hope for the Future

Congress has given CDC the funds to expand Diabetes Prevention and Control Programs in all states, U.S. territories, and the District of Columbia. CDC currently provides 22 states with limited funding (capacity-building) and 28 states with more substantial support (basic implementation). The 28 states receiving basic implementation funds have improved preventive care practices for people with diabetes and worked with partners to improve people's access to high-quality diabetes care. Thus, CDC will continue to expand the number of state programs receiving basic implementation funds and will work with them to launch primary prevention pilot programs. Such activities generate innovations that enable states to continue preventing diabetes and improve the lives of millions of people.

State Program in Action:

Louisiana Diabetes Prevention and Control Program



Improving diabetes education for homeless patients is the goal of this exemplary partnership between the Louisiana Diabetes Prevention and Control Program (DPCP) and the City of New Orleans Health Department's Healthcare for the Homeless Clinic. The ultimate goal is to improve patient compliance with treatment regimens such as regular A1C testing, which is highly effective in showing if a person's blood sugar is under control. The A1C detects problems early so that disabling, costly complications can be prevented.

Patient compliance at the clinic had been extremely low: in September 2001, less than 16% of patients had at least one A1C check, and less than 26% had at least two A1C checks in the past year. By June 2004, however, compliance had risen remarkably: 99% of patients had at least one A1C check, and 54% had at least two A1C checks in the past year. Moreover, over 99% of patients had met their goals for self-managing their diabetes, compared with 94% in September 2001.

This Louisiana program is a successful example of how state programs can promote healthy behaviors, prevent disease, and reduce the economic burden for homeless people who have diabetes or are at risk for this disease.

For more information and references supporting these facts, visit www.cdc.gov/nccdphp. For additional copies of this document, E-mail ccdinfo@cdc.gov.