Diabetes Information for Teens, Third Edition

Health Tips about Managing Diabetes and
Preventing Related Complications

Including Facts about Insulin, Glucose Control,
Diabetes-Related Health Concerns, Healthy Eating,
Physical Activity, and Learning to Live with Diabetes

Facts and Statistics about Diabetes

What Is Diabetes?

Diabetes is a disease that occurs when your blood glucose, also called "blood sugar," is too high. Blood glucose is your main source of energy and comes from the food you eat. Insulin, a hormone made by the pancreas, helps glucose from food get into your cells to be used for energy. Sometimes, your body does not make enough—or any—insulin, or it does not use insulin well. Glucose then stays in your blood and does not reach your cells.

Over time, having too much glucose in your blood can cause health problems. Although diabetes has no cure, you can take steps to manage your diabetes and stay healthy.

> Sometimes, people call diabetes "a touch of sugar" or "borderline diabetes." These terms suggest that someone does not really have diabetes or has a less serious case, but every case of diabetes is serious.

What Are the Different Types of Diabetes?

The most common types of diabetes are type 1, type 2, and gestational diabetes.

Type 1 Diabetes

If you have type 1 diabetes, your body does not make insulin. Your immune system attacks and destroys the cells in your pancreas that make insulin. Type 1 diabetes is usually diagnosed in children and young adults, although it can appear at any age. People with type 1 diabetes need to take insulin every day to stay alive.

Type 2 Diabetes

If you have type 2 diabetes, your body does not make or use insulin well. You can develop type 2 diabetes at any age, even during childhood. However, this type of diabetes occurs most often in middle-aged and older people. Type 2 is the most common type of diabetes.

Gestational Diabetes

Gestational diabetes develops in some women when they are pregnant. Most of the time, this type of diabetes goes away after the baby is born. However, if you have had gestational diabetes, you have a greater chance of developing type 2 diabetes later in life. Sometimes, diabetes diagnosed during pregnancy is actually type 2 diabetes.

Other Types of Diabetes

Less common types include monogenic diabetes, which is an inherited form of diabetes, and cystic fibrosis-related diabetes.

How Common Is Diabetes?

As of 2015, 30.3 million people in the United States, or 9.4 percent of the population, had diabetes. More than 1 in 4 of them did not know they had the disease. Diabetes affects 1 in 4 people over the age of 65. About 90 to 95 percent of cases in adults are type 2 diabetes.

Who Is More Likely to Develop Type 2 Diabetes?

You are more likely to develop type 2 diabetes if you are 45 years of age or older, have a family history of diabetes, or are overweight. Physical inactivity; race; and certain health problems, such as high blood pressure, also affect your chance of developing type 2 diabetes. You are also more likely to develop type 2 diabetes if you have prediabetes or had gestational diabetes when you were pregnant.

The Big Picture

More than 30 million people in the United States have diabetes, and 1 in 4 of them do not know they have it.

- More than 84 million U.S. adults—over a third—have prediabetes, and 90 percent of them do not know they have it.

- Diabetes is the seventh leading cause of death in the United States (and may be underreported).

- Type 2 diabetes accounts for about 90 to 95 percent of all diagnosed cases of diabetes; type 1 diabetes accounts for about 5 percent.

- In the last 20 years, the number of adults diagnosed with diabetes has more than tripled as the American population has aged and become more overweight or obese.

Complications

People with diabetes are twice as likely to have heart disease or a stroke as people without diabetes—and at an earlier age.

- In the United States, diabetes is the leading cause of chronic kidney diseases, lower-limb amputations, and adult-onset blindness.

- Smokers are 30 to 40 percent more likely to develop type 2 diabetes than nonsmokers.

- People with diabetes who smoke are more likely to develop serious related health problems, including heart and kidney disease.

- In about 2 out of 3 American Indians/Alaska Natives with kidney failure, diabetes is the cause.

Cost

- Medical costs and lost work and wages for people with diagnosed diabetes total $327 billion yearly.

- Medical costs for people with diabetes are twice as high as for people who do not have diabetes.

Diabetes Incidence and Prevalence

Diabetes incidence—which is the rate of new cases of diagnosed diabetes—among adults in the United States went down in 2015 and has gone down each year since 2008 (Figure 1.1). About 1.4 million new cases of diabetes were diagnosed among adults between the ages of 18 and 79 in 2015.

Diabetes prevalence—which is the total number of existing cases, including new cases—among adults continues to go up (Figure 1.1). About 30.3 million people, or 9.4 percent of the U.S. population, had diabetes in 2015. This total included 30.2 million adults 18 years of age or older, or 12.2 percent of all U.S. adults. About 7.2 million of these adults had diabetes but were not aware that they had the disease or did not report that they had it. Although the prevalence of adults with diagnosed diabetes went up sharply during the 1990s, it appears to have been stabilizing since 2009 (Figure 1.1).

The increase in the number of adults with diabetes in the United States may be due in part to people with the disease living longer because of improvements in self-management practices and healthcare services. As of 2016, more than 4,100 diabetes self-management education and support (DSMES) programs were offered across the United States.

Diabetes self-management education and support (DSMES) programs are intended to improve preventive practices among people with diabetes. About 1.1 million people with diabetes participated in DSMES programs recognized by the American Diabetes Association (ADA) or accredited by the American Association of Diabetes Educators (AADE) in 2016.
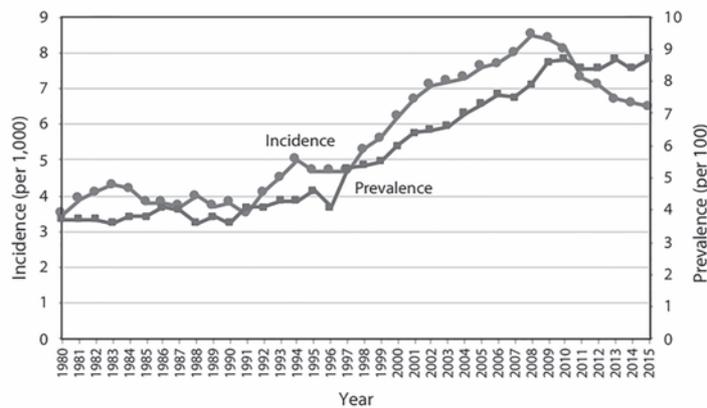

Figure 1.1. Trends in Incidence and Prevalence of Diagnosed Diabetes among Adults Aged 18 or Older, United States, 1980–2015

Race, Ethnicity, and Education

Members of some racial and ethnic minority groups are more likely to have diagnosed diabetes than non-Hispanic Whites. Among adults, American Indians/Alaska Natives had the highest age-adjusted rates of diagnosed diabetes among all racial and ethnic groups examined (Figure 1.2).
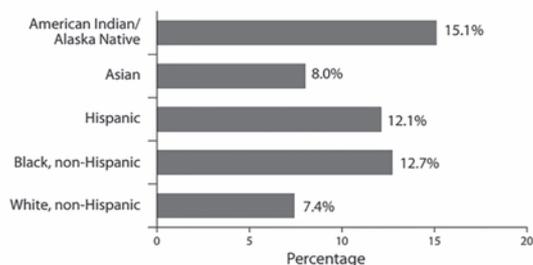

Figure 1.2. Percentage of U.S. Adults Aged 18 or Older with Diagnosed Diabetes, by Racial and Ethnic Group, 2013–2015 (Source: Figure adapted from the National Diabetes Statistics Report, 2017. Data sources: 2013–2015 National Health Interview Survey and 2015 Indian Health Service National Data Warehouse (American Indian/ Alaska Native data).)

Percentages are age-adjusted to the 2000 U.S. standard population.

A higher percentage of adults with less than a high-school education had diagnosed diabetes compared to adults with a high-school education or more than a high-school education (Figure 1.3).
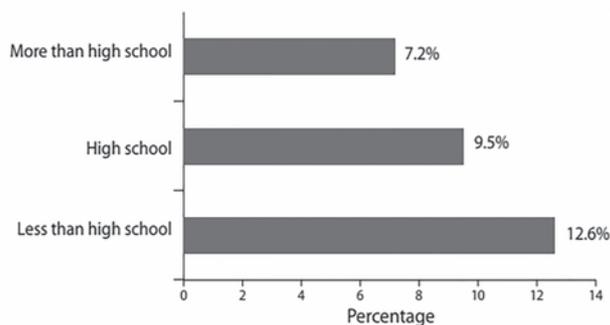

Figure 1.3. Percentage of U.S. Adults Aged 18 or Older with Diagnosed Diabetes, by Education Level, 2013–2015 (Source: Figure adapted from the National Diabetes Statistics Report, 2017. Data source: 2013–2015 National Health Interview Survey.)
Percentages are age-adjusted to the 2000 U.S. standard population.

A person's socioeconomic position is defined by her or his education and income level. Differences in diabetes prevalence were seen in the overall U.S. population and within racial and ethnic groups according to socioeconomic position. For example, the prevalence of diabetes increased among non-Hispanic Whites with less education and lower incomes and among Hispanics with less education. In addition, an association was found between lower education levels and less use of preventive care practices, such as annual foot and eye exams and regular monitoring of blood sugar levels.

Research suggests that the effectiveness of interventions designed to help people reduce their risk of type 2 diabetes and manage or prevent complications can vary by socioeconomic position. Healthy People 2020, the nation's agenda for improving the health of all Americans, and recent studies have identified socioeconomic position as an important factor to consider when evaluating the effectiveness of interventions.