

# DIABETES FACTS

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## What is diabetes?

Diabetes is a group of diseases marked by high levels of blood glucose resulting from defects in insulin production, insulin action, or both. Diabetes can lead to serious complications and premature death, but people with diabetes can take steps to control the disease and lower the risk of complications.

Diabetes is a chronic disease that **has no cure**. There are an estimated 23.6 million children and adults in the United States, or 7.8% of the population, who have diabetes. While an estimated 17.9 million have been diagnosed, unfortunately, 5.7 million people are not aware that they have the disease. At least 57 million people have pre-diabetes.

If present trends continue, one in three Americans, and 1 in 2 minorities, born in 2000 will develop diabetes in their lifetime. In 2007, 1.6 million new cases of diabetes were diagnosed in people age 20 years or older. Each day, approximately 4,383 people are diagnosed with diabetes.

## The Dangerous Toll of Diabetes

From 1987 to 2002, the death rate due to diabetes has increased by 45 percent, while the death rates due to heart disease, stroke, and cancer have declined.

Based on death certificate data, diabetes contributed to 233,619 deaths in 2005. Studies indicate that diabetes is generally under-reported on death certificates, particularly in the cases of older persons with multiples chronic conditions such as heart disease and hypertension. Because of this, the toll of diabetes is believed to be much higher than officially reported.

Many people first become aware that they have diabetes when they develop one of its serious and life-threatening complications such as:

- Heart Disease and Stroke
- High Blood Pressure
- Blindness
- Kidney Disease
- Nervous System Damage
- Amputations
- Dental Disease
- Pregnancy Complications
- Sexual Dysfunction
- Others

### National Office

1701 North Beauregard Street  
Alexandria, VA 22311  
Tel: 703-549-1500

### Diabetes Information

call 1-800-DIABETES (1-800-342-2383)  
online [www.diabetes.org](http://www.diabetes.org)  
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### The Mission of the American

Diabetes Association is to prevent and cure diabetes and to improve the lives of all people affected by diabetes.

## Types of Diabetes

**Type 1 diabetes** was previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes. Type 1 diabetes develops when the body's immune system destroys pancreatic beta cells, the only cells in the body that make the hormone insulin that regulates blood glucose. To survive, people with type 1 diabetes must have insulin delivered by injection or a pump. This form of diabetes usually strikes children and young adults, although disease onset can occur at any age. Type 1 diabetes accounts for 5% to 10% of all diagnosed cases of diabetes. Risk factors for type 1 diabetes may be autoimmune, genetic, or environmental. There is no known way to prevent type 1 diabetes. Several clinical trials of methods of the prevention of type 1 diabetes are currently in progress or are being planned.

**Type 2 diabetes** was previously called non-insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes. Type 2 diabetes accounts for about 90% to 95% of all diagnosed cases of diabetes. It usually begins as insulin resistance, a disorder in which the cells do not use insulin properly. As the need for insulin rises, the pancreas gradually loses its ability to produce it. Type 2 diabetes is associated with older age, obesity, family history of diabetes, history of gestational diabetes, impaired glucose metabolism, physical inactivity, and race/ethnicity. African Americans, Hispanic/Latino Americans, American Indians, and some Asian Americans and Native Hawaiians or Other Pacific Islanders are at particularly high risk for type 2 diabetes and its complications. Clinically-based reports and regional studies suggest that type 2 diabetes in children and adolescents, although still rare, is being diagnosed more frequently, particularly in American Indians, African Americans, and Hispanic/Latino Americans.

**Gestational diabetes** is a form of glucose intolerance diagnosed in some women during pregnancy. Gestational diabetes occurs more frequently among African Americans, Hispanic/Latino Americans, and American Indians. It is also more common among obese women and women with a family history of diabetes. During pregnancy, gestational diabetes requires treatment to normalize maternal blood glucose levels to avoid complications in the infant. After pregnancy, 5% to 10% of women with gestational diabetes are found to have type 2 diabetes. Women who have had gestational diabetes have a 40% to 60% chance of developing diabetes in the next 5–10 years.

**Other types** of diabetes result from specific genetic conditions (such as maturity-onset diabetes of youth), surgery, drugs, malnutrition, infections, and other illnesses. Such types of diabetes account for 1% to 5% of all diagnosed cases.

**Pre-diabetes** is a condition that raises the risk of developing type 2 diabetes, heart disease, and stroke. People with pre-diabetes have blood glucose levels higher than normal but not high enough to be classified as diabetes.

- People with pre-diabetes have impaired fasting glucose (IFG) or impaired glucose tolerance (IGT). Some people have both IFG and IGT.
- IFG is a condition in which the fasting blood sugar level is 100 to 125 milligrams per deciliter (mg/dL) after an overnight fast. The level is higher than normal but not high enough to be classified as diabetes.
- IGT is a condition in which the blood sugar level is 140 to 199 mg/dL after a 2-hour oral glucose tolerance test. The level is higher than normal but not high enough to be classified as diabetes.
- Progression to diabetes among those with pre-diabetes is not inevitable. Studies have shown that people with pre-diabetes who lose weight and increase their physical activity can prevent or delay diabetes and even return their blood glucose levels to normal.
- Between 2003-2006, 25.9% of U.S. adults aged 20 years or older had IFG (35.4% of adults aged 60 years or older). Applying this percentage to the entire U.S. population in 2007 yields an estimated 57 million American adults aged 20 years or older with IFG, suggesting that **at least** 57 million American adults had pre-diabetes in 2007. Recent estimates for IGT are not available.
- In 1999–2000, 7.0% of U.S. adolescents aged 12–19 years had IFG.

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## The Risk of Diabetes

### Who is at Greater Risk for Type 1 Diabetes?

- Brothers and sisters of people with type 1 diabetes
- Children of parents with type 1 diabetes

### Who is at Greater Risk for Type 2 Diabetes?

- People with impaired glucose tolerance (IGT) and/or impaired fasting glucose (IFG)
- People over age 45
- People with a family history of diabetes
- People who are overweight
- People who do not exercise regularly
- People with low HDL cholesterol or high triglycerides, high blood pressure
- Certain racial and ethnic groups (e.g., Non-Hispanic Blacks, Hispanic/Latino Americans, Asian Americans and Pacific Islanders, and American Indians and Alaska Natives)
- Women who had gestational diabetes, or who have had a baby weighing 9 pounds or more at birth

## Warning Signs of Diabetes

### Type 1 Diabetes

- Frequent urination
- Unusual thirst
- Extreme hunger
- Unusual weight loss
- Extreme fatigue
- Irritability

### Type 2 Diabetes\*

- Any of the type 1 symptoms
- Frequent infections
- Blurred vision
- Cuts/bruises that are slow to heal
- Tingling/numbness in the hands/feet
- Recurring skin, gum, or bladder infections

\*Often people with type 2 diabetes have no symptoms

## Treating diabetes

- To survive, people with type 1 diabetes must have insulin delivered by injection or a pump.
- Many people with type 2 diabetes can control their blood glucose by following a healthy meal plan and exercise program, losing excess weight, and taking oral medication.
- Many people with diabetes also need to take medications to control their cholesterol and blood pressure.
- Diabetes self-management education (DMSE) is an integral component of medical care.

Among adults with diagnosed diabetes, 14% take insulin only, 13% take both insulin and oral medication, 57% take oral medication only, and 16% do not take either insulin or oral medications.

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