

DIABETES FACTS

DIABETES IN YOUTH

What Is Diabetes?

There are 18.2 million people (or 6.3% of the population) in the United States who have diabetes. There are two main types of diabetes. Type 1, which usually occurs during childhood or adolescence, and type 2, the most common form of the disease, which usually occurs after age 45, but is increasingly being diagnosed in children and adolescents.

- Diabetes is a chronic disease that has **no cure**. It is the **fifth-deadliest disease** in the United States; this year, diabetes will contribute to the deaths of **more than 210,000 Americans**.
- The total annual economic cost of diabetes in 2002 was estimated to be **\$132 billion, or one out of every 10 health care dollars spent in the United States**.
- There are an estimated **850,000 to 1.7 million** people with type 1 diabetes in the United States today.

Type 1 Diabetes in Youth

- The risk of developing type 1 diabetes is higher than virtually all other severe chronic diseases of childhood.
- Peak incidence occurs during puberty, around 10 to 12 years of age in girls and 12 to 14 years of age in boys.
- Type 1 diabetes tends to run in families. Brothers and sisters of children with type 1 diabetes have about a 10% chance of developing the disease by age 50.
- The identical twin of a person with type 1 diabetes has a 25-50% higher chance of developing type 1 diabetes than a child in an unaffected family.
- There is a **higher incidence of type 1 diabetes in Caucasians** than in other racial groups.
- The symptoms of type 1 diabetes can mimic the flu in children.

Type 2 Diabetes in Youth

Type 2 diabetes is a metabolic disorder resulting from the body's inability to make enough or properly use insulin. A growing number of children and adolescents are developing type 2 diabetes – a form of diabetes that is generally diagnosed among adults. Type 2 diabetes commonly occurs in children who are:

- **Overweight:** As many as 80% of youth may be overweight at the time of diagnosis.

- Older than 10 years of age and are in middle to late puberty; but cases of type 2 diabetes in children as young as four years old have been documented.
- Have a **family history** of type 2 diabetes.
- Is a member of a **certain racial/ethnic group** (African Americans, Hispanic/Latino and Native American descent).
- **As the U.S. population becomes increasingly overweight, researchers expect type 2 diabetes to appear more frequently in younger, pre-pubescent children.**
- Since type 2 diabetes in children and adolescents is a relatively new phenomenon, accurate statistics regarding the number of cases have not been generated. However, recent reports indicate that **8-45% of children with newly-diagnosed diabetes have type 2 diabetes.**

What Are the Complications of Diabetes?

The complications of diabetes include heart disease, stroke, vision loss/blindness, amputation and kidney disease.

- **Cardiovascular disease** caused by atherosclerosis (excess buildup on the inner wall of a large blood vessel, restricting the flow of blood) accounts for approximately **25 percent of deaths** among patients with onset of diabetes before 20 years of age.
- **Blindness** due to diabetic retinopathy. Diabetic retinopathy is a more important cause of **visual impairment** in younger-onset people than in older-onset people. Males with younger-onset diabetes develop retinopathy more rapidly than females with younger-onset diabetes.
- **Kidney disease** due to diabetic nephropathy. Ten to twenty-one percent of all people with diabetes develop kidney disease. Diabetic nephropathy is the leading cause of **end-stage renal disease (ESRD, or kidney failure)**, accounting for **43 percent** of new cases. ESRD requires the patient to undergo dialysis or kidney transplantation in order to live. In people with type 1 diabetes who develop **proteinuria (protein in the urine)**, ESRD or death usually follows after about 5-10 years.
- **Diabetic ketoacidosis (DKA)** is one of the most serious outcomes of poorly controlled diabetes, and primarily occurs in type 1 individuals. DKA is marked by high blood glucose levels along with ketones in the urine. DKA is responsible for about **10 percent of diabetes-related deaths** in individuals with diabetes under age 45.

For more information in English or Spanish, contact the American Diabetes Association at 1-800-DIABETES (1-800-342-2383), or visit our Web site at www.diabetes.org.

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