

ISHIB Health Facts

DIABETES

WHAT IS DIABETES?

Diabetes mellitus is a group of diseases characterized by high levels of blood glucose which result from defects in insulin secretion, insulin action, or both. Diabetes can be associated with serious complications and premature death, but persons with diabetes can take measures to reduce the likelihood of such occurrences.

THE FOUR TYPES OF DIABETES

Type 1 diabetes was previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes. Type 1 diabetes may account for 5% to 10% of all diagnosed cases of diabetes. Risk factors are less well defined for type 1 diabetes than for type 2 diabetes, but autoimmune, genetic, and environmental factors are involved in the development of this type of diabetes.

Type 2 diabetes was previously called non-insulin dependent diabetes mellitus (NIDDM) or adult-onset diabetes. Type 2 diabetes may account for about 90% to 95% of all diagnosed cases of diabetes. Risk factors for type 2 diabetes include older age, obesity, family history of diabetes, prior history of gestational diabetes, impaired glucose tolerance, physical inactivity, and race/ethnicity. African Americans, Hispanic/Latino Americans, American Indians, and some Asian Americans and Pacific Islanders are at particularly high risk for type 2 diabetes.

Gestational diabetes develops in 2% to 5% of all pregnancies but disappears when a pregnancy is over. Gestational diabetes occurs more frequently in African Americans, Hispanic/Latino Americans, American Indians, and persons with a family history of diabetes. Obesity is also associated with higher risk. Women who have had gestational diabetes are at increased risk for later developing type 2 diabetes. In some studies, nearly 40% of women with a history of gestational diabetes developed diabetes in the future.

“Other specific types” of diabetes result from specific genetic syndromes, surgery, drugs, malnutrition, infections, and other illnesses. Such types of diabetes may account for 1% to 2% of all diagnosed cases of diabetes.

WARNING SIGNS OF TYPE 2 DIABETES

- Feeling tired or ill
- Frequent urination, especially at night
- Excessive thirst
- Weight loss
- Blurred vision
- Frequent infections
- Slow healing of sores

HOW TO MANAGE TYPE 2 DIABETES

- Eat foods to control blood sugar.
- Get physically active-everyday.
- Test blood sugar regularly.
- Take oral medication and insulin, as prescribed.

SEASONAL ALERT

In November each year, the CDC and other health organizations across the country urge persons with diabetes to receive influenza and pneumococcal vaccines. Persons with diabetes are more likely than persons without diabetes to die from complications of influenza and pneumonia and these vaccines can help prevent infection. In 1997, only half of adults with diabetes received an annual influenza vaccination, and one third received a pneumococcal vaccine.



PREVALENCE OF DIABETES

Total number of people with diabetes

15.7 million people — 5.9% of the population.

Diagnosed: 10.3 million people

Undiagnosed: 5.4 million people

New cases diagnosed per year: 798,000

Prevalence of diabetes by age

Age 65 years or older: 6.3 million. 18.4% of all people in this age group have diabetes.

Age 20 years or older: 15.6 million. 8.2% of all people in this age group have diabetes.

Under age 20: 123,000. 0.16% of all people in this age group have diabetes.

Prevalence of diabetes by sex in people 20 years or older*

Men: 7.5 million. 8.2% of all men have diabetes.

Women: 8.1 million. 8.2% of all women have diabetes.

* These figures do not include the approximately 123,000 cases of diabetes in children and teenagers in the United States.

Prevalence of diabetes by race/ethnicity in people 20 years or older*

Non-Hispanic Whites: 11.3 million. 7.8% of all non-Hispanic Whites have diabetes.

Non-Hispanic Blacks: 2.3 million. 10.8% of all non-Hispanic Blacks have diabetes.

On average, non-Hispanic Blacks are 1.7 times as likely to have diabetes as non-Hispanic Whites of similar age.

Mexican Americans: 1.2 million. 10.6% of all Mexican Americans have diabetes.

On average, Mexican Americans are 1.9 times as likely to have diabetes as non-Hispanic Whites of similar age.

Other Hispanic/Latino Americans: On average, Hispanic/Latino Americans are almost twice as likely to have diabetes as non-Hispanic Whites of similar age. (Sufficient data are not currently available to derive more specific estimates.)

American Indians and Alaska Natives: 9% of American Indians and Alaska Natives have diagnosed diabetes. On average, American Indians and Alaska Natives are 2.8 times as likely to have diagnosed diabetes as non-Hispanic whites of similar age.

Asian Americans and Pacific Islanders: Prevalence data for diabetes among Asian Americans and Pacific Islanders are limited. Some groups within this population are at increased risk for diabetes. For example, data collected from 1988 to 1995 suggest that Native Hawaiians are twice as likely to have diagnosed diabetes as white residents of Hawaii.

* These figures do not include the approximately 123,000 cases of diabetes in children and teenagers in the United States.

Deaths among persons with diabetes

Studies have found death rates to be twice as high among middle-aged people with diabetes as among middle-aged people without diabetes. Based on death certificate data, diabetes contributed to 193,140 deaths in 1996. Diabetes was the seventh leading cause of death listed on U.S. death certificates in 1996, according to CDC's National Center for Health Statistics.

Diabetes is believed to be underreported on death certificates, both as a condition and as a cause of death.

Source: Centers for Disease Control and Prevention

Other health facts sheets available at www.ishib.org:

- stroke
- hypertension
- diabetes
- substance use
- obesity



COMPLICATIONS OF DIABETES

Heart disease

Heart disease is the leading cause of diabetes-related deaths. Adults with diabetes have heart disease death rates about 2 to 4 times as high as that of adults without diabetes.

Stroke

The risk of stroke is 2 to 4 times higher in people with diabetes.

High blood pressure

An estimated 60% to 65% of people with diabetes have high blood pressure.

Blindness

Diabetes is the leading cause of new cases of blindness in adults 20 to 74 years old. Diabetic retinopathy causes from 12,000 to 24,000 new cases of blindness each year.

Kidney disease

Diabetes is the leading cause of end-stage renal disease, accounting for about 40% of new cases. 27,851 people with diabetes developed end-stage renal disease in 1995. In 1995, a total of 98,872 people with diabetes underwent dialysis or kidney transplantation.

Nervous system disease

About 60% to 70% of people with diabetes have mild to severe forms of nervous system damage (which often includes impaired sensation or pain in the feet or hands, slowed digestion of food in the stomach, carpal tunnel syndrome, and other nerve problems).

Severe forms of diabetic nerve disease are a major contributing cause of lower extremity amputations.

Amputations

More than half of lower limb amputations in the United States occur among people with diabetes. From 1993 to 1995, about 67,000 amputations were performed each year among people with diabetes.

Dental disease

Periodontal disease (a type of gum disease that can lead to tooth loss) occurs with greater frequency and severity among people with diabetes. Periodontal disease has been reported to occur among 30% of people aged 19 years or older with type 1 diabetes.

Complications of pregnancy

The rate of major congenital malformations in babies born to women with preexisting diabetes varies from 0% to 5% among women who receive preconception care to 10% among women who do not receive preconception care. Between 3% to 5% of pregnancies among women with diabetes result in death of the newborn; the rate for women who do not have diabetes is 1.5%.

Other complications

Diabetes can directly cause acute life-threatening events, such as diabetic ketoacidosis* and hyperosmolar nonketotic coma.* People with diabetes are more susceptible to many other illnesses. For example, they are more likely to die of pneumonia or influenza than people who do not have diabetes.

** Diabetic ketoacidosis and hyperosmolar nonketotic coma are medical conditions that can result from biochemical imbalance in uncontrolled diabetes.*



RESOURCES

RECOMMENDED READING ABOUT DIABETES

The Uncomplicated Guide to Diabetes Complications

Marvin E. Levin, MD and
Michael A. Pfeifer, MD (Editors)

List Price: \$18.95

Available at www.amazon.com for \$13.95

Number of Pages: 384

Winner of the 1999 National Health Information Gold Award

Diabetes is a serious disease with serious complications. Understanding these complications—what they are, what the warning signs are, what to expect, how they can be prevented and treated—is essential for every person with diabetes and their families. Thorough, comprehensive chapters cover everything a person with diabetes needs to know about prevention, treatment, and self-care—in simple language that anyone can understand. All major complications and special concerns are covered, including:

- Kidney and heart disease
- Hypertension and stroke
- Neuropathy and vascular disease
- Skin and teeth problems
- Impotence and sexual disorders
- Plus special concerns such as obesity, pregnancy, and hypoglycemia

Read what one reader says about this book

“There are two reasons why every diabetic should own this book: (1) It is the best source I’ve found to combat what is manifest with every disease: denial! You cannot read this and continue to behave in ways that guarantee diabetes complications. (2) Its print is large enough for those of us whose eyesight has been compromised by diabetes. READ THIS BOOK if you have diabetes!”

OTHER RESOURCES FOR DIABETES

The following organizations provide information and resources for diabetest:

American Association of Diabetes Educators
<http://www.aadenet.org>

American Diabetes Association
<http://www.diabetes.org>

Centers for Disease Control and Prevention
<http://www.cdc.gov/diabetes/>
<http://www.cdc.gov/nchs>

Department of Veterans Affairs
<http://www.va.gov/health/diabetes/>

Health Resources and Services Administration
<http://www.hrsa.dhhs.gov>

Indian Health Service
<http://www.ihs.gov>

Juvenile Diabetes Foundation International
<http://www.jdfcure.com>

National Diabetes Education Program:
A joint program of NIH & CDC
<http://ndep.nih.gov>
<http://www.cdc.gov/diabetes/projects/ndeps.htm>

National Institute of Diabetes and Digestive and
Kidney Disease of the National Institutes of Health
<http://www.niddk.nih.gov>

U.S. Department of Health and Human Services,
Office of Minority Health
<http://www.omrhc.gov>

National Council of La Raza
<http://www.nclr.org>

