



The Diabetes Epidemic Among American Indians and Alaska Natives

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 one of the leading causes of death and disability in the United States. Total health care and related costs for the treatment of diabetes run about \$132 billion annually.

WHAT ARE THE DIFFERENT TYPES OF DIABETES?

- **Type 1 diabetes** (formerly called juvenile diabetes) results when the body's immune system attacks and destroys its own insulin-producing beta cells in the pancreas. People with type 1 diabetes must have insulin delivered by injection or a pump. Symptoms of type 1 diabetes – increased thirst and urination, constant hunger, weight loss, blurred vision, and extreme fatigue – usually develop over a short period of time. If type 1 diabetes is not diagnosed and treated, a person can lapse into a life-threatening coma.

➤ Type 1 diabetes accounts for 5% to 10% of all diagnosed cases of diabetes.

- **Type 2 diabetes** (formerly called adult-onset diabetes) occurs when the body does not make enough insulin or cannot use the insulin it makes effectively. The symptoms of type 2 diabetes – feeling tired or ill, unusual thirst, frequent urination especially at night, weight loss, blurred vision, frequent infections, and slow-healing wounds – may develop gradually and may not be as noticeable as in type 1 diabetes. Some people have no symptoms.

➤ Type 2 diabetes accounts for about 90% to 95% of all diagnosed cases of diabetes.

The following factors increase a person's chances of having type 2 diabetes: a family history of diabetes, being a member of an ethnic group such as American Indians or Alaska Natives, being overweight or obese, having had diabetes while pregnant (gestational diabetes), having high blood pressure, having abnormal cholesterol (lipid) levels, and not getting enough physical activity

- **Gestational diabetes** develops during pregnancy. Women who have had gestational diabetes have a 20 to 50 percent chance of developing diabetes, mostly type 2, in the next 5-10 years.

HOW MANY AMERICAN INDIANS AND ALASKA NATIVES HAVE DIABETES?

- American Indians and Alaska Natives on average are 2.2 times more likely to have diabetes as non-Hispanic whites.
- About 15.1 percent of American Indians and Alaska Natives aged twenty years and older and receiving care from the Indian Health Service (IHS) have diabetes.
- Diabetes is least common among Alaska Natives (8.1 percent) and most common among American Indians in the southern U.S. and southern Arizona (26.7 percent and 27.6 percent respectively).

WHAT IS THE LINK BETWEEN CARDIOVASCULAR DISEASE AND DIABETES?

- Diabetes is a major risk factor for cardiovascular disease in all American Indian populations, and cardiovascular disease is the leading cause of death in this group.
- People with diabetes are 2 to 4 times more likely to have heart disease or suffer a stroke than people without diabetes.
- Middle-aged people with type 2 diabetes have the same high risk for heart attack as people without diabetes who already have had a heart attack.
- About 73 percent of people with diabetes also have high blood pressure.
- Smoking doubles the risk for heart disease in people with diabetes.

WHAT CAN AMERICAN INDIANS AND ALASKA NATIVES DO TO PREVENT HEART DISEASE OR STROKE AND OTHER DIABETES COMPLICATIONS?

- Diabetes is a self-managed disease. People with diabetes must take responsibility for their day-to-day care.
- The chances of having diabetes complications can be reduced or delayed significantly by keeping blood glucose (blood sugar), blood pressure, and cholesterol levels in the target range. The National Diabetes Education Program (NDEP) recommends the following targets for reducing risk of heart disease and stroke for people with diabetes:

A1C (Blood Glucose)

Less than 7 percent
(check at least twice a year)

Blood Pressure

Less than 130/80 mmHg
(check every doctor's visit)

Cholesterol (LDL)

Less than 100 mg/dl
(check once a year)

- People with diabetes can manage their disease by eating healthy foods, being physically active, taking diabetes medicine as prescribed, and testing blood glucose levels.
- Community education and support programs can help people with diabetes and their families to manage their diabetes.

CAN TYPE 2 DIABETES BE PREVENTED?

- YES! The Diabetes Prevention Program (DPP), an important trial sponsored by the National Institutes of Health, showed that type 2 diabetes can be delayed or prevented in overweight adults with pre-diabetes, including American Indians and Alaska Natives. Pre-diabetes is a condition where blood glucose levels are higher than normal, but not yet high enough for a diagnosis of diabetes.
- Risk factors for pre-diabetes are the same as those listed for type 2 diabetes.
- To prevent diabetes, the people who participated in the DPP study:
 - Lost 5 to 7 percent of their body weight (that's 10 to 15 pounds in a person who weighs 200 pounds).
 - Were physically active for 30 minutes a day, 5 days a week. Most participants chose brisk walking.
 - Made healthier food choices and limited the amount of calories and fat in their diet.

WHERE CAN I GO FOR MORE INFORMATION?

For more information about preventing and controlling diabetes, call 1-800-438-5383 or visit the National Diabetes Education Program's website at www.ndep.nih.gov.

Adapted from National Institute of Diabetes and Digestive and Kidney Diseases. National Diabetes Statistics fact sheet: general information and national estimates on diabetes in the United States, 2005. Bethesda, MD: U.S. Department of Health and Human Services, National Institute of Health, 2005.

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