What is diabetes?
• Diabetes is marked by high levels of blood glucose (sugar) resulting from defects in the production or action of insulin, a hormone that regulates blood glucose levels.
• People with diabetes, working together with their support network and health care team, can take steps to control the disease and lower their risk of serious complications and premature death.
• Type 2 diabetes accounts for about 90% to 95% of all diagnosed cases of diabetes.1

How many people have diabetes?
• Diabetes is the seventh leading cause of death in both the United States and North Carolina.1,2 In 2018, diabetes was the primary cause for 3,021 deaths (3.2% of all deaths) and a contributing cause to many more deaths in North Carolina.3
• An estimated 30.3 million people in the United States have diabetes, and of these, about a quarter (7.2 million people) are unaware.1 In North Carolina, about 1 million (12.5%) adults report having been diagnosed with diabetes.3
• In 2018, diabetes was listed as the primary diagnosis for 23,713 hospital discharges in North Carolina.4
• The North Carolina Medicaid program spent over $655 million on 164,757 beneficiaries who have diabetes in 2018.5 That’s about $3,978 per beneficiary with diabetes.
• Over 50,000 adults are newly diagnosed in North Carolina with diabetes each year.6

How is diabetes diagnosed?
• Fasting blood glucose, oral glucose tolerance test and HbA1c are blood tests used to diagnose diabetes as shown in Table 1.
• In North Carolina, only three out of five adults (60.5%) without a known diagnosis of diabetes have had a blood sugar test within the past three years.7

What are the complications of type 2 diabetes?
• Diabetes affects multiple areas of the body and can lead to serious complications including: heart disease and stroke, hypertension, hearing loss, blindness and other eye problems, kidney disease, nerve damage (e.g., impaired sensation or pain in the feet or hands, slow digestion of food in the stomach, erectile dysfunction), amputations (mainly of the lower limbs), dental disease (especially of the gums), excessively large babies, diabetic coma, increased susceptibility to pneumonia and influenza, and depression.

How is type 2 diabetes managed?
• Many people with type 2 diabetes can control their blood glucose by following a healthy meal plan and exercise program, losing excess weight, taking oral medication and/or, in some cases, insulin.
• Preventing complications, especially heart disease, is a key component of diabetes management. The ABCs of diabetes management include optimal blood glucose, blood pressure and cholesterol targets.
  A. A1c less than 7.0%  
  B. Blood pressure less than 140/90 mmHg  
  C. Cholesterol-LDL less than 100 mg/dl  
• Many people with diabetes also need to take medications to control their cholesterol and blood pressure.

What are the risk factors for type 2 diabetes?
• The risk factors include: older age (45 years and older), a family history of type 2 diabetes (parent, brother or sister) and race/ethnicity (African-Americans, Hispanics and other minority groups), overweight/obesity, physical inactivity, high cholesterol, high blood pressure and smoking.
• Additional risk factors specific to women include: gestational diabetes (abnormal blood sugar during pregnancy), giving birth to a baby who weighed more than 9 pounds and having a history of polycystic ovary syndrome (a common condition characterized by irregular menstrual periods, excess hair growth and obesity).

Table 1: Diagnostic criteria for diabetes

<table>
<thead>
<tr>
<th>Test</th>
<th>Normal</th>
<th>Prediabetes</th>
<th>Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fasting Blood Glucose (FBG)</td>
<td>less than 100 mg/dl</td>
<td>100 to 125 mg/dl</td>
<td>126 mg/dl or higher</td>
</tr>
<tr>
<td>Oral Glucose Tolerance Test (OGTT)</td>
<td>less than 140 mg/dl</td>
<td>140 to 199 mg/dl</td>
<td>200 mg/dl or higher</td>
</tr>
<tr>
<td>HbA1c</td>
<td>less than 5.7%</td>
<td>5.7% to 6.4%</td>
<td>6.5% or higher</td>
</tr>
</tbody>
</table>


How can complications of type 2 diabetes be prevented?

- Adherence to the ABCs of diabetes control—optimal control of blood glucose, blood pressure, and blood cholesterol.
- Detection and treatment of diabetes-related eye disease.
- Comprehensive foot care including risk assessment, education, preventive therapy, treatment of foot problems and referral to specialists.
- Vaccination against the flu and pneumonia.

How can type 2 diabetes be prevented?

For individuals who do not have a diagnosis of diabetes, prevention can be achieved by addressing modifiable risk factors:

- Losing a modest amount of weight (5% to 7% of total body weight) through healthy eating and moderate physical activity, with the help of a lifestyle change program, such as the CDC-recognized National Diabetes Prevention Program, has been proven to be the most effective way of delaying or preventing progression from prediabetes to type 2 diabetes.8

For more information, visit DiabetessFreeNC.com or call the North Carolina Diabetes Prevention Program Navigator at 844-328-0021.

Figure 2. Self-Reported Diabetes Prevalence by Area Health Education Centers and Diabetes Self-Management Education and Support (DSMES) Sites

[Map of North Carolina with diabetes prevalence data]

**Data Sources:** American Association of Diabetes Educators, Accredited Programs in North Carolina, nif1.diabeteseducator.org/events/DynamicPage.aspx?Site=aade&WebCode=DEAPFindApprovedProgram


References


