WHAT IS DIABETES?

Diabetes is a chronic disease characterized by elevated blood glucose (blood sugar). High levels of blood glucose result from inadequate production of insulin or a resistance to the effects of insulin, a hormone produced by the pancreas.¹

- **Type 1 Diabetes**: Occurs when the body is unable to produce insulin. It cannot be prevented and accounts for approximately 5% of all diagnosed cases of diabetes in adults.
- **Type 2 Diabetes**: Occurs when cells in the body become resistant to the effects of insulin. Type 2 Diabetes onset is more gradual than in Type 1 and can be prevented. This accounts for about 90-95% of all diagnosed cases of diabetes in adults.
- **Gestational Diabetes**: Develops during pregnancy and can lead to complications for the infant if not managed appropriately. It is usually diagnosed through prenatal screening. Women who develop gestational diabetes during pregnancy have significant risk for developing diabetes later in life.

**Prediabetes (Borderline Diabetes)**: A condition in which the blood sugar levels or hemoglobin A1c (HBA1c) are higher than normal but not high enough to be classified as diabetes.

- 15-30% of people with prediabetes will develop Type 2 within 5 years.
- 9 out of 10 of those with prediabetes do not know they have it.

**Diagnosis**

Diabetes is diagnosed using several blood tests:

<table>
<thead>
<tr>
<th>Test</th>
<th>Normal</th>
<th>Prediabetes</th>
<th>Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fasting Plasma Glucose (FPG)</td>
<td>&lt;100 mg/dL</td>
<td>100-125 mg/dL</td>
<td>&gt;125 mg/dL</td>
</tr>
<tr>
<td>Oral Glucose Tolerance (OGTT)</td>
<td>&lt;140 mg/dL</td>
<td>140-199 mg/dL</td>
<td>&gt;199 mg/dL</td>
</tr>
<tr>
<td>HbA1c</td>
<td>&lt;5.7%</td>
<td>5.7%-6.4%</td>
<td>&gt;6.4%</td>
</tr>
</tbody>
</table>

Almost 1 in 11 (8.8%) Nebraska adults were diagnosed with diabetes in 2016.³
Prevalence

- There’s no evidence of statistical change in percent of Nebraska adults with diabetes from 2012-2016. In 2016, Nebraska’s diabetes rate was lower than the U.S. median (Figure 1).
- Prevalence of diabetes and prediabetes among Nebraska adults rises with increasing age, with the highest prevalence being among adults 55 years and older.
- Those with college degrees are less likely to have diabetes compared with less educated individuals (Figure 2).*
- Diabetes is higher among those with low income (Figure 2).*
- Non-Hispanic (NH) multiracial individuals have the highest age-adjusted rates of diabetes (15.0%), followed by NH American Indians (14.3%) and NH blacks (13.8%) (Figure 3).*

*Age-adjusted rate per 100,000 population (2000 U.S standard population). Population estimates are calculated by the U.S. Department of Commerce, Bureau of the Census.
NH: Non-Hispanic
Prevalence (cont.)

- Prevalence of adverse health conditions is higher among adults with diabetes compared with those without (Figure 4).

Hospitalization^4

- In 2016, 2,327 inpatient hospitalizations occurred among Nebraska residents due to diabetes.

Mortality^5

- Nebraska’s top ten causes of death in 2016 included diabetes at #7.
- In 2016, diabetes claimed the lives of 501 (out of 16,207 deaths) residents in Nebraska.

Risk Factors for Diabetes

- **Non-modifiable risk factors** for diabetes include age, a family history of Type 2 Diabetes and race/ethnicity.
- **Modifiable risk factors** for diabetes include being obese or overweight, physical inactivity, high blood pressure, high blood cholesterol and smoking.
- Additional risk factors specific to women include gestational diabetes and having a baby weighing more than 9 pounds.

The American Diabetes Association (ADA) Diabetes Risk Test (DRT) questionnaire assesses an individual’s risk of developing Type 2 Diabetes. A cumulative score of 5 or higher is categorized as “High Risk.”

Health Impacts of Diabetes

- Blindness
- Heart disease
- Kidney failure
- Loss of toes, feet, or legs
- Stroke

Diabetes Management

Early detection of prediabetes provides an opportunity to prevent or delay development of diabetes and related complications. Research studies found that healthy lifestyle modifications can prevent or delay type 2 diabetes among adults at high risk. Adults with diabetes should also follow a comprehensive care plan to control diabetes and prevent complications. The plan includes:

- Annual diabetes-focused doctor visit and follow-up per doctor’s recommendation.
- Test your own blood sugar a number of times each day (self-monitor blood glucose).
- Check blood pressure (self-monitor blood pressure).
- Get an HbA1c test from health care providers about every three months.
- Take medication as prescribed.
- Participate in diabetes self-management class.

Nebraska Diabetes & Prediabetes Resources

- CDC’s National Diabetes Prevention Program
- ADA or AADE’s Diabetes Self-Management Education (DSME)
- Living Well with Diabetes (Diabetes Self-Management Program developed by Stanford)

For more information

Contact the Chronic Disease Prevention and Control Program at the Nebraska Department of Health and Human Services at: DHHS.CDPProgram@Nebraska.gov or (402) 471-2102.

Or visit our website at www.partnersnhealth.ne.gov

Resources: