Diabetes in Minnesota

What is Diabetes?

Diabetes is a set of diseases that occurs when glucose (sugar) builds up in your blood. It is caused by problems with insulin, a hormone that helps your body use glucose. Glucose provides energy to your body. It is found in carbohydrates in food.\(^1\)

Common Types of Diabetes

**Type 1** develops when the pancreas (an organ near your stomach) stops making insulin. Type 1 often starts in childhood, but adults can develop it.\(^1\)

**Type 2** develops when the pancreas slows down its production of insulin or the body cannot use the insulin. Type 2 diabetes is on the rise worldwide. About 95 percent of all diabetes cases are type 2.\(^1\) Most cases occur among adults.

**Gestational diabetes** affects women during pregnancy and usually goes away after pregnancy. Between 2-10% of women have had gestational diabetes.\(^1\)

How many adults in Minnesota have diabetes?

In 2017, 7.8% of Minnesota adults (about 330,000)\(^2\) had been diagnosed with diabetes (type 1 or 2). Around 18,000 new cases are diagnosed in Minnesota each year (2010).\(^2\)

Around 1 in 10 people with diabetes do not know that they have the disease.\(^3\)

Including people who do not know they have diabetes, the true number of adults with diabetes in Minnesota may be around 10 percent.

Who is at risk for diabetes?

**Type 1 diabetes:** We know some genes that can increase risk of type 1 diabetes, but we do not know what triggers it or how to prevent it. Having a family history of type 1 may put you at greater risk.\(^1\) Read more about family history and the genetics of diabetes.

Also, non-Hispanic whites are more likely to experience type 1 diabetes than other ethnic groups.

**Type 2 diabetes:** Many people are at increased risk for type 2 diabetes:

- **Older adults:** Diabetes is more common among older adults.\(^2\)

- **Overweight and obese adults:** Nearly 2 in 3 adults (65%) in Minnesota were overweight or obese in 2017.\(^2\) Use the Centers for Disease Control and Prevention’s [Adult BMI Calculator](https://www.cdc.gov/HealthyWeights/bmi/adult_bmi/index.htm) to determine your BMI, which can measure if you are overweight.
- Ethnic groups other than non-Hispanic white experience more type 2 diabetes.\(^1,3\)

- People with a family history of diabetes\(^4\): shared lifestyle patterns like diet and exercise are important and genes may play a role too.

- People with low levels of physical activity\(^1\): In 2017, only 21% of Minnesota adults regularly got all recommended physical activity, which includes: 1) muscle strengthening and 2) aerobic activity.\(^2\) See physical activity basics to get ideas for including physical activity into your day.

- Women who had gestational diabetes: About 50 percent of women who had gestational diabetes will develop type 2 diabetes later in life.\(^3\)

- Adults with cardiovascular disease and cardiovascular risk factors: In 2017, 27 percent of Minnesota adults reported having been diagnosed with high blood pressure and 29 percent have high cholesterol.\(^2\)

- Adults with prediabetes: As many as 34% of adults in Minnesota may have prediabetes.\(^4\) Most do not know they have it.\(^5\)

Minnesota rates increased between 1994 and 2010. New US data suggest the increases may have slowed for some groups.\(^6,7\) Increases may be due to:

- people with diabetes living longer, healthier lives than before
- improved detection of diabetes
- our population getting older and demographics changing *(effects minimal in the chart)*
- changes in diagnostic criteria, and
- increasing rates of obesity and risk factors

We also need to look at diabetes among people under 20 years of age. In the US, 0.22 percent of people under 20 have diagnosed diabetes versus 9.3 percent of adults.\(^4,8\) Diabetes is much less common in this age group and rates for all types are rising.

Until recently, type 2 diabetes was rarely seen in children or youth. A new study suggests the number of type 2 cases among youth in the US increased 31% percent between 2001-09.\(^8\)

Obesity and physical activity are the only factors involved in increasing diabetes rates that we can change to lower risk. Learn more about the importance of a healthy weight.

### Are diabetes rates on the rise?

![Graph showing the percentage of Minnesota adults with diagnosed diabetes nearly doubling since 1994](chart)

### What are symptoms?

Not everyone with diabetes experiences diabetes symptoms. However, if you experience any diabetes symptoms, please contact your health care team immediately.

For type 2 diabetes, people may experience no symptoms. Your health care team can run a blood test to tell you if you have type 2.
Should I get tested?

<table>
<thead>
<tr>
<th>If you are:</th>
<th>Recommendations^1</th>
</tr>
</thead>
<tbody>
<tr>
<td>45 years old or older &amp; overweight</td>
<td>Get tested</td>
</tr>
<tr>
<td>45 years old or older &amp; not overweight</td>
<td>Consider being tested</td>
</tr>
<tr>
<td>18-44 years old, overweight or obese and have any of the following risk factors listed here.</td>
<td>Get tested</td>
</tr>
</tbody>
</table>

Also, you can take the Type 2 Diabetes Risk Test to see if you might be at risk. Talk with your health care provider if you have risk factors or are concerned about your diabetes risk.

Updated October 2018.

References

^1National Diabetes Information Clearinghouse
^2CDC, Behavioral Risk Factor Surveillance Study
^4CDC, National Diabetes Statistics Report 2017
^5CDC, Diabetes Public Health Resource: Prediabetes
^6Reuters, Diabetes rates may be leveling off overall: U.S. health officials 9/23/2014
^7Geiss LS et al. 2014 JAMA 312(12):1218
^8Hamman RF et al. 2014 Diabetes Care 37(12):3336

Minnesota Department of Health
Diabetes Unit
PO Box 64882,
St. Paul, MN 55164-0882
651-201-5435
Minnesota Department of Health Website
(www.health.state.mn.us)