

# Prediabetes in Minnesota

## What is Prediabetes?

Prediabetes occurs when blood sugar (glucose) levels are higher than normal, but not high enough to be diabetes.<sup>1</sup>

Prediabetes may be called borderline diabetes, impaired fasting glucose or impaired glucose tolerance.

## How many people in Minnesota have prediabetes?

Around **1 in 3** (34 percent) of American adults have prediabetes.<sup>1</sup> Using this number, **as many as 1.5 million adult Minnesotans may have prediabetes.**

In 2017 **only 8.4% percent** of adults in Minnesota (approx. 360,000) said their health care team told them they had prediabetes.<sup>2</sup>

These numbers suggest that most Minnesotans with prediabetes do not know they have it.

## Why is it important?

People with prediabetes are at higher risk of developing type 2 diabetes, heart disease, and stroke.<sup>1</sup>

**There are steps people with prediabetes can take to lower their chances of developing diabetes, such as losing weight.**

People with prediabetes can develop health problems usually associated with diabetes. These include early kinds of kidney disease, nerve damage, and damaged blood vessels.

The risk of stroke is also higher in people with prediabetes.<sup>1</sup>

A 2014 study estimated that 2012 medical costs for US adults with prediabetes were \$510 higher each year as compared to adults without prediabetes. Costs were higher due to treatment of conditions like high blood pressure, kidney problems, hormonal problems and general medical issues.<sup>3</sup> This means up to \$760 million dollars may be spent each year on additional medical services for adults with prediabetes in Minnesota.

## Who is at risk for diabetes?

**Older adults:** Prediabetes is more common among older adults. Around 25 percent of 18-44 year-olds have prediabetes. This nearly doubles for adults 45 and older.<sup>1</sup>

**Overweight or obese adults:** Nearly two out of three adults in Minnesota were overweight or obese in 2017.<sup>2</sup> People who are overweight or obese are more likely to have prediabetes than people who are normal weight.

**Adults who get little physical activity:** In 2017, around 1 in 4 adult Minnesotans said they did not participate in any physical activity in the last month.<sup>2</sup> Physical activity is associated with maintaining a healthy weight and lowering risk of prediabetes and type 2 diabetes.

## Who should get tested for prediabetes?

Who should get tested for prediabetes varies by age, weight and other factors:

### Prediabetes screening recommendations

If you are:	Recommendation
45 years old or older & overweight	Get tested
45 years old or older & not overweight	Consider being tested
18-44 years old and have any one of the following risk factors:	Get tested

- Physical inactivity
- Birth parent, brother or sister with diabetes
- Had gestational diabetes when pregnant
- Delivered a baby that weighed 9 pounds or more
- Family background that is African American, American Indian, Asian American, Hispanic/Latino, or Pacific Islander
- High blood pressure
- Low HDL or “good” cholesterol
- Polycystic Ovary Syndrome (PCOS)
- Dark patches in skinfolds- neck, armpits or groin
- History of cardiovascular disease

**To help you or your friends and family members determine their prediabetes risk, [complete the on-line prediabetes and diabetes risk test.](#)**

A doctor can use any one of three blood sugar tests to determine if you have prediabetes (or diabetes):<sup>4</sup>

- A1C
- Fasting plasma glucose
- Oral glucose tolerance test

## What can be done to reduce one’s risk for diabetes?

Overweight people with prediabetes who were in a lifestyle change program had 58 percent lower risk of developing type 2 diabetes than people with prediabetes who were not in the program. People in the program:

- Had moderate weight loss (5-7 percent of starting weight)
- Increased their physical activity to 150 minutes per week<sup>5</sup>

The program worked for people of all ethnic backgrounds and for people of all ages.<sup>1</sup>

Ten years later, fewer people in the lifestyle change program had developed type 2 diabetes, showing long-term effects of the program.<sup>1,5</sup>

This program is the Diabetes Prevention Program or DPP. Many different organizations offer the DPP in Minnesota.

Medications including metformin can also delay or prevent type 2 diabetes.<sup>3</sup>

## How can we change the picture for prediabetes in Minnesota?

**See your health care provider and get tested.** Nearly 1 in 3 US adults have prediabetes. A recent study showed less than 50 percent of US adults had a blood sugar test for prediabetes or diabetes in the last 3 years.<sup>6</sup> In 2017, that number was 51 percent for Minnesota.<sup>2</sup> Most adults with prediabetes do not know they have it.

**Talk with your health care provider about how to lower your risk.** A national study showed only 1 in 3 people with diagnosed or undiagnosed prediabetes said their health care team gave them advice about reducing their risk.<sup>6</sup> Be a champion for your health and ask your doctor what lifestyle changes you should make.

**Take steps that can help prevent diabetes.** In the same national study, only one in two people who knew they had prediabetes were doing something to reduce their risk.<sup>6</sup> Three steps can make a difference if you're overweight:

- Try to lose weight
- Reduce extra fat or calories
- Increase your physical activity

The National Diabetes Prevention Program may help you achieve these goals.

**Work with your neighbors, community members and legislators to make your community healthier by:** making healthy foods more available, creating more spaces for physical activity, and supporting policies that will improve health for all.

*Updated October 2018*

## References

- <sup>1</sup>[CDC National Diabetes Statistics Report 2017](#)  
<sup>2</sup>[CDC, Behavioral Risk Factor Surveillance Survey, MDH analysis](#)  
<sup>3</sup>[Dall T.M. et al. 2014. \*Diabetes Care\* 37:3172](#)  
<sup>4</sup>[Bullard KM et al. 2013. \*Diabetes Care\* 36:2286](#)  
<sup>5</sup>[National Diabetes Information Clearinghouse](#)  
<sup>6</sup>[Geiss et al. 2010. \*American Journal of Preventive Medicine\* 38\(4\):403-409](#)

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