

What Is Prediabetes?

Prediabetes is a condition where a person has a blood glucose or A1C level higher than normal, but not high enough for a diagnosis of diabetes.¹

Burden of Diabetes

An estimated 79 million adults in the U.S. have prediabetes. In Michigan, it is estimated that 2.6 million adults have prediabetes.^{1,2}

While approximately 35% of the US adult population is estimated to have prediabetes, in Michigan, only about 6.2% of adults said they were told they have prediabetes or borderline diabetes.^{1,3}

Without lifestyle changes to improve their health, 15% to 30% of people with prediabetes will develop type 2 diabetes within five years.⁴

Studies have shown that people with prediabetes who lose weight and increase their physical activity can prevent or delay the onset of type 2 diabetes and in some cases return their blood glucose levels to normal.⁵

The Cost of Diabetes:

The total estimated cost of diagnosed diabetes in 2012 was \$245 billion. People with diagnosed diabetes, on average, have medical expenditures approximately 2.3 times higher than what expenditures would be in the absence of diabetes.⁶



THE NATIONAL DIABETES PREVENTION PROGRAM

The **National Diabetes Prevention Program** is an evidence-based lifestyle change program aimed at preventing diabetes for people with prediabetes and/or other risk factors for type 2 diabetes.

WHAT DO THE STUDIES SAY?

Small changes, big benefits. Evidence shows for those with prediabetes, making modest lifestyle changes—losing a modest amount of weight (5-7% of body weight) and increasing physical activity (to at least 150 minutes per week)—can delay or prevent diabetes.⁵

The Diabetes Prevention Program study included 3,234 people who were overweight and had prediabetes, and those who lost 7% of body weight and were moderately physically active reduced their risk of diabetes by 58%. The metformin medication group also reduced risk, however only by 31%.⁵

RETURN ON INVESTMENT

Making lifestyle changes can produce a significant return on investment for health plans. In most cases the time to return on investment is less than two years. In one study, participants experienced a per member per month cost savings, beyond the cost of the program, of \$21 in the first year.⁵ The benefits, in health outcomes and dollars saved, outweigh the costs.

HOW DOES IT WORK?

In a group setting, trained lifestyle coaches work with participants over the course of one year to make lifestyle changes to lose 5-7% of body weight and be physically active at least 150 minutes a week through:

- Tracking and logging foods eaten and physical activity
- Reducing fat in meals
- Staying motivated and creating healthy environments

WHO QUALIFIES FOR THE PROGRAM?

To qualify for the program participants must:

- Be 18 years or older and have a BMI $\geq 24\text{kg/m}^2$ AND
 - diagnosed with prediabetes or
 - have a history of gestational diabetes or
 - be at a high risk for developing type 2 diabetes

NDPP PROGRAMS IN MICHIGAN

Ann Arbor YMCA

Community Health and
Social Services Center--
CHASS

District Health Department
#10

Garden City Hospital

Spectrum Gerber Memorial
Hospital

Hurley Health and Fitness
Center

Michigan State University
Extension

National Kidney Foundation
of Michigan

Spectrum Healthier
Communities

YMCA of Greater Grand
Rapids

YMCA of Marquette County

Find local Michigan NDPP programs online:

[dpacmi.org/national-
diabetes-prevention-
program-in-michigan.aspx](http://dpacmi.org/national-diabetes-prevention-program-in-michigan.aspx)



TESTING FOR PREDIABETES

The following tests are used to determine prediabetes status:

<u>Test</u>	<u>Normal</u>	<u>Prediabetes</u>
Fasting Blood Glucose (FBG)	≤99mg/dL	100-125mg/dL
Hemoglobin A1c (A1c)	≤5.6%	5.7 – 6.4%
Oral Glucose Tolerance Test (OGTT)	≤139mg/dL	140-199mg/dL

REFERENCES

- ¹ Centers for Disease Control and Prevention. National diabetes fact sheet: national estimates and general information on diabetes and prediabetes in the United States, 2011. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2011.
- ² Prediabetes in Michigan 2011—The Facts. Michigan Department of Community Health, 2011. www.michigan.gov/diabetes
- ³ Fussman C, Pier K. Diabetes Testing and Prediabetes Among Michigan Adults. *Michigan BRFSS Surveillance Brief*. Vol. 5, No. 5. Lansing, MI: Michigan Department of Community Health, Division of Genomics, Perinatal Health, and Chronic Disease Epidemiology, Surveillance and Program Evaluation Section, Chronic Disease Epidemiology Unit, November 2011.
- ⁴ Centers for Disease Control and Prevention Diabetes Prevention Website. www.cdc.gov/diabetes/prevention/factsheet.htm
- ⁵ Diabetes Prevention Program Research Group. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N Engl J Med* 2002, Vol.346, No. 6.
- ⁶ American Diabetes Association (2013) Economic Costs of Diabetes in the U.S. in 2012. *Diabetes Care* published ahead of print March 6, 2013, doi:10.2337/dc12-2625.

For more information about the CDC Diabetes Prevention Recognition Program, please visit: www.cdc.gov/diabetes/prevention/index.htm