

Prediabetes in Michigan-2015

Prediabetes is the condition in which blood glucose or A1C levels are higher than normal but not yet high enough to be considered diabetes.¹ People with prediabetes have an increased risk of developing type 2 diabetes, and are at higher risk of heart disease and stroke.^{1,2}

Prediabetes Prevalence among Michigan Adults

- Prediabetes tends to be an underreported condition.¹
- 37% of U.S. adults age 20 or older have prediabetes of which approximately 10% are aware of their condition.² In Michigan, only 8.2% of adults 18 years and older reported ever being told that they had prediabetes in 2014.
- Table 1 shows that reported prediabetes was comparable among men and women 18 years and older.
- Prediabetes prevalence increased with increasing age (18-64 years) and increasing weight status (Table 1).
- A higher percentage of Black adults reported ever being told that they had prediabetes than White adults ($p = 0.032$) (Table 1).
- Those who reported a disability had a higher prevalence of reported prediabetes than those who did not report a disability (Table 1).

National Diabetes Prevention Program

Evidence from the Diabetes Prevention Program demonstrated prediabetes risk can be reduced by 57% when those at high risk make modest lifestyle changes, specifically losing 5-7% body weight and being physically active 5 days a week for at least 30 minutes.³

The CDC-led National Diabetes Prevention Program is an evidence-based lifestyle change program for preventing type 2 diabetes. For a list of Michigan programs, please visit www.cdc.gov/diabetes/prevention.

Table 1. Reported Prediabetes Prevalence, Michigan, Adults, 2012 and 2014 combined

Characteristics	Ever Told Prediabetes (%)
Michigan	7.7 (7.1-8.4)
Gender	
Male	7.6 (6.7-8.6)
Female	7.9 (7.1-8.7)
Race	
White	7.3 (6.7-8.0)
Black	9.6 (7.8-11.8)
Other and Multi-racial	10.2 (7.4-13.8)
Age	
18-44 yrs	3.7 (3.0-4.6)
45-54 yrs	9.2 (7.7-11.0)
55-64 yrs	13.4 (11.7-15.2)
65+ yrs	11.9 (10.6-13.3)
Weight Status	
Healthy weight	3.6 (2.9-4.5)
Overweight	6.6 (5.7-7.6)
Obese	14.0 (12.5-15.6)
Health Insurance	
Has insurance	8.0 (7.4-8.7)
No insurance	6.0 (4.4-8.2)
Disability	
Has disability	12.1 (10.7-13.7)
No disability	6.5 (5.8-7.2)

Source: MiBRFSS [www.michigan.gov/brfs]

For more diabetes information in Michigan, please visit www.michigan.gov/diabetes

Diabetes Testing among Michigan Adults

- In 2014, more than half of Michigan adults 18 years and older (56.1%) received a test for diabetes in the past three years.
- Diabetes testing was comparable by gender and race (Table 2).
- The percentage of adults reporting diabetes screening increased with increasing age (18-64 years) and weight status (Table 2).
- Those with health insurance or a disability had a higher prevalence of reported screening than those without insurance or who did not report a disability (Table 2).

Test Results Indicating a Prediabetes Diagnosis⁴

Hemoglobin A1C: 5.7%-6.4%

Fasting Blood Glucose: 100 mg/dL-125 mg/dL

Oral Glucose Tolerance Test: 140 mg/dL-199 mg/dL (2-h PG in the 75-g)

Testing should be considered in all adults who are overweight (Body Mass Index ≥ 25 kg/m² or ≥ 23 kg/m² in Asian Americans) and have additional risk factors such as physical inactivity, family history, high-risk race/ethnicity, women with gestational diabetes history, and hypertension.⁴ For all patients, particularly those who are overweight or obese, testing should begin at age 45 years.⁴ For additional guidance on screening, refer to the US Preventive Services Task Force www.uspreventiveservicestaskforce.org.

Note—MIBRFSS 2012 and 2014 data were combined to determine statistical differences within different subgroups.

References

1. United States Department of Health and Human Services, Centers for Disease Control and Prevention, Division of Diabetes Translation, National Diabetes Prevention Program. *Prediabetes: Am I at Risk?* Accessed November 3, 2015.
2. Centers for Disease Control and Prevention. *National Diabetes Statistics Report: Estimates of Diabetes and Its Burden in the United States, 2014*. Atlanta, GA: U.S. Department of Health and Human Services; 2014.
3. The Diabetes Prevention Program Research Group. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *New England Journal of Medicine* 2002 Feb 7;346(6):393-403.
4. American Diabetes Association. Classification and diagnosis of diabetes. Sec. 2. In *Standards of Medical Care in Diabetes 2015*. *Diabetes Care* 2015;38(Suppl. 1):S8-S16.

Table 2. Diabetes Testing Prevalence, Michigan, Adults, 2012 and 2014 combined

Characteristics	Diabetes Testing in Past Three Years (%)	
Michigan	55.3	(54.0-56.6)
Gender		
Male	53.8	(51.7-55.7)
Female	56.7	(55.0-58.4)
Race		
White	55.1	(53.7-56.5)
Black	57.4	(53.4-61.4)
Other and Multi-racial	51.5	(45.9-57.1)
Age		
18-44 yrs	43.7	(41.6-46.0)
45-54 yrs	59.4	(56.6-62.1)
55-64 yrs	69.5	(67.1-71.7)
65+ yrs	69.6	(67.6-71.5)
Weight Status		
Healthy weight	44.7	(42.4-47.0)
Overweight	58.1	(55.9-60.3)
Obese	65.3	(62.8-67.7)
Health Insurance		
Has insurance	58.3	(56.9-59.6)
No insurance	35.5	(31.7-39.5)
Disability		
Has disability	63.7	(61.0-66.2)
No disability	53.0	(51.5-54.5)

Source: MIBRFSS [\[www.michigan.gov/brfs\]](http://www.michigan.gov/brfs)

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