Community & Clinical Connections for Prevention & Health Branch | North Carolina DHHS | Division of Public Health

What is prediabetes?

Prediabetes is a condition where people have higher blood sugar levels than normal, but the levels are not high enough to be diagnosed with type 2 diabetes.

- · Prediabetes usually happens before someone gets type 2 diabetes and is also a risk factor for heart disease and stroke. With a lifestyle change program, such as the National Diabetes Prevention Program (National DPP) people can lower their risk of developing prediabetes by as much as 58%.1
- · Unlike diabetes, prediabetes often has no noticeable symptoms.
- · Prediabetes can develop at any age from childhood and adolescence through adulthood.

Type 2 **Target** Prediabete: **Diabetes** Range

How many people have prediabetes?

Based on fasting blood sugar or hemoglobin A1C (HbA1c) level-

of US adults or an estimated

million people had prediabetes in 20212

Fasting blood sugar test measures blood sugar after not eating overnight. Hemoglobin A1C is a blood test that measures average blood sugar levels over the past 3 months.

are aware individuals with Nationwide. out of their only about prediabetes - or condition.2

If the national estimated prevalence for prediabetes of 38% is applied to North Carolina adults, then-

million North Carolinians may have prediabetes

of NC adults. an estimated million

were told by a health professional that they have prediabetes.4

nearly

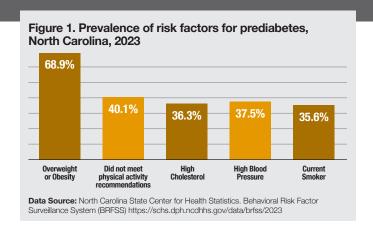
million North Carolinians may have prediabetes but are unaware of their condition.

According to CDC adults in NC develop 2022 data, about diabetes every day.

Without intervention, people with prediabetes are more likely to develop diabetes.6

What are the risk factors for prediabetes?

- · The risk factors include older age (45 years and older), a family history of type 2 diabetes (parent, brother or sister) and race/ethnicity (African-Americans, Hispanics, and other racial and ethnic minority groups), overweight/obesity, and physical inactivity.
- Additional risk factors for prediabetes specific to women include: gestational diabetes (elevated blood sugar during pregnancy), giving birth to a baby who weighed more than 9 pounds, and having a history of polycystic ovary syndrome (a common condition characterized by irregular menstrual periods, excess hair growth, and obesity).



How is prediabetes diagnosed?

- CDC has a simple screening tool that uses seven questions to assess an individual's risk of prediabetes.⁶ A score of five or higher indicates a high risk for prediabetes and getting a blood test can confirm prediabetes (Table 1).
- Fasting blood sugar, oral glucose tolerance test, and HbA1c are blood tests used to confirm both prediabetes and diabetes as shown in Table 1.
- In North Carolina, 1 in 4 adults (25%) without a known diagnosis of diabetes did not have a blood sugar test within the past year.⁴

Table 1: Diagnostic test criteria for prediabetes

		-	
Test	Target Range	Prediabetes	Type 2 Diabetes
Fasting Blood Glucose (FBG)	99mg/dL or below	100-125 mg/dL	126 mg/dL or above
Oral Glucose Tolerance Test (OGTT)	140mg/dL or below	140-199 mg/dL	200 mg/dL or above
HbA1c	Below 5.7%	5.7%-6.4%	6.5% or above

Source: American Diabetes Association, Diagnosing Diabetes and Learning About Prediabetes. diabetes.org/diabetes-basics/diagnosis

How is prediabetes treated?

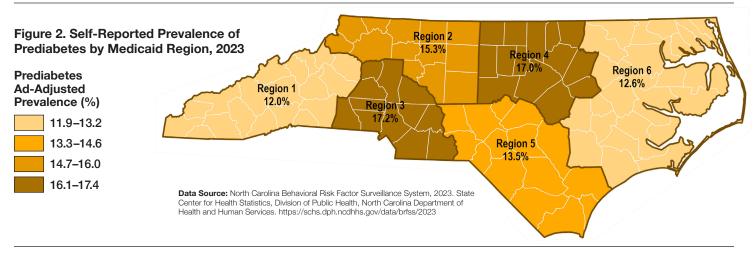
Once an individual is diagnosed with prediabetes, the main goal of treatment is to delay or prevent progression to type 2 diabetes.

- Losing a modest amount of weight (5% to 7% of total body weight) through healthy eating and moderate physical activity with the help of a lifestyle change program, such as the CDC-recognized National Diabetes Prevention Program, has been proven to be the most effective way of delaying or preventing progression from prediabetes to type 2 diabetes.¹
 - -For more information: cdc.gov/diabetes-prevention/index.html
- Metformin, a drug used to control blood sugar, has also been shown to be somewhat effective in delaying or preventing progression from prediabetes to type 2 diabetes, but it is not as effective as lifestyle change.⁷

How is prediabetes prevented?

For individuals who do not have prediabetes, prevention can be achieved by addressing these modifiable risk factors:

- Preventing overweight/obesity through regular physical activity and healthy eating. For general information on physical activity and healthy eating please visit esmmweighless.com.
- Preventing and/or managing high cholesterol and high blood pressure through lifestyle change and medications if necessary.
- Avoiding tobacco products and secondhand smoke for non-smokers and quitting for current smokers. For general information about smoking and how to get help quitting, please visit quitlinenc.com or call 1-800-QUIT-NOW.



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In addition to the above references this fact sheet was developed with heavy information from the Centers for Disease Control and Prevention website: cdc.gov/diabetes/index.html



This fact sheet was produced by the Community and Clinical Connections for Prevention and Health Branch, Chronic Disease and Injury Section, Division of Public Health, N.C. Department of Health and Human Services. If you have any questions about data used in this fact sheet or about heart and blood vessel disease prevention and management efforts in North Carolina, please email contact@communityclinicalconnections.com.

For more information on the Community and Clinical Connections for Prevention and Health Branch, please visit communityclinicalconnections.com.