

BRFSS Brief

Number 2022-17

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey of adults developed by the Centers for Disease Control and Prevention conducted in all 50 States, the District of Columbia, and several US Territories. The New York BRFSS is administered by the New York State Department of Health to provide statewide and regional information on behaviors, risk factors, and use of preventive health services related to the leading causes of chronic and infectious diseases, disability, injury, and death.

Diagnosed Diabetes

New York State Adults, 2020

Introduction and Key Findings

Diabetes is a chronic disease in which blood sugar (glucose) levels are above normal. Insulin, a hormone made by the pancreas, helps blood sugar enter the body's cells for use as energy. In people with diabetes, this process is impaired. In type 1 diabetes, the pancreas fails to produce insulin, and in type 2 diabetes, the cells of the body become resistant to insulin.¹ Type 2 diabetes accounts for about 90% to 95% of all diagnosed cases of diabetes, and type 1 diabetes accounts for about 5%.²

Both type 1 and type 2 diabetes are characterized by high blood sugar or hyperglycemia. Over time, high blood sugar damages nerves and blood vessels leading to complications such as heart disease, stroke, blindness, kidney disease, and amputations. Other complications of diabetes may include increased susceptibility to other diseases, loss of mobility with aging, depression, and problems during pregnancy.³

Risk factors for type 1 diabetes include family history, environmental factors such as exposure to certain viruses, and the presence of antibodies that damage the immune system. Risk factors for type 2 diabetes include those that are modifiable, such as being physically active less than three times per week or having overweight. Risk factors for type 2 diabetes that are not modifiable include family history of diabetes, advancing age, race, and ethnicity. Type 2 diabetes is preventable with proven lifestyle changes that include losing a small amount of weight (5-7% of body weight) and getting regular physical activity.

Social determinants of health that are fueled by systemic racism contribute to stark disparities in diabetes prevalence, management, and outcomes. Diabetes is also a very costly disease. Medical spending for people with diagnosed diabetes are more than double those for people without diabetes.⁴

Key Findings

An estimated 1.58 million adult New Yorkers (10.3%) have diagnosed diabetes. The prevalence of diagnosed diabetes is significantly higher among Black, non-Hispanic adults (15.1%) than White, non-Hispanic adults (8.3%). Adults with obesity are significantly more likely to report being diagnosed with diabetes (17.8%) compared to adults with overweight (10.2%) or with neither overweight nor obesity (6.4%). Diagnosed diabetes is more prevalent among adults receiving Medicare (21.4%) or Medicaid (13.6%) than among those with private insurance (6.9%). It is more common among older adults, adults with lower household incomes and educational attainment, and adults living with a disability.

BRFSS questions

Diagnosed diabetes

1. Have you ever been told by a doctor that you have diabetes?

[If "yes" and respondent is female, ask:]

2. Was this only when you were pregnant?

Gestational (pregnancy-related) diabetes, prediabetes, and borderline diabetes were not counted as diabetes cases in the calculation of prevalence estimates.

Figure 1. Diagnosed Diabetes* among US and New York State adults, BRFSS 2020

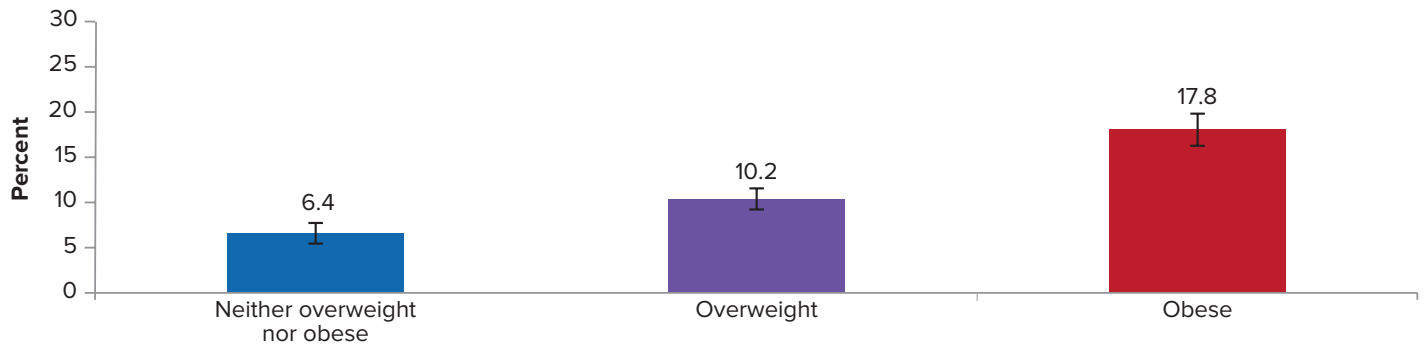


*Does not include reported gestational diabetes, prediabetes, or borderline diabetes.

**Median percent; includes data from all 50 states and the District of Columbia.

Note: Error bars represent 95% confidence intervals.

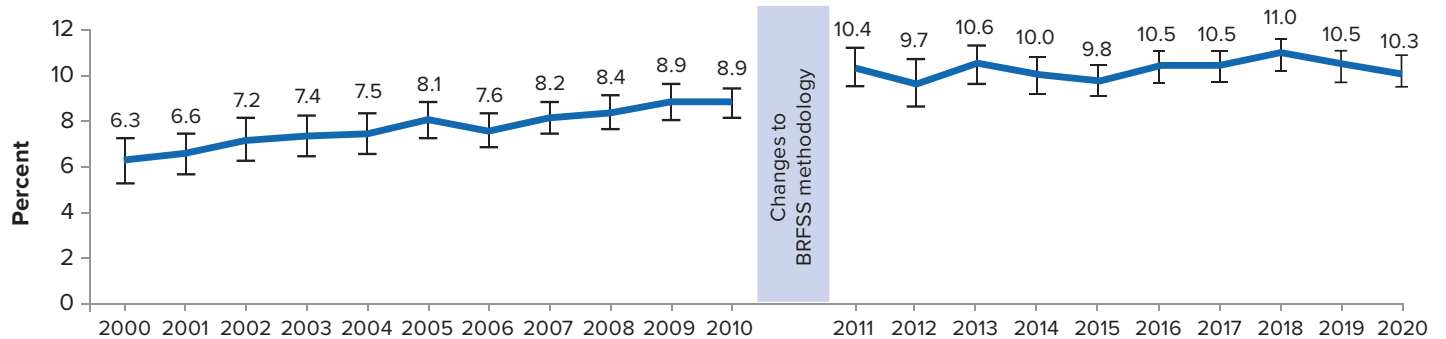
Figure 2. Diagnosed Diabetes* among New York State adults, by Body Mass Index (BMI) category, BRFSS 2020



*Does not include reported gestational diabetes, prediabetes, or borderline diabetes.

Note: Error bars represent 95% confidence intervals.

Figure 3. Diagnosed Diabetes* among New York State adults by BRFSS survey year, 2000-2020**



*Does not include reported gestational diabetes, prediabetes, or borderline diabetes.

**Data from 2011-2017 are not comparable to prior years because of changes to the BRFSS methods in 2011. See the following link for more information on these changes: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6122a3.htm?s_cid=mm6122a3_w

Note: Error bars represent 95% confidence intervals.

Diagnosed Diabetes^a among New York State adults, 2020 BRFSS

	% ^b	95% CI ^b
Total New York State (NYS) [n=14,769]	10.3	9.6 - 11.0
Sex		
Male	10.8	9.8 - 11.9
Female	9.8	8.9 - 10.8
Age (years)		
18-24	1.8	0.4 - 3.2
25-34	1.4	0.6 - 2.2
35-44	5.0	3.6 - 6.4
45-54	10.5	8.7 - 12.2
55-64	16.0	14.0 - 18.1
65+	21.9	19.9 - 23.9
Race/ethnicity		
White, non-Hispanic	8.3	7.6 - 9.0
Black, non-Hispanic	15.1	12.8 - 17.5
Hispanic	12.1	10.2 - 14.0
Other race or multiracial, non-Hispanic ^c	11.8	8.7 - 14.9
Annual household income		
<\$25,000	16.6	14.5 - 18.7
\$25,000-\$49,999	12.6	10.8 - 14.4
\$50,000 and greater	6.8	6.0 - 7.6
Missing ^d	9.8	8.2 - 11.4
Educational attainment		
Less than high school	19.9	16.8 - 23.1
High school or GED	10.9	9.6 - 12.2
Some post-high school	10.0	8.6 - 11.3
College graduate	6.2	5.5 - 6.8
Body Mass Index (BMI) category		
Neither overweight nor obese	6.4	5.2 - 7.6
Overweight	10.2	9.1 - 11.4
Obese	17.8	16.1 - 19.6
Health care coverage type		
Private	6.9	6.1 - 7.8
Medicare	21.4	19.2 - 23.5
Medicaid	13.6	11.0 - 16.3
Other insurance ^e	14.5	10.5 - 18.5
Not insured	6.0	4.3 - 7.6
Disability status^f		
Yes	23.3	21.0 - 25.5
No	6.4	5.8 - 7.1
Region		
New York City (NYC)	11.1	9.9 - 12.4
NYS exclusive of NYC	9.7	8.9 - 10.5

^a Does not include reported gestational diabetes, prediabetes, or borderline diabetes.

^b % = weighted percentage; CI = confidence interval.

^c American Indian, Alaskan Native, Asian, Native Hawaiian or other Pacific Islander, other race or multiracial

^d "Missing" category included because more than 10% of the sample did not report income.

^e Includes TRICARE, VA/Military, and Indian Health Services.

^f All respondents who reported at least one type of disability (cognitive, mobility, vision, self-care, independent living or deafness).

References

1. National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health. Diabetes Overview: What is Diabetes? Available at: <https://www.niddk.nih.gov/health-information/diabetes/overview/what-is-diabetes>. Accessed May 17, 2022.
2. Centers for Disease Control and Prevention. Type 2 Diabetes. Available at: <https://www.cdc.gov/diabetes/basics/type2.html>. Accessed May 17, 2022.
3. National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health. Diabetes Overview: Preventing Diabetes Problems. Available at: <https://www.niddk.nih.gov/health-information/diabetes/overview/preventing-problems>. Accessed May 17, 2022.
4. American Diabetes Association. Economic Costs of Diabetes in the U.S. in 2017. Diabetes Care 2018;41(5):917-928. Available at: <https://care.diabetesjournals.org/content/41/5/917>. Accessed May 17, 2022.

Program Contributions

New York State Department of Health
Bureau of Chronic Disease Evaluation and Research
Bureau of Community Chronic Disease Prevention

Order Information

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