

BRFSS Brief

Number 1306

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual statewide telephone survey of adults developed by the Centers for Disease Control and Prevention and administered by the New York State Department of Health. The BRFSS is designed to provide information on behaviors, risk factors, and utilization of preventive services related to the leading causes of chronic and infectious diseases, disability, injury, and death among the noninstitutionalized, civilian population aged 18 years and older.

Diabetes

New York State Adults 2011

Introduction and Key Findings

Diabetes is a chronic disease in which blood sugar (glucose) levels are above normal. Normally, cells in the body access the energy stored in glucose, a form of sugar created from digestion of food, through a chemical process involving the hormone insulin. In people with diabetes, this process is impaired. In persons with Type 1 diabetes, the pancreas fails to produce insulin, and in those with Type 2 diabetes, the cells of the body become resistant to insulin. Both Type 1 and Type 2 diabetes are characterized by high blood sugar or hyperglycemia.¹ Over time, high blood sugar damages nerves and blood vessels, leading to complications such as heart disease, stroke, blindness, dental disease and amputations. Other complications of diabetes may include increased susceptibility to other diseases, loss of mobility with aging, depression and problems during pregnancy.²

National data indicate almost 40% of the U.S. population has some type of hyperglycemic condition.³ Projections based on national trends suggest that 1 in 3 Americans will develop diabetes in their lifetime.⁴ The risk factors for diabetes include both characteristics that cannot be modified, including race, ethnicity, family history and age, and behavioral and lifestyle characteristics that can be modified, including sedentary behavior, eating habits and the management of other chronic conditions. Diabetes is not only common; it is also a very costly disease. Medical expenditures for people with diagnosed diabetes are more than double those for people without diabetes.^{4,5}

KEY FINDINGS

An estimated 1.5 million adult New Yorkers (10.4%) have been diagnosed with diabetes. The prevalence of diabetes is significantly higher among adults with a family history of diabetes (19.7%) than among those without a family history (5.9%), and among adults who are obese (22.1%) compared to adults who are overweight (9.1%) or neither overweight nor obese (4.5%). Diabetes is also more common among older adults, adults with lower household incomes and educational attainment, and among adults with disabilities.

BRFSS Questions

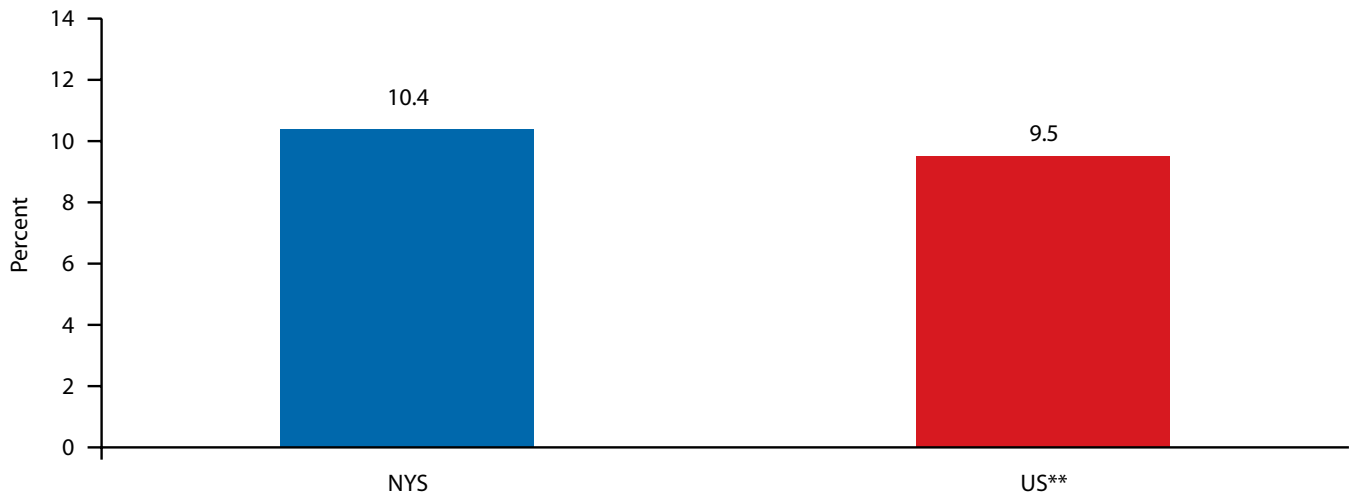
1. Have you ever been told by a doctor that you have diabetes?

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

2. Was this only when you were pregnant?

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

Figure 1. Diabetes* among US and New York State adults, BRFSS 2011

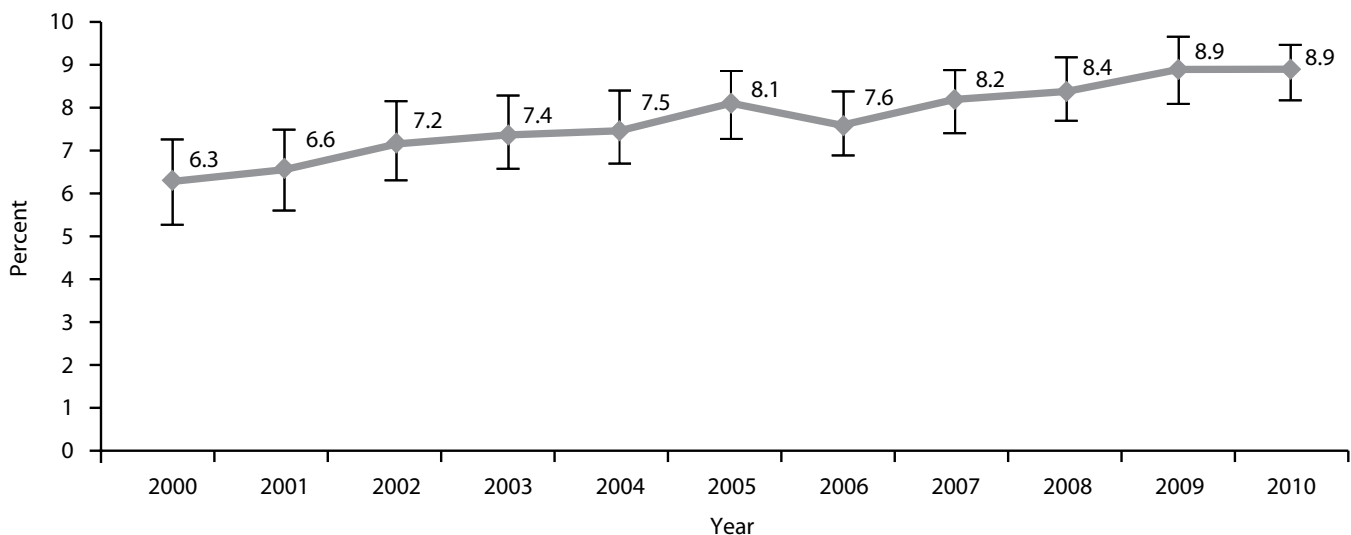


*Does not include reported gestational diabetes, pre-diabetes, or borderline diabetes.
**Median percent; includes data from all 50 states and the District of Columbia.

Changes to BRFSS Methodology

Beginning in 2011, BRFSS data includes data from interviews completed by people with cell phones in addition to interviews completed by people with landlines. The data also reflect changes in how CDC weights the data. Weighting ensures that the data collected are as representative of New York's population as possible. The new method of weighting enables more sociodemographic information about the respondents to be incorporated into the weighting. While these two changes improve the accuracy of the BRFSS, they can result in prevalence estimates that are significantly different from those calculated previously. **Because of the differences in data collection, it is not appropriate to compare 2011 data to prior years and the BRFSS 2011 prevalence data should be considered a baseline year for data analysis.**

Figure 2. Diabetes* among New York State adults, by BRFSS survey year, 2000-2010



*Does not include reported gestational diabetes, pre-diabetes, or borderline diabetes.
Note: Error bars represent 95% confidence intervals.

Diabetes^a among New York State adults, 2011 BRFSS

	% ^b	95% CI ^b
New York State (NYS) [n=7,735]	10.4	9.6-11.3
Sex		
Male	10.6	9.3-12.0
Female	10.3	9.2-11.4
Age (years)		
18-24	0.9	0.0-2.0
25-34	1.7	0.4-2.9
35-44	6.0	4.2-7.8
45-54	11.5	9.2-13.8
55-64	17.1	14.7-19.6
≥ 65	23.0	20.6-25.4
Race/ethnicity		
White non-Hispanic	9.3	8.4-10.2
Black non-Hispanic	14.6	11.9-17.4
Hispanic	10.8	8.3-13.3
Other non-Hispanic	10.1	6.6-13.7
Annual household income		
<\$15,000	16.1	13.1-19.1
\$15,000-\$24,999	13.5	10.8-16.1
\$25,000-\$34,999	11.3	8.3-14.3
\$35,000-\$49,999	12.3	9.5-15.1
\$50,000-\$74,999	8.7	6.5-10.9
≥\$75,000	6.0	4.8-7.3
Missing ^c	10.1	8.0-12.2
Educational attainment		
Less than high school	17.6	14.3-20.9
High school or GED	11.5	9.8-13.1
Some post-high school	10.1	8.5-11.8
College graduate	6.2	5.2-7.2
Body Mass Index (BMI) category		
Neither overweight nor obese	4.5	3.4-5.5
Overweight	9.4	8.0-10.7
Obese	22.1	19.7-24.6
Family history of diabetes		
Yes	19.7	15.9-23.4
No	5.9	4.7-7.0
Disability^d		
Yes	20.0	17.7-22.4
No	7.3	6.4-8.2
Region		
New York City (NYC)	10.3	9.0-11.6
NYS exclusive of NYC	10.6	9.4-11.7

a Does not include reported gestational diabetes, pre-diabetes, or borderline diabetes.

b % = weighted percentage; CI = confidence interval

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

d All respondents who report activity limitations due to physical, mental, or emotional problems OR have health problems that require the use of special equipment.

References

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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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