

BRFSS Brief

Number 1108

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 Self-management Behaviors

New York State Adults, 2008-2010

Introduction and Key Findings

Diabetes is a chronic disease that requires daily care and management to prevent complications and help maintain health. Appropriate diabetes management includes both regular medical care and routine patient self-management. Daily monitoring of blood glucose (blood sugar) is a central component of self-care that enables adults with diabetes to evaluate their responses to therapy and assess whether targets for glycemic control (the maintenance of blood sugar levels within appropriate ranges) are achieved. Diabetes self-management education (DSME) is a course facilitated by a team of specialized health care providers that helps people with diabetes initiate effective self-management skills and maintain healthy lifestyles. When delivered in accordance with national standards, DSME has been shown to improve diabetes knowledge, self-care behaviors, and clinical outcomes, including glycemic control.¹ Many insurers, including New York State Medicaid, offer diabetes self-management education as a benefit.

Between 2003 and 2010, adults with diabetes who reported taking a course on how to manage their diabetes were more likely to monitor their blood glucose levels daily. However, the percentage of adults participating in DSME remained constant during those years, with less than half participating. In spite of this, the percentage of adults who reported monitoring their blood glucose levels daily increased between 2003 and 2010. Encouraging participation in DSME represents a way to achieve additional increases in blood glucose monitoring beyond what was observed between 2003 and 2010.

BRFSS Questions

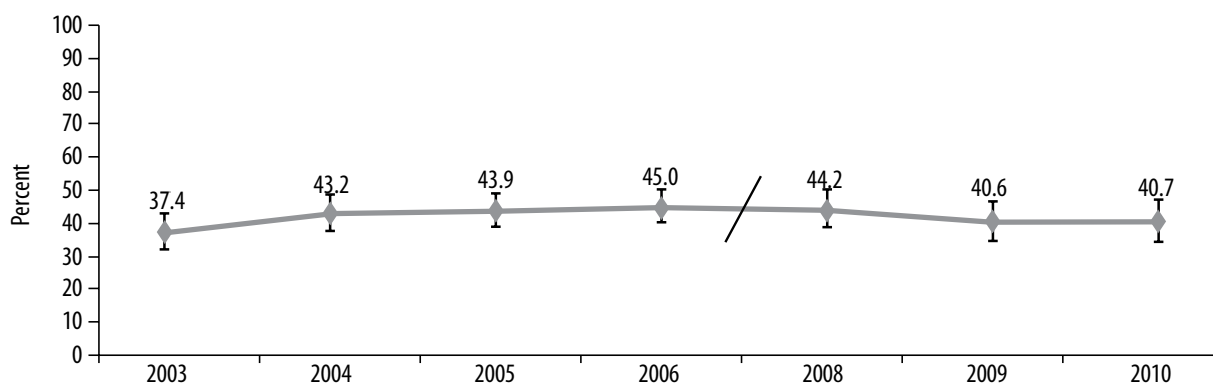
Diabetes self-management education

1. *Have you ever taken a course or class in how to manage your diabetes yourself?*

Self-monitoring of blood glucose

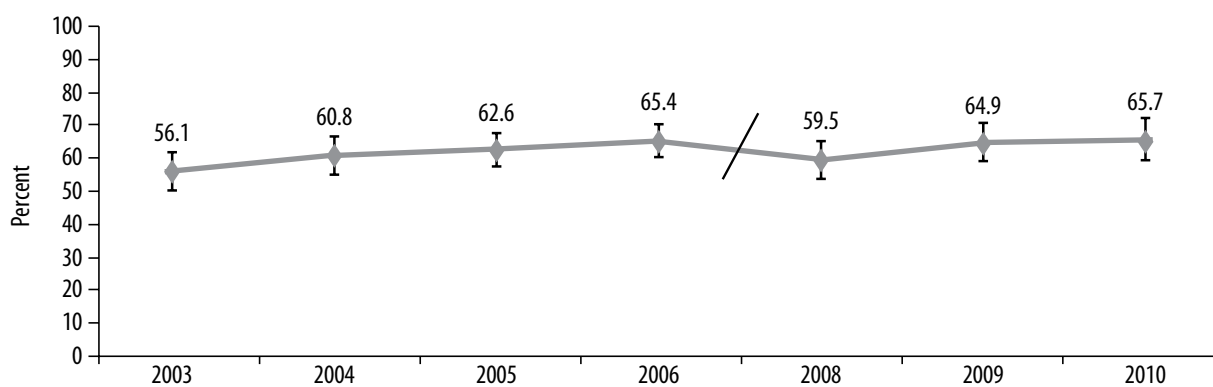
1. *About how often do you check your blood for glucose or sugar? Include times when checked by a family member or friend, but do NOT include times when checked by a health professional.*

Diabetes self-management education* (DSME) among NYS adults with diabetes, by BRFSS survey year



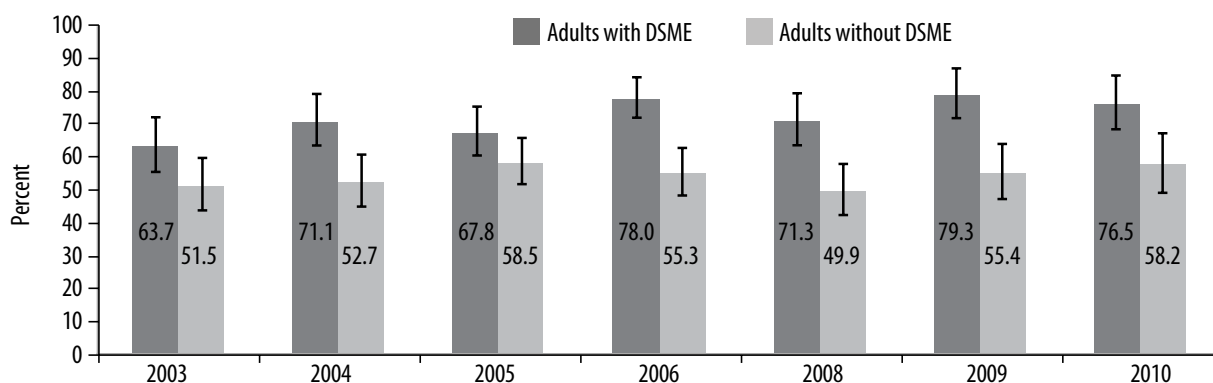
*Those adults with diabetes who report ever having attended a class or a course on diabetes self-management.
 Note: This question was not asked in the BRFSS in 2007. Error bars represent 95% confidence intervals

Self-monitoring of blood glucose (SMBG) at least once per day among NYS adults with diabetes, by BRFSS survey year



Note: This question was not asked in the BRFSS in 2007. Error bars represent 95% confidence intervals

Percent of NYS adults with diabetes who perform daily SMBG by DSME status, by BRFSS survey year



Note: This question was not asked in the BRFSS in 2007. Error bars represent 95% confidence intervals

Prevalence of self-management behaviors among NYS adults with diabetes^a: 2008-2010 BRFSS

	Ever had diabetes self-management education		Monitor blood glucose at least once per day	
	% ^b	95% CI ^b	% ^b	95% CI ^b
New York State (NYS)	42.0	38.5-45.5	63.0	59.6-66.5
Sex				
Male	37.6	32.5-42.7	59.1	53.7-64.4
Female	46.6	41.9-51.2	67.1	62.8-71.4
Age (years)				
18-64	42.5	37.4-47.6	63.3	58.3-68.3
≥65	41.4	36.9-45.9	62.9	58.5-67.4
Race/ethnicity				
White non-Hispanic	42.8	38.8-46.9	63.7	59.8-67.6
Black non-Hispanic	35.6	26.2-45.0	56.5	45.8-67.1
Hispanic	43.0	29.2-56.9	65.8	52.4-79.3
Other non-Hispanic	*	—	*	—
Annual household income				
<\$15,000	34.7	26.1-43.2	71.0	62.3-79.8
\$15,000-\$24,999	42.0	34.7-49.4	62.2	54.8-69.6
\$25,000-\$49,999	50.5	43.0-58.0	62.8	55.6-70.0
\$50,000-\$74,999	39.3	28.6-49.9	57.2	46.2-68.1
≥\$75,000	38.6	30.0-47.2	56.8	47.7-65.9
Missing ^c	41.3	32.7-49.9	69.5	61.9-77.1
Employment status				
Employed	39.7	33.1-46.3	56.6	49.8-63.4
Out of work	40.3	25.5-55.0	64.8	50.9-78.7
Homemaker/student/unable to work	45.4	37.4-53.5	70.3	62.7-77.8
Retired	41.9	37.2-46.7	64.4	59.8-69.0
Currently taking Insulin				
Yes	55.7	48.9-62.6	92.9	89.3-96.5
No	36.5	32.5-40.4	50.6	46.4-54.8
Insurance status				
Insured	42.6	39.0-46.2	62.9	59.4-66.5
No insurance	34.9	21.1-48.7	64.0	50.5-77.5
BMI Category				
Neither overweight or obese	44.6	35.7-53.5	59.2	50.5-67.9
Overweight	38.3	32.4-44.2	61.9	55.8-67.9
Obese	44.9	39.5-50.0	65.2	60.1-70.2
Duration of diabetes (years)				
0-4	33.8	27.1-40.5	51.7	44.5-58.9
5-9	36.8	29.6-43.9	62.7	55.2-70.1
10-19	51.4	44.7-58.1	66.8	60.4-73.3
≥20	49.3	41.4-57.2	76.9	70.1-83.7
Marital Status				
Married or unmarried couple	42.5	37.7-47.4	61.8	57.0-66.7
Not married	41.1	36.1-46.1	64.2	59.4-69.0
Disability^d				
Yes	43.7	38.6-48.9	70.7	65.7-75.6
No	40.6	35.8-45.5	57.0	52.1-61.9

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.

* Estimates based on fewer than 50 observations have been suppressed.

References

1. American Diabetes Association. Standards of medical care in diabetes – 2011. *Diabetes Care* 2011; 34(S1):S11-S61.

Program Contributions

Diabetes Prevention and Control Program
New York State Department of Health
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Order Information

Copies may be obtained by contacting:

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