BRFSS Brief

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.

High Cholesterol
New York State Adults, 2011

Introduction and Key Findings

Elevated blood cholesterol levels are a major risk factor for cardiovascular disease. Adults with high total cholesterol (≥240 mg/dL) are twice as likely to develop coronary heart disease. High cholesterol has no symptoms, so many people don't know that their cholesterol is too high. The National Cholesterol Education Program recommends that all adults have their cholesterol levels checked at least once every five years (more frequently if their cholesterol levels are high or they are at high risk for cardiovascular disease).[1]

Obesity, lack of physical activity, and high intake of saturated and trans fats are common modifiable risk factors for developing high cholesterol.

KEY FINDINGS

Among adults in New York State who have had their cholesterol checked, nearly 40% report being told they had high cholesterol levels. High cholesterol is significantly more prevalent among adults who are obese (47%) or overweight (40.9%) than those who are neither overweight nor obese (31%). Adults with diabetes have a significantly higher rate (68%) of elevated cholesterol compared to adults without diabetes (35%).

Eighty percent of adults reported that they had had their cholesterol checked within the past five years. Rates for having cholesterol checked within the past five years were higher for whites (82%) than for other race/ethnic groups (76% for African Americans and 74% for Hispanics), and higher for those with health care coverage (84%) compared to those without coverage (53%).

BRFSS Questions

1. Blood cholesterol is a fatty substance found in the blood. Have you ever had your blood cholesterol checked?

[If "yes"]

2. About how long has it been since you last had your blood cholesterol checked?

3. Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?
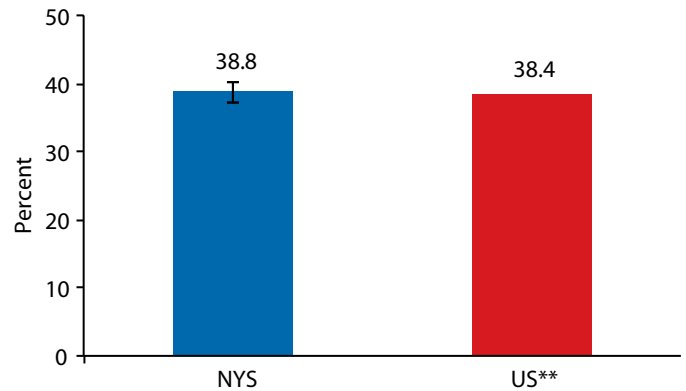
Figure 1. Cholesterol checked within the past 5 years among U.S. and New York State adults, BRFSS 2011
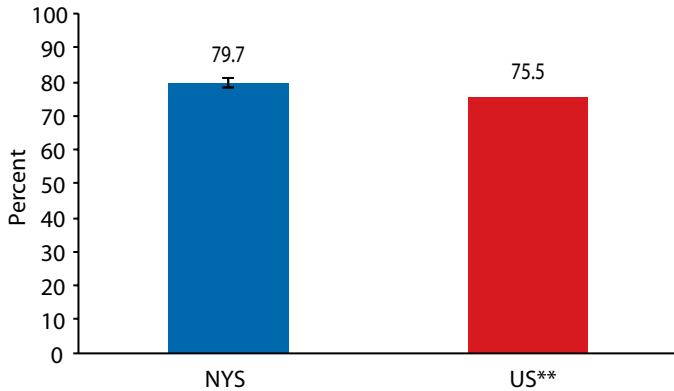
* Median percent; includes data from all 50 states and the District of Columbia.
Note: Error bars represent 95% confidence intervals

Figure 2. High cholesterol* among U.S. and New York State adults, BRFSS 2011


* Those who ever had blood cholesterol checked.
** Median percent; includes data from all 50 states and the District of Columbia.
Note: Error bars represent 95% confidence intervals

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 the Centers for Disease Control (CDC) weight 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 demographic information about the respondents to be incorporated into the weighting. While these two changes improve the accuracy of the BRFSS, they may result in prevalence estimates that are significantly different from those previously calculated. **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 3. High cholesterol* among New York State adults, by BRFSS survey year
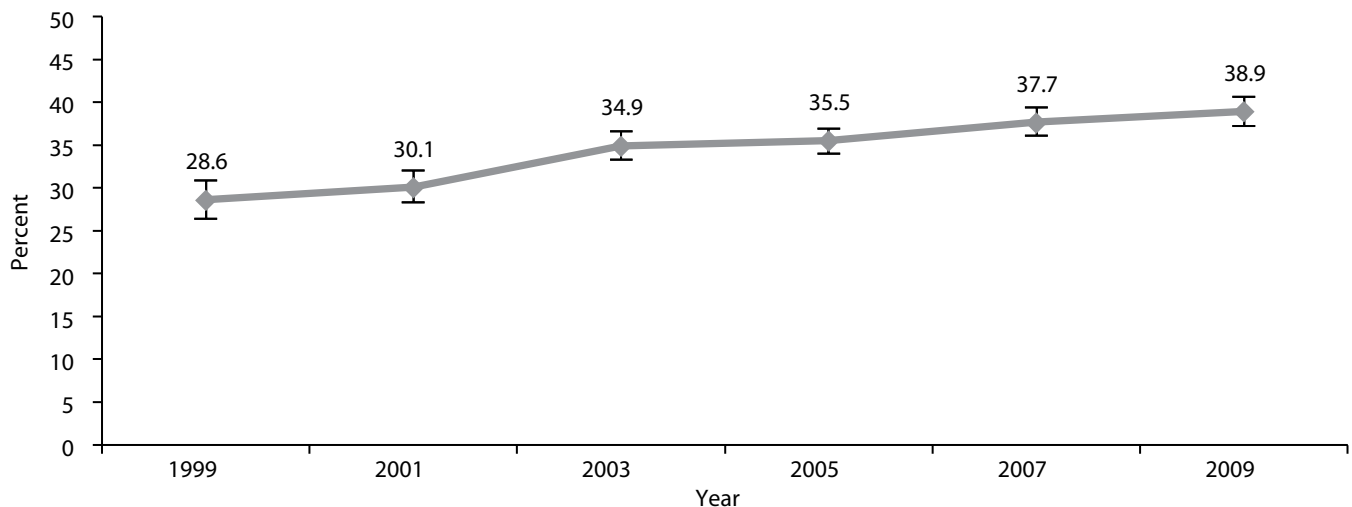
Note: Error bars represent 95% confidence intervals.

Blood cholesterol among New York State adults:[a] 2011 BRFSS

	Blood cholesterol			
	High Cholesterol[b]		**Checked within past 5 years**	
	%[c]	**95% CI[c]**	**%**	**95% CI**
New York State (NYS) [n=7,735]	**38.8**	**37.2-40.3**	**79.7**	**78.1-81.1**
Sex				
Male	39.9	37.5-42.4	75.8	73.4-78.1
Female	37.8	35.8-39.7	83.2	81.3-85.0
Age (years)				
18-24	11.3	6.7-18.6	48.5	41.7-55.2
25-34	16.0	12.8-19.9	60.6	56.4-64.7
35-44	28.0	24.5-31.8	80.9	77.4-84.1
45-54	40.7	37.3-44.1	87.3	84.7-89.5
55-64	54.9	51.7-58.2	95.0	93.5-96.2
≥ 65	55.9	53.1-58.6	95.8	94.7-96.8
Race/ethnicity				
White non-Hispanic	39.8	38.0-41.7	82.5	80.7-84.2
Black non-Hispanic	34.3	30.2-38.7	76.3	71.3-80.7
Hispanic	38.0	33.7-42.5	73.9	69.6-77.7
Other non-Hispanic	38.1	31.9-44.7	75.4	69.4-80.5
Annual household income				
<$25,000	44.2	40.9-47.5	70.7	67.4-73.8
$25,000-$49,999	40.6	37.2-44.1	81.3	78.2-84.0
$50,000 and greater	34.8	32.6-37.1	87.4	85.3-89.3
Missing[d]	38.7	34.5-43.0	74.2	69.5-78.4
Educational attainment				
Less than high school	47.7	42.4-53.1	71.0	66.1-75.5
High school or GED	41.2	38.2-44.4	76.4	73.1-79.4
Some post-high school	36.1	33.2-39.2	80.6	77.4-83.3
College graduate	34.7	32.6-36.8	86.5	84.6-88.1
Disability[e]				
Yes	49.4	46.4-52.4	86.3	83.5-88.6
No	34.6	32.8-36.5	77.8	75.9-79.6
Have health care coverage				
Yes	39.7	38.1-41.3	84.4	82.9-85.9
No	30.5	25.7-35.8	52.8	48.0-57.6
Weight Status				
Neither overweight nor obese	31.3	28.9-33.8	73.8	71.0-76.5
Overweight	40.9	38.3-43.6	82.8	80.3-85.1
Obese	47.1	43.9-50.2	87.4	84.9-89.6
Diabetes				
Yes	67.5	63.3-71.5	95.4	92.8-97.1
No	34.8	33.2-36.4	77.9	76.2-79.5
Region				
New York City (NYC)	38.4	36.1-40.7	80.4	78.4-82.3
NYS exclusive of NYC	39.0	37.0-41.2	79.2	76.9-81.2

a Rows with less than 50 observations and rows that contain a confidence interval with a half-width of greater than 10 have been suppressed.

b If ever had blood cholesterol checked, and ever told by a doctor, nurse or other health professional that blood cholesterol was high..

c % = weighted percentage; CI = confidence interval.

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

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

References

1. National Cholesterol Education Program, National Heart, Lung, and Blood Institute, National Institutes of Health. Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) Executive Summary. NIH Publication No. 01-3670. May 2001. [cited May 10, 2011] Available at: http://www.nhlbi.nih.gov/guidelines/cholesterol/atp3xsum.pdf

Program Contributions

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