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, 2019

Introduction and Key Findings

Nearly 1 in 3 Americans has high blood cholesterol, a condition where the blood contains too many lipids.[1] Elevated blood cholesterol levels are a major modifiable risk factor for cardiovascular disease (CVD), including heart attack and stroke. Lowering elevated blood cholesterol through proven lifestyle changes and/or cholesterol-lowering medications can reduce the risk for CVD. Lifestyle modification activities which include adhering to a heart healthy diet, getting regular exercise, avoiding all tobacco products, and maintaining a healthy weight are critical to health promotion and cardiovascular risk reduction.[2]

Blood cholesterol goals are now based on an individual's risk factors for CVD. In addition to high cholesterol, other modifiable risk factors for CVD include uncontrolled hypertension, diabetes, physical inactivity, smoking, being overweight or obese, and drinking alcohol in excess. Non-modifiable risk factors include race and ethnicity, family history of high cholesterol and early onset of CVD, and increased age. Working with a health care provider to identify risk factors, getting cholesterol levels checked and developing a personalized plan to lower risk are key steps to preventing CVD.[2,3]
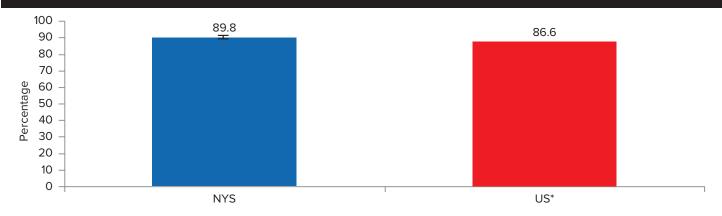
Key Findings

Over 4.3 million adults in New York State report being told by a health professional they have high cholesterol levels (32.6%). High cholesterol is significantly more prevalent among adults who have obesity (38.0%) or overweight (36.4%) than those who neither have overweight nor obesity (26.3%). Adults with diabetes have a significantly higher rate (61.2%) of elevated cholesterol compared to adults without diabetes (28.7%). Similarly, adults who have been diagnosed with high blood pressure are twice as likely to have high cholesterol as those without high blood pressure (55.1% vs. 21.6%).

About ninety percent of NYS 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 highest among adults over 65 years of age (97.9%), adults with annual household income $50,000 and greater (91.5%), adults with Medicare (97.4%), adults living with diabetes (98.2%) and adults diagnosed with high blood pressure (96.3%).
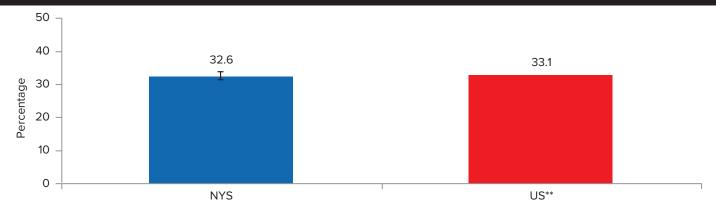
BRFSS questions

1. Blood cholesterol is a fatty substance found in the blood. About how long has it been since you last had your blood cholesterol checked?

2. 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 2019

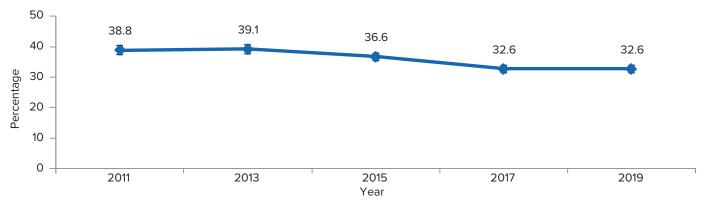Note: Error bars represent 95% confidence intervals.
*Median percent; includes data from 49 US states and the District of Columbia

Figure 2. High cholesterol* among U.S. and New York State adults, BRFSS 2019

* Those respondents who were ever told by a doctor, nurse or other health professional that their blood cholesterol was high.
**Median percent; includes data from all 50 states and the District of Columbia.
Note: Error bars represent 95% confidence intervals.

Figure 3. High cholesterol* among New York State adults, by BRFSS survey year

* Those respondents who were ever told by a doctor, nurse or other health professional that their blood cholesterol was high.
Note: Error bars represent 95% confidence intervals.

Blood cholesterol among New York State adults, 2019 BRFSS

| | Blood cholesterol | | | |
| | High cholesterol[a] | | Checked within past 5 years | |
	%[c]	95% CI[c]	%[c]	95% CI[c]
New York State (NYS) [n=14,232]	32.6	31.4-33.7	89.8	89.0-90.7
Sex				
Male	33.5	31.8-35.2	88.3	87.1-89.6
Female	31.7	30.1-33.3	91.2	90.0-92.4
Age (years)				
18-24	10.6	7.1-14.1	77.2	72.7-81.7
25-34	13.6	11.1-16.1	79.1	76.3-82.0
35-44	20.3	17.5-23.1	88.4	86.3-90.5
45-54	32.9	30.0-35.8	93.5	92.1-94.9
55-64	46.2	43.4-49.0	95.3	94.2-96.3
65+	51.0	48.7-53.2	97.9	97.3-98.5
Race/ethnicity				
White non-Hispanic	34.0	32.6-35.4	90.8	86.6-90.6
Black non-Hispanic	32.3	28.9-35.8	90.2	85.5-89.8
Hispanic	29.6	26.6-32.6	86.9	90.1-92.8
Other, non-Hispanic	31.5	26.6-36.5	89.8	87.7-91.4
Annual household income				
<$25,000	37.2	34.4-40.0	88.6	85.6-89.2
$25,000-$49,999	32.8	29.8-35.9	87.7	84.8-89.3
$50,000 and greater	31.0	26.6-32.6	91.5	91.2-93.4
Missing[c]	31.9	26.6-36.5	89.6	85.3-90.1
Educational attainment				
Less than high school (HS)	40.2	35.8-44.5	84.9	81.9-87.9
High school or GED	30.5	28.2-32.7	88.0	86.2-89.8
Some college	32.2	29.9-34.4	89.2	87.3-91.1
College graduate	31.6	29.8-33.3	93.8	92.8-94.7
Disability[d]				
Yes	43.7	41.2-46.2	91.9	90.5-93.3
No	28.7	27.3-30.0	89.3	88.2-90.4
Health care coverage				
Private	29.2	27.6-30.9	91.9	90.8-93.1
Medicare	50.4	47.9-53.0	97.4	96.6-98.2
Medicaid	29.8	26.3-33.3	88.2	85.5-90.8
Other insurance[e]	33.6	28.1-39.2	90.9	87.8-94.1
No coverage	23.3	19.5-27.2	74.6	70.8-78.5
Weight status				
Neither overweight nor obese	26.3	24.3-28.4	88.2	86.5-89.9
Overweight	36.4	34.2-38.6	91.1	89.7-92.4
Obese	38.0	19.5-27.2	92.0	90.6-93.4
Hypertension				
Yes	55.1	53.0-57.3	96.3	95.1-97.1
No	21.6	20.3-22.9	86.9	85.7-88.1
Diabetes				
Yes	61.2	57,6-64.8	98.2	97.4-99.0
No	28.7	27.5-29.9	88.8	87.8-89.7
Region				
New York City (NYC)	31.4	29.4-33.5	90.1	88.8-91.5
NYS exclusive of NYC	33.4	32.0-34.8	89.6	88.5-90.7

[a] Those respondents who were ever told by a doctor, nurse or other health professional that their blood cholesterol was high.

[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 reported at least one type of disability (cognitive, self-care, independent living, vision, or mobility).

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

References

1. Benjamin EJ, Blaha MJ, Chiuve SE, Cushman M, Das SR, Deo R, et al. Heart disease and stroke statistics—2017 update: a report from the American Heart Association. *Circulation*. 2017; 135:e1–e458.

2. Centers for Disease Control and Prevention. Cholesterol: Preventing and Managing High Cholesterol. Updated January 18, 2019. Available at: https://www.cdc.gov/cholesterol/index.htm

3. Stone NS, et al. 2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation*. 2014; 129: S1-S45.

Program Contributions

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

Order Information

Copies may be obtained by contacting:

BRFSS Coordinator
New York State Department of Health
Bureau of Chronic Disease Evaluation and Research
Empire State Plaza
Corning Tower, Rm. 1070
Albany, NY 12237-0679

Or by phone or electronic mail:

(518) 473-0673
or
BRFSS@health.ny.gov
or
www.health.ny.gov

NEW YORK STATE | **Department of Health**