

BRFSS Brief

Number 2022-15

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 preventative health services related to the leading causes of chronic and infectious diseases, disability, injury, and death.

Cardiovascular Disease

New York State Adults, 2020

Introduction and Key Findings

Cardiovascular disease (CVD) is a group of diseases involving the circulatory system and includes stroke and heart disease. **Coronary heart disease** (CHD), the most common type of CVD, occurs when plaque builds up and narrows the arteries that supply blood to the heart. **Heart attack** (also called acute myocardial infarction) occurs when an artery becomes completely blocked, resulting in lack of blood flow to the heart. **Angina** refers to pain or discomfort in the chest that occurs when some part of the heart does not receive enough blood and is a common symptom of CHD. **A stroke** (cerebrovascular disease) occurs when a clot blocks the blood supply to the brain or when a blood vessel bursts and causes internal bleeding in the brain.

CVD is the leading cause of death in New York State (NYS), accounting for 32 percent of all deaths statewide.¹ Heart disease and stroke are major causes of disability.² Lifestyle modifications and interventions could prevent as much as 80% of heart disease and stroke³⁻⁷; these include [never starting to smoke or quitting](#); being [physically active](#); [eating well](#), including consuming [less sugar-sweetened beverages](#) and reducing [excessive alcohol consumption](#); and being tested and treated for [high blood pressure](#), [elevated cholesterol](#) and [diabetes](#).

Key Findings

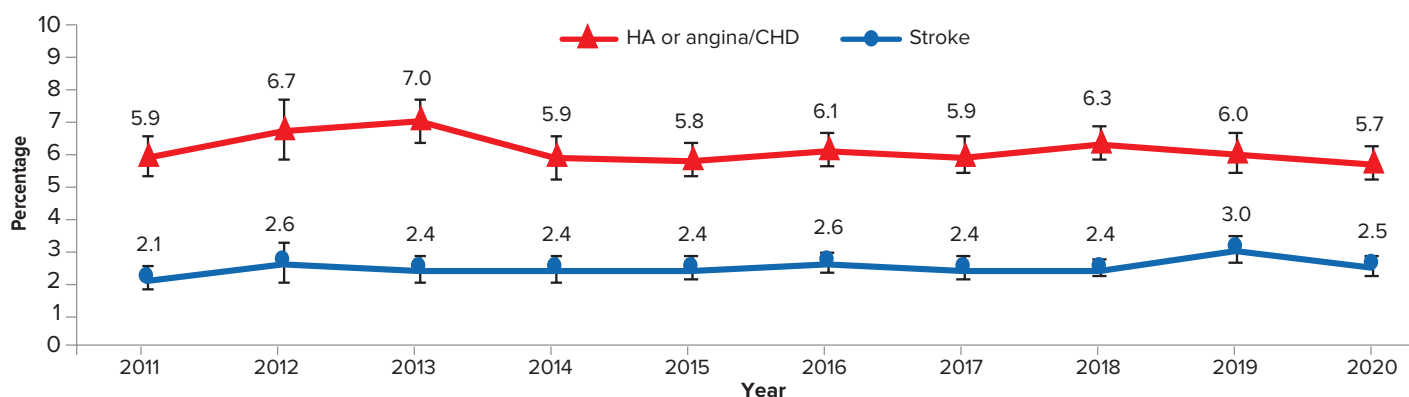
An estimated 1,118,000 adults (7.3%) in NYS report they have had a heart attack, angina/CHD, or stroke. The proportion of adults reporting a heart attack, angina/CHD or stroke increases for each decade of life and is significantly higher for those aged 65 and older compared to those younger than 65. Men, adults with less than a college education, and adults who experience food insecurity are more likely to report a heart attack, angina/CHD or stroke than women, adults with a college education, and adults with food security. Stroke prevalence is higher among non-Hispanic black adults (4.0%) than among non-Hispanic white (2.4%), Hispanic (2.0%) or other race, non-Hispanic adults (1.9%). The prevalence of cardiovascular disease among adults living with disability (17.7%) is over four times greater than the prevalence reported among adults living without disability (4.4%). The prevalence of heart attack or angina/CHD and stroke are significantly higher among adults diagnosed with diabetes or high blood pressure compared to adults without diabetes and more prevalent among adults with obesity compared to those without overweight or obesity.

BRFSS questions

Has a doctor, nurse, or other health professional ever told you that you had any of the following?

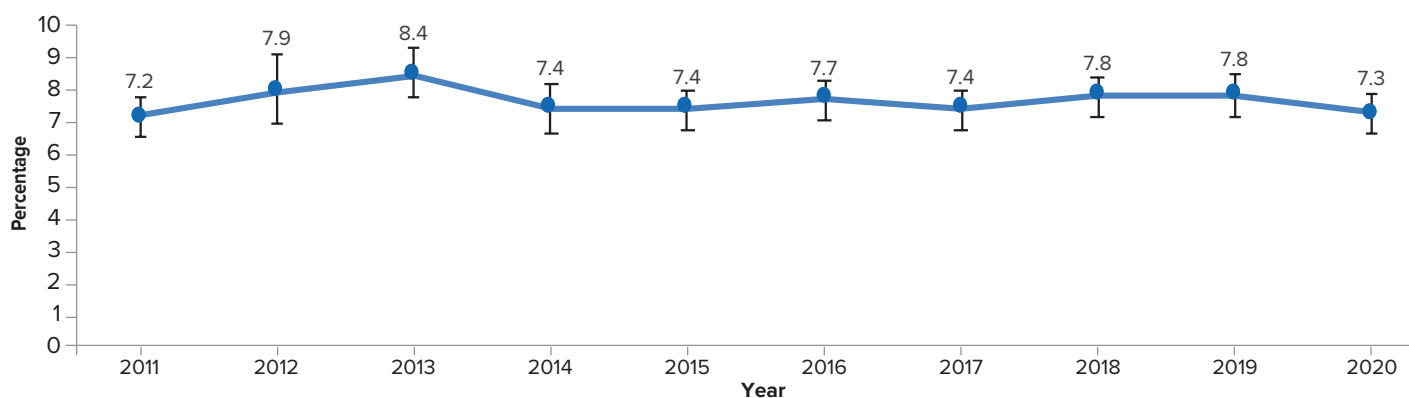
1. [Ever told] you had a heart attack, also called a myocardial infarction?
2. [Ever told] you had angina or coronary heart disease?
3. [Ever told] you had a stroke?

Figure 1. Prevalence of heart attack (HA) or angina/CHD among New York State adults, by BRFSS survey year



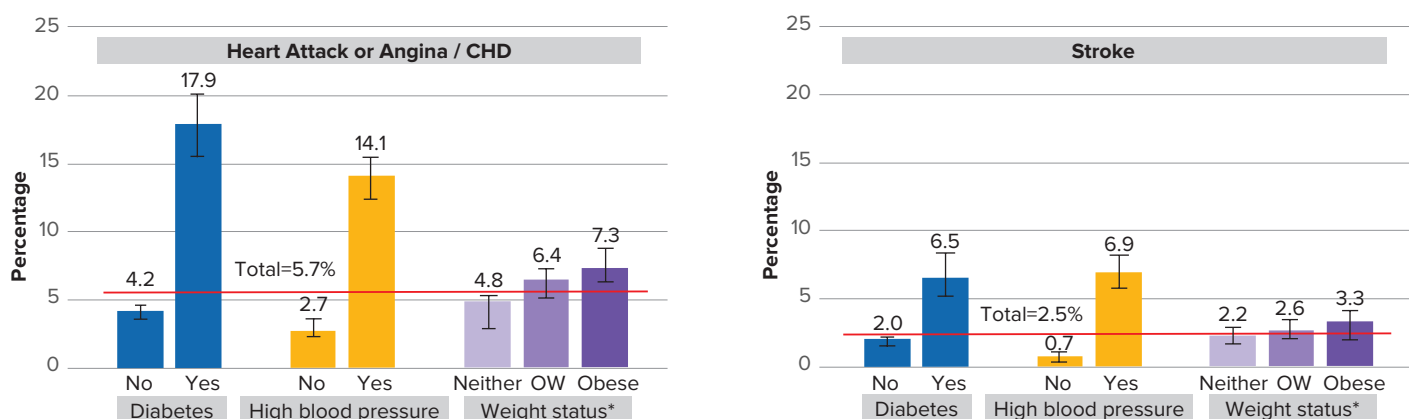
Note: Error bars represent 95% confidence intervals

Figure 2. Prevalence of cardiovascular disease (heart attack, angina/Coronary Heart Disease (CHD), stroke) among New York State adults, by BRFSS survey year



Note: Error bars represent 95% confidence intervals

Figure 3. Prevalence of heart attack or angina/CHD or stroke among New York State adults with certain CVD risk factors, by 2020 BRFSS



Note: Error bars represent 95% confidence intervals

*OW=overweight; Neither=neither OW or obese

History of cardiovascular disease (self-reported heart attack, angina/CHD, or stroke) among New York State adults:^a 2020 BRFSS

	Heart Attack		Angina/CHD		Heart Attack, Angina/ CHD		Stroke		Heart Attack, Angina/ CHD, or Stroke	
	% ^b	95% CI ^b	%	95% CI	%	95% CI	%	95% CI	%	95% CI
New York State (NYS) [n=14,232]	3.8	3.4 - 4.3	3.5	3.1 - 3.8	5.7	5.2 - 6.2	2.5	2.2 - 2.8	7.3	6.7-7.8
Sex										
Male	5.1	4.4 - 5.8	4.3	3.7 - 4.9	7.1	6.3 - 7.9	2.6	2.1 - 3.0	8.6	7.7 - 9.4
Female	3.5	2.2 - 3.1	2.7	2.2 - 3.1	4.4	3.8 - 5.0	2.4	2.0 - 2.9	6.1	5.4 - 6.8
Age (years)										
18-24	*	–	*	–	0.9	0.2 - 1.6	*	–	0.9	0.2 - 1.6
25-34	0.9	0.0 - 1.7	0.5	0 - 1.0	1.3	0.4 - 2.2	0.2	0.0 - 0.4	1.4	0.5 - 2.3
35-44	0.9	0.4 - 1.3	0.8	0.3 - 1.3	1.6	0.9 - 2.3	0.8	0.3 - 1.4	2.4	1.5 - 3.3
45-54	3.2	2.1 - 4.3	2.1	1.3 - 2.9	4.1	2.9 - 5.3	1.8	1.0 - 2.7	5.2	3.9 - 6.5
55-64	4.4	3.4 - 5.4	4.1	3.2 - 4.9	6.9	5.7 - 8.1	3.5	2.7 - 4.4	9.3	7.9 - 10.7
65+	10.3	9.0 - 11.6	9.9	8.7 - 11.2	14.9	13.4 - 16.4	6.5	5.4 - 7.5	18.9	17.3 - 20.5
Race/ethnicity										
White, non-Hispanic	4.0	3.5 - 4.5	4.2	3.7 - 4.7	6.3	5.7 - 7.0	2.4	2.0 - 2.8	8.1	7.3 - 8.8
Black, non-Hispanic	4.3	2.9 - 5.7	3.2	2.0 - 4.3	5.7	4.2 - 7.2	4.0	2.7 - 5.3	8.1	6.3 - 9.8
Hispanic	3.2	2.2 - 4.2	2.4	1.6 - 3.2	4.6	3.4 - 5.8	2.0	1.3 - 2.7	5.9	4.5 - 7.2
Other race, non-Hispanic ^c	3.4	1.9 - 4.9	1.5	0.8 - 2.1	4.0	2.5 - 5.5	1.9	1.0 - 2.9	4.8	3.2 - 6.5
Multi-racial, non-Hispanic	6.3	1.1-11.4	7.4	2.0 - 12.8	8.2	2.7 - 13.6	*	–	9.9	4.0 - 15.7
Annual household income										
Less than \$25,000	5.8	4.5 - 7.0	5.7	4.5 - 6.9	8.4	7.0 - 9.8	5.1	4.0 - 6.2	11.7	10.0 - 13.3
\$25,000-\$34,999	5.8	3.9 - 7.6	4.1	2.6 - 5.6	7.3	5.3 - 9.4	2.8	1.6 - 4.0	9.4	7.1 - 11.6
\$35,000-\$49,999	4.1	2.8 - 5.3	3.4	2.4 - 4.5	5.5	4.1 - 6.8	2.7	1.6 - 3.8	7.0	5.5 - 8.6
\$50,000-\$74,999	2.7	1.8 - 3.7	2.7	1.8 - 3.6	4.2	3.1 - 5.3	1.5	0.7 - 2.2	5.2	3.9 - 6.4
\$75,000 and greater	2.5	1.9 - 3.0	2.6	2.1 - 3.2	4.2	3.4 - 4.9	1.2	0.8 - 1.6	4.9	4.2 - 5.7
Missing ^d	4.0	3.0 - 5.1	3.2	2.5 - 4.0	6.0	4.8 - 7.1	2.3	1.7 - 3.0	7.5	6.2 - 8.7
Educational attainment										
Less than high school	6.3	4.5 - 8.2	4.5	3.0 - 6.0	8.5	6.4 - 10.5	4.0	2.7 - 5.3	10.7	8.5 - 13.0
High school or GED	4.7	3.8 - 5.6	3.9	3.2 - 4.7	6.7	5.6 - 7.7	2.8	2.1 - 3.4	8.5	7.4 - 9.7
Some college	3.6	2.9 - 4.4	3.6	2.9 - 4.3	5.5	4.6 - 6.4	3.1	2.4 - 3.9	7.5	6.5 - 8.6
College graduate	2.4	1.9 - 2.8	2.5	2.1 - 3.0	3.9	3.4 - 4.4	1.1	0.9 - 1.4	4.7	4.2 - 5.3
Health care coverage type										
Private	2.3	1.9 - 2.8	2.3	1.9 - 2.7	3.6	3.1 - 4.2	1.6	1.2 - 1.9	4.8	4.1 - 5.4
Medicare	8.8	7.5 - 10.1	8.9	7.6 - 10.3	13.2	11.6 - 14.8	5.2	4.2 - 6.3	16.3	14.6 - 18.0
Medicaid	3.8	2.4 - 5.3	3.0	2.0 - 4.0	5.6	4.0 - 7.3	2.9	1.9 - 3.9	7.3	5.5 - 9.1
Other insurance ^e	6.6	3.9 - 9.4	4.2	2.1 - 6.4	7.8	5.0 - 10.7	6.3	3.8 - 8.8	12.1	8.6 - 15.5
No coverage	3.1	1.8 - 4.4	2.0	1.0 - 3.0	4.4	2.8 - 6.0	1.2	0.5 - 1.9	5.0	3.4 - 6.6
Perceived food security										
Food insecure	5.6	4.3 - 6.9	5.4	4.1 - 6.7	8.0	6.4 - 9.5	5.0	3.7 - 6.2	10.8	9.0 - 12.6
Food secure	3.6	3.0 - 4.0	3.5	3.1 - 4.0	5.5	4.9 - 6.1	2.2	1.8 - 2.5	7.1	6.4 - 7.7
Diagnosed diabetes										
Yes	13.6	11.3 - 16.0	11.9	9.8 - 14.0	17.9	15.4 - 20.5	6.5	5.0 - 8.1	21.4	18.7 - 24.2
No	2.7	2.3 - 3.1	2.5	2.2 - 2.8	4.2	3.8 - 4.7	2.0	1.7 - 2.3	5.6	5.1 - 6.1
Diagnosed high blood pressure										
Yes	9.6	8.2 - 11.0	9.8	8.3 - 11.2	14.1	12.5 - 15.7	6.9	5.6 - 8.2	18.5	16.7 - 20.3
No	1.7	1.3 - 2.1	1.4	1.1 - 1.8	2.7	2.2 - 3.2	0.7	0.5 - 0.9	3.1	2.6 - 3.7
Weight status										
Neither OW nor obese	3.4	2.7 - 4.2	2.5	2.0 - 3.0	4.8	3.9 - 5.6	2.2	1.7 - 2.8	6.2	5.3 - 7.1
Overweight (OW)	4.0	3.2 - 4.7	4.2	3.5 - 4.9	6.4	5.4 - 7.3	2.6	2.0 - 3.2	8.1	7.1 - 9.1
Obese	4.9	4.0 - 5.8	5.0	4.0 - 5.9	7.3	6.2 - 8.4	3.3	2.5 - 4.1	9.3	8.1 - 10.6
Disability^f										
Yes	9.2	7.8 - 10.7	8.9	7.6 - 10.3	13.2	11.6 - 14.8	7.2	6.0 - 8.4	17.7	15.9 - 19.5
No	2.3	2.0 - 2.7	2.0	1.7 - 2.3	3.6	3.2 - 4.1	1.1	0.9 - 1.4	4.4	3.9 - 4.9

a Rows are suppressed when there are less than 50 observations, a confidence interval with a half-width of greater than 10, or when the standard relative error is greater than 0.30.

b % = weighted percentage; CI = confidence interval

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

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 report having at least one type of disability (cognitive, mobility, vision, self-care, independent living, or hearing).

References

1. Vital Statistics of New York State, Table 33a: Deaths and Death Rates by Selected Causes and Race, New York State, 2019. Available at: https://www.health.ny.gov/statistics/vital_statistics/2019/table33a.htm Accessed April 22, 2022.
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7. van Dam RM, Li T, Spiegelman D, Franco OH, Hu FB. Combined impact of lifestyle factors on mortality: prospective cohort study in US women. *BMJ*. 2008;337:a1440.

Program Contributions

New York State Department of Health
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Bureau of Community Chronic Disease Prevention

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