Number 2023-13

NYS BRFSS Brief

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, 2021

Introduction

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 causing internal bleeding in the brain.

CVD is the leading cause of death in New York State (NYS), accounting for 27 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 stroke[3-7]; 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 (HBP), elevated cholesterol and diabetes.

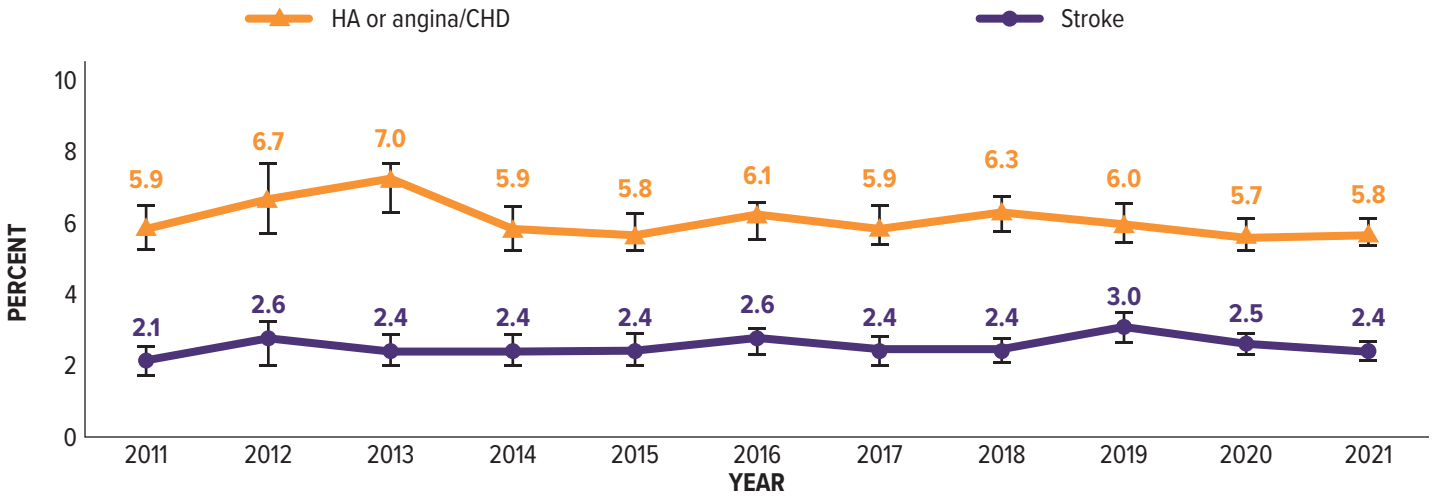
Health Equity

Socioeconomic inequalities are strong predictors of cardiovascular risk.[8] Many of these inequities are caused and perpetuated by structural factors: laws, policies, institutional practices, and entrenched norms that lead to the inequitable treatment of certain people, most notably people of color, and promote risk factors for CVD, including obesity, HBP, and diabetes.[9] Recommendations to reduce health care disparities for patients with CVD include evaluating and addressing social determinants of health such as language literacy and proficiency, affordability of medication, food security, housing, and transportation.[10] In addition, identifying and removing barriers to healthcare access is important to ensure quality of care for those at greatest risk of poor health.

Key Findings

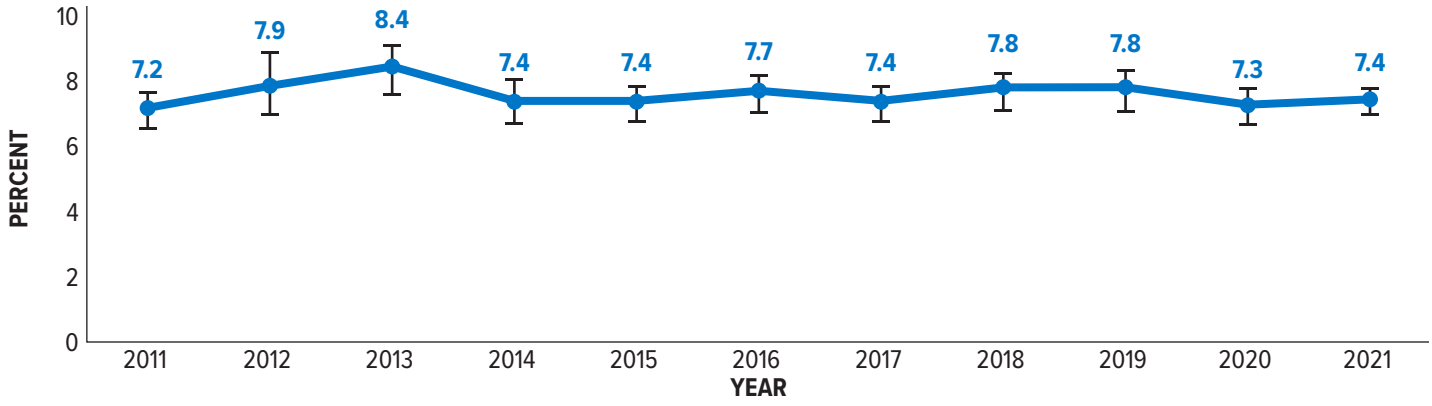
- An estimated 1,118,000 adults (7.4%) in NYS report they have had a heart attack, angina/CHD, or stroke. The proportion of adults reporting a heart attack, angina/CHD or stroke increases for each decade of life and is significantly higher for: adults aged 65 and older (17.7%); adults with Medicare coverage (16.9%); adults who report they could not afford to see a doctor (10.4%); men (8.4%); adults with less than a college education (8.3%); and adults living outside of New York City (8.1%).
- The prevalence of CVD among adults living with disability (17.7%) is over four times greater than the prevalence reported among adults living without disability (4.4%), and one and a half times greater among adults who report frequent mental health distress (10.6%) than those without frequent mental distress (6.9%).
- Stroke prevalence is higher among non-Hispanic Black adults (3.3%) than among non-Hispanic White adults (2.4%), Hispanic adults (2.3%), multi-racial, non-Hispanic adults (1.5%), or all other race groups combined, non-Hispanic adults (1.4%).

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



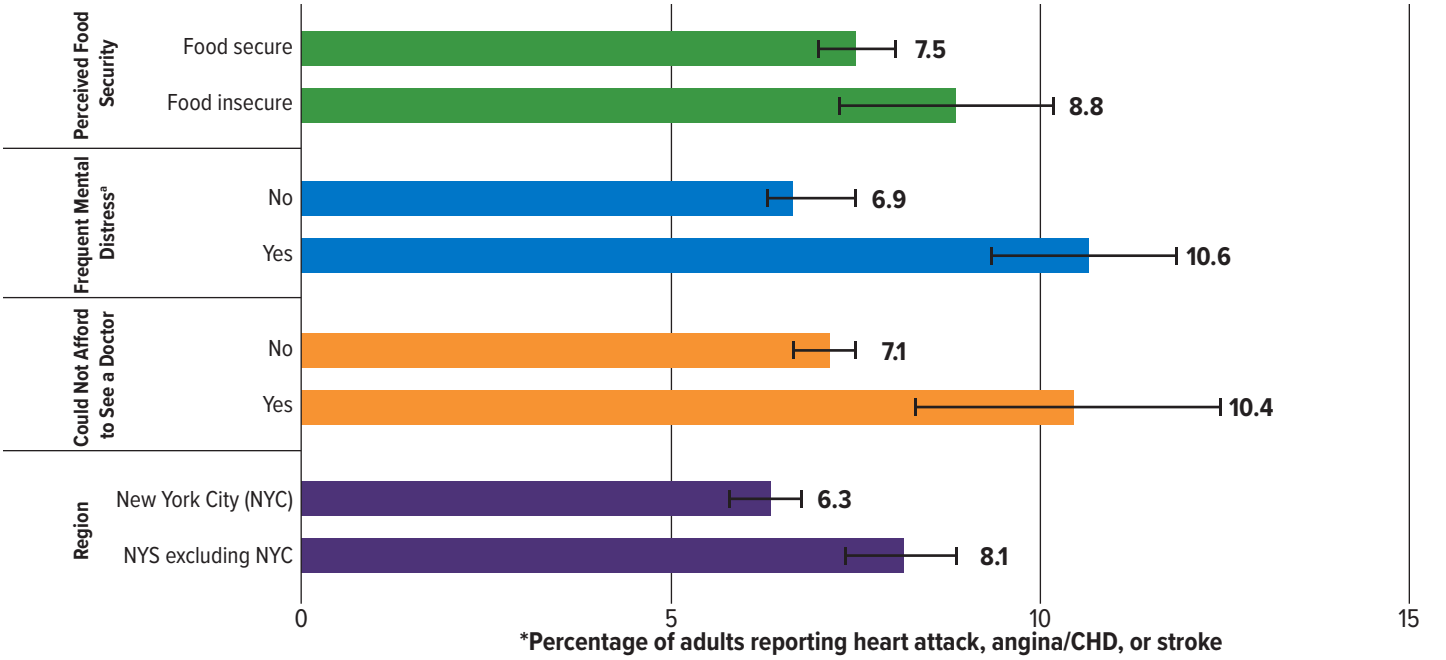
Notes: Error bars represent 95% confidence intervals.

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



Notes: Error bars represent 95% confidence intervals.

Figure 3. Disparities in cardiovascular disease prevalence* among New York State adults, BRFSS 2021



Notes: Error bars represent 95% confidence intervals.

[a]Frequent mental distress is defined as yes if respondents report problems with stress, depression, or emotions on at least 14 of the previous 30 days.

Table 1. History of cardiovascular disease (self-reported heart attack, angina/CHD, or stroke) among New York State adults[a], BRFSS 2021

	Heart Attack		Angina/CHD		Heart Attack or 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=39,095]	**3.5**	**3.2-3.8**	**3.9**	**3.2-4.2**	**5.8**	**5.4-6.2**	**2.4**	**2.2-2.6**	**7.4**	**6.9-7.8**
Sex										
Male	4.4	4.0 - 4.9	4.6	4.1 - 5.1	7.0	6.4 - 7.6	2.3	2.0 - 2.7	8.4	7.8 - 9.1
Female	2.7	2.3 - 3.1	3.3	2.8 - 3.7	4.7	4.2 - 5.1	2.5	2.1 - 2.8	6.4	5.8 - 6.9
Age (Years)										
18-24	0.6	0.2 - 1.1	0.2	0.0 - 0.4	0.8	0.3 - 1.3	0.2	0.1 - 0.3	0.9	0.4 - 1.4
25-34	0.7	0.2 - 1.2	0.4	0.1 - 0.7	0.9	0.4 - 1.5	0.5	0.2 - 0.8	1.3	0.7 - 2.0
35-44	1.2	0.8 - 1.6	1.1	0.6 - 1.5	2	1.4 - 2.5	0.7	0.4 - 1.1	2.5	1.8 - 3.1
44-54	2.7	2.0 - 3.5	2.8	2.1 - 3.5	4.5	3.7 - 5.4	2.3	1.6 - 2.9	6.1	5.1 - 7.1
55-64	5.0	4.2 - 5.8	4.9	4.0 - 5.8	7.6	6.6 - 8.7	3.5	2.8 - 4.3	10.0	8.8 - 11.2
65+	8.4	7.5 - 9.3	10.7	9.6 - 11.7	14.2	13.1 - 15.4	5.4	4.7 - 6.2	17.7	16.5 - 18.9
Race/ethnicity										
Black, non-Hispanic	2.7	2.0 - 3.5	2.6	1.9 - 3.3	4.4	3.5 - 5.2	3.3	2.5 - 4.1	6.9	5.8 - 8.0
Hispanic	2.6	2.0 - 3.3	3.1	2.3 - 3.9	4.7	3.7 - 5.6	2.3	1.7 - 2.9	6.0	5.0 - 7.0
Multi-racial, non-Hispanic	2.6	1.4 - 3.9	3.1	1.3 - 4.9	4.6	2.6 - 6.7	1.5	0.8 - 2.3	5.6	3.4 - 7.8
White, non-Hispanic	4.1	3.7 - 4.5	4.7	4.3 - 5.1	6.7	6.2 - 7.2	2.4	2.1 - 2.7	8.4	7.8 - 8.9
Other race groups combined, non-Hispanic[c]	3.1	1.8 - 4.4	3.1	1.8 - 4.5	4.5	3.0 - 6.0	1.4	0.7 - 2.2	5.2	3.6 - 6.8
Annual household income										
Less than $25,000	6.0	5.1 - 7.0	4.8	3.9 - 5.6	8.7	7.5 - 9.8	4.3	3.5 - 5.1	11.3	10.0 - 12.6
$25,000-$34,999	5.0	3.8 - 6.3	5.0	3.8 - 6.2	7.2	5.8 - 8.6	3.4	2.5 - 4.3	9.2	7.7 - 10.7
$35,000-$49,999	3.8	2.9 - 4.7	4.5	3.3 - 5.7	6.3	5.0 - 7.6	2.5	1.6 - 3.4	7.6	6.2 - 9.1
$50,000-$74,999	3.4	2.5 - 4.4	3.3	2.5 - 4.1	5.1	4.0 - 6.2	2.6	1.7 - 3.4	6.9	5.7 - 8.1
$75,000 and greater	2.3	1.9 - 2.8	3.2	2.7 - 3.7	4.3	3.8 - 5.0	1.4	1.0 - 1.8	5.3	4.7 - 6.0
Missing[d]	3.1	2.5 - 3.7	4.0	3.3 - 4.6	5.6	4.8 - 6.4	2.1	1.8 - 2.5	7.1	6.2 - 7.9
Education attainment										
Less than high school (HS)	5.3	4.0 - 6.6	4.6	3.5 - 5.8	7.6	6.1 - 9.1	3.5	2.5 - 4.4	9.4	7.8 - 11.0
High school or GED	4.3	3.7 - 4.9	4.2	3.5 - 4.8	6.5	5.7 - 7.2	3.0	2.6 - 3.7	8.6	7.7 - 9.4
Some college	3.3	2.8 - 3.9	4.1	3.4 - 4.8	5.8	5.1 - 6.6	2.4	1.9 - 2.9	7.5	6.6 - 8.3
College graduate	2.4	2.1 - 2.8	3.3	2.9 - 3.8	4.5	4.0 - 5.0	1.5	1.2 - 1.7	5.6	5.0 - 6.1
Health care coverage type										
Private	1.9	1.5 - 2.2	2.4	2.0 - 2.8	3.3	2.9 - 3.8	1.1	0.8 - 1.4	4.2	3.7 - 4.7
Medicare	8.2	7.2 - 9.2	9.4	8.3 - 10.5	13.3	12.0 - 14.5	5.8	4.9 - 6.6	16.9	15.6 - 18.3
Medicaid	4.0	3.1 - 5.0	3.2	2.4 - 4.0	5.7	4.6 - 6.8	3.1	2.4 - 3.8	7.7	6.5 - 8.9
Other insurance[e]	3.1	2.4 - 3.8	3.5	2.7 - 4.4	5.1	4.1 - 6.1	2.3	1.7 - 3.0	6.4	5.3 - 7.5
No coverage	1.4	0.7 - 2.1	0.8	0.2 - 1.4	2.0	1.1 - 2.9	0.9	0.3 - 1.6	2.8	1.7 - 3.8
Diagnosed diabetes										
Yes	10.4	8.9 - 11.9	11.3	9.7 - 13.0	16.0	14.1 - 18.0	7.3	6.1 - 8.6	20.2	18.2 - 22.2
No	2.6	2.3 - 2.9	3.0	2.7 - 3.2	4.4	4.1 - 4.8	1.8	1.5 - 2.0	5.7	5.3 - 6.1
Diagnosed high blood pressure										
Yes	7.8	7.0 - 8.6	9.4	8.6 - 10.3	13.1	12.1 - 14.1	5.7	5.0 - 6.4	16.7	15.6 - 17.8
No	1.7	1.4 - 2.0	1.5	1.3 - 1.8	2.6	2.2 - 2.9	1.0	0.8 - 1.1	3.3	2.9 - 3.6
Weight Status										
Neither overweight nor obese	2.7	2.2 - 3.2	2.7	2.2 - 3.2	4.2	3.6 - 4.8	2.2	1.8 - 2.7	5.7	5.0 - 6.4
Overweight	3.8	3.1 - 4.4	4.4	3.8 - 5.0	6.4	5.6 - 7.1	2.2	1.8 - 2.6	7.9	7.1 - 8.7
Obese	4.8	4.1 - 5.5	5.3	4.6 - 6.0	7.8	7.0 - 8.6	3.1	2.6 - 3.7	9.7	8.8 - 10.6
Disability[f]										
Yes	7.6	6.7 - 8.5	8.8	7.9 - 9.8	12.5	11.4 - 13.5	6.1	5.3 - 6.8	16.3	15.1 - 17.5
No	2.2	1.9 - 2.5	2.3	2.0 - 2.7	3.6	3.2 - 4.0	1.1	0.9 - 1.3	4.3	3.9 - 4.8

Notes: [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]Medicare includes Medigap; Other includes Children's Health Insurance Program (CHIP),TRICARE, VA/Military, and Indian Health Services, State sponsored health plan, and other government programs. [f]All respondents who report having at least one type of disability (cognitive, mobility, vision, self-care, independent living, or hearing).

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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?

Suggested Citation

Wales, KR, Parrigan-Oades, K and Brissette, I. Cardiovascular Disease, New York State BRFSS Brief., No. 2023-13. Albany, NY: New York State Department of Health, Division of Chronic Disease Prevention, Bureau of Chronic Disease Evaluation and Research, November 2023.

Program Contributions

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