

BRFSS Brief

Number 2021-12

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 Blood Pressure

New York State Adults, 2019

Introduction and Key Findings

High blood pressure (HBP) is one of the leading risk factors for cardiovascular disease (CVD), including heart disease and stroke, and is known as the silent killer because there are often no warning signs or symptoms.¹ An estimated 85.7 million U.S. adults ages 20 and older have HBP, defined for surveillance purposes as a blood pressure equal to or greater than 140/90mmHg.² Projections show that by 2030, the total cost of HBP in the U.S. could increase to an estimated \$274 billion.³

Effective management and control of HBP decreases the incidence of heart attacks, stroke and heart failure.⁴ Taking medications as prescribed (medication adherence), reducing sodium in the diet, getting daily physical activity and quitting smoking are all strategies that can help keep blood pressure under control.⁵ Medication adherence is critical to achieving blood pressure control, however only 51% of Americans treated for HBP follow their health care provider's advice with respect to medications.⁶ The [Million Hearts Initiative](#), co-led by the Centers for Disease Control and Prevention and the Center for Medicare and Medicaid Services, aims to prevent one million heart attacks and strokes by 2022. The initiative's website offers tools and resources for health care providers, public health professionals and patients to support the prevention and management of HBP.

Key Findings

Over 4.5 million adults in New York State (NYS) report being told by a health professional they have HBP (29.6%). Among that group, over three-quarters (78.9%) are taking medication to control their HBP. Being diagnosed with HBP and taking medication to control HBP were highest among adults over 65 years of age (57.8% and 92.4%, respectively), and among those with Medicare coverage (55.3% and 91.4%, respectively). Diagnosed HBP is also significantly more common among non-Hispanic Black adults (37.1%) compared to non-Hispanic white (30.1%), non-Hispanic other (23.9%) and Hispanic adults (25%). Almost seven in ten adults with diabetes report having HBP (69.5%), while the proportion of HBP among adults who are obese is about 2.2 times higher than the proportion among adults who are neither overweight nor obese (44.7% compared to 19.9%).

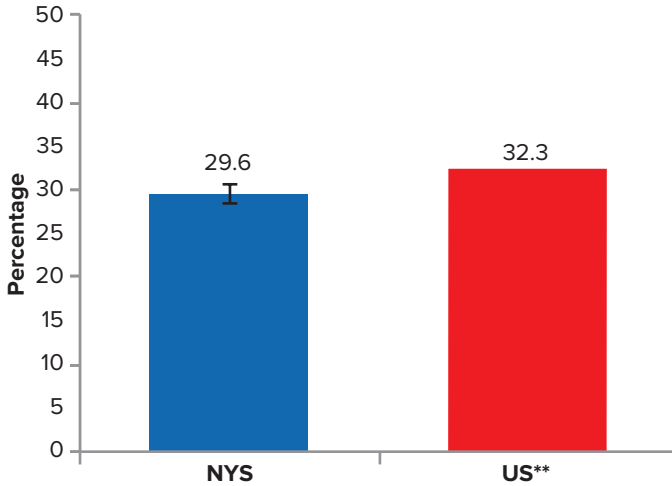
BRFSS questions

1. Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?

[If "yes"]

2. Are you currently taking medicine for your high blood pressure?

Figure 1. Diagnosed HBP* among US and NYS adults, BRFSS 2019

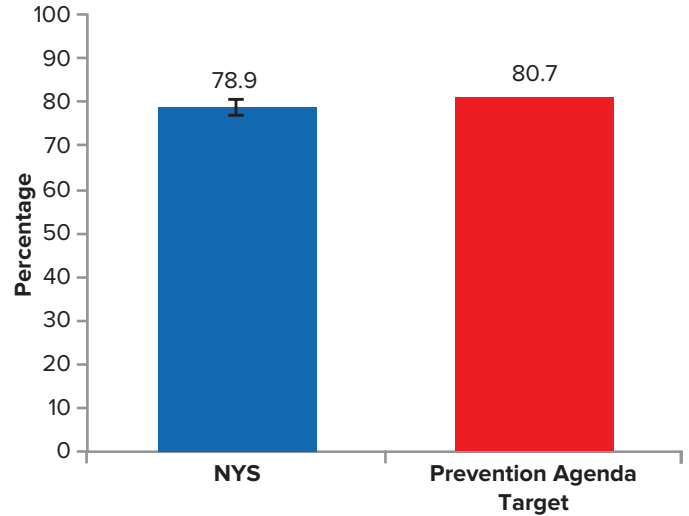


* Those respondents who were ever told by a doctor, nurse, or other health professional that they had HBP.

**Median percent; includes data from 49 states and the District of Columbia.

Note: Error bars represent 95% confidence intervals.

Figure 2. Use of HBP medication among NYS adults aware they had HBP* and Prevention Agenda Target, BRFSS 2019**

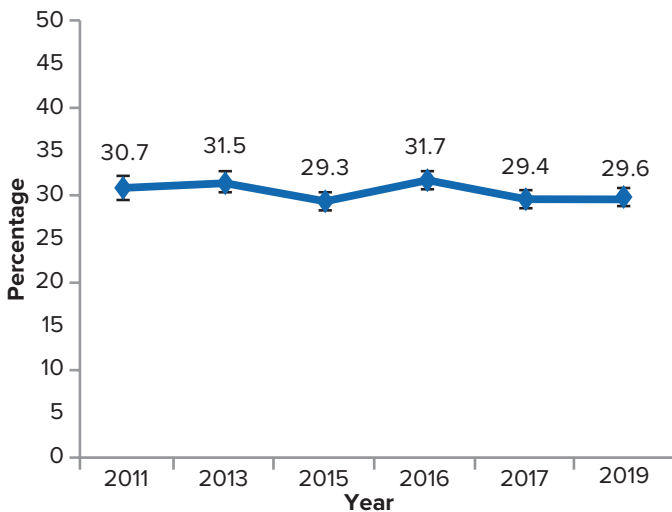


* Those respondents who were ever told by a doctor, nurse, or other health professional that they had HBP.

**NYS Prevention Agenda 2024 Target⁷.

Note: Error bars represent 95% confidence intervals.

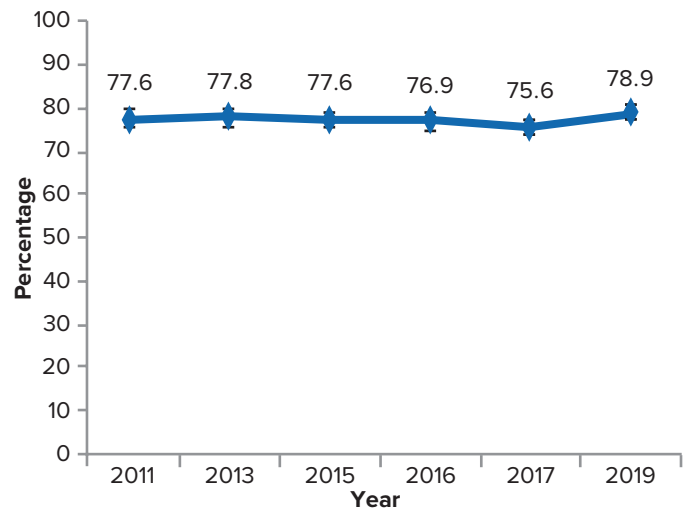
Figure 3. HBP* among NYS adults, by BRFSS survey year



* Those respondents who were ever told by a doctor, nurse, or other health professional that they had HBP.

Note: Error bars represent 95% confidence intervals.

Figure 4. Use of HBP medication among NYS adults aware they had HBP*, by BRFSS survey year



* Those respondents who were ever told by a doctor, nurse, or other health professional that they had HBP.

Note: Error bars represent 95% confidence intervals.

Blood pressure among New York State adults, 2019 BRFSS

	Diagnosed high blood pressure ^a		Taking medication	
	% ^b	95% CI ^b	%	95% CI
New York State (NYS) [n=14,232]	29.6	28.5-30.7	78.9	77.1-80.7
Sex				
Male	32.4	30.8-33.9	73.1	70.3-75.9
Female	27.1	25.6-28.5	85.4	83.3-87.4
Age (years)				
18-24	6.4	4.2-8.6	30.2	12.4-47.9
25-34	11.5	9.4-13.6	29.0	20.3-37.7
35-44	15.8	13.4-18.1	53.5	45.3-61.6
45-54	28.6	26.0-31.2	74.7	70.2-79.2
55-64	43.6	40.9-46.4	86.5	83.2-89.7
65+	57.8	55.7-59.9	92.4	91.0-93.7
Race/ethnicity				
White non-Hispanic	30.1	28.9-31.4	79.5	77.3-81.6
Black non-Hispanic	37.1	33.7-40.4	82.9	78.3-87.5
Hispanic	25.0	22.5-27.5	73.3	68.2-78.4
Other non-Hispanic	23.9	19.8-27.9	77.1	68.8-85.4
Annual household income				
<\$25,000	37.0	34.4-39.6	81.3	77.9-84.7
\$25,000-\$49,999	31.4	28.6-34.1	78.4	74.0-82.7
\$50,000 and greater	26.0	24.5-27.6	76.6	73.5-79.8
Missing ^c	28.6	26.3-31.0	79.9	75.9-83.9
Educational attainment				
Less than high school (HS)	37.4	33.6-41.3	84.2	79.8-88.6
High school or GED	30.9	28.8-33.0	78.3	74.6-82.0
Some post-HS	30.6	28.5-32.7	78.1	74.5-81.7
College graduate	24.7	23.3-26.1	77.3	74.4-80.2
Insurance status				
Private	25.2	23.7-26.7	75.2	72.0-78.3
Medicare	55.3	52.8-57.7	91.4	89.6-93.2
Medicaid	30.4	27.1-33.7	72.9	67.1-78.7
Other insurance ^d	28.7	24.3-33.2	80.5	73.6-87.4
No coverage	18.0	15.0-20.9	64.3	56.0-72.7
Disability^e				
Yes	48.0	45.6-50.4	82.5	80.0-85.1
No	23.3	22.1-24.5	76.4	73.8-79.0
Weight status				
Neither overweight nor obese	19.9	18.2-21.5	73.6	69.4-77.9
Overweight	30.7	28.7-32.7	79.4	76.3-82.6
Obese	44.7	42.4-47.0	80.7	77.8-83.6
Diabetes				
Yes	69.5	66.2-72.9	93.6	91.7-95.5
No	24.9	23.8-25.9	74.1	71.9-76.3
Region				
New York City (NYC)	10.4	8.9-12.0	11.0	9.4-12.7
NYS exclusive of NYC	11.0	9.9-12.0	10.5	9.4-11.5

a Those respondents who were ever told by a doctor, nurse or other health professional that they had high blood pressure.

b % = weighted percentage; CI = confidence interval.

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

d Includes TRICARE, VA/Military, and Indian Health Services.

e All respondents who reported at least one type of disability (cognitive, self-care, independent living, vision, hearing or mobility).

References

1. CDC Division of Heart Disease and Stroke Prevention. "5 Surprising Facts About High Blood Pressure." Updated November 9, 2020. Available at: https://www.cdc.gov/bloodpressure/5_surprising_facts.htm
2. American Heart Association. AHA Statistical Update: Heart Disease and Stroke Statistics - 2017 Update. *Circulation*. 2017; 135:e1-e458.
3. Mozaffarian D, Benjamin EJ, Go AS, et al. on behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics-2016 update: a report from the American Heart Association. *Circulation*. 2016; 133(4):e38-e360.
4. Fryar CD, Ostchega Y, Hales CM, Zhang G, Kruszon-Moran D. Hypertension Prevalence and Control Among Adults: United States, 2015-2016. NCHS Data Brief (#289). October, 2017. Available at: <https://www.cdc.gov/nchs/data/databriefs/db289.pdf>
5. CDC Division of Heart Disease and Stroke Prevention. "Prevent and Manage High Blood Pressure." Updated September 30, 2020. Available at: https://www.cdc.gov/bloodpressure/prevent_manage.htm
6. Ho PM, Bryson CL, Rumsfeld JS. Medication Adherence: Its Importance in Cardiovascular Outcomes. *Circulation*. 2009;119:3028-3035.
7. Prevention Agenda 2019-2024: New York State's Health Improvement Plan. Available at: https://www.health.ny.gov/prevention/prevention_agenda/2019-2024/

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:

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