



# 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 (NYS) Department of Health (DOH) to provide statewide and regional information on behaviors, risk factors, and use of preventive health services related to the leading causes of chronic and infectious diseases, disability, injury, and death.

## High Blood Pressure

### New York State Adults, 2021



### Introduction

High blood pressure (HBP) is one of the leading preventable risk factors for cardiovascular disease (CVD), including heart disease and stroke.<sup>1</sup> An estimated 121.5 million U.S. adults ages 20 and older have HBP, defined as a blood pressure equal to or greater than 130/80mm Hg.<sup>2</sup> Medication is often prescribed to control hypertension; total annual spending on hypertension medication is approximately \$29 billion, \$3.4 billion of which is directly paid by individuals.<sup>1</sup>

Effective management and control of HBP decreases the incidence of heart attacks, stroke, and heart failure.<sup>3</sup> Taking medications as prescribed (medication adherence), eating a healthy diet, not smoking, increasing physical activity, maintaining a healthy weight, and consuming alcohol in moderation, if at all, are lifestyle change activities that can help lower blood pressure and keep it under control.<sup>1</sup> 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.<sup>4</sup> 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 2027. The initiative provides tools and resources for health care providers, public health professionals, and patients to support the prevention and management of HBP.

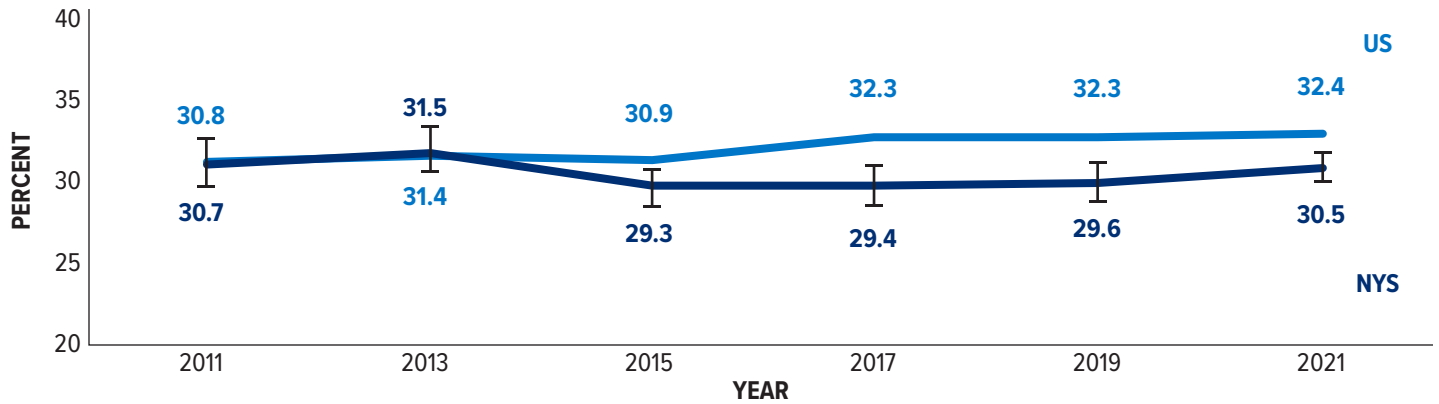
### Health Equity

The NYSDOH acknowledges that social, economic, and environmental inequities result in adverse health outcomes and can have a greater impact than individual choices. Non-Hispanic Black adults and adults with annual household income of less than \$25,000 are more likely to be diagnosed with HBP but have lower rates of HBP medication use. This suggests there is a need to ensure access to effective, equitable, and inclusive HBP management strategies such as medication adherence monitoring, screening for and responding to social determinants of health risk factors, and referring to home blood pressure monitoring.

### Key Findings

- An estimated 4.9 million adult New Yorkers reported being told by a health professional they have high blood pressure. Among that group, eight out of ten (80.2%) are taking medication to control their HBP.
- Being diagnosed with HBP and taking medication to control HBP are highest among adults over 65 years of age (58.8% and 93.5% respectively), and among those with Medicare coverage (53.7% and 91.3% respectively).
- HBP is significantly more prevalent among Black, non-Hispanic adults (37.3%) compared to white, non-Hispanic adults (32.4%), all other race groups combined, non-Hispanic (26.2%), and Hispanic adults (25.4%).
- The prevalence of HBP among adults with obesity (44.6%) is more than two times greater than the prevalence among adults who have neither obesity nor overweight (19.3%).
- Adults with diabetes are more than two and a half times as likely to have HBP as those without diabetes (66.9% vs. 26.2%).
- Adults without health care coverage are significantly less likely to take medication to control HBP than adults with any type of health care coverage (47.3% vs. 75.0%-91.3%).

**Figure 1. Percent of Diagnosed HBP\* among US\*\* and NYS\*\* adults, BRFSS 2011-2021\*\*\***

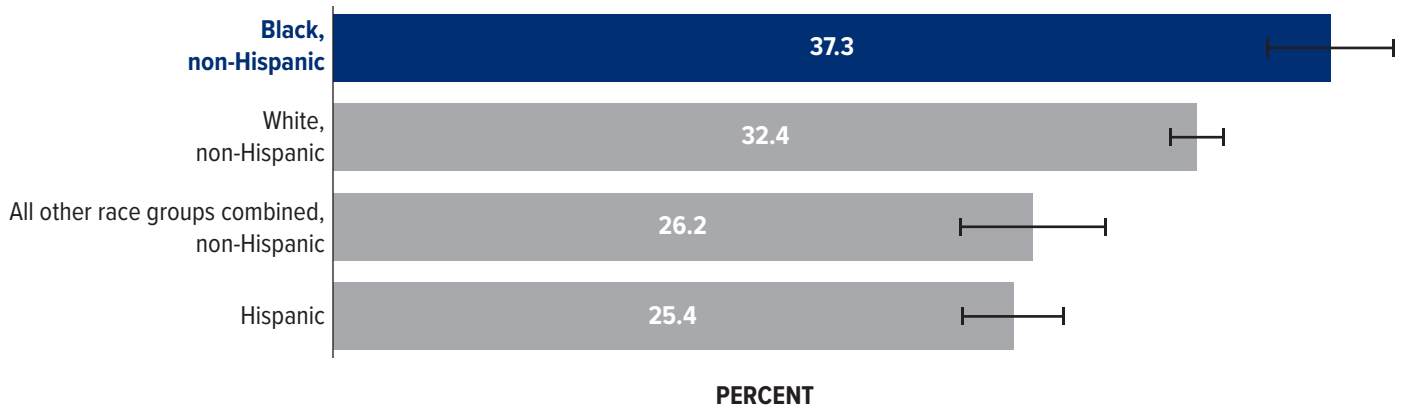


\*Includes respondents who were ever told by a health professional they have high blood pressure.

\*\*US data is the median from 50 states and District of Columbia and excludes error bars. NYS error bars represent 95% Confidence Interval.

\*\*\*Data unavailable in 2012, 2014, 2016, and 2018.

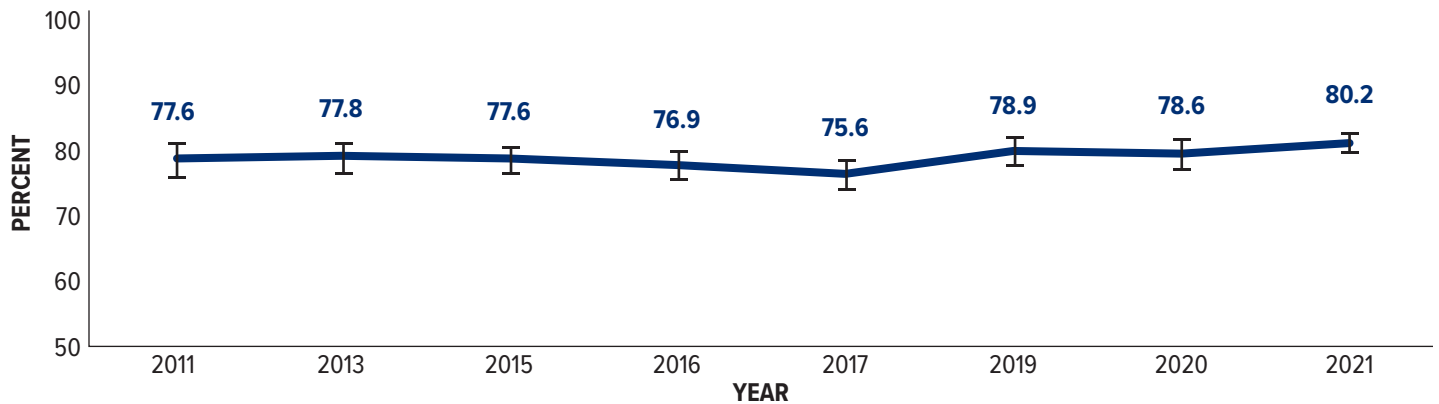
**Figure 2. Percent of Diagnosed HBP\* among NYS\*\* adults by race/ethnicity, BRFSS 2021**



\*Includes respondents who were ever told by a health professional they have high blood pressure.

\*\*NYS error bars represent 95% Confidence Interval.

**Figure 3. Percent of HBP medication usage among NYS\* adults aware they had HBP\*\*, BRFSS 2011-2021\*\*\***



\*NYS error bars represent 95% Confidence Interval.

\*\*Includes respondents who were ever told by a health professional they have high blood pressure.

\*\*\*Data unavailable in 2012, 2014, and 2018.

**Table 1. High Blood Pressure among New York State Adults, 2021 BRFSS**

	Diagnosed High Blood Pressure <sup>a</sup>		Taking Medication <sup>b</sup>	
	% <sup>c</sup>	95% CI <sup>c</sup>	% <sup>c</sup>	95% CI <sup>c</sup>
<b>New York State (NYS) [n=39,095]</b>	<b>30.5</b>	<b>29.7-31.3</b>	<b>80.2</b>	<b>79.0-81.3</b>
<b>Sex</b>				
Male	33.3	32.2-34.4	75.4	73.6-77.2
Female	28.7	27.7-29.7	84.8	83.3-86.2
<b>Age (Years)</b>				
18-24	7.1	5.5-8.7	12.5	4.9-20.0
25-34	10.0	8.5-11.4	34.9	27.6-42.2
35-44	16.3	14.7-17.8	51.0	46.0-56.1
45-54	31.4	29.5-33.4	75.9	72.7-79.1
55-64	46.2	44.2-48.1	85.9	83.9-87.8
65+	58.8	57.3-60.3	93.5	92.6-94.4
<b>Race/Ethnicity</b>				
White, non-Hispanic	32.4	31.4-33.3	82.0	80.6-83.4
Black, non-Hispanic	37.3	35.0-39.6	79.3	76.2-82.3
Hispanic	25.4	23.6-27.3	73.6	70.0-77.3
All other race groups combined, non-Hispanic <sup>d</sup>	26.2	23.5-28.9	78.0	73.3-82.7
<b>Annual Household Income</b>				
<\$25,000	37.4	35.2-39.7	77.9	74.7-81.1
\$25,000-\$49,999	33.3	31.6-35.1	82.6	80.3-84.8
\$50,000 and greater	30.8	29.2-32.4	82.0	79.7-84.3
Missing <sup>e</sup>	30.1	28.5-31.6	80.2	77.5-82.8
<b>Educational Attainment</b>				
Less than high school	35.8	33.1-38.5	79.5	75.7-83.2
High school or GED	32.8	31.2-34.3	81.0	78.9-83.1
Some college	31.2	29.7-32.7	79.1	76.8-81.5
College graduate	27.7	26.6-28.8	80.0	77.9-82.0
<b>Health Care Coverage</b>				
Private	25.1	24.0-26.2	75.5	73.4-77.7
Medicare	53.7	52.0-55.4	91.3	90.0-92.6
Medicaid	26.8	24.7-28.8	75.0	71.3-78.7
Other insurance <sup>f</sup>	29.8	27.4-32.2	75.3	71.0-79.7
No coverage	16.3	13.6-19.1	47.3	38.1-56.5
<b>Disability<sup>g</sup></b>				
Yes	45.8	44.1-47.4	84.1	82.4-85.8
No	26.0	25.2-26.9	77.6	76.0-79.3
<b>Weight Status</b>				
Neither overweight nor obese	19.3	18.1-20.5	76.1	73.3-79.0
Overweight	32.7	31.3-34.1	79.3	77.2-81.5
Obese	44.6	43.0-46.3	81.9	79.9-84.0
<b>Diabetes</b>				
Yes	66.9	64.6-69.3	91.1	89.5-92.7
No	26.2	25.4-27.0	76.2	74.7-77.6
<b>Region</b>				
New York City (NYC)	27.6	26.3-29.0	75.8	73.3-78.2
NYS exclusive of NYC	32.7	31.8-33.6	81.8	80.5-83.1

Notes: <sup>a</sup>Respondents who have ever been told by a doctor, nurse, or other health professional that they had high blood pressure. <sup>b</sup>Among those responding yes to a, respondents who were currently taking medicine for their high blood pressure. <sup>c</sup>% = Weighted Percentage; CI = Confidence Interval. <sup>d</sup>All other race groups, non-Hispanic includes American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific Islander, other race or multiracial. <sup>e</sup>“Missing” category included because more than 10% of the sample did not report income. <sup>f</sup>Other insurance includes Children’s Health Insurance Plan (CHIP), TRICARE, VA/Military, Indian Health Service, state sponsored health plan, or other government plan. <sup>g</sup>All respondents who reported at least one type of disability (cognitive, mobility, vision, self-care, independent living, or deafness).

## References



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4. Ho PM, Bryson CL, Rumsfeld JS. Medication Adherence: Its Importance in Cardiovascular Outcomes. *Circulation*. 2009;119:3028-3035. Accessed August 15, 2023. <https://doi.org/10.1161/CIRCULATIONAHA.108.768986>.

## BRFSS Questions



### High Blood Pressure

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

[If “yes”]

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

## Suggested Citation



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## Program Contributions



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



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