



# New York State Behavioral Risk Factor Surveillance System 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 United States Territories. The New York Behavioral Risk Factor Surveillance System is administered by the New York State Department of Health 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, 2022



### Introduction

High blood pressure, also called hypertension, is one of the leading preventable risk factors for cardiovascular disease, including heart disease and stroke.<sup>1</sup> An estimated 121.5 million United States adults ages 20 and older have high blood pressure, defined as a blood pressure equal to or greater than 130/80 mm 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 high blood pressure 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 high blood pressure 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 high blood pressure.

### Health Equity

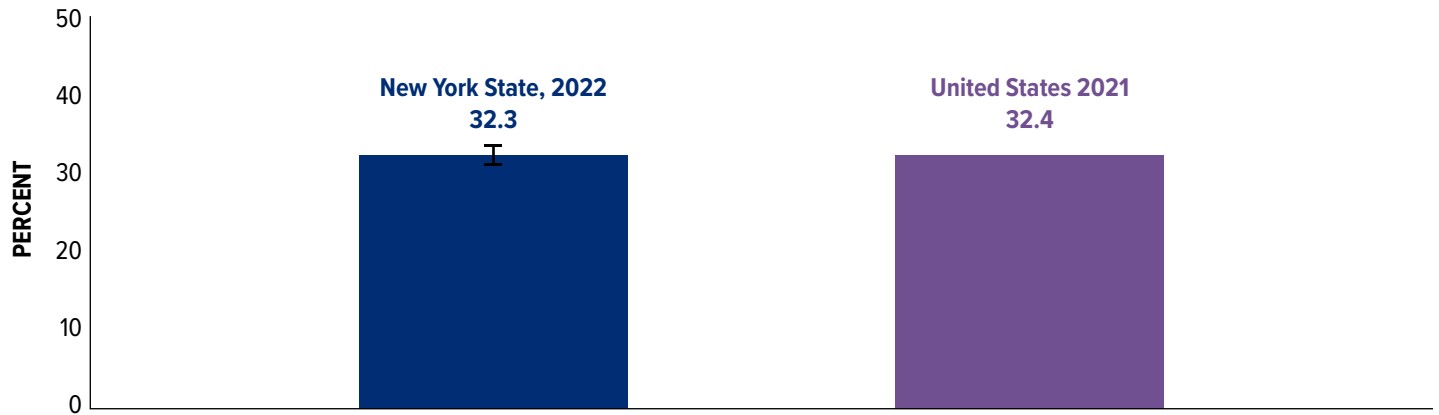
The New York State Department of Health acknowledges that social, economic, and environmental inequities result in adverse health outcomes and can have a greater impact than individual choices. Low rates of medication use among people with hypertension without insurance suggests a continued need to ensure access to affordable and quality health insurance. Encouraging screening and referrals for social service and support needs and promoting access to effective, equitable, and inclusive high blood pressure management strategies such as medication adherence monitoring and home blood pressure monitoring for all New Yorkers can help address disparities in high blood pressure.

### Key Findings

- An estimated 4 million adult New Yorkers reported being told by a health professional they have high blood pressure. Among that group, three out of four (76.6%) are taking prescription medicine to control their high blood pressure.
- High blood pressure is more prevalent among Black, non-Hispanic adults (41.1%) compared to White, non-Hispanic adults (33.5%), all other race groups combined, non-Hispanic adults (26.6%), and Hispanic adults (25.8%).
- The prevalence of high blood pressure among adults with obesity (45.9%) is more than two times greater than the prevalence among adults who neither have obesity nor overweight (19.3%).
- Hypertension prevalence is higher among adults with diabetes (67.7%), adults 65 years or older (58.4%), those with Medicare coverage (52.0%), adults with disability (45.8%), and people living outside of New York City (34.6%).
- Medication use for high blood pressure is highest among adults 65 years or older (90.0%), adults with diabetes (89.1%), those with Medicare coverage (86.1%), and females (81.1%).
- Adults without health care coverage are much less likely to take medication to control high blood pressure than adults with any type of health care coverage (26.2% vs. 72.6%-86.1%).



**Figure 1. Percent of Adults With Diagnosed High Blood Pressure\*, New York State\*\* and United States\*\*, Behavioral Risk Factor Surveillance System 2021-2022\*\*\***

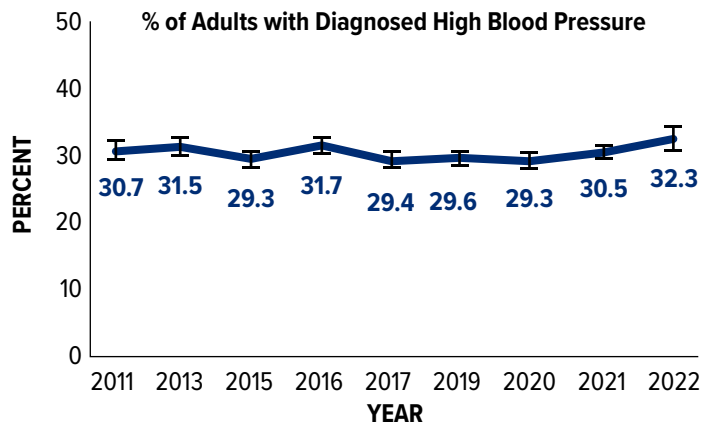


\*Includes respondents who were ever told by a health professional they have high blood pressure.

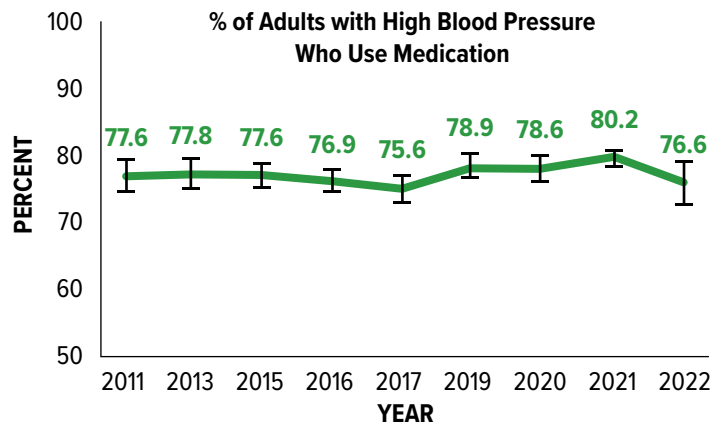
\*\*United States data is the median from 50 states and District of Columbia and is only available for odd years and excludes error bars. New York State error bars represent 95% Confidence Interval.

\*\*\*New York and United States data are sourced from 2022 and 2021 respectively.

**Figure 2A. Percent of Adults With Diagnosed High Blood Pressure\* New York Behavioral Risk Factor Surveillance System 2011-2022\*\***



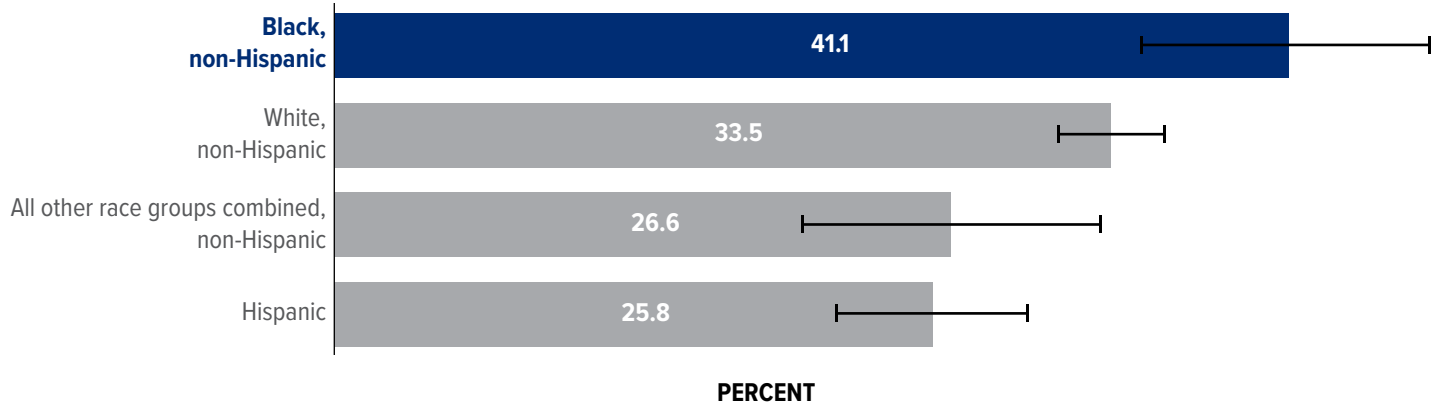
**Figure 2B. Percent of Adults Aware They Had High Blood Pressure Who Reported Medication Usage\* New York Behavioral Risk Factor Surveillance System 2011-2022\*\***



\*Includes respondents who were ever told by a health professional they have high blood pressure and respondents who take high blood pressure medication aware they had high blood pressure. New York State error bars represent 95% Confidence Interval.

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

**Figure 3. Percent of Adults With Diagnosed High Blood Pressure\* by Race/Ethnicity, New York Behavioral Risk Factor Surveillance System 2022**



\*Includes respondents who were ever told by a health professional they have high blood pressure. New York State error bars represent 95% Confidence Interval.

**Table 1. High Blood Pressure and Medication Usage Among Adults, New York Behavioral Risk Factor Surveillance System 2022**

|   | 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 [n 17,800]</b>                          | <b>32.3</b>                                | <b>30.5-34.1</b>    | <b>76.6</b>                    | <b>73.7-79.5</b>    |
| <b>Sex</b>  |  |                     |                                |                     |
| Male  | 34.6                                       | 32.0-37.3           | 72.3                           | 68.0-76.5           |
| Female  | 30.2                                       | 27.6-32.7           | 81.1                           | 77.3-84.9           |
| <b>Age (Years)</b>  |  |                     |                                |                     |
| 18-24   | 7.0  | 3.9-10.2            | 9.4                            | 0.0-22.7            |
| 25-34   | 11.2                                       | 7.8-14.6            | 24.6                           | 10.7-38.4           |
| 35-44   | 18.1                                       | 14.0-22.2           | 42.2                           | 29.8-54.5           |
| 45-54   | 29.6                                       | 24.3-34.9           | 72.9                           | 64.2-81.5           |
| 55-64   | 47.2                                       | 42.6-51.7           | 86.8                           | 82.7-90.9           |
| 65+   | 58.4                                       | 54.6-62.1           | 90.0                           | 87.4-92.6           |
| <b>Race/Ethnicity</b>                                     |  |                     |                                |                     |
| White, non-Hispanic                                       | 33.5                                       | 31.2-35.7           | 77.2                           | 73.7-80.8           |
| Black, non-Hispanic                                       | 41.1                                       | 34.8-47.3           | 78.1                           | 70.5-85.7           |
| Hispanic  | 25.8                                       | 21.7-29.9           | 71.7                           | 63.6-79.8           |
| All other race groups combined, non-Hispanic <sup>d</sup> | 26.6                                       | 20.3-33.0           | 74.3                           | 62.6-86.1           |
| <b>Annual Household Income</b>                            |  |                     |                                |                     |
| Less than \$25,000  | 34.4                                       | 29.4-39.3           | 79.0                           | 72.0-86.0           |
| \$25,000-\$49,999   | 35.6                                       | 30.9-40.3           | 81.4                           | 76.0-86.7           |
| \$50,000 or more  | 32.1                                       | 29.4-34.7           | 76.0                           | 71.7-80.3           |
| Missing <sup>e</sup>                                      | 28.7                                       | 25.0-32.4           | 71.1                           | 63.9-78.4           |
| <b>Educational Attainment</b>                             |  |                     |                                |                     |
| Less than high school                                     | 29.9                                       | 23.6-36.1           | 81.4                           | 72.6-90.2           |
| High school or GED  | 33.1                                       | 29.3-37.0           | 77.4                           | 71.7-83.1           |
| Some college  | 35.7                                       | 32.0-39.5           | 74.7                           | 69.0-80.4           |
| College graduate  | 29.6                                       | 27.0-32.1           | 75.5                           | 70.9-80.1           |
| <b>Health Care Coverage</b>                               |  |                     |                                |                     |
| Private   | 27.5                                       | 24.8-30.2           | 71.7                           | 66.6-76.8           |
| Medicare  | 52.0                                       | 47.7-56.2           | 86.1                           | 82.4-89.8           |
| Medicaid  | 27.2                                       | 22.4-31.9           | 72.6                           | 63.9-81.3           |
| Other insurance <sup>f</sup>                              | 32.7                                       | 26.9-38.5           | 76.4                           | 67.0-85.8           |
| No coverage   | 13.3                                       | 7.1-19.5            | 26.2                           | 8.3-44.2            |
| <b>Disability<sup>g</sup></b>                             |  |                     |                                |                     |
| Yes   | 45.8                                       | 41.7-49.9           | 80.4                           | 75.9-84.9           |
| No  | 27.3                                       | 25.3-29.3           | 74.3                           | 70.5-78.1           |
| <b>Weight Status</b>                                      |  |                     |                                |                     |
| Neither overweight nor obese                              | 19.3                                       | 16.8-21.9           | 74.0                           | 67.7-80.3           |
| Overweight  | 36.1                                       | 32.7-39.4           | 77.0                           | 72.3-81.8           |
| Obese   | 45.9                                       | 42.1-49.7           | 77.4                           | 72.6-82.2           |
| <b>Diabetes</b>   |  |                     |                                |                     |
| Yes   | 67.7                                       | 61.6-73.8           | 89.1                           | 85.2-93.1           |
| No  | 28.0                                       | 26.1-29.8           | 73.1                           | 69.6-76.5           |
| <b>Region</b>   |  |                     |                                |                     |
| New York City   | 28.5                                       | 25.8-31.3           | 75.2                           | 70.3-80.0           |
| New York State exclusive of New York City                 | 34.6                                       | 32.2-37.1           | 77.3                           | 73.7-80.9           |

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>When comparing estimates, the 95% confidence interval (95% CI) provides the statistical range containing the true population percentage with a 95% probability. The width of the confidence interval is influenced by the number of residents surveyed. Although a 95% confidence interval is not a test of statistical significance, estimates whose 95% confidence intervals do not overlap can be considered significantly different. <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 December 8, 2023. <https://doi.org/10.1161/CIRCULATIONAHA.108.768986>.



## Behavioral Risk Factor Surveillance System Questions

### High Blood Pressure

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 prescription medicine for your high blood pressure?



## Suggested Citation

(Wong, S. Austin, R. Wyrick, T. Foglietta, A). High Blood Pressure, New York State BRFSS Brief., No. 2024-07. Albany, NY: New York State Department of Health, Division of Chronic Disease Prevention, Bureau of Chronic Disease Evaluation and Research, March 2024.



## Program Contributions

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



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