# BRFSS Brief 

## Number 2022-13

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 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 regions 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, 2020

## Introduction and Key Findings

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

Effective management and control of HBP decreases the incidence of heart attacks, stroke and heart failure. ${ }^{3}$ Taking medications as prescribed (medication adherence), eating a healthy diet, 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. ${ }^{1}$ 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. ${ }^{4}$ 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.

## Key Findings

Almost 4.5 million adults in New York State (NYS) report being told by a health professional they have HBP (29.3\%). Among that group, over three-quarters (78.6\%) 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 (57.5\% and $92.9 \%$, respectively), and among those with Medicare coverage ( $54.6 \%$ and $89.5 \%$, respectively). Diagnosed HBP is also significantly more common among non-Hispanic Black adults (38.2\%) compared to non-Hispanic white (31.1\%), non-Hispanic other (21.9\%) and Hispanic adults (22.9\%). Seven in ten adults with diabetes report having HBP (70.8\%), while the proportion of HBP among adults who have obesity is about 2.3 times higher than the proportion among adults who have neither overweight nor obesity ( $43.4 \%$ compared to 18.7\%).

## 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 2020


* 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. National data are only available for odd years.
Note: Error bars represent 95\% confidence intervals.

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


[^0]Figure 2. Use of HBP medication among NYS adults aware they had HBP* and Prevention Agenda Target**, BRFSS 2020


* Those respondents who were ever told by a doctor, nurse, or other health professional that they had HBP.
${ }^{* *}$ NYS Prevention Agenda 2024 Target ${ }^{5}$.
Note: Error bars represent 95\% confidence intervals. .

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


[^1]
## Blood pressure among New York State adults, 2020 BRFSS

|  | Diagnosed high blood pressure ${ }^{\text {a }}$ |  | Taking medication ${ }^{\text {b }}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% ${ }^{\text {c }}$ | 95\% Cl ${ }^{\text {c }}$ | \% ${ }^{\text {c }}$ | 95\% Cl ${ }^{\text {c }}$ |
| New York State (NYS) [ $\mathrm{n}=14,769$ ] | 29.3 | 28.1-30.5 | 78.6 | 76.5-80.6 |
| Sex |  |  |  |  |
| Male | 31.7 | 29.9-33.5 | 75.7 | 72.7-78.7 |
| Female | 27.2 | 25.6-28.8 | 81.6 | 78.9-84.3 |
| Age (years) |  |  |  |  |
| 18-24 | 4.9 | 2.7-7.0 | 17.4 | 0.3-34.5 |
| 25-34 | 11.0 | 8.6-13.4 | 25.6 | 16.0-35.2 |
| 35-44 | 16.6 | 13.9-19.2 | 46.9 | 38.3-55.6 |
| 45-54 | 29.5 | 26.5-32.5 | 75.7 | 70.6-80.9 |
| 55-64 | 41.0 | 38.1-43.9 | 85.7 | 82.6-88.7 |
| 65+ | 57.5 | 55.0-60.1 | 92.9 | 91.1-94.6 |
| Race/ethnicity |  |  |  |  |
| White non-Hispanic | 31.1 | 29.6-32.6 | 79.7 | 77.2-82.1 |
| Black non-Hispanic | 38.2 | 34.2-42.1 | 79.1 | 73.3-84.9 |
| Hispanic | 22.9 | 20.2-25.7 | 72.5 | 66.6-78.4 |
| Other non-Hispanic | 21.9 | 17.8-26.0 | 80.5 | 73.7-87.3 |
| Annual household income |  |  |  |  |
| <\$25,000 | 33.4 | 30.4-36.4 | 80.9 | 76.7-85.1 |
| \$25,000-\$49,999 | 33.0 | 29.8-36.1 | 76.4 | 71.6-81.1 |
| \$50,000 and greater | 26.7 | 25.0-28.5 | 77.9 | 74.6-81.2 |
| Missing ${ }^{\text {d }}$ | 28.0 | 25.3-30.6 | 79.7 | 75.2-84.2 |
| Educational attainment |  |  |  |  |
| Less than high school (HS) | 35.5 | 31.2-39.9 | 79.0 | 73.3-84.7 |
| High school or GED | 31.5 | 29.0-33.9 | 79.1 | 75.2-82.9 |
| Some post-HS | 29.8 | 27.4-32.2 | 77.5 | 73.2-81.8 |
| College graduate | 24.5 | 22.9-26.1 | 78.7 | 75.5-81.8 |
| Insurance status |  |  |  |  |
| Private | 24.6 | 23.0-26.1 | 76.9 | 73.8-80.0 |
| Medicare | 54.6 | 51.6-57.6 | 89.5 | 86.8-92.1 |
| Medicaid | 25.4 | 22.0-28.9 | 69.0 | 61.9-76.1 |
| Other insurance ${ }^{\text {e }}$ | 31.6 | 25.9-37.4 | 78.8 | 68.9-88.7 |
| No coverage | 20.2 | 16.8-23.7 | 56.8 | 47.6-66.1 |
| Disability ${ }^{\text {e }}$ |  |  |  |  |
| Yes | 49.5 | 46.6-52.5 | 83.7 | 80.7-86.7 |
| No | 23.7 | 22.4-25.0 | 75.8 | 73.0-78.5 |
| Weight status |  |  |  |  |
| Neither overweight nor obese | 18.7 | 16.8-20.6 | 76.3 | 71.6-81.1 |
| Overweight | 31.6 | 29.4-33.7 | 79.0 | 75.7-82.4 |
| Obese | 43.4 | 40.6-46.2 | 79.8 | 76.4-83.2 |
| Diabetes |  |  |  |  |
| Yes | 70.8 | 66.9-74.7 | 91.3 | 88.4-94.1 |
| No | 24.7 | 23.5-25.8 | 74.5 | 72.0-76.9 |
| Region |  |  |  |  |
| New York City (NYC) | 26.1 | 24.1-28.0 | 78.6 | 75.2-82.0 |
| NYS exclusive of NYC | 31.4 | 29.8-32.9 | 78.6 | 76.0-81.1 |

a Those respondents who were ever told by a doctor, nurse or other health professional that they had high blood pressure.
b The respondents were among those aware they had high blood pressure.
c \% = weighted percentage; $\mathrm{Cl}=$ confidence interval.
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 reported at least one type of disability (cognitive, self-care, independent living, vision, hearing or mobility).

## References

1. U.S. Department of Health and Human Services. The Surgeon General's Call to Action to Control Hypertension. Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General; 2020
2. American Heart Association. AHA Statistical Update: Heart Disease and Stroke Statistics - 2022 Update: A Report From the American Heart Association. Circulation. 2022;145:e153e639 Available at: https://doi.org/10.1161/CIR. 0000000000001052
3. Ostchega Y, Fryar CD, Nwankwo T, Nguyen DT. Hypertension prevalence among adults aged 18 and over: United States, 2017-2018. NCHS Data Brief, no 364. Hyattsville, MD: National Center for Health Statistics. 2020. Available at: NCHS Data Brief, Number 364, April 2020 (cdc. gov)
4. Ho PM, Bryson CL, Rumsfeld JS. Medication Adherence: Its Importance in Cardiovascular Outcomes. Circulation. 2009;119:3028-3035. https://www.cdc.gov/bloodpressure/prevent_ manage.htm
5. 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:
BRFSS Coordinator
New York State Department of Health
Bureau of Chronic Disease Evaluation and Research
Empire State Plaza
Corning Tower, Rm. 1070
Albany, NY 12237-0679

Or by phone or electronic mail:
(518) 473-0673
or
BRFSS@health.ny.gov
or
www.health.ny.gov


[^0]:    * 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.

[^1]:    * 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.

