## BRFSS Brief

## Number 1507

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, 2013

## Introduction and Key Findings

High blood pressure (hypertension) accounts for approximately 37\% of cardiovascular disease deaths and is estimated to be a contributing cause for nearly 1,000 deaths each day in the United States (U.S.). ${ }^{1,2}$ High blood pressure (HBP) has been estimated to cost the U.S. an estimated $\$ 46$ billion annually in health care expenditures. ${ }^{2}$ An Institute of Medicine report on strategies to improve blood pressure control identified HBP as a "neglected disease" because of the lack of sufficient attention given to prevention and control. ${ }^{3}$

According to a recent analysis of the National Health and Nutrition Examination Survey (NHANES) data, during 2011-2012, among adults with HBP, 82.7\% were aware of their HBP, $75.6 \%$ reported currently taking prescribed medication to lower their blood pressure, and $51.8 \%$ had their blood pressure controlled. ${ }^{4}$ Obesity, high sodium intake, lack of physical activity, tobacco and excessive alcohol use are common modifiable risk factors for developing HBP.

## Key Findings

Nearly 1 in 3, or 4.8 million adults in New York State report being told by a health professional they have HBP (31.5\%). Among that group, three-quarters (77.8\%) are taking medication to control their HBP. Awareness and taking medication to control HBP were highest among adults over 65 years of age ( $63.1 \%$ and $94.1 \%$, respectively), and lowest among those with no insurance coverage ( $18 \%$ and $35.4 \%$, respectively). Seven in ten adults with diabetes report having HBP (70.6\%), while the rate of HBP among adults who are obese is almost 2.5 times higher than the rate among adults who are neither overweight nor obese ( $48.1 \%$ compared to $19.7 \%$ ).

## 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 high blood pressure (HBP)* among U.S. and New York State adults, BRFSS 2011 and 2013


* Those ever told by a doctor, nurse, or other health professional that they had HBP
${ }^{* *}$ Median percent includes data from all 50 states and the District of Columbia Note: Error bars represent $95 \%$ confidence intervals

Figure 2. Use of high blood pressure (HBP) medication among U.S. and New York State adults aware they had HBP*, BRFSS 2011 and 2013


[^0]Blood pressure among New York State adults, 2013 BRFSS

|  | Diagnosed high blood pressure |  | Taking medication ${ }^{\text {b }}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% ${ }^{\text {c }}$ | 95\% CI ${ }^{\text {c }}$ | \% | 95\% CI |
| Total New York State (NYS) [ $\mathrm{n}=8,979$ ] | 31.5 | 30.3-32.8 | 77.8 | 75.8-79.9 |
| Sex |  |  |  |  |
| Male | 33.3 | 31.4-35.3 | 71.0 | 67.6-74.5 |
| Female | 29.9 | 28.3-31.5 | 84.8 | 82.7-86.9 |
| Age (years) |  |  |  |  |
| 18-24 | 7.5 | 4.6-10.4 | * | - |
| 25-34 | 11.0 | 8.9-13.2 | 22.4 | 13.6-31.2 |
| 35-44 | 17.3 | 14.4-20.2 | 50.2 | 40.9-59.4 |
| 45-54 | 33.8 | 30.8-36.9 | 74.4 | 69.6-79.2 |
| 55-64 | 48.1 | 44.9-51.2 | 87.8 | 85.0-90.7 |
| 65+ | 63.1 | 60.5-65.6 | 94.1 | 92.7-95.4 |
| Race/ethnicity |  |  |  |  |
| White, non-Hispanic | 31.4 | 29.9-32.8 | 79.1 | 76.8-81.5 |
| Black, non-Hispanic | 39.8 | 35.6-43.9 | 82.7 | 77.2-88.2 |
| Hispanic | 26.9 | 23.9-30.0 | 74.0 | 68.2-79.8 |
| Other, non-Hispanic | 27.9 | 22.8-33.1 | 68.2 | 57.4-79.0 |
| Annual household Income |  |  |  |  |
| <\$25,000 | 36.7 | 34.1-39.3 | 80.2 | 77.0-83.3 |
| \$25,000-\$49,999 | 34.6 | 31.7-37.6 | 76.8 | 71.8-81.8 |
| \$50,000 and greater | 27.2 | 25.3-29.1 | 75.1 | 71.2-79.0 |
| Missing ${ }^{\text {d }}$ | 28.8 | 25.7-32.0 | 80.7 | 75.4-86.0 |
| Educational attainment |  |  |  |  |
| Less than high school (HS) | 40.3 | 36.1-44.6 | 79.3 | 73.6-85.1 |
| High school or GED | 33.8 | 31.3-36.3 | 81.7 | 77.6-85.7 |
| Some college | 31.3 | 28.9-33.7 | 75.2 | 71.2-79.2 |
| College graduate | 25.0 | 23.4-26.7 | 74.8 | 71.5-78.1 |
| Insurance status |  |  |  |  |
| Private | 27.7 | 25.8-29.5 | 75.0 | 71.3-78.7 |
| Medicare | 60.6 | 57.4-63.9 | 90.4 | 88.0-92.7 |
| Medicaid | 29.8 | 25.2-34.4 | 75.7 | 68.4-83.0 |
| Other government assistance plans | 31.2 | 24.8-37.5 | 78.7 | 69.1-88.2 |
| Other insurances | 38.1 | 31.8-44.3 | 84.0 | 77.7-90.3 |
| No coverage | 18.0 | 13.6-22.4 | 35.4 | 23.1-47.6 |
| Disability ${ }^{\text {e }}$ |  |  |  |  |
| Yes | 49.4 | 46.4-52.5 | 84.1 | 81.4-86.9 |
| No | 26.7 | 25.3-28.0 | 74.9 | 72.1-77.6 |
| Weight status |  |  |  |  |
| Neither overweight nor obese | 19.7 | 18.0-21.5 | 73.6 | 68.7-78.6 |
| Overweight | 33.1 | 30.9-35.3 | 76.6 | 73.0-80.2 |
| Obese | 48.1 | 45.3-50.9 | 80.6 | 77.4-83.7 |
| Diabetes |  |  |  |  |
| Yes | 70.6 | 66.6-74.7 | 93.2 | 91.0-95.4 |
| No | 26.8 | 25.6-28.1 | 73.1 | 70.6-75.6 |
| Region |  |  |  |  |
| New York City (NYC) | 30.8 | 28.9-32.8 | 76.0 | 72.9-79.1 |
| NYS exclusive of NYC | 32.1 | 30.5-33.7 | 79.2 | 76.4-82.0 |

a Rows with less than 50 observations and rows that contain a A137:N144 interval with a half-width of greater than 10 have been suppressed
${ }^{\mathrm{b}}$ Of those respondents who were ever told by a doctor, nurse or other health professional that 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 All respondents who report activity limitations due to physical, mental, or emotional reasons OR have health problems that require the use of special equipment.

## References

1. Kung HC, Xu JQ. Hypertension-related mortality in the United States, 2000-2013. NCHS data brief, no 193. Hyattsville, MD: National Center for Health Statistics. 2015.
2. Mozaffarian D, Benjamin EJ,et al on behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics-2015 update: a report from the American Heart Association. Circulation. 2015; 131:e29-322, e86-e96.
3. IOM (Institute of Medicine). 2010. A PopulationBased Policy and Systems Change Approach to Prevent and Control Hypertension. Washington, DC: The National Academies Press. Nwankwo T, Yoon SS, et al. Hypertension among adults in the United States: National Health and Nutrition Examination Survey, 2011-2012. NCHS data brief, no 133. Hyattsville, MD: National Center for Health Statistics. 2013.

## 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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[^0]:    * Of those ever told by a doctor, nurse, or other health professional that they had HBP
    ${ }^{* *}$ Median percent; includes data from all 50 states and the District of Columbia
    Note: Error bars represent 95\% confidence intervals

