

*The Behavioral Risk Factor Surveillance System (BRFSS) is an annual statewide telephone survey of adults developed by the Center 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.*

## Actions to Control High Blood Pressure New York State Adults 2005 and 2007

### Introduction

High blood pressure (HBP) or hypertension for adults is defined as a systolic blood pressure of 140 mmHg or higher or a diastolic blood pressure of 90 mmHg or higher. HBP increases the risk for coronary heart disease, heart failure, stroke, and kidney disease. The association between HBP and cardiovascular disease (heart disease, heart failure and stroke) is independent of other risk factors such as smoking, high cholesterol and obesity.<sup>1</sup>

Although HBP is easily detected and is treatable, the condition is not controlled in a substantial proportion of adults.<sup>2</sup> A Healthy People 2010 objective is to increase the proportion of adults with HBP who are taking action to help control their blood pressure. Adults with HBP can self-manage their condition by making lifestyle modifications such as dietary changes, exercising, limiting alcohol use, and taking prescribed medications. Clinicians can contribute to adults taking action to control their high blood pressure by advising them to make lifestyle changes.<sup>1</sup>

Controlling HBP reduces disability and death from heart disease and stroke and can contribute to the achievement of prevention goals for cardiovascular disease and diabetes outlined in the New York State Department of Health Prevention Agenda Toward the Healthiest State.<sup>3,4</sup>

### BRFSS Questions

*For those who have answered "Yes" to:  
Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?*

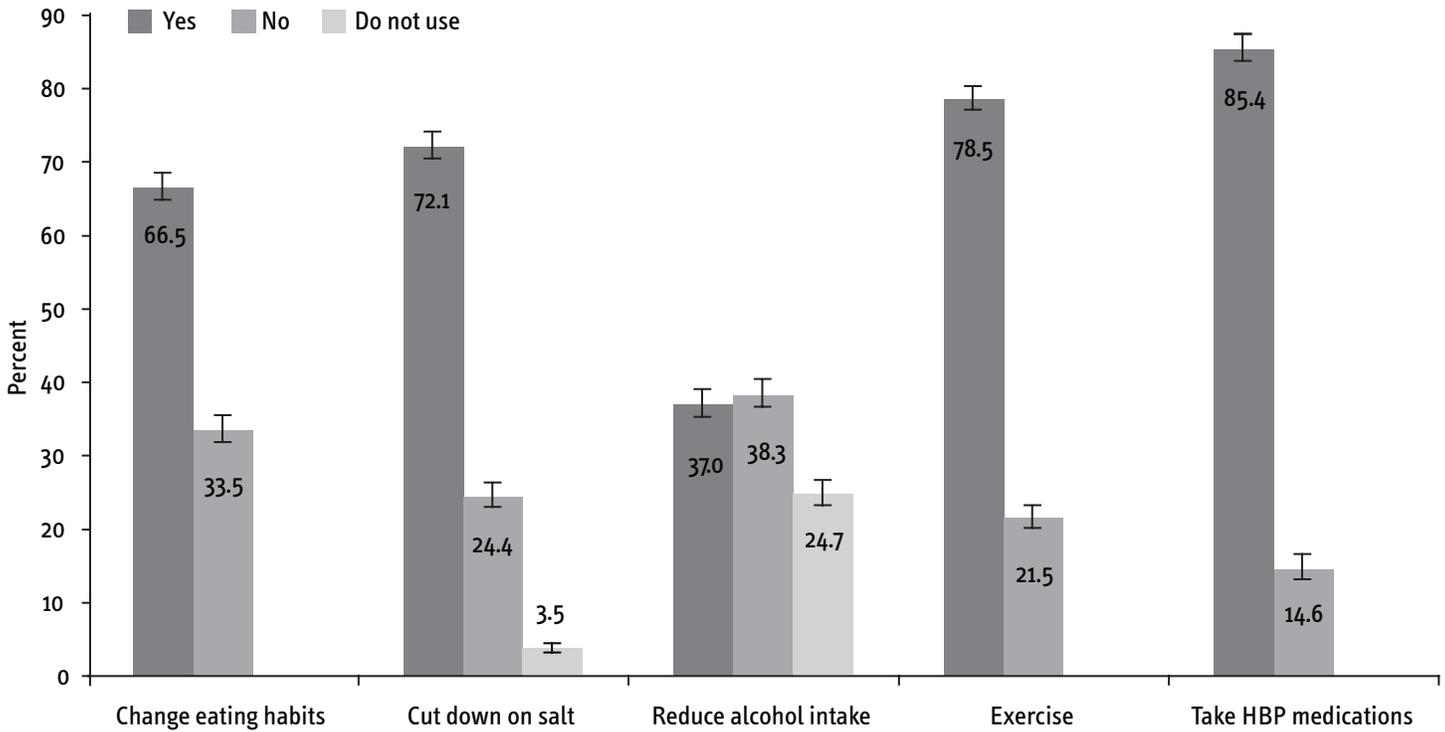
*Are you now doing any of the following to help lower or control your high blood pressure?*

- 1. (Are you) changing your eating habits (to help lower or control your high blood pressure)?*
- 2. (Are you) cutting down on salt (to help lower or control your high blood pressure)?*
- 3. (Are you) reducing alcohol use (to help lower or control your high blood pressure)?*
- 4. (Are you) exercising (to help lower or control your high blood pressure)?*

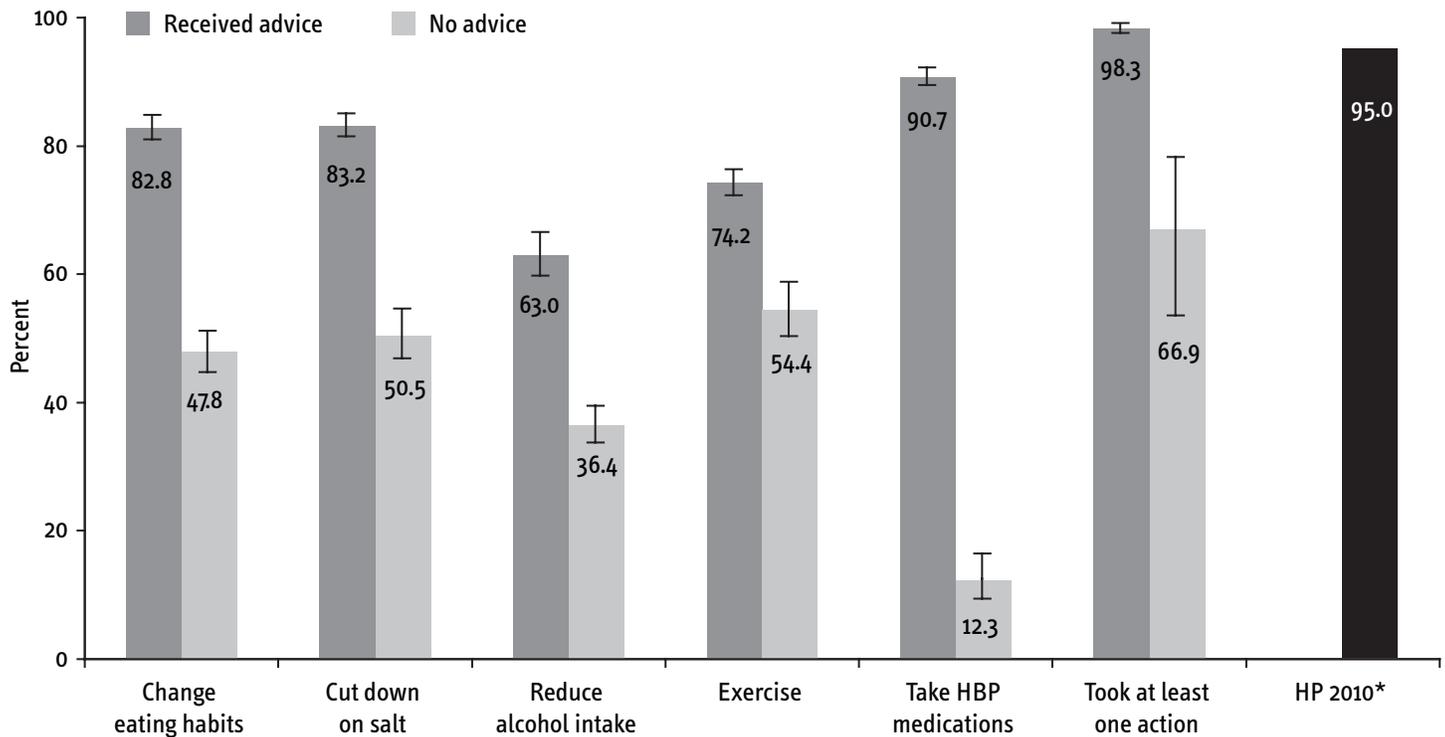
*Has a doctor or other health professional ever advised you to do any of the following to help lower or control your high blood pressure?*

- 5. (Ever advised you to) change your eating habits (to help lower or control your high blood pressure)?*
- 6. (Ever advised you to) cut down on salt (to help lower or control your high blood pressure)?*
- 7. (Ever advised you to) reduce alcohol use (to help lower or control your high blood pressure)?*
- 8. (Ever advised you to) exercise (to help lower or control your high blood pressure)?*
- 9. (Ever advised you to) take medication (to help lower or control your high blood pressure)?*

**Prevalence of reported advice from health professional to lower or control High Blood Pressure: 2005 & 2007 BRFSS**



**Prevalence of reported actions to lower or control High Blood Pressure by receipt of health professional advice: 2005 & 2007 BRFSS**



\* Healthy People 2010 objective 12-11: Increase the proportion of adults with high blood pressure who are taking action to help control their blood pressure to 95%.

Note: Error bars represent 95% confidence intervals.

**Percentage of respondents taking selected actions to control high blood pressure (HBP) among adults told by a health professional that they have HBP: 2005 and 2007 BRFSS<sup>†</sup>**

	Changing eating habits		Reducing use of or not using salt		Reducing use of or not drinking alcohol		Exercising		Taking antihypertensive medication	
	% <sup>a</sup>	95% CI <sup>a</sup>	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>New York State (NYS) [n=4,514]</b>	<b>71.0</b>	<b>69.2-72.8</b>	<b>84.0</b>	<b>82.5-85.5</b>	<b>78.7</b>	<b>77.2-80.3</b>	<b>69.9</b>	<b>68.1-71.7</b>	<b>79.4</b>	<b>77.6-81.1</b>
<b>Sex</b>										
Male	67.5	64.5-70.3	80.2	77.5-82.6	73.2	70.5-75.7	70.1	67.2-72.9	75.2	72.2-77.9
Female	74.3	72.1-76.3	87.6	85.9-89.2	83.9	82.2-85.6	69.8	67.4-72.0	83.4	81.3-85.3
<b>Age (years)</b>										
18-24	58.7*	36.7-77.6	61.4*	39.6-79.4	76.5*	57.1-88.9	65.6*	42.4-83.1	11.1*	4.3-25.8
25-34	60.1	48.0-71.1	64.0	51.7-74.7	67.7	55.6-77.8	71.1	59.2-80.6	27.4*	19.1-37.7
35-44	77.9	72.3-82.6	81.5	76.0-85.9	78.1	72.8-82.6	70.3	64.0-75.9	52.0	45.8-58.0
45-54	77.0	72.8-80.7	84.9	81.7-87.6	81.5	77.8-84.7	68.3	63.8-72.5	79.7	76.2-82.9
55-64	75.4	72.3-78.3	85.6	82.9-87.9	80.0	77.1-82.6	72.7	69.3-75.8	87.3	84.7-89.5
65+	65.5	62.8-68.0	87.9	86.0-89.5	78.6	76.4-80.7	69.1	66.4-71.6	94.7	93.4-95.8
<b>Race/ethnicity</b>										
White	67.3	65.4-69.1	82.4	80.7-83.9	73.6	71.7-75.3	69.8	67.9-71.6	82.6	80.8-84.2
Black	84.3	79.3-88.3	95.4	92.6-97.2	92.0	88.5-94.4	68.6	62.6-74.0	81.0	75.8-85.3
Hispanic	72.3	64.6-79.0	79.0	71.2-85.1	87.8	81.9-92.1	66.3	58.6-73.2	67.3	60.0-73.8
Other	73.5	64.2-81.1	84.6	77.1-90.0	80.6	71.3-87.4	78.7	71.3-84.6	73.1	64.7-80.1
<b>Annual household income</b>										
<\$15,000	70.3	64.3-75.6	85.7	80.2-90.0	88.2	83.5-91.7	65.3	59.4-70.9	77.6	71.4-82.8
\$15,000-\$24,999	68.7	63.7-73.4	82.4	77.7-86.3	86.7	82.9-89.8	68.8	63.7-73.5	77.4	72.2-81.8
\$25,000-\$34,999	73.8	68.9-78.2	90.5	87.2-93.0	83.3	79.2-86.7	72.7	67.4-77.5	81.3	76.4-85.4
\$35,000-\$49,999	70.4	65.6-74.8	85.5	81.5-88.7	76.6	72.1-80.5	67.1	61.8-72.0	81.7	77.1-85.6
\$50,000-\$74,999	76.2	71.9-79.9	85.2	81.6-88.2	76.4	72.2-80.1	74.2	69.6-78.4	80.8	76.4-84.6
\$75,000 and greater	72.7	68.8-76.2	79.5	75.8-82.7	65.4	61.3-69.3	72.9	68.9-76.5	79.0	75.1-82.4
Missing <sup>b</sup>	65.3	59.9-70.4	83.7	78.5-87.8	80.5	75.8-84.4	67.5	62.2-72.4	79.3	73.7-84.0
<b>Educational attainment</b>										
Less than high school (HS)	69.3	63.3-74.6	84.8	79.3-89.0	87.1	81.8-91.0	68.7	62.7-74.1	77.0	71.2-82.0
High school or GED	68.2	64.8-71.5	84.6	81.6-87.2	84.3	81.5-86.7	68.9	65.5-72.1	80.4	77.0-83.4
Some college	74.9	71.5-78.1	85.6	82.6-88.1	79.4	76.2-82.3	69.8	66.1-73.2	77.3	73.5-80.8
College graduate	71.8	68.8-74.6	81.9	79.2-84.4	68.1	65.0-70.9	71.8	68.6-74.8	81.0	78.1-83.6
<b>Disability<sup>c</sup></b>										
Yes	70.6	67.5-73.5	84.5	81.8-86.9	83.7	81.5-85.7	59.6	56.3-62.8	83.9	80.9-86.5
No	71.2	68.9-73.3	83.8	81.8-85.6	76.3	74.2-78.3	75.0	72.7-77.1	77.3	75.0-79.5
<b>Health care coverage<sup>d</sup></b>										
Yes	71.4	69.6-73.2	85.1	83.5-86.5	78.8	77.2-80.3	70.3	68.4-72.1	82.8	81.0-84.4
No	65.2	56.6-72.9	72.2	63.5-79.5	76.9	68.5-83.7	65.2	56.6-72.8	45.3	37.9-53.0

† Data were combined from 2005 and 2007 survey years to ensure an adequate sample of adults with HBP from which to obtain prevalence estimates.

a % = weighted percentage; CI = confidence interval.

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

c All respondents who report activity limitations due to physical, mental, or emotional reasons OR have health problems that require the use of special equipment.

d Includes health insurance, prepaid plans such as HMOs, and government plans such as Medicare.

\* This estimate is based on fewer than 50 observations. It is less reliable than estimates in the table based on more than 50 observations and should be interpreted with caution.

## References

1. Chobanian AV, Bakris GL, Black HR et al. The seventh report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure. National Heart, Lung and Blood Institute. *Hypertension* 2003; 42: 1206-52.
2. Hajjar I, Kotchen TA. Trends in prevalence, awareness, treatment, and control of hypertension in the United States, 1988-2000. *JAMA* 2003;290:199-206.
3. Ogden LG, He J, Lydick E, Whelton PK. Long-term absolute benefit of lowering blood pressure in hypertensive patients according to the JNC VI risk stratification. *Hypertension*.2000;35:539-43.
4. New York State Department of Health Prevention Agenda Towards the Healthiest State. [http://www.nyhealth.gov/prevention/prevention\\_agenda/chronic\\_disease/](http://www.nyhealth.gov/prevention/prevention_agenda/chronic_disease/)

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