



## State Heart Disease and Stroke Prevention Program Addresses High Blood Pressure



### High Blood Pressure Facts

- High blood pressure (HBP), defined by systolic pressure of 140 mm Hg or more, or diastolic pressure of 90 mm Hg or more, affects an estimated 50 million people in the United States.
- One of four adults has high blood pressure and another 59 million adults have pre-hypertension (systolic blood pressure of 120–139 or diastolic blood pressure of 80–89).<sup>1,2</sup>
- According to the *Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7)*, about 30% of people with high blood pressure are unaware of their condition, approximately half of hypertensives are not treated, and only 34% have their high blood pressure controlled.<sup>4</sup>
- High blood pressure is one of the most prevalent chronic diseases for which treatment is available. Uncontrolled high blood pressure increases one's risk of heart disease and stroke; even modest elevations in blood pressure are associated with an increase in disease risk.
- Results from large-scale trials show that a 5 mm Hg reduction in diastolic blood pressure corresponds to a 21% reduction in heart disease risk.<sup>4</sup> Because the consequences of high blood pressure are so serious, early detection, treatment, and control are critical.
- About 50% of people who suffer a first heart attack and about 66% of people experiencing a first stroke have blood pressure above 160/95 mm Hg.<sup>5</sup> Also, high blood pressure is associated with a 2–3 times higher risk of developing heart failure.<sup>6</sup>
- The cost of high blood pressure and its adverse health outcomes is an economic burden to our nation. In 2007, the estimated direct and indirect costs of high blood pressure are projected to be \$66.4 billion.
- Treatment of high blood pressure includes behavior changes and compliance to drug therapy when indicated. Reduction in excess weight through improved diet and exercise habits and avoidance of excess dietary salt, for example, can be very effective in controlling blood pressure. To help with therapeutic decisions, the *JNC 7* report establishes three risk groups with recommended treatment. Adults should have their blood pressure checked regularly. [See JNC 7 guidelines for treatment recommendations.](#)

#### High Blood Pressure Activities in CDC-Funded State Heart Disease and Stroke Prevention Program

The Arkansas program addresses hypertension in African American males, in partnership with the American Heart Association (AHA), the Community Health Centers of Arkansas, the Arkansas Minority Health Commission, and the Arkansas Department of Health's Minority Health Office, and others.

The Maine program works to assure quality of care and compliance with guidelines through the implementation of AHA's Get with the Guidelines for CVD, in collaboration with its partners which include AHA and managed-care organizations.

The Oregon program analyzed Medicaid claims to determine the prevalence of CVD risk factors, including hypertension.

The Missouri program collaborates with the St. Louis Fire Department to provide blood pressure and cholesterol screenings, referral, and follow up to residents in inner-city neighborhoods. Persons with dangerously high blood pressure have been taken to hospitals.

The Wisconsin Program, working with its State Medicare Quality Improvement Organization and State Diabetes Program, analyzed Health Plan Employer Data and Information Set (HEDIS) indicators for hypertension.

The Virginia program has partnered with AHA on a blood pressure control media campaign.

## State Heart Disease and Stroke Prevention Program: Take Action!

State Health Departments work to reduce the burden of stroke by promoting activities that can be implemented in health care, work sites, communities, and schools. For example, a state program might

- Promote policy development for system changes that ensure increased adherence to national guidelines for the prevention and control of high blood pressure through screening and follow-up, and provide education and training about the importance of implementing *JNC 7* guidelines. Assure detection and follow-up services with employees for control of blood pressure at the worksite.
  - *Potential Partners:* local health care professional organizations, such as occupational health nurses, medical societies, health and safety manager, human resource managers, voluntary health care organizations, local health departments.
- Develop assessment tools for tracking high blood pressure treatment and control rates.
  - *Potential Partners:* primary care associations, federally-qualified health centers, managed care organizations, and Medicare Quality Improvement Organization.
- Inform the public that high blood pressure is a major modifiable risk factor for heart disease and stroke, and that having blood pressure checked is an important first step in identifying and controlling high blood pressure and reducing the risk of heart disease and stroke.
- Assure that detection and follow-up services are available for controlling high blood pressure and cholesterol in various settings including the work site and community.
  - *Potential Partners:* American Heart Association (AHA) affiliate, media, business, industry and human resource management, employee associations, unions, faith organizations, local minority nursing association, and local health departments.
- Collaborate on education and policy intervention programs to detect and control high blood pressure in high-risk groups.
  - *Potential Partners:* AHA affiliate, hospitals, federally-qualified health centers, business, industry and human resource management, employee associations, faith organizations, local minority nursing association, and local health departments
- Advocate for health care coverage to include blood pressure screening, treatment, and control, and rehabilitation services for heart attack and stroke survivors.
  - *Potential Partners:* AHA affiliate, business, industry and human resource management, employee associations, unions, third party payers, health care providers, and local policy makers

**Prevent and Control High Blood Pressure:** Mission Possible is a new initiative of the National High Blood Pressure Education Program at the National Heart, Lung, and Blood Institute (NHLBI). It is designed to mobilize all Americans in the fight against high blood pressure and reduce the more than 1 million heart attacks, strokes, and kidney failure cases that it causes each year. The CDC and the NHLBI have joined forces to disseminate these materials through the State Heart Disease and Stroke Prevention Program. An evaluation of the use and dissemination was conducted in 2006.

Blood Pressure Classification*	Blood Pressure level (mm Hg)
Normal	Systolic BP <120 <b>AND</b> Diastolic BP <80
Pre-Hypertension	Systolic BP= 120–139 <b>OR</b> Diastolic BP= 80-89
Stage 1 Hypertension	Systolic BP= 140–159 <b>OR</b> Diastolic BP= 90-99

Stage 2 Hypertension	Systolic BP= 160 or higher <b>OR</b> Diastolic BP= 100 or higher
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\*If the systolic and diastolic blood pressure measurements fall into two different categories, the blood pressure classification is the higher of the two categories. Source: *The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure*.

## References

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