

FACTS

Million Hearts™

Savings Millions of Lives by Working Together

OVERVIEW

Heart disease and stroke are the 1st and 5th leading causes of death in the United States, respectively.¹ Million Hearts™, launched in September 2011 by the Department of Health and Human Services, brings together communities, health systems, nonprofit organizations, federal agencies, and private-sector partners to fight these deadly conditions.² This national initiative has the ambitious goal of preventing one million heart attacks and strokes by 2017 through a targeted focus on the ABCS – factors that impact risk for heart disease and stroke.

Aspirin for people at risk
Blood pressure control
Cholesterol management
Smoking cessation

The American Heart Association has adopted an even more ambitious goal by 2020 – to improve the cardiovascular health of all Americans by 20% while reducing deaths from cardiovascular diseases and stroke by 20%.³ Preventing and controlling high blood pressure (HBP) is essential to achieving this objective.

THE SILENT KILLER

When a heart beats, it creates pressure to push blood through your blood vessels and capillaries. The pressure – blood pressure – is the result of two forces. The first occurs as heart pumps blood out into the arteries (systolic). The second force is created as the heart rests between beats (diastolic). These two forces are represented by the two numbers in a blood pressure reading. When these forces are too strong (as indicated by a reading 140/90 mm Hg or above) they stretch the walls of the arteries beyond a healthy limit.⁴

HBP (hypertension), with the exception of extreme cases, has no symptoms. Unfortunately, if left untreated HBP can cause severe damage to major organs, including the heart, lungs, kidneys, and eyes. In the heart alone, HBP can cause arterial damage, atherosclerosis, heart failure, angina, and can lead to stroke.⁵ In fact, an individual with high blood pressure is **four times** more likely to die of a

stroke and **three times** more likely to die of heart disease.⁶

The estimated costs of HBP in 2011 were \$46.4 billion and could increase to \$274 billion by 2030,⁷ making it the most expensive form of cardiovascular disease (CVD).⁸

WHO HAS HIGH BLOOD PRESSURE?

Over 80 million adults, or nearly 33% of the population, in the U.S. have HBP.⁷ By 2030, this figure is projected to increase to over 40%.⁷ HBP is more prevalent in men up to age 45, equally prevalent in men and women from age 46 to 64, and more prevalent in women over age 64.⁷ Blacks have the highest prevalence of HBP of any ethnic group.⁷

Numerous risk factors and markers for development of hypertension have been identified, including age, ethnicity, family history of HBP, genetic factors, lower education and socioeconomic status, greater weight, lower physical activity, tobacco use, psychosocial stressors, sleep apnea, and dietary factors such as dietary fats, higher sodium intake, lower potassium intake, and excessive alcohol intake.⁷

Taking action to control and reduce your blood pressure can add years to your life. It is estimated that 46,000 deaths may be avoided each year if 70% of the patients with HBP were treated to goal.⁹ Additionally, research has shown that a 10% increase in HBP treatment would result in 14,000 prevented deaths.¹⁰ Unfortunately, only about half of people with HBP are estimated to have the condition adequately controlled.⁷ There are several ways to control HBP, including following a healthy diet and reducing sodium intake, participating in regular physical activity, maintaining a healthy weight, taking your prescription medications, and limiting alcohol intake.

HYPERTENSION AND SODIUM

High amounts of sodium in the diet have been linked to HBP and multiple scientific studies dating back to the 1940s have demonstrated improved health through lower sodium consumption.¹¹ Yet the average American continues to consume about 3,400 mg of sodium per day,¹² significantly more than the American Heart

Association's recommended levels of 1,500 mg/day.¹³ If the U.S. population moved to an average daily sodium intake of 1,500 mg there could be a 25.6% overall decrease in HBP and a \$26.2 billion savings in annual healthcare spending.¹⁴

MILLION HEARTS™

Million Hearts™ goal to eliminate one million heart attacks and strokes by 2017 includes several activities aimed at helping Americans better control their blood pressure. The program aims to:²

- Improve access to effective care
- Improve the quality of care for the ABCS
- Focus clinical attention on the prevention of heart attack and stroke
- Activate the public to lead a heart-healthy lifestyle
- Improve the prescription of, and adherence to, appropriate medications for the ABCS

Some of the Million Hearts™ activities to support these objectives include community efforts to reduce sodium in the food supply, public education campaigns to help Americans make healthy food choices, and the use of health information technology and quality improvement initiatives to standardize and improve the delivery of care for HBP.

ACTION PLAN TO REDUCE HIGH BLOOD PRESSURE

The American Heart Association is committed to programs and public policies that will reduce the prevalence of HBP. As part of its participation in Million Hearts™, we are:

- Providing access to health management tools, such as My Life Check and Heart360.
- Working with federal agencies to harmonize clinical indicators to measure the progress toward attaining the ABCS.
- Working with national organizations and quality improvement organizations to share evidence-based protocols and best practices, measure and improve clinical performance, and address healthcare disparities.
- Developing webinars and disseminating collaborative and coordinated monthly messaging campaigns.
- Working with leaders and experts to collaborate and learn more about best practices of successful hypertension control efforts.
- Mobilizing diverse organizations to create a culture that drives high impact solutions for greater blood pressure control through our Check.Change.Control program

THE ASSOCIATION ADVOCATES

The American Heart Association also advocates for changes in health policy and programs that help patients better prevent and control HBP. These efforts include:

- Supporting funding for Million Hearts™ to help Americans prevent and control HBP.
- Protecting funding for the Prevention and Public Health Fund (PPHF), which provides support for Million Heart's activities.
- Promoting patient HBP medication adherence¹⁵ through public policies and programs.
- Supporting implementation of the recommendations in the Institute of Medicine's report *Strategies to Reduce Sodium Intake in the United States*.¹⁶

¹ Centers for Disease Control and Prevention, (2015). Leading Causes of Death. Retrieved from <http://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm>.

² Million Hearts. (2015). Retrieved from <http://millionhearts.hhs.gov/index.html>.

³ Lloyd-Jones, DM, Hong, Y, Labarthe, D, Mozaffarian, D, Appel, LJ, Van Horn, L, ... & Rosamond, WD. (2010). Defining and setting national goals for cardiovascular health promotion and disease reduction the American Heart Association's Strategic Impact Goal through 2020 and beyond. *Circulation*, 121(4), 586-613.

⁴ American Heart Association. (2015). *About High Blood Pressure*. Retrieved from http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/AboutHighBloodPressure/About-High-Blood-Pressure_UCM_002050_Article.jsp.

⁵ American Heart Association (2014). Why High Blood Pressure Matters. Retrieved from

http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/WhyBloodPressureMatters/Why-Blood-Pressure-Matters_UCM_002051_Article.jsp.

⁶ Centers for Disease Control and Prevention. (2012). *Getting Blood Pressure Under Control*. Retrieved from <http://www.cdc.gov/VitalSigns/hypertension/index.html>.

⁷ Mozaffarian D, Benjamin EJ, Go AS, Arnett DK, Blaha MJ, Cushman M, ... & Turner MB: on behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. (2014). Heart disease and stroke statistics—2015 update: A report from the American Heart Association. *Circulation* 2015, 131, e01–e294.

⁸ Go, AS, Mozaffarian, D, Roger, VL, Benjamin, EJ, Berry, JD, Blaha, MJ, ... & Stroke, SS. (2014). Heart disease and stroke statistics--2014 update: a report from the American Heart Association. *Circulation*, 129(3), e28.

⁹ Centers for Disease Control and Prevention. (2014). Progress of Health Plans Toward Meeting the Million Hearts Clinical Target for High Blood Pressure Control — United States, 2010–2012. *Morbidity and Mortality Weekly Report*. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6306a2.htm>.

¹⁰ Farley, TA, Dalal, MA, Mostashari, F, & Frieden, TR. (2010). Deaths preventable in the US by improvements in use of clinical preventive services. *American Journal of Preventive Medicine*, 38(6), 600-609.

¹¹ American Heart Association. (2015). *Reducing Sodium in a Salty World*. Retrieved from

http://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/HealthyDietGoals/Reducing-Sodium-in-a-Salty-World_UCM_457519_Article.jsp.

¹² Mayo Clinic. (2013). *Sodium: How to tame your salt habit*. Retrieved from <http://www.mayoclinic.org/healthy-living/nutrition-and-healthy-eating/in-depth/sodium/art-20045479>.

¹³ Whelton, PK, Appel, LJ, Sacco, RL, Anderson, CA, Antman, EM, Campbell, N, ... & Van Horn, LV. (2012). Sodium, blood pressure, and cardiovascular disease further evidence supporting The American Heart Association sodium reduction recommendations. *Circulation*, 126(24), 2880-2889.

¹⁴ Dall, TM, Fulgoni III, VL, Zhang, Y, Reimers, KJ, Packard, PT, & Astwood, JD. (2009). Potential health benefits and medical cost savings from calorie, sodium, and saturated fat reductions in the American diet. *American Journal of Health Promotion*, 23(6), 412-422.

¹⁵ American Heart Association. (2014). *A Tough Pill to Swallow*. Retrieved from http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_460769.pdf.

¹⁶ Institute of Medicine. (2010). *Strategies to Reduce Sodium Intake in the United States*.