

# FACTS

## Making Progress: Making a Difference

### CDC Heart Disease and Stroke Prevention Program

#### OVERVIEW

Over the past 50 years, significant progress has been made in the battle against heart disease, stroke, and other forms of cardiovascular disease (CVD). Improved diagnosis and treatment have been remarkable - as has the survival rate. CVD mortality rates have declined over 50% since the 1970s.<sup>1,2</sup> An estimated 44% of the decrease in heart disease deaths from 1980-2000 was a result of prevention through the reduction of risk factors.<sup>3</sup>

CVD remains the No. 1 and most costly killer in the U.S. and a major cause of disability.<sup>4</sup> Beyond the toll in suffering and death, it comes with a steep price tag. CVD will cost the U.S. over \$1 trillion in medical expenses (direct costs) and lost productivity (indirect costs) by 2035.<sup>5</sup>

#### MANY DEATHS AND DISABILITIES FROM CVD CAN BE PREVENTED

- Avoiding key risk factors and receiving early diagnosis and correct treatment are essential to combating heart disease and stroke. Not smoking, maintaining a healthy weight, and controlling blood sugar, blood pressure and cholesterol may add 15 years of life.<sup>6</sup>
- An estimated 47% of U.S. adults age 20 and older have total cholesterol levels of 200 mg/dL or higher. A 10% decrease in these levels population-wide may result in about a 30% cut in the incidence of coronary heart disease.<sup>4</sup>
- One in three U.S. adults has high blood pressure.<sup>3,7</sup> About 69% of people who have a first heart attack, 77% who have a first stroke, and 74% with congestive heart failure have blood pressure above 140/90 mmHg.<sup>4</sup>
- Only 27% of respondents in a 2005 study knew heart attack signs and symptoms and would call 9-1-1 first if someone was having a heart attack or stroke.<sup>4</sup>

#### PREVENTION OF CVD CAN REDUCE RISING HEALTH CARE COSTS

- Costs of treating heart disease and stroke could top to \$1 trillion by 2035.<sup>5</sup>
- Less than 5% of those eligible for tPA - the only emergency treatment approved by the FDA for the most common type of stroke - receive it.<sup>8</sup> Patients treated with tPA within 3 hours of onset of stroke symptoms are 37% more likely to have minimal or no disability at a 3-month follow-up.<sup>9</sup> The original National Institute of Neurological Disorders and Stroke-funded tPA trial resulted in an estimated 10-year net benefit of \$6.47 billion.<sup>10</sup>
- People free of risk factors have lower healthcare costs and are far less likely to develop CVD. But, after two decades of progress, the percentage of Americans without major heart disease risk factors is dropping – standing at less than 10%.<sup>3</sup>

#### CDC STATE HEART DISEASE AND STROKE PREVENTION PROGRAM

CDC spends on average only 16 cents per person each year in the U.S. on heart disease and stroke prevention. The CDC's Division for Heart Disease and Stroke Prevention awards grants to states and conducts surveillance to improve cardiovascular health for all. However, 9 states receive no money at all.<sup>11</sup>

- With an appropriation of \$56 million in FY 2010, CDC still funds only 14 states for basic program implementation and 27 states and the D.C. for capacity building (program planning).<sup>11</sup>
- CVD is the No. 1 killer in each state, but 9 states receive no funding for this life-saving program.<sup>12</sup>

#### CDC HEART & STROKE SUCCESSSES

- State Heart Disease and Stroke Prevention Programs focus on controlling blood pressure and cholesterol, knowing heart disease and stroke signs and symptoms, calling 9-1-1,

improving emergency response and quality of care, and eliminating health disparities.

- Mississippi improved awareness of risk factors such as high blood pressure and cholesterol.<sup>12</sup>
- New York's participating worksites averaged a 62% increase in heart health supports, including blood pressure screenings, low-fat food choices, and smoke-free workplace policies.<sup>12</sup>
- Wisconsin joined with the state Society for Cardiovascular and Pulmonary Health and Rehabilitation to start an outpatient cardiac rehab registry. Major progress in reducing LDL cholesterol from admission to discharge has been noted.<sup>12</sup>

## PAUL COVERDELL NATIONAL ACUTE STROKE REGISTRY (PCNASR)

- CDC supports the PCNASR to measure, track and improve the quality and delivery of stroke care in six states (GA, MA, MI, MN, NC, OH).<sup>13</sup>
- More than 246 hospitals participate in PCNASR. Goals include addressing gaps between practice and guidelines and promoting growth of quality improvement in stroke care in hospitals and emergency medical services.<sup>13</sup>
- Since January 2005, PCNASR has collected about 120,000 stroke transient ischemic attack cases. Data shows sustained progress in 7 of 10 stroke quality improvement measures.<sup>13</sup>

## WISEWOMAN PROGRAM

- **Well-Integrated Screening and Evaluation for Women Across the Nation** screens uninsured and under-insured low-income women ages 40 to 65 in 20 states for heart disease and stroke risk. They receive counseling, education, referral, and follow-up as appropriate.
- From 2000 to mid-2008, **WISEWOMAN** reached over 84,000 low-income women, provided more than 210,000 lifestyle interventions, and identified 7,647 new cases of high blood pressure, 7,928 new cases of high cholesterol, and 1,140 new cases of diabetes. Among those participants who were re-screened one year later, average blood pressure and cholesterol levels had decreased considerably.<sup>14</sup>

## THE AHA ADVOCATES

American Heart Association advocates adequate CDC funding that would allow all states to implement a Heart Disease and Stroke Prevention Program,

Paul Coverdell National Acute Stroke Registry, WISEWOMAN, and a broad surveillance system.

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<sup>1</sup> Centers for Disease Control and Prevention. Health, United States, 2012. Available at <http://www.cdc.gov/nchs/data/abus/abus12.pdf>. Accessed December 30, 2013.

<sup>2</sup> Capewell, S., et al. (2010). Cardiovascular risk factor trends and potential for reducing coronary heart disease mortality in the United States of America." Bull World Health Organization, 88(2): 120-130.

<sup>3</sup> Ford, E. S. and S. Capewell. (2011). Proportion of the decline in cardiovascular mortality disease due to prevention versus treatment: public health versus clinical care. Annual Review of Public Health:32: 5-22.

<sup>4</sup> Benjamin, EJ et al. Heart Disease and Stroke Statistics—2017 Update. A Report From the American Heart Association. Circulation. 2017;135:00–00

<sup>5</sup> Khavjou, O, et al. (2017). Projections of Cardiovascular Disease and Costs: 2015-2035. Unpublished RTI Report on behalf of the AHA.

<sup>6</sup> Clarke, R., et al. (2009). Life expectancy in relation to cardiovascular risk factors: 38 year follow-up of 19,000 men in the Whitehall study. British Medical Journal, 339: b3513.

<sup>7</sup> Center for Disease Control and Prevention. (2011). Vital signs: prevalence, treatment, and control of hypertension—United States, 1999-2002 and 2005-2008. MMWR;60(4):103-8

<sup>8</sup> Rosamond WD, et al. (1998). Rapid response to stroke symptoms: the Delay in Accessing Stroke Healthcare (DASH) study. Academic Emergency Medicine; 5: 45-51.

<sup>9</sup> Strbian, D., et al. Ultra-early intravenous stroke thrombolysis: do all patients benefit similarly. Stroke 2013; 44(10): 2913-2916.

<sup>10</sup> Johnston SC, et al. (2006). Effect of a US NIH program of clinical trials on public health and costs. The Lancet; 367, 1319-1327.

<sup>11</sup> Centers for Disease Control and Prevention. CDC National Heart Disease and Stroke Prevention Program. Available at [http://www.cdc.gov/dhdSP/programs/nhdsp\\_program/index.htm](http://www.cdc.gov/dhdSP/programs/nhdsp_program/index.htm). Accessed December 31, 2013

<sup>12</sup> Centers for Disease Control and Prevention. Prevention Works: CDC Strategies for a Heart Healthy and Stroke-Free America. Washington, DC. CDC. 2006.

<sup>13</sup> Centers for Disease Control and Prevention. The Paul Coverdell National Acute Stroke Registry. Available at: [http://www.cdc.gov/DHDSP/stroke\\_registry.htm](http://www.cdc.gov/DHDSP/stroke_registry.htm). Accessed December 22, 2009.

<sup>14</sup> Centers for Disease Control and Prevention. WISEWOMAN (Well-Integrated Screening and Evaluation for Women Across the Nation). Available at: <https://www.cdc.gov/wisewoman/index.htm>. Accessed on January 15, 2016.