FACTS
An Ounce of Prevention...
The Value of Prevention for Cardiovascular Disease

OVERVIEW
Cardiovascular disease (CVD), including heart disease and stroke, is the leading cause of death and disability in the U.S.1 Unfortunately, the disease process can start early in life and is influenced over time by lifestyle behaviors, the environments where people live, and modifiable risk factors, including smoking, obesity, physical inactivity, high blood pressure, elevated blood cholesterol, and Type 2 diabetes. In many instances, CVD can be prevented if individuals modify their risk factors for the disease. Policy makers ask, however, if efforts aimed at prevention are cost-effective—i.e. are such interventions worth what we pay for them? A paper by the American Heart Association2 summarizes the value of prevention and makes the important case for the valuable impact of policy and environment change and early clinical intervention on the public health, national security, and the productivity of our nation’s workforce. The ultimate goal is to increase the number of years that people can enjoy a high quality of life.

MAKING THE CASE
A great deal of evidence shows the benefit of healthy living throughout the lifespan.

• Studies show that reducing modifiable risk factors such as hypertension and smoking results in lower incidence of heart attack and stroke.3
• Counseling to improve diet or increase physical activity changes health behaviors and is associated with small improvements in weight, blood pressure, and cholesterol levels.4
• Comprehensive coverage of tobacco cessation services in the Medicaid program can lead to reduced hospitalizations for heart attacks and a net savings of $10.5 million, or a $3.07 return on investment for every dollar spent.5
• Approximately 44% of the decline in U.S. age-adjusted CHD death rates from 1980-2000 can be attributed to improvements in risk factors including reductions in total blood cholesterol, systolic blood pressure, smoking prevalence, and physical inactivity.6 However, only 16% of U.S. adults meet ideal levels for at least five of seven metrics of cardiovascular health.6
• Community-based programs to increase physical activity, to improve nutrition, and to prevent smoking and other tobacco use can show a return on investment of $5.60 for every dollar spent within five years.7
• Almost a quarter of companies’ medical costs per year are spent on ten modifiable risk factors with obesity contributing the most at $347 per capita, per year.8 Employers can reduce these costs through worksite wellness programs. For each dollar spent, these programs can lower medical costs by approximately $3.27 and absenteeism costs by about $2.73 in the first twelve to 18 months9 and have the potential to lower employee medical costs by 18% over two years.10
• Comprehensive school-based initiatives to promote healthy eating and physical activity have shown a cost effectiveness of $900-$4305 per quality-of-life-year saved.11

HOW ARE WE DOING?
In 2009-2010, about 47% (102.5 million) adults had at least one of three risk factors for cardiovascular disease that could be reduced via preventive efforts: uncontrolled blood pressure, uncontrolled high levels of low-density lipoproteins (LDL’s), or current smoking.12 Although the prevalence of some risk factors has been decreasing and we are placing a greater emphasis on prevention, we still have a long way to go to reach our goals.1

Figure 1. Age-adjusted percentage of adults aged 20 and over who have uncontrolled high blood pressure or uncontrolled high LDL cholesterol, or who currently smoke, by sex and age: United States, 1999-2010


• In 2011, 12 states had adult obesity rates greater than 30%, and the adult obesity rate exceeded 25% in 27 more states.13
• The obesity epidemic is spreading to our children at an alarming rate. 31.8% of children and adolescents ages 2-19 are considered overweight or obese.1
• The number of obese preschoolers jumped from 5% to 10% between the late 1970s and 2008.14 Sadly, one study has shown that obese children’s arteries resemble those of a middle-aged adult.15 However, we are making some progress. Recent studies have shown the progression of childhood obesity is slowing in a few major metropolitan areas.16
• According to a 2012 Surgeon General’s report, after years of steady progress, declines in the use of
tobacco by youth have slowed, and each day over 3,800 young people under 18 years of age smoke their first cigarette. An estimated 6.4 million of these children can be expected to die prematurely as a result. And children are increasingly using the new smokeless tobacco products entering the market as well as cigars.

- Forty-eight percent of hypertensive adults were categorized as having poor blood pressure control.
- A sedentary lifestyle contributes to CHD. However, moderate-intensity physical activity, such as brisk walking, is associated with a substantial reduction in chronic disease. It is estimated that $5.6 billion in heart disease costs could be saved if 10% of Americans began a regular walking program. Still, 32% of U.S. adults report that they do not engage in any leisure-time aerobic physical activity.
- At least 68% of people age 65 or older with Type 2 diabetes die from some form of heart disease and 16% die of stroke. Unfortunately, diabetes prevalence increased 90% from 1995-1997 to 2005-2007.
- About 27.9 million Americans have diagnosed or undiagnosed diabetes and the prevalence of pre-diabetes in the adult population is 38%. Diabetes disproportionately affects African Americans, Mexican Americans, Hispanic/Latino individuals, and other ethnic minorities.
- Approximately 14% of U.S. adults have unhealthy total cholesterol levels. Despite cholesterol screening levels reaching as high as 83% in some states, fewer than half of all people who qualify for cholesterol lowering treatment are receiving it, and only one-in-three that receive treatment are achieving a healthy cholesterol level.

THE ASSOCIATION ADVOCATES
In order to achieve its goals of improving the cardiovascular health of the U.S. population by 20%

- The Prevention and Public Health Fund, maintaining the Fund at funding levels designated through the Affordable Care Act.
- The Million Hearts Initiative, a program to prevent one million heart attacks and stroke in five years.
- Comprehensive clean indoor air laws.
- Excise taxes on all tobacco products.
- Funding for comprehensive smoking cessation/prevention programs at all levels and in all coverage plans; for programs that eliminate health disparities; for active transportation such as walking and biking trails, Safe Routes to School, and Complete Streets; coordinate school health programs; and state heart disease and stroke programs.
- Strong implementation of FDA regulation of tobacco.
- Comprehensive health care coverage for preventive services; prevention, diagnosis, and treatment of overweight and obesity;
- Efforts to design workplaces, communities, and schools around active living; integrating physical activity opportunities throughout the day.
- Sports, community recreational opportunities, parks, and green spaces.
- Quality physical education in schools at recommended levels.
- Accurate measures of obesity and related risk assessments in diverse populations.
- Comprehensive worksite wellness programs.
- Strong local wellness policies in all schools.
- Comprehensive obesity prevention strategies in early childhood and day care programs.
- Healthy foods by eliminating food deserts and improving access.
- Updated nutrition standards in schools for meals and competitive foods regulations.
- Robust nutrition standards in all government nutrition assistance or feeding programs.
- Improved food labeling and menu labeling in restaurants and where foods are sold for immediate consumption.
- The removal of industrial trans fats from the food supply and assure the use of healthy replacement oils.
- Less junk food marketing and advertising to children.
- Limiting added sugars and sodium in the food supply.