

# PREVENTION PAYS

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# ACKNOWLEDGMENTS

This report, Prevention Pays, represents the work of countless Florida public health professionals.

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# EXECUTIVE SUMMARY

Today, Americans die prematurely from diseases linked largely to preventable causes. In general, they die after many years of unhealthy life, which further contributes to skyrocketing health care costs. Focusing our efforts and resources on prevention is essential to curbing these expenditures and to building healthy communities. In particular:

## **High-Risk Behaviors:**

The major causes of premature death and disability are related to high-risk behaviors, particularly tobacco use, over-eating, and inadequate physical activity. A reduction in these behaviors would not only reduce work and school absenteeism and increase the productivity of Floridians, but also would save millions of dollars in averted health care costs.

## **Injuries:**

Injuries are the leading cause of death among persons between ages 1 and 44 and overall the third leading direct cause of death after heart disease and cancer. Nearly 50 million injuries occur each year, placing a staggering burden on the U.S. health care system. State budgets share this burden through Medicaid, state employee health benefits, health care for the uninsured, child welfare services, and lost tax revenue for the injured and their caregivers.

## **Women's Health:**

In addition to the population-wide benefits to be realized by reducing chronic disease, there are additional long-term benefits related to improving the health of women of child-bearing age. Because healthy mothers have healthy babies, it is important to encourage women in this age group to have sound nutrition and regular physical exercise, to get regular mammograms and pap tests, to reduce sexually transmitted infections, and to reduce unplanned pregnancies.

## **Maternal and Infant Health:**

It is crucial that our babies get the best possible start in life. To reduce the high fiscal and social costs of poor birth and infant outcomes and inadequately diagnosed problems, mothers should get early regular prenatal care, including WIC (the federal supplemental nutrition program for women, infants and children); babies should be breastfed from the start and screened for metabolic problems; and, children found to have developmental delays should receive special services from birth through age three.

## **Adolescent and Adult Health:**

Adolescents put themselves at risk through a variety of behaviors, including those that lead to STDs and HIV. Adults put themselves at risk by lifestyle choices begun in adolescence and increase their risk when they do not take advantage of readily available screening for cancer, diabetes, hypertension and high cholesterol. The cost of treating advanced cancers, heart attacks, strokes and complications of diabetes far outweighs the cost of prevention and early treatment.

## **Environmental Health:**

Providing safe food and water, breathing clean air and playing in clean recreational water are essential if we are to reduce illness-related costs and improve overall well-being.

During this time of economic uncertainty, there are unlikely to be budget increases to meet burgeoning health care needs. It is even more important now to use scarce health resources efficiently and effectively, by focusing our efforts on prevention.

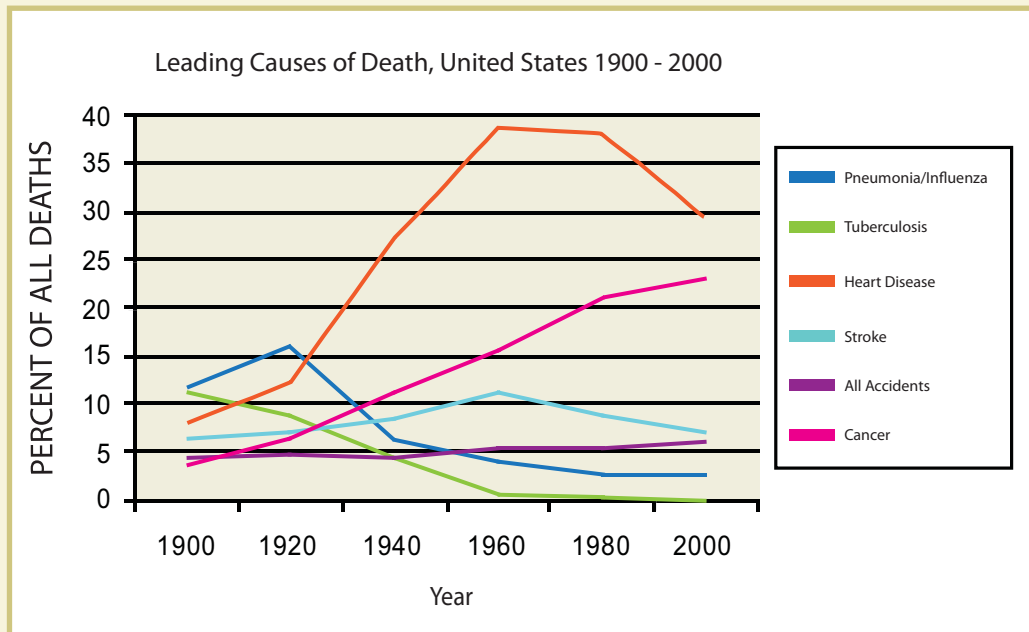
The bottom line is simple: implementing proven preventive strategies not only has a substantial positive impact on the health and well-being of our citizens, but it also results in a positive return on our health care investment. It is essential to remember this as we move forward.

## INTRODUCTION: THE NEED FOR PREVENTION

Today, Americans die prematurely from diseases linked largely to preventable causes. In general, they die after many years of unhealthy life, which further contributes to skyrocketing health care costs. Focusing our efforts and resources on prevention is essential to curbing these expenditures and to building healthy communities.

### **Americans are now more likely to die from consequences of chronic disease.**

In the past century, chronic diseases have overtaken communicable diseases as the leading causes of death, due both to advances in the control of infectious disease and to lengthened life spans. Although overall life expectancy continues a long-term upward trend, gains in the United States continue to lag behind other countries such as Canada and Japan.



Florida mirrors the United States in the shift from communicable diseases to chronic diseases as the leading causes of death. Chronic diseases – heart disease, stroke, cancer, diabetes, chronic respiratory disease – now comprise 62.5% of all deaths in Florida, compared to less than 20% 70 years ago.

## **Tobacco use, poor diet, and physical inactivity are the leading ‘actual’ causes of death in America.**

Chronic diseases develop over an extended period of time, often after prolonged exposure to one or more risky behaviors, particularly tobacco use, poor nutrition and insufficient physical activity. In a now-famous 1993 study of causes of death, these three behaviors were dubbed the leading ‘actual’ causes of death, because they are underlying factors in almost half of all deaths in the United States.<sup>1</sup> The 2004 updated version of that study finds that these behaviors, plus alcohol consumption, continue to account for nearly 40% of all deaths, with physical activity and diet quickly overtaking tobacco as the leading cause of death.<sup>2</sup>

Declines in tobacco use among American adults and adolescents have stalled while rates of obesity continue to skyrocket. The United States leads all other industrialized countries in the rate of adult obesity, increasing the risk for related health care problems and increased costs in years to come. Florida fares somewhat better, with improvement in tobacco use, but growing rates of obesity.

According to the 2007 Behavioral Risk Factor Surveillance Survey (BRFSS), one out of every five adult Floridians smokes. Prevalence of current smoking decreased from 22% of adults in 1998 to 18% in this most recent survey. Current cigarette use among high school students also declined from 1998 to 2007, but cigar and flavored tobacco smoking use are on the increase.<sup>3</sup> Over 62% of adult Floridians are overweight, and more than a third of that group qualifies as obese. Since 1986, the percentage of Floridians who are obese has doubled.

## **Health care related costs have skyrocketed.**

The United States spends a disproportionate share of its gross domestic product (GDP) on health care expenditures relative to other industrialized countries. Healthcare spending ballooned to over 16.7% of the nation’s gross domestic product by 2007.<sup>4</sup> By 2015, health expenditures are expected to surpass \$4 trillion nationwide.<sup>5</sup> Since 1988, only 3% (\$9.1 billion) of those expenditures have been spent on public health.<sup>6</sup>

Florida’s health care expenditures have also risen over the last two decades and healthcare is now a \$100+ billion industry. In 2007, personal health care expenditures in Florida reached \$119.7 billion, up from \$112.3 billion in 2006 (an increase of 6.6%), and \$104.5 billion in 2005 (an increase of 7.5%).<sup>7</sup> The consequences of increased smoking and obesity among Floridians of all ages can only lead to an explosion of chronic disease and its associated costs, both in terms of health care and of lost productivity.

It is not just health-related costs that will increase, however. The behaviors linked to serious health problems have also been found to contribute to many educational and social problems that confront the nation, including failure to complete high school, unemployment, and crime.<sup>8</sup>

## **Funding prevention is our best strategy.**

Providing adequate resources for core public health activities is essential to mitigating the effects of chronic disease on an increasingly aging and burgeoning population.<sup>9</sup> A strong public health system provides a range of services designed to decrease the onset and severity of chronic diseases, thereby improving the health of public. Simultaneously, it ensures timely emergency preparedness during disasters; safe food, air and water supplies; control of infectious disease outbreaks; and prevention of serious childhood illnesses. State and local health departments serve as the backbone of the public health system around which other community, religious, educational, and civic organizations build their efforts.<sup>10</sup> By utilizing evidence-based public health interventions and modifying the built environment to promote physical activity and access to healthy food, we can increase longevity, improve the quality of life, and be more productive.

This report summarizes current research on the value of prevention, and highlights potential benefits – in reduced health care costs, improved quality of life, decreased absenteeism and higher productivity – that can be reaped by focusing our resources on prevention.

# HIGH-RISK BEHAVIORS

The major causes of premature death and disability are related to high-risk behaviors, particularly tobacco use, over-eating, and inadequate physical activity. A reduction in these behaviors would not only reduce work and school absenteeism and thereby increase the productivity of Floridians, but also would save millions of dollars in averted health care costs.

## **Smoking**

Smoking is the leading cause of preventable death and disability in the United States.<sup>11</sup> Since smoking harms nearly every organ of the body, quitting has immediate and long-term health benefits for the smoker and family members. Cigarette-related lung cancer continues to be the leading cause of cancer death for men and women in Florida, in the United States and throughout the world.<sup>12</sup>

- Productivity losses in Florida from lives shortened by smoking totaled an estimated \$6.47 billion in 2008. This is in addition to sick days, disability, and productivity declines related to tobacco use.<sup>13</sup>
- National estimates show that every adult smoker who quits smoking reduces his lifetime health care costs by approximately \$9,500 (in 2004 dollars).<sup>14</sup>
- For Florida, this means that for every 1% decline in the smoking rate – 142,000 fewer smokers – there is \$1.3 billion savings in health care costs alone.<sup>15</sup>

## **Obesity: Nutrition and Physical Activity**

The major causes of obesity are poor diet and physical inactivity. Taken together, they are the second leading preventable causes of death in the United States.<sup>16</sup> Being overweight causes or aggravates a variety of conditions, including adult-onset diabetes, high blood pressure, high cholesterol, coronary heart disease, stroke, osteoarthritis, reproductive complications and some cancers. Obesity is also growing among the young. This increase is a public health concern, because most obese adolescents continue their obesity into adulthood with serious risk for chronic disease. Focus should therefore be on prevention programs that promote healthier lifestyles and physical activity.

- Florida is the 10th heaviest state in the nation; nearly two-thirds of all adults in Florida are overweight or obese, a figure which has increased by 29% over the last 15 years.
- The Centers for Disease Control and Prevention estimate that obesity is associated with 385,000 deaths annually in the United States.<sup>17</sup>
- Obesity in adolescence has increased significantly over the past 30-40 years. A recent international comparison study showed that the highest obesity rates in the world occurred in U.S. adolescents (12.6% in 13 year old boys, 10.8% in girls and 13.9% in 15 year old boys, 15.1% in girls).<sup>18</sup>
- It is estimated that the 2008 medical costs of overweight and obesity were \$147 billion nationally in the U.S., up from \$78 billion only 10 years earlier.<sup>19</sup>
- The average annual health care costs for adults who are obese are estimated to be 36% higher than for non-obese individuals.<sup>20</sup>

## INJURIES

Injuries are the leading cause of death among persons between ages 1 and 44 and overall the third leading direct cause of death after heart disease and cancer. Nearly 50 million injuries occur each year, placing a staggering burden on the U.S. health care system. State budgets share this burden through Medicaid, employee health benefits, health care for the uninsured, child welfare services, and lost tax revenue for the injured and their caregivers.

Florida's injury death rates are 17% higher than the national average, claiming 13,062 lives and accounting for 8% of all deaths to Florida residents.<sup>21</sup>

The misperception of injuries as simply accidents undermines its seriousness as a public health threat. Injuries are as understandable, predictable, and preventable as many other health problems. Effective interventions include the use of seat belts and bicycle helmets, laws establishing lower legal blood alcohol levels (0.08 rather than 0.10) for drunk driving, and residential smoke alarm and fire safety education programs. Helmeted bicycle riders are over 33 times less likely to sustain a major head injury than non-helmeted riders.<sup>22</sup>

- According to the Centers for Disease Control (CDC), injuries cost an estimated \$406 billion per year nationally in medical expenses and lost productivity.<sup>23</sup>
- The prevention of injuries would preserve more years of potential life before age 65 than the prevention of heart disease and cancer combined.<sup>24</sup>

## WOMEN'S HEALTH

In addition to the population-wide benefits to be realized by reducing chronic disease, there are additional long-term benefits related to improving the health of women of child-bearing age. Because healthy mothers have healthy babies, it is important to encourage sound nutrition and regular physical exercise, promote regular mammograms and pap tests, reduce sexually transmitted infections, and reduce unplanned pregnancies.

### **Cancers of the Reproductive System**

Cancer is the second leading cause of death for women in the United States and in Florida. Breast and cervical screening prevent premature deaths by detecting and treating these cancers early.

- 3,700 lives could be saved annually if 90% of women age 40 and older were screened with mammography every two years.<sup>25</sup>
- A mammogram every two years extends life for women aged 65 or older at a cost of about \$36,924 per year of life saved.<sup>26</sup>
- Pap screening every three years extends life at a cost of about \$5,392 per year of life saved.<sup>27</sup>

### **Unintended and Mistimed Pregnancies**

Nearly half of all pregnancies in Florida are unintended or mistimed.<sup>28</sup> For a first baby, this means women may not be in optimal health to deliver a healthy baby. For subsequent pregnancies, this may mean too-short time

period between births. In either case, there is increased risk of miscarriage, stillbirth, prematurity, birth defects and infant death. Well-woman care provides increased opportunities for preconception counseling and screening before women become pregnant. Interconception care can address risks identified by a previous adverse pregnancy outcome.

- Every \$1 spent on preconception care saves \$1.60 in maternal and infant care costs.<sup>29</sup>
- Women enrolled in preconception care have fewer congenital malformations (4.2% versus 13.5%) than women who do not get preconception care and their babies are 50% less likely to require neonatal intensive care unit stays.<sup>30</sup>
- In the United States, it is estimated that voluntary contraceptive services for young and low-income women prevent 1.94 million unintended pregnancies annually, including almost 400,000 teen pregnancies.<sup>31</sup>
- In the United States, it is estimated that contraceptive services would reduce abortion every year by two-thirds.<sup>32</sup>
- In 2006, approximately 43,000 Florida pregnancies were prevented as a direct result of services provided by the Florida Department of Health's statewide family planning program. If even half of these had resulted in a live birth, it would have cost Florida over \$220 million in prenatal care, delivery, postpartum care and one year of infant care costs; about \$205 million of this would have been in Medicaid expenditures.<sup>33</sup>

## MATERNAL AND INFANT HEALTH

It is crucial that our babies get the best possible start in life. To reduce the high fiscal and social costs of poor birth and infant outcomes and inadequately diagnosed problems, mothers should get early regular prenatal care, including WIC; babies should be breastfed from the start and screened for metabolic problems; and children found to have developmental delays should receive special services from birth through age three.

### **Prenatal Care**

Prenatal care affects the health of the mother and her unborn child by improving the health status of the mother and reducing the possibility of intrauterine infection and preterm birth or placental transmission of disease. Prenatal care allows for the infant's optimal health and development inside of the womb. Providing Regional Perinatal Intensive Care Centers (RPICCs) for high-risk pregnant women and their newborns, as Florida does, prevents problems and costs related to prematurity and very low birth weight.

- From 1995 to 2002, women who had no prenatal care consistently had approximately five times the risk of infant death as women who received prenatal care during any trimester.<sup>34</sup>
- In 2005, preterm birth cost the United States an estimated annual cost of \$51,600 for every infant born preterm, totaling approximately \$26.2 billion.<sup>35</sup>
- Raising birth weight by even half a pound for a low birth weight infant saves an estimated average of more than \$28,000 in first-year medical costs alone.<sup>36</sup>
- In 2007 and 2008, Florida served over 11,000 high-risk pregnant women through its Regional Perinatal Intensive Care Centers, averting an estimated \$30 million in neonatal intensive care costs.<sup>37</sup>

## **Special Supplemental Nutrition Program for Women, Infants and Children (WIC)**

The Special Supplemental Food Program for Women, Infants, and Children (WIC) is a federal nutrition program that provides nutritious foods, nutrition education, breastfeeding education, and access to health care to low income pregnant women, new mothers, infants and children at nutritional risk.

- It is estimated that every dollar spent on WIC results in savings of between \$1.77 and \$3.13 in Medicaid cost for newborns and their mothers.<sup>38</sup>
- Participation in the WIC and Food Stamp Programs reduces the risk of child abuse and neglect, as well as health problems such as anemia, failure to thrive, and nutritional deficiency.<sup>39</sup>
- WIC increases the number of women receiving prenatal care, which reduces the incidence of low birth weight and fetal mortality.<sup>40</sup>
- Medicaid funded women enrolled in WIC during their pregnancies have a reduced risk of infant and neonatal mortality and lower prevalence of low birth weight/very low birth weight.<sup>41</sup>
- WIC participants are more likely to breastfeed and their children are more likely to have at least four well-child visits than comparable women who did not receive WIC support.<sup>42</sup>

## **Breastfeeding**

A major focus of prenatal care, child health care and the WIC program is encouraging new mothers to breastfeed. Research shows that breastfeeding can decrease the occurrence or severity of diarrhea, ear infections and bacterial meningitis, and may offer protection against sudden infant death syndrome, diabetes, obesity and asthma. Breastfeeding reduces a mother's risk of ovarian cancer and breast cancer, and possibly decreases the risk of hip fractures and osteoporosis in the postmenopausal period.<sup>43</sup>

- The American Academy of Pediatrics estimates that increased breastfeeding has the potential for decreasing annual health costs in the U.S. by \$3.6 billion.<sup>44</sup>
- Breastfeeding reduces parental employee absenteeism because breastfeeding reduces childhood illnesses.<sup>45</sup>
- Breastfeeding decreases the environmental burden of disposal of formula cans and bottles, and reduces energy demands for production and transportation of formula.<sup>46</sup>

## **Newborn Screening**

Florida screens all newborns for hearing impairment and for 35 metabolic disorders that lead to death or significant developmental disability. Newborn screening has been demonstrated to prevent developmental disabilities and reduce the need for special education services.

- The Centers for Disease Control and Prevention report that the present value of lifetime costs of developmental disabilities that are prevented by newborn screening ranges from \$500,000 to \$1 million.<sup>47</sup> The lifetime savings for these conditions in Florida far exceed the costs of implementing and maintaining a statewide newborn screening program.

## **Early Intervention for Children with Developmental Delays**

Early Steps is Florida's program for infants and toddlers (birth to thirty-six months) with significant developmental delays. Because early intervention programs help these children to improve their thinking skills and develop socially, children lead more successful lives and are less dependent on future government assistance.

High-quality early childhood programs can keep children out of expensive special education programs, reduce the number of students who must repeat a grade in school, and increase high school graduation rates.

- Early identification and treatment of children who are at risk of developmental delay produces economic benefits up to \$17 for each \$1 spent on the programs. The earlier the intervention, the lower the overall cost.<sup>48</sup>

## CHILD HEALTH

### **Immunization**

Childhood immunization represents one of the greatest public health achievements of the 20th century. Immunizations are among the most important and cost effective (even cost saving) preventive interventions.<sup>49</sup>

- The standard childhood immunization series annually prevents approximately 10.5 million cases of infectious illness and 33,000 deaths in the United States.<sup>50</sup>
- Every dollar spent on immunization saves \$6.30 in direct medical costs, with an aggregate annual savings of \$10.5 billion nationally.<sup>51</sup>
- The additional cost of missed work, death and disability raises the figure to \$18.40 saved per dollar spent on immunization, producing an aggregate savings of \$42 billion in the United States.<sup>52</sup>

### **Fluoridated Public Drinking Water**

Fluoridated drinking water provides a safe and cost-effective means of delivering fluoride community-wide, thereby reducing tooth decay and tooth loss. It has been recognized as one of the top ten public health achievements of the 20th century.<sup>53</sup>

- Every \$1 invested in water fluoridation saves \$38 dollars in dental treatment costs.<sup>54</sup>
- Children residing in non-fluoridated communities have double the oral health care costs of children residing in fluoridated communities.<sup>55</sup>
- Medicaid-covered children between ages 1 and 5 residing in communities without fluoridated water were three times more likely to receive dental treatment in a hospital than Medicaid-covered children residing in communities with fluoridated water.<sup>56</sup>

## ADOLESCENT AND ADULT HEALTH

Adolescents put themselves at risk not only through a variety of high-risk behaviors, including those that lead to STDs and HIV. Adults put themselves at risk by lifestyle choices begun in adolescence and increase their risk when they do not take advantage of readily available screening for cancer, diabetes, hypertension and high cholesterol. The cost of treating advanced cancers, heart attacks, strokes and complications of diabetes far outweighs the cost of prevention and early treatment.

## **Sexually Transmitted Diseases**

Every year, there are approximately 19 million new sexually transmitted disease (STD) infections in the United States, almost half of them among youth aged 15 to 24. Because of their many serious complications and consequences, including infertility among women and their offspring, STDs are one of the leading causes for loss of healthy years of life in childbearing age women, surpassed only by maternity-related disorders.<sup>57</sup>

- STD prevention efforts averted over 32 million cases of gonorrhea between 1971-2003.<sup>58</sup>
- Reductions in syphilis and gonorrhea from 1990 to 2003 in the U.S. saved an estimated \$5 billion (2003 dollars).<sup>59</sup>

## **HIV/AIDS**

HIV screening decreases the likelihood of further HIV transmission. Prevention programs that offer HIV counseling and testing provide access to life saving care and treatment.

- From the beginning of the HIV/AIDS epidemic through 2006, these programs prevented approximately 362,000 HIV infections in the U.S., and saved over 3.3 million quality-adjusted years of life.<sup>60</sup>
- HIV care and treatment costs are approximately \$22,500 per year, and lifetime treatment costs can total over \$275,000. Since the beginning of the HIV epidemic, prevention programs and screenings saved about \$52,000 per infection, far less than the lifetime per-person cost of HIV care and treatment.<sup>61</sup>

## **Cancer Prevention and Detection**

The American Institute for Cancer Research reports that over 45% of colon cancers and 38% of breast cancers in the U.S. can be prevented by making changes in diet and physical activity and by controlling weight. A third of the most common cancers can be prevented by avoiding the single most important risk factor for cancer, tobacco.<sup>62</sup>

Cancer is the second leading cause of death in the United States and in Florida. Regular breast, cervical and colorectal cancer screening prevents premature deaths by detecting and treating cancer early.

- Nearly 40,000 Floridians died from cancer in 2007, resulting in an estimated \$21.1 billion cost from health care expenditures and lost productivity due to death and disability.
- Screening for colorectal cancer extends life at a cost of \$11,890 to \$29,725 per year of life saved.<sup>63</sup>
- 14,000 lives could be saved annually in the U.S. if 90% of adults age 50 and older kept up to date on their colorectal screenings.<sup>64</sup>

## **Diabetes Prevention and Management**

Almost 24 million Americans have diabetes, including 5.7 million who do not know they have the disease. Diabetes is the seventh leading cause of death in the United States and accounted for \$217.5 billion in total U.S. healthcare system costs in 2007 due to higher medical expenditures and lost productivity.<sup>65</sup> Lifestyle changes can both prevent the onset of type 2 diabetes among those at high risk and reduce the occurrence of diabetes complications, thus reducing premature death and disability. These changes include managing blood pressure, glucose, lipid levels, maintaining a healthy weight, and receiving routine preventive care.

- For those with pre-diabetes, lifestyle changes, including at least 7% weight loss and at least 150 minutes of physical activity per week, can reduce the onset of type 2 diabetes by 58%.<sup>66</sup>

- Blood pressure control reduces the risk for heart disease and stroke among people with diabetes anywhere from 33% to 50%. It also reduces the risk for eye, kidney, and nerve diseases among people with diabetes by 33%.<sup>67</sup>

### **Preventing Heart Attacks and Strokes**

In the United States, about 70 million people – one in four Americans – have cardiovascular disease. Every year, more than 927,000 of them will die. Heart disease and stroke alone account for nearly 40% of all deaths in the United States. Eliminating tobacco use, improving poor diet, increasing physical activity, and controlling high cholesterol and high blood pressure can all prevent heart attacks and strokes. Educating people at risk about the symptoms and signs of heart attack and stroke will further save lives and reduce disability. This is especially important among diabetics, as their risk for heart disease and stroke is double that of the general population.

- The National Institutes of Health (NIH) estimate that 1.6 million heart disease and stroke deaths have been averted since 1997. Forty-four percent of the decrease is attributable to prevention through risk-factors reduction in the population.
- In 2007, the American Heart Association estimates that the national direct and indirect costs for cardiovascular disease will be \$431.8 billion.<sup>68</sup>

## **ENVIRONMENTAL HEALTH**

Providing safe food and water, clean air to breathe and safe water to play in reduces illness-related costs and improves overall well-being.

### **Safe Drinking Water**

Ensuring access to safe drinking water and protecting the public from waterborne disease, chemical contaminants, and other health threats is a core public health function.

Beyond reducing water related diseases, providing better access to improved water and sanitation reduces illness-related costs and improves overall well-being. Increased productivity in homes and businesses relies on consistent access to a clean safe water supply.<sup>69</sup>

### **Air Quality**

Reducing exposure to air pollution contributed to significant and measurable improvements in life expectancy in the United States. A 2009 study comparing 211 United States counties over time found that reductions in air pollution accounted for as much as 15% of the overall increase in life expectancy in the study areas across socioeconomic and demographic groups, and above and beyond smoking prevalence.<sup>70</sup>

### **Safe Food**

Seventy-six million Americans fall ill each year from eating foods contaminated with bacteria, viruses, and parasites. These foodborne illnesses result in discomfort, pain, time lost from normal activities, forgone earnings, spending on medications, long-term medical treatment, and even death, with financial costs running to millions of dollars.<sup>71</sup>

- Foodborne diseases cause approximately 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States each year.<sup>72</sup>

- The USDA estimates the annual U.S. economic costs due to foodborne Salmonella infections alone at \$2.4 billion.

### **Safe Recreational Water**

Polluted recreational water can lead to gastrointestinal illness, acute respiratory disease and ear and eye infections.

Estimated economic burden in the United States per event:

- Gastrointestinal illness: \$36.58
- Acute respiratory disease: \$76.76
- Ear ailment: \$37.86
- Eye ailment: \$27.31

These costs can become a substantial public health burden when millions of exposures per year result in hundreds of thousands of illnesses.<sup>73</sup>

## CONCLUSION

We know that keeping people healthy through preventive public health measures reduces health care costs, improves quality of life, and increases productivity.<sup>74</sup> In this century, we have an unprecedented opportunity. The leading causes of death - chronic diseases - are also the most preventable.

We know what works to reduce the burden of chronic disease. We know how to protect our children through screening, early intervention, access to routine care that includes immunizations, and being born to healthy mothers. We know how to keep sexually transmitted infections from spreading among our adolescents and young adults and to prevent falls among our elderly. We know how to keep our food and water safe. And we know that it costs less to prevent disease and disability than to treat it.

The bottom line is simple: implementing proven preventive strategies not only has a substantial positive impact on the health and well-being of our citizens, but it also results in a positive return on our health care investment. The Trust for America's Health concluded that an investment of \$10 per person per year in proven community-based programs just to increase physical activity, improve nutrition and prevent smoking and other tobacco use could save the country more than \$16 billion annually within five years. In Florida, that amounts to \$6.2 for every \$1 spent.<sup>75</sup> Allocating resources to prevention is important as we continue to discuss health care reform.

During this time of economic uncertainty, there are unlikely to be budget increases to meet burgeoning health care needs. It is even more important now to use scarce health resources efficiently and effectively, by focusing our efforts on prevention. We will pay now, or pay later. The choice is ours.

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